

# European Mineral Statistics



2009–13



**British  
Geological Survey**  
NATIONAL ENVIRONMENT RESEARCH COUNCIL



## European Mineral Statistics 2009–13

A product of the World Mineral Statistics database

By: T J Brown, S F Hobbs, A J Mills, N E Idoine and C E Wrighton

Additional production statistics by: E R Raycraft, T Bide, E A Deady  
and J Rippingale

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](http://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](mailto: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. 2015. *European mineral  
statistics 2009–13.* (Keyworth, Nottingham: British Geological  
Survey.)

*Cover photograph:* Silver grains. Photo © Boliden  
(used with permission)

ISBN 978-0-85272-850-5 (Paperback)

ISBN 978-0-85272-851-2 (Download)

# 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 compilation<sup>1</sup>.

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.

As 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 organisations, 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 –

---

<sup>1</sup> For this compilation 'Europe' is defined as the 28 EU members (as of 1 July 2013), the EU associates Norway and Switzerland and the EU candidate countries Albania, Iceland, Macedonia, Montenegro, Serbia and Turkey; this group of 36 countries is for convenience referred to as 'EU36'.

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 <sup>2</sup>	<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>

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.

The total volumes of primary aggregates production 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

---

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

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 produce approximately equal quantities of sand and 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. Crushed rock produced from onshore sites is also conveyed by sea from Norway and Scotland.

It should also be borne in mind that recycled and secondary aggregates have become an increasingly important part of supply, in response to environmental constraints on the production of primary (quarried) material. The categorisation of these recycled and secondary aggregates varies from country to country and these materials are not included in this volume.

### **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 materials<sup>3</sup> can be obtained from completely different sources, for example magnesia (magnesium oxide), which is produced from both magnesite and a combination of seawater and dolomite. Salt is a further example, being extracted as a solid (rock salt), as brine and by the evaporation of seawater.

European production of industrial minerals<sup>4</sup> 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 are given in Table 2.

**Table 2** EU36 production of selected industrial minerals as world percentages

<b>Industrial mineral</b>	<b>% of world</b>	<b>EU36 countries with &gt;2% of world output in 2013</b>
Feldspar	63.4	Turkey (35.0%), Italy, Spain, France
Kaolin	34.5	Germany (16.5%), Turkey, UK, Czech Republic
Salt	22.5	Germany (6.5%), Netherlands, UK, France
Diatomite	19.5	Denmark (6.2%), France, Turkey, Spain, Czech Republic
Bentonite	16.4	Greece (7.2%), Germany
Gypsum	16.4	Turkey (4.8%), Spain
Talc	14.3	France (5.0%), Finland
Potash	13.3	Germany (9.0%), Spain
Magnesite	10.8	Turkey (5.1%)
Mica	10.2	France (5.6%), Finland
Barytes	4.1	Turkey (3.0%)
Fluorspar	3.2	-

## 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 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.

European smelting and refining of imported ores and concentrates provides the bulk of supply for many metals. Refining in Europe of semi-processed materials from other continents is also significant. Ferro-alloys of a number of metals are produced in Europe but imports of the major types are an indispensable

<sup>3</sup>In 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.

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

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.

Certain European countries are major mine producers of particular metals, but the majority of European countries depend chiefly on imports from other continents. The overall EU36 position of mine production of selected metals in 2013 is shown in Table 3.

**Table 3** EU36 mine production of selected metals as world percentages.

<b>Metal</b>	<b>% world</b>	<b>EU36 countries with &gt;1% of world output in 2013</b>
Chromium	12.2	Turkey (6.9%), Finland, Albania
Silver	7.5	Poland (4.2%), Sweden
Zinc	7.2	Ireland (2.4%), Turkey, Sweden
Titanium	6.9	Norway (6.9%)
Lead	6.2	Turkey (1.4%), Poland, Sweden
Copper	5.6	Poland (2.4%)
Tungsten	2.8	Austria (1.1%)
Nickel	2.7	-
Gold	2.2	Turkey (1.1%)
Iron	1.6	Sweden (1.2%)

## 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 there are exports of petroleum from the EU36 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.

'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 the latter 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.

The overall EU36 position with regard to production of energy minerals in 2013 is shown in Table 4.

**Table 4** EU36 production of energy minerals as world percentages.

<b>Mineral</b>	<b>% world</b>	<b>EU36 countries with &gt; 1% of world output 2013</b>
Coal	8.3	Germany (2.4%), Poland, Turkey
Natural gas	7.9	Norway (3.1%), Netherlands, United Kingdom
Petroleum	3.7	Norway (2.0%)

# Contents

## Country index

Albania	2
Austria	4
Belgium	9
Bulgaria	15
Croatia	19
Cyprus	21
Czech Republic	23
Denmark	28
Estonia	32
Finland	35
France	40
Germany	46
Greece	53
Hungary	57
Iceland	61
Ireland, Republic of	63
Italy	66
Latvia	72
Lithuania	75
Luxembourg	78
Macedonia	80
Malta	82
Montenegro	83
Netherlands	85
Norway	91
Poland	95
Portugal	100
Romania	104
Serbia	108
Slovakia	111
Slovenia	115
Spain	119
Sweden	125
Switzerland	130
Turkey	134
United Kingdom	139

## Commodity index

Aggregates	148	Manganese	277
Alumina	154	Mercury	281
Aluminium	155	Mica	283
Antimony	165	Molybdenum	286
Arsenic	167	Natural gas	298
Asbestos	168	Nepheline syenite	357
Barytes	169	Nickel	288
Bauxite	153	Niobium	333
Bentonite	172	Perlite	357
Bismuth	177	Petroleum	295
Borates	357	Phosphates	301
Bromine	178	Platinum	303
Cadmium	179	Potash	307
Cement	182	Pyrites	325
Chromium	190	Rare earths	312
Coal	194	Rhenium	358
Cobalt	201	Salt	315
Copper	205	Sand and gravel	148
Crushed rock	148	Selenium	358
Diamond	214	Silicon	246
Diatomite	218	Sillimanite	319
Feldspar	221	Silver	321
Ferro alloys	246	Strontium	358
Fluorspar	224	Sulphur	325
Fuller's earth	172	Talc	330
Gold	227	Tantalum	333
Graphite	231	Tellurium	359
Gypsum	234	Tin	334
Iodine	239	Titanium	338
Iron ore	241	Tungsten	343
Iron and steel	244	Uranium	359
Kaolin	261	Vanadium	347
Lead	264	Wollastonite	359
Lithium	271	Zinc	348
Magnesia	274	Zirconium	355
Magnesite	273		

## 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.

## 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, the Barytes Association and the International Fertilizer Industry Association Ltd. In a few instances, information on specific commodities has been obtained directly from company sources. The co-operation of other members of the International Consultative Group on Metal Statistics is also gratefully acknowledged.

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

In addition, information has been obtained from the websites of the following organisations, companies, statistical offices and government departments: Agnico Eagle Mines; Altona Mining Ltd; Aluminium de Grece; Belvedere Resources Ltd; BP Plc; Dragon Mining; Endomines; Eurozinc Mining Corporation; First Quantum; Heidelberg Cement; Inmet Mining; Lapland Gold Miners; Lundin Mining; Nevsun; New Boliden; Norsk Hydro; Nyrstar; Outokumpu; Rio Narcea; Rio Tinto; Talvivaara; Xstrata; Energy Information Agency; European Aggregates Association; Eurofer; Eurostat; Kaolin & Plastic Clays Europe; World Nuclear Association; World Steel Association; Vereinigung der Oesterreichischen Zementindustrie, Austria; Federation de l'Industrie Cimentiere Belge, Belgium; Statistics Belgium; Belgian Steel Federation; Czech Republic Statistical Office; Statistics Denmark; Danish Energy Agency, Denmark; Geological Survey of Finland; Federation des Minerais, Mineraux Industrielles et Metaux non Ferreux, France; Unicem, France; Infociments, France; Statistisches Bundesamt Deutschland, Germany; R W Silicium, Germany; BEB Erdgas und Erdol, Germany; Verband der Kali und Salzindustrie EV, 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; Nethalands Oil and Gas Portal; Statistisk Sentralbyra, Norway; Geological Survey of Norway; Norwegian Petroleum Directorate; Instituto Nacional de Estatistica, Portugal; Ministry of Agriculture, Portugal; Vimetco, Romania; Statistical Office of the Republic of Slovenia; Unesid, Spain; Sveriges Geologiska Undersokning, Sweden; Jernkontoret, Sweden; Statistiska Centralbyran, Sweden; CemSuisse, Switzerland; Department for Business, Innovation and Skills, United Kingdom; Department of Energy and Climate Change, 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

# 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
- (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 EU36 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 ( $\text{Al}_2\text{O}_3$ ) of total hydrate produced, whether or not calcined
- (2) The figures represent alumina produced from bauxite. Alumina-rich materials can also be derived from salt slags formed during the production of secondary aluminium

## Primary aluminium – production

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

## 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 attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties

## Bentonite and fuller's earth – exports and imports

- (1) See notes 1 - 3 under production
- (2) The figures refer to natural and sodium-exchanged bentonite, Harmonised System 2508.10
- (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
- (5) From 2007 Harmonised System 2508.20, previously 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

## 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 – mine production

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

## Cobalt metal – production

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

### Copper – smelter production

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

### Refined copper – production

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

### Copper – exports and imports

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

### Diamond – production

- (1) Synthetic diamond is excluded

### 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

### Kaolin – exports and imports

- (1) The term 'kaolin', as used here, includes kaolin and kaolinitic clay

### Refined Lead – production

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

### 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 and by recovery from effluents

### Mica – exports and imports

- (1) Data show unmanufactured mica and include sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'

### Molybdenum – exports and imports

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

### Nickel – smelter/refinery production

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

### Nickel – exports and imports

- (1) The term 'unwrought' nickel corresponds to item 7502 of the Harmonised System which excludes all electro-plating 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 m<sup>3</sup>, multiply by 1.11

### Platinum group metals – production

- (1) Wherever possible, figures relate to quantities of platinum group metals thought to be recovered from ores originating in the country stated  
(2) Concentrates produced in Spain are believed to be processed in China to recover platinum group metals

**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 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
- (2) Production capacity for synthetic mullite also exists in the United Kingdom but output is believed to be zero

**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 – smelter production**

- (1) Figures include both primary and secondary metal

**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**

## Albania

### Production

Commodity	Units	2009	2010	2011	2012	2013
Chromium	tonnes	288 759	334 467	330 938	380 349	529 592
Coal					—	—
Lignite	tonnes	2 000	3 000	100	—	—
Copper, mine	tonnes (metal content)	2 600	2 672	4 379	5 691	5 454
Gypsum	tonnes	* 78 000	* 80 000	* 80 000	91 021	126 399
Crude steel	tonnes	221 000	390 000	464 000	390 000	312 000
Ferro-alloys						
Ferro-chrome	tonnes	5 705	23 233	28 433	24 018	24 692
Nickel, mine	tonnes (metal content)	550	1 954	914	750	2 151
Crude petroleum	tonnes	576 739	742 012	894 530	1 112 000	1 224 000
Natural gas	million m <sup>3</sup>	9	2	2	—	—
Salt						
Sea salt	tonnes	* 47 000	* 47 000	* 47 000	* 47 000	* 47 000

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	9 410	887	8 321	24 363	2 517
Aluminium and bauxite						
Unwrought (a)	tonnes	526	2 805	3 309	1 940	4 124
Scrap	tonnes	3 784	5 290	4 670	6 260	5 854
Cement						
Cement clinkers	tonnes	12 716	87 590	...	23 341	18 066
Portland cement	tonnes	195 346	511 681	674 037	1 026 560	997 924
Other cement	tonnes	0	25	...	0	1 667
Chromium						
Ores and concentrates	tonnes	275 879	428 385	346 792	427 092	756 361
Copper						
Ores and concentrates	tonnes	21 974	24 820	31 481	36 482	38 311
Scrap	tonnes	2 748	4 953	5 656	5 725	4 613
Gypsum						
Crude and calcined	tonnes	6 034	1 955	791	2 019	7 439
Iron ore	tonnes	176 337	277 026	606 577	191 531	191 934
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	586	23 493	31 364	29 813	28 389
Ingots, blooms, billets	tonnes	(b)* 72 000	132 144	162 632	124 525	42 798
Scrap	tonnes	17 764	55 885	99 445	86 884	23 038
Lead						
Unwrought	tonnes	2 324	2 914	1 568	1 117	811
Nickel						
Scrap	tonnes	0	1	7	477	7
Ores and concentrates	tonnes	...	...	...	103	191 605
Crude petroleum	tonnes	342 581	537 315	696 762	1 000 850	1 251 513
Salt	tonnes	6 054	2 748	13 557	35 464	30 574
Sulphur and pyrites						
Pyrites	tonnes	...	...	...	5 076	10 560

#### Notes

(a) Including alloys

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

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	20 791	15 253	20 645	26 226	41 918
Aluminium and bauxite						
Bauxite	tonnes	348	5 408	497	...	...
Unwrought	tonnes	7 579	7 092	7 661	9 843	10 398
Scrap	tonnes	132	1 268	1 234	548	1 802
Barytes						
Barium minerals	tonnes	720	320	1 192	2 665	363
Bentonite	tonnes	128	1 059	1 549	373	377
Cement						
Cement clinkers	tonnes	19	40	...	5 260	79 661
Portland cement	tonnes	817 589	593 883	384 655	284 837	122 507
Other cement	tonnes	550 840	300 788	211 346	162 203	107 529
Chromium						
Ores and concentrates	tonnes	580	4 651	7 477	...	...
Coal						
Anthracite	tonnes	2 142	5 023	8 245	9 240	8 729
Other coal	tonnes	88 601	59 663	82 438	90 273	84 406
Fluorspar	tonnes	...	350	650	55	500
Gypsum						
Crude	tonnes	1 038	1 632	669	339	184
Iron, steel and ferro-alloys						
Ferro-silico-chrome	tonnes	3 161	2 033	...	...	...
Ferro-manganese	tonnes	22	...	10	...	201
Ferro-silico-manganese	tonnes	2 189	3 354	4 145	4 217	3 095
Ferro-silicon	tonnes	1 018	484	1 447	915	618
Ingots, blooms, billets	tonnes	84 083	310	180	63	105
Scrap	tonnes	150 003	292 096	312 746	211 910	201 240
Crude petroleum	tonnes	60 131	21 972	28 163	276	...
Potash						
Other potassic fertilisers	tonnes	10	650	88	48	30
Salt	tonnes	17 174	15 415	22 903	14 098	9 647
Silver						
Metal	kilograms	8 832	7 819	4 485	2 768	3 327
Titanium Oxides	tonnes	575	326	301	284	341

## Austria

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel (a)	tonnes	30 120 263	30 182 855	35 507 353	31 285 739	30 120 263
Crushed rock (a)	tonnes	29 784 794	24 399 380	26 866 150	26 348 996	25 866 612
Cement						
Cement, clinker	tonnes	160 223	54 369	131 734	* 125 000	* 120 000
Cement, finished	tonnes	4 847 862	4 499 402	4 291 449	4 162 406	3 967 440
Copper, refined	tonnes	96 200	113 700	112 500	113 600	108 100
Graphite (e)	tonnes	750	420	925	219	...
Gypsum (b)	tonnes	910 945	872 273	815 438	791 961	635 299
Iron ore (c)	tonnes	2 002 131	2 068 853	2 206 910	2 142 255	2 323 323
Pig iron	tonnes	4 353 000	5 621 000	5 815 000	5 751 000	6 200 000
Crude steel	tonnes	5 662 000	7 206 000	7 474 000	7 421 000	7 953 000
Ferro-alloys						
Ferro-molybdenum	tonnes	4 000	4 000	4 000	4 000	4 000
Ferro-nickel	tonnes	2 500	2 500	2 500	2 500	2 500
Ferro-vanadium	tonnes	6 200	8 000	8 000	8 000	8 000
Kaolin	tonnes	18 148	18 914	18 897	* 14 000	* 13 000
Lead, refined	tonnes	22 200	25 500	26 200	24 504	38 786
Magnesite	tonnes	544 716	757 063	867 912	778 810	714 422
Nickel, smelter/refinery	tonnes	700	1 000	1 000	1 000	1 000
Crude petroleum	tonnes	905 031	875 969	838 052	837 561	847 952
Natural gas	million m <sup>3</sup>	1 559	1 713	1 591	1 729	1 359
Salt						
Rock salt	tonnes	50	95	169	222	184
Salt in brine	tonnes	1 035 044	1 071 842	1 150 474	3 193 216	3 717 419
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	48 624	40 512	48 612	47 572	* 48 000
Talc	tonnes	111 388	138 367	132 018	134 665	134 814
Tungsten	tonnes (metal content)	887	975	861	706	850

#### Notes

(1) Austria is believed to produce arsenic and bentonite

- (a) Sales
- (b) Including anhydrite
- (c) Including micaceous iron oxide
- (d) From petroleum refining and/or natural gas
- (e) Crude

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	2 634 211	2 828 621	2 646 753	2 387 082	2 659 189
Aluminium and bauxite						
Bauxite	tonnes	546	1	897	11 944	21 832
Alumina	tonnes	705	14 322	34 555	32 486	15 897
Unwrought	tonnes	2 332	3 236	2 344	2 465	2 299
Unwrought alloys	tonnes	98 966	151 559	209 748	211 491	276 249
Scrap	tonnes	118 028	122 057	105 138	128 589	151 419
Barytes						
Barium minerals	tonnes	1 276	345	618	766	769
Bentonite	tonnes	4 350	3 447	4 954	4 513	4 947
Cement						
Cement clinkers	tonnes	146 991	46 560	173 312	121 529	72 246
Portland cement	tonnes	272 440	213 082	330 710	299 060	277 032
Other cement	tonnes	56 934	50 592	25 432	21 521	41 174
Chromium						
Ores and concentrates	tonnes	333	4	1 163	413	9
Metal	tonnes	5 845	10 245	2 138	565	707

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Cobalt						
Metal	tonnes	60	72	60	111	68
Copper						
Matte and cement	tonnes	3 109	960	0	—	2
Scrap	tonnes	50 748	52 702	55 454	60 033	50 784
Unwrought, unrefined	tonnes	217	7 636	7 780	1 049	412
Unwrought, refined	tonnes	115 480	135 132	128 551	124 897	99 847
Unwrought alloys	tonnes	1 058	804	690	528	503
Diamond						
Unsorted	Carats	...	£191 000	£3 305 000	£17 000	...
Gem, cut	Carats	£4 053 000	£3 564 000	£6 211 000	£3 657 000	£2 823 000
Dust	Carats	£260 000	£225 000	£66 000	£34 000	£122 000
Diatomite	tonnes	3 286	3 467	2 756	3 550	3 275
Feldspar	tonnes	14 025	13 474	11 807	11 452	11 488
Gold						
Metal	kilograms	18 800	27 800	22 500	18 000	16 600
Waste and scrap	kilograms	2 700	5 900	2 900	1 600	2 800
Graphite	tonnes	6 260	9 518	9 936	5 562	5 216
Gypsum						
Crude	tonnes	20 694	19 124	23 007	18 485	24 898
Calcined	tonnes	78 839	55 927	76 548	79 280	75 787
Iodine	kilograms	339	564	413	10 652	200
Iron, steel and ferro-alloys						
Pig iron	tonnes	2 354	4 476	3	74	776
Sponge and powder	tonnes	193	1 195	653	49 019	46 756
Ferro-alloys	tonnes	5 953	2 618	1 690	2 291	2 526
Silicon metal	tonnes	4 795	7 403	597	1 643	842
Ingots, blooms, billets	tonnes	187 410	190 343	293 647	238 922	297 349
Scrap	tonnes	1 067 926	1 034 398	950 865	1 008 503	963 641
Kaolin	tonnes	8 954	27 908	6 588	6 958	6 318
Lead						
Unwrought	tonnes	12 512	16 427	15 619	13 329	11 929
Scrap	tonnes	2 173	871	729	983	1 521
Lithium						
Carbonate	tonnes	10	170	166	9	13
Magnesite and magnesia						
Magnesite	tonnes	1 746	989	780	774	559
Magnesia	tonnes	26 716	39 589	79 519	71 453	70 253
Mercury	kilograms	2 000	(a)* 3 300	(a)* 1 600	(a)* 500	(a)* 200
Mica	tonnes	3 328	4 303	4 245	4 024	3 554
Molybdenum						
Metal (a)	tonnes	* 1 800	* 2 300	* 2 800	* 2 500	* 2 500
Nickel						
Scrap	tonnes	1 775	1 606	2 709	2 633	3 322
Unwrought (b)	tonnes	265	208	234	351	305
Natural gas	tonnes	2 164 960	2 645 056	2 945 349	1 995 157	992 867
Platinum metals						
Platinum and platinum metals	kilograms	£38 485 000	£83 434 000	£110 119 000	£105 895 000	£101 611 000
Waste and scrap	kilograms	£295 000	£1 070 000	£757 000	£733 000	£697 000
Potash						
Potassic fertilisers	tonnes	13 843	20 259	19 304	21 653	25 037
Rare earths						
Metals	tonnes	244	258	452	500	532
Cerium compounds	tonnes	2 035	1 936	1 167	888	1 102
Other rare earth compounds	tonnes	8 437	8 658	4 902	5 696	6 166
Salt	tonnes	491 981	500 126	392 506	404 069	475 453
Silver						
Metal	kilograms	98 600	100 300	136 000	155 200	134 800
Sulphur and pyrites						
Pyrites	tonnes	1 740	2 794	2 887	2 579	1 523
Sulphur, sublimed and precipitated	tonnes	7 423	1 145	746	2 138	3 425
Talc	tonnes	106 423	106 271	115 967	121 264	84 271
Tantalum and niobium						
Tantalum	tonnes	35	27	29	21	112
Tin						
Unwrought (b)	tonnes	71	60	98	103	118

Austria

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Titanium						
Metal	tonnes	203	129	224	317	159
Oxides	tonnes	5 344	5 956	4 794	3 965	4 052
Tungsten						
Metal (a)	tonnes	* 4 300	* 3 000	* 2 400	* 2 200	* 1 900
Zinc						
Unwrought (b)	tonnes	5 703	8 532	9 776	6 410	11 065
Scrap	tonnes	6 052	5 757	8 583	8 591	10 440

Notes

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

(b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	2 924 359	2 284 169	2 184 095	2 521 253	2 420 461
Aluminium and bauxite						
Bauxite	tonnes	2 370	8 489	7 842	6 169	9 235
Alumina	tonnes	27 193	47 681	53 232	40 520	20 675
Alumina hydrate	tonnes	13 219	12 914	12 821	14 603	15 411
Unwrought	tonnes	103 145	177 751	197 795	131 764	156 583
Unwrought alloys	tonnes	175 583	239 493	280 502	314 594	235 575
Scrap	tonnes	168 055	268 845	282 707	304 272	280 710
Antimony						
Metal	tonnes	64	37	214	267	316
Oxide	tonnes	192	249	204	156	164
Barytes						
Barium minerals	tonnes	2 733	3 115	4 711	5 157	3 545
Bentonite	tonnes	66 575	90 229	83 313	91 208	93 506
Bismuth						
Metal	tonnes	80	130	138	139	175
Bromine	kilograms	65 300	318 400	238 900	384 600	647 900
Cement						
Cement clinkers	tonnes	404 998	407 616	393 132	297 009	262 939
Portland cement	tonnes	639 545	637 550	913 116	797 976	749 455
Other cement	tonnes	52 715	71 535	60 349	54 115	133 721
Chromium						
Ores and concentrates	tonnes	25 891	54 945	20 921	33 317	29 138
Metal	tonnes	4 325	6 109	7 868	4 854	4 365
Coal						
Anthracite	tonnes	3 454	3 774	5 760	5 932	1 654
Other coal	tonnes	4 079 423	3 614 354	3 359 294	3 339 262	3 178 153
Lignite	tonnes	72 734	68 777	74 609	75 705	82 039
Briquettes	tonnes	30 538	34 999	35 695	26 598	28 482
Cobalt						
Metal	tonnes	331	653	718	730	1 363
Oxides	tonnes	5	10	9	8	54
Copper						
Scrap	tonnes	134 063	145 903	130 675	127 187	102 554
Unwrought, unrefined	tonnes	24 445	36 218	44 412	42 637	21 970
Unwrought, refined	tonnes	4 868	10 361	16 680	8 374	5 348
Unwrought alloys	tonnes	1 617	1 412	1 376	2 183	2 567
Diamond						
Unsorted	Carats	£543 000	£729 000	£3 371 000	£203 000	£108 000
Gem, cut	Carats	£9 795 000	£9 838 000	£19 112 000	£10 309 000	£9 666 000
Industrial	Carats	£313 000	£193 000	£5 500	£149 000	£132 000
Dust	Carats	17 000 000	30 000 000	38 000 000	30 500 000	44 000 000
Diatomite	tonnes	16 327	13 324	12 798	12 452	12 827
Feldspar	tonnes	1 933	2 433	2 804	2 442	2 094
Fluorspar	tonnes	1 956	3 490	2 911	2 935	2 847
Gold						
Metal	kilograms	86 500	56 600	63 500	47 300	54 400
Waste and scrap	kilograms	1 700	1 400	2 400	3 300	6 900

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Graphite	tonnes	4 622	18 501	21 867	9 272	10 843
Gypsum						
Crude	tonnes	12 098	22 432	84 817	36 806	67 145
Calcined	tonnes	73 588	70 850	72 696	77 931	70 371
Iodine	kilograms	204 100	213 000	198 500	147 200	195 100
Iron ore (b)	tonnes	6 095 762	9 309 860	9 966 338	9 628 923	8 269 199
Iron, steel and ferro-alloys						
Pig iron	tonnes	30 084	25 355	30 367	18 706	18 579
Sponge and powder	tonnes	13 980	13 537	18 585	90 782	49 177
Ferro-chrome	tonnes	20 400	29 355	38 422	35 000	31 026
Ferro-silico-magnesium	tonnes	79	132	150	97	101
Ferro-manganese	tonnes	18 962	17 840	21 671	21 540	27 737
Ferro-silico-manganese	tonnes	17 927	22 976	19 931	18 862	17 957
Ferro-molybdenum	tonnes	801	742	1 402	1 503	1 127
Ferro-nickel	tonnes	1	...	973	906	971
Ferro-niobium	tonnes	665	1 061	1 191	1 865	1 165
Ferro-phosphorus	tonnes	1 095	1 232	2 497	610	761
Ferro-silicon	tonnes	12 825	27 063	33 709	38 402	58 296
Ferro-titanium and ferro-silico-titanium	tonnes	388	471	630	607	367
Ferro-tungsten and ferro-silico-tungsten	tonnes	208	552	715	624	533
Ferro-vanadium	tonnes	32	166	65	300	204
Other ferro-alloys	tonnes	1 764	3 549	4 806	3 067	2 974
Silicon metal	tonnes	7 288	11 497	10 180	7 189	8 773
Ingots, blooms, billets	tonnes	46 762	159 527	186 929	196 328	155 829
Scrap	tonnes	1 196 327	991 574	1 016 301	1 007 906	1 168 752
Kaolin	tonnes	192 860	194 396	187 831	171 310	161 876
Lead						
Unwrought	tonnes	21 580	19 391	31 675	29 938	40 143
Scrap	tonnes	826	264	837	558	1 560
Lithium						
Carbonate	tonnes	327	402	463	359	298
Magnesite and magnesia						
Magnesite	tonnes	937	848	1 512	1 069	489
Magnesia	tonnes	21 708	272 232	214 788	180 117	219 973
Manganese						
Ores and concentrates	tonnes	184	152	334	222	198
Metal	tonnes	11 512	16 696	21 123	21 692	20 665
Mica	tonnes	492	874	656	625	493
Molybdenum						
Metal	tonnes	430	548	951	440	414
Nickel						
Scrap	tonnes	367	440	527	1 917	4 359
Unwrought (c)	tonnes	4 142	6 894	9 231	8 830	8 004
Oxides	tonnes	11	15	8	247	63
Crude petroleum	tonnes	7 428 183	6 770 069	7 358 582	7 463 478	7 831 498
Natural gas	tonnes	7 566 509	8 697 934	9 390 448	10 043 171	7 317 311
Phosphate rock	tonnes	(a)* 58 000	(a)* 160 000	61 030	(a)* 6 500	(a)* 106
Platinum metals						
Platinum and platinum metals	kilograms	1 600	1 400	4 100	500	2 600
Waste and scrap	kilograms	—	100	21 400	1 100	700
Potash						
Sulphate	tonnes	4 241	15 074	9 595	15 636	14 738
Chloride	tonnes	28 000	105 299	102 028	132 302	125 318
Other potassic fertilisers	tonnes	9 139	18 201	9 418	12 312	16 730
Rare earths						
Metals	tonnes	269	550	325	442	595
Cerium compounds	tonnes	1 985	1 766	1 310	696	979
Other rare earth compounds	tonnes	2 471	3 375	1 646	802	1 630
Salt	tonnes	230 979	293 799	291 187	162 790	314 374
Sillimanite minerals	tonnes	1 353	2 089	2 224	3 093	1 941
Silver						
Metal	kilograms	431 500	481 800	804 000	331 500	583 000
Sulphur and pyrites						
Pyrites	tonnes	1 614	3 154	3 321	3 340	2 133
Sulphur	tonnes	68 881	75 065	70 892	49 910	51 428
Sulphur, sublimed and precipitated	tonnes	14 961	15 331	22 109	16 997	22 895

Austria

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Talc	tonnes	37 648	74 554	93 985	86 891	84 634
Tantalum and niobium						
Tantalum	tonnes	—	17	4	5	31
Tin						
Unwrought (c)	tonnes	1 915	2 923	3 403	3 186	3 423
Titanium						
Titanium minerals	tonnes	362	477	580	284	432
Metal	tonnes	1 346	1 381	2 590	3 130	2 737
Oxides	tonnes	28 258	28 288	32 258	21 255	20 972
Tungsten						
Metal	tonnes	369	632	1 471	1 017	950
Carbide	tonnes	568	1 268	1 241	1 076	968
Vanadium						
Vanadiferous residues	tonnes	* 35 000	* 46 000	* 46 000	* 46 000	* 46 000
Zinc						
Unwrought	tonnes	37 864	37 560	47 394	51 634	72 381
Unwrought alloys	tonnes	27 886	34 411	38 759	34 920	33 182
Scrap	tonnes	596	298	4 827	9 832	9 204
Zirconium						
Concentrates	tonnes	1 298	1 680	1 994	1 344	1 193

Notes

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

## Belgium

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	* 19 000 000	* 22 000 000	* 23 000 000	* 21 000 000	* 21 000 000
Crushed rock	tonnes	* 43 000 000	* 44 000 000	* 49 000 000	* 46 000 000	* 45 000 000
Arsenic	tonnes	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Cement						
Cement, clinker	tonnes	1 123 722	858 871	* 700 000	726 690	911 116
Cement, finished	tonnes	6 113 000	5 990 000	6 844 000	6 280 000	6 119 000
Cobalt metal (a)	tonnes	2 150	2 600	3 187	4 200	5 415
Copper, refined	tonnes	372 700	381 200	394 200	396 700	389 400
Indium	tonnes	* 30	* 30	* 30	* 30	* 30
Pig iron	tonnes	3 087 000	4 688 000	4 700 000	4 073 000	4 343 000
Crude steel	tonnes	5 635 000	7 973 000	8 026 000	7 301 000	7 127 000
Kaolin	tonnes	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Lead, refined	tonnes	109 000	121 000	119 000	119 000	129 000
Selenium metal	tonnes	* 200	* 200	* 200	* 200	* 200
Tin	tonnes	8 700	9 900	10 000	11 400	10 300
Slab zinc	tonnes	137 000	260 000	282 000	250 000	252 000

#### Notes

- (1) Germanium is also believed to be recovered from imported or domestic material in Belgium  
(2) Belgium is also believed to produce sulphur

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

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	13 354 957	12 427 043	13 083 592	12 886 680	12 158 112
Aluminium and bauxite						
Bauxite	tonnes	44 530	48 683	37 533	36 651	34 078
Alumina	tonnes	5 666	7 516	21 284	5 218	28 210
Unwrought	tonnes	121 708	257 888	150 542	95 405	166 743
Unwrought alloys	tonnes	22 665	14 204	30 285	61 019	74 265
Scrap	tonnes	219 846	274 819	321 484	311 716	286 908
Antimony						
Ores and concentrates	tonnes	530	433	274	1 187	4
Metal	tonnes	533	776	732	259	271
Oxide	tonnes	8 811	10 599	10 417	7 818	7 751
Arsenic						
Metallic arsenic	tonnes	42	114	120	191	104
Barytes						
Barium minerals	tonnes	2 638	3 216	213	1 713	11 796
Bentonite	tonnes	36 263	28 632	28 512	31 222	29 489
Bismuth						
Metal	tonnes	413	1	6	4	4
Bromine	kilograms	17 466 300	12 619 000	25 002 100	25 239 600	27 339 200
Cadmium						
Metal	tonnes	452	459	545	690	178
Oxide	tonnes	4 033	4 413	3 734	3 764	2 767
Cement						
Cement clinkers	tonnes	936 451	582 766	744 707	638 496	775 332
Portland cement	tonnes	1 722 252	1 676 150	1 729 402	1 631 167	1 719 988
Other cement	tonnes	417 798	410 909	353 126	253 759	239 879
Chromium						
Ores and concentrates	tonnes	15 562	18 415	13 945	34 801	44 009
Metal	tonnes	1 226	1 311	1 010	676	915

Belgium

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Coal						
Anthracite	tonnes	675 097	1 652 015	1 915 992	1 668 940	1 772 455
Other coal	tonnes	4 640 602	4 211 655	2 560 811	3 566 699	2 502 987
Lignite	tonnes	7 267	18 781	42 164	51 514	42 225
Briquettes	tonnes	11 452	18 899	40 374	41 363	55 684
Cobalt						
Ore	tonnes	1 227	633	2 431	362	175
Metal (a)	tonnes	* 4 700	* 4 400	* 2 400	* 2 300	* 2 500
Copper						
Ores and concentrates	tonnes	4 594	4 549	2 046	3 242	1 874
Matte and cement	tonnes	2 432	6 935	9 042	10 231	13 334
Scrap	tonnes	110 355	141 380	165 713	168 705	144 000
Unwrought, unrefined	tonnes	11 570	42 836	40 660	27 586	37 012
Unwrought, refined	tonnes	248 500	189 253	187 595	242 533	230 392
Unwrought alloys	tonnes	9 253	12 116	11 763	12 436	12 049
Diamond						
Gem, rough	Carats	85 500 000	113 000 000	90 500 000	89 000 000	95 000 000
Gem, cut	Carats	5 178 000	6 034 000	6 232 100	* 5 500 000	* 6 300 000
Industrial	Carats	1 670 000	3 320 000	3 170 746	* 5 900 000	* 4 465 000
Dust	Carats	£11 148 000	£13 948 000	£12 800 000	£11 590 000	£11 072 000
Diatomite	tonnes	1 907	3 004	3 122	2 690	3 566
Feldspar	tonnes	1 117	64	317	417	2 830
Fluorspar	tonnes	84 491	122 483	118 782	147 771	106 343
Gold						
Metal	kilograms	25 683	22 842	6 200	12 900	18 100
Waste and scrap	kilograms	29 100	173 700	67 800	58 600	70 800
Graphite	tonnes	2 634	993	1 316	1 716	1 366
Gypsum						
Crude	tonnes	113 954	92 533	101 382	72 899	81 189
Calcined	tonnes	1 823	177 046	(a)* 195 000	(a)* 184 000	(a)* 187 000
Iodine	kilograms	2 582 300	3 989 500	3 584 800	3 391 900	4 457 300
Iron ore	tonnes	178 567	366 331	455 069	76 216	7 694
Iron, steel and ferro-alloys						
Pig iron	tonnes	160 120	254 854	255 067	232 381	218 946
Sponge and powder	tonnes	14 655	35 395	10 029	14 734	22 163
Ferro-chrome	tonnes	20 403	25 965	23 538	26 098	26 507
Ferro-silico-chrome	tonnes	15 645	5 849	1 549	666	—
Ferro-manganese	tonnes	9 915	26 544	41 161	43 319	30 129
Ferro-silico-manganese	tonnes	31 374	48 652	47 762	10 280	4 867
Ferro-molybdenum	tonnes	16 396	19 593	20 134	21 760	23 643
Ferro-silicon	tonnes	47 214	23 071	33 676	25 595	32 322
Other ferro-alloys	tonnes	2 988	4 137	16 124	8 045	9 676
Silicon metal	tonnes	5 954	8 522	8 396	2 327	2 127
Ingots, blooms, billets	tonnes	279 680	487 535	484 510	336 540	288 335
Scrap	tonnes	3 245 159	3 754 403	3 533 560	3 618 789	3 218 658
Kaolin	tonnes	783 512	523 697	232 664	219 024	193 131
Lead						
Ores and concentrates	tonnes	148 562	101 160	167 055	136 787	290 625
Unwrought	tonnes	108 442	145 571	130 655	127 052	159 411
Scrap	tonnes	21 962	21 479	18 945	18 051	17 405
Lithium						
Oxides	tonnes	781	2 284	1 890	2 320	2 380
Carbonate	tonnes	3 042	4 539	4 428	4 985	6 736
Magnesite and magnesia						
Magnesite	tonnes	876	1 235	914	150	2 469
Magnesia	tonnes	59 644	96 513	58 237	49 561	17 793
Manganese						
Ores and concentrates	tonnes	5 192	4 444	9 982	4 236	7 751
Metal	tonnes	714	1 185	1 625	1 447	2 959
Mercury	kilograms	1 400	11 500	600	8 700	7 900
Mica	tonnes	1 562	1 590	2 363	3 587	2 561
Molybdenum						
Ores and concentrates	tonnes	15 581	24 396	25 337	19 444	18 384
Metal	tonnes	105	371	128	204	650
Oxides	tonnes	91	83	366	688	59

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Nickel						
Mattes, sinters etc	tonnes	921	697	2 380	3 328	2 379
Scrap	tonnes	6 883	3 443	7 430	2 407	2 953
Ores and concentrates	tonnes	1 212	724	1 161	—	77
Unwrought	tonnes	11 883	9 271	9 684	11 517	12 067
Unwrought alloys	tonnes	2 479	1 357	1 838	3 838	14 106
Oxides	tonnes	834	221	910	498	1 080
Crude petroleum	tonnes	2 390 390	2 593 653	2 278 613	2 085 993	2 149 195
Natural gas	tonnes	10 085 049	12 091 105	24 078 554	14 990 395	21 292 092
Phosphate rock	tonnes	15 792	30 744	62 021	63 004	66 964
Platinum metals						
Platinum and platinum metals	kilograms	10 700	7 500	8 900	5 300	5 400
Waste and scrap	kilograms	315 200	497 000	218 400	31 200	9 300
Potash						
Chloride	tonnes	58 784	64 018	100 097	217 498	65 796
Rare earths						
Metals	tonnes	273	476	110	134	171
Rare earth compounds	tonnes	335	332	265	141	180
Salt	tonnes	125 255	288 679	354 644	151 767	269 571
Sillimanite minerals	tonnes	39 809	53 940	51 011	35 685	32 902
Silver						
Ores and concentrates	kilograms	6 200	12 300	2 149 800	1 409 800	982 300
Metal	kilograms	69 900	21 800	197 000	311 900	(d)* 152 906
Sulphur and pyrites						
Sulphur	tonnes	74 232	21 533	34 087	10 274	9 828
Sulphur, sublimed and precipitated	tonnes	345	193	83	119	298
Talc	tonnes	112 983	128 526	125 040	109 253	114 645
Tantalum and niobium						
Tantalum	tonnes	2	4	2	2	121
Tin						
Unwrought	tonnes	4 753	5 114	4 261	7 428	11 881
Unwrought alloys	tonnes	5 000	6 236	6 427	5 018	408
Scrap	tonnes	127	207	1 195	308	2 496
Titanium						
Titanium minerals	tonnes	58 654	106 478	116 859	119 931	96 990
Metal	tonnes	1 087	895	1 405	1 560	1 336
Oxides	tonnes	369 495	435 415	390 405	345 752	399 734
Tungsten						
Ores and concentrates	tonnes	120	27	406	544	350
Metal	tonnes	422	723	368	657	427
Carbide	tonnes	32	92	92	77	82
Vanadium						
Ores and concentrates	tonnes	131	...	...	...	...
Pentoxide	tonnes	47	80	* 116	65	7
Zinc						
Ores and concentrates	tonnes	785 125	749 582	725 335	859 086	773 334
Unwrought	tonnes	13 590	155 654	296 197	277 418	244 589
Unwrought alloys	tonnes	...	...	154 258	140 766	155 488
Scrap	tonnes	16 644	14 540	11 652	15 063	13 333
Zirconium						
Concentrates	tonnes	28 907	17 417	12 021	13 246	17 228
Metal	tonnes	125	187	272	186	197

## Note

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

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	22 175 332	22 484 726	23 911 051	22 934 219	20 869 873
Aluminium and bauxite						
Bauxite	tonnes	40 837	75 600	52 727	41 111	41 968
Alumina	tonnes	7 265	19 028	20 406	25 501	21 092
Alumina hydrate	tonnes	29 635	34 978	52 806	36 956	63 875
Unwrought	tonnes	322 792	517 946	412 600	400 947	364 106
Unwrought alloys	tonnes	126 490	193 103	218 350	159 147	168 240
Scrap	tonnes	204 621	228 517	257 366	249 187	206 775
Antimony						
Metal	tonnes	7 511	10 280	9 451	7 195	6 713
Oxide	tonnes	624	904	831	1 822	786
Arsenic						
Metallic arsenic	tonnes	17	114	634	284	72
Asbestos						
Unmanufactured	tonnes	166	0	0	...	...
Barytes						
Barium minerals	tonnes	4 490	5 637	4 294	12 095	7 961
Bentonite	tonnes	62 885	72 971	91 291	68 771	71 394
Bismuth						
Metal	tonnes	9	1	24	16	30
Bromine	kilograms	20 618 700	18 693 500	28 221 500	28 260 600	27 220 500
Cadmium						
Metal	tonnes	3 439	6 456	5 932	3 683	3 944
Oxide	tonnes	28	43	109	7	32
Cement						
Cement clinkers	tonnes	684 634	740 528	717 664	649 014	779 293
Portland cement	tonnes	819 923	1 030 282	1 113 638	1 310 336	978 809
Other cement	tonnes	252 247	172 609	158 441	163 298	138 660
Chromium						
Ores and concentrates	tonnes	19 050	25 350	22 896	39 090	52 755
Metal	tonnes	871	1 593	3 023	977	834
Coal						
Anthracite	tonnes	1 436 499	2 660 267	3 382 132	2 377 808	2 077 612
Other coal	tonnes	5 807 413	6 851 382	5 887 514	7 104 464	6 870 834
Lignite	tonnes	256 167	362 257	411 424	425 918	474 879
Briquettes	tonnes	31 346	27 379	53 793	40 447	60 486
Cobalt						
Ore	tonnes	272	156	379	349	66
Metal	tonnes	249	222	368	246	181
Copper						
Ores and concentrates	tonnes	17 378	10 554	13 735	1 278	3 413
Matte and cement	tonnes	36 352	29 857	41 741	40 104	(a)* 9 000
Scrap	tonnes	215 202	272 816	255 661	303 702	307 373
Unwrought, unrefined	tonnes	212 932	191 159	206 987	181 032	174 338
Unwrought, refined	tonnes	79 524	61 447	34 734	71 465	59 309
Unwrought alloys	tonnes	2 669	4 917	5 134	2 971	3 686
Diamond						
Unsorted	Carats	495 270	462 450	418 531	* 550 000	* 4 250 000
Gem, rough	Carats	44 000 000	63 000 000	67 500 000	54 500 000	64 000 000
Gem, cut	Carats	500 000	3 000 000	3 000 000	500 000	* 2 260 000
Industrial	Carats	3 500 000	3 000 000	1 000 000	2 500 000	2 000 000
Dust	Carats	35 000 000	61 000 000	58 000 000	68 500 000	57 500 000
Diatomite	tonnes	6 414	11 813	10 815	7 143	7 753
Feldspar	tonnes	27 113	24 495	22 623	17 062	18 181
Fluorspar	tonnes	91 928	134 266	145 776	173 038	119 747
Gold						
Metal	kilograms	13 100	10 100	9 100	9 400	10 900
Waste and scrap (a)	kilograms	* 115 800	* 339 000	* 141 000	* 807 000	* 42 629
Graphite	tonnes	5 048	7 243	7 473	6 109	6 321
Gypsum						
Crude	tonnes	702 104	616 338	683 957	838 204	641 842
Calcined	tonnes	424 465	396 873	507 725	455 117	422 056
Iodine	kilograms	3 189 200	4 087 700	3 814 500	4 663 100	4 773 300
Iron ore						
Burnt pyrites	tonnes	23 648	45	...	0	67
Iron ore	tonnes	3 254 834	7 567 453	7 425 015	6 309 506	6 303 550

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	281 872	331 652	320 083	286 145	261 257
Sponge and powder	tonnes	19 389	39 503	54 212	42 889	65 817
Ferro-chrome	tonnes	185 381	263 715	248 006	275 926	312 300
Ferro-silico-chrome	tonnes	—	1 950	10 437	19 741	5 569
Ferro-silico-magnesium	tonnes	1 292	1 992	1 716	1 258	831
Ferro-manganese	tonnes	21 327	48 471	69 017	70 732	59 929
Ferro-silico-manganese	tonnes	36 931	72 195	77 001	28 938	29 946
Ferro-molybdenum	tonnes	2 215	2 160	3 261	3 437	4 248
Ferro-nickel	tonnes	46 248	48 017	64 242	40 217	45 403
Ferro-niobium	tonnes	1 089	1 890	1 598	1 687	2 047
Ferro-phosphorus	tonnes	3 124	2 612	1 459	1 227	1 536
Ferro-silicon	tonnes	62 888	92 785	105 445	87 805	88 808
Ferro-titanium and ferro-silico-titanium	tonnes	2 161	2 926	2 377	2 525	2 157
Ferro-tungsten and ferro-silico-tungsten	tonnes	159	229	93	249	227
Ferro-vanadium	tonnes	246	214	146	263	397
Other ferro-alloys	tonnes	3 363	7 039	8 777	7 451	9 086
Silicon metal	tonnes	18 995	23 566	21 688	10 440	13 602
Ingots, blooms, billets	tonnes	1 966 055	2 554 975	2 916 336	2 458 279	1 634 190
Scrap	tonnes	3 678 867	4 726 992	4 634 651	4 330 264	4 238 922
Kaolin	tonnes	905 784	1 001 057	890 863	868 298	854 056
Lead						
Ores and concentrates	tonnes	192 496	169 356	154 976	139 771	214 596
Unwrought	tonnes	18 121	14 467	27 696	77 349	33 247
Scrap	tonnes	34 085	31 992	33 219	26 023	24 479
Lithium						
Oxides	tonnes	1 179	2 410	2 953	2 515	3 179
Carbonate	tonnes	3 410	4 183	7 770	7 205	6 403
Magnesite and magnesia						
Magnesite	tonnes	1 412	3 820	2 076	643	800
Magnesia	tonnes	104 577	80 845	70 954	58 355	46 379
Manganese						
Ores and concentrates	tonnes	61 980	49 731	49 393	50 509	51 271
Metal	tonnes	3 076	4 377	5 466	4 636	5 946
Mercury	kilograms	15 700	57 200	12 500	505	707
Mica						
Unmanufactured	tonnes	3 454	2 636	2 395	4 331	1 893
Ground	tonnes	3 507	4 086	4 722	3 314	3 803
Waste	tonnes	45	8	120	1 212	929
Molybdenum						
Ores and concentrates	tonnes	37 101	46 899	42 498	39 523	45 135
Metal	tonnes	344	142	235	304	720
Oxides	tonnes	968	694	1 204	1 659	1 542
Nickel						
Mattes, sinters etc	tonnes	499	330	598	1 541	3 770
Ores and concentrates	tonnes	419	764	1 124	77	831
Scrap	tonnes	288	918	1 553	1 907	2 109
Unwrought	tonnes	12 037	15 052	19 170	19 032	19 343
Unwrought alloys	tonnes	1 915	469	574	3 035	11 930
Oxides	tonnes	565	700	1 033	576	1 322
Crude petroleum	tonnes	32 376 828	35 234 358	34 059 177	35 087 312	32 729 841
Natural gas	tonnes	14 431 349	14 144 704	13 250 074	12 979 827	12 670 698
Phosphate rock	tonnes	579 326	1 114 210	1 076 842	1 038 397	946 026
Platinum metals						
Platinum and platinum metals	kilograms	1 200	1 000	400	400	10 418
Potash						
Sulphate	tonnes	73 074	129 152	120 335	15 461	7 775
Chloride	tonnes	428 365	1 173 213	1 259 385	740 726	717 841
Other potassic fertilisers	tonnes	7 668	13 668	13 771	3 794	2 412
Rare earths						
Metals	tonnes	323	411	205	136	205
Cerium compounds	tonnes	419	323	289	146	204
Other rare earth compounds	tonnes	292	172	58	41	52
Ferro-cerium and other pyrophoric alloys	tonnes	62	2	0	7	0
Salt	tonnes	1 319 896	1 751 650	2 001 517	1 272 556	1 696 164

Belgium

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Sillimanite minerals						
Sillimanite minerals	tonnes	40 549	53 115	50 427	32 683	31 070
Mullite	tonnes	432	1 955	1 690	4 139	3 391
Silver						
Ores and concentrates	kilograms	1 567 600	6 000 300	7 619 600	25 085 300	2 799 000
Metal	kilograms	225 700	86 500	71 100	80 200	60 400
Sulphur and pyrites						
Sulphur	tonnes	460 990	592 348	562 688	568 833	662 537
Sulphur, sublimed and precipitated	tonnes	750	621	473	558	561
Talc	tonnes	149 757	183 625	175 662	163 309	168 067
Tin						
Concentrates	tonnes	16	200	488	253	124
Unwrought	tonnes	1 350	1 131	847	1 365	657
Unwrought alloys	tonnes	2 638	3 289	2 785	3 109	3 971
Scrap	tonnes	2 327	3 560	3 551	7 001	7 843
Titanium						
Titanium minerals	tonnes	110 028	181 688	213 276	205 930	174 657
Metal	tonnes	2 132	1 743	1 582	1 160	1 454
Oxides	tonnes	108 582	* 314 200	114 760	97 229	126 543
Tungsten						
Ores and concentrates	tonnes	2	28	—	—	48
Metal	tonnes	326	402	321	202	112
Carbide	tonnes	35	31	20	22	52
Vanadium						
Ores and concentrates	tonnes	123	...	...	...	...
Pentoxide	tonnes	94	123	95	364	200
Zinc						
Ores and concentrates	tonnes	(a)* 444 500	1 129 207	1 182 797	1 194 208	1 132 719
Unwrought	tonnes	237 741	189 980	280 492	267 917	214 491
Unwrought alloys	tonnes	13 299	10 613	11 844	30 383	40 924
Scrap	tonnes	61 433	68 233	66 665	57 765	52 498
Zirconium						
Concentrates	tonnes	28 897	17 469	12 317	12 682	17 652
Metal	tonnes	213	370	480	309	382

Note

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

## Bulgaria

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	12 882 651	5 199 000	10 054 205	9 293 819	8 433 198
Crushed rock	tonnes	15 667 880	16 876 900	17 979 678	18 281 353	20 897 466
Barytes	tonnes	14 300	500	200	—	1 000
Bentonite	tonnes	108 400	99 700	53 900	77 900	—
Bismuth	tonnes (metal content)	* —	* 3	* 3	* 3	* 3
Cadmium	tonnes	413	389	427	363	* 360
Cement						
Cement, clinker	tonnes	1 858 850	2 071 100	1 475 700	* 1 500 000	* 1 500 000
Cement, finished	tonnes	2 660 176	1 981 971	1 889 502	1 754 204	1 796 021
Coal						
Brown coal	tonnes	2 243 800	2 321 200	2 743 500	2 556 700	2 301 500
Lignite	tonnes	25 014 800	27 148 300	34 496 200	31 040 700	26 459 300
Copper, mine (a)	tonnes (metal content)	110 652	112 904	114 603	118 255	115 149
Copper, smelter	tonnes	256 200	265 000	285 900	264 200	283 000
Copper, refined	tonnes	196 900	216 000	226 100	226 000	230 100
Feldspar	tonnes	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Fluorspar	tonnes	32	10	31 800	69 700	82 500
Gold	kilograms	4 482	4 489	5 302	7 058	7 385
Gypsum	tonnes	127 600	109 200	114 800	113 700	119 100
Crude steel	tonnes	726 000	744 000	835 000	633 000	523 000
Ferro-alloys						
Ferro-silicon	tonnes	3 000	—	—	—	* —
Kaolin	tonnes	* 11 829	* 16 832	7 700	33 900	22 600
Lead, mine (a)	tonnes (metal content)	12 981	12 705	14 369	15 949	16 914
Lead, refined	tonnes	83 100	80 600	71 000	68 000	71 000
Manganese ore	tonnes	28 300	106 000	85 600	39 100	103 600
Perlite	tonnes	14 800	—	—	3 700	—
Crude petroleum	tonnes	23 800	22 400	21 400	23 600	27 400
Natural gas	million m <sup>3</sup>	15	74	443	390	282
Salt	tonnes	1 300 000	1 900 000	2 200 000	2 100 000	2 000 000
Silver	kilograms (metal content)	* 55 000	* 55 000	* 55 000	* 55 000	* 55 000
Zinc, mine (a)	tonnes (metal content)	9 339	9 904	10 977	12 116	13 902
Slab zinc	tonnes	92 700	93 800	88 400	73 100	* 72 000

#### Notes

(1) Bulgaria is believed to produce chromite, magnesite and sulphur

(a) Metal content of ore

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	76 129	262 166	325 857	513 135	377 613
Aluminium and bauxite						
Unwrought alloys	tonnes	2 775	6 798	7 555	5 866	6 440
Scrap	tonnes	20 577	31 728	26 302	25 579	22 765
Barytes						
Barium minerals	tonnes	14 326	505	231	—	960
Bentonite and fuller's earth						
Bentonite	tonnes	79 359	72 183	67 118	63 090	45 919
Bromine	kilograms	0	...	0	0	25 200
Cadmium						
Metal	tonnes	569	474	421	394	382
Cement						
Cement clinkers	tonnes	14 836	5 246	8 131	296 372	237 020
Portland cement	tonnes	109 923	164 404	190 570	269 199	269 977
Other cement	tonnes	394	1 772	6 516	21 341	4 713

Bulgaria

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Chromium						
Metal	tonnes	15	2	603	304	91
Coal						
Anthracite	tonnes	1 970	150	2 538	2 731	2 914
Other coal	tonnes	9 541	76 358	123 691	130 739	129 657
Lignite	tonnes	5 862	9 525	2 744	635	127
Copper						
Ores and concentrates	tonnes	134 910	86 171	131 874	204 416	231 388
Matte and cement	tonnes	4 749	5 048	5 827	4 565	3 967
Scrap	tonnes	10 717	18 226	12 982	12 318	10 760
Unwrought, unrefined	tonnes	73 379	7 926	10 844	70 347	121 280
Unwrought, refined	tonnes	153 025	206 309	353 450	202 885	199 698
Feldspar	tonnes	15 007	19 087	19 329	19 414	19 433
Fluorspar	tonnes	189	821	33	60	986
Gypsum						
Crude and calcined	tonnes	11 965	3 641	10 953	21 872	11 800
Iodine	kilograms	300	600	600	500	400
Iron ore	tonnes	12 705	1	—	26 823	—
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 420	1 141	854	1 249	2 157
Ferro-silico-manganese	tonnes	...	19	1	136	761
Ferro-silicon	tonnes	2 890	980	248	1 563	1 463
Other ferro-alloys	tonnes	9 867	2 115	312	907	1 652
Ingots, blooms, billets	tonnes	54 115	30 327	24 822	14 564	11 786
Scrap	tonnes	510 997	949 000	850 898	730 749	610 990
Kaolin	tonnes	119 736	159 669	197 114	193 385	200 655
Lead						
Ores and concentrates	tonnes	4 188	4 611	9 331	2 120	6 896
Unwrought	tonnes	77 713	78 977	68 472	64 354	73 577
Magnesite and magnesia						
Magnesite	tonnes	—	—	537	241	94
Manganese						
Ores and concentrates	tonnes	29 715	163 257	91 110	76 140	50 390
Molybdenum						
Metal	tonnes	132	122	355	133	139
Nickel						
Scrap	tonnes	364	1 220	2	...	9
Platinum metals						
Waste and scrap (a)	kilograms	* 44 000	* 16 000	* 23 000	* 10 000	* 36 851
Salt	tonnes	2 689	1 078	6 074	170	1 313
Silver						
Ores and concentrates	kilograms	...	...	8 900	...	—
Metal	kilograms	58 565	37 300	35 200	49 000	52 600
Sulphur and pyrites						
Sulphur	tonnes	20 840	40 286	38 097	41 601	45 592
Titanium						
Metal	tonnes	2	—	849	64	114
Oxides	tonnes	677	584	987	408	258
Tungsten						
Metal	tonnes	2	80	11	12	5
Zinc						
Unwrought (b)	tonnes	87 008	81 332	71 894	57 768	54 272
Scrap	tonnes	2 226	1 949	2 021	2 185	1 353

Notes

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

(b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	22 189	14 843	15 075	18 661	50 149
Aluminium and bauxite						
Alumina	tonnes	1 859	2 887	1 875	3 429	3 946
Unwrought	tonnes	39 759	44 468	43 192	43 405	50 232
Unwrought alloys	tonnes	16 050	27 444	35 685	42 685	55 507
Scrap	tonnes	3 014	6 897	4 625	1 582	1 742
Arsenic						
Metallic arsenic	tonnes	11	3	10	10	27
Barytes						
Barium minerals	tonnes	57	155	112	848	1 840
Bentonite	tonnes	2 422	2 548	2 591	2 074	2 659
Bromine	kilograms	250	...	4 321	52	19 500
Cement						
Cement clinkers	tonnes	45 002	16 167	17 478	14 586	4 929
Portland cement	tonnes	481 991	448 220	431 780	436 036	368 272
Other cement	tonnes	955	2 510	6 147	8 567	6 496
Chromium						
Ores and concentrates	tonnes	637	671	971	1 086	679
Coal						
Anthracite	tonnes	1 938 000	1 858 397	2 203 775	1 132 609	732 939
Other coal	tonnes	1 130 146	1 081 783	1 032 074	1 080 540	964 062
Briquettes	tonnes	10 238	46 754	19	47	24
Copper						
Ores and concentrates	tonnes	635 039	575 192	836 387	756 349	1 008 680
Matte and cement	tonnes	15 160	13 642	2 006	98	17
Unwrought	tonnes	8 016	8 272	12 441	6 982	15 532
Scrap	tonnes	20 730	35 464	52 461	64 563	56 040
Diamond						
Dust	Carats	4 940 300	7 251 395	7 571 255	* 7 641 000	* 9 090 000
Feldspar	tonnes	54 178	86 861	86 056	84 230	110 954
Fluorspar	tonnes	778	700	1 742	1 262	421
Gold						
Metal	kilograms	56	55	1 596	342	137
Graphite	tonnes	132	66	65	56	54
Gypsum						
Crude	tonnes	15 830	6 239	11 399	6 338	5 416
Calcined	tonnes	42 086	44 383	37 323	29 471	32 856
Iodine	kilograms	2 900	2 300	2 800	3 600	3 200
Iron ore						
Burnt pyrites	tonnes	15 831	16 653	16 679	11 794	4 344
Iron ore	tonnes	3 110	7 991	1 265	1 987	9 634
Iron, steel and ferro-alloys						
Pig iron	tonnes	6 736	14 781	17 521	13 807	19 196
Sponge and powder	tonnes	14 572	317	294	97	823
Ferro-chrome	tonnes	182	356	578	489	441
Ferro-silico-magnesium	tonnes	180	164	183	177	237
Ferro-manganese	tonnes	3 137	3 137	6 280	3 816	2 531
Ferro-silico-manganese	tonnes	3 479	4 291	6 324	6 966	5 503
Ferro-molybdenum	tonnes	24	47	82	37	728
Ferro-silicon	tonnes	1 152	2 520	3 246	4 203	4 090
Ferro-titanium and ferro-silico-titanium	tonnes	34	72	175	173	101
Ferro-vanadium	tonnes	87	91	134	125	93
Other ferro-alloys	tonnes	708	685	4 238	5 108	532
Ingots, blooms, billets	tonnes	306 020	258 743	411 534	300 224	412 924
Scrap	tonnes	202 276	269 483	230 401	113 497	93 301
Kaolin	tonnes	20 623	23 784	25 789	29 038	26 218
Lead						
Ores and concentrates	tonnes	63 185	81 307	74 810	72 008	74 199
Unwrought	tonnes	10 182	7 283	21 566	21 064	23 536
Scrap	tonnes	12 145	17 462	4 627	1 660	11 050
Magnesite and magnesia	tonnes	3 180	5 678	11 378	6 204	6 125
Manganese						
Ores and concentrates	tonnes	20	5	133	—	7 893
Molybdenum						
Metal	tonnes	47	10	193	9	3

Bulgaria

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Nickel						
Unwrought (a)	tonnes	90	125	201	172	160
Crude petroleum	tonnes	5 770 397	5 355 541	4 999 511	5 901 767	5 726 184
Phosphate rock	tonnes	309 564	455 539	570 288	535 571	410 404
Potash						
Potassic fertilisers	tonnes	1 970	7 985	3 210	9 948	15 194
Salt	tonnes	102 272	215 355	214 732	252 392	163 880
Silver						
Ores and concentrates	kilograms	...	...	...	...	88 200
Metal	kilograms	871	2 408	4 300	12 800	4 900
Talc	tonnes	747	512	985	956	960
Tin						
Unwrought (a)	tonnes	22	47	359	215	353
Titanium						
Titanium minerals	tonnes	105	506	486	735	—
Metal	tonnes	65	19	46	127	89
Oxides	tonnes	5 329	5 675	6 454	4 593	4 897
Tungsten						
Metal	tonnes	26	86	16	30	21
Zinc						
Ores and concentrates	tonnes	147 579	167 107	166 553	132 500	127 158
Unwrought (a)	tonnes	2 480	1 761	2 765	6 878	2 765
Zirconium						
Concentrates	tonnes	573	781	609	95	231

Notes

(a) Including alloys

## Croatia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	6 583 880	3 646 572	5 012 106	4 345 920	3 779 919
Bauxite	tonnes	500	2 300	4 800	5 700	* 6 000
Primary aluminium	tonnes	—	666	600	—	—
Gypsum	tonnes	318 139	248 675	231 008	182 557	114 450
Crude steel	tonnes	54 266	103 429	162 709	1 016	125 000
Crude petroleum	tonnes	807 424	748 791	664 440	620 835	620 795
Natural gas	million m <sup>3</sup>	2 591	2 727	2 471	2 013	3 724
Salt	tonnes	57 186	66 835	53 963	45 992	42 502

Note

(1) Croatia is also believed to produce sulphur

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	3 087 216	1 858 348	992 712	586 991	556 143
Aluminium and bauxite						
Unwrought	tonnes	124	2 338	2 674	2 161	2 553
Unwrought alloys	tonnes	124	1 017	2 055	2 114	2 516
Scrap	tonnes	15 779	22 346	23 009	23 867	19 095
Cement						
Cement clinkers	tonnes	169 394	176 403	103 281	284 480	324 551
Portland cement	tonnes	615 827	639 236	1 189 738	897 747	1 250 523
Other cement	tonnes	276 981	601 470	180 836	102 405	146 025
Coal						
Hard coal	tonnes	(a) 1	(a) 1	156	(a) 488	(a) 10 733
Copper						
Scrap	tonnes	10 202	13 329	12 597	14 016	11 319
Gold						
Metal	kilograms	140	256	1 408	6 046	4 200
Gypsum						
Crude and calcined	tonnes	3 119	10	66	23	317
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	3 397	6 526	5 254	2 368	73
Ingots, blooms, billets	tonnes	7	2 495	30 004	4 041	78 244
Scrap	tonnes	302 085	357 015	517 438	516 600	349 730
Lead						
Scrap	tonnes	1 025	1 697	1 842	1 906	2 051
Natural gas	tonnes	570 296	347 567	180 323	174 291	260 560
Platinum metals						
Waste and scrap	kilograms	27 959	53 996	24 958	36 441	35 000
Potash						
Chloride	tonnes	1	3	212	217	1 033
Salt	tonnes	9 995	20 721	24 561	21 548	26 247
Silver						
Metal	kilograms	313	93	839	2 558	5 500
Sulphur and pyrites						
Sulphur	tonnes	8 664	6 565	14 256	15 801	12 917
Titanium						
Oxides	tonnes	331	117	172	42	519
Zinc						
Scrap	tonnes	708	518	676	764	833

Note

(a) Including anthracite

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 871 236	926 574	1 366 197	1 689 891	1 446 658
Aluminium and bauxite						
Bauxite	tonnes	72 103	85 634	66 169	67 410	73 689
Unwrought	tonnes	37 828	50 354	45 493	54 040	38 781
Unwrought alloys	tonnes	28 251	29 270	40 783	31 807	40 502
Barytes						
Barium minerals	tonnes	889	710	125	2 225	1 105
Bentonite	tonnes	22 383	7 852	16 906	5 394	6 159
Bromine	kilograms	121	67	120	168	22 800
Cement						
Cement clinkers	tonnes	1	967	144	44	9
Portland cement	tonnes	393 613	344 352	326 526	315 804	261 584
Other cement	tonnes	10 620	7 619	4 200	1 001	1 197
Chromium						
Metal	tonnes	307	419	345	404	177
Coal						
Hard coal (a)	tonnes	712 873	1 112 822	1 092 794	875 116	1 181 025
Lignite	tonnes	47 504	85 413	85 316	44 423	49 158
Briquettes	tonnes	1 730	1 823	2 302	2 175	6 848
Copper						
Unwrought	tonnes	760	944	1 627	744	2 835
Diatomite	tonnes	462	402	555	616	598
Feldspar	tonnes	14 603	14 763	14 001	11 676	11 503
Fluorspar	tonnes	165	146	3 527	15 513	18 082
Gold						
Metal	kilograms	1 221	310	11	11	...
Gypsum						
Crude	tonnes	14 470	1 608	11 421	13 269	37 283
Calcined	tonnes	22 154	14 076	12 709	11 790	9 308
Iron ore (b)	tonnes	12 057	20 147	2 123	2 764	1 924
Iron, steel and ferro-alloys						
Pig iron	tonnes	8 420	10 343	14 072	12 353	13 950
Ferro-alloys	tonnes	2 239	4 051	2 490	1 223	2 578
Ferro-manganese	tonnes	95	135	546	59	361
Ferro-silico-manganese	tonnes	728	2 005	743	56	927
Ferro-phosphorus	tonnes	186	168	196	192	184
Ferro-silicon	tonnes	1 072	1 416	878	828	1 055
Other ferro-alloys	tonnes	344	495	323	280	51
Silicon metal	tonnes	33	95	208	347	16 466
Ingots, blooms, billets	tonnes	19 396	6 514	1 943	14 199	2 139
Scrap	tonnes	10 628	30 395	44 335	4 875	43 945
Kaolin	tonnes	14 486	10 238	11 278	8 655	9 456
Magnesite and magnesia	tonnes	1 289	1 208	1 061	710	2 019
Crude petroleum	tonnes	4 044 874	3 517 452	2 838 313	2 324 685	2 461 651
Natural gas	tonnes	738 109	587 846	579 005	971 008	1 032 104
Phosphate rock	tonnes	117 441	51 010	67 007	56 303	48 227
Potash						
Chloride	tonnes	10 538	132 471	102 879	115 375	75 526
Other potassic fertilisers	tonnes	1 091	1 749	3 717	1 314	2 233
Rare earths						
Ferro-cerium and other pyrophoric alloys	tonnes	87	106	133	116	52
Salt	tonnes	197 644	287 609	190 963	201 542	256 162
Silver						
Metal	kilograms	2 353	3 212	3 868	3 309	2 859
Sulphur and pyrites						
Sulphur	tonnes	10 349	2 877	2 752	1 503	176
Talc	tonnes	1 721	1 813	1 578	1 774	1 989
Titanium						
Oxides	tonnes	2 697	3 000	2 911	206	2 826
Zinc						
Unwrought (c)	tonnes	3 149	3 029	2 886	2 847	3 024

### Notes

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

## Cyprus

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Crushed rock	tonnes	11 467 987	12 981 444	11 816 397	7 308 056	4 561 152
Bentonite	tonnes	152 722	162 969	160 625	160 180	158 386
Cement						
Cement, clinker	tonnes	30 286	—	—	23 363	807 041
Cement, finished	tonnes	1 480 843	1 328 763	1 206 786	1 025 666	854 778
Copper, mine	tonnes (metal content)	2 380	2 595	3 660	4 328	3 631
Copper, refined	tonnes	2 380	2 595	3 660	4 328	3 631
Gypsum	tonnes	317 000	333 000	335 000	327 800	315 000

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	38 469	—	2	78	67
Aluminium and bauxite						
Scrap	tonnes	5 934	6 896	6 310	7 688	5 595
Bentonite	tonnes	95 674	98 803	114 923	130 413	122 699
Cement						
Cement clinkers	tonnes	24 215	—	—	6 535	739 613
Portland cement	tonnes	27 324	12 866	42 438	248 521	343 434
Copper						
Unwrought	tonnes	2 449	2 550	3 660	4 328	3 615
Scrap	tonnes	3 400	4 619	4 086	5 435	3 511
Gold						
Metal	kilograms	700	300	600	1 200	1 300
Gypsum						
Crude and calcined	tonnes	236 427	250 034	248 284	249 250	248 863
Iron, steel and ferro-alloys						
Scrap	tonnes	80 349	96 654	138 529	136 351	103 981
Lead						
Scrap	tonnes	188	252	465	237	1 056
Salt	tonnes	2 910	7 929	6 260	5 765	2 308
Silver						
Metal	kilograms	100	400	1 900	2 500	1 200

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	11 564	2 648	1 517	16 792	1 432
Aluminium and bauxite						
Unwrought (a)	tonnes	8 761	9 225	7 104	6 458	4 768
Barytes						
Barium minerals	tonnes	9	5	58	2	848
Bentonite	tonnes	5 709	4 629	142	280	6 246
Cement						
Cement clinkers	tonnes	15 455	29 579	69 780	6 498	10 100
Portland cement	tonnes	249	2 512	545	416	466
Other cement	tonnes	279	242	138	78	113
Coal						
Hard coal (b)	tonnes	28 911	7 714	129	164	386
Diamond						
Gem, cut	Carats	£1 724 000	£955 000	£976 000	£921 000	£697 000
Industrial	Carats	£587 000	£1 007 000	£944 000	£1 474 000	£890 000
Gypsum						
Crude and calcined	tonnes	10 807	9 292	6 461	5 165	3 061
Platinum metals						
Platinum and platinum metals (c)	kilograms	...	* 900	* 400	* 11	* 340
Rare earths						
Cerium compounds	tonnes	0	24	0	16	...
Ferro-cerium and other pyrophoric alloys	tonnes	...	18	...	—	—
Salt	tonnes	16 822	23 836	20 998	20 470	16 683
Silver						
Metal	kilograms	1 993	1 200	2 200	500	200
Sulphur and pyrites						
Sulphur	tonnes	1 011	951	625	604	664
Talc	tonnes	290	307	267	133	150
Titanium						
Oxides	tonnes	1 189	1 299	1 141	783	621

### Notes

- (a) Including alloys
- (b) Including anthracite
- (c) BGS estimates, based on known exports from certain countries

## Czech Republic

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	23 974 000	19 327 000	21 424 000	18 785 000	17 363 000
Crushed rock	tonnes	41 302 000	37 260 000	36 717 000	32 535 000	33 004 000
Bentonite	tonnes	177 000	183 000	160 000	221 000	226 000
Cement						
Cement, clinker	tonnes	2 923 203	2 748 472	3 132 268	2 837 600	2 472 196
Cement, finished	tonnes	3 637 000	3 345 000	3 831 000	3 434 000	3 211 000
Coal						
Bituminous	tonnes	10 621 000	11 193 000	10 967 000	10 796 000	8 610 000
Brown coal	tonnes	45 354 000	43 931 000	46 848 000	43 710 000	40 585 000
Lignite	tonnes	262 000	—	—	—	—
Diatomite	tonnes	—	32 000	46 000	43 000	49 000
Feldspar	tonnes	431 000	388 000	407 000	445 000	411 000
Graphite	tonnes	3 000	—	—	—	—
Gypsum	tonnes	13 000	5 000	11 000	14 000	11 000
Pig iron	tonnes	3 483 000	3 987 000	4 137 000	3 935 207	4 039 528
Crude steel	tonnes	4 594 000	5 180 000	5 583 000	5 072 082	5 171 255
Ferro-alloys						
Ferro-vanadium	tonnes	* 1 900	* 3 400	* 4 600	* 5 800	* 6 400
Kaolin (a)	tonnes	488 000	636 000	660 000	624 000	609 000
Lead, refined	tonnes	29 000	30 000	34 000	30 000	28 000
Crude petroleum	tonnes	217 000	173 000	163 000	150 000	152 000
Natural gas	million m <sup>3</sup>	180	201	187	204	207
Uranium, mine	tonnes (metal content)	286	259	252	222	232

#### Notes

(1) Czech Republic is also believed to produce sulphur

(a) Beneficiated

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	597 101	683 786	1 010 339	645 164	701 217
Aluminium and bauxite						
Alumina	tonnes	3 069	3 861	3 659	4 065	5 384
Unwrought (a)	tonnes	59 913	51 307	53 600	61 017	64 991
Scrap	tonnes	49 251	71 467	89 690	85 939	55 875
Bentonite	tonnes	99 584	120 859	143 788	151 474	162 165
Bismuth						
Metal	tonnes	—	19	3	4	8
Cement						
Cement clinkers	tonnes	85 427	88 236	169	10 362	1 222
Portland cement	tonnes	374 515	402 537	844 920	665 669	598 254
Other cement	tonnes	156 650	218 689	232	124	124
Chromium						
Ores and concentrates	tonnes	369	764	1 140	1 061	838
Metal	tonnes	662	21	103	31	149
Coal						
Anthracite	tonnes	2 783	1 126	3 463	3 583	4 144
Other coal	tonnes	6 025 794	6 443 306	6 253 274	5 368 575	4 832 928
Lignite	tonnes	1 207 715	1 019 645	1 071 038	12 779 156	1 186 782
Briquettes	tonnes	93 479	90 864	103 816	54 148	45 025
Copper						
Unwrought	tonnes	10 653	11 041	10 703	20 225	47 442
Scrap	tonnes	105 230	123 688	85 202	74 592	66 568
Unwrought alloys	tonnes	3 992	3 515	2 884	1 238	1 331
Diamond						
Gem, cut	Carats	£3 046 000	£4 465 000	£7 709 000	£6 721 000	£5 038 000
Diatomite	tonnes	3 789	4 231	5 182	6 751	7 031

Czech Republic

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Feldspar	tonnes	135 533	129 715	166 859	171 207	173 282
Fluorspar	tonnes	6 147	10 575	10 564	9 634	10 722
Gold						
Metal	kilograms	9 800	12 000	21 400	5 300	82 100
Waste and scrap	kilograms	5 600	4 400	2 700	11 700	1 500
Graphite	tonnes	2 150	3 154	3 417	3 108	2 673
Gypsum						
Crude	tonnes	10 195	48 605	103 363	63 751	70 706
Calcined	tonnes	6 430	5 235	3 448	3 537	3 421
Iodine	kilograms	500	1 000	2 000	4 000	5 300
Iron, steel and ferro-alloys						
Pig iron	tonnes	24 041	65 473	45 677	82 769	82 515
Ferro-silicon	tonnes	4 285	9 806	7 354	7 571	10 533
Ferro-vanadium	tonnes	1 868	3 440	4 603	5 737	6 368
Other ferro-alloys	tonnes	12 274	23 873	6 732	9 311	12 895
Silicon metal	tonnes	783	847	584	74	168
Ingots, blooms, billets	tonnes	222 780	320 821	356 146	292 066	259 268
Scrap	tonnes	1 442 865	1 814 398	2 011 915	2 042 131	1 908 593
Kaolin	tonnes	174 814	485 203	537 962	507 689	504 179
Lead						
Unwrought	tonnes	23 617	32 743	27 649	23 614	27 893
Scrap	tonnes	4 832	1 914	2 357	1 157	1 139
Magnesite and magnesia	tonnes	3 728	3 809	7 096	5 997	4 690
Manganese						
Ores and concentrates	tonnes	—	—	50	383	65
Mercury	kilograms	6 400	1 100	1 700	193	182
Mica	tonnes	59	96	163	212	82
Molybdenum						
Oxides	tonnes	18	25	25	20	214
Nickel						
Scrap	tonnes	2 420	4 558	3 427	6 851	6 560
Unwrought (a)	tonnes	228	126	272	725	1 668
Oxides	tonnes	275	341	338	380	289
Crude petroleum	tonnes	21 600	18 239	18 685	21 470	24 673
Natural gas	tonnes	834 462	1 318 872	1 115 748	1 034 568	965 421
Platinum metals						
Platinum and platinum metals	kilograms	5 200	6 800	2 900	2 800	3 500
Waste and scrap	kilograms	—	—	15 300	—	4 600
Potash						
Potassic fertilisers	tonnes	6 843	4 235	4 780	3 839	3 320
Rare earths						
Rare earth compounds	tonnes	3	6	2	—	2
Salt	tonnes	31 068	51 289	41 658	25 883	80 306
Silver						
Metal	kilograms	77 000	74 600	399 700	187 000	432 800
Sulphur and pyrites						
Sulphur	tonnes	20 153	12 124	980	1 852	9 195
Sulphur, sublimed and precipitated	tonnes	86	330	260	183	44
Tantalum and niobium						
Tantalum	tonnes	62	95	110	86	118
Tin						
Unwrought (a)	tonnes	76	276	18	868	1 995
Scrap	tonnes	118	44	167	191	102
Titanium						
Titanium minerals	tonnes	452	2 378	504	684	758
Metal	tonnes	339	358	264	384	368
Oxides	tonnes	46 753	45 842	45 437	43 174	45 164
Tungsten						
Metal	tonnes	30	211	611	1 011	1 110
Carbide	tonnes	307	803	903	863	949
Zinc						
Unwrought (a)	tonnes	19 982	5 148	5 147	7 407	13 112
Scrap	tonnes	2 716	4 798	4 189	4 432	3 364

Notes

(a) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	398 613	353 419	357 455	352 553	405 141
Aluminium and bauxite						
Bauxite	tonnes	9 857	33 794	32 556	27 514	24 765
Alumina	tonnes	5 995	7 407	7 980	7 682	9 089
Alumina hydrate	tonnes	6 672	9 547	10 052	8 851	9 574
Unwrought	tonnes	62 972	76 945	84 560	77 128	71 737
Unwrought alloys	tonnes	108 231	135 648	153 819	141 484	166 166
Scrap	tonnes	50 379	61 802	86 969	103 385	81 351
Antimony						
Metal	tonnes	55	75	64	31	42
Oxide	tonnes	209	379	356	411	367
Barytes						
Barium minerals	tonnes	4 641	7 004	7 431	7 008	6 525
Bentonite	tonnes	25 129	18 472	39 439	43 334	44 995
Bismuth						
Metal	tonnes	53	106	264	110	101
Cadmium						
Oxide	tonnes	396	464	487	439	415
Cement						
Cement clinkers	tonnes	101 031	121 682	44 577	86 089	141 404
Portland cement	tonnes	890 776	702 257	765 382	638 364	593 385
Other cement	tonnes	51 482	48 336	31 074	26 875	9 941
Chromium						
Ores and concentrates	tonnes	7 798	7 975	7 986	8 413	6 822
Metal	tonnes	83	514	139	147	218
Coal						
Anthracite	tonnes	24 054	24 471	95 762	121 247	183 417
Other coal	tonnes	1 761 947	2 016 443	2 286 190	1 833 669	1 940 720
Lignite	tonnes	36 617	49 426	91 889	350 322	304 216
Briquettes	tonnes	60 962	137 933	157 513	156 682	167 695
Cobalt						
Metal	tonnes	220	60	60	73	59
Oxides	tonnes	17	20	20	32	57
Copper						
Unwrought	tonnes	21 475	6 846	6 252	16 354	29 583
Scrap	tonnes	9 639	11 804	18 859	18 874	14 107
Unwrought alloys	tonnes	3 050	3 674	3 388	1 867	2 400
Diamond						
Gem, cut	Carats	7 306	5 567	6 796	* 10 000	* 7 000
Dust	Carats	£977 000	£1 704 000	£1 954 000	£2 057 000	£2 229 000
Diatomite	tonnes	3 173	2 753	3 263	3 829	3 694
Feldspar	tonnes	5 330	6 298	6 527	4 735	5 920
Fluorspar	tonnes	8 626	14 495	15 547	15 388	17 129
Gold						
Metal	kilograms	3 055	2 600	23 800	3 600	5 500
Waste and scrap	kilograms	60 440	84 000	192 500	245 400	12 200
Graphite	tonnes	2 554	3 605	5 149	4 757	5 588
Gypsum						
Crude	tonnes	83 819	55 087	57 962	48 657	42 413
Calcined	tonnes	53 954	33 763	34 353	33 209	34 644
Iodine	kilograms	31 900	35 100	36 500	22 600	16 400
Iron ore (a)	tonnes	4 803 009	5 902 011	7 363 983	5 870 744	6 268 042

Czech Republic

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	47 666	54 625	76 416	67 036	65 101
Sponge and powder	tonnes	10 006	15 391	24 059	18 754	13 440
Ferro-chrome	tonnes	14 715	16 962	10 933	9 658	18 172
Ferro-silico-magnesium	tonnes	564	820	1 061	699	530
Ferro-manganese	tonnes	23 630	26 204	25 281	24 826	22 787
Ferro-silico-manganese	tonnes	34 418	40 732	41 411	39 572	45 720
Ferro-molybdenum	tonnes	949	1 868	2 401	3 415	3 962
Ferro-nickel	tonnes	2	96	136	47	380
Ferro-niobium	tonnes	183	275	310	360	295
Ferro-phosphorus	tonnes	410	645	650	451	521
Ferro-silicon	tonnes	23 936	31 908	33 418	29 475	31 596
Ferro-titanium and ferro-silico-titanium	tonnes	160	239	317	212	173
Ferro-vanadium	tonnes	299	482	472	526	935
Other ferro-alloys	tonnes	2 709	3 012	2 749	2 358	2 316
Silicon metal	tonnes	4 408	5 805	5 809	4 910	6 325
Ingots, blooms, billets	tonnes	220 524	651 182	322 206	352 697	358 780
Scrap	tonnes	377 942	410 647	472 576	475 327	551 957
Kaolin	tonnes	13 228	14 125	18 733	17 045	15 677
Lead						
Unwrought	tonnes	65 896	81 762	36 233	60 258	104 236
Scrap	tonnes	4 150	2 901	2 763	2 560	4 177
Magnesite and magnesia						
Magnesite	tonnes	3 460	7 108	4 578	5 270	3 386
Magnesia	tonnes	38 048	38 862	40 975	43 235	46 261
Manganese						
Ores and concentrates	tonnes	16 063	25 758	28 810	335	14 189
Metal	tonnes	2 219	984	907	521	629
Mercury	kilograms	4 400	2 400	4 400	2 600	3 300
Mica	tonnes	981	2 513	740	915	604
Molybdenum						
Ores and concentrates	tonnes	1 040	184	118	79	91
Metal	tonnes	127	82	104	57	64
Nickel						
Scrap	tonnes	1 468	1 257	178	1 311	1 016
Unwrought (b)	tonnes	2 179	2 223	3 750	2 799	2 361
Oxides	tonnes	319	393	399	307	298
Crude petroleum	tonnes	7 451 765	7 770 418	6 968 871	7 024 223	6 630 606
Natural gas	tonnes	7 080 247	7 471 522	7 175 884	5 652 749	6 622 377
Phosphate rock	tonnes	543	9 917	13 163	21	35
Platinum metals						
Platinum	kilograms	81 500	25 000	2 100	13 100	1 200
Platinum metals	kilograms	600	17 700	100	100	300
Waste and scrap	kilograms	772	7 835	54 300	169 600	189 400
Potash						
Chloride	tonnes	36 125	82 710	87 248	75 651	66 418
Other potassic fertilisers	tonnes	2 430	4 773	3 410	3 377	4 381
Rare earths						
Metals	tonnes	0	13	35	2	...
Rare earth compounds	tonnes	124	131	117	344	190
Ferro-cerium and other pyrophoric alloys	tonnes	5	6	2	1	1
Salt	tonnes	711 374	958 474	858 980	560 186	1 046 589
Sillimanite minerals						
Sillimanite minerals	tonnes	4 227	3 682	4 089	4 132	7 867
Mullite	tonnes	490	758	818	606	1 142
Silver						
Ores and concentrates	kilograms	5 700	990 200	—	—	—
Metal	kilograms	163 316	136 000	1 635 700	993 700	865 000
Sulphur and pyrites						
Pyrites	tonnes	299	250	247	384	366
Sulphur	tonnes	20 986	14 762	14 945	70 008	54 000
Sulphur, sublimed and precipitated	tonnes	71 033	82 355	93 289	39 459	27 870
Talc	tonnes	9 312	9 570	12 686	8 827	9 735
Tantalum and niobium						
Tantalum	tonnes	141	265	222	175	224

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Tin						
Unwrought (b)	tonnes	937	449	651	631	1 449
Titanium						
Titanium minerals	tonnes	140 394	155 485	146 778	98 071	100 317
Metal	tonnes	918	779	1 333	1 717	1 884
Oxides	tonnes	7 248	8 857	9 372	7 763	8 863
Tungsten						
Ores and concentrates	tonnes	...	...	314	799	100
Metal	tonnes	4 184	677	367	968	506
Carbide	tonnes	...	150	219	88	198
Vanadium						
Pentoxide	tonnes	2 702	5 255	7 004	8 672	9 478
Zinc						
Unwrought	tonnes	24 660	15 121	17 137	19 064	21 687
Unwrought alloys	tonnes	7 155	11 653	10 590	11 947	8 524
Scrap	tonnes	2 434	900	909	583	177
Zirconium						
Concentrates	tonnes	268	303	955	595	682

## Notes

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

Denmark

## Denmark

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	36 240 000	33 978 000	42 878 000	39 332 000	* 38 000 000
Crushed rock	tonnes	260 000	240 000	337 000	293 000	243 000
Bentonite	tonnes	24 040	23 832	38 300	30 330	56 355
Cement						
Cement, clinker	tonnes	122	3 819	25	24 256	—
Cement, finished	tonnes	1 578 614	1 566 624	1 852 804	1 817 334	1 852 445
Diatomite						
Moler (a)	tonnes	126 000	124 000	126 000	111 000	128 125
Crude petroleum	tonnes	13 045 000	12 090 000	10 909 000	9 968 000	8 657 000
Natural gas	million m <sup>3</sup>	7 998	7 792	6 262	5 480	4 566
Salt	tonnes	511 063	601 046	* 595 000	* 590 000	580 000
Sulphur and pyrites						
Recovered (b)	tonnes (sulphur content)	4 200	3 246	3 045	3 925	3 599

### Notes

(1) Denmark is also believed to produce kaolin

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

(b) From petroleum refining and/or natural gas

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	955 036	907 149	961 853	1 224 741	1 433 979
Aluminium and bauxite						
Bauxite	tonnes	1 568	3 279	6 769	9 432	4 600
Alumina	tonnes	4 002	4 661	4 958	5 879	4 709
Unwrought alloys	tonnes	7 505	9 515	7 382	7 440	7 896
Scrap	tonnes	70 649	73 402	67 000	73 392	73 142
Bentonite	tonnes	13 004	13 787	13 827	17 711	20 620
Cement						
Cement clinkers	tonnes	7 784	11 884	2 689	24 658	39
Portland cement	tonnes	568 656	731 730	813 938	767 554	754 399
Other cement	tonnes	20 751	3 860	4 175	4 565	4 574
Chromium						
Metal	tonnes	659	1 056	601	548	427
Coal						
Hard coal	tonnes	(a) 44 115	61 612	153 532	(a) 10 585	(a) 80 771
Copper						
Scrap	tonnes	31 711	30 006	33 289	27 276	29 167
Diamond						
Unsorted	Carats	15 000	...	2 875 000	60 000	—
Gem, cut	Carats	685 000	520 000	545 000	360 000	3 500 000
Industrial	Carats	40 000	90 000	125 000	55 000	65 000
Dust	Carats	5 400 000	7 625 000	24 850 000	18 500 000	10 000
Diatomite (b)	tonnes	* 57 500	* 57 300	* 56 800	* 42 700	* 55 700
Gold						
Metal	kilograms	868	761	1 224	1 556	5 560
Waste and scrap	kilograms	500	500	1 800	3 000	1 300
Gypsum						
Crude	tonnes	8 440	2 211	63	5 155	126
Calcined	tonnes	1 455	8 299	6 725	13 990	1 748
Iodine	kilograms	1 500	3	100	—	—
Iron, steel and ferro-alloys						
Pig iron	tonnes	53	239	1 102	1 681	674
Ferro-silicon	tonnes	55	77	164	1 043	602
Other ferro-alloys	tonnes	291	54	43	48	52
Ingots, blooms, billets	tonnes	13 287	19 143	21 926	21 050	21 075
Scrap	tonnes	1 335 754	1 596 485	1 554 808	1 359 467	1 245 646

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Kaolin	tonnes	352	607	1 370	1 489	1 245
Lead						
Unwrought	tonnes	615	896	478	588	1 375
Scrap	tonnes	4 057	3 485	4 118	4 167	5 165
Magnesite and magnesia						
Magnesite	tonnes	425	244	147	1	60
Magnesia	tonnes	93	522	497	179	437
Mercury	kilograms	108	9	119	843	68 876
Nickel						
Scrap	tonnes	1 063	1 765	1 244	590	314
Crude petroleum	tonnes	8 520 980	7 363 518	6 899 354	5 896 071	6 000 228
Natural gas	tonnes	2 906 339	(b)* 1 044 000	(b)* 836 000	(b)* 729 000	(b)* 1 527 000
Platinum metals						
Platinum and platinum metals	kilograms	7 000	200	100	200	600
Potash						
Chloride	tonnes	59	69	2 123	2 579	2 628
Other potassic fertilisers	tonnes	504	683	8 898	7 664	5 891
Salt	tonnes	333 383	319 317	296 459	391 879	324 030
Silver						
Ores and concentrates	kilograms	...	...	422 100	1 533 800	645 100
Metal	kilograms	37 200	30 300	53 800	30 100	29 700
Sulphur and pyrites						
Sulphur	tonnes	6	12	39	4 814	14 543
Talc	tonnes	269	409	235	235	188
Tin						
Unwrought	tonnes	6	1	208	81	98
Titanium						
Metal	tonnes	102	196	125	194	193
Oxides	tonnes	442	820	5 792	10 732	10 385
Tungsten						
Metal	tonnes	91	113	118	32	12
Zinc						
Unwrought (c)	tonnes	124	318	635	789	1 060
Scrap	tonnes	2 622	2 563	2 468	2 617	2 271

## Notes

- (a) Including anthracite  
 (b) BGS estimates, based on known imports into certain countries  
 (c) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	2 932 586	2 777 604	3 531 658	3 934 656	3 688 045
Aluminium and bauxite						
Bauxite	tonnes	8 108	8 364	9 112	7 515	10 371
Alumina	tonnes	21 968	22 484	21 012	25 210	28 552
Unwrought (a)	tonnes	61 259	79 479	86 057	77 796	54 482
Scrap	tonnes	5 321	5 175	5 891	5 267	13 785
Barytes						
Barium minerals	tonnes	27 656	14 178	17 322	8 615	16 538
Bentonite	tonnes	35 089	43 049	34 130	41 931	38 382
Cement						
Cement clinkers	tonnes	31 847	23 732	29 888	24 464	25 822
Portland cement	tonnes	208 467	180 249	244 007	211 379	209 012
Other cement	tonnes	46 117	38 797	19 941	19 569	15 876
Chromium						
Ores and concentrates	tonnes	384	480	864	880	724
Coal						
Anthracite	tonnes	12 593	(b)* 21 000	(b)* 6 000	(b)* 6 000	(b)* 500
Other coal	tonnes	6 423 923	3 670 544	(b)* 7 104 000	(b)* 3 799 000	(b)* 451 000
Briquettes	tonnes	455	7 554	14 768	4 106	3 522
Cobalt						
Oxides	tonnes	15	19	42	16	0
Copper						
Unwrought	tonnes	1 413	1 978	2 255	1 692	2 039
Scrap	tonnes	10 388	9 125	9 075	7 547	9 477
Diamond						
Unsorted	Carats	£40 000	£255 000	£82 000	£17 000	£94 000
Gem, cut	Carats	£4 680 000	£5 339 000	£5 884 000	£8 897 000	£11 316 000
Industrial	Carats	£223 000	£59 000	£88 000	£137 000	£105 000
Dust	Carats	10 680 000	2 075 000	1 940 000	1 210 000	(b)* 1 505 000
Diatomite	tonnes	3 347	3 294	4 165	3 056	2 998
Feldspar	tonnes	2 666	1 211	2 612	45	2
Fluorspar	tonnes	33 149	13 086	22 462	16 043	11 860
Gold						
Metal	kilograms	3 100	900	100 900	1 100	47 900
Graphite	tonnes	269	303	405	424	335
Gypsum						
Crude	tonnes	106 304	53 577	97 219	133 652	85 185
Calcined	tonnes	58 675	42 290	21 696	79 529	34 987
Iodine	kilograms	8 674	10 168	5 895	8 447	11 900
Iron ore						
Burnt pyrites	tonnes	—	15 457	8	—	2
Iron ore	tonnes	69 990	53 896	49 597	49 006	40 005
Iron, steel and ferro-alloys						
Pig iron	tonnes	10 299	10 263	17 316	17 014	18 760
Sponge and powder	tonnes	1 742	3 229	3 586	8 505	28 389
Ferro-silico-magnesium	tonnes	16	114	8	32	89
Ferro-manganese	tonnes	101	139	121	248	151
Ferro-silicon	tonnes	569	2 864	3 328	3 655	3 010
Other ferro-alloys	tonnes	448	149	98	87	189
Ingots, blooms, billets	tonnes	328 893	538 503	609 342	420 037	554 999
Scrap	tonnes	269 841	337 192	242 848	208 231	322 275
Kaolin	tonnes	37 738	37 007	37 755	53 815	26 349
Lead						
Scrap	tonnes	2 583	2 890	1 989	2 655	2 601
Lithium						
Carbonate	tonnes	402	340	358	80	63
Magnesite and magnesia						
Magnesite	tonnes	2 680	2 728	2 299	1 784	2 000
Magnesia	tonnes	5 472	4 636	4 927	5 219	4 187
Manganese						
Ores and concentrates	tonnes	1 158	257	1 051	352	566
Mica	tonnes	242	237	150	148	185
Molybdenum						
Oxides	tonnes	388	418	253	345	570
Nickel						
Scrap	tonnes	122	382	234	227	303

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Crude petroleum	tonnes	3 320 486	2 562 669	2 625 412	3 150 386	4 274 735
Natural gas	tonnes	...	103 236	198 509	119	683
Platinum metals						
Platinum and platinum metals	kilograms	4 699	2 300	796	500	1 600
Potash						
Sulphate	tonnes	1 019	1 910	9 335	11 225	15 644
Chloride	tonnes	4 917	36 608	42 472	30 823	41 611
Other potassic fertilisers	tonnes	11 052	14 967	8 473	4 816	3 951
Rare earths						
Cerium compounds	tonnes	734	15	16	19	16
Other rare earth compounds	tonnes	36	19	6	3	20
Salt	tonnes	421 109	762 420	907 135	351 217	715 813
Sillimanite minerals						
Sillimanite minerals	tonnes	1 011	1 124	792	386	1 338
Mullite	tonnes	1 587	3 199	2 590	1 714	1 639
Silver						
Metal	kilograms	1 873 817	612 600	172 900	66 700	379 200
Sulphur and pyrites						
Sulphur	tonnes	4 447	7 051	6 123	4 173	4 339
Talc	tonnes	8 035	7 013	6 276	6 883	6 469
Tin						
Unwrought (a)	tonnes	13	110	136	195	173
Titanium						
Metal	tonnes	670	674	1 723	1 948	1 036
Oxides	tonnes	17 511	20 427	23 296	17 706	20 220
Tungsten						
Metal	tonnes	105	51	41	32	30
Zinc						
Unwrought	tonnes	6 063	4 427	6 023	6 877	6 968
Unwrought alloys	tonnes	771	1 310	763	923	1 343

## Notes

(a) Including alloys

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

## Estonia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	3 911 980	3 469 220	3 568 680	3 954 600	5 185 580
Crushed rock	tonnes	6 034 500	5 849 600	5 919 500	6 170 200	6 242 500
Cement						
Cement, clinker	tonnes	448 500	537 000	719 000	714 600	301 100
Cement, finished	tonnes	326 200	375 000	451 000	481 500	456 700
Crude steel	tonnes	—	—	1	185	395
Lead, refined	tonnes	5 000	7 200	7 800	8 046	7 581
Crude petroleum (a)	tonnes	1 733 000	2 080 000	2 173 132	2 180 313	2 379 253

Note

(a) From oil shale

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	503 048	810 298	745 353	689 854	625 329
Aluminium and bauxite						
Bauxite	tonnes	80	...	29 492	23 317	...
Unwrought (a)	tonnes	8 357	4 132	52	1 220	1 090
Scrap	tonnes	6 958	65 948	63 880	11 342	10 523
Antimony						
Metal	tonnes	...	67	113	...	—
Cadmium						
Metal	tonnes	...	...	...	564	378
Cement						
Cement clinkers	tonnes	395 641	222 190	426 994	347 754	346 684
Portland cement	tonnes	120 294	148 505	186 255	208 131	202 614
Other cement	tonnes	59	488	752	1 107	3
Coal						
Hard coal	tonnes	(b) 20 296	(b) 16 452	(b) 2 312	(b) 741	1
Copper						
Unwrought	tonnes	520	1 790	744	2 386	860
Scrap	tonnes	5 633	6 915	5 171	5 549	5 820
Gold						
Metal	kilograms	—	400	2 300	1 600	2 300
Gypsum						
Crude and calcined	tonnes	22	87	105	1 781	1 282
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	100	124	142	1 012	2 175
Scrap	tonnes	384 299	512 766	563 124	631 831	517 330
Kaolin	tonnes	—	878	830	1 019	352
Lead						
Unwrought	tonnes	8 861	10 624	11 513	11 042	10 334
Molybdenum						
Ores and concentrates	tonnes	20	40	80	180	848
Nickel						
Scrap	tonnes	89	0	536	144	20
Unwrought	tonnes	(a) —	(a) 2	2	539	(a) 2
Crude petroleum	tonnes	—	—	1 062	3 124	12 056
Platinum metals						
Platinum and platinum metals	kilograms	7	...	—	654	500
Waste and scrap	kilograms	800	7 700	9 100	8 800	103 800
Potash						
Potassic fertilisers	tonnes	12	48	693	242	131
Rare earths						
Metals	tonnes	1	1	0	42	77
Rare earth compounds	tonnes	2 679	1 686	1 124	3 210	3 482
Salt	tonnes	277	2 055	3 685	2 968	4 383

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Silver						
Metal	kilograms	955	200	4 600	1 600	1 400
Sulphur and pyrites						
Sulphur	tonnes	20	45	621	—	—
Tantalum and niobium						
Tantalum	tonnes	47	34	76	49	24
Tin						
Scrap	tonnes	124	120	56	121	276
Titanium						
Oxides	tonnes	158	49	164	468	396
Tungsten						
Metal	tonnes	—	1	...	61	4
Zinc						
Scrap	tonnes	1 065	509	637	410	253

## Notes

- (a) Including alloys  
 (b) Including anthracite

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 006 376	1 395 122	1 302 589	1 215 348	1 308 292
Aluminium and bauxite						
Unwrought (a)	tonnes	5 956	3 176	2 231	2 811	902
Scrap	tonnes	535	4 495	2 488	488	250
Bentonite	tonnes	1 631	3 352	2 937	2 670	2 958
Cement						
Cement clinkers	tonnes	—	13 474	(b)* 1 800	4 688	4 526
Portland cement	tonnes	30 424	36 354	52 807	27 404	34 852
Other cement	tonnes	458	827	1 545	13 043	31 565
Coal						
Hard coal (c)	tonnes	30 413	77 300	89 422	81 082	58 945
Copper						
Unwrought	tonnes	489	520	484	1 480	395
Feldspar	tonnes	115	94	109	17 881	2 477
Gold						
Metal	kilograms	300	900	1 600	900	3 200
Gypsum						
Crude	tonnes	381	11 295	11 922	16 772	13 952
Calcined	tonnes	8 760	8 950	8 343	7 718	8 328
Iodine	kilograms	196	13 157	258	39	5 024
Iron, steel and ferro-alloys						
Ferro-niobium	tonnes	220	438	374	411	410
Ferro-silicon	tonnes	2	21	149	61	83
Ferro-titanium and ferro-silico-titanium	tonnes	0	...	...	11	500
Other ferro-alloys	tonnes	83	213	79	102	103
Scrap	tonnes	9 267	8 434	12 230	8 305	25 634
Kaolin	tonnes	1 588	881	211	8 568	3 090
Magnesite and magnesia						
Magnesia	tonnes	260	297	382	380	528
Manganese						
Metal	tonnes	168	576	85	—	71
Natural gas	tonnes	477 844	491 806	478 288	452 299	535 232
Platinum metals						
Waste and scrap	kilograms	...	...	...	—	59 600
Potash						
Chloride	tonnes	1	1 517	1 898	2 438	3 120
Other potassic fertilisers	tonnes	5	57	1 491	1 960	372
Rare earths						
Cerium compounds	tonnes	0	24	501	545	300
Other rare earth compounds	tonnes	4 125	2 105	3 616	4 499	4 494

## Estonia

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Salt	tonnes	73 931	73 254	85 105	73 248	43 617
Silver						
Metal	kilograms	2 900	3 200	5 000	1 700	3 700
Sulphur and pyrites						
Sulphur	tonnes	1	1	2	1 344	1 224
Talc	tonnes	332	373	451	429	467
Tantalum and niobium						
Tantalum	tonnes	—	37	20	1	—
Titanium						
Metal	tonnes	50	82	5	683	2 229
Oxides	tonnes	1 349	1 409	1 724	1 921	1 808
Zinc						
Unwrought (a)	tonnes	1 595	5 978	8 887	4 987	664

## Notes

- (a) Including alloys
- (b) BGS estimates, based on known exports from certain countries
- (c) Including anthracite

# Finland

## Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	* 37 000 000	* 36 000 000	* 36 000 000	* 34 000 000	* 31 960 000
Crushed rock	tonnes	* 47 000 000	* 48 000 000	* 53 000 000	* 54 000 000	* 52 000 000
Cement						
Cement, finished (a)	tonnes	1 041 866	1 204 581	1 379 760	1 292 855	1 292 430
Chromium	tonnes	247 000	598 000	693 000	425 000	982 000
Cobalt, mine	tonnes (metal content)	* 27	* 140	480	* 1 381	2 061
Cobalt, metal	tonnes	8 970	9 429	10 627	10 562	10 798
Copper, mine	tonnes (metal content)	14 600	14 700	14 000	25 446	34 451
Copper, smelter	tonnes	115 490	131 548	130 041	130 262	118 552
Copper, refined	tonnes	105 411	112 687	124 360	129 256	135 840
Feldspar	tonnes	23 120	28 013	26 292	43 124	47 636
Germanium	tonnes	—	12	12	16	17
Gold	kilograms	3 996	5 896	6 674	9 100	9 981
Pig iron	tonnes	2 042 000	2 564 000	2 600 000	2 461 000	2 100 000
Crude steel	tonnes	3 066 000	4 029 000	3 989 000	3 759 000	3 517 000
Ferro-alloys						
Ferro-chrome	tonnes	123 310	238 000	231 000	229 000	434 000
Mercury	kilograms	6 210	9 000	5 000	—	—
Mica	tonnes	7 855	13 809	12 896	12 112	11 244
Nickel, mine	tonnes (metal content)	735	12 100	18 244	19 073	19 300
Nickel, smelter/refinery	tonnes	41 556	49 772	49 823	46 275	44 498
Phosphate rock	tonnes	658 347	817 289	869 694	858 005	877 189
Platinum metals						
Platinum	kilograms (metal content)	—	—	—	429	946
Palladium	kilograms (metal content)	—	—	—	379	766
Selenium metal	tonnes	59	73	86	93	101
Silver	kilograms (metal content)	70 062	64 596	73 081	128 200	100 890
Sulphur and pyrites						
Pyrites	tonnes (sulphur content)	153 600	250 000	338 000	375 000	347 000
Recovered (b)	tonnes (sulphur content)	273 600	270 000	940 000	990 000	947 000
Recovered (c)	tonnes (sulphur content)	127 000	122 000	133 300	121 700	130 000
Talc	tonnes	375 302	419 345	429 494	396 332	361 840
Wollastonite	tonnes	9 200	12 100	11 500	* 11 500	* 12 000
Zinc, mine	tonnes (metal content)	30 233	55 562	64 115	52 200	40 290
Slab zinc	tonnes	295 049	307 144	307 352	314 742	311 686

### Notes

(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	2009	2010	2011	2012	2013
Primary aggregates	tonnes	645 609	1 396 025	2 020 822	953 926	712 702
Aluminium and bauxite						
Unwrought alloys	tonnes	8 939	15 346	11 289	14 185	15 200
Scrap	tonnes	34 910	33 304	38 862	43 221	48 252
Bentonite	tonnes	803	0	61	27	123
Bromine	kilograms	...	...	22 200	—	—
Cement						
Cement clinkers	tonnes	47	30	58	28	18
Portland cement	tonnes	1 275	373	92	6	1 172
Other cement	tonnes	29	13	33	50	42
Chromium						
Ores and concentrates	tonnes	2 050	8 291	5 231	4 575	3 424
Metal	tonnes	1 577	1 813	2 366	1 950	2 542
Coal						
Hard coal (a)	tonnes	19	12	32	0	5 270
Cobalt						
Oxides (b)	tonnes	* 3 100	* 5 400	* 6 400	* 4 300	* 5 200
Metal (b)	tonnes	* 4 500	* 3 900	* 4 200	* 6 000	* 5 300
Copper						
Matte and cement	tonnes	...	...	19 610	18 588	28 640
Scrap	tonnes	32 762	32 819	33 714	32 739	28 583
Unwrought, unrefined	tonnes	37 084	35 132	24 908	29 714	21 400
Unwrought, refined	tonnes	41 139	57 969	41 603	59 950	59 318
Diamond						
Dust	Carats	...	...	20 000	35 000	105 000
Feldspar	tonnes	26 613	31 844	31 700	47 889	42 359
Gold						
Metal	kilograms	2 207	4 168	4 970	2 841	639
Waste and scrap	kilograms	539	878	1 268	88 389	1 243
Iron ore						
Burnt pyrites	tonnes	244 225	391 549	(b)* 80 000	(b)* 30 000	(b)* 13 000
Iron ore	tonnes	0	298 912	(b)* 700 000	(b)* 1 200 000	(b)* 1 700 000
Iron, steel and ferro-alloys						
Pig iron	tonnes	11 317	2 564	373	14 459	5 780
Ferro-chrome	tonnes	61 319	126 713	97 322	104 829	283 425
Other ferro-alloys	tonnes	308	560	211	217	202
Ingots, blooms, billets	tonnes	253 440	263 863	219 129	127 904	49 814
Scrap	tonnes	276 010	229 680	341 937	361 107	402 310
Kaolin	tonnes	13 832	18 176	30 760	40 550	38 900
Lead						
Scrap	tonnes	357	340	328	1 231	1 895
Manganese						
Metal	tonnes	341	32	25	2	1
Mercury	kilograms	6 211	9 321	4 830	—	—
Mica	tonnes	6 125	11 377	8 636	9 242	11 073
Nickel						
Mattes, sinters etc	tonnes	...	...	7 732	13 387	9 473
Scrap	tonnes	1 511	323	33	39	130
Ores and concentrates	tonnes	—	8 946	23 411	55 260	139 017
Unwrought	tonnes	37 202	(c) 31 275	(c) 39 472	36 364	36 113
Oxides (b)	tonnes	* 200	* 500	* 200	* 200	* 150
Natural gas	tonnes	4 557	9 052	4 729	34	34
Phosphate rock	tonnes	3 796	52 006	117 304	43 597	—
Platinum metals						
Platinum and platinum metals	kilograms	34 126	6 238	6 684	3 927	8 475
Waste and scrap	kilograms	267	723	75	454	37 096
Potash						
Sulphate	tonnes	45 800	53 850	* 61 000	* 57 000	* 39 000
Rare earths						
Rare earth compounds	tonnes	0	44	67	0	84
Salt	tonnes	336	11 380	1 370	401	935
Silver						
Metal	kilograms	1 680	1 162	1 336	1 084	3 058

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Sulphur and pyrites						
Pyrites (b)	tonnes	* 88 000	* 198 000	* 460 000	* 520 000	* 316 000
Sulphur	tonnes	35 701	2 715	2 404	2 871	(b) 80
Talc (b)	tonnes	* 174 000	* 222 000	* 259 000	* 249 000	* 243 000
Tin						
Scrap	tonnes	124	142	139	171	186
Titanium						
Oxides (b)	tonnes	* 86 000	* 88 000	* 80 000	* 66 000	* 83 000
Tungsten						
Metal	tonnes	291	450	588	480	643
Zinc						
Ores and concentrates	tonnes	1 426	22 479	50 656	39 555	29 613
Unwrought (c)	tonnes	268 893	266 738	265 686	271 313	272 632
Scrap	tonnes	1 012	1 369	1 215	1 066	935

## Notes

- (a) Including anthracite  
 (b) BGS estimates, based on known imports into certain countries  
 (c) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	330 108	284 066	52 920	96 804	137 333
Aluminium and bauxite						
Bauxite	tonnes	1 584	9 294	3 036	1 328	3 168
Alumina	tonnes	1 733	2 401	2 422	2 479	3 057
Alumina hydrate	tonnes	20 614	29 607	25 676	22 996	26 702
Unwrought	tonnes	1 204	2 008	2 070	1 596	1 691
Unwrought alloys	tonnes	29 303	37 539	37 589	32 897	33 081
Scrap	tonnes	10 998	15 466	15 803	14 080	14 731
Antimony						
Oxide	tonnes	101	116	80	104	73
Barytes						
Barium minerals	tonnes	2 573	4 406	4 383	4 101	3 988
Bentonite	tonnes	19 429	16 293	21 194	24 913	26 294
Bromine	kilograms	242 982	318 478	322 231	441 332	371 829
Cement						
Cement clinkers	tonnes	536	14 191	16 790	7 512	2 912
Portland cement	tonnes	320 084	587 410	549 673	498 577	401 067
Other cement	tonnes	12 232	10 202	16 408	13 870	20 606
Chromium						
Ores and concentrates	tonnes	4 521	9 197	20 853	9 372	3 726
Metal	tonnes	105	139	194	139	94
Coal						
Hard coal (a)	tonnes	5 937 153	5 919 757	6 972 540	3 954 916	5 064 181
Cobalt						
Ore	tonnes	15 146	9 867	8 994	7 477	5 352
Metal	tonnes	24 002	30 623	53 059	54 106	39 435
Oxides	tonnes	46	233	172	298	154
Copper						
Ores and concentrates	tonnes	352 370	458 174	415 365	424 982	391 822
Unwrought	tonnes	16 298	4 212	4 711	6 366	2 330
Scrap	tonnes	7 349	6 967	7 726	9 839	7 444
Unwrought alloys	tonnes	2 415	2 783	2 528	1 819	2 067
Diamond						
Unsorted	Carats	£91 000	£419 000	£315 000	£288 000	£228 000
Gem, rough	Carats	£56 000	£168 000	£131 000	£111 000	£41 000
Gem, cut	Carats	£3 133 000	£3 575 000	£3 346 000	£3 201 000	£3 018 000
Industrial	Carats	20 000	65 000	520 000	20 000	40 000
Dust	Carats	273 415	519 830	773 725	645 000	735 000
Diatomite	tonnes	3 015	4 367	3 432	3 426	2 724
Feldspar	tonnes	851	1 209	1 217	4 902	5 660

## Finland

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Fluorspar	tonnes	23 178	16 740	17 605	16 818	15 398
Gold						
Metal	kilograms	549	650	595	1 358	905
Gypsum						
Crude	tonnes	146 141	235 787	182 082	223 784	150 748
Calcined	tonnes	5 664	7 281	11 020	9 270	7 061
Iodine	kilograms	2 901	1 443	1 174	856	719
Iron ore	tonnes	2 204 018	(b) 3 052 609	3 728 222	3 220 998	(b) 2 903 196
Iron, steel and ferro-alloys						
Pig iron	tonnes	18 097	36 120	31 235	21 728	20 360
Sponge and powder	tonnes	493 087	872 476	1 871	1 102	1 361
Ferro-chrome	tonnes	5 094	7 055	8 274	33 392	6 865
Ferro-silico-magnesium	tonnes	309	190	158	220	100
Ferro-manganese	tonnes	5 985	10 595	11 784	10 170	9 005
Ferro-silico-manganese	tonnes	20 642	30 204	30 169	* 22 000	30 754
Ferro-molybdenum	tonnes	584	1 316	1 717	* 1 200	1 001
Ferro-nickel	tonnes	17 098	25 746	40 962	* 51 000	35 930
Ferro-niobium	tonnes	318	629	849	874	804
Ferro-phosphorus	tonnes	285	543	499	325	537
Ferro-silicon	tonnes	21 437	31 395	30 207	34 361	34 600
Ferro-titanium and ferro-silico-titanium	tonnes	710	1 043	1 843	942	994
Ferro-vanadium	tonnes	91	235	193	134	119
Other ferro-alloys	tonnes	1 028	4 648	4 839	1 545	1 260
Silicon metal	tonnes	548	1 390	1 281	845	1 821
Ingots, blooms, billets	tonnes	30 206	18 268	17 119	10 111	12 616
Scrap	tonnes	467 642	754 398	710 558	* 600 000	556 007
Kaolin	tonnes	708 210	941 387	936 544	860 241	806 954
Lead						
Unwrought	tonnes	2 346	1 512	2 446	3 821	4 146
Magnesite and magnesia						
Magnesite	tonnes	224	118	576	568	264
Magnesia	tonnes	6 439	7 387	9 214	8 959	8 074
Manganese						
Ores and concentrates	tonnes	12 224	21 961	3 792	329	248
Metal	tonnes	912	2 134	2 123	2 144	1 747
Mercury	kilograms	2 136	2 203	4 069	36	17
Mica	tonnes	1 988	3 647	3 351	2 267	208
Molybdenum						
Ores and concentrates (c)	tonnes	* 1 214	* 1 724	* 1 679	* 2 013	* 3 707
Nickel						
Mattes, sinters etc	tonnes	22 715	33 986	35 284	30 443	29 502
Ores and concentrates	tonnes	185 202	217 164	276 892	276 587	240 116
Unwrought	tonnes	9 192	14 558	9 946	—	7 878
Unwrought alloys	tonnes	792	17 649	2 688	—	490
Crude petroleum	tonnes	11 516 562	11 211 580	11 504 505	11 088 493	11 639 775
Natural gas	tonnes	—	3 252 037	3 543 126	(c)* 3 000 000	2 152 696
Phosphate rock	tonnes	(c)* 1 510	* 28 144	* 10 181	(c)* 52	* 41 664
Platinum metals						
Platinum and platinum metals	kilograms	284	385	356	57 429	107 271
Potash						
Chloride (d)	tonnes	84 600	194 800	211 100	207 500	232 400
Other potassic fertilisers	tonnes	74	117	4 602	1 100	9
Rare earths						
Cerium compounds	tonnes	57	72	52	18	23
Other rare earth compounds	tonnes	9	8	14	5	3
Ferro-cerium and other pyrophoric alloys	tonnes	1	2	2	10	12
Salt	tonnes	417 495	384 089	452 873	385 359	380 753
Silver						
Metal	kilograms	(c)* 47 900	50 681	26 764	19 618	13 828
Sulphur and pyrites						
Sulphur	tonnes	1 673	21 676	38 923	29 283	16 558
Sulphur, sublimed and precipitated	tonnes	6	3	4	43	210
Talc	tonnes	525	1 202	1 929	1 624	1 153
Tantalum and niobium						
Tantalum	tonnes	* 0	* 0	* 0	* 0	* 87

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Tin						
Unwrought (e)	tonnes	94	188	136	124	77
Titanium						
Titanium minerals	tonnes	8 794	(c)* 20	(c)* 3 154	(c)* 20	39 888
Metal	tonnes	87	60	66	81	62
Oxides	tonnes	12 524	15 571	15 533	13 638	14 391
Tungsten						
Metal	tonnes	205	403	567	456	725
Zinc						
Ores and concentrates	tonnes	532 036	559 918	547 265	558 963	611 240
Unwrought (e)	tonnes	3 705	4 374	1 471	1 146	1 565

## Notes

- (a) Including anthracite
- (b) Including burnt pyrites
- (c) BGS estimates, based on known exports from certain countries
- (d) K<sub>2</sub>O content
- (e) Including alloys

## France

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	146 290 000	141 290 000	148 680 000	138 280 000	* 129 983 200
Crushed rock	tonnes	209 440 000	201 860 000	204 980 000	196 600 000	* 184 804 000
Bauxite	tonnes	129 700	93 100	80 800	69 500	* 70 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	348 000	481 000	470 000	430 000	430 000
Primary aluminium	tonnes	345 000	356 000	334 000	349 000	343 000
Bentonite	tonnes	25 000	25 000	20 000	28 000	* 25 000
Cement						
Cement, clinker	tonnes	14 568 000	14 901 000	15 229 000	14 178 000	13 778 000
Cement, finished	tonnes	18 300 000	17 998 000	19 433 000	18 018 000	17 469 000
Cobalt metal	tonnes	368	302	354	326	308
Diatomite	tonnes	* 75 000	* 75 000	* 75 000	* 85 000	* 85 000
Feldspar	tonnes	* 550 000	* 650 000	* 600 000	* 600 000	* 550 000
Gypsum (a)	tonnes	1 887 260	2 065 814	2 452 204	2 314 788	2 189 971
Pig iron	tonnes	8 104 318	10 136 827	9 697 535	9 531 844	10 300 000
Crude steel	tonnes	12 840 108	15 413 577	15 780 639	15 607 227	15 685 000
Ferro-alloys						
Ferro-manganese	tonnes	46 000	138 100	130 500	* 131 000	* 131 000
Ferro-silico-manganese	tonnes	54 100	62 400	63 400	* 64 000	* 64 000
Ferro-silicon	tonnes	* 18 300	* 27 000	* 59 000	* 60 000	* 60 000
Silicon metal	tonnes	* 80 000	* 112 000	* 128 000	* 110 000	* 110 000
Kaolin	tonnes	350 000	350 000	310 000	308 000	* 300 000
Lead, refined	tonnes	62 000	71 000	80 000	83 000	71 000
Mica (b)	tonnes	* 18 000	* 19 000	* 19 000	* 18 000	* 19 700
Nickel, smelter/refinery	tonnes	13 900	12 900	13 700	13 200	12 100
Crude petroleum	tonnes	971 000	903 000	901 000	888 000	* 800 000
Natural gas	million m <sup>3</sup>	813	736	623	538	340
Salt	tonnes	* 6 100 000	* 6 100 000	* 6 100 000	* 6 100 000	* 6 300 000
Sillimanite minerals						
Andalusite	tonnes	* 65 000	* 65 000	* 65 000	* 68 000	* 68 000
Talc	tonnes	400 000	400 000	400 000	* 400 000	* 400 000
Slab zinc	tonnes	161 000	163 000	164 000	161 000	152 000

#### Notes

- (1) France may also produce fuller's earth
- (2) France is also believed to produce sulphur
- (3) Significant quantities of germanium are believed to be recovered from imported and domestic material

(a) Including anhydrite

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

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	7 586 323	8 142 237	7 226 413	7 769 899	8 224 326
Aluminium and bauxite						
Bauxite	tonnes	9 296	12 116	13 594	11 975	11 125
Alumina	tonnes	178 570	270 769	281 634	309 291	265 798
Alumina hydrate	tonnes	100 293	131 035	83 054	139 311	97 170
Unwrought	tonnes	91 682	51 275	71 970	45 172	64 410
Unwrought alloys	tonnes	125 580	166 807	130 384	127 551	129 161
Scrap	tonnes	345 372	405 847	425 541	423 298	447 687
Antimony						
Metal	tonnes	34	145	24	60	95
Oxide	tonnes	6 788	6 853	6 124	5 482	5 192
Arsenic						
Metallic arsenic	tonnes	9	5	8	10	3
Barytes						
Barium minerals (a)	tonnes	* 11 500	* 10 500	* 10 600	* 11 700	* 6 500

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Bentonite	tonnes	9 211	12 709	11 472	8 826	7 658
Bismuth	tonnes	6	20	49	115	259
Metal	tonnes	1 022	763	549	733	584
Cadmium	tonnes	170 883	282 673	179 184	210 901	218 646
Metal	tonnes	621 568	766 167	764 305	765 777	896 682
Cement	tonnes	1 935	2 422	2 168	1 858	3 390
Cement clinkers	tonnes	4 767	7 612	8 034	9 720	9 509
Portland cement	tonnes	17 551	121 733	113 718	168 068	96 081
Chromium	tonnes	6 045	4 495	2 390	109	39
Ores and concentrates	tonnes	5 272	9 551	4 760	11 423	100 873
Metal	tonnes	91 266	235 277	292 631	305 883	317 556
Anthracite	tonnes	6 045	4 495	2 390	109	39
Other coal	tonnes	21 713	26 822	25 420	25 245	22 688
Briquettes	tonnes	182 575	226 149	226 934	207 687	167 806
Cobalt	tonnes	50	3	3	4	3
Oxides	tonnes	706	785	1 086	1 100	1 217
Copper	tonnes	219	847	128	536	2 286
Ores and concentrates	tonnes	235 277	292 631	305 883	317 556	298 873
Scrap	tonnes	1 002	7 356	9 545	2 430	2 895
Unwrought, unrefined	tonnes	59 426	23 258	35 309	39 858	29 397
Unwrought, refined	tonnes	9 455	12 786	10 624	11 182	11 025
Unwrought alloys	tonnes	226	361	321	166	222
Diamond	Carats	394 845	145 682	129 943	* 230 000	* 180 000
Gem	Carats	940 610	1 609 470	8 768 911	2 075 000	3 335 000
Dust	tonnes	21 713	26 822	25 420	25 245	22 688
Diatomite	tonnes	182 575	226 149	226 934	207 687	167 806
Feldspar	tonnes	226	361	321	166	222
Gold	kilograms	22 447	27 729	45 303	54 233	41 186
Metal	kilograms	34 094	24 189	29 961	10 955	9 694
Waste and scrap	tonnes	101 909	47 103	89 357	187 560	86 018
Graphite	tonnes	124 492	(b) 19 349	129 374	(b) 88 094	167 799
Gypsum	tonnes	151 699	52 439	53 736	44 010	42 234
Crude	tonnes	5 261	18 917	20 857	9 484	7 372
Calcined	tonnes	2 217	2 447	2 035	2 837	1 995
Iodine	kilograms	282 254	286 799	310 248	289 668	242 886
Iron ore	tonnes	41 324	51 330	54 023	51 068	79 510
Iron, steel and ferro-alloys	tonnes	379	548	802	972	724
Pig iron	tonnes	10 496	6 104	1 042	787	59
Sponge and powder	tonnes	261	505	220	186	186
Ferro-chrome	tonnes	51 676	77 144	84 879	74 961	75 639
Ferro-silico-magnesium	tonnes	844	1 259	1 222	2 381	1 485
Ferro-manganese	tonnes	2 882	2 200	2 554	1 704	782
Ferro-silico-manganese	tonnes	41 324	51 330	54 023	51 068	79 510
Ferro-molybdenum	tonnes	41 324	51 330	54 023	51 068	79 510
Ferro-nickel	tonnes	379	548	802	972	724
Ferro-niobium	tonnes	10 496	6 104	1 042	787	59
Ferro-silicon	tonnes	261	505	220	186	186
Ferro-titanium and ferro-silico-titanium	tonnes	51 676	77 144	84 879	74 961	75 639
Other ferro-alloys	tonnes	844	1 869	1 985	1 660	1 744
Silicon metal	tonnes	10 077	37 932	33 076	45 776	39 004
Ingots, blooms, billets	tonnes	231	261	298	85	65
Scrap	tonnes	1 814 051	1 858 111	2 088 739	2 232 987	1 141 631
Kaolin	tonnes	5 402 426	6 665 264	6 240 254	6 233 179	6 174 335
Lead	tonnes	268 674	272 778	273 802	244 439	232 133
Unwrought	tonnes	14 554	36 293	40 470	53 971	46 991
Scrap	tonnes	20 815	37 654	20 392	15 936	22 573
Lithium	tonnes	91	46	108	103	72
Oxides	tonnes	576	274	207	250	195
Magnesite and magnesia	tonnes	35 523	52 553	35 543	38 098	53 989
Magnesite	tonnes	138 787	152 425	125 827	118 915	130 333
Magnesia	tonnes	631	717	805	1 081	582
Manganese	tonnes	1 022	763	549	733	584
Ores and concentrates (c)	tonnes	1 935	2 422	2 168	1 858	3 390
Metal	tonnes	4 767	7 612	8 034	9 720	9 509

## France

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Mercury	kilograms	718	1 595	49 992	2 233	1 092
Mica	tonnes	10 819	12 455	12 821	11 771	13 352
Molybdenum						
Ores and concentrates	tonnes	75	205	352	81	30
Metal	tonnes	34	47	36	317	262
Nickel						
Mattes, sinters etc	tonnes	68	315	1 306	1 384	1 240
Scrap	tonnes	11 435	30 601	11 685	12 683	9 164
Unwrought	tonnes	12 095	9 376	10 997	11 477	9 535
Unwrought alloys	tonnes	1 377	1 307	1 875	1 818	2 517
Crude petroleum	tonnes	1 689	161 761	467 914	427 246	67 524
Natural gas	tonnes	3 469 724	2 908 272	8 017 462	* 5 800 000	4 729 143
Phosphate rock (a)	tonnes	* 22 000	* 18 000	* 19 000	* 31 000	* 33 000
Platinum metals						
Platinum	kilograms	1 140	1 884	2 566	4 139	4 662
Platinum metals	kilograms	1 396	914	1 255	2 558	3 281
Waste and scrap	kilograms	609 699	179 798	270 355	352 702	521 192
Potash						
Sulphate	tonnes	18 248	17 085	25 238	17 335	3 224
Chloride	tonnes	9 858	36 215	15 947	65 461	66 100
Other potassic fertilisers	tonnes	414	1 788	2 772	3 714	2 660
Rare earths						
Metals	tonnes	3	8	11	12	14
Rare earth compounds	tonnes	1 244	3 411	2 789	2 097	1 878
Salt	tonnes	277 617	297 909	190 124	147 441	207 111
Sillimanite minerals	tonnes	38 494	49 011	55 316	43 751	43 457
Silver						
Ores and concentrates	kilograms	1 597 157	—	4 053	319	591 800
Metal	kilograms	169 806	258 205	511 716	392 507	420 267
Sulphur and pyrites						
Sulphur	tonnes	313 229	296 345	248 989	237 974	193 899
Sulphur, sublimed and precipitated	tonnes	445	565	556	394	232
Talc	tonnes	224 419	270 494	269 518	271 399	273 414
Tantalum and niobium						
Tantalum	tonnes	37	20	25	41	138
Tin						
Concentrates	tonnes	44	341	89	74	23
Unwrought	tonnes	402	423	413	485	323
Unwrought alloys	tonnes	140	143	178	145	170
Scrap	tonnes	282	342	532	484	616
Titanium						
Metal	tonnes	4 523	4 907	5 333	5 946	6 633
Oxides	tonnes	113 798	129 197	140 278	114 715	127 319
Tungsten						
Ores and concentrates	tonnes	1	2	3	—	1 335
Metal	tonnes	398	473	589	962	566
Carbide	tonnes	261	288	272	353	286
Zinc						
Ores and concentrates	tonnes	39 350	49 652	54 609	62 111	97 317
Unwrought	tonnes	64 773	79 727	105 934	80 747	73 557
Unwrought alloys	tonnes	9 362	1 851	2 549	1 938	2 333
Scrap	tonnes	45 986	51 755	42 736	42 231	47 478
Zirconium						
Concentrates	tonnes	1 243	2 044	4 973	1 708	1 955

## Notes

- (a) BGS estimates, based on known imports into certain countries
- (b) Including burnt pyrites
- (c) Including manganiferous iron ore

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	10 907 837	9 838 820	11 224 302	10 814 082	10 481 744
Aluminium and bauxite						
Bauxite	tonnes	1 024 569	984 804	1 577 328	1 443 488	1 198 412
Alumina	tonnes	849 798	734 935	619 175	734 773	720 649
Alumina hydrate	tonnes	46 113	47 336	47 510	43 650	37 402
Unwrought	tonnes	87 130	103 937	152 348	134 309	147 016
Unwrought alloys	tonnes	311 287	364 962	387 038	277 335	326 472
Scrap	tonnes	216 872	260 871	292 597	267 325	246 746
Antimony						
Ores and concentrates	tonnes	26	101	74	0	0
Metal	tonnes	7 682	9 068	7 413	6 502	5 372
Oxide	tonnes	1 277	1 577	2 854	1 677	1 572
Arsenic						
Metallic arsenic	tonnes	4	17	21	30	18
Asbestos						
Unmanufactured	tonnes	34	42	19	14	27
Barytes						
Barium minerals	tonnes	26 227	41 513	29 516	40 294	32 790
Bentonite	tonnes	158 715	159 096	194 555	180 301	132 657
Bismuth						
Metal	tonnes	102	100	205	281	311
Bromine	kilograms	11 720 470	5 275 994	8 449 327	8 999 985	10 135 985
Cadmium						
Metal	tonnes	455	212	100	285	70
Oxide	tonnes	605	18	7	6	7
Cement						
Cement clinkers	tonnes	784 892	838 538	849 577	693 269	1 118 820
Portland cement	tonnes	1 744 423	2 422 582	3 113 977	3 057 832	2 776 280
Other cement	tonnes	980 685	559 436	246 702	239 915	289 020
Chromium						
Ores and concentrates	tonnes	10 813	11 273	15 835	14 844	10 639
Metal	tonnes	478	1 155	524	466	837
Coal						
Anthracite	tonnes	1 914 614	2 291 609	1 304 643	1 527 937	1 766 268
Bituminous	tonnes	27 548 446	33 109 724	27 848 085	32 067 576	16 699 467
Other coal	tonnes	13 893 343	16 688 152	14 073 053	16 249 645	16 699 467
Lignite	tonnes	51 577	52 076	82 504	75 621	146 480
Briquettes	tonnes	151 863	129 465	102 257	164 158	120 067
Cobalt						
Metal	tonnes	1 203	1 681	2 338	2 013	1 533
Oxides	tonnes	578	635	841	611	650
Copper						
Unwrought	tonnes	265 766	227 271	226 312	218 176	230 041
Scrap	tonnes	50 753	72 220	81 824	76 972	63 604
Unwrought alloys	tonnes	7 980	9 242	9 148	8 200	8 742
Diamond						
Unsorted	Carats	15 326	9 402	10 015	* 41 800	* 27 200
Gem, rough	Carats	1 854	469	2 960	* 3 100	* 1 800
Gem, cut	Carats	691 852	468 867	660 561	* 843 000	* 861 000
Industrial	Carats	40 221	30 480	30 012	* 54 000	* 29 000
Dust	Carats	9 314 960	12 512 821	22 167 841	21 135 000	15 530 000
Diatomite	tonnes	15 163	17 477	14 098	13 279	11 150
Feldspar	tonnes	43 981	31 721	34 907	36 109	50 725
Fluorspar	tonnes	13 124	14 601	14 655	15 879	15 453
Gold						
Metal	kilograms	16 877	20 037	19 721	18 994	26 979
Waste and scrap	kilograms	6 248	25 070	3 886	697	1 324
Graphite	tonnes	10 376	9 981	11 725	8 201	7 799
Gypsum						
Crude	tonnes	354 086	313 842	249 933	283 071	367 325
Calcined	tonnes	101 840	85 849	76 800	73 772	90 451
Iodine	kilograms	1 189 569	1 530 436	1 492 427	1 501 344	1 237 444

## France

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron ore						
Iron ore	tonnes	10 014 901	15 259 049	13 531 471	13 718 095	15 344 995
Burnt pyrites	tonnes	5 375	11 603	11 452	23 894	13 099
Iron, steel and ferro-alloys						
Pig iron	tonnes	115 722	139 186	160 336	140 321	187 416
Sponge and powder	tonnes	26 695	52 795	84 787	38 973	72 852
Ferro-chrome	tonnes	71 570	111 080	99 240	106 591	121 183
Ferro-silico-magnesium	tonnes	1 375	1 047	1 102	483	572
Ferro-manganese	tonnes	33 948	44 405	43 245	37 724	40 090
Ferro-silico-manganese	tonnes	34 758	35 405	44 217	58 938	40 432
Ferro-molybdenum	tonnes	3 263	3 720	4 857	4 441	4 081
Ferro-nickel	tonnes	12 709	7 724	16 270	4 818	6 119
Ferro-niobium	tonnes	1 183	2 195	2 225	1 608	1 673
Ferro-phosphorus	tonnes	1 670	2 656	2 227	1 833	1 857
Ferro-silicon	tonnes	30 913	51 906	65 306	54 824	52 768
Ferro-titanium and ferro-silico-titanium	tonnes	2 647	5 457	5 756	3 958	4 314
Ferro-tungsten and ferro-silico-tungsten	tonnes	247	343	378	303	328
Ferro-vanadium	tonnes	819	1 065	1 113	811	815
Other ferro-alloys	tonnes	10 711	16 247	15 035	8 602	11 741
Silicon metal	tonnes	15 243	19 135	19 373	27 828	30 215
Ingots, blooms, billets	tonnes	1 113 710	1 807 094	2 047 778	1 728 612	1 696 098
Scrap	tonnes	2 407 619	2 450 993	2 682 258	2 732 380	2 377 000
Kaolin	tonnes	200 203	231 779	220 764	223 649	198 892
Lead						
Unwrought	tonnes	42 187	34 090	39 305	38 918	42 523
Scrap	tonnes	13 579	12 848	15 182	14 265	2 941
Lithium						
Oxides	tonnes	362	570	479	547	505
Carbonate	tonnes	1 172	1 137	2 792	1 756	1 162
Magnesite and Magnesia						
Magnesite	tonnes	1 209	784	1 087	4 013	3 948
Magnesia	tonnes	117 821	126 821	127 469	115 590	131 742
Manganese						
Ores and concentrates (b)	tonnes	193 684	721 272	647 182	562 298	572 043
Metal	tonnes	8 905	17 586	21 186	9 231	10 304
Mercury	kilograms	222 224	19 073	1 406	252	180
Mica						
Unmanufactured	tonnes	370	255	848	488	541
Ground	tonnes	1 844	1 861	2 149	1 828	1 941
Molybdenum						
Ores and concentrates	tonnes	769	1 209	1 764	1 575	1 653
Metal	tonnes	541	888	1 098	942	998
Oxides	tonnes	1 018	1 095	1 465	1 365	1 387
Nickel						
Mattes, sinters etc	tonnes	20 015	19 921	19 954	19 395	19 053
Scrap	tonnes	1 265	2 164	2 988	2 713	3 063
Ores and concentrates	tonnes	1 783	265	37	290	252
Unwrought	tonnes	10 909	13 964	21 693	24 002	16 608
Unwrought alloys	tonnes	5 364	5 029	7 345	5 466	4 943
Oxides	tonnes	310	524	412	114	66
Crude petroleum	tonnes	70 343 956	59 946 970	62 875 826	56 890 280	55 608 981
Natural gas	tonnes	32 440 935	41 624 014	50 897 525	(a)* 37 000 000	(a)* 34 000 000
Phosphate rock	tonnes	130 323	305 259	264 541	312 023	229 553
Platinum metals						
Platinum	kilograms	3 633	4 516	4 010	4 606	43 645
Palladium	kilograms	5 177	2 706	25 607	7 919	10 272
Other platinum metals	kilograms	171	300	270	264	1 308
Waste and scrap	kilograms	359 138	143 885	296 178	122 641	411 440
Potash						
Sulphate	tonnes	12 477	51 068	40 885	75 743	86 471
Chloride	tonnes	242 713	626 635	597 658	901 544	826 150
Other potassic fertilisers	tonnes	7 287	13 998	6 814	13 696	15 213
Rare Earths						
Metals	tonnes	402	372	506	280	338
Cerium compounds	tonnes	6 112	5 687	1 867	3 940	* 1 900
Other rare earth compounds	tonnes	874	1 408	1 359	1 301	1 396
Ferro-cerium and other pyrophoric alloys	tonnes	26	83	388	940	242

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Salt	tonnes	918 448	1 653 101	1 622 835	705 665	1 157 520
Sillimanite minerals	tonnes	3 209	3 110	3 502	1 930	2 576
Mullite	tonnes	1 327	2 663	3 831	2 919	2 948
Silver						
Ores and concentrates	kilograms	4 279	4 433 810	8 499	100 102	8 713
Metal	kilograms	435 001	954 773	908 080	612 382	680 836
Sulphur and pyrites						
Pyrites	tonnes	159	183	206	136	254
Sulphur	tonnes	55 212	78 366	92 106	108 471	145 535
Sulphur, sublimed and precipitated	tonnes	403	410	441	481	1 623
Talc	tonnes	72 274	59 722	48 155	47 883	45 965
Tantalum and niobium						
Tantalum	tonnes	43	22	39	49	39
Tin						
Unwrought	tonnes	5 869	5 787	5 252	4 815	4 693
Unwrought alloys	tonnes	207	389	283	266	305
Scrap	tonnes	259	100	61	107	57
Titanium						
Ilmenite	tonnes	17 766	...	...	...	...
Other titanium minerals	tonnes	11 964	(c) 50 893	(c) 67 259	(c) 184 385	(c) 91 344
Metal	tonnes	7 282	7 766	10 026	11 881	13 169
Oxides	tonnes	136 389	148 994	138 687	123 037	129 659
Titanium slag	tonnes	92 290	15 218	246	20 762	12 707
Tungsten						
Ores and concentrates	tonnes	1	2	4	14 619	69 283
Metal	tonnes	547	867	1 027	619	534
Carbide	tonnes	311	359	583	551	575
Vanadium						
Pentoxide	tonnes	371	574	605	429	652
Zinc						
Ores and concentrates	tonnes	241 976	222 580	234 060	288 110	306 850
Unwrought	tonnes	128 674	131 993	151 988	126 771	120 553
Unwrought alloys	tonnes	27 000	34 205	34 022	32 075	34 823
Scrap	tonnes	4 604	3 003	3 853	23 591	58 552
Zirconium						
Concentrates	tonnes	25 087	25 310	35 922	25 784	26 688
Metal	tonnes	553	326	687	436	363

## Notes

- (a) BGS estimate, based on known exports from certain countries  
 (b) Including manganeseiferous iron ore  
 (c) Includes ilmenite

# Germany

## Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	245 000 000	239 000 000	252 000 000	235 300 000	236 000 000
Crushed rock	tonnes	217 000 000	208 000 000	229 000 000	211 000 000	207 000 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
Primary aluminium	tonnes	291 750	402 480	432 472	410 413	492 368
Barytes	tonnes	45 606	55 887	55 342	52 030	45 446
Bentonite	tonnes	326 461	362 623	375 332	366 220	358 844
Cadmium	tonnes	* 400	* 400	* 400	* 400	* 400
Cement						
Cement, clinker	tonnes	23 232 000	22 996 000	24 775 000	24 581 000	23 143 000
Cement, finished	tonnes	30 441 000	29 915 000	33 540 000	32 432 000	31 458 000
Coal						
Anthracite and Bituminous	tonnes	14 971 000	14 110 000	12 960 000	11 558 000	8 260 000
Brown coal	tonnes	169 857 142	169 402 544	176 502 048	185 432 000	182 696 000
Copper, refined	tonnes	668 945	704 300	708 800	682 132	679 700
Copper, smelter	tonnes	251 000	378 700	346 200	352 400	295 200
Feldspar	tonnes	106 837	150 000	218 000	205 000	* 200 000
Fluorspar	tonnes	49 962	59 086	65 619	54 202	48 744
Graphite	tonnes	—	—	—	109	269
Gypsum (a)	tonnes	1 898 000	1 822 000	2 021 000	1 949 000	1 778 000
Indium	tonnes	* 10	* 10	* 10	* 10	* 10
Iron ore (b)(c)	tonnes	363 699	390 353	489 091	447 515	413 404
Pig iron	tonnes	20 104 000	28 560 000	27 943 000	27 046 000	27 177 000
Crude steel	tonnes	32 670 000	43 830 000	44 284 000	42 661 000	42 645 000
Ferro-alloys						
Ferro-chrome	tonnes	13 667	* 18 300	* 18 900	* 17 800	* 17 800
Other ferro-alloys	tonnes	6 336	* 9 200	9 985	8 248	* 8 200
Silicon metal	tonnes	27 620	30 105	30 134	28 574	30 283
Kaolin (d)	tonnes	4 513 753	4 578 097	4 898 516	4 398 796	4 348 562
Lead, refined	tonnes	390 600	405 400	429 100	423 000	400 000
Crude petroleum	tonnes	2 800 063	2 511 174	2 677 136	2 633 000	2 645 000
Natural gas	million m <sup>3</sup>	15 554	13 666	12 952	11 706	10 678
Potash						
Potassic salts	tonnes ( $\text{K}_2\text{O}$ content)	1 825 139	3 023 941	3 214 696	3 149 386	3 075 201
Salt						
Rock salt	tonnes	7 709 844	9 992 156	8 765 168	5 938 855	8 510 652
Brine salt	tonnes	1 862 630	2 118 484	2 217 205	2 182 440	2 164 456
Salt in brine	tonnes	* 7 300 000	* 4 500 000	* 6 500 000	* 10 900 000	7 878 895
Selenium metal	tonnes	* 230	* 250	* 250	* 250	* 250
Sulphur and pyrites						
Recovered (e)	tonnes (sulphur content)	1 504 000	1 455 000	1 465 000	1 312 000	1 255 000
Recovered (f)	tonnes (sulphur content)	565 000	513 000	542 210	493 169	464 776
Uranium, mine	tonnes (metal content)	—	* 8	52	50	27
Zinc, mine	tonnes	153 000	165 000	170 000	169 000	162 000

### Notes

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

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

- (a) Including anhydrite
- (b) Including manganeseiferous 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	2009	2010	2011	2012	2013
Primary aggregates	tonnes	27 973 749	25 337 558	29 162 240	25 160 776	21 825 199
Aluminium and bauxite						
Bauxite	tonnes	16 591	26 178	26 306	34 814	22 966
Alumina	tonnes	382 750	424 236	372 191	369 337	374 471
Alumina hydrate	tonnes	461 601	551 817	485 074	455 157	463 704
Unwrought	tonnes	67 356	111 815	83 675	42 580	40 775
Unwrought alloys	tonnes	288 023	361 396	374 917	361 850	383 882
Scrap	tonnes	753 218	823 810	947 252	968 539	935 218
Antimony						
Metal	tonnes	101	132	239	103	86
Oxide	tonnes	448	961	1 132	688	669
Arsenic						
Metallic arsenic	tonnes	31	57	66	128	40
Barytes						
Barium minerals	tonnes	45 360	(a)* 33 000	(a)* 34 000	(a)* 29 000	(a)* 12 500
Bentonite	tonnes	52 424	84 920	91 477	82 504	72 020
Bismuth						
Metal	tonnes	143	178	210	195	86
Bromine	kilograms	6 031	6 119	7 543	8 559	28 941
Cadmium						
Metal	tonnes	276	523	348	379	450
Cement						
Cement clinkers	tonnes	467 042	680 552	761 406	475 987	443 142
Portland cement	tonnes	4 445 980	4 173 112	5 002 240	4 672 927	4 217 917
Other cement	tonnes	2 101 709	2 010 734	2 159 075	1 794 724	1 664 700
Chromium						
Ores and concentrates	tonnes	15 922	32 070	53 989	60 354	59 965
Metal	tonnes	4 685	4 606	2 995	6 308	3 496
Coal						
Anthracite	tonnes	179 880	222 458	165 471	166 704	198 318
Other coal	tonnes	129 955	31 492	39 712	109 026	52 793
Lignite	tonnes	523 720	696 279	789 315	1 134 350	919 347
Briquettes	tonnes	493 552	463 102	467 383	450 270	386 161
Cobalt						
Ore	tonnes	103	88	—	8	—
Oxides	tonnes	69	102	113	84	53
Metal	tonnes	1 067	1 481	1 393	1 533	1 641
Copper						
Ores and concentrates	tonnes	58 932	48 761	54 856	57 074	47 039
Matte and cement	tonnes	1	8 431	9	2	1
Scrap	tonnes	449 990	578 448	585 346	587 935	516 590
Unwrought, unrefined	tonnes	88	104	1 446	2 014	6 688
Unwrought, refined	tonnes	194 016	136 006	195 181	276 943	225 139
Unwrought alloys	tonnes	9 781	13 276	12 276	14 578	14 422
Diamond						
Unsorted (b)	Carats	£* 775 000	£* 863 000	£* 489 000	£* 283 000	£* 3 271 000
Gem	Carats	179 213	161 687	155 370	129 830	126 640
Dust	Carats	2 560 000	7 355 000	13 670 000	15 095 000	16 665 000
Diatomite	tonnes	5 035	5 361	14 251	22 190	27 103
Feldspar	tonnes	70 130	78 610	76 300	70 936	91 047
Fluorspar	tonnes	31 157	33 487	45 955	38 029	37 087
Gold						
Metal	kilograms	113 039	221 003	226 243	212 936	183 267
Waste and scrap	kilograms	62 603	904 379	688 482	956 113	80 219
Graphite	tonnes	12 722	20 583	15 600	12 721	13 601
Gypsum						
Crude	tonnes	393 691	430 977	516 024	501 487	425 608
Calcined	tonnes	1 290 391	1 558 288	1 333 953	1 444 714	1 156 749
Iodine	kilograms	112 690	62 331	124 705	109 595	62 042
Iron ore						
Burnt pyrites	tonnes	10 865	7 994	15 999	—	—
Iron ore	tonnes	4 497	22 373	54 555	42 763	50 451

## Germany

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	86 491	180 542	183 310	171 347	149 745
Sponge and powder	tonnes	28 183	56 763	43 160	35 370	35 330
Ferro-chrome	tonnes	27 831	54 956	45 048	32 760	28 644
Ferro-silico-magnesium	tonnes	1 113	1 718	2 355	2 062	2 981
Ferro-manganese	tonnes	9 043	12 387	22 690	11 811	11 501
Ferro-silico-manganese	tonnes	4 436	3 377	17 756	12 006	16 084
Ferro-molybdenum	tonnes	3 229	3 174	4 440	2 815	3 438
Ferro-nickel	tonnes	1 725	7 869	5 775	391	1 146
Ferro-niobium	tonnes	321	538	237	228	283
Ferro-phosphorus	tonnes	475	1 452	1 233	1 250	1 449
Ferro-silicon	tonnes	63 214	95 683	81 464	67 351	65 014
Ferro-titanium and ferro-silico-titanium	tonnes	1 662	4 180	5 350	4 687	4 010
Ferro-tungsten and ferro-silico-tungsten	tonnes	339	640	402	417	381
Ferro-vanadium	tonnes	755	659	391	226	389
Other ferro-alloys	tonnes	8 210	10 799	8 722	3 952	5 080
Silicon metal	tonnes	20 207	29 309	33 077	49 693	58 466
Ingots, blooms, billets	tonnes	1 655 376	2 150 091	2 150 120	1 712 813	1 844 387
Scrap	tonnes	7 275 257	9 175 802	9 859 197	9 658 280	9 146 441
Kaolin	tonnes	374 313	389 927	431 815	361 915	372 171
Lead						
Ores and concentrates	tonnes	1 000	4 296	19 697	60 356	14 517
Unwrought	tonnes	204 075	203 077	196 443	178 589	146 285
Scrap	tonnes	13 100	9 892	12 932	7 982	12 859
Lithium						
Carbonate	tonnes	1 880	2 387	2 927	2 259	2 809
Magnesite and magnesia						
Magnesite	tonnes	140	229	1 303	381	474
Magnesia	tonnes	58 604	94 198	67 605	73 154	84 986
Manganese						
Ores and concentrates	tonnes	3 710	4 480	5 035	4 387	4 114
Metal	tonnes	6 727	8 243	8 907	13 598	9 758
Mercury	kilograms	120 587	110 405	197 989	102 650	133 626
Mica	tonnes	2 888	4 197	4 479	4 474	6 157
Molybdenum						
Ores and concentrates	tonnes	2 502	5 017	3 955	3 738	3 127
Metal	tonnes	725	763	1 248	1 395	1 475
Nickel						
Mattes, sinters etc	tonnes	8 687	13 981	15 998	19 412	18 951
Scrap	tonnes	8 227	9 563	8 600	7 727	6 516
Ores and concentrates	tonnes	1 619	2 673	299	778	74
Unwrought	tonnes	2 617	3 751	4 184	4 808	4 922
Unwrought alloys	tonnes	3 083	1 866	4 423	5 036	5 336
Crude petroleum	tonnes	265 799	180 515	283 784	138 712	108 761
Natural gas	tonnes	(a)* 11 354 000	11 720 448	19 128 385	24 489 252	28 752 629
Phosphate rock	tonnes	137	489	1 641	1 742	791
Platinum metals						
Palladium	kilograms	43 329	35 462	43 952	43 524	44 596
Platinum	kilograms	36 204	24 597	24 994	23 627	25 030
Other platinum metals	kilograms	65 029	33 299	28 158	21 018	23 890
Waste and scrap	kilograms	3 352 271	5 997 852	6 960 588	6 047 948	6 088 890
Potash						
Potassic fertilisers (c)(d)	tonnes	1 825 139	3 023 941	3 214 696	3 149 386	3 075 201
Rare earths						
Metals	tonnes	19	25	29	10	9
Rare earth compounds	tonnes	652	601	660	699	319
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	5	3	6
Salt	tonnes	2 744 985	3 097 654	2 735 634	2 207 276	2 685 408
Sillimanite minerals						
Sillimanite	tonnes	2 641	3 491	5 981	6 245	8 069
Sillimanite minerals	tonnes	7 965	13 379	18 818	17 287	19 614
Silver						
Metal	kilograms	2 169 994	3 397 674	3 368 313	2 984 504	2 944 492

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Sulphur and pyrites						
Pyrites	tonnes	320	755	440	342	301
Sulphur	tonnes	681 563	671 836	721 717	525 622	474 875
Sulphur, sublimed and precipitated	tonnes	78	271	1 380	274	493
Talc	tonnes	3 662	4 773	6 243	5 274	5 374
Tantalum and niobium						
Tantalum	tonnes	8	18	38	33	30
Tin						
Concentrates	tonnes	163	32	...	—	—
Unwrought	tonnes	1 000	1 253	1 348	1 223	1 215
Unwrought alloys	tonnes	1 088	956	1 459	1 352	1 442
Scrap	tonnes	1 129	1 440	1 175	1 141	1 067
Titanium						
Titanium minerals	tonnes	6 864	22 384	18 932	13 648	51 517
Metal	tonnes	5 367	9 351	13 954	12 561	13 824
Oxides	tonnes	351 872	391 981	345 661	331 757	374 970
Tungsten						
Ores and concentrates	tonnes	196	164	976	524	40
Metal	tonnes	2 655	3 119	3 064	3 618	4 823
Zinc						
Ores and concentrates	tonnes	888	1 674	73 980	39 533	96 369
Unwrought	tonnes	63 165	52 483	55 518	59 913	54 476
Unwrought alloys	tonnes	24 163	31 857	31 170	29 775	27 985
Scrap	tonnes	68 648	74 208	75 168	73 200	52 974
Zirconium						
Concentrates (a)	tonnes	* 7 300	* 10 800	* 10 800	* 7 500	* 6 300
Metal	tonnes	386	384	792	735	896

## Notes

- (a) BGS estimates, based on known imports into certain countries  
 (b) BGS estimates, based on known value of imports to certain countries  
 (c) K<sub>2</sub>O content  
 (d) Including sulphate, chloride and other potassic fertilisers

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	12 866 444	11 936 108	13 786 596	11 636 491	9 868 728
Aluminium and bauxite						
Bauxite	tonnes	2 069 109	2 005 053	2 436 413	2 777 032	2 407 688
Alumina	tonnes	518 456	661 379	654 946	476 257	832 700
Alumina hydrate	tonnes	168 216	260 488	176 692	196 301	160 162
Unwrought	tonnes	495 511	799 780	768 797	732 599	759 344
Unwrought alloys	tonnes	1 157 271	1 591 991	1 810 035	1 750 733	1 759 155
Scrap	tonnes	362 582	479 413	535 304	575 925	560 479
Antimony						
Ores and concentrates	tonnes	13	11	8	6	922
Metal	tonnes	552	494	456	376	462
Oxide	tonnes	5 072	7 986	6 949	6 013	5 675
Arsenic						
Metallic arsenic	tonnes	...	69	9	43	45
Asbestos						
Unmanufactured	tonnes	36	72	88	554	78
Barytes						
Barium minerals	tonnes	129 220	263 839	291 716	237 254	171 262
Bentonite	tonnes	335 990	386 261	447 793	450 850	489 843
Bismuth						
Metal	tonnes	881	1 052	1 282	1 155	1 406
Bromine	kilograms	456 893	657 303	722 036	783 214	669 944
Cadmium						
Metal	tonnes	11	18	40	69	19
Oxide	tonnes	522	625	489	653	621

Germany

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Cement						
Cement clinkers	tonnes	9 200	18 037	52 111	82 345	43 676
Portland cement	tonnes	904 023	939 310	1 054 856	1 023 170	1 043 382
Other cement	tonnes	272 741	255 027	217 931	218 486	273 164
Chromium						
Ores and concentrates	tonnes	45 684	101 972	180 377	188 783	191 488
Metal	tonnes	3 328	4 783	5 931	6 887	7 596
Coal						
Anthracite	tonnes	3 893 429	3 643 048	2 535 881	1 399 126	1 047 216
Other coal	tonnes	30 926 568	34 850 251	40 187 648	41 993 809	49 515 475
Lignite	tonnes	37 839	24 400	41 768	21 509	71 697
Briquettes	tonnes	132 895	404 681	291 675	138 019	137 275
Cobalt						
Ore	tonnes	42	115	170	128	76
Metal	tonnes	2 017	3 864	4 946	4 505	4 309
Oxides	tonnes	902	1 069	900	878	1 580
Copper						
Ores and concentrates	tonnes	1 252 430	1 128 472	1 124 525	1 215 273	1 013 432
Matte and cement	tonnes	4 133	12 739	2 742	2 415	1 867
Scrap	tonnes	454 753	626 442	647 084	655 895	617 454
Unwrought, unrefined	tonnes	46 840	23 331	68 147	45 707	112 940
Unwrought, refined	tonnes	658 703	743 934	737 763	702 577	685 731
Unwrought alloys	tonnes	38 538	36 249	35 493	37 491	39 025
Diamond						
Gem	Carats	301 075	377 399	366 385	314 347	339 068
Industrial	Carats	211 630	122 838	143 922	149 572	171 664
Dust	Carats	25 210 000	64 065 000	89 060 000	94 175 000	90 495 000
Diatomite	tonnes	38 258	43 487	39 892	42 122	43 006
Feldspar	tonnes	130 081	139 663	153 713	109 157	129 123
Fluorspar	tonnes	187 330	261 999	380 027	280 867	249 532
Gold						
Metal	kilograms	164 511	192 815	162 289	133 260	149 337
Waste and scrap	kilograms	1 126 326	1 396 280	2 680 174	2 568 174	1 997 032
Graphite	tonnes	33 293	56 333	57 411	43 349	46 829
Gypsum						
Crude	tonnes	28 315	29 132	26 182	21 712	16 062
Calcined	tonnes	75 319	82 341	80 574	98 665	93 803
Iodine	kilograms	1 168 886	1 422 575	1 576 165	1 700 953	1 771 622
Iron ore						
Burnt pyrites	tonnes	7 087	3 077	4 513	23 495	13 696
Iron ore	tonnes	28 812 134	43 082 309	41 678 285	38 908 327	40 322 561
Iron, steel and ferro-alloys						
Pig iron	tonnes	402 132	421 287	589 302	614 096	533 932
Sponge and powder	tonnes	294 393	500 970	326 097	210 328	461 742
Ferro-chrome	tonnes	305 008	454 005	447 242	392 515	329 237
Ferro-silico-chrome	tonnes	8 648	29 047	18 334	8 573	9 585
Ferro-silico-magnesium	tonnes	5 914	2 972	6 208	4 528	3 412
Ferro-manganese	tonnes	122 063	203 200	232 613	192 817	204 941
Ferro-silico-manganese	tonnes	111 008	185 067	208 913	206 967	224 049
Ferro-molybdenum	tonnes	12 484	16 375	18 760	16 934	17 025
Ferro-nickel	tonnes	127 087	192 394	155 881	139 658	84 470
Ferro-niobium	tonnes	4 047	5 923	6 579	6 297	5 857
Ferro-phosphorus	tonnes	1 332	6 067	5 137	5 587	5 471
Ferro-silicon	tonnes	146 127	272 466	298 352	248 310	227 634
Ferro-titanium and ferro-silico-titanium	tonnes	5 461	8 754	9 818	9 912	9 423
Ferro-tungsten and ferro-silico-tungsten	tonnes	1 366	787	977	1 010	1 313
Ferro-vanadium	tonnes	3 421	5 034	5 305	5 096	4 962
Other ferro-alloys	tonnes	6 325	11 783	15 982	21 651	14 401
Silicon metal	tonnes	183 516	255 977	241 565	232 640	219 791
Ingots, blooms, billets	tonnes	1 171 865	1 611 091	2 401 066	1 768 289	1 532 302
Scrap	tonnes	3 865 110	5 305 194	6 658 407	5 737 878	5 656 924
Kaolin	tonnes	585 675	715 770	705 107	625 826	629 989
Lead						
Ores and concentrates	tonnes	234 102	184 018	205 464	228 444	258 922
Unwrought	tonnes	103 642	157 301	157 653	148 576	149 465
Scrap	tonnes	40 547	39 653	35 823	28 058	28 091

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Lithium						
Oxides (a)	tonnes	* 3 000	* 1 800	* 1 700	* 1 300	* 1 600
Carbonate	tonnes	4 433	6 486	5 735	6 064	5 977
Magnesite and magnesia						
Magnesite	tonnes	6 731	12 751	5 625	5 285	4 637
Magnesia	tonnes	276 674	473 545	515 139	496 202	535 966
Manganese						
Ores and concentrates (b)	tonnes	14 645	17 346	19 137	18 532	18 872
Metal	tonnes	33 989	43 346	40 705	35 671	32 039
Mercury	kilograms	28 678	104 241	134 666	52 469	46 484
Mica						
Unmanufactured	tonnes	221	1 330	10 527	8 934	7 986
Ground	tonnes	25 682	29 716	26 405	24 116	24 104
Waste	tonnes	316	428	20	—	—
Molybdenum						
Ores and concentrates	tonnes	6 953	9 134	9 500	7 158	6 165
Metal	tonnes	1 726	3 038	3 761	4 016	3 479
Oxides	tonnes	1 661	2 890	2 699	2 385	2 423
Nickel						
Mattes, sinters etc	tonnes	561	849	2 048	1 869	766
Scrap	tonnes	8 259	8 584	11 924	14 191	10 135
Ores and concentrates	tonnes	1 087	1 667	1 184	8 185	1 637
Unwrought	tonnes	42 201	69 282	68 023	73 360	66 360
Unwrought alloys	tonnes	3 839	8 023	11 778	23 191	7 844
Oxides	tonnes	463	621	476	608	532
Crude petroleum	tonnes	97 648 203	91 239 711	87 338 296	92 277 990	91 465 347
Natural gas	tonnes	78 990 573	82 784 241	87 762 701	92 961 372	98 149 729
Phosphate rock	tonnes	28 863	120 580	117 971	133 355	85 115
Platinum metals						
Platinum	kilograms	42 452	40 983	38 019	32 874	33 128
Palladium	kilograms	47 092	53 479	50 926	47 449	41 511
Other platinum metals	kilograms	12 120	19 655	21 319	18 444	15 626
Waste and scrap	kilograms	6 224 314	8 069 744	7 290 427	8 020 283	7 091 894
Potash						
Sulphate	tonnes	13 194	20 786	22 490	21 559	19 889
Chloride	tonnes	75 154	131 645	131 244	146 673	172 910
Other potassic fertilisers	tonnes	633	8 065	11 726	7 729	14 129
Rare earths						
Metals	tonnes	106	459	263	290	267
Cerium compounds	tonnes	448	1 006	844	553	862
Other rare earth compounds	tonnes	7 755	9 999	6 904	4 155	5 862
Ferro-cerium and other pyrophoric alloys	tonnes	2	6	14	11	13
Salt	tonnes	1 867 023	2 654 736	3 477 233	2 277 714	2 376 658
Sillimanite minerals						
Sillimanite minerals	tonnes	27 232	47 738	48 748	54 045	50 227
Mullite	tonnes	12 279	47 775	72 049	51 709	57 152
Silver						
Ores and concentrates	kilograms	2 581 290	4 002 438	3 493 141	5 279 656	2 590 874
Metal	kilograms	1 784 960	2 322 566	2 434 577	1 858 257	2 203 529
Sulphur and pyrites						
Pyrites	tonnes	52 641	76 101	82 530	74 726	74 610
Sulphur	tonnes	38 246	44 103	51 714	34 102	49 080
Sulphur, sublimed and precipitated	tonnes	2 856	1 649	4 363	4 637	3 889
Talc	tonnes	293 417	324 703	330 321	293 175	304 604
Tantalum and niobium						
Tantalum	tonnes	67	231	376	221	178
Tin						
Unwrought	tonnes	14 193	18 684	21 396	18 865	19 224
Unwrought alloys	tonnes	175	316	112	196	186
Scrap	tonnes	674	714	1 578	461	880
Titanium						
Ilmenite	tonnes	304 471	...	...	...	...
Other titanium minerals	tonnes	212 735	(c) 838 768	(c) 794 043	(c) 648 030	(c) 612 633
Metal	tonnes	11 649	12 919	20 233	17 015	16 198
Oxides	tonnes	240 120	309 500	329 073	264 304	309 892
Titanium slag	tonnes	42 042	164	2 499	...	...

Germany

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Tungsten						
Ores and concentrates	tonnes	821	1 029	843	381	119
Metal	tonnes	3 313	7 168	8 094	6 946	6 351
Carbide	tonnes	1 333	2 544	3 105	2 478	2 337
Vanadium						
Pentoxide (a)	tonnes	* 400	* 1 000	* 700	* 1 300	* 1 500
Zinc						
Ores and concentrates	tonnes	271 554	285 331	344 106	324 954	292 037
Unwrought	tonnes	285 965	380 807	398 086	365 788	371 332
Unwrought alloys	tonnes	36 350	57 563	69 972	64 642	64 278
Scrap	tonnes	16 782	23 694	25 853	25 536	20 363
Zirconium						
Concentrates (a)	tonnes	* 24 985	* 26 967	* 29 153	* 20 059	* 25 671
Metal	tonnes	664	798	676	956	983

Notes

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

(b) Including manganeseiferous Iron ore

(c) Includes Ilmenite

## Greece

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	* 65 000 000	* 41 000 000	* 33 000 000	* 30 000 000	* 31 000 000
Bauxite	tonnes	1 935 000	1 902 000	2 324 000	1 816 000	1 844 000
Alumina	tonnes (Al <sub>2</sub> O <sub>3</sub> content)	642 900	661 882	683 030	653 011	527 500
Primary aluminium	tonnes	134 737	137 000	165 150	165 050	169 480
Bentonite	tonnes	1 500 000	844 804	1 250 000	1 235 110	1 200 000
Cement						
Cement, clinker	tonnes	8 649 322	7 446 775	4 569 167	5 544 951	6 754 154
Cement, finished	tonnes	11 160 205	8 778 949	5 822 967	5 422 499	(a) 5 371 480
Coal						
Lignite	tonnes	61 800 000	53 600 000	58 400 000	62 334 800	54 000 000
Feldspar	tonnes	55 737	23 050	10 200	13 000	—
Gold	kilograms	—	—	—	26	823
Gypsum (b)	tonnes	730 000	* 600 000	587 000	700 000	760 000
Crude steel	tonnes	2 000 000	1 821 000	1 934 000	1 247 000	1 030 000
Ferro-alloys						
Ferro-nickel	tonnes	42 400	69 600	94 000	96 435	86 850
Kaolin	tonnes	—	3 493	7 250	6 268	5 786
Lead, mine	tonnes (metal content)	10 000	12 200	13 400	18 060	18 010
Lead, refined	tonnes	* 11 000	* 11 000	* 7 000	* 6 000	* 6 000
Magnesite	tonnes	380 834	396 497	393 880	349 998	368 588
Nickel, mine	tonnes (metal content)	9 600	16 100	21 700	18 630	16 890
Nickel, smelter/refinery	tonnes	8 269	13 960	18 530	18 630	17 500
Perlite	tonnes	862 935	760 000	720 000	790 000	700 000
Crude petroleum	tonnes	87 000	86 000	87 126	83 143	62 233
Natural gas	million m <sup>3</sup>	11	7	6	6	5
Salt	tonnes	* 189 000	* 190 000	* 190 000	191 970	189 500
Silver	kilograms (metal content)	27 500	29 000	* 33 300	* 39 800	39 759
Talc	tonnes	* 200	* 200	* 200	* 200	* 200
Zinc, mine	tonnes (metal content)	17 800	18 400	21 200	20 800	22 500

#### Notes

(1) Greece is also believed to produce sulphur

(a) Sales

(b) Including anhydrite

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	59 216	60 851	76 495	118 173	318 563
Aluminium and bauxite						
Bauxite	tonnes	409 508	436 513	519 999	437 305	337 274
Alumina	tonnes	412 888	224 607	202 986	320 795	315 348
Alumina hydrate	tonnes	74 996	99 574	102 136	110 605	160 632
Unwrought	tonnes	17 533	20 727	19 668	5 925	4 626
Unwrought alloys	tonnes	57 668	68 924	103 326	102 092	120 261
Scrap	tonnes	14 681	32 250	27 738	20 367	16 636
Bentonite	tonnes	5 116	13 203	33 306	14 233	7 770
Cement						
Cement clinkers	tonnes	851 946	722 142	459 716	1 877 641	1 828 644
Portland cement	tonnes	3 051 954	3 122 615	1 548 482	2 398 675	3 733 819
Other cement	tonnes	297 036	47 435	155 000	604	9 525
Coal						
Anthracite	tonnes	3 274	2 073	2 175	1 424	702
Other coal	tonnes	1 525	1 499	6 478	8 849	8 758
Lignite	tonnes	—	—	10 242	18 262	16 976
Briquettes	tonnes	—	113	—	8 502	1

Greece

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Unwrought	tonnes	2 748	825	4 458	981	852
Scrap	tonnes	15 742	21 994	18 672	28 705	20 599
Unwrought alloys	tonnes	1 071	2 097	4 346	969	646
Diamond						
Unsorted	Carats	£206 000	£43 000	£99 000	£213 000	£789 000
Gem	Carats	£1 356 000	£1 956 000	£405 000	£270 000	£247 000
Industrial	Carats	£31 000	£49 000	£20 000	£24 000	£114 000
Feldspar	tonnes	718	1 119	1 562	1 279	5 064
Gold						
Metal	kilograms	581	48	2 455	1 426	2 600
Waste and scrap	kilograms	...	...	12 300	9 300	24 800
Gypsum						
Crude	tonnes	49 037	38 459	95 699	142 598	338 023
Calcined	tonnes	580	337	621	3 750	3 415
Iron ore						
Burnt pyrites	tonnes	...	...	6 559	—	10 180
Iron, steel and ferro-alloys						
Pig iron	tonnes	351	2 009	2 650	2	...
Ferro-alloys	tonnes	377	999	294	11 299	4 816
Ingots, blooms, billets	tonnes	102 721	143 318	139 537	64 523	44 379
Scrap	tonnes	34 840	66 989	59 592	57 511	70 956
Lead						
Unwrought	tonnes	2 360	5 209	3 068	11 313	7 681
Scrap	tonnes	913	1 945	735	1 516	1 579
Magnesite and magnesia						
Magnesite	tonnes	—	...	8 766	4 012	1 268
Magnesia	tonnes	84 399	108 020	110 276	87 550	98 204
Nickel						
Ores and concentrates	tonnes	144 529	20 284	120	86	37
Natural gas	tonnes	...	...	2 871	6 027	2 807
Platinum metals						
Platinum and platinum metals	kilograms	589	345	106	883	37
Waste and scrap	kilograms	...	—	...	6 300	32 500
Potash						
Potassic fertilisers	tonnes	1 369	1 294	431	336	575
Salt	tonnes	47 406	59 655	65 014	41 292	38 494
Silver						
Metal	kilograms	79 400	19 700	13 900	14 100	54 200
Sulphur and pyrites						
Pyrites	tonnes	24 429	28 680	42	3 776	57 800
Sulphur	tonnes	4 044	4 594	35 279	167 611	204 170
Talc	tonnes	3 898	2 809	4 086	9 312	6 997
Titanium						
Oxides	tonnes	462	773	731	744	1 079
Zinc						
Ores and concentrates	tonnes	21 311	14 660	36 016	51 007	41 940

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	177 887	13 538	16 892	4 102	5 633
Aluminium and bauxite						
Bauxite	tonnes	351 677	314 423	288 647	90 804	330 522
Alumina	tonnes	963	1 546	1 346	1 822	1 887
Unwrought	tonnes	110 311	153 771	126 051	119 587	141 469
Unwrought alloys	tonnes	32 252	66 134	59 931	51 875	60 864
Scrap	tonnes	17 339	43 866	95 166	54 011	40 371
Antimony						
Metal	tonnes	85	74	84	47	98
Oxide	tonnes	55	75	94	86	100

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Arsenic						
Metallic arsenic	tonnes	11	33	9	3	3
Barytes						
Barium minerals	tonnes	2 133	1 318	2 277	1 222	2 667
Bentonite	tonnes	8 593	3 668	7 193	5 831	4 125
Bismuth						
Metal	tonnes	0	0	12	21	60
Cadmium						
Metal	tonnes	39	1	0	0	1
Cement						
Cement clinkers	tonnes	4 249	12 100	34 712	65 317	87 439
Portland cement	tonnes	136 300	206 164	159 514	49 204	24 791
Other cement	tonnes	2 359	15 136	22 371	22 214	13 618
Coal						
Anthracite	tonnes	37 585	48 783	117 406	21 961	21 083
Other coal	tonnes	168 663	512 663	169 990	117 867	339 450
Lignite	tonnes	58 053	87 707	165 417	206 384	163 191
Briquettes	tonnes	5 827	62	12 986	53 028	61 330
Cobalt						
Metal	tonnes	14	3	17	64	39
Copper						
Unwrought	tonnes	57 367	63 443	53 615	53 416	54 236
Scrap	tonnes	11 245	20 017	29 253	43 607	33 690
Diamond						
Unsorted	Carats	2 375 000	910 000	470 000	135 000	(a)* 150 000
Gem, rough	Carats	3 365 000	920 000	...	15 000	* 221 000
Gem, cut	Carats	6 370 000	8 365 000	2 615 000	5 390 000	4 000 000
Industrial	Carats	43 195 000	4 375 000	3 680 000	2 150 000	220 000
Dust (a)	Carats	* 1 813 000	* 214 000	* 77 000	* 90 000	* 100 000
Diatomite	tonnes	482	668	623	647	424
Feldspar	tonnes	5 851	12 195	9 469	20	6 128
Fluorspar	tonnes	1 954	2 652	3 073	2 104	1 349
Gold						
Metal	kilograms	917	1 055	500	346	12 373
Graphite	tonnes	918	219	92	68	64
Gypsum						
Crude and calcined	tonnes	2 097	1 759	1 400	3 714	4 576
Iodine	kilograms	800	1 300	200	300	753
Iron, steel and ferro-alloys						
Pig iron	tonnes	9 107	4 427	9 127	470	2 615
Sponge and powder	tonnes	9 685	5 772	3 302	429	680
Ferro-chrome	tonnes	916	693	1 217	1 304	1 174
Ferro-manganese	tonnes	1 216	837	271	203	162
Ferro-silico-manganese	tonnes	8 023	18 515	12 695	10 971	12 124
Ferro-silicon	tonnes	4 569	4 888	4 361	2 924	2 623
Other ferro-alloys	tonnes	170	849	167	156	401
Silicon metal	tonnes	906	1 426	1 746	1 212	1 487
Ingots, blooms, billets	tonnes	159 350	28 092	71 878	17 546	45 081
Scrap	tonnes	1 159 166	1 008 235	935 510	413 394	301 661
Kaolin	tonnes	49 509	31 132	14 336	7 454	8 808
Lead						
Unwrought	tonnes	10 644	11 149	16 980	17 028	16 937
Scrap	tonnes	1 753	1 692	2 136	2 183	915
Magnesite and magnesia						
Magnesite	tonnes	19 803	3 603	14 704	14 475	21 012
Magnesia	tonnes	1 729	2 198	7 506	1 442	882
Manganese						
Ores and concentrates	tonnes	31 776	22 888	51 374	26 294	22 943
Metal	tonnes	162	292	175	855	1 029
Mercury	kilograms	668	211	1 200	7 500	900
Mica	tonnes	317	169	175	155	211
Crude petroleum	tonnes	2 437 424	19 064 118	13 010 825	20 102 882	20 292 638
Natural gas	tonnes	3 086 243	3 520 510	4 233 660	3 927 266	2 835 500
Phosphate rock	tonnes	192 135	252 644	220 591	140 205	156 936
Platinum metals						
Platinum and platinum metals	kilograms	100	500	1 400	900	400

Greece

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Potash						
Sulphate	tonnes	14 325	39 155	26 686	26 621	24 778
Chloride	tonnes	20 773	35 176	27 276	19 735	19 026
Other potassic fertilisers	tonnes	107	3 240	8 166	2 947	2 276
Rare earths						
Metals	tonnes	68	...	...	—	...
Rare earth compounds	tonnes	—	3	4	11	10
Ferro-cerium and other pyrophoric alloys	tonnes	0	65	62	169	20
Salt	tonnes	149 094	144 367	173 050	154 435	146 686
Silver						
Metal	kilograms	31 300	29 900	55 100	51 900	68 500
Sulphur and pyrites						
Sulphur	tonnes	26 673	42 673	80 976	31 788	38 372
Talc	tonnes	7 862	8 869	8 663	13 779	8 123
Tin						
Unwrought (b)	tonnes	80	160	211	70	46
Titanium						
Titanium minerals	tonnes	351	504	396	220	275
Metal	tonnes	11	74	74	47	260
Oxides	tonnes	19 289	19 003	19 447	12 378	16 796
Vanadium						
Ores and concentrates	tonnes	80	...	...	...	...
Zinc						
Unwrought (b)	tonnes	25 422	22 534	11 358	11 341	9 895

Notes

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

(b) Including alloys

## Hungary

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	35 591 131	25 059 000	23 361 598	* 22 250 000	* 27 000 000
Crushed rock	tonnes	15 808 088	11 390 100	9 128 819	* 9 000 000	* 10 000 000
Bauxite	tonnes	317 000	365 000	277 800	255 000	94 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	* 185 000	* 214 000	* 250 000	* 170 000	* 130 000
Bentonite	tonnes	5 298	17 200	22 931	1 392	1 671
Cement						
Cement, clinker	tonnes	* 2 200 000	* 1 500 000	1 167 942	1 332 354	* 1 300 000
Cement, finished	tonnes	* 3 200 000	* 2 560 000	* 2 200 000	* 2 300 000	...
Coal						
Lignite	tonnes	8 026 587	8 202 859	8 800 783	8 438 000	8 834 000
Brown coal	tonnes	944 139	813 403	699 129	875 944	749 000
Diatomite	tonnes	1 277	1 197	1 309	1 229	434
Gypsum (a)	tonnes	19 766	20 000	3 000	—	—
Pig iron	tonnes	1 050 000	1 325 000	1 315 000	1 229 000	600 000
Crude steel	tonnes	1 403 000	1 678 000	1 733 000	1 543 000	883 000
Manganese ore	tonnes	43 000	55 000	58 000	51 000	35 000
Perlite	tonnes	82 058	70 990	70 900	72 364	* 64 220
Crude petroleum	tonnes	796 000	735 900	657 000	700 931	607 132
Natural gas	million m <sup>3</sup>	2 748	2 600	2 315	2 205	2 065

#### Notes

(1) Hungary is also believed to produce antimony, arsenic and sulphur

(a) Including anhydrite

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 294 700	1 191 521	1 137 425	1 003 456	1 122 883
Aluminium and bauxite						
Alumina	tonnes	89 857	112 819	107 937	99 699	78 432
Alumina hydrate	tonnes	88 515	92 011	71 834	64 000	51 224
Unwrought (a)	tonnes	26 176	41 719	38 819	36 491	39 897
Scrap	tonnes	35 060	51 508	66 599	68 156	78 773
Barytes						
Barium minerals	tonnes	...	...	...	180	2 034
Bentonite	tonnes	555	954	782	1 047	813
Cement						
Cement clinkers	tonnes	1 701	296	25	203 686	8 551
Portland cement	tonnes	220 069	185 279	277 497	269 382	231 601
Other cement	tonnes	2 987	795	6 451	1 363	11 762
Coal						
Anthracite	tonnes	...	9 151	5 077	210	11
Other coal	tonnes	...	683	476	208	42 521
Lignite	tonnes	41 329	3 390	4 886	4 539	14 179
Copper						
Scrap	tonnes	19 120	15 319	31 459	37 048	35 024
Unwrought, refined	tonnes	...	24	786	5 867	10 432
Unwrought alloys	tonnes	314	571	1 120	476	294
Diamond						
Unsorted	Carats	...	4 000 000	5 500 000	3 500 000	...
Dust	Carats	...	...	9 500 000	14 500 000	14 000 000
Gold						
Metal	kilograms	1 312	1 827	2 214	2 529	2 535
Waste and scrap	kilograms	...	2 221 600	2 665 300	2 115 900	11 900
Gypsum						
Crude and calcined	tonnes	22 019	17 367	44 845	59 059	27 914
Iodine	kilograms	...	...	...	92 300	40 900
Iron ore	tonnes	—	52 400	64 435	63 373	11 382

Hungary

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	...	104	207	272	112
Silicon metal	tonnes	...	...	4 317	2 887	1 809
Ingots, blooms, billets	tonnes	4 315	9 274	44 796	7 260	14 694
Scrap	tonnes	636 805	1 132 142	1 272 473	1 171 610	1 109 969
Kaolin	tonnes	2 847	2 436	3 272	2 861	2 753
Lead						
Scrap	tonnes	4 001	1 898	2 428	1 615	2 942
Magnesite and magnesia						
Magnesia	tonnes	—	...	317	309	643
Mercury	kilograms	...	6 400	10 700	6 500	22 800
Nickel						
Scrap	tonnes	203	170	126	126	108
Crude petroleum	tonnes	...	...	...	1 353	65 964
Natural gas	tonnes	323 537	—	—	417 151	829 105
Platinum metals						
Waste and scrap	kilograms	...	92 300	91 200	149 100	36 600
Potash						
Potassic fertilisers	tonnes	9 916	5 697	5 805	7 664	13 513
Salt	tonnes	3 434	1 356	39 405	14 663	9 460
Sillimanite minerals	tonnes	(b) 4 321	7 505	8 180	6 335	7 641
Silver						
Metal	kilograms	1 300	3 300	29 200	4 000	8 200
Sulphur and pyrites						
Sulphur	tonnes	39 638	44 098	48 616	43 855	49 438
Talc	tonnes	75	173	51	69	413
Tin						
Scrap	tonnes	222	196	222	268	234
Titanium						
Metal	tonnes	11	55	37	68	48
Oxides	tonnes	1 120	1 942	1 484	1 298	1 871
Tungsten						
Metal	tonnes	36	54	53	99	76
Zinc						
Scrap	tonnes	2 978	2 821	2 314	1 897	1 755

Notes

(a) Including alloys

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

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	446 187	473 730	369 445	515 141	1 028 054
Aluminium and bauxite						
Bauxite	tonnes	178 031	244 095	254 039	142 246	146 245
Alumina	tonnes	9 246	22 660	36 305	42 371	51 768
Alumina hydrate	tonnes	3 352	6 856	9 123	7 382	69 615
Unwrought	tonnes	100 897	146 221	135 392	129 030	130 942
Unwrought alloys	tonnes	79 437	165 833	190 175	181 695	187 798
Scrap	tonnes	30 212	43 720	59 661	47 904	35 042
Antimony						
Oxide	tonnes	173	156	148	173	196
Barytes						
Barium minerals	tonnes	4 536	1 441	2 852	516	1 106
Bentonite	tonnes	3 608	4 360	4 648	6 527	10 490
Bismuth						
Metal	tonnes	84	106	50	43	35
Bromine	kilograms	10 500	4 500	8 800	5 600	9 300
Cement						
Cement clinkers	tonnes	117 232	69 469	67 770	43 196	68 506
Portland cement	tonnes	565 552	495 045	785 166	710 516	978 968
Other cement	tonnes	49 051	34 191	33 802	6 809	27 678

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Chromium						
Metal	tonnes	—	82	99	95	130
Coal						
Hard coal (a)	tonnes	1 340 769	1 744 778	1 570 645	1 556 689	1 366 089
Lignite	tonnes	413 094	297 335	318 792	224 685	187 326
Briquettes	tonnes	17 519	14 352	11 018	21 885	31 443
Copper						
Unwrought	tonnes	2 168	3 637	4 819	11 217	12 871
Scrap	tonnes	10 091	4 038	5 416	4 831	3 942
Diamond						
Gem, cut	Carats	£167 000	£280 000	£657 000	£421 000	£454 000
Industrial	Carats	£171 000	£168 000	£675 000	£346 000	£153 000
Dust	Carats	(b)* 5 450 000	(b)* 8 910 000	(b)* 12 690 000	14 500 000	14 000 000
Diatomite	tonnes	796	957	1 189	885	649
Feldspar	tonnes	14 499	14 235	14 211	13 905	10 755
Fluorspar	tonnes	(b)* 1 500	2 662	4 152	3 014	3 984
Gold						
Metal	kilograms	1 076	396	1 512	* 1 500	1 200
Gypsum						
Crude	tonnes	3 248	5 362	5 198	5 241	3 608
Calcined	tonnes	43 128	12 413	18 039	24 138	31 969
Iodine	kilograms	2 100	2 700	6 100	4 000	8 000
Iron ore	tonnes	876 109	1 985 510	1 780 865	(c) 1 632 969	(c) 845 366
Iron, steel and ferro-alloys						
Pig iron	tonnes	3 403	7 158	5 662	5 527	5 079
Sponge and powder	tonnes	425	756	638	479	653
Ferro-chrome	tonnes	150	187	223	279	323
Ferro-manganese	tonnes	2 037	12 015	16 011	12 255	5 753
Ferro-silico-manganese	tonnes	922	724	1 785	225	1 191
Ferro-molybdenum	tonnes	73	85	105	108	89
Ferro-niobium	tonnes	...	75	141	111	71
Ferro-phosphorus	tonnes	...	652	60	111	161
Ferro-silicon	tonnes	3 100	3 630	3 999	2 969	2 275
Other ferro-alloys	tonnes	15 557	569	312	410	263
Silicon metal	tonnes	2 589	4 010	7 832	5 619	4 061
Ingots, blooms, billets	tonnes	104 855	30 505	240 299	565 955	1 156 777
Scrap	tonnes	34 357	56 974	68 566	34 219	51 899
Kaolin	tonnes	25 094	24 175	29 736	23 099	26 053
Lead						
Unwrought	tonnes	2 663	6 138	9 497	11 372	8 710
Magnesite and magnesia						
Magnesite	tonnes	1 081	1 331	1 499	1 124	1 351
Magnesia	tonnes	1 563	6 783	4 369	4 739	6 291
Manganese						
Ores and concentrates	tonnes	220	198	159	142	304
Metal	tonnes	280	336	461	500	589
Mercury	kilograms	4 800	5 000	8 400	6 100	5 400
Molybdenum						
Metal	tonnes	69	70	60	51	60
Nickel						
Unwrought (d)	tonnes	219	346	35	47	159
Crude petroleum	tonnes	(b)* 6 241 000	5 310 899	5 935 772	5 489 453	5 741 800
Natural gas	tonnes	6 238 749	5 858 735	5 788 348	5 509 482	6 064 192
Phosphate rock	tonnes	37	45	1 028	312	215
Platinum metals						
Platinum and platinum metals	kilograms	26	1 300	84	—	38
Potash						
Chloride	tonnes	38 441	90 063	98 351	106 292	127 342
Other potassic fertilisers	tonnes	4 372	5 760	6 161	5 449	5 141
Rare earths						
Cerium compounds	tonnes	36	38	33	31	20
Other rare earth compounds	tonnes	26	31	23	31	11
Salt	tonnes	535 928	704 143	800 950	540 297	841 520
Sillimanite minerals						
Sillimanite minerals	tonnes	1 892	2 100	2 903	3 039	2 515
Mullite	tonnes	649	1 348	1 854	1 352	1 364

Greece

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Silver						
Metal	kilograms	128 985	196 500	234 100	229 700	232 900
Sulphur and pyrites						
Sulphur	tonnes	(b)* 1 200	3 189	1 100	981	934
Sulphur, sublimed and precipitated	tonnes	186	119	223	172	7
Talc	tonnes	7 566	6 786	6 226	5 319	6 010
Tantalum and niobium						
Tantalum	tonnes	0	32	0	0	0
Tin						
Unwrought (d)	tonnes	208	231	156	205	253
Titanium						
Titanium minerals	tonnes	(b)* 1 200	2 677	2 410	3 038	3 254
Metal	tonnes	216	84	134	116	143
Oxides	tonnes	6 853	8 927	8 885	7 325	8 809
Tungsten						
Metal	tonnes	31	54	67	56	78
Zinc						
Unwrought (d)	tonnes	9 862	11 767	12 818	12 856	12 139
Zirconium						
Concentrates	tonnes	1 265	2 455	1 765	1 965	1 444

Notes

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

## Iceland

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	599 816	201 280	221 920	232 112	291 384
Primary aluminium	tonnes	804 605	825 803	780 853	802 827	736 429
Ferro-alloys						
Ferro-silicon	tonnes	112 992	114 230	120 076	131 818	125 204

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	29 712	44 512	85 854	92 094	81 265
Aluminium and bauxite						
Unwrought	tonnes	805 450	812 981	765 999	787 071	788 366
Scrap	tonnes	4 467	10 136	6 397	3 799	3 672
Cement						
Cement clinkers	tonnes	1	46	7	2	—
Portland cement	tonnes	16	4	146	1	35
Iron, steel and ferro-alloys						
Ferro-silicon	tonnes	112 993	114 231	120 076	131 818	125 204
Other ferro-alloys	tonnes	4 595	5 603	6	0	0
Silicon metal	tonnes	200	—	—	—	13
Scrap	tonnes	38 075	37 328	38 954	28 581	40 564
Salt	tonnes	2 115	1 093	1 402	694	1 228

### Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	4 846	6 492	7 524	32 327	14 981
Aluminium and bauxite						
Alumina	tonnes	1 557 309	1 612 188	1 539 080	1 590 521	1 646 175
Unwrought	tonnes	(a) 1 461	6 127	5 560	(a) 1 356	(a) 1 968
Bentonite	tonnes	1 259	432	563	281	304
Cement						
Cement clinkers	tonnes	30	42	49	71	39
Portland cement	tonnes	38 640	24 481	26 714	64 565	82 861
Other cement	tonnes	241	4 405	226	229	255
Coal						
Anthracite	tonnes	104 094	101 220	103 822	103 989	125 109
Other coal	tonnes	9 903	3 521	6 701	4	2
Diamond						
Gem, cut	Carats	* 100 000	110 592	90 000	160 000	210 000
Graphite	tonnes	2 132	18	18	33	...
Gypsum						
Crude	tonnes	4 724	2 579	892	682	730
Iron ore	tonnes	34 404	36 318	42 846	19 251	22 916
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 333	1 148	841	844	792
Ferro-alloys	tonnes	5 641	6 838	204	727	69
Silicon metal	tonnes	237	4 366	3 204	4 816	6 377
Scrap	tonnes	643	11 545	4 680	7	145
Magnesite and Magnesia	tonnes	2	1	3	2	365
Platinum metals						
Platinum and platinum metals	kilograms	158	117	216	150	166
Rare earths						
Metals	tonnes	87	350	77	...	...
Salt	tonnes	98 207	65 342	94 177	100 020	84 266

## Iceland

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Silver Metal	kilograms	1 096	909	700	640	399
Titanium Metal	tonnes	99	100	59	75	80

## Note

(a) Including alloys

## Ireland, Republic of

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	* 15 000 000	* 10 000 000	* 7 000 000	* 7 000 000	* 9 000 000
Crushed rock	tonnes	* 50 000 000	* 40 000 000	* 25 000 000	* 22 000 000	* 21 000 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	806 000	1 211 600	1 249 300	1 250 600	1 264 689
Cement						
Cement, finished	tonnes	* 2 720 000	* 2 290 000	* 1 700 000	1 573 000	1 450 000
Gypsum	tonnes	* 400 000	* 300 000	* 300 000	* 200 000	* 200 000
Lead, mine	tonnes (metal content)	49 500	39 100	50 700	47 400	42 950
Lead, refined	tonnes	19 000	19 000	18 000	16 000	17 000
Natural gas (a)	million m <sup>3</sup>	414	402	361	380	354
Silver	kilograms (metal content)	5 267	3 818	6 109	9 454	7 822
Zinc, mine	tonnes (metal content)	385 700	342 500	344 000	337 500	326 700

Note

(a) Sales

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	40 626	13 318	16 005	88 530	147 770
Aluminium and bauxite						
Alumina	tonnes	895 034	1 542 563	1 794 148	1 616 065	1 867 541
Alumina hydrate	tonnes	95 548	124 803	103 631	30 328	55 265
Unwrought alloys	tonnes	2 455	2 576	3 109	2 684	3 095
Scrap	tonnes	18 257	22 810	29 261	24 137	29 763
Cement						
Cement clinkers	tonnes	4 823	1	—	16 698	0
Portland cement	tonnes	1 054 533	1 025 910	942 940	1 238 718	1 234 596
Other cement	tonnes	1 317	8 787	1 158	971	1 074
Coal						
Hard coal	tonnes	(a) 3 863	5 820	(a) 2 857	18 914	(a) 35 038
Briquettes	tonnes	9 858	12 695	11 333	12 115	12 113
Cobalt						
Ore	tonnes	84	184	68	177	144
Metal	tonnes	145	234	125	234	272
Copper						
Scrap	tonnes	23 305	13 172	10 168	10 046	9 601
Diamond						
Gem, rough	Carats	5 000	10 000	100 000	—	5 000
Gem, cut	Carats	210 000	345 000	260 000	600 000	405 000
Industrial	Carats	204 108	58 658	2 801 447	460 000	3 170 000
Dust	Carats	25 398 022	65 787 012	283 458 829	...	69 945 000
Gold						
Waste and scrap	kilograms	11 155	10 480	9 268	68 063	179 072
Gypsum						
Crude	tonnes	10 425	23 355	5 390	5 176	7 039
Calcined	tonnes	28 491	15 129	21 274	16 585	16 699
Iodine	kilograms	1 982	—	2 589	—	—
Iron, steel and ferro-alloys						
Sponge and powder	tonnes	9	...	18 709	150	1 268
Ingots, blooms, billets	tonnes	547	262	9 240	510	425
Scrap	tonnes	428 416	484 871	609 985	517 800	447 391
Lead						
Ores and concentrates	tonnes	109 877	62 729	64 470	80 910	70 125
Scrap	tonnes	114	638	4 144	42 384	30 813
Magnesite and magnesia						
Magnesite	tonnes	9 133	3 383	18 665	13 218	4 114
Magnesia	tonnes	8 595	33 334	11 761	3 465	41 749

Ireland, Republic of

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Nickel						
Scrap	tonnes	220	557	269	208	188
Crude petroleum	tonnes	11	96	46 629	62	—
Platinum metals						
Platinum and platinum metals	kilograms	* 221	* 213	* 295	* 268	549
Waste and scrap	kilograms	8 544	5 440	1 763	3 496	1 775
Rare earths						
Rare earth compounds	tonnes	7	1	1	4	0
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	...	...	14
Salt	tonnes	735	10 183	1 540	2 608	2 656
Silver						
Metal	kilograms	...	...	263	824	608
Tin						
Unwrought	tonnes	(b) 23	(b) 689	—	—	—
Zinc						
Ores and concentrates	tonnes	594 268	588 143	660 259	647 444	615 916

#### Notes

- (a) Including anthracite
- (b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	781 470	652 594	695 162	817 052	840 968
Aluminium and bauxite						
Bauxite	tonnes	2 786 723	4 111 457	4 215 019	4 169 784	4 434 990
Alumina	tonnes	4 711	4 903	4 378	9 679	9 288
Antimony						
Metal	tonnes	2	64	0	0	0
Bentonite	tonnes	2 741	2 734	2 623	2 788	3 975
Bismuth						
Metal	tonnes	14	5	1	1	1
Bromine	kilograms	799	743	38 566	675	501
Cement						
Cement clinkers	tonnes	31 983	15 459	23 190	24 718	25 005
Portland cement	tonnes	192 556	133 977	100 440	86 608	87 458
Other cement	tonnes	10 698	4 974	4 112	4 375	5 793
Chromium						
Metal	tonnes	138	83	179	40	77
Coal						
Anthracite	tonnes	53 413	77 112	33 665	30 564	43 709
Other coal	tonnes	1 721 651	1 601 294	2 149 095	2 028 332	2 300 643
Lignite	tonnes	415	242	60	21 901	21 901
Briquettes	tonnes	40 482	31 507	30 673	46 258	91 158
Cobalt						
Metal	tonnes	777	756	601	743	701
Copper						
Ores and concentrates	tonnes	42 945	2	2	2	3
Diamond						
Unsorted	Carats	£478 000	£362 000	£320 000	£314 000	£172 000
Gem, rough	Carats	1 885 000	1 565 000	1 620 000	1 595 000	1 475 000
Gem, cut	Carats	18 170 000	11 385 000	6 745 000	3 905 000	3 305 000
Industrial	Carats	2 100 000	4 585 000	2 570 000	1 545 000	750 000
Dust	Carats	86 782 073	86 782 073	737 418 949	358 020 000	405 650 000
Diatomite	tonnes	1 243	640	699	965	683
Gold						
Metal	kilograms	£4 365 000	£4 047 000	£5 356 000	£7 079 000	£11 433 187
Gypsum						
Crude	tonnes	15 931	20 637	2 731	10 715	10 688
Calcined	tonnes	13 930	5 410	9 318	7 623	8 944
Iodine	kilograms	24 358	13 311	22 220	32 305	23 685
Iron ore	tonnes	(a) 31 488	(a) 109	(a) 507	(a) 147	4

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 202	1 345	947	1 182	799
Sponge and powder	tonnes	955	989	1 176	1 216	698
Ferro-chrome	tonnes	53	89	128	100	91
Other ferro-alloys	tonnes	683	296	233	139	213
Ingots, blooms, billets	tonnes	5 373	7 332	5 423	4 952	7 230
Scrap	tonnes	4 388	4 030	3 310	6 565	3 496
Kaolin	tonnes	3 155	4 039	3 414	3 377	3 489
Lead						
Unwrought	tonnes	15 784	14 357	15 345	5 199	2 916
Scrap	tonnes	16 689	12 074	12 305	14 089	16 874
Magnesite and magnesia						
Magnesite	tonnes	4 191	5 535	6 333	1 731	7 853
Magnesia	tonnes	22 523	39 638	49 122	48 779	43 182
Manganese						
Ores and concentrates (b)	tonnes	65	54	9 565	31	19
Mercury	kilograms	1 182	8 582	24	81	69
Nickel						
Unwrought (c)	tonnes	626	1 503	1 748	568	409
Crude petroleum	tonnes	2 792 968	2 931 391	2 720 968	2 843 575	2 989 606
Natural gas	tonnes	4 192 236	4 738 918	4 430 360	4 282 222	4 372 123
Phosphate rock	tonnes	85	5 328	264	327	55
Platinum metals						
Platinum and platinum metals	kilograms	121 381	9 470	7 826	13 879	15 171
Potash						
Chloride	tonnes	29 932	99 181	95 816	85 536	146 361
Other potassic fertilisers	tonnes	3 390	7 570	2 011	5 249	6 697
Rare earths						
Rare earth compounds	tonnes	67	8	85	3	2
Salt	tonnes	114 659	172 053	308 884	105 270	131 516
Silver						
Metal	kilograms	5 316	3 999	5 431	3 571	10 137
Talc	tonnes	1 722	1 140	1 320	3 033	2 982
Tantalum and niobium						
Tantalum	tonnes	4	85	0	1	0
Tin						
Unwrought (c)	tonnes	100	157	117	22	17
Titanium						
Metal	tonnes	507	414	202	432	1 297
Oxides	tonnes	4 308	4 922	4 312	3 924	4 044
Tungsten						
Metal	tonnes	68	91	76	121	101
Carbide	tonnes	108	68	186	116	113
Zinc						
Unwrought (c)	tonnes	2 210	2 104	2 358	2 058	2 481
Zirconium						
Concentrates	tonnes	1 323	16 162	886	146	268

## Notes

- (a) Including burnt pyrites
- (b) Including manganiferous Iron ore
- (c) Including alloys

# Italy

## Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel (a)	tonnes	164 218 753	150 996 352	131 770 340	105 221 496	102 381 384
Crushed rock (a)	tonnes	84 717 579	80 336 696	76 793 269	74 169 360	63 782 880
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	92 000	—	—	—	—
Primary aluminium	tonnes	165 800	129 500	141 900	99 600	—
Barytes	tonnes	* 3 500	* 3 500	* 3 500	* 3 500	* 3 500
Bentonite	tonnes	114 212	104 279	105 952	109 576	118 235
Cement						
Cement, clinker (a)	tonnes	637 853	966 577	1 286 791	1 284 500	1 199 742
Cement, finished	tonnes	33 611 625	37 061 576	35 687 105	27 490 415	24 334 169
Copper, refined	tonnes	6 500	1 800	7 600	7 700	4 900
Feldspar	tonnes	* 4 700 000	* 4 700 000	* 4 700 000	* 4 700 000	* 4 700 000
Gypsum	tonnes	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000
Indium	tonnes	* 5	* 5	* 5	* 5	* 5
Pig iron	tonnes	5 670 000	8 555 000	9 824 000	9 424 000	6 935 000
Crude steel	tonnes	19 848 000	25 750 000	28 735 000	27 257 000	24 079 000
Ferro-alloys						
Ferro-manganese	tonnes	* 20 000	* 25 000	* 25 000	* 27 000	* 27 000
Ferro-silico-manganese	tonnes	56 000	108 000	145 000	110 000	* 110 000
Kaolin	tonnes	* 180 000	* 180 000	* 180 000	* 180 000	* 180 000
Lead, mine	tonnes (metal content)	17 000	—	—	—	—
Lead, refined	tonnes	149 000	150 000	149 500	138 400	151 000
Perlite	tonnes	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Crude petroleum	tonnes	4 550 816	5 080 498	5 286 042	5 376 629	5 480 000
Natural gas	million m <sup>3</sup>	7 909	8 265	8 339	8 511	7 710
Salt						
Rock salt and brine salt	tonnes	3 678 234	4 006 882	2 912 128	2 862 440	2 879 174
Talc	tonnes	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Slab zinc	tonnes	103 400	104 700	110 200	97 200	111 000

### Notes

(1) Italy is also believed to produce sulphur

### (a) Sales

## Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 308 016	1 507 704	1 071 579	1 073 466	1 120 193
Aluminium and bauxite						
Bauxite	tonnes	4 585	66 218	46 330	93 847	169 411
Alumina	tonnes	61 223	17 056	16 821	3 424	4 411
Alumina hydrate	tonnes	1 243	4 346	7 023	6 448	7 809
Unwrought	tonnes	30 019	49 442	25 882	30 378	23 224
Unwrought alloys	tonnes	122 294	220 237	286 525	311 381	322 614
Scrap	tonnes	82 055	107 131	102 696	103 518	106 916
Antimony						
Ores and concentrates	tonnes	566	960	898	1 311	1 669
Metal	tonnes	2	19	80	2	7
Oxide	tonnes	391	226	261	215	399
Barytes						
Barium minerals	tonnes	2 890	1 906	2 623	4 898	4 427
Bentonite	tonnes	186 219	257 173	214 775	225 729	224 684
Bismuth						
Metal	tonnes	5	1	13	11	2
Cadmium						
Metal	tonnes	2 030	3 104	1 722	363	3

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Cement						
Cement clinkers	tonnes	5 280	52 673	45 472	47 155	129 335
Portland cement	tonnes	1 637 605	2 035 118	1 681 397	1 838 228	2 440 982
Other cement	tonnes	469 636	393 746	250 624	200 038	162 360
Chromium						
Ores and concentrates	tonnes	1 762	1 617	3 764	1 831	1 828
Coal						
Anthracite	tonnes	15 474	12 817	17 611	12 841	13 515
Other coal	tonnes	14 733	1 485	571	53 107	1 953
Briquettes	tonnes	514	3 923	213	798	45
Cobalt						
Oxides	tonnes	141	206	224	188	390
Metal	tonnes	205	187	230	177	184
Copper						
Matte and cement	tonnes	90	61	1	333	1 041
Scrap	tonnes	158 062	167 424	174 068	181 600	172 601
Unwrought, unrefined	tonnes	2 752	7 290	8 502	7 811	5 612
Unwrought, refined	tonnes	13 186	8 648	13 506	21 312	12 227
Unwrought alloys	tonnes	12 787	15 553	20 024	21 264	17 927
Diamond						
Unsorted	Carats	200 000	210 000	205 000	2 880 000	12 935 000
Gem, rough	Carats	...	15 000	—	120 000	370 000
Gem, cut	Carats	155 195	243 170	181 572	12 605 000	86 540 000
Industrial	Carats	170 000	250 000	285 000	1 585 000	18 865 000
Dust	Carats	1 550 895	15 054 770	14 873 656	10 850 000	7 825 000
Diatomite	tonnes	10 392	6 716	2 226	1 229	1 458
Feldspar	tonnes	126 289	194 763	288 246	220 404	261 124
Fluorspar	tonnes	9 518	6 740	28 942	48 048	54 013
Gold						
Metal	kilograms	106 646	109 762	176 952	200 363	138 471
Waste and scrap	kilograms	173	154 845	1 006	7 001	10 283
Graphite	tonnes	820	798	512	310	233
Gypsum						
Crude	tonnes	17 907	12 035	9 614	8 383	35 889
Calcined	tonnes	21 848	18 484	39 465	79 661	84 696
Iodine	kilograms	86 917	24 722	20 112	22 559	26 637
Iron ore (a)	tonnes	354	8 779	6 742	14 191	18 697
Iron, steel and ferro-alloys						
Pig iron	tonnes	61 761	38 026	22 412	51 911	39 597
Sponge and powder	tonnes	452	729	1 534	3 904	3 571
Ferro-chrome	tonnes	2 066	5 020	5 639	3 399	4 180
Ferro-silico-magnesium	tonnes	163	33	27	114	527
Ferro-manganese	tonnes	7 457	9 186	9 761	11 603	8 233
Ferro-silico-manganese	tonnes	4 322	4 316	3 890	15 215	15 371
Ferro-molybdenum	tonnes	1 266	149	41	1 048	368
Ferro-nickel	tonnes	418	176	215	52	186
Ferro-silicon	tonnes	6 395	6 329	8 642	7 741	10 028
Other ferro-alloys	tonnes	2 523	863	951	968	1 001
Silicon metal	tonnes	3 200	3 284	4 293	1 621	1 246
Ingots, blooms, billets	tonnes	570 380	909 562	908 493	831 477	702 422
Scrap	tonnes	325 026	422 731	317 626	324 451	253 587
Kaolin	tonnes	21 392	36 208	27 994	21 393	24 241
Lead						
Unwrought	tonnes	23 006	7 821	15 455	8 646	7 058
Scrap	tonnes	7 594	9 776	10 173	14 804	11 681
Lithium						
Carbonate	tonnes	145	49	105	73	84
Magnesite and magnesia						
Magnesite	tonnes	1 945	2 535	3 236	2 902	2 305
Magnesia	tonnes	5 873	7 393	6 194	7 283	7 237
Manganese						
Metal	tonnes	326	716	963	897	600
Mercury	kilograms	89 228	202 273	68 623	12 706	8 743
Mica	tonnes	857	697	1 014	1 138	1 336

Italy

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Molybdenum						
Ores and concentrates	tonnes	205	1 523	2 299	3 153	2 503
Metal	tonnes	488	911	443	409	76
Oxides	tonnes	982	443	286	22	126
Nickel						
Scrap	tonnes	541	3 537	627	1 260	710
Unwrought (b)	tonnes	1 293	2 408	2 097	2 182	2 766
Crude petroleum	tonnes	619 630	423 777	713 237	920 740	573 665
Natural gas	tonnes	1 620 776	1 427 161	159 619	143 244	190 849
Phosphate rock	tonnes	6 416	10 751	16 139	8 370	8 614
Platinum metals						
Platinum	kilograms	10 043	10 408	9 982	10 071	9 791
Platinum metals	kilograms	8 898	12 684	14 436	16 259	23 339
Waste and scrap	kilograms	311	634	37 750	2 899	6 425
Potash						
Potassic fertilisers	tonnes	12 725	13 629	8 702	8 551	9 426
Rare earths						
Metals	tonnes	78	101	145	111	100
Rare earth compounds	tonnes	167	236	322	353	319
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	3	6	4
Salt	tonnes	558 441	919 673	1 017 938	473 826	776 645
Silver						
Metal	kilograms	383 782	715 501	995 384	979 652	1 024 151
Sulphur and pyrites						
Pyrites	tonnes	6 005	13 698	16 032	11 114	13 741
Sulphur	tonnes	256 614	286 954	285 891	249 274	212 188
Sulphur, sublimed and precipitated	tonnes	21 430	22 485	55 740	17 021	5 279
Talc	tonnes	124 212	143 236	135 418	140 618	144 432
Tin						
Unwrought (b)	tonnes	411	367	383	582	869
Scrap	tonnes	154	289	243	240	266
Titanium						
Metal	tonnes	3 607	3 248	4 789	4 531	4 756
Oxides	tonnes	23 508	27 450	26 181	22 039	37 137
Tungsten						
Metal	tonnes	670	925	1 091	1 060	687
Vanadium						
Ores and concentrates	tonnes	385	...	...	...	...
Zinc						
Ores and concentrates	tonnes	48 051	98 211	71 471	84 569	89 580
Unwrought	tonnes	5 258	11 071	16 570	14 737	8 016
Unwrought alloys	tonnes	3 491	6 377	9 385	10 029	8 415
Scrap	tonnes	12 334	16 427	13 006	7 151	7 019
Zirconium						
Concentrates	tonnes	33 219	41 784	44 252	11 012	2 832
Metal	tonnes	274	136	34	137	27

Notes

(a) Including burnt pyrites

(b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	3 654 570	3 057 378	2 135 306	966 588	1 035 371
Aluminium and bauxite						
Bauxite	tonnes	36 975	62 666	45 146	55 504	31 679
Alumina	tonnes	88 864	252 028	406 774	292 537	122 812
Alumina hydrate	tonnes	142 005	198 253	205 274	180 778	199 553
Unwrought	tonnes	284 779	432 393	482 850	355 557	465 484
Unwrought alloys	tonnes	310 560	488 002	563 882	489 373	520 800
Scrap	tonnes	268 836	372 686	461 302	444 544	448 220
Antimony						
Ores and concentrates	tonnes	935	1 378	1 169	1 474	1 964
Metal	tonnes	198	233	298	132	332
Oxide	tonnes	4 602	5 460	4 227	3 538	3 201
Arsenic						
Metallic arsenic	tonnes	45	19	74	33	81
Barytes						
Barium minerals	tonnes	51 615	67 303	88 574	69 098	93 846
Bentonite	tonnes	96 698	130 508	140 458	133 041	158 054
Bismuth						
Metal	tonnes	152	355	378	154	146
Bromine	kilograms	958 588	1 259 187	1 207 042	939 005	939 294
Cadmium						
Metal	tonnes	43	3	44	37	24
Cement						
Cement clinkers	tonnes	1 495 609	797 703	844 108	729 063	450 465
Portland cement	tonnes	1 433 820	1 298 080	1 119 225	998 392	804 854
Other cement	tonnes	308 222	139 459	125 066	106 926	108 775
Chromium						
Ores and concentrates	tonnes	23 842	22 012	31 861	30 547	28 069
Metal	tonnes	943	881	1 738	1 598	1 960
Coal						
Anthracite	tonnes	210 384	408 391	394 026	266 462	162 364
Other coal	tonnes	20 165 036	21 820 370	23 656 907	25 609 289	20 184 762
Briquettes	tonnes	7 786	6 233	3 857	1 905	3 975
Cobalt						
Metal	tonnes	632	477	758	609	744
Oxides	tonnes	473	707	719	679	901
Copper						
Cement copper	tonnes	...	24	0	...	...
Matte and cement	tonnes	1 503	24	0	25	1
Unwrought	tonnes	544 635	628 325	615 251	583 215	559 334
Scrap	tonnes	91 519	129 074	148 358	137 709	151 708
Unwrought alloys	tonnes	8 166	14 679	15 910	14 795	16 689
Diamond						
Unsorted	Carats	£1 738 000	£8 198 000	£8 652 000	£7 050 000	£9 648 000
Gem, rough	Carats	25 000	60 000	115 000	175 000	28 050 000
Gem, cut	Carats	£203 538 000	£285 718 000	£370 521 000	£338 455 000	£347 587 000
Industrial	Carats	£1 481 000	£7 993 000	£7 254 000	£4 318 000	£8 721 000
Dust	Carats	121 055 000	196 860 000	248 520 000	252 160 000	306 965 000
Diatomite	tonnes	2 497	3 920	5 555	5 091	4 571
Feldspar	tonnes	1 570 345	1 951 827	1 954 499	1 905 805	1 855 315
Fluorspar	tonnes	212 415	200 184	246 374	232 908	232 279
Gold						
Metal	kilograms	146 721	149 022	175 415	195 214	175 188
Waste and scrap	kilograms	864	649	1 223	5 075	4 360
Graphite	tonnes	5 995	8 308	12 559	6 411	6 274
Gypsum						
Crude	tonnes	5 754	3 618	2 205	8 793	7 299
Calcined	tonnes	16 645	16 267	16 976	17 916	17 911
Iodine	kilograms	1 256 232	1 080 203	1 375 868	1 633 655	1 673 429
Iron ore	tonnes	8 159 741	12 092 237	15 134 122	13 396 809	11 522 381

## Italy

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	895 818	1 018 615	1 288 014	1 106 558	1 517 045
Sponge and powder	tonnes	174 364	278 989	540 005	551 034	732 306
Ferro-chrome	tonnes	296 813	390 374	414 410	416 091	388 133
Ferro-silico-chrome	tonnes	—	97	841	3	99
Ferro-silico-magnesium	tonnes	1 759	1 943	1 683	2 125	2 586
Ferro-manganese	tonnes	46 537	71 406	86 512	82 933	86 923
Ferro-silico-manganese	tonnes	119 670	158 540	176 855	167 310	173 051
Ferro-molybdenum	tonnes	3 998	6 141	8 541	9 547	10 710
Ferro-nickel	tonnes	78 383	98 168	116 806	128 877	124 343
Ferro-niobium	tonnes	1 395	2 751	2 521	2 619	2 490
Ferro-phosphorus	tonnes	550	631	414	365	380
Ferro-silicon	tonnes	89 909	137 031	160 561	118 880	129 155
Ferro-titanium and ferro-silico-titanium	tonnes	4 462	3 876	3 819	3 139	2 418
Ferro-tungsten and ferro-silico-tungsten	tonnes	300	247	252	269	298
Ferro-vanadium	tonnes	1 158	1 901	2 330	2 367	2 011
Other ferro-alloys	tonnes	4 267	7 325	9 198	7 117	8 392
Silicon metal	tonnes	27 402	48 392	53 131	41 277	43 173
Ingots, blooms, billets	tonnes	2 655 726	3 681 439	3 662 856	3 169 000	3 198 102
Scrap	tonnes	3 321 387	4 609 403	5 752 270	5 271 612	4 957 195
Kaolin	tonnes	505 593	823 461	707 622	681 595	686 567
Lead						
Ores and concentrates	tonnes	29 210	20	0	9 419	39 748
Unwrought	tonnes	86 054	111 301	109 458	89 266	71 393
Scrap	tonnes	2 031	2 609	4 976	4 111	3 059
Lithium						
Oxides	tonnes	96	175	148	143	121
Carbonate	tonnes	1 185	1 123	1 369	1 052	1 241
Magnesite and magnesia						
Magnesite	tonnes	9 375	21 454	27 347	13 774	8 223
Magnesia	tonnes	93 262	143 725	133 451	120 185	105 816
Manganese						
Ores and concentrates (a)	tonnes	77 075	55 284	81 629	107 907	27 243
Metal	tonnes	3 709	5 788	5 759	5 804	6 274
Mercury	kilograms	19 992	10 510	15 246	4 247	1 863
Mica						
Unmanufactured	tonnes	417	136	209	205	187
Ground	tonnes	2 597	3 854	3 849	3 489	3 329
Molybdenum						
Ores and concentrates	tonnes	6 703	9 108	5 248	4 794	5 394
Metal	tonnes	171	136	219	192	161
Oxides	tonnes	176	276	199	187	128
Nickel						
Mattes, sinters etc	tonnes	93	1	4	78	1 281
Scrap	tonnes	763	1 063	656	899	1 330
Ores and concentrates	tonnes	...	...	...	...	316
Unwrought	tonnes	25 833	39 586	38 075	33 635	28 985
Unwrought alloys	tonnes	2 841	1 171	1 314	2 626	9 793
Crude petroleum	tonnes	76 301 866	76 729 305	72 173 373	68 812 837	57 467 112
Natural gas	tonnes	52 879 546	59 616 091	50 506 295	48 666 707	43 720 221
Phosphate rock	tonnes	89 245	231 808	243 718	196 478	140 749
Platinum metals						
Platinum	kilograms	13 627	12 545	10 630	7 417	8 436
Palladium	kilograms	13 047	10 019	9 171	7 855	6 411
Other platinum metals	kilograms	1 909	1 694	1 084	1 244	782
Waste and scrap	kilograms	8 178	16 918	1 468	3 103	2 150
Potash						
Sulphate	tonnes	31 910	88 593	58 418	52 568	59 966
Chloride	tonnes	144 086	367 465	287 984	285 476	283 353
Other potassic fertilisers	tonnes	3 413	8 415	1 368	511	416
Rare earths						
Metals	tonnes	87	124	108	30	62
Cerium compounds	tonnes	414	597	616	337	565
Other rare earth compounds	tonnes	258	303	307	257	232
Ferro-cerium and other pyrophoric alloys	tonnes	5	10	3	3	1
Salt	tonnes	902 241	1 119 583	1 045 659	1 128 585	943 961

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Sillimanite minerals						
Sillimanite minerals	tonnes	38 590	14 473	17 937	11 720	10 465
Mullite	tonnes	6 582	16 141	13 564	16 084	6 728
Silver						
Ores and concentrates	kilograms	15	70 440	31 391	11 644	102
Metal	kilograms	881 205	1 120 080	729 807	645 344	911 101
Sulphur and pyrites						
Pyrites	tonnes	228	13 538	29 746	10 436	12 808
Sulphur	tonnes	13 305	19 263	30 290	22 499	23 964
Sulphur, sublimed and precipitated	tonnes	3 617	758	732	887	5 066
Talc	tonnes	78 506	100 934	115 046	111 333	99 446
Tin						
Unwrought	tonnes	2 652	3 828	4 936	3 375	3 617
Unwrought alloys	tonnes	360	1 074	533	429	643
Scrap	tonnes	49	60	220	22	35
Titanium						
Titanium minerals	tonnes	74 338	98 978	111 842	(b)* 4 132	55 323
Metal	tonnes	3 352	4 497	9 420	7 367	6 065
Oxides	tonnes	139 071	160 361	164 708	137 976	143 083
Tungsten						
Metal	tonnes	147	496	552	656	482
Carbide	tonnes	103	279	440	240	380
Vanadium						
Pentoxide	tonnes	45	53	45	117	231
Zinc						
Ores and concentrates	tonnes	155 028	184 192	153 982	186 715	140 909
Unwrought	tonnes	118 424	245 254	244 557	164 716	142 457
Unwrought alloys	tonnes	22 194	34 595	39 554	31 434	48 303
Scrap	tonnes	15 315	27 740	36 491	36 134	39 614
Zirconium						
Concentrates	tonnes	53 845	98 214	81 360	40 897	56 430
Metal	tonnes	226	144	184	135	141

## Notes

(a) Including manganeseiferous Iron ore

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

## Latvia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	6 520 363	6 016 126	7 855 125	8 358 839	7 234 582
Crushed rock	tonnes	818 390	1 375 197	2 050 976	2 072 775	2 664 580
Cement						
Cement, clinker	tonnes	...	1 158 000	1 277 000	1 485 720	* 1 500 000
Cement, finished	tonnes	* 650 000	* 1 100 000	* 1 100 000	* 1 100 000	* 110 000
Gypsum (a)	tonnes	175 870	176 510	216 000	252 714	* 250 000
Crude steel	tonnes	692 000	655 000	568 000	805 000	198 000

## Note

(a) Including anhydrite

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	121 260	101 406	59 930	19 683	49 235
Aluminium and bauxite						
Alumina	tonnes	203	140	64 225	115 744	14 622
Unwrought alloys	tonnes	11 772	14 493	21 793	18 481	9 196
Scrap	tonnes	4 419	5 461	4 414	4 876	4 771
Cement						
Cement clinkers	tonnes	2 382	68 802	201 050	163 102	26 930
Portland cement	tonnes	147 960	562 435	673 260	759 738	734 184
Other cement	tonnes	126	76	250	176	237
Coal						
Hard coal (a)	tonnes	170	3 136	26 100	13 823	32 847
Briquettes	tonnes	74	3 262	6 402	4 007	2 772
Copper						
Unwrought	tonnes	2	—	642	4 314	6 428
Scrap	tonnes	6 138	7 106	13 679	8 494	7 847
Unwrought alloys	tonnes	2 512	722	1 008	1 156	2 053
Gypsum						
Crude and calcined	tonnes	37 352	38 596	47 016	84 358	97 074
Iodine	kilograms	—	4 200	—	7 400	—
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	204	4 051	9 502	30 189	13 006
Ferro-manganese	tonnes	402	794	1 132	515	679
Ferro-silico-manganese	tonnes	...	6 247	16 563	20 152	11 513
Ferro-silicon	tonnes	1	11 029	23 706	13 874	26 207
Ingots, blooms, billets	tonnes	2 323	2 442	5 045	72 535	32 687
Scrap	tonnes	213 766	396 794	563 192	507 285	468 154
Lead						
Scrap	tonnes	1 352	3 243	3 086	2 687	2 362
Nickel						
Scrap	tonnes	3 301	3 108	2 284	150	291
Unwrought alloys	tonnes	165	112	116	2	* 0
Crude petroleum	tonnes	93	524	42 208	45 767	5 690
Potash						
Chloride	tonnes	0	39	28	1 427	137
Potassic fertilisers	tonnes	379	357	535	1 344	1 070
Salt	tonnes	15 919	23 172	35 545	21 741	25 536
Silver						
Metal	kilograms	—	300	1 600	100	3 600
Sulphur and pyrites						
Sulphur	tonnes	5 253	0	1	12	—
Tin						
Scrap	tonnes	...	175	8	2	3
Titanium						
Metal	tonnes	—	7	61	42	2

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Zinc Scrap	tonnes	975	587	459	779	821

## Note

(a) Including anthracite

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	565 877	467 414	611 872	895 335	1 212 414
Aluminium and bauxite						
Scrap	tonnes	5 974	7 828	10 381	10 956	13 929
Bentonite	tonnes	2 148	2 787	3 434	2 701	3 501
Cement						
Cement clinkers	tonnes	34 375	158	6 551	701	68
Portland cement	tonnes	87 660	94 873	89 751	108 596	137 815
Other cement	tonnes	1 088	643	281	306	229
Coal						
Anthracite	tonnes	78	1 273	12 649	5 111	3 903
Other coal	tonnes	136 199	180 075	185 516	152 423	132 348
Copper						
Unwrought	tonnes	3 049	712	2 153	4 310	(a)* 3 000
Scrap	tonnes	1 307	2 942	3 855	5 014	8 145
Unwrought alloys	tonnes	926	698	950	2 597	4 103
Diatomite	tonnes	534	412	805	812	836
Feldspar	tonnes	9	577	561	1 292	1 522
Fluorspar	tonnes	468	678	775	1 269	811
Graphite	tonnes	—	1	1	3 813	4
Gypsum						
Crude	tonnes	1 037	22 669	33 495	48 578	45 012
Calcined	tonnes	883	2 027	2 787	2 523	1 918
Iodine	kilograms	200	140	300	300	708
Iron, steel and ferro-alloys						
Pig iron	tonnes	38 140	45 454	2 244	2 653	1 163
Sponge and powder	tonnes	14 931	4 460	565	104	84
Ferro-chrome	tonnes	588	6 995	9 782	17 179	13 045
Ferro-manganese	tonnes	2 345	4 090	1 480	584	782
Ferro-silico-manganese	tonnes	14 722	18 898	17 085	25 026	10 122
Ferro-silicon	tonnes	15 085	24 660	25 992	15 963	25 583
Ferro-tungsten and ferro-silico-tungsten	tonnes	...	...	...	80	120
Other ferro-alloys	tonnes	415	158	245	119	51
Silicon metal	tonnes	783	1 553	981	1 134	879
Ingots, blooms, billets	tonnes	226 967	206 428	402 711	3 861	2 695
Scrap	tonnes	214 564	443 817	366 039	923 037	318 371
Kaolin	tonnes	7 476	10 594	9 289	10 768	12 151
Lead						
Scrap	tonnes	24	93	1 221	502	922
Magnesite and magnesia						
Magnesia	tonnes	2 827	5 524	2 735	12 507	3 596
Manganese						
Ores and concentrates	tonnes	26	27	92	97	200
Nickel						
Unwrought	tonnes	1	...	0	584	1
Natural gas	tonnes	1 047 240	1 160 668	1 099 045	1 034 139	1 081 866
Platinum metals						
Platinum and platinum metals	kilograms	...	...	100	200	100
Waste and scrap	kilograms	(a)* 3 900	(a)* 400	...	...	—
Potash						
Chloride	tonnes	—	6 414	3 468	8 694	9 043
Salt	tonnes	151 529	163 486	198 975	135 514	187 521
Silver						
Metal	kilograms	556	791	2 300	1 400	7 900
Sulphur and pyrites						
Sulphur	tonnes	12 488	24	21	18	35

Latvia

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Talc	tonnes	314	295	145	126	183
Titanium Oxides	tonnes	562	739	693	640	586

Notes

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

## Lithuania

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	5 029 476	5 655 401	5 776 850	5 081 166	6 930 916
Crushed rock	tonnes	2 849 122	3 281 330	4 456 089	3 241 831	3 801 100
Cement						
Cement, clinker	tonnes	233 292	—	—	—	—
Cement, finished	tonnes	583 067	834 000	996 284	1 014 977	1 069 593
Crude petroleum	tonnes	114 956	114 464	113 895	101 644	86 054
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	69 722	73 470	76 699	73 040	81 449

#### Notes

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

(a) From petroleum refining and/or natural gas

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	163 850	57 255	139 291	118 463	137 961
Aluminium and bauxite						
Alumina	tonnes	7	22	59	413	2 574
Unwrought alloys	tonnes	2 614	7 754	7 534	6 363	4 286
Scrap	tonnes	4 796	5 298	8 952	10 306	12 777
Bentonite	tonnes	266	442	1 628	1 386	1 530
Cement						
Cement clinkers	tonnes	39 878	14	98	19	4
Portland cement	tonnes	170 273	352 750	450 601	529 457	604 824
Other cement	tonnes	491	1 151	406	36	280
Coal						
Hard coal (a)	tonnes	10 915	33 109	28 271	5 762	33 957
Copper						
Unwrought	tonnes	610	591	4 873	1 481	1 558
Scrap	tonnes	3 375	4 128	5 724	7 582	10 680
Diatomite	tonnes	78	551	615	234	280
Iodine	kilograms	—	4	8 900	3 000	6 900
Iron, steel and ferro-alloys						
Ferro-alloys	tonnes	3 093	104	141	3 280	1 235
Scrap	tonnes	422 436	595 721	664 225	562 585	493 483
Kaolin	tonnes	18	40	648	1 258	258
Lead						
Scrap	tonnes	4 210	5 941	5 335	6 603	4 019
Magnesite and magnesia						
Magnesia	tonnes	537	717	352	350	294
Crude petroleum	tonnes	113 172	110 597	80 025	78 183	66 924
Phosphate rock	tonnes	—	—	—	20 000	—
Platinum metals						
Waste and scrap	kilograms	101 900	193 600	126 800	...	—
Potash						
Potassic fertilisers	tonnes	18 714	6 517	4 256	7 989	6 381
Rare earths						
Cerium compounds	tonnes	8	12	10	7	9
Salt	tonnes	5 437	19 031	13 514	7 653	19 753
Silver						
Metal	kilograms	200	1 100	1 600	2 900	3 100
Sulphur and pyrites						
Sulphur	tonnes	14 038	1 227	403	759	383
Talc	tonnes	17	350	111	126	232
Tantalum and niobium						
Tantalum	tonnes	11	9	18	10	6

Lithuania

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Titanium						
Oxides	tonnes	502	1 167	965	1 029	1 122
Tungsten						
Ores and concentrates	tonnes	...	...	...	...	41
Metal	tonnes	1	—	178	18	17

Note

(a) Including anthracite

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	695 973	849 462	1 046 066	991 388	1 678 898
Aluminium and bauxite						
Bauxite	tonnes	6 923	4 348	...	0	0
Alumina	tonnes	1 815	16 411	26 876	23 690	21 348
Scrap	tonnes	888	2 460	6 014	3 238	3 682
Bentonite	tonnes	3 368	4 378	6 250	6 656	7 366
Cement						
Cement clinkers	tonnes	996	176 461	227 793	173 488	24 015
Portland cement	tonnes	133 039	122 178	144 824	147 329	199 114
Other cement	tonnes	...	...	...	...	671
Coal						
Anthracite	tonnes	15 755	3 616	24 260	62 934	3 435
Other coal	tonnes	199 684	313 355	368 099	256 651	416 369
Copper						
Unwrought	tonnes	415	596	4 652	1 251	472
Scrap	tonnes	409	436	634	2 505	5 696
Diatomite	tonnes	836	744	1 174	865	1 187
Feldspar	tonnes	2 958	6 265	10 278	6 700	1 405
Gold						
Waste and scrap	kilograms	103	—	64 453	12 202	—
Gypsum						
Crude	tonnes	28 754	54 772	63 632	64 379	82 504
Calcined	tonnes	19 974	17 377	18 503	19 211	19 504
Iodine	kilograms	4 510	17 732	20 100	3 200	2 000
Iron, steel and ferro-alloys						
Ferro-chrome	tonnes	2 842	32	35	42	60
Ferro-molybdenum	tonnes	2	—	3	936	3
Ferro-nickel	tonnes	...	...	674	986	—
Ferro-silicon	tonnes	39	102	40	40	46
Other ferro-alloys	tonnes	71	59	42	1 464	1 065
Ingots, blooms, billets	tonnes	1 229	4 270	5 384	4 536	7 537
Scrap	tonnes	29 805	35 270	71 858	59 444	30 690
Kaolin	tonnes	159	486	360	480	508
Lead						
Scrap	tonnes	3 301	4 459	5 755	1 892	3 350
Magnesite and magnesia						
Magnesia	tonnes	855	1 245	593	1 159	939
Molybdenum						
Metal	tonnes	7	65	37	45	6
Crude petroleum	tonnes	8 413 067	9 018 334	8 943 996	8 523 368	9 077 111
Natural gas	tonnes	1 761 529	2 048 906	2 385 268	2 265 929	1 954 603
Phosphate rock	tonnes	1 162 070	1 354 093	1 254 579	1 216 427	1 283 243
Platinum metals						
Waste and scrap	kilograms	22 700	76 400	64 600	4 800	59 500
Potash						
Sulphate	tonnes	2 617	2 581	7 069	6 267	4 521
Chloride	tonnes	6 631	32 552	35 602	52 573	46 394
Other potassic fertilisers	tonnes	87	4	112	1 837	98
Rare earths						
Rare earth compounds	tonnes	3	14	11	10	11
Salt	tonnes	159 534	209 506	246 724	154 780	225 754

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Silver						
Metal	kilograms	5 800	6 300	7 800	9 200	11 300
Sulphur and pyrites						
Sulphur	tonnes	319 353	326 485	298 977	293 839	291 622
Tantalum and niobium						
Tantalum	tonnes	24	12	13	4	1
Titanium						
Metal	tonnes	8	7	4	38	71
Oxides	tonnes	1 259	1 947	2 081	2 028	2 686
Tungsten						
Metal	tonnes	—	1	156	52	25
Zinc						
Unwrought (a)	tonnes	190	460	1 049	1 063	684

Note

(a) Including alloys

## Luxembourg

### Production

Commodity	Units	2009	2010	2011	2012	2013
Cement						
Cement, clinker	tonnes	706 426	736 000	770 232	* 740 000	* 710 000
Cement, finished	tonnes	929 820	1 030 700	1 232 633	1 177 000	1 127 000
Crude steel	tonnes	2 141 000	2 548 000	2 521 000	2 214 000	2 090 000

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	132 842	160 773	161 019	165 025	152 062
Aluminium and bauxite						
Unwrought alloys	tonnes	85 636	157 473	151 330	145 882	145 487
Scrap	tonnes	3 785	6 034	6 051	6 902	5 993
Cement						
Cement clinkers	tonnes	58 463	7 695	4 215	1	2
Portland cement	tonnes	119 660	341 075	424 306	321 903	407 310
Other cement	tonnes	137 975	219 688	320 980	338 240	216 961
Cobalt						
Metal	tonnes	3	1	305	1	1
Copper						
Scrap	tonnes	1 787	2 492	2 449	2 449	3 823
Diamond						
Dust	Carats	313 330	750 900	1 006 960	13 945 000	12 465 000
Gold						
Metal	kilograms	38 000	32 700	8 000	4 500	100
Gypsum						
Crude and calcined	tonnes	661	1 596	1 919	1 698	1 594
Iodine	kilograms	...	83 600	40 900	—	—
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	16 793	10 953	37 393	27 521	26 104
Scrap	tonnes	114 924	165 832	133 133	102 625	127 509
Kaolin	tonnes	414	22	6	54	28
Magnesite and magnesia						
Magnesite	tonnes	621	943	1 325	1 171	1 081
Platinum metals						
Platinum and platinum metals	kilograms	149	243	197	469	477
Waste and scrap	kilograms	24 700	5 600	16 000	...	100
Silver						
Metal	kilograms	159	1 409	3 324	1 152	1 884
Titanium						
Metal	tonnes	9	20	17	17	151
Tungsten						
Metal	tonnes	2	203	47	0	0
Zinc						
Scrap	tonnes	423	1 134	739	698	690

### Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 757 604	2 097 069	2 211 572	2 036 554	1 934 764
Aluminium and bauxite						
Unwrought	tonnes	33 315	62 504	51 627	44 826	37 496
Unwrought alloys	tonnes	4 480	7 362	5 586	8 278	8 556
Scrap	tonnes	98 962	128 632	121 295	161 015	168 410
Asbestos						
Unmanufactured	tonnes	—	—	37	1	...

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Barytes						
Barium minerals	tonnes	16 377	17 182	17 049	12 350	6 827
Cement						
Cement clinkers	tonnes	17 827	27 238	34 532	34 703	8 589
Portland cement	tonnes	56 666	34 642	42 548	37 740	67 220
Other cement	tonnes	16 255	12 119	14 934	15 382	11 592
Coal						
Anthracite	tonnes	16 525	24 834	16 256	10 994	10 869
Other coal	tonnes	83 454	76 133	73 322	69 623	62 674
Lignite	tonnes	7 093	7 090	7 710	8 620	3 483
Cobalt						
Metal	tonnes	11	163	811	80	113
Copper						
Scrap	tonnes	7 533	10 708	10 061	14 275	11 913
Diamond						
Unsorted	Carats	£47 000	£20 000	£248 000	£262 000	£38 000
Gem, cut	Carats	£446 000	£418 000	£533 000	£864 000	£2 332 000
Industrial	Carats	60 000	105 000	35 000	860 000	360 000
Dust	Carats	£227 000	£609 000	£472 000	£891 000	£553 000
Diatomite	tonnes	7 054	7 858	7 394	129	48
Fluorspar	tonnes	618	983	887	795	739
Gold						
Metal	kilograms	41 901	42 136	184 535	83 757	36 175
Gypsum						
Crude	tonnes	57 828	50 104	69 918	63 994	61 079
Calcined	tonnes	15 793	10 715	18 459	24 216	19 003
Iron, steel and ferro-alloys						
Ferro-manganese	tonnes	1 132	910	1 317	1 193	1 032
Ferro-silico-manganese	tonnes	25 617	27 116	29 053	29 843	29 419
Ferro-niobium	tonnes	166	192	226	212	243
Ferro-silicon	tonnes	2 846	3 428	3 828	3 642	3 337
Ferro-vanadium	tonnes	150	292	328	298	308
Other ferro-alloys	tonnes	432	614	851	797	1 050
Ingots, blooms, billets	tonnes	364 945	407 419	370 786	237 293	131 957
Scrap	tonnes	1 829 754	2 693 481	2 632 849	2 259 684	2 330 581
Kaolin	tonnes	6 316	904	563	736	1 046
Magnesite and Magnesia	tonnes	2 202	2 612	2 375	3 805	2 116
Natural gas	tonnes	92 122	3 591	3 077	1 441	10 903
Platinum metals						
Platinum and platinum metals	kilograms	1 702	1 633	438	329	301
Potash						
Potassic fertilisers	tonnes	801	1 681	1 167	1 252	1 832
Rare earths						
Rare earth compounds	tonnes	2	2	5	2	1
Ferro-cerium and other pyrophoric alloys	tonnes	—	11	0	—	—
Salt	tonnes	51 132	77 304	91 033	24 059	86 365
Silver						
Metal	kilograms	3 738	24 304	11 000	2 800	1 100
Sulphur and pyrites						
Sulphur	tonnes	2 981	2 166	1 789	1 432	1 604
Tantalum and niobium						
Tantalum	tonnes	2	1	1	1	52
Tin						
Scrap	tonnes	0	...	3	95	105
Titanium						
Metal	tonnes	66	456	1 842	786	1 898
Oxides	tonnes	1 114	1 481	1 534	1 494	13 393
Tungsten						
Carbide	tonnes	465	7	2	—	2
Zinc						
Unwrought	tonnes	6 049	9 232	6 819	7 461	7 080

## Macedonia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Bentonite	tonnes	9 033	7 084	8 918	2 355	18 520
Coal						
Lignite	tonnes	7 395 915	6 583 074	7 902 084	7 309 546	6 633 560
Copper, mine	tonnes (metal content)	7 440	7 912	7 555	9 506	9 802
Copper, refined	tonnes	—	—	—	1 100	1 900
Feldspar	tonnes	19 377	23 188	25 032	17 168	15 168
Crude steel	tonnes	299 332	344 866	348 576	225 224	145 633
Ferro-alloys						
Ferro-silico-manganese	tonnes	—	36 705	50 756	14 179	—
Ferro-nickel	tonnes	12 000	14 413	17 292	19 247	20 001
Ferro-silicon	tonnes	7 657	30 044	56 167	42 402	72 279
Gypsum (a)	tonnes	154 550	143 118	162 984	157 844	162 661
Lead, mine	tonnes (metal content)	46 788	41 293	37 295	39 184	42 826
Nickel, smelter/refinery	tonnes	12 000	14 400	17 300	19 200	20 000
Nickel, mine	tonnes (metal content)	12 000	14 200	25 600	10 800	21 100
Silver	kilograms (metal content)	* 35 000	* 32 000	* 30 000	* 31 000	* 32 000
Talc	tonnes	682	1 292	547	286	—
Zinc, mine	tonnes (metal content)	38 648	32 872	28 132	28 037	30 907

## Note

(a) Including anhydrite

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	...	...	39 217	47 352	59 365
Aluminium and bauxite						
Scrap	tonnes	1 514	2 351	2 432	2 724	2 833
Bentonite	tonnes	3 716	3 310	3 730	3 635	3 237
Cement						
Cement clinkers	tonnes	5 638	...	0	154 117	20 118
Portland cement	tonnes	361 677	315 074	277 326	136 803	164 396
Copper						
Ores and concentrates	tonnes	(a)* 39 000	41 135	39 014	45 119	51 838
Unwrought	tonnes	14	8	8	1 090	1 919
Scrap	tonnes	2 029	576	2 845	2 221	2 144
Feldspar	tonnes	18 457	21 924	25 111	14 857	15 477
Gypsum						
Crude and calcined	tonnes	12 604	30 273	32 328	29 321	27 891
Iron, steel and ferro-alloys						
Ferro-manganese	tonnes	773	50	4	209	21
Ferro-silico-manganese	tonnes	10 938	31 344	46 254	22 482	441
Ferro-nickel	tonnes	(b)* 91 800	67 384	77 107	89 302	94 714
Ferro-silicon	tonnes	16 621	19 491	52 684	41 131	71 956
Scrap	tonnes	59 407	71 830	83 784	88 861	75 972
Lead						
Ores and concentrates	tonnes	60 702	55 482	48 959	49 055	54 266
Unwrought	tonnes	1 271	801	421	685	2 136
Scrap	tonnes	226	226	219	218	146
Nickel						
Ores and concentrates	tonnes	0	60 181	25 579	16 219	3 575
Phosphate rock	tonnes	1 233	1 056	651	709	529
Salt	tonnes	3 616	2 666	5 456	4 898	3 195
Sulphur and pyrites						
Sulphur	tonnes	2 052	1 653	877	197	170
Talc	tonnes	528	636	648	380	618

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Zinc						
Ores and concentrates	tonnes	69 509	60 369	51 545	51 154	56 810
Scrap	tonnes	479	739	313	103	144

## Notes

- (a) Including alloys  
 (b) BGS estimates, based on known imports into certain countries

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	894	1 029	1 180	3 403	1 085
Aluminium and bauxite						
Unwrought (a)	tonnes	2 164	2 839	2 642	2 785	2 856
Scrap	tonnes	1 341	1 554	1 842	1 073	834
Bentonite	tonnes	142	219	302	725	400
Cement						
Cement clinkers	tonnes	(b)* 17 000	(b)* 2 000	8 932	(b)* 23	...
Portland cement	tonnes	193 076	185 378	148 954	193 978	178 196
Other cement	tonnes	397	1 213	409	501	545
Chromium						
Ores and concentrates	tonnes	495	294	512	324	268
Coal						
Hard coal (c)	tonnes	85 660	160 162	189 549	233 556	163 242
Lignite	tonnes	340	23 409	42 052	27 024	51 273
Briquettes	tonnes	9 207	7 623	22 546	18 209	90 103
Fluorspar	tonnes	457	350	600	244	122
Graphite	tonnes	761	875	911	648	764
Iron, steel and ferro-alloys						
Pig iron	tonnes	1 732	1 823	1 382	1 075	967
Ferro-alloys	tonnes	1 618	2 401	5 970	3 251	2 436
Ingots, blooms, billets	tonnes	157 566	145 509	97 889	100 791	90 116
Scrap	tonnes	7 375	292 049	318 612	157 401	55 654
Kaolin	tonnes	4 879	4 985	3 815	1 440	1 497
Magnesite and Magnesia	tonnes	10 113	11 266	9 418	5 547	2 115
Manganese						
Ores and concentrates	tonnes	...	56 893	110 589	42 109	503
Nickel						
Ores and concentrates	tonnes	985 925	1 210 300	1 393 490	1 518 156	1 259 734
Crude petroleum	tonnes	992 672	852 361	685 090	258 896	51 521
Natural gas	tonnes	53 192	79 059	93 816	96 877	93 567
Platinum metals						
Platinum and platinum metals	kilograms	—	2 420	7 649	9 910	13 443
Salt	tonnes	39 232	42 011	39 986	49 248	43 611
Silver						
Metal	kilograms	2 229	3 294	3 779	2 032	2 781
Titanium						
Oxides	tonnes	427	504	502	455	546
Zinc						
Unwrought (a)	tonnes	4 147	5 213	4 920	4 611	4 075

## Notes

- (a) Including alloys  
 (b) BGS estimates, based on known exports from certain countries  
 (c) Including anthracite

## Malta

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Aluminium and bauxite						
Scrap	tonnes	1 361	1 865	1 788	2 058	1 811
Copper						
Scrap	tonnes	1 828	919	1 096	1 287	736
Gold						
Waste and scrap	kilograms	...	17 008	27 387	...	...
Iron, steel and ferro-alloys						
Scrap	tonnes	27 775	29 498	38 408	34 244	28 134
Silver						
Metal	kilograms	...	100	500	500	100
Tin						
Scrap	tonnes	* 1	* 3	4	134	7

### Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	47 363	37 324	28 813	38 373	51 082
Bentonite	tonnes	635	921	844	446	440
Cement						
Cement clinkers	tonnes	142	17	...	...	3
Portland cement	tonnes	328 411	285 182	258 304	260 664	223 401
Other cement	tonnes	1 552	13 002	6 676	2 906	2 122
Gold						
Metal	kilograms	5 500	8 200	3 400	3 100	7 100
Gypsum						
Crude and calcined	tonnes	2 305	10 446	11 428	12 507	6 191
Salt	tonnes	1 364	1 682	1 366	2 567	1 464
Silver						
Metal	kilograms	1 090	128	100	100	800
Titanium						
Oxides	tonnes	470	463	445	346	382

## Montenegro

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	183 235	255 678	133 947	201 896	176 435
Crushed rock	tonnes	186 221	265 066	167 405	112 630	299 453
Bauxite	tonnes	45 779	61 205	158 614	—	61 154
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	58 528	—	—	—	—
Primary aluminium	tonnes	63 960	82 043	92 838	74 813	47 951
Coal						
Lignite	tonnes	957 164	1 937 847	1 972 671	1 706 302	1 692 535
Lead, mine	tonnes (metal content)	—	—	1 200	1 500	1 700
Crude steel	tonnes	90 404	48 272	61 164	28 161	19 723
Salt						
Sea salt	tonnes	17 000	11 200	10 000	16 000	10 000
Zinc, mine	tonnes (metal content)	—	500	3 300	4 600	4 600

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	127 600	112 522	32 451	15 527	45 091
Aluminium and bauxite						
Bauxite	tonnes	17 122	85 623	127 268	26 354	100 291
Unwrought	tonnes	(a) 82 877	(a) 76 891	108 813	75 180	(a) 48 052
Scrap	tonnes	1 570	2 045	2 357	2 356	2 337
Cement						
Portland cement	tonnes	...	...	2 372	1 583	3 250
Coal						
Lignite	tonnes	58 381	69 130	48 940	47 778	22 877
Copper						
Scrap	tonnes	1 029	1 769	2 356	1 650	1 705
Iron, steel and ferro-alloys						
Ingots, blooms, billets	tonnes	15 423	18 775	6 866	9 199	3 540
Scrap	tonnes	14 442	28 570	55 204	43 998	56 423
Salt	tonnes	3 776	14 316	1 560	1 845	2 158
Zinc						
Ores and concentrates	tonnes	...	499	6 579	9 120	9 283

Note

(a) Including alloys

### Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	44 639	26 703	12 574	4 709	1 933
Aluminium and bauxite						
Alumina	tonnes	55 777	157 753	185 103	139 940	93 297
Cement						
Cement clinkers	tonnes	...	0	...	...	72
Portland cement	tonnes	279 497	266 063	250 759	248 013	267 715
Other cement	tonnes	171 150	116 132	90 911	92 927	96 956
Coal						
Lignite	tonnes	6 734	—	62	39	—
Briquettes	tonnes	3 448	(a) 0	3	14	16
Diamond						
Dust	Carats	17 850	45 000	...	...	...
Gypsum						
Crude and calcined	tonnes	3 356	653	730	521	525

Montenegro

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	13 954	322	1 150	119	...
Ferro-chrome	tonnes	103	242	395	249	147
Ferro-silico-manganese	tonnes	1 664	1 663	891	306	168
Ferro-silicon	tonnes	271	288	187	402	241
Other ferro-alloys	tonnes	24	55	171	38	80
Scrap	tonnes	54 801	19 950	27 396	11 306	16 280
Salt	tonnes	10 402	6 470	9 600	6 795	6 137

Note

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

## Netherlands

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	63 350 000	56 865 000	71 320 000	* 71 000 000	* 72 000 000
Primary aluminium	tonnes	165 000	217 000	* 200 000	86 300	81 000
Cadmium	tonnes	* 490	* 560	* 570	* 560	* 560
Cement						
Cement, finished	tonnes	* 2 700 000	* 2 700 000	* 2 700 000	* 2 700 000	* 2 700 000
Indium	tonnes	* 5	* 5	* 5	* 5	* 5
Lead, refined	tonnes	* 27 000	* 27 000	* 27 000	* 27 000	* 27 000
Magnesite (a)	tonnes	183 256	236 053	274 877	290 873	249 568
Pig iron	tonnes	4 655 000	5 799 000	5 943 000	5 909 000	5 700 000
Crude steel	tonnes	5 194 000	6 651 000	6 937 000	6 879 000	6 713 000
Crude petroleum	tonnes	1 704 000	1 414 000	1 464 000	1 467 000	1 519 000
Natural gas	million m <sup>3</sup>	74 659	83 944	76 429	76 020	81 479
Salt	tonnes	5 967 000	5 982 000	6 866 000	6 513 000	6 517 000
Slab zinc	tonnes	224 000	264 000	261 000	257 000	275 000

#### Notes

(1) Netherlands is also believed to produce sulphur

(a) Chloride produced from solution mining

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	7 140 000	9 311 275	15 472 833	15 140 085	14 071 676
Aluminium and bauxite						
Bauxite	tonnes	* 59 000	26 997	12 739	19 133	68 646
Alumina	tonnes	62 131	8 665	43 695	9 831	583 016
Alumina hydrate	tonnes	65 279	76 244	89 612	128 448	159 168
Unwrought	tonnes	218 141	424 733	390 062	371 106	381 464
Unwrought alloys	tonnes	191 239	320 263	246 826	203 792	223 326
Scrap	tonnes	200 650	317 038	322 834	372 917	320 523
Antimony						
Metal	tonnes	171	219	385	475	429
Oxide	tonnes	285	433	264	206	155
Arsenic						
Metallic arsenic	tonnes	* 30	11	62	55	22
Barytes						
Barium minerals	tonnes	121 567	79 880	71 719	92 823	95 795
Bentonite	tonnes	135 722	178 093	186 574	141 709	137 010
Bismuth						
Metal	tonnes	28	34	32	52	107
Bromine	kilograms	1 960 700	1 477 700	1 154 400	84 300	95 800
Cadmium						
Metal	tonnes	305	606	617	839	896
Cement						
Cement clinkers	tonnes	352	34	3 911	33 160	2 022
Portland cement	tonnes	194 392	201 065	310 479	274 856	291 279
Other cement	tonnes	11 447	57 922	150 175	203 678	419 501
Chromium						
Ores and concentrates	tonnes	32 485	74 483	126 012	156 975	175 682
Metal	tonnes	885	3 569	2 197	3 112	5 870
Coal						
Anthracite	tonnes	78 064	41 054	303 741	153 370	91 575
Other coal	tonnes	5 154 853	7 580 839	8 239 446	1 281 730	11 303 627
Briquettes	tonnes	16 347	144 797	294 637	148 931	14 240

Netherlands

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Cobalt						
Oxides	tonnes	65	144	67	132	45
Metal	tonnes	353	1 733	2 062	1 934	2 054
Copper						
Ores and concentrates	tonnes	4	0	0	6 540	56 629
Unwrought	tonnes	29 260	20 175	34 435	59 260	27 722
Scrap	tonnes	143 329	283 847	315 437	328 463	295 139
Unwrought alloys	tonnes	2 413	2 379	3 057	2 389	2 497
Diamond						
Unsorted	Carats	£494 000	£371 000	£1 799 000	£823 000	£308 000
Gem, cut	Carats	£3 780 000	£3 132 000	£16 418 000	£8 002 000	£10 206 000
Industrial	Carats	£1 415 000	£2 179 000	£1 282 000	£1 508 000	£2 148 000
Dust	Carats	£196 000	£51 000	£57 000	£97 000	£794 000
Diatomite	tonnes	1 365	359	633	807	864
Feldspar	tonnes	1 355	105	112	281	228
Fluorspar	tonnes	11 333	14 023	28 870	19 488	16 659
Gold						
Metal	kilograms	15 515	34 851	50 559	37 629	31 713
Waste and scrap	kilograms	1 222	57 680	112 629	123 769	58 592
Graphite	tonnes	1 974	2 967	10 651	11 201	8 019
Gypsum						
Crude	tonnes	* 39 600	15 773	42 080	36 388	39 777
Calcined	tonnes	5 550	1 656	2 714	3 005	2 818
Iodine	kilograms	386 170	124 797	152 295	122 569	502 562
Iron ore	tonnes	(a) 239 932	121 426	208 469	49 903	241 379
Iron, steel and ferro-alloys						
Pig iron	tonnes	89 714	111 189	133 861	184 975	78 365
Sponge and powder	tonnes	(b)* 140	359	625	745	26 189
Ferro-chrome	tonnes	62 439	170 489	242 310	232 408	168 967
Ferro-silico-chrome	tonnes	* 300	448	14 816	31 811	6 589
Ferro-manganese	tonnes	33 193	35 353	66 053	57 013	88 182
Ferro-silico-manganese	tonnes	37 593	66 085	62 737	99 228	124 570
Ferro-molybdenum	tonnes	1 894	6 462	6 544	8 031	8 399
Ferro-nickel	tonnes	3 564	6 264	7 514	10 306	23 130
Ferro-niobium	tonnes	925	1 175	2 070	1 280	1 941
Ferro-silicon	tonnes	87 348	219 244	238 469	226 217	112 552
Ferro-titanium and ferro-silico-titanium	tonnes	2 730	10 510	13 620	10 357	11 011
Ferro-tungsten and ferro-silico-tungsten	tonnes	476	727	1 155	990	1 663
Ferro-vanadium	tonnes	926	1 909	2 343	1 772	1 525
Other ferro-alloys	tonnes	* 33 000	50 903	16 535	15 559	7 145
Silicon metal	tonnes	46 466	69 896	65 055	86 097	47 748
Ingots, blooms, billets	tonnes	157 861	849 018	1 553 519	1 601 063	702 912
Scrap	tonnes	* 2 835 000	5 541 773	5 692 223	5 635 229	5 517 477
Kaolin	tonnes	33 563	33 923	24 652	25 254	26 668
Lead						
Ores and concentrates	tonnes	74 725	63 921	94 100	46 688	41 266
Unwrought	tonnes	11 061	12 971	16 989	14 432	17 260
Scrap	tonnes	13 807	35 168	30 486	21 665	38 896
Lithium						
Oxides	tonnes	205	116	365	303	492
Carbonate	tonnes	227	160	300	567	266
Magnesite and magnesia						
Magnesite	tonnes	180	423	744	31	99
Magnesia	tonnes	160 337	139 516	402 976	370 287	273 416
Manganese						
Ores and concentrates	tonnes	28 701	21 806	29 097	27 154	30 072
Metal	tonnes	15 642	38 159	44 310	29 855	26 866
Mercury	kilograms	419 480	195 272	72 020	67 263	64 995
Mica	tonnes	3 214	1 687	2 396	1 986	1 897
Molybdenum						
Ores and concentrates	tonnes	4 408	17 126	19 765	24 083	29 792
Metal	tonnes	46	249	492	128	141
Oxides	tonnes	1 805	6 429	6 434	6 407	7 319

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Nickel						
Mattes, sinters etc (b)	tonnes	* 2 900	* 1 800	* 2 400	* 1 400	* 980
Scrap	tonnes	1 711	1 956	1 793	1 405	2 948
Ores and concentrates	tonnes	(b)* 260	(b)* 52	(b)* 11	3 787	(b)* 1 145
Unwrought (c)	tonnes	105	165	49 681	46 929	45 573
Oxides	tonnes	...	...	1 456	1 398	1 433
Crude petroleum	tonnes	184 860	340 357	81 621	396 475	8 886 727
Phosphate rock	tonnes	11 807	138 239	166 704	162 952	117 248
Platinum metals						
Platinum	kilograms	£59 804 000	£14 634 000	£9 386 000	£10 282 000	£6 146 000
Platinum metals	kilograms	£10 383 000	£7 953 000	£7 261 000	£5 329 000	£6 817 000
Waste and scrap	kilograms	* 163 160	1 877	220	5 714	1 445
Potash						
Sulphate	tonnes	4 431	7 854	45 711	27 002	27 259
Chloride	tonnes	133 012	174 453	227 456	395 684	327 663
Other potassic fertilisers	tonnes	2 680	15 619	45 766	31 642	33 173
Rare earths						
Metals	tonnes	* 135	86	70	163	2 688
Rare earth compounds	tonnes	* 150	177	327	341	256
Ferro-cerium and other pyrophoric alloys	tonnes	44	49	18	32	14
Salt	tonnes	* 3 412 200	3 456 740	2 631 255	2 456 168	4 304 382
Sillimanite minerals						
Sillimanite	tonnes	5 602	6 237	6 350	3 092	5 545
Sillimanite minerals	tonnes	5 602	6 907	23 239	13 447	18 958
Silver						
Ores and concentrates	kilograms	—	1 458	6 944	123	—
Metal	kilograms	196 180	216 182	624 589	241 614	555 475
Sulphur and pyrites						
Pyrites	tonnes	10 039	56 610	101 114	84 734	13 367
Sulphur	tonnes	36 898	480 968	469 819	561 995	395 938
Talc	tonnes	147 544	173 042	147 492	150 456	145 912
Tantalum and niobium						
Tantalum	tonnes	4	22	42	19	12
Tin						
Unwrought	tonnes	1 536	4 043	3 619	5 670	6 126
Unwrought alloys	tonnes	558	856	357	314	338
Scrap	tonnes	547	544	465	363	653
Titanium						
Titanium minerals	tonnes	13 664	101 840	69 170	57 796	3 396
Metal	tonnes	895	4 117	9 548	10 173	8 815
Oxides	tonnes	36 179	31 385	11 305	14 836	114 285
Tungsten						
Ores and concentrates	tonnes	25	104	0	0	63
Metal	tonnes	133	406	255	119	84
Vanadium						
Pentoxide	tonnes	102	122	186	328	492
Zinc						
Ores and concentrates	tonnes	425	12 182	132 344	90 253	91 030
Unwrought	tonnes	133 994	166 281	122 532	213 479	272 732
Unwrought alloys	tonnes	22 041	42 182	52 382	39 626	48 484
Scrap	tonnes	* 11 900	32 543	25 629	28 277	26 682
Zirconium						
Concentrates	tonnes	4 639	11 091	13 351	9 959	9 514
Metal	tonnes	32	110	108	147	75

## Notes

- (a) Including burnt pyrites  
 (b) BGS estimates, based on known imports into certain countries  
 (c) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	* 25 007 000	26 065 573	28 239 777	23 457 644	22 724 647
Aluminium and bauxite						
Bauxite	tonnes	68 038	113 499	113 653	108 492	35 459
Alumina	tonnes	153 891	692 413	955 665	626 715	792 007
Alumina hydrate	tonnes	52 798	167 596	246 013	243 186	287 325
Unwrought	tonnes	134 950	384 724	424 915	487 639	163 027
Unwrought alloys	tonnes	284 410	462 371	537 289	464 926	444 992
Scrap	tonnes	88 053	184 066	241 081	270 014	220 965
Antimony						
Metal	tonnes	150	314	208	586	697
Oxide	tonnes	2 257	57 454	26 729	18 315	16 031
Arsenic						
Metallic arsenic	tonnes	* 45	2	19	0	—
Barytes						
Barium minerals	tonnes	43 928	161 343	148 240	168 963	140 000
Bentonite	tonnes	* 190 000	237 683	289 615	277 221	216 441
Bismuth						
Metal	tonnes	42	259	192	427	694
Bromine (a)	kilograms	63 310	321 599	114 504	297 589	1 417
Cadmium						
Metal	tonnes	50	102	1	15	36
Cement						
Cement clinkers	tonnes	511 560	636 694	424 274	558 153	634 548
Portland cement	tonnes	904 788	1 123 936	1 580 140	1 278 033	1 259 993
Other cement	tonnes	842 190	1 136 163	1 475 035	1 488 241	1 271 302
Chromium						
Ores and concentrates	tonnes	18 702	88 788	135 776	180 648	150 921
Metal	tonnes	2 157	6 642	5 773	4 789	5 260
Coal						
Anthracite	tonnes	8 005	44 958	225 184	257 485	160 206
Other coal	tonnes	14 084 993	18 783 491	18 008 920	21 017 984	22 978 921
Lignite	tonnes	29 239	21 933	15 824	22 991	62 285
Briquettes	tonnes	53 030	132 281	429 514	1 398 836	2 702 367
Cobalt						
Metal	tonnes	* 491	962	1 023	1 249	1 581
Oxides	tonnes	54	118	596	16	7
Copper						
Ores and concentrates	tonnes	46	40	125	2 529	(b)* 66 000
Scrap	tonnes	—	144 426	204 327	214 211	166 106
Unwrought, unrefined	tonnes	2 678	7 194	5 502	9	68
Unwrought, refined	tonnes	33 771	26 982	41 659	25 369	21 677
Unwrought alloys	tonnes	1 329	2 101	2 111	1 930	2 982
Diamond						
Unsorted	Carats	£551 000	£80 000	£192 000	£144 000	£885 000
Gem, rough	Carats	£95 000	£47 000	£38 000	£61 000	£16 000
Gem, cut	Carats	£10 757 000	£15 248 000	£35 316 000	£30 128 000	£33 465 000
Industrial	Carats	£613 000	£624 000	£1 393 000	£1 392 000	£2 340 000
Dust	Carats	426 830	290 475	2 074 815	820 000	(b)* 4 170 000
Diatomite	tonnes	3 794	4 641	6 034	6 232	6 445
Feldspar	tonnes	8 849	15 721	9 071	57 431	85 487
Fluorspar	tonnes	13 014	14 295	23 603	11 725	26 299
Gold						
Metal	kilograms	42 806	37 888	38 349	35 027	38 821
Waste and scrap	kilograms	111	110 465	188 490	117	52 603
Graphite	tonnes	2 487	16 692	14 266	13 498	11 342
Gypsum						
Crude	tonnes	249 206	203 179	307 971	280 623	349 844
Calcined	tonnes	418 481	368 523	611 145	570 600	504 609
Iodine	kilograms	23 376	16 031	1 352 421	811 065	1 174 000
Iron ore	tonnes	(c) 4 585 303	(c) 8 810 077	8 921 399	7 445 399	(c) 5 200 141

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	122 185	98 575	213 530	190 874	118 277
Sponge and powder	tonnes	109 768	378 111	402 025	416 889	190 235
Ferro-chrome	tonnes	40 931	93 919	123 284	76 613	264 401
Ferro-silico-chrome	tonnes	1 394	2 838	525	353	6 227
Ferro-manganese	tonnes	39 045	86 504	89 805	84 529	141 367
Ferro-silico-manganese	tonnes	29 335	57 967	80 905	21 583	78 217
Ferro-molybdenum	tonnes	2 868	4 643	7 753	4 548	3 397
Ferro-nickel	tonnes	4 274	19 378	25 849	20 222	7 243
Ferro-niobium	tonnes	949	920	1 354	1 397	78
Ferro-silicon	tonnes	79 461	178 138	152 194	181 213	62 226
Ferro-titanium and ferro-silico-titanium	tonnes	1 860	11 922	13 484	14 189	9 816
Ferro-tungsten and ferro-silico-tungsten	tonnes	554	1 168	1 298	726	1 108
Ferro-vanadium	tonnes	519	2 014	1 890	1 710	1 102
Other ferro-alloys	tonnes	6 951	11 263	17 558	7 372	6 993
Silicon metal	tonnes	41 740	82 599	75 664	81 148	100 682
Ingots, blooms, billets	tonnes	110 561	536 157	1 335 875	1 040 244	404 473
Scrap	tonnes	* 1 135 000	1 988 278	2 188 452	2 408 332	2 290 454
Kaolin	tonnes	68 072	150 929	150 310	149 090	115 525
Lead						
Ores and concentrates	tonnes	1 935	1 558	8 083	29 375	7 383
Unwrought	tonnes	7 195	8 717	8 496	4 020	5 484
Scrap	tonnes	13 593	21 255	16 886	15 622	10 578
Lithium						
Oxides	tonnes	228	290	494	201	229
Carbonate	tonnes	316	431	527	462	524
Magnesite and magnesia						
Magnesite	tonnes	3 259	459	3 115	195	645
Magnesia	tonnes	80 478	345 154	458 372	340 922	235 685
Manganese						
Ores and concentrates	tonnes	9 398	23 045	33 555	66 281	38 141
Metal	tonnes	19 083	50 866	35 618	40 131	30 706
Mercury	kilograms	* 101 000	30 636	213 259	154 983	124 697
Mica						
Unmanufactured	tonnes	523	191	419	418	540
Ground	tonnes	3 490	21 756	20 744	4 632	4 504
Waste	tonnes	...	748	462	24	0
Molybdenum						
Ores and concentrates	tonnes	9 555	35 335	40 562	39 782	30 242
Metal	tonnes	84	274	261	236	154
Oxides	tonnes	230	594	865	596	617
Nickel						
Scrap	tonnes	4 666	21 724	4 607	2 584	2 803
Ores and concentrates	tonnes	* 220	5 940	9 544	744	0
Unwrought	tonnes	...	...	230 179	32 005	41 856
Unwrought alloys	tonnes	227	638	3 548	982	1 126
Oxides (b)	tonnes	* 70	* 50	* 70	* 150	* 253
Crude petroleum	tonnes	35 086 584	60 408 191	55 108 848	63 505 928	63 201 586
Natural gas (b)	tonnes	* 9 512 000	* 11 044 000	* 12 153 000	* 10 107 568	* 2 884 000
Phosphate rock	tonnes	192 355	779 354	779 537	679 557	287 737
Platinum metals						
Platinum	kilograms	£78 613 000	£25 740 000	£73 911 000	£79 002 000	£15 407 000
Platinum metals	kilograms	£11 659 000	£13 014 000	£54 486 000	£31 439 659	£10 916 000
Waste and scrap	kilograms	111	260 515	411 332	5 883	116 333
Potash						
Sulphate	tonnes	28 984	21 982	56 536	66 497	118 050
Chloride	tonnes	204 377	430 138	756 966	905 233	851 210
Other potassic fertilisers	tonnes	3 466	1 542	26 231	24 569	80 844
Rare earths						
Metals	tonnes	* 200	48	18	99	75
Cerium compounds	tonnes	71	88	223	396	268
Other rare earth compounds	tonnes	* 1 100	568	173	742	878
Ferro-cerium and other pyrophoric alloys	tonnes	6	2	1	23	14
Salt	tonnes	* 253 000	1 404 032	2 397 781	331 643	1 090 957

Netherlands

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Sillimanite minerals						
Sillimanite minerals	tonnes	2 425	3 576	13 342	13 177	24 417
Mullite	tonnes	21 064	51 745	64 162	34 244	32 464
Silver						
Metal	kilograms	218 279	304 219	338 239	301 089	321 318
Sulphur and pyrites						
Pyrites	tonnes	2 119	48	1 593	329	1 481
Sulphur	tonnes	11 430	49 399	229 496	80 459	117 195
Sulphur, sublimed and precipitated	tonnes	2	4	7	3 736	1
Talc	tonnes	94 407	178 312	199 302	182 898	213 095
Tantalum and niobium						
Tantalum	tonnes	4	6	9	(b)* 24	6
Tin						
Unwrought	tonnes	7 071	13 967	11 303	7 453	11 803
Unwrought alloys	tonnes	504	665	505	276	389
Scrap	tonnes	380	606	524	424	3 655
Titanium						
Titanium minerals	tonnes	* 100 000	238 199	196 960	158 679	83 675
Metal	tonnes	1 224	5 330	6 094	5 709	5 902
Oxides	tonnes	40 914	43 542	52 165	38 792	58 718
Tungsten						
Ores and concentrates (b)	tonnes	* 900	* 1 200	* 3 100	* 3 400	* 3 203
Metal	tonnes	71	206	209	211	471
Vanadium						
Pentoxide	tonnes	27	204	888	558	1 240
Zinc						
Ores and concentrates	tonnes	320 568	391 050	355 644	445 698	474 857
Unwrought	tonnes	104 253	254 953	227 277	221 680	191 576
Unwrought alloys	tonnes	15 791	19 827	13 356	8 029	24 859
Scrap	tonnes	8 274	12 653	9 283	6 759	7 301
Zirconium						
Concentrates	tonnes	11 027	23 981	43 560	17 070	6 651
Metal	tonnes	* 70	188	297	211	152

Notes

(a) May include some fluorine

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

(c) Including burnt pyrites

## Norway

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	13 047 000	13 011 000	13 215 000	14 262 000	13 984 000
Crushed rock	tonnes	51 378 000	54 134 000	63 855 000	67 670 000	66 259 000
Primary aluminium	tonnes	1 098 200	1 090 000	1 201 000	1 110 900	1 154 900
Cadmium	tonnes	249	300	309	* 310	* 310
Cement						
Cement, clinker	tonnes	1 528 300	1 433 783	1 382 809	1 435 497	1 399 012
Cement, finished	tonnes	1 434 439	1 467 363	1 579 505	1 661 157	1 694 150
Coal						
Bituminous (a)	tonnes	2 437 000	1 685 000	1 640 000	1 325 000	2 135 000
Cobalt, metal	tonnes	3 510	3 208	3 067	2 969	3 348
Copper, refined	tonnes	33 900	36 200	36 000	37 891	37 461
Copper, smelter	tonnes	33 900	36 200	36 000	37 891	37 461
Feldspar	tonnes	48 000	56 000	25 271	—	—
Graphite	tonnes	4 562	6 270	7 789	6 992	6 207
Gypsum (b)(c)	tonnes	68 103	36 395	88 953	85 296	* 80 000
Iron ore	tonnes	896 000	3 266 000	2 532 100	3 420 684	3 409 269
Pig iron	tonnes	83 000	108 000	101 000	100 000	* 100 000
Crude steel	tonnes	595 000	520 000	620 000	683 000	605 000
Ferro-alloys						
Ferro-manganese	tonnes	196 700	297 300	337 900	* 320 000	* 780 000
Ferro-silico-manganese	tonnes	(b) 247 615	(b) 281 266	266 000	* 250 000	* 250 000
Ferro-silicon	tonnes	233 974	* 200 000	170 102	203 886	349 389
Silicon metal	tonnes	169 643	* 170 000	* 170 000	* 150 000	* 150 000
Molybdenum	tonnes (metal content)	...	...	...	4	8
Nickel, smelter/refinery	tonnes	88 577	92 185	92 427	91 687	91 017
Nickel, mine	tonnes (metal content)	336	348	339	351	296
Crude petroleum	tonnes	115 612 000	105 146 000	100 343 000	94 497 000	90 347 000
Natural gas	million m <sup>3</sup>	104 800	107 800	101 697	114 918	108 746
Nepheline syenite	tonnes	270 000	327 000	330 000	320 000	320 000
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	* 90 000	* 96 000	* 96 000	126 801	118 487
Recovered (e)	tonnes (sulphur content)	25 000	22 000	19 000	20 000	22 000
Talc	tonnes	23 350	6 392	8 191	7 983	8 459
Titanium						
Ilmenite	tonnes	671 000	864 000	870 000	830 614	826 126
Slab zinc	tonnes	138 973	148 862	153 200	152 647	143 444

#### Notes

- (a) Spitzbergen: not including production from mines controlled by Russia
- (b) Sales
- (c) Including anhydrite
- (d) From metal sulphide processing
- (e) From petroleum refining and/or natural gas

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	13 843 722	16 877 617	20 858 955	19 761 572	18 103 600
Aluminium and bauxite						
Alumina	tonnes	145	156	187	228	2 715
Unwrought	tonnes	106 593	74 941	58 478	66 997	57 855
Unwrought alloys	tonnes	1 249 830	1 420 662	1 370 411	1 287 135	1 196 035
Scrap	tonnes	80 729	77 216	88 312	76 950	61 112
Barytes						
Barium minerals	tonnes	4 069	12 071	8 008	9 954	13 246
Bentonite	tonnes	294	3 726	318	1 318	494
Bismuth						
Metal	tonnes	—	25	—	—	—

## Norway

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Cadmium						
Metal	tonnes	211	329	317	221	267
Cement						
Cement clinkers (a)	tonnes	* 104 000	* 150 000	* 251 000	* 104 000	* 40 000
Portland cement (a)	tonnes	* 14 200	* 144 000	* 94 000	* 138 000	* 148 000
Chromium						
Metal	tonnes	85	97	78	202	61
Cobalt						
Metal	tonnes	3 550	3 325	3 064	3 059	2 876
Copper						
Matte and cement	tonnes	0	0	2	3 852	2 387
Unwrought	tonnes	33 497	35 975	36 549	38 146	37 287
Scrap	tonnes	25 339	37 829	45 889	55 842	57 357
Diatomite	tonnes	6	1	—	9	56
Feldspar	tonnes	47 711	55 637	30 617	4 821	9 146
Gold						
Metal	kilograms	3 865	4 567	7 439	8 498	4 912
Waste and scrap	kilograms	1 197	1 482	1 904	4 261	1 027
Gypsum						
Crude and calcined	tonnes	68 140	36 298	85 598	90 159	77 012
Iodine	kilograms	250	—	13 250	1 127	—
Iron ore	tonnes	775 828	1 803 242	2 435 415	3 659 210	3 567 408
Iron, steel and ferro-alloys						
Pig iron (a)	tonnes	* 75 000	* 118 000	* 110 000	* 91 000	* 118 000
Sponge and powder	tonnes	286	678	169	1 269	3 722
Ferro-chrome	tonnes	—	(a)* 30	(a)* 65	(a)* 90	(a)* 89
Ferro-manganese (a)	tonnes	* 203 000	* 332 000	* 379 000	* 370 000	* 825 000
Ferro-silico-manganese	tonnes	200 279	245 095	246 808	277 070	279 907
Ferro-silicon	tonnes	115 682	214 643	246 711	244 224	246 718
Other ferro-alloys	tonnes	16 247	2 479	47	9	20
Silicon metal	tonnes	109 254	162 649	154 191	161 468	174 217
Ingots, blooms, billets	tonnes	106 505	64 474	92 475	163 423	87 907
Scrap	tonnes	228 138	337 675	289 943	345 558	365 332
Kaolin	tonnes	271	103	85	492	20
Lead						
Scrap	tonnes	504	1 800	1 444	1 944	1 290
Manganese						
Ores and concentrates	tonnes	9 214	10 709	2 600	39 355	8 211
Metal	tonnes	59	112	462	95	0
Mica	tonnes	1 835	2 078	2 144	2 093	2 447
Nickel						
Ores and concentrates	tonnes	2 464	4 818	7 598	7 969	5 433
Scrap	tonnes	274	1 042	582	499	674
Unwrought	tonnes	88 080	91 813	92 705	91 591	89 413
Crude petroleum	tonnes	87 982 743	79 030 886	70 031 846	64 341 641	59 375 084
Natural gas	tonnes	74 357 298	75 626 277	74 356 856	84 557 156	81 107 905
Phosphate rock	tonnes	25	2	5	6 866	17 506
Platinum metals						
Platinum and platinum metals	kilograms	12 341	9 714	11 951	13 707	10 088
Waste and scrap	kilograms	35 829	157 937	36 399	63 560	19 969
Rare earths						
Metals	tonnes	105	—	19	5	54
Rare earth compounds	tonnes	21	30	23	13	35
Salt	tonnes	14 998	12 609	5 775	17 053	9 211
Silver						
Metal	kilograms	58 979	57 617	62 849	49 856	48 129
Talc	tonnes	23 461	728	2 204	535	648
Titanium						
Titanium minerals (a)	tonnes	* 350 000	* 465 000	* 441 000	* 392 000	* 396 000
Metal	tonnes	227	231	343	243	271
Oxides (a)	tonnes	* 207 000	* 35 000	* 35 000	* 31 000	* 35 000

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Zinc						
Unwrought	tonnes	128 416	122 649	119 770	115 789	109 485
Unwrought alloys	tonnes	6 107	19 889	29 094	28 188	30 614

## Note

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

**Imports**

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	66 884	82 706	98 721	107 087	83 631
Aluminium and bauxite						
Bauxite	tonnes	15 444	8 645	459	746	485
Alumina	tonnes	2 069 424	2 144 519	2 185 976	2 191 352	2 302 823
Alumina hydrate	tonnes	45 252	35 379	53 224	50 386	47 789
Unwrought	tonnes	240 409	512 340	450 432	298 464	286 320
Unwrought alloys	tonnes	95 120	68 086	27 867	41 031	21 577
Scrap	tonnes	26 598	38 039	42 078	31 750	32 529
Antimony						
Oxide	tonnes	200	264	193	211	162
Barytes						
Barium minerals	tonnes	146 535	149 510	139 620	124 210	159 682
Bentonite	tonnes	12 612	14 506	12 668	11 620	16 045
Cement						
Cement clinkers	tonnes	6 904	7 070	170	312	376
Portland cement	tonnes	237 896	353 102	409 018	435 344	464 686
Other cement	tonnes	20 474	21 621	25 809	28 533	31 974
Chromium						
Ores and concentrates (a)	tonnes	* 400	* 400	* 500	* 300	* 200
Metal	tonnes	74	90	437	453	543
Coal						
Anthracite (b)	tonnes	54 199	78 387	79 140	78 412	68 231
Other coal (a)(b)	tonnes	* 367 000	* 517 000	* 230 000	* 468 000	* 463 955
Cobalt						
Metal	tonnes	3 012	2 132	684	5 090	2 678
Oxides	tonnes	155	0	0	3	0
Copper						
Unwrought	tonnes	1 627	4 609	909	704	1 460
Scrap	tonnes	9 727	9 891	12 856	12 073	11 674
Diamond						
Gem, cut	Carats	9 604	8 545	5 305	* 4 400	* 6 800
Industrial	Carats	85 000	160 000	140 000	285 000	130 000
Dust	Carats	...	...	...	115 000	55 000
Diatomite	tonnes	931	842	808	867	937
Feldspar	tonnes	13 781	16 413	18 228	14 322	15 794
Gold						
Metal	kilograms	670	969	1 220	1 338	1 007
Waste and scrap	kilograms	3 568	4 127	5 415	4 915	3 928
Graphite	tonnes	508	400	129	124	45
Gypsum						
Crude	tonnes	76 435	84 359	94 824	79 789	78 521
Calcined	tonnes	234 564	270 721	275 909	299 898	264 601
Iodine	kilograms	1 270 662	1 708 338	1 663 657	1 759 025	2 035 784
Iron ore	tonnes	134 167	148 809	127 127	92 702	74 266

Norway

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	10 639	1 498	10 709	9 749	7 650
Sponge and powder	tonnes	292	575	39 665	36 216	28 156
Ferro-chrome	tonnes	1 162	1 311	1 534	1 293	1 170
Ferro-manganese	tonnes	6 608	5 303	5 254	1 200	124
Ferro-silico-manganese	tonnes	1 186	548	0	2	197
Ferro-molybdenum	tonnes	103	121	172	133	142
Ferro-silicon	tonnes	9 097	10 615	9 595	5 383	3 478
Other ferro-alloys	tonnes	823	1 544	2 090	1 022	1 845
Silicon metal	tonnes	29 810	49 349	53 897	28 196	19 763
Ingots, blooms, billets	tonnes	59 344	4 733	5 411	5 977	8 395
Scrap	tonnes	91 114	108 802	138 814	210 426	194 345
Kaolin	tonnes	190 562	225 576	149 002	176 164	168 419
Lead						
Unwrought	tonnes	5 026	6 449	7 713	8 071	9 630
Magnesite and magnesia						
Magnesia	tonnes	4 904	10 987	8 714	9 795	8 060
Manganese						
Ores and concentrates	tonnes	525 674	1 121 716	1 085 383	1 072 991	992 832
Metal	tonnes	1 297	1 974	2 697	1 636	2 158
Mica						
Unmanufactured	tonnes	1 021	1 224	1 573	1 964	2 027
Ground	tonnes	1 140	1 179	294	285	193
Waste	tonnes	...	...	...	82	355
Nickel						
Mattes, sinters etc	tonnes	153 437	170 365	199 173	190 275	178 840
Unwrought (c)	tonnes	199	235	246	250	175
Crude petroleum	tonnes	1 225 514	1 508 241	1 238 531	1 305 413	1 815 872
Natural gas	tonnes	231	4 393	1 005	444	36
Phosphate rock	tonnes	403 098	9 638	6 499	—	—
Platinum metals						
Platinum and platinum metals	kilograms	1 005	1 425	1 430	758	955
Waste and scrap	kilograms	930	1 362	1 160	1 403	1 225
Potash						
Sulphate	tonnes	123 549	(a)* 99 000	(a)* 65 000	(a)* 27 782	(a)* 49 000
Chloride	tonnes	199 385	(a)* 377 000	(a)* 354 000	(a)* 395 133	(a)* 371 000
Other potassic fertilisers	tonnes	509	612	287	320	235
Rare earths						
Metals	tonnes	24	148	552	438	439
Cerium compounds	tonnes	9	1	13	3	—
Other rare earth compounds	tonnes	0	8	9	9	17
Salt	tonnes	959 630	1 042 489	1 106 066	1 052 197	1 029 977
Sillimanite minerals	tonnes	4 359	3 456	3 208	3 626	2 767
Silver						
Ores and concentrates (a)	kilograms	* 5 700	* 1 100	* 700	* 4 700	* 12 200
Metal	kilograms	47 040	57 422	49 727	47 768	27 060
Sulphur and pyrites						
Sulphur	tonnes	3 102	2 897	3 051	2 725	2 614
Sulphur, sublimed and precipitated	tonnes	12 127	11 515	11 627	12 685	12 848
Talc	tonnes	6 517	8 356	8 364	8 374	10 586
Titanium						
Titanium minerals	tonnes	29 809	45 018	25 003	...	26 238
Metal	tonnes	389	412	723	890	671
Oxides	tonnes	8 209	10 115	10 376	8 093	7 214
Zinc						
Ores and concentrates	tonnes	209 649	228 828	250 537	260 442	237 170
Unwrought (c)	tonnes	1 612	1 376	1 013	2 313	205

Notes

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

(b) Excludes coal imported from Spitzbergen

(c) Including alloys

# Poland

## Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel (a)	tonnes	* 141 114 000	* 157 236 000	* 176 000 000	* 145 000 000	* 141 000 000
Crushed rock	tonnes	58 245 900	62 886 200	88 696 900	64 859 600	57 945 103
Bentonite	tonnes	2 800	2 000	900	800	1 050
Cadmium	tonnes	534	451	526	370	460
Cement						
Cement, clinker	tonnes	10 659 214	11 767 782	13 629 500	11 807 300	10 855 278
Cement, finished	tonnes	15 536 984	15 756 000	18 929 000	15 918 614	14 831 323
Coal						
Bituminous	tonnes	78 064 462	76 727 802	76 447 604	79 854 904	77 016 910
Lignite	tonnes	57 108 304	56 510 125	62 841 269	64 297 772	65 848 670
Copper, mine	tonnes (metal content)	439 365	425 725	426 665	427 064	428 879
Copper, refined	tonnes	502 462	547 074	571 041	565 834	565 155
Copper, smelter	tonnes	457 510	469 656	481 875	466 715	456 100
Diatomite	tonnes	670	1 000	580	600	600
Feldspar	tonnes	445 500	513 700	538 800	487 200	483 000
Gold	kilograms	600	500	400	469	431
Gypsum (b)	tonnes	1 326 928	1 398 500	1 225 600	1 227 900	1 270 100
Pig iron	tonnes	2 983 500	3 637 995	3 974 930	3 943 968	4 013 877
Crude steel	tonnes	7 128 482	7 993 025	8 776 458	8 539 302	8 199 353
Ferro-alloys						
Ferro-manganese	tonnes	1 736	800	800	800	820
Ferro-silico-manganese	tonnes	72	100	400	200	100
Ferro-silicon	tonnes	9 673	53 206	72 668	79 400	73 590
Other ferro-alloys	tonnes	4 190	200	300	300	11 250
Kaolin (c)	tonnes	136 561	125 000	163 600	137 800	166 000
Lead, mine	tonnes (metal content)	62 910	48 050	40 492	73 231	74 000
Lead, refined	tonnes	100 400	120 300	135 500	141 000	145 400
Magnesite	tonnes	47 000	63 000	75 350	84 000	97 000
Nickel, smelter/refinery	tonnes	600	600	900	800	600
Nickel, mine	tonnes (metal content)	600	600	900	800	600
Crude petroleum	tonnes	686 992	686 487	618 163	677 664	962 090
Natural gas	million m <sup>3</sup>	5 537	5 666	5 921	5 871	5 380
Platinum metals						
Platinum	kilograms (metal content)	30	30	* 30	* 30	* 30
Palladium	kilograms (metal content)	20	20	* 20	* 20	* 20
Rhenium	tonnes	4	4	5	* 5	* 9
Salt						
Rock salt	tonnes	988 545	1 221 700	1 254 000	793 000	1 310 500
Brine salt	tonnes	2 533 413	2 464 363	2 633 300	2 732 200	2 735 500
Other salt	tonnes	763 385	763 515	768 000	724 000	499 200
Selenium metal	tonnes	80	79	85	90	80
Silver	kilograms (metal)	1 221 000	1 183 000	1 167 000	1 200 000	1 100 000
Sulphur and pyrites						
Frasch	tonnes (sulphur content)	262 769	516 742	657 100	676 500	526 300
Recovered (d)	tonnes (sulphur content)	257 000	253 000	310 500	310 500	310 500
Recovered (e)	tonnes (sulphur content)	214 382	250 075	259 000	285 000	* 280 000
Zinc, mine	tonnes (metal content)	115 500	107 700	87 200	76 700	75 200
Slab zinc	tonnes	139 100	135 000	144 100	138 300	146 300

### Notes

(1) Poland is also believed to produce strontium minerals

(a) Includes an estimate for small producers

(b) Including anhydrite

(c) Washed

(d) From metal sulphide processing

(e) From petroleum refining and/or natural gas

## Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	902 193	1 031 013	1 058 307	962 169	1 565 938
Aluminium and bauxite						
Bauxite	tonnes	833	448	8 546	—	2
Unwrought (a)	tonnes	66 065	103 803	111 421	118 356	153 672
Scrap	tonnes	102 757	123 503	130 472	155 032	151 679
Antimony						
Metal	tonnes	65	27	47	40	38
Bentonite	tonnes	23 918	21 987	25 050	23 563	38 087
Bromine	kilograms	5 500	9 800	7 100	3 600	5 400
Cadmium						
Metal	tonnes	590	484	579	388	437
Cement						
Cement clinkers	tonnes	127 806	89 692	46 295	99 977	147 787
Portland cement	tonnes	405 940	415 187	358 847	303 667	419 673
Other cement	tonnes	35 305	22 984	17 523	28 200	20 620
Chromium						
Ores and concentrates	tonnes	107	425	3 604	536	373
Metal	tonnes	861	7 948	7 135	2 977	4 423
Coal						
Anthracite	tonnes	5 282	41 908	43 370	37 906	52 188
Other coal	tonnes	8 368 190	10 323 041	676 364	5 257 817	10 805 260
Lignite	tonnes	68 273	116 682	145 063	133 531	217 825
Briquettes	tonnes	363	2 114	15 992	1 676	1 637
Cobalt						
Oxides	tonnes	64	8	3	2	3
Copper						
Matte and cement	tonnes	1 515	956	1 567	1 306	1 724
Unwrought	tonnes	325 395	332 989	327 585	333 648	343 628
Scrap	tonnes	64 606	68 686	60 544	49 128	57 215
Unwrought alloys	tonnes	2 358	1 180	1 260	2 571	2 279
Diatomite	tonnes	85	111	788	3 012	5 823
Feldspar	tonnes	1 829	3 050	3 012	1 376	1 222
Gold						
Metal	kilograms	121 100	1 100	3 000	12 300	7 100
Waste and scrap	kilograms	18 000	588	26	1 000	180
Graphite	tonnes	80	233	505	977	796
Gypsum						
Crude and calcined	tonnes	40 512	47 654	121 689	111 389	119 406
Iodine	kilograms	5 100	16 400	4 000	3 700	2 700
Iron ore	tonnes	14 893	16 130	4 400	1 573	29 699
Iron, steel and ferro-alloys						
Pig iron	tonnes	10 543	17 340	21 122	79 889	49 925
Sponge and powder	tonnes	4 448	5 293	16 519	7 185	7 040
Ferro-manganese and ferro-silico-manganese	tonnes	21 640	10 113	3 284	5 844	44 294
Ferro-silicon	tonnes	16 401	59 845	76 121	72 741	83 700
Other ferro-alloys	tonnes	2 655	7 452	8 135	4 919	15 087
Silicon metal	tonnes	1 033	845	1 390	1 674	2 161
Ingots, blooms, billets	tonnes	664 035	490 919	846 908	618 682	360 816
Scrap	tonnes	978 862	1 334 069	1 838 699	1 955 438	1 946 832
Kaolin	tonnes	11 515	9 781	13 591	12 366	10 173
Lead						
Ores and concentrates	tonnes	59 790	35 459	30 132	60 549	56 766
Unwrought	tonnes	48 599	43 945	59 599	62 941	62 616
Scrap	tonnes	1 525	1 668	1 010	1 392	1 282
Magnesite and magnesia						
Magnesite	tonnes	474	66	101	79	69
Magnesia	tonnes	250	1 013	550	3 303	5 873
Manganese						
Metal	tonnes	603	2 875	41	97	198
Mercury	kilograms	46 200	106 100	7 300	—	—
Nickel						
Mattes, sinters etc	tonnes	1 443	1 134	—	—	28
Scrap	tonnes	260	416	749	709	319
Unwrought	tonnes	(a) 172	(a) 1 876	(a) 252	(a) 917	2 617
Oxides	tonnes	260	38	29	5	2

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Crude petroleum	tonnes	17 227	3	186 730	211 223	402 670
Phosphate rock	tonnes	4	43	434	226	1 284
Platinum metals						
Platinum and platinum metals	kilograms	47 400	1 100	2 400	400	900
Waste and scrap	kilograms	1 600	300	3 400	63 900	425 200
Potash						
Potassic fertilisers	tonnes	13 279	10 687	10 078	3 999	15 678
Rare earths						
Cerium compounds	tonnes	4	7	86	1	9
Other rare earth compounds	tonnes	—	4	66	3	4
Salt	tonnes	503 899	572 595	515 723	393 235	625 660
Silver						
Metal	kilograms	1 265 200	1 281 800	1 328 900	1 378 800	1 245 000
Sulphur and pyrites						
Sulphur	tonnes	152 484	402 102	394 861	506 641	406 030
Sulphur, sublimed and precipitated	tonnes	29 540	34 752	26 542	29 757	500
Talc	tonnes	793	869	744	830	825
Tin						
Unwrought (a)	tonnes	279	408	536	533	558
Titanium						
Metal	tonnes	105	76	90	47	47
Oxides	tonnes	20 937	20 996	23 401	20 201	20 329
Tungsten						
Ores and concentrates	tonnes	...	...	314	...	41
Metal	tonnes	136	154	179	89	348
Zinc						
Ores and concentrates	tonnes	45 877	4 213	0	0	3
Unwrought	tonnes	84 833	96 142	105 552	105 929	128 521
Unwrought alloys	tonnes	4 699	6 280	6 939	6 541	9 137
Scrap	tonnes	1 617	902	960	533	570

## Note

(a) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	5 349 230	5 014 564	9 022 494	5 766 695	3 143 654
Aluminium and bauxite						
Bauxite	tonnes	49 033	48 664	45 672	51 430	46 961
Alumina	tonnes	27 626	29 920	34 691	35 709	34 969
Alumina hydrate	tonnes	23 083	31 406	26 536	25 912	28 557
Unwrought	tonnes	67 561	125 567	125 147	112 325	99 308
Unwrought alloys	tonnes	144 983	192 393	232 859	245 491	254 479
Scrap	tonnes	67 408	84 622	98 484	108 168	175 534
Antimony						
Metal	tonnes	71	47	68	62	115
Oxide	tonnes	1 034	1 044	1 026	949	841
Arsenic						
Metallic arsenic	tonnes	20	42	45	44	39
Asbestos						
Unmanufactured	tonnes	35	0	...	...	—
Barytes						
Barium minerals	tonnes	8 349	11 758	15 723	21 567	11 154
Bentonite	tonnes	122 165	155 173	212 585	233 200	212 103
Bismuth						
Metal	tonnes	20	34	23	24	33
Bromine	kilograms	6 100	17 200	11 200	66 300	35 300
Cement						
Cement clinkers	tonnes	35 106	111 677	35 663	13 558	12 497
Portland cement	tonnes	421 822	565 893	932 507	695 629	659 111
Other cement	tonnes	21 466	26 247	25 467	21 027	108 490

## Poland

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Chromium						
Ores and concentrates	tonnes	12 728	15 672	30 863	27 723	30 554
Metal	tonnes	679	103	4 533	78	526
Coal						
Anthracite	tonnes	310 290	583 158	582 605	407 120	384 053
Other coal	tonnes	10 362 090	13 127 065	14 090 331	9 652 129	10 434 564
Lignite	tonnes	30 307	35 973	67 550	134 135	221 819
Briquettes	tonnes	25 788	60 548	60 758	53 873	57 782
Cobalt						
Metal	tonnes	53	52	47	52	48
Oxides	tonnes	15	18	114	17	20
Copper						
Ores and concentrates	tonnes	78 027	38 000	45 484	41 333	112 568
Scrap	tonnes	22 153	24 316	26 201	53 828	49 205
Unwrought, unrefined	tonnes	40 030	33 717	23 581	22 766	17 481
Unwrought, refined	tonnes	13 838	26 944	11 822	19 234	17 078
Unwrought alloys	tonnes	2 408	2 813	2 939	4 229	2 693
Diamond						
Gem, cut	Carats	£2 509 000	£2 128 000	£3 805 000	£2 532 000	£3 286 000
Industrial	Carats	169 851	35 260	16 703	* 8 300	* 8 200
Dust	Carats	£196 000	£179 000	£273 000	£376 000	£388 000
Diatomite	tonnes	9 790	6 753	9 365	7 802	6 980
Feldspar	tonnes	176 717	243 645	324 426	287 882	288 728
Fluorspar	tonnes	8 562	11 013	12 239	11 747	9 106
Gold						
Metal	kilograms	100	200	1 500	1 800	1 900
Graphite	tonnes	3 078	6 933	10 267	6 833	7 317
Gypsum						
Crude	tonnes	157 974	129 336	134 230	122 407	20 267
Calcined	tonnes	82 586	53 613	47 261	39 845	43 204
Iodine	kilograms	10 600	21 700	11 600	12 900	21 800
Iron ore	tonnes	(a) 3 752 010	6 494 457	5 977 338	6 576 287	6 640 058
Iron, steel and ferro-alloys						
Pig iron	tonnes	156 970	176 145	228 357	200 340	157 826
Sponge and powder	tonnes	4 677	7 594	14 597	7 336	8 430
Ferro-chrome	tonnes	6 064	7 785	8 042	9 413	19 247
Ferro-silico-magnesium	tonnes	2 366	3 402	2 326	1 752	1 352
Ferro-manganese	tonnes	32 935	30 721	45 192	31 083	64 426
Ferro-silico-manganese	tonnes	71 585	56 882	65 816	60 667	71 356
Ferro-molybdenum	tonnes	711	612	547	470	1 316
Ferro-niobium	tonnes	244	395	279	379	278
Ferro-phosphorus	tonnes	675	917	1 253	1 183	850
Ferro-silicon	tonnes	16 132	21 576	18 457	15 818	23 324
Ferro-titanium and ferro-silico-titanium	tonnes	117	194	259	291	291
Ferro-vanadium	tonnes	313	370	10	447	621
Other ferro-alloys	tonnes	3 096	4 355	5 856	6 658	4 775
Silicon metal	tonnes	11 839	16 219	17 091	17 754	22 669
Ingots, blooms, billets	tonnes	157 799	119 466	370 144	575 506	603 525
Scrap	tonnes	596 733	374 076	409 454	383 472	510 652
Kaolin	tonnes	90 183	117 914	143 476	138 026	146 430
Lead						
Unwrought	tonnes	29 861	46 810	52 011	42 108	44 237
Scrap	tonnes	2 293	7 154	6 673	4 980	10 330
Lithium						
Oxides	tonnes	86	86	114	141	100
Carbonate	tonnes	137	175	177	177	165
Magnesite and magnesia						
Magnesite	tonnes	2 658	3 966	1 375	1 948	659
Magnesia	tonnes	81 304	113 757	137 148	116 632	103 475
Manganese						
Ores and concentrates	tonnes	1 930	4 345	4 509	4 951	5 459
Metal	tonnes	507	1 514	436	764	1 030
Mercury	kilograms	10 900	4 300	39 900	13 700	31 300
Mica	tonnes	1 134	1 150	2 019	1 504	1 459

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Molybdenum						
Metal	tonnes	281	889	1 292	72	72
Oxides	tonnes	80	162	198	237	195
Nickel						
Mattes, sinters etc	tonnes	1 468	1 223	7	—	10
Scrap	tonnes	2 122	341	603	325	447
Unwrought (b)	tonnes	1 353	3 350	2 722	3 189	3 208
Oxides	tonnes	34	38	28	263	29
Crude petroleum	tonnes	19 959 321	22 009 801	22 870 416	24 629 744	23 141 408
Phosphate rock	tonnes	458 923	1 299 106	1 434 124	1 237 885	957 111
Platinum metals						
Platinum and platinum metals	kilograms	31 300	5 100	2 700	1 800	300
Waste and scrap	kilograms	36	19	1	100	33 000
Potash						
Sulphate	tonnes	10 919	19 155	23 281	23 883	28 911
Chloride	tonnes	194 900	757 987	769 256	779 023	784 534
Other potassic fertilisers	tonnes	3 470	4 442	10 317	11 544	17 079
Rare earths						
Metals	tonnes	2	5	0	2	27
Cerium compounds	tonnes	43	134	101	68	104
Other rare earth compounds	tonnes	16	48	32	13	13
Salt	tonnes	483 243	886 294	1 052 650	451 619	906 654
Sillimanite minerals						
Sillimanite minerals	tonnes	7 852	17 956	13 791	17 567	20 761
Mullite	tonnes	1 040	2 109	2 817	2 757	2 299
Silver						
Metal	kilograms	122 900	106 700	78 600	82 800	76 900
Sulphur and pyrites						
Pyrites	tonnes	813	1 866	1 255	1 480	1 473
Sulphur	tonnes	35 350	44 939	53 828	30 488	8 508
Sulphur, sublimed and precipitated	tonnes	978	164	387	6	88
Talc	tonnes	18 325	23 331	26 212	26 430	34 117
Tin						
Concentrates	tonnes	220	98	...	...	15
Unwrought (b)	tonnes	1 102	1 317	1 579	1 281	1 138
Scrap	tonnes	1 664	1 605	2 790	3 689	4 638
Titanium						
Titanium minerals	tonnes	84 396	105 384	99 055	84 143	96 894
Metal	tonnes	264	616	2 020	329	270
Oxides	tonnes	42 031	46 110	54 770	44 098	48 200
Tungsten						
Metal	tonnes	87	124	96	69	170
Zinc						
Ores and concentrates	tonnes	130 258	115 561	97 225	178 780	157 232
Unwrought	tonnes	18 498	53 983	49 569	47 314	48 736
Unwrought alloys	tonnes	8 922	7 610	10 045	11 622	11 593
Scrap	tonnes	3 907	7 188	10 421	11 060	14 251
Zirconium						
Concentrates	tonnes	340	648	488	670	735

## Notes

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

# Portugal

## Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	10 191 339	8 569 474	7 658 205	6 093 188	5 893 671
Crushed rock	tonnes	56 509 630	50 628 649	48 737 535	32 966 351	21 577 096
Arsenic	tonnes	* 15	* 15	* 15	* 15	* 15
Barytes	tonnes	1 078	15	—	—	—
Cement						
Cement, clinker (a)	tonnes	6 484 970	6 483 644	5 351 024	4 881 543	5 427 443
Cement, finished (a)	tonnes	6 862 969	6 665 585	6 072 751	5 392 995	5 301 473
Copper, mine	tonnes (metal content)	86 462	74 426	79 686	74 043	77 236
Feldspar (b)	tonnes	210 266	169 722	187 159	167 287	138 715
Gypsum	tonnes	335 189	336 755	337 272	321 988	299 038
Crude steel	tonnes	1 557 000	1 504 000	1 871 000	1 960 000	2 050 000
Kaolin	tonnes	274 925	273 890	322 041	321 689	246 308
Lead, mine	tonnes (metal content)	—	—	—	87	1 496
Lead, refined	tonnes	7 000	9 000	6 000	5 000	4 000
Lithium						
Lepidolite	tonnes	37 359	40 109	37 534	20 698	19 940
Salt						
Rock salt	tonnes	594 578	618 961	631 295	520 284	473 095
Sea salt	tonnes	72 325	44 574	47 267	88 693	91 282
Silver	kilograms (metal content)	20 483	20 561	28 027	29 890	40 621
Talc	tonnes	11 567	11 981	15 462	15 131	11 348
Tin	tonnes (metal content)	34	22	39	42	84
Tungsten (c)	tonnes (metal content)	823	799	818	763	692
Zinc, mine	tonnes (metal content)	501	6 422	4 227	30 006	53 382

### Notes

- (1) Portugal is also believed to produce sulphur  
(2) Portugal is a small producer of tantalum-bearing tin slags but no detailed information is available

(a) Sales

(b) Includes feldspathic sand  
(c) Wolframite and scheelite

## Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	101 421	67 505	120 946	71 399	353 360
Aluminium and bauxite						
Unwrought alloys	tonnes	90 869	102 856	59 056	40 526	5 593
Scrap	tonnes	32 481	51 888	45 775	52 782	40 273
Antimony						
Metal	tonnes	119	138	70	277	138
Bentonite	tonnes	691	1 175	1 356	1 935	1 672
Cement						
Cement clinkers	tonnes	1 553 992	1 888 362	916 431	994 099	1 410 579
Portland cement	tonnes	758 854	996 778	1 345 607	2 000 541	2 668 095
Other cement	tonnes	15 231	10 440	8 111	40 461	57 065
Coal						
Anthracite	tonnes	4 409	7 136	7 405	11 385	9 679
Copper						
Ores and concentrates	tonnes	371 881	305 485	327 096	312 192	328 240
Unwrought	tonnes	2 098	1 887	9 969	8 425	248
Scrap	tonnes	20 213	24 491	36 151	41 285	36 744
Diamond						
Gem, cut	Carats	£52 000	£550	£61 000	£136 000	£507 000
Industrial	Carats	1 500 000	3 500 000	1 000 000	1 500 000	500 000
Dust	Carats	10 000	92 107	788 459	1 000 000	550 000
Diatomite	tonnes	473	7 545	7 299	11 538	18 246
Feldspar	tonnes	1 290	2 190	3 197	17 482	29 205

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Gold						
Metal	kilograms	—	6 600	13 100	17 000	10 600
Waste and scrap	kilograms	800	800	100	457 000	274 800
Gypsum						
Crude and calcined	tonnes	12 394	20 016	47 278	56 546	31 679
Iron, steel and ferro-alloys						
Pig iron	tonnes	51	18 502	21 606	18 330	17 431
Ferro-alloys	tonnes	255	1 746	2 392	793	443
Ingots, blooms, billets	tonnes	136 284	172 983	119 353	54 844	71 231
Scrap	tonnes	216 037	303 013	239 842	236 115	246 687
Kaolin	tonnes	51 014	31 390	102 721	122 029	103 161
Lead						
Unwrought	tonnes	6 647	8 785	8 050	5 124	3 952
Scrap	tonnes	2 222	1 710	1 855	1 363	3 639
Magnesite and magnesia						
Magnesite	tonnes	...	11	1	716	503
Magnesia	tonnes	10	4	1	528	712
Mercury	kilograms	—	200	6 700	25 600	—
Natural gas	tonnes	254 997	389 309	875	58 753	243 548
Platinum metals						
Waste and scrap	kilograms	—	...	15 100	3 200	1 600
Potash						
Potassic fertilisers	tonnes	402	612	895	3 901	10 878
Rare earths						
Other rare earth compounds	tonnes	20	9	2	—	0
Salt	tonnes	15 662	31 022	31 304	37 302	33 633
Silver						
Ores and concentrates	kilograms	11 500	12 300	16 300	15 100	25 200
Metal	kilograms	580	3 400	10 600	40 600	34 200
Sulphur and pyrites						
Sulphur	tonnes	5 737	6 164	9 737	7 065	24 478
Talc	tonnes	2 699	4 316	2 526	2 224	1 740
Tantalum and niobium						
Tantalum	tonnes	49	98	81	50	27
Tin						
Unwrought	tonnes	250	—	31	4	(a) 92
Scrap	tonnes	9	43	82	200	117
Titanium						
Oxides	tonnes	1 166	1 091	3 422	5 322	6 733
Tungsten						
Ores and concentrates	tonnes	1 407	1 289	1 324	1 325	1 253
Metal	tonnes	20	6	131	51	10
Zinc						
Ores and concentrates	tonnes	371	7 438	2 201	67 881	112 125
Unwrought (a)	tonnes	849	151	734	1 723	492
Scrap	tonnes	1 646	940	755	5 736	1 745

## Note

(a) Including alloys

**Imports**

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	175 576	224 514	255 625	242 987	185 020
Aluminium and bauxite						
Alumina	tonnes	13 742	14 862	8 762	8 863	9 472
Unwrought	tonnes	15 200	20 152	18 744	17 371	13 634
Unwrought alloys	tonnes	149 759	170 057	113 150	96 190	74 013
Scrap	tonnes	15 819	10 183	5 305	7 409	4 460
Antimony						
Oxide	tonnes	146	240	184	239	229
Barytes						
Barium minerals	tonnes	3 744	4 448	2 509	2 286	2 985
Bentonite	tonnes	12 788	18 205	23 436	26 466	21 319
						101

Portugal

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Cement						
Cement clinkers	tonnes	24 156	24 143	3 238	6 011	1 106
Portland cement	tonnes	150 065	186 170	134 000	169 109	212 948
Other cement	tonnes	11 072	11 771	5 043	5 293	7 746
Chromium						
Ores and concentrates	tonnes	2 361	2 108	2 727	2 639	2 206
Coal						
Anthracite	tonnes	28 472	21 454	30 860	42 657	32 258
Other coal	tonnes	4 922 698	2 648 704	3 592 502	4 999 817	4 182 028
Copper						
Unwrought	tonnes	4 027	5 534	4 725	4 688	5 613
Scrap	tonnes	7 550	8 819	7 973	5 169	6 797
Unwrought alloys	tonnes	4 453	4 127	4 378	3 993	3 445
Diamond						
Gem, cut	Carats	£1 756 000	£2 039 000	£3 732 000	£2 906 000	£2 414 000
Industrial	Carats	£246 000	£111 000	£122 000	£86 000	£65 000
Dust	Carats	5 514 973	10 117 653	16 401 864	5 595 000	4 610 000
Diatomite	tonnes	1 127	2 284	2 340	2 242	2 702
Feldspar	tonnes	72 275	63 675	49 902	61 516	79 625
Fluorspar	tonnes	2 243	1 384	2 350	3 234	3 291
Gold						
Metal	kilograms	1 077	1 500	1 200	800	700
Waste and scrap	kilograms	...	...	49 685	121 743	19 509
Gypsum						
Crude	tonnes	81 971	73 822	40 153	28 175	44 712
Calcined	tonnes	244 809	270 783	237 788	167 437	133 151
Iodine	kilograms	8 000	8 700	8 600	6 300	10 800
Iron, steel and ferro-alloys						
Pig iron	tonnes	7 507	10 623	4 980	1 895	3 230
Sponge and powder	tonnes	38 849	6 919	37 376	27 383	30 100
Ferro-chrome	tonnes	245	810	683	617	770
Ferro-silico-magnesium	tonnes	1 104	1 475	470	79	21
Ferro-manganese	tonnes	762	856	722	683	593
Ferro-silico-manganese	tonnes	9 921	4 396	9 877	15 041	13 097
Ferro-silicon	tonnes	3 707	2 902	3 408	3 130	2 240
Other ferro-alloys	tonnes	3 516	657	2 611	4 500	2 868
Silicon metal	tonnes	410	753	950	1 182	606
Ingots, blooms, billets	tonnes	53 089	28 583	33 675	33 266	31 844
Scrap	tonnes	887 110	672 856	616 063	1 165 785	1 409 187
Kaolin	tonnes	73 081	96 851	106 955	103 863	97 034
Lead						
Unwrought	tonnes	6 642	5 593	9 403	8 661	13 630
Scrap	tonnes	258	395	266	1 113	5 026
Magnesite and magnesia						
Magnesite	tonnes	697	1 162	1 379	1 249	1 652
Magnesia	tonnes	8 538	4 504	5 523	7 130	9 037
Mercury	kilograms	25 100	152 900	125 400	59	18
Mica	tonnes	139	284	288	258	263
Nickel						
Unwrought	tonnes	316	312	221	285	405
Crude petroleum	tonnes	10 193 366	11 251 958	10 152 747	11 456 025	11 600 330
Natural gas	tonnes	3 770 943	3 849 819	3 543 064	3 231 198	3 456 751
Phosphate rock	tonnes	44 189	93 348	91 703	105 186	73 503
Platinum metals						
Platinum and platinum metals	kilograms	146	796	245	* 800	* 900
Waste and scrap	kilograms	...	...	...	—	3 600
Potash						
Sulphate	tonnes	1 574	3 840	4 405	10 798	27 020
Chloride	tonnes	25 525	50 687	65 352	82 364	64 943
Other potassic fertilisers	tonnes	5 389	1 899	2 596	5 395	8 477
Rare earths						
Metals	tonnes	...	1	87	—	1
Cerium compounds	tonnes	11	7	8	15	6
Other rare earth compounds	tonnes	2	5	18	3	3
Salt	tonnes	108 161	172 107	144 688	182 585	149 922
Sillimanite minerals	tonnes	573	466	641	2 241	794

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Silver						
Metal	kilograms	18 602	66 900	38 700	22 200	37 300
Sulphur and pyrites						
Sulphur	tonnes	3 366	4 861	3 981	2 726	2 367
Talc	tonnes	18 537	24 143	22 388	11 746	14 043
Tantalum and niobium						
Tantalum	tonnes	22	41	44	33	23
Tin						
Unwrought	tonnes	308	317	560	435	510
Unwrought alloys	tonnes	103	100	19	13	23
Titanium						
Titanium minerals	tonnes	358	714	807	429	517
Oxides	tonnes	18 456	20 486	19 813	14 788	23 016
Tungsten						
Metal	tonnes	193	277	206	151	147
Carbide	tonnes	46	110	106	79	93
Zinc						
Unwrought	tonnes	12 830	15 757	13 299	11 135	10 471
Unwrought alloys	tonnes	4 018	4 522	3 967	4 601	6 084
Zirconium						
Concentrates	tonnes	5 620	5 475	4 048	2 386	2 574

## Romania

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	23 199 337	22 085 231	25 319 433	21 068 344	50 829 386
Crushed rock	tonnes	4 835 584	3 774 309	6 189 078	5 593 429	36 888 195
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	44 000	414 000	484 000	414 000	391 000
Primary aluminium	tonnes	228 630	241 000	261 000	249 000	250 000
Bentonite	tonnes	13 756	21 637	19 864	19 241	24 127
Cement						
Cement, clinker	tonnes	—	—	33 363	84 853	50 617
Cement, finished	tonnes	7 897 656	6 867 596	7 646 612	7 727 046	7 120 934
Coal						
Anthracite and bituminous	tonnes	—	—	2 121 574	1 876 062	* 2 000 000
Lignite	tonnes	28 460 152	28 774 244	33 779 130	31 529 377	22 902 291
Brown coal	tonnes	63 458	62 448	46 071	17 700	—
Copper, mine	tonnes (metal content)	3 129	5 127	6 355	5 902	6 700
Copper, refined	tonnes	4 600	—	—	—	—
Feldspar	tonnes	14 317	6 049	3 814	4 112	7 060
Gold	kilograms	* 500	* 500	* 500	* 500	* 500
Graphite	tonnes	24 352	6 633	—	—	—
Gypsum	tonnes	720 713	639 010	834 009	765 251	736 099
Pig iron	tonnes	1 576 679	1 723 418	1 595 000	1 580 000	* 1 300 000
Crude steel	tonnes	2 772 679	3 720 775	3 835 000	3 780 000	2 985 000
Ferro-alloys						
Ferro-chrome	tonnes	15 377	14 353	—	—	—
Ferro-silico-manganese	tonnes	—	20 605	* 30 000	* 30 000	* 30 000
Kaolin	tonnes	651	326	—	—	32 722
Lead, mine	tonnes (metal content)	* 3 000	* 7 700	* —	* 5 300	* 400
Lead, refined	tonnes	8 687	11 263	6 854	13 000	14 000
Manganese ore	tonnes	20 304	13 120	3 180	8 993	21 300
Crude petroleum	tonnes	4 388 940	4 172 411	4 081 979	3 992 011	3 994 122
Natural gas	million m <sup>3</sup>	11 273	11 138	11 164	11 095	11 135
Salt	tonnes	2 072 744	2 388 357	2 248 940	1 888 516	2 113 752
Silver	kilograms (metal)	* 18 000	* 18 000	* 18 000	* 18 000	18 000
Talc	tonnes	570	296	131	13	—
Uranium, mine	tonnes (metal content)	* 75	* 77	* 77	* 90	* 77
Zinc, mine	tonnes (metal content)	* 3 000	* 7 700	* 8 800	* 8 400	* 2 000
Slab zinc	tonnes	1 000	—	—	—	—

### Note

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

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	160 241	360 161	255 970	438 328	889 084
Aluminium and bauxite						
Bauxite	tonnes	161	1 513	2 318	5 274	—
Alumina	tonnes	99	25 559	38 406	29 070	30 444
Unwrought	tonnes	50 496	10 312	14 004	6 074	6 534
Unwrought alloys	tonnes	5 898	51 556	70 697	83 687	90 163
Scrap	tonnes	20 775	17 733	12 801	14 200	12 046
Barytes						
Barium minerals	tonnes	1 812	258	2 009	1 326	6 802
Cement						
Cement clinkers	tonnes	182	265	24 810	84 874	7 092
Portland cement	tonnes	17 869	20 039	278 795	333 946	156 625
Other cement	tonnes	155	214	16 310	16 668	10 984
Coal						
Hard coal	tonnes	(a) 19 771	(a) 73 002	35 712	19 701	(a) 5 599

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Ores and concentrates	tonnes	6 711	31 582	39 704	41 879	44 995
Matte and cement	tonnes	4 502	956	186	379	—
Unwrought	tonnes	601	797	308	1 603	380
Scrap	tonnes	42 148	49 248	54 536	51 844	44 056
Feldspar	tonnes	8 375	1	283	260	301
Gypsum						
Crude and calcined	tonnes	17 966	17 672	15 576	15 693	13 360
Iron ore						
Burnt pyrites	tonnes	12 694	1 359	1 690	2 887	10 757
Iron ore	tonnes	172 372	1 718	2 728	53 998	317 571
Iron, steel and ferro-alloys						
Sponge and powder	tonnes	18 807	24 454	29 320	25 038	24 992
Ferro-chrome	tonnes	3 543	14 234	10 996	8 577	1 715
Ferro-manganese	tonnes	1 801	45	26	195	92
Ferro-silico-manganese	tonnes	8 120	19 087	34 387	4 171	14 170
Ferro-niobium	tonnes	72	53	66	136	217
Ferro-silicon	tonnes	727	24	0	—	45
Other ferro-alloys	tonnes	130	223	101	1 716	755
Ingots, blooms, billets	tonnes	51 644	196 302	267 543	199 986	156 285
Scrap	tonnes	2 565 443	2 519 237	2 348 565	1 908 069	1 947 543
Lead						
Ores and concentrates	tonnes	15 759	9 096	5 952	11 051	1 631
Unwrought	tonnes	9 049	10 573	18 722	18 859	21 331
Scrap	tonnes	2 526	5 659	6 846	5 419	3 884
Magnesite and magnesia						
Magnesia	tonnes	381	460	212	412	309
Manganese						
Ores and concentrates	tonnes	...	...	...	9 085	6 623
Molybdenum						
Ores and concentrates	tonnes	...	...	...	652	525
Nickel						
Scrap	tonnes	1 089	816	561	66	131
Crude petroleum	tonnes	...	78 256	76 061	48 688	60 128
Potash						
Chloride	tonnes	2 562	5 218	303	390	99
Salt	tonnes	372 501	790 530	712 657	635 801	808 606
Sulphur and pyrites						
Pyrites	tonnes	6 315	8	5	—	—
Sulphur	tonnes	49 052	55 961	58 437	54 016	63 651
Tin						
Unwrought (b)	tonnes	66	68	128	67	109
Titanium						
Metal	tonnes	541	960	550	375	615
Oxides	tonnes	560	310	498	536	433
Tungsten						
Metal	tonnes	4	9	23	43	5 373
Zinc						
Ores and concentrates	tonnes	24 528	15 375	17 592	16 745	4 080
Unwrought (b)	tonnes	8 004	657	776	454	544
Scrap	tonnes	1 615	711	597	672	592

## Notes

- (a) Including anthracite  
 (b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	205 133	248 484	370 249	512 538	331 523
Aluminium and bauxite						
Bauxite	tonnes	104 404	1 277 587	1 271 274	1 297 303	1 064 823
Alumina	tonnes	353 846	1 928	15 037	2 554	22 819
Alumina hydrate	tonnes	7 996	10 412	5 768	2 841	537
Unwrought	tonnes	1 023	2 163	3 024	2 751	10 877
Unwrought alloys	tonnes	16 360	33 711	24 287	26 311	31 608
Scrap	tonnes	3 838	83 381	62 768	66 878	92 702
Antimony						
Metal	tonnes	36	61	43	9	55
Oxide	tonnes	87	88	120	163	138
Barytes						
Barium minerals	tonnes	8 351	8 501	15 598	16 874	23 859
Bentonite	tonnes	3 859	4 825	6 341	8 463	8 787
Cement						
Cement clinkers	tonnes	23 613	75 812	144 547	144 116	216 322
Portland cement	tonnes	296 687	307 977	239 373	240 469	208 701
Other cement	tonnes	15 779	22 004	21 297	18 626	14 882
Chromium						
Ores and concentrates	tonnes	705	7 054	1 637	2 288	1 514
Metal	tonnes	39	16	105	50	151
Coal						
Anthracite	tonnes	56 296	72 776	148 260	137 388	143 627
Other coal	tonnes	937 077	936 727	840 669	1 142 615	785 892
Lignite	tonnes	62 469	718	1 706	3 492	2 611
Briquettes	tonnes	102 372	96 428	197	197	511
Cobalt						
Oxides	tonnes	37	41	79	27	32
Copper						
Unwrought	tonnes	10 926	2 282	2 915	1 899	1 997
Scrap	tonnes	437	2 443	3 218	2 355	6 279
Diatomite	tonnes	2 477	2 269	2 459	1 827	2 583
Feldspar	tonnes	37 639	36 924	45 421	47 688	39 447
Fluorspar	tonnes	1 481	2 911	3 817	3 178	1 475
Graphite	tonnes	144	204	742	601	182
Gypsum						
Crude	tonnes	45 891	40 703	63 658	92 883	54 106
Calcined	tonnes	62 134	47 912	50 866	43 118	36 964
Iodine	kilograms	330	300	500	400	2 500
Iron ore						
Burnt pyrites	tonnes	11 572	29 544	35 551	30 178	17 263
Iron ore	tonnes	1 597 033	2 848 921	2 186 674	2 023 063	2 545 657
Iron, steel and ferro-alloys						
Pig iron	tonnes	61 027	111 702	48 365	58 954	35 635
Sponge and powder	tonnes	1 518	2 740	22 355	1 777	2 551
Ferro-chrome	tonnes	984	1 500	2 856	2 564	1 911
Ferro-silico-magnesium	tonnes	36	49	25	104	92
Ferro-manganese	tonnes	9 063	15 530	18 136	21 039	19 489
Ferro-silico-manganese	tonnes	11 461	19 151	24 215	19 093	10 013
Ferro-molybdenum	tonnes	177	274	315	420	365
Ferro-niobium	tonnes	61	55	132	177	172
Ferro-phosphorus	tonnes	188	217	154	119	135
Ferro-silicon	tonnes	4 998	9 859	9 602	10 392	8 149
Ferro-titanium and ferro-silico-titanium	tonnes	40	183	412	284	250
Ferro-vanadium	tonnes	57	153	166	166	211
Other ferro-alloys	tonnes	949	1 255	1 495	635	677
Silicon metal	tonnes	1 104	3 098	3 205	2 730	2 097
Ingots, blooms, billets	tonnes	109 046	458 742	771 167	328 843	224 868
Scrap	tonnes	4 204	5 501	8 416	49 468	17 655
Kaolin	tonnes	40 326	51 754	56 871	60 170	62 370
Lead						
Ores and concentrates	tonnes	5 889	7 052	9 420	463	831
Unwrought	tonnes	9 245	11 834	16 789	12 777	14 707
Magnesite and magnesia						
Magnesia	tonnes	7 427	10 389	13 391	11 402	8 838

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Manganese						
Ores and concentrates	tonnes	16	87 880	66 285	244	13
Metal	tonnes	527	220	588	415	517
Mercury	kilograms	415	18 149	19 500	4 200	2 600
Mica	tonnes	441	785	1 077	810	1 039
Molybdenum						
Ores and concentrates	tonnes	1	1	41	1 516	1
Nickel						
Unwrought (b)	tonnes	288	456	224	190	216
Crude petroleum	tonnes	6 893 956	5 821 640	5 451 662	5 127 631	5 299 043
Natural gas	tonnes	1 451 767	* 2 000 000	3 283 138	(a)* 200 000	(a)* 260 000
Phosphate rock	tonnes	103 500	233 377	254 061	229 060	63 150
Potash						
Sulphate	tonnes	19 592	13 726	6 936	17 559	32 233
Chloride	tonnes	5 119	56 922	46 842	21 354	46 300
Potassic fertilisers	tonnes	25 085	71 073	54 460	40 192	45 822
Other potassic fertilisers	tonnes	374	425	683	1 279	1 161
Rare earths						
Rare earth compounds	tonnes	5	5	1	2	1
Salt	tonnes	82 569	81 441	114 500	94 288	107 859
Silver						
Metal (a)	kilograms	* 8 800	* 27 500	* 8 100	* 15 900	* 14 600
Sulphur and pyrites						
Sulphur	tonnes	1 884	2 561	2 965	6 246	4 311
Sulphur, sublimed and precipitated	tonnes	1 254	2 062	2 074	1 807	1 469
Talc	tonnes	1 105	2 099	2 248	2 593	2 284
Tantalum and niobium						
Tantalum	tonnes	* 0	0	* 0	0	58
Tin						
Unwrought (b)	tonnes	114	85	125	91	120
Titanium						
Titanium minerals	tonnes	1 513	2 095	5 393	1 354	1 721
Metal	tonnes	707	771	541	776	801
Oxides	tonnes	7 151	8 733	10 571	7 511	8 996
Tungsten						
Metal	tonnes	22	79	50	63	45
Zinc						
Unwrought (b)	tonnes	10 523	16 664	17 006	16 883	18 691
Scrap	tonnes	—	246	439	1 628	1 101
Zirconium						
Metal	tonnes	301	35	41	1	46

## Notes

- (a) BGS estimate, based on known exports from certain countries  
 (b) Including alloys

## Serbia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Coal						
Bituminous	tonnes	69 000	108 000	134 000	141 000	155 000
Lignite (a)	tonnes	38 070 579	37 562 840	40 467 132	37 707 017	39 752 741
Brown coal	tonnes	209 660	193 492	349 861	316 507	340 892
Copper, mine	tonnes (metal content)	19 400	19 000	25 800	32 200	32 600
Copper, refined	tonnes	27 400	22 200	28 400	34 700	35 800
Copper, smelter	tonnes	27 000	20 000	28 200	36 800	41 300
Feldspar	tonnes	149	253	23 586	19 927	* 20 000
Gold (b)	kilograms	818	856	1 534	1 400	* 1 000
Pig iron	tonnes	964 607	1 158 628	1 197 693	318 651	366 277
Crude steel	tonnes	1 054 336	1 254 386	1 304 954	346 000	396 000
Kaolin	tonnes	163 616	76 197	90 472	69 487	* 70 000
Lead, mine	tonnes (metal content)	1 800	1 800	2 100	2 500	3 100
Crude petroleum	tonnes	663 005	865 499	1 020 490	1 124 794	1 163 988
Natural gas	million m <sup>3</sup>	279	423	616	672	660
Platinum metals						
Platinum	kilograms (metal content)	12	—	6	3	2
Palladium	kilograms (metal content)	38	22	20	22	25
Salt	tonnes	28 782	30 816	23 334	16 506	13 704
Silver (c)	kilograms (metal content)	4 424	4 384	7 380	8 388	8 400
Zinc, mine	tonnes (metal content)	2 700	2 600	3 100	6 000	5 800

#### Notes

(1) Serbia is also believed to produce sulphur

(a) Excluding production in Kosovo

(b) Metal production

(c) Smelter and/or refinery production

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	334 517	127 309	497 637	485 266	211 015
Aluminium and bauxite						
Unwrought	tonnes	7 387	17 602	15 353	10 130	10 713
Scrap	tonnes	10 972	13 574	22 248	20 752	16 939
Asbestos						
Unmanufactured	tonnes	62	1	306	...	...
Bentonite	tonnes	5 107	4 823	11 903	2 972	3 367
Cement						
Cement clinkers	tonnes	66 309	...	...	...	0
Portland cement	tonnes	76 539	156 477	115 432	138 914	81 091
Other cement	tonnes	125	33	28	29	65
Coal						
Anthracite	tonnes	3 784	4 434	2 507	160	3 009
Other coal	tonnes	14 530	3 801	1 116	441	1 112
Lignite	tonnes	120 553	112 009	32 337	28 266	51 729
Briquettes	tonnes	630	8 724	573	53	62 273
Copper						
Ores and concentrates	tonnes	1 452	1 666	2 234	4 276	4 158
Matte and cement	tonnes	1 928	2 501	1 649	358	714
Unwrought	tonnes	3 699	10 280	8 840	15 242	19 712
Scrap	tonnes	7 920	12 286	9 991	10 496	7 705
Unwrought alloys	tonnes	654	641	704	370	1 308
Gold						
Metal	kilograms	3 278	93	78	141	579
Iron ore						
Burnt pyrites	tonnes	...	0	34 828	1 547 491	1 288 928

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	71 778	70 090	46 629	374 860	910
Ingots, blooms, billets	tonnes	46 587	20 547	111 080	187 578	266 510
Scrap	tonnes	328 763	416 713	357 778	372 846	330 259
Kaolin	tonnes	4 239	1 868	1 282	1 069	4 649
Lead						
Ores and concentrates	tonnes	9 133	10 265	13 981	13 479	14 917
Unwrought	tonnes	6 695	5 661	7 848	5 777	1 847
Magnesite and magnesia						
Magnesite	tonnes	242	1 851	1 524	1 852	2 551
Magnesia	tonnes	319	328	5 831	8 704	3 283
Potash						
Potassic fertilisers	tonnes	163	690	3 672	3 546	2 288
Salt	tonnes	3 895	16 290	13 362	5 073	9 987
Silver						
Metal	kilograms	3 670	4 355	4 222	3 044	7 084
Sulphur and pyrites						
Sulphur	tonnes	1 451	2 335	3 571	2 760	12 556
Zinc						
Ores and concentrates	tonnes	10 699	14 921	23 247	22 559	25 416
Scrap	tonnes	330	120	67	907	834

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	12 664	15 910	8 759	9 907	14 742
Aluminium and bauxite						
Bauxite	tonnes	4 773	10 972	7 800	5 979	3 807
Alumina	tonnes	2 668	3 682	2 673	3 092	3 190
Unwrought	tonnes	36 626	54 512	51 717	51 578	54 127
Unwrought alloys	tonnes	12 913	13 600	15 834	14 446	17 668
Scrap	tonnes	4 411	8 404	6 870	7 209	10 334
Barytes						
Barium minerals	tonnes	0	421	1 494	3 468	2 491
Bentonite	tonnes	2 274	1 683	1 804	5 294	3 906
Cement						
Cement clinkers	tonnes	...	1 321	5 309	51 360	27 469
Portland cement	tonnes	41 744	52 582	92 665	194 728	198 866
Other cement	tonnes	1 003	728	784	664	1 979
Chromium						
Ores and concentrates	tonnes	436	641	725	211	140
Coal						
Anthracite	tonnes	10 752	18 056	16 456	13 988	21 017
Other coal	tonnes	89 731	156 846	183 713	178 984	83 968
Lignite	tonnes	276 033	307 250	615 026	716 035	321 145
Briquettes	tonnes	2 181	11 130	8 975	18 239	2 085
Copper						
Ores and concentrates	tonnes	33 808	...	3 063	0	...
Unwrought	tonnes	41 399	37 129	26 995	14 679	8 262
Scrap	tonnes	208	342	769	809	2 259
Diamond						
Dust	Carats	478 650	550 000	885 000	425 000	580 000
Feldspar	tonnes	8 424	10 139	11 864	11 302	9 794
Gypsum						
Crude	tonnes	13 273	14 601	22 546	32 566	25 738
Calcined	tonnes	11 684	9 276	9 962	9 096	7 441
Iodine	kilograms	4 030	8 137	10 876	2 790	748
Iron ore	tonnes	1 397 755	1 860 593	(a) 1 624 795	(a) 465 170	(a) 486 247

## Serbia

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Iron, steel and ferro-alloys						
Pig iron	tonnes	523	2 739	1 281	1 073	1 017
Sponge and powder	tonnes	122	217	187	89	1 524
Ferro-chrome	tonnes	1 104	1 272	1 884	1 327	1 146
Ferro-manganese	tonnes	8 571	9 524	9 270	2 299	4 893
Ferro-silico-manganese	tonnes	6	440	2 431	3 727	3 970
Ferro-silicon	tonnes	2 089	2 418	3 285	2 631	2 355
Other ferro-alloys	tonnes	275	324	357	219	219
Ingots, blooms, billets	tonnes	205 528	283 255	34 913	2 021	1 325
Scrap	tonnes	15 178	12 403	35 192	90 554	169 512
Kaolin	tonnes	32 091	50 421	38 810	25 922	22 219
Lead						
Ores and concentrates	tonnes	...	5 978	8 127	2 642	1 475
Unwrought	tonnes	4 493	6 018	5 302	9 163	3 862
Scrap	tonnes	0	1 228	2 643	2 087	45
Magnesite and magnesia						
Magnesia	tonnes	585	570	547	623	899
Manganese						
Ores and concentrates	tonnes	16 833	17 003	14 366	4 229	5 829
Metal	tonnes	180	324	317	254	184
Nickel						
Unwrought	tonnes	116	143	107	118	147
Crude petroleum	tonnes	2 280 658	1 869 881	1 497 415	1 091 762	1 596 462
Natural gas	tonnes	1 046 465	1 346 955	1 362 390	1 289 674	1 201 886
Phosphate rock	tonnes	3 974	20 394	60 024	85 674	97 293
Potash						
Chloride	tonnes	10 710	71 906	53 113	69 712	57 629
Salt	tonnes	144 711	204 395	274 636	246 280	197 570
Sulphur and pyrites						
Sulphur	tonnes	621	674	721	635	796
Talc	tonnes	1 236	1 616	1 270	1 432	1 957
Tin						
Unwrought	tonnes	49	60	72	148	224
Titanium						
Oxides	tonnes	3 892	3 888	4 498	3 960	4 336
Zinc						
Unwrought	tonnes	4 178	4 846	5 275	5 344	6 418

## Note

(a) Including burnt pyrites

## Slovakia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	6 919 826	6 931 873	6 020 641	3 794 873	3 953 525
Crushed rock	tonnes	15 233 400	14 909 400	13 834 800	10 157 400	10 009 000
Primary aluminium	tonnes	149 604	163 000	162 840	160 662	163 000
Barytes	tonnes	30 000	17 000	13 000	21 000	14 000
Bentonite	tonnes	109 000	153 000	213 000	177 000	184 000
Cement						
Cement, clinker	tonnes	1 822 820	1 607 025	1 823 306	1 490 768	* 1 500 000
Cement, finished	tonnes	3 011 460	2 887 749	3 219 557	2 915 166	3 121 000
Coal						
Lignite	tonnes	155 000	176 000	124 000	136 000	179 000
Brown coal	tonnes	2 221 000	2 026 000	1 989 000	1 964 000	2 009 000
Copper, mine	tonnes (metal content)	14	22	28	31	...
Feldspar	tonnes	13 000	—	—	—	...
Gold	kilograms	346	534	398	546	533
Gypsum (a)	tonnes	131 000	87 000	88 000	88 000	60 000
Pig iron	tonnes	3 019 000	3 649 000	3 346 000	3 519 755	3 616 850
Crude steel	tonnes	3 747 000	4 583 000	4 236 000	4 403 447	4 510 535
Ferro-alloys						
Ferro-silico-manganese	tonnes	32 000	34 960	25 036	50 089	* 50 000
Ferro-silicon	tonnes	4 600	26 419	32 304	32 726	41 664
Other ferro-alloys	tonnes	22 250	38 860	18 575	20 059	* 20 000
Kaolin	tonnes	10 000	—	4 000	3 000	6 000
Lead, mine	tonnes (metal content)	63	94	114	166	...
Magnesite	tonnes	477 600	650 100	751 700	618 400	584 000
Perlite	tonnes	25 000	23 000	23 000	24 000	16 000
Crude petroleum	tonnes	19 000	16 000	18 000	14 000	13 000
Natural gas	million m <sup>3</sup>	114	106	106	93	91
Salt	tonnes	41 000	—	—	—	—
Silver	kilograms (metal content)	201	320	330	441	508
Talc	tonnes	200	7 000	7 000	2 000	10 000
Zinc, mine	tonnes (metal content)	54	82	103	134	...

#### Notes

(1) Slovakia is also believed to produce sulphur

(a) Including anhydrite

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	* 768 000	* 598 000	* 615 008	* 525 000	* 534 000
Aluminium and bauxite						
Unwrought	tonnes	77 013	44 989	40 011	576	5 715
Unwrought alloys	tonnes	110 484	111 769	118 485	80 141	164 465
Scrap	tonnes	9 441	10 260	14 044	18 207	31 339
Barytes						
Barium minerals	tonnes	6 309	641	230	197	10 831
Bentonite	tonnes	65 429	32 981	85 760	98 257	144 198
Cement						
Cement clinkers	tonnes	127 016	69 366	44 607	—	0
Portland cement	tonnes	1 344 258	1 396 241	1 795 235	1 407 502	1 876 911
Other cement	tonnes	217 328	21 660	10	28	77
Chromium						
Metal	tonnes	424	777	83	2	2
Coal						
Anthracite	tonnes	2 927	725	6 198	9 373	7 955
Other coal	tonnes	105 417	5 128	2 552	10	9 463
Lignite	tonnes	7 477	55	908	53	18 063
Briquettes	tonnes	609	108	65	6 486	6 953

Slovakia

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Scrap	tonnes	15 114	15 550	19 522	23 250	25 452
Unwrought, unrefined	tonnes	26 492	31 685	38 566	40 404	20 077
Unwrought, refined	tonnes	3 268	2 597	4 435	2 751	13 189
Unwrought alloys	tonnes	1 287	1 346	704	619	1 343
Diamond						
Gem, cut	Carats	...	7 000 000	3 000 000	500 000	75 000
Dust	Carats	100	6 250 000	2 934 017	...	...
Feldspar	tonnes	...	...	58	1	1 532
Gold						
Metal	kilograms	3 196	2 926	20 000	3 300	267 600
Waste and scrap	kilograms	1 200	7 300	6 800	4 800	6 500
Iron ore	tonnes	5 923	62 568	22 481	118 695	121 558
Iron, steel and ferro-alloys						
Pig iron	tonnes	29 779	70 588	26 976	29 527	42 978
Ferro-chrome	tonnes	4 029	10 029	11 189	12 893	10 802
Ferro-manganese	tonnes	19 204	14 032	10 229	4 308	13 223
Ferro-silico-manganese	tonnes	37 792	35 764	28 660	44 202	41 345
Ferro-molybdenum	tonnes	119	78	2 416	172	98
Ferro-silicon	tonnes	15 823	19 656	31 004	26 389	39 296
Other ferro-alloys	tonnes	1 129	3 390	3 226	4 940	6 596
Ingots, blooms, billets	tonnes	255 917	631 135	221 697	413 032	128 932
Scrap	tonnes	318 290	556 952	651 135	430 539	360 818
Kaolin	tonnes	1 425	4 493	552	42	14 067
Lead						
Unwrought	tonnes	247	250	539	373	1 577
Scrap	tonnes	287	662	737	759	1 258
Magnesite and magnesia						
Magnesite (a)	tonnes	* 7 400	* 8 400	* 4 900	* 3 800	* 2 600
Magnesia	tonnes	261 876	336 786	340 612	272 677	266 320
Nickel						
Scrap	tonnes	140	295	1 368	217	149
Unwrought	tonnes	201	68	84	—	1 095
Natural gas	tonnes	334 205	1 153 269	1 439 467	1 366 942	1 052 157
Crude petroleum	tonnes	14 932	13 048	15 359	11 515	10 042
Platinum metals						
Platinum and platinum metals	kilograms	1 700	5 800	84 100	29 400	1 800
Waste and scrap	kilograms	423	111	764	97	152
Potash						
Potassic fertilisers	tonnes	74	51	580	183	859
Salt	tonnes	4 606	45 056	27 935	20 917	20 151
Silver						
Metal	kilograms	2 700	39 100	15 100	31 500	28 800
Sulphur and pyrites						
Sulphur	tonnes	147	448	1 998	2 456	2 075
Sulphur, sublimed and precipitated	tonnes	72 613	72 910	82 785	74 817	86 343
Talc	tonnes	45	47	38	25	939
Tin						
Unwrought	tonnes	(b) 9	(b) 8	11	688	1 968
Titanium						
Metal	tonnes	3	49	24	199	91
Tungsten						
Metal	tonnes	4	4	9	43	296
Zinc						
Unwrought	tonnes	12 871	7 903	2 836	3 421	2 385
Unwrought alloys	tonnes	11 365	13 075	7 001	10 336	10 472

Notes

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

(b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	692 609	666 380	527 259	419 992	385 376
Aluminium and bauxite						
Bauxite	tonnes	5 443	4 233	6 136	6 087	9 087
Alumina	tonnes	288 753	270 786	232 187	183 051	320 673
Unwrought (a)	tonnes	27 853	42 273	44 357	39 235	49 057
Scrap	tonnes	1 760	2 098	3 181	3 667	6 174
Asbestos						
Unmanufactured	tonnes	...	0	64	76	96
Bentonite	tonnes	5 890	6 416	26 935	25 923	6 917
Cement						
Cement clinkers	tonnes	13 076	6 380	9 706	5 840	29 373
Portland cement	tonnes	284 457	256 358	281 910	266 308	300 277
Other cement	tonnes	56 060	34 733	102 134	71 001	60 034
Chromium						
Ores and concentrates	tonnes	2 533	4 546	5 542	3 562	5 459
Coal						
Anthracite	tonnes	264 286	293 054	713 105	635 877	499 374
Other coal	tonnes	3 828 520	3 078 570	3 110 255	32 401 325	3 084 364
Lignite	tonnes	693 786	563 021	534 118	624 731	436 339
Briquettes	tonnes	7 877	12 799	14 836	16 545	25 808
Cobalt						
Oxides	tonnes	5 327	137	97	147	144
Copper						
Ores and concentrates	tonnes	2 113	462	1	—	...
Cement copper	tonnes	...	799	...	...	...
Matte and cement	tonnes	3 300	799	10	—	...
Unwrought	tonnes	4 685	6 153	7 531	8 665	10 099
Scrap	tonnes	29 141	40 347	30 687	37 623	28 454
Diamond						
Gem, cut	Carats	£1 993 000	£2 530 000	£2 720 000	£6 610 000	£2 749 557
Industrial	Carats	* 2 600	55 000	1 037 208	* 10 000	40 000
Dust	Carats	59 781	18 560 000	129 250	* 600 000	160 000
Diatomite	tonnes	901	784	415	461	498
Feldspar	tonnes	16 352	5 886	5 590	5 518	5 809
Fluorspar	tonnes	644	954	762	896	820
Gold						
Metal	kilograms	208 400	220 470	189 400	523 800	120 600
Graphite	tonnes	962	1 899	1 688	1 847	1 741
Gypsum						
Crude	tonnes	53 104	74 512	80 966	70 308	99 454
Calcined	tonnes	52 703	16 732	17 194	17 335	15 319
Iodine	kilograms	235	325	500	300	500
Iron ore	tonnes	4 499 385	5 796 813	5 103 229	5 404 215	5 647 197
Iron, steel and ferro-alloys						
Pig iron	tonnes	19 468	33 258	43 874	38 466	36 404
Sponge and powder	tonnes	4 090	13 227	7 294	6 124	6 188
Ferro-chrome	tonnes	2 635	6 829	6 684	8 014	7 056
Ferro-manganese	tonnes	16 912	13 202	16 391	17 286	19 133
Ferro-silico-manganese	tonnes	2 720	1 776	4 904	3 902	22 205
Ferro-molybdenum	tonnes	171	140	374	252	213
Ferro-niobium	tonnes	154	315	426	549	540
Ferro-phosphorus	tonnes	590	282	629	463	307
Ferro-silicon	tonnes	14 970	15 250	12 660	9 171	10 200
Ferro-titanium and ferro-silico-titanium	tonnes	315	535	435	281	224
Ferro-vanadium	tonnes	7	62	123	144	127
Other ferro-alloys	tonnes	664	1 627	981	201	267
Silicon metal	tonnes	4 460	6 309	7 196	6 329	6 735
Ingots, blooms, billets	tonnes	54 781	10 020	24 162	7 314	12 664
Scrap	tonnes	164 985	224 868	146 065	342 657	383 012
Kaolin	tonnes	58 509	62 748	70 451	64 345	70 545
Magnesite and magnesia						
Magnesite	tonnes	2 906	3 916	4 960	(b)* 2 000	(b)* 3 000
Magnesia	tonnes	12 731	28 639	27 100	23 363	20 405
Manganese						
Ores and concentrates	tonnes	74 712	146 434	130 519	144 936	127 764
Metal	tonnes	395	442	659	228	207

Slovakia

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Mercury	kilograms	4 500	4 700	27 700	10 000	3 000
Molybdenum						
Metal	tonnes	106	1	2	2	31
Nickel						
Scrap	tonnes	—	52	312	35	1
Unwrought (a)	tonnes	120	112	617	103	2 659
Crude petroleum	tonnes	5 787 725	5 555 541	5 988 119	5 345 149	5 821 927
Natural gas	tonnes	4 820 301	5 765 254	5 747 975	5 577 333	5 378 551
Phosphate rock	tonnes	258	1 688	1 662	1 299	(b)* 1 000
Platinum metals						
Platinum	kilograms	1 533 869	1 625 761	2 662 700	2 339 500	1 544 400
Palladium	kilograms	1 191	2 702	4 400	4 800	500
Potash						
Chloride	tonnes	4 597	22 561	24 631	23 613	18 670
Other potassic fertilisers	tonnes	689	2 913	2 260	3 204	1 032
Rare earths						
Rare earth compounds	tonnes	8	8	10	7	10
Salt	tonnes	168 211	266 329	244 787	226 571	408 235
Sillimanite minerals	tonnes	1 812	2 456	2 917	844	2 002
Silver						
Metal	kilograms	9 000	55 300	* 47 000	268 700	97 800
Sulphur and pyrites						
Sulphur	tonnes	2 462	3 855	3 173	3 115	3 571
Sulphur, sublimed and precipitated	tonnes	1 046	864	1 510	735	576
Talc	tonnes	1 030	719	380	470	1 098
Tin						
Unwrought (a)	tonnes	2 059	2 087	2 120	2 091	4 119
Titanium						
Metal	tonnes	130	956	2 271	643	778
Oxides	tonnes	2 949	2 109	2 409	2 163	2 776
Tungsten						
Metal	tonnes	43	366	5 398	5 331	2 207
Zinc						
Unwrought (a)	tonnes	28 863	37 266	34 536	27 313	36 191

Notes

(a) Including alloys

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

## Slovenia

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	3 001 291	2 422 771	1 899 770	1 707 455	2 143 013
Crushed rock	tonnes	13 609 728	12 072 532	9 626 791	7 557 431	7 067 895
Primary aluminium	tonnes	35 148	40 177	75 300	83 300	* 83 000
Bentonite	tonnes	104	135	168	98	143
Cement						
Cement, finished	tonnes	* 1 000 000	* 1 000 000	* 1 000 000	745 000	614 000
Coal						
Lignite	tonnes	3 921 746	4 010 930	4 066 278	3 967 064	3 721 188
Brown coal	tonnes	510 769	419 466	435 800	314 262	50 744
Crude steel	tonnes	430 000	606 000	648 000	632 000	618 000
Lead, refined	tonnes	14 000	14 000	15 000	12 000	12 000
Crude petroleum	tonnes	138	233	263	279	298
Natural gas	million m <sup>3</sup>	3	7	2	1	3
Salt	tonnes	2 924	59	4 291	5 684	3 360

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	451 012	488 256	426 686	406 872	562 005
Aluminium and bauxite						
Bauxite	tonnes	2 537	6 665	5 738	1 576	1 713
Alumina	tonnes	242 215	239 729	161 747	203 376	196 342
Unwrought alloys	tonnes	61 800	78 619	95 251	94 531	104 253
Scrap	tonnes	23 382	33 972	39 961	52 712	50 473
Cement						
Cement clinkers	tonnes	—	42 475	140 361	175 807	256 109
Portland cement	tonnes	96 736	168 056	200 615	172 090	153 772
Other cement	tonnes	97 258	4 731	988	308	2 487
Chromium						
Metal	tonnes	14	123	174	1	1
Coal						
Anthracite	tonnes	426	759	5 932	624	6 932
Other coal	tonnes	25	2	200	—	6 326
Lignite	tonnes	4 615	...	—	19	—
Cobalt						
Metal	tonnes	50	65	33	71	96
Copper						
Unwrought	tonnes	1 376	7 042	5 847	561	2 135
Scrap	tonnes	17 991	29 276	22 126	33 239	25 751
Gold						
Waste and scrap	kilograms	200	5 450	12 200	14 800	1 100
Graphite	tonnes	15	14	661	252	79
Gypsum						
Crude and calcined	tonnes	6 575	205	220	303	249
Iron, steel and ferro-alloys						
Pig iron	tonnes	4 412	10 507	21 823	19 227	10 834
Ferro-chrome	tonnes	3 648	5 320	4 757	12 373	14 421
Ferro-manganese	tonnes	1 056	1 769	1 317	3 076	5 676
Ferro-silico-manganese	tonnes	1 938	5 959	4 268	3 281	1 200
Ferro-silicon	tonnes	6 628	7 280	13 397	9 241	5 150
Ferro-titanium and ferro-silico-titanium	tonnes	50	124	123	53	46
Other ferro-alloys	tonnes	3 297	4 214	4 554	5 193	5 672
Silicon metal	tonnes	3 049	5 568	4 753	764	1 303
Ingots, blooms, billets	tonnes	12 296	17 320	39 269	33 034	36 092
Scrap	tonnes	284 958	343 716	409 401	417 264	395 560
Kaolin	tonnes	327	359	277	197	504
Lead						
Unwrought	tonnes	6 891	8 090	6 008	5 391	5 995
						115

Slovenia

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Lithium						
Carbonate	tonnes	128	88	91	98	67
Magnesite and magnesia						
Magnesite	tonnes	59	4 798	78	22	20
Magnesia	tonnes	344	334	259	9 577	125 735
Nickel						
Unwrought (a)	tonnes	117	1 544	520	692	527
Phosphate rock	tonnes	56 973	153 182	164 440	172 405	153 665
Platinum metals						
Platinum and platinum metals	kilograms	430	77	5	7	151
Rare earths						
Metals	tonnes	...	...	7	2	...
Salt	tonnes	15 671	21 711	33 998	30 498	17 001
Silver						
Metal	kilograms	1 600	3 100	3 600	3 800	14 400
Sulphur and pyrites						
Sulphur	tonnes	3 764	1 016	145	190	79
Titanium						
Metal	tonnes	23	171	346	356	347
Oxides	tonnes	57 866	61 637	53 015	47 488	58 140
Zinc						
Unwrought (a)	tonnes	1 469	2 725	918	367	604
Scrap	tonnes	517	933	832	1 104	1 173

Note

(a) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Aluminium and bauxite	tonnes	1 165 083	771 814	486 627	461 601	531 904
Bauxite	tonnes	13 966	41 846	42 555	22 700	44 860
Alumina	tonnes	302 520	328 453	322 872	381 845	376 159
Alumina hydrate	tonnes	20 629	27 252	26 173	15 753	21 712
Unwrought	tonnes	62 162	87 848	65 523	66 209	74 611
Unwrought alloys	tonnes	34 530	65 950	71 318	66 410	84 970
Scrap	tonnes	37 677	51 159	52 860	60 468	69 046
Antimony						
Metal	tonnes	50	36	150	25	49
Oxide	tonnes	34	29	25	26	21
Arsenic						
Metallic arsenic	tonnes	3	* —	11	11	10
Barytes						
Barium minerals	tonnes	530	457	609	881	860
Bentonite	tonnes	4 421	4 191	4 790	5 905	8 555
Bismuth						
Metal	tonnes	24	49	63	57	75
Cement						
Cement clinkers	tonnes	60	129	95 704	168 235	2 549
Portland cement	tonnes	297 617	328 563	334 053	210 734	206 144
Other cement	tonnes	17 414	17 328	8 237	4 077	2 626
Chromium						
Ores and concentrates	tonnes	1 005	1 912	966	466	677
Metal	tonnes	143	104	97	101	98
Coal						
Anthracite	tonnes	3 997	7 898	15 300	8 745	15 621
Other coal	tonnes	29 146	18 975	15 329	14 920	13 345
Lignite	tonnes	507 013	544 523	515 659	599 679	496 183
Cobalt						
Metal	tonnes	149	141	110	92	206

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Unwrought	tonnes	2 826	8 369	7 062	1 287	1 892
Scrap	tonnes	11 452	22 407	12 350	10 222	8 120
Diamond						
Dust	Carats	723 391	1 656 306	1 423 460	990 000	1 280 000
Diatomite	tonnes	550	718	623	397	394
Feldspar	tonnes	8 899	14 954	13 168	6 012	5 963
Fluorspar	tonnes	1 064	1 754	1 463	1 481	1 586
Gold						
Metal	kilograms	400	1 100	1 700	1 100	800
Waste and scrap	kilograms	1 210	5 400	5 600	1 800	2 300
Graphite	tonnes	89	295	844	440	258
Gypsum						
Crude	tonnes	5 565	942	785	37	57
Calcined	tonnes	9 432	7 615	6 218	6 095	5 354
Iodine	kilograms	631	45	35	111	3 500
Iron, steel and ferro-alloys						
Pig iron	tonnes	24 031	29 120	25 327	30 517	29 660
Sponge and powder	tonnes	1 053	1 225	1 630	794	1 020
Ferro-chrome	tonnes	15 951	26 575	36 528	36 673	51 232
Ferro-silico-magnesium	tonnes	286	624	786	1 485	1 377
Ferro-manganese	tonnes	4 157	6 175	5 763	6 318	8 882
Ferro-silico-manganese	tonnes	3 467	8 810	7 697	7 477	5 608
Ferro-molybdenum	tonnes	410	717	885	1 028	1 060
Ferro-phosphorus	tonnes	522	846	968	1 115	710
Ferro-silicon	tonnes	11 335	13 114	15 739	15 371	12 419
Ferro-titanium and ferro-silico-titanium	tonnes	108	230	232	228	219
Ferro-tungsten and ferro-silico-tungsten	tonnes	14	99	136	65	60
Ferro-vanadium	tonnes	230	481	449	413	471
Other ferro-alloys	tonnes	1 421	1 795	1 687	1 714	1 433
Silicon metal	tonnes	4 929	7 874	8 318	5 862	5 810
Ingots, blooms, billets	tonnes	1 568	8 191	31 931	20 897	20 770
Scrap	tonnes	281 950	495 432	561 713	552 363	539 994
Kaolin	tonnes	20 776	27 287	28 779	22 614	23 877
Lead						
Unwrought	tonnes	13 036	16 025	17 594	17 294	21 844
Scrap	tonnes	1 985	3 812	3 611	3 741	4 117
Lithium						
Oxides	tonnes	139	95	125	190	298
Magnesite and magnesia	tonnes	4 346	7 279	64 675	109 365	128 518
Manganese						
Metal	tonnes	264	433	420	483	417
Molybdenum						
Ores and concentrates	tonnes	292	561	523	473	476
Nickel						
Unwrought (a)	tonnes	2 020	2 967	3 230	4 304	4 469
Natural gas	tonnes	748 930	828 674	736 641	662 178	719 982
Phosphate rock	tonnes	56 969	153 160	164 442	172 406	153 649
Potash						
Potassic fertilisers	tonnes	766	1 919	2 076	1 447	1 574
Rare earths						
Metals	tonnes	55	98	26	55	61
Rare earth compounds	tonnes	2	3	3	9	5
Salt	tonnes	239 191	317 999	235 663	142 926	284 695
Sillimanite minerals	tonnes	236	363	921	1 901	3 970
Silver						
Metal	kilograms	17 800	24 100	29 700	25 100	26 900
Sulphur and pyrites						
Pyrites	tonnes	353	645	836	921	959
Sulphur	tonnes	53 615	57 411	56 490	51 225	54 707
Talc	tonnes	13 756	10 793	4 489	4 413	4 618
Tin						
Unwrought (a)	tonnes	69	118	70	62	89

Slovenia

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Titanium						
Titanium minerals	tonnes	32 789	25 081	54 387	20 208	19 761
Metal	tonnes	233	400	964	739	844
Oxides	tonnes	2 889	2 917	2 884	2 625	2 954
Titanium slag	tonnes	66 818	...	39 644	57 097	54 482
Zinc						
Unwrought	tonnes	16 766	15 314	14 495	12 916	12 984
Unwrought alloys	tonnes	6 180	5 850	7 374	6 623	8 457

Notes

(a) Including alloys

## Spain

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	96 000 000	72 000 000	59 000 000	41 000 000	* 35 000 000
Crushed rock	tonnes	160 000 000	170 000 000	144 000 000	117 000 000	* 90 000 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	* 1 300 000	* 1 300 000	* 1 300 000	* 1 100 000	1 530 000
Primary aluminium	tonnes	329 500	456 500	408 400	386 395	* 250 000
Barytes	tonnes	5 212	2 050	—	—	—
Bentonite and fuller's earth						
Bentonite	tonnes	147 090	157 001	110 371	96 605	102 709
Attapulgite	tonnes	21 110	27 841	26 021	23 537	25 439
Sepiolite	tonnes	573 937	557 862	566 270	622 372	576 608
Cement						
Cement, clinker	tonnes	21 594 604	21 234 637	17 000 000	16 719 769	* 16 000 000
Cement, finished	tonnes	29 504 574	26 217 200	22 000 000	15 538 965	* 13 170 000
Coal						
Anthracite	tonnes	4 306 033	3 212 603	2 489 797	2 259 236	2 213 775
Bituminous	tonnes	2 898 340	2 776 918	1 774 992	1 651 496	1 799 242
Sub-bituminous	tonnes	2 493 577	2 428 877	2 358 930	2 275 409	1 870 569
Copper, mine	tonnes (metal content)	17 663	54 335	68 511	97 452	104 600
Copper, refined	tonnes	329 356	347 518	353 790	406 600	351 000
Copper, smelter	tonnes	264 971	259 119	260 730	270 200	224 400
Diatomite (a)	tonnes	29 194	64 346	83 624	60 777	53 713
Feldspar	tonnes	597 496	691 894	662 418	530 238	602 908
Fluorspar	tonnes	122 533	132 341	117 063	113 570	128 512
Gold	kilograms	—	—	290	1 333	2 053
Gypsum	tonnes	8 181 315	6 990 249	7 825 747	6 359 923	7 125 463
Pig iron	tonnes	2 920 000	3 572 000	3 540 000	3 081 000	3 949 000
Crude steel	tonnes	14 358 000	16 343 000	15 504 000	13 639 000	14 130 000
Ferro-alloys						
Ferro-manganese	tonnes	* 60 100	* 134 000	* 108 000	* 108 000	* 108 000
Ferro-silico-manganese	tonnes	* 59 200	* 132 000	* 164 000	* 165 000	* 166 000
Ferro-silicon	tonnes	* 44 000	* 64 400	* 57 000	* 57 000	* 57 000
Silicon metal	tonnes	* 23 000	* 32 500	* 43 000	* 45 000	* 45 000
Kaolin (b)	tonnes	270 298	310 993	384 179	402 251	393 427
Lead, mine	tonnes (metal content)	1 000	229	5 705	6 800	6 000
Lead, refined	tonnes	138 000	165 000	177 000	160 000	157 000
Lithium						
Lepidolite	tonnes	4 270	7 824	—	—	—
Magnesite	tonnes	390 311	462 959	577 725	649 977	643 827
Mica (c)	tonnes	3 655	4 034	3 775	3 518	3 462
Nickel, mine	tonnes (metal content)	8 029	6 296	—	2 398	7 574
Crude petroleum	tonnes	106 817	121 528	99 925	143 526	367 645
Natural gas	million m <sup>3</sup>	19	58	58	65	62
Potash						
Chloride	tonnes ( $\text{K}_2\text{O}$ content)	481 455	418 778	436 026	421 652	961 865
Salt						
Rock salt	tonnes	2 763 081	3 115 940	3 096 383	2 785 959	2 902 729
Sea salt	tonnes	1 338 789	1 242 718	1 314 529	1 222 060	1 229 000
Other salt	tonnes	99 853	92 644	92 850	100 643	147 553
Silver	kilograms (metal content)	2 200	20 800	29 900	32 943	* 31 000
Strontium minerals	tonnes	57 466	83 035	97 102	96 888	90 972
Sulphur and pyrites						
Recovered (d)	tonnes (sulphur content)	533 000	547 000	492 000	578 400	539 200
Recovered (e)	tonnes (sulphur content)	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Talc						
Pyrophyllite	tonnes	—	—	5 600	* —	—
Talc	tonnes	47 218	51 897	11 957	8 857	* 8 000
Tin	tonnes (metal content)	—	—	9	69	* 0
Tungsten	tonnes (metal content)	284	303	425	496	702
Wollastonite	tonnes	7 000	6 000	7 417	10 918	16 738

## Spain

### Production continued

Commodity	Units	2009	2010	2011	2012	2013
Zinc, mine	tonnes	515 000	517 100	527 100	528 300	* 530 000
Slab zinc	tonnes (metal content)	5 900	17 323	33 197	28 634	24 975

### Notes

(1) Spain is also 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	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 060 445	1 153 923	1 306 103	1 026 358	953 044
Aluminium and bauxite						
Bauxite	tonnes	4 951	3 628	2 038	1 676	3 118
Alumina	tonnes	612 933	299 703	391 516	426 925	636 058
Alumina hydrate	tonnes	163 303	126 398	186 543	282 062	227 359
Unwrought	tonnes	19 816	26 693	19 248	29 433	42 539
Unwrought alloys	tonnes	230 539	148 884	175 112	181 026	174 067
Scrap	tonnes	46 307	66 976	51 518	90 881	94 856
Antimony						
Metal	tonnes	62	19	50	247	2
Oxide	tonnes	894	1 716	1 784	1 204	2 361
Barytes						
Barium minerals	tonnes	29 776	32 427	34 285	34 402	34 361
Bentonite and fuller's earth						
Bentonite	tonnes	1 021 034	66 118	54 449	54 147	56 416
Sepiolite	tonnes	418 644	...	...	...	...
Bismuth						
Metal	tonnes	14	9	9	4	6
Bromine	kilograms	2 578	15 627	86 311	10 480	72 396
Cement						
Cement clinkers	tonnes	1 181 783	1 545 705	1 590 245	3 487 481	3 870 209
Portland cement	tonnes	1 411 588	2 768 457	2 577 325	3 033 778	3 333 949
Other cement	tonnes	74 007	87 864	184 099	117 093	194 554
Chromium						
Ores and concentrates	tonnes	1 022	600	1 252	4 225	2 250
Metal	tonnes	516	665	237	555	470
Coal						
Anthracite	tonnes	123 114	337 930	337 833	240 630	351 794
Other coal	tonnes	1 252 923	1 149 991	851 716	162 047	356 469
Cobalt						
Oxides	tonnes	33	19	14	37	66
Metal	tonnes	17	4	25	72	6
Copper						
Ores and concentrates	tonnes	110 724	221 429	583 874	529 494	729 177
Matte and cement	tonnes	—	...	17 649	9 409	...
Scrap	tonnes	100 498	102 236	87 122	159 419	156 511
Unwrought, unrefined	tonnes	38 761	33 973	37 314	43 168	37 762
Unwrought, refined	tonnes	108 716	151 204	86 800	145 142	113 585
Unwrought alloys	tonnes	12 150	15 881	15 809	17 571	16 646
Diamond						
Unsorted	Carats	£266 000	£292 000	£154 000	£490 000	£390 000
Gem, rough	Carats	£273 000	...	£500 000	£130 000	£160 000
Gem, cut	Carats	£5 328 000	£7 350 000	£9 802 000	£9 021 000	£11 894 000
Industrial	Carats	£171 000	£210 000	£590 000	£42 000	£499 000
Dust	Carats	182 628	689 563	8 454 551	21 675 000	23 795 000
Diatomite	tonnes	4 678	7 382	6 637	10 384	4 271
Feldspar	tonnes	56 161	69 337	71 959	63 369	81 429
Fluorspar	tonnes	35 366	1 680	3 312	5 519	12 754

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Gold						
Metal	kilograms	31 466	282 816	9 444 195	4 268 966	3 562 857
Waste and scrap	kilograms	131 376	258 156	176 652	113 264	621 165
Graphite	tonnes	8 160	5 369	6 142	5 184	1 620
Gypsum						
Crude	tonnes	2 187 816	2 678 208	3 367 083	3 780 980	3 454 407
Calcined	tonnes	182 982	165 424	156 461	135 415	188 096
Iodine	kilograms	15 376	14 704	7 909	43 289	90 312
Iron ore (a)	tonnes	17 348	9 079	165 589	184 056	270 073
Iron, steel and ferro-alloys						
Pig iron	tonnes	4 772	2 998	7 023	11 831	17 049
Sponge and powder	tonnes	2 566	2 658	3 233	3 000	3 659
Ferro-chrome	tonnes	367	1 025	1 181	1 359	2 224
Ferro-manganese	tonnes	29 403	52 296	37 866	42 486	71 628
Ferro-silico-manganese	tonnes	25 859	58 097	65 469	66 101	58 380
Ferro-molybdenum	tonnes	242	359	7	55	22
Ferro-silicon	tonnes	5 939	12 854	12 952	20 235	17 571
Other ferro-alloys	tonnes	208	2 191	2 326	1 901	4 259
Silicon metal	tonnes	5 571	18 463	21 864	20 690	19 644
Ingots, blooms, billets	tonnes	261 758	337 566	194 482	134 781	253 033
Scrap	tonnes	302 465	277 401	431 394	737 203	567 955
Kaolin	tonnes	156 915	167 811	161 156	173 061	164 350
Lead						
Ores and concentrates	tonnes	14 147	9 513	24 608	50 216	45 055
Unwrought	tonnes	13 434	6 630	15 683	37 882	13 350
Scrap	tonnes	3 862	6 781	5 029	3 361	7 505
Lithium						
Carbonate	tonnes	228	175	268	100	2 477
Magnesite and magnesia						
Magnesite	tonnes	2 167	410	573	1 051	798
Magnesia	tonnes	156 027	224 590	259 493	257 527	234 020
Manganese						
Ores and concentrates	tonnes	21 456	707	623	621	5 367
Metal	tonnes	3 386	1 297	1 735	4 665	3 880
Mercury	kilograms	376 885	964 922	824 421	950 824	1 008 952
Mica						
Unmanufactured	tonnes	563	1 339	1 823	1 826	1 904
Ground	tonnes	1 521	2 269	2 193	1 993	613
Molybdenum						
Metal	tonnes	68	243	14	69	79
Nickel						
Scrap	tonnes	875	366	376	454	339
Ores and concentrates	tonnes	102 105	93 536	26 597	20 632	100 228
Unwrought (b)	tonnes	573	738	400	430	390
Crude petroleum	tonnes	(c)* 400	(c)* 164 000	(c)* 300	(c)* 240 000	...
Natural gas	tonnes	61 433	200 027	555 012	1 325 072	2 483 109
Phosphate rock	tonnes	1 565	1 888	10 985	620	269
Platinum metals						
Platinum and platinum metals	kilograms	1 672	2 347	1 255	21 889	467 717
Waste and scrap	kilograms	225 411	291 877	163 420	68 805	106 813
Potash						
Sulphate	tonnes	2 540	6 474	3 713	4 873	4 150
Chloride	tonnes	319 549	609 607	688 599	733 789	852 298
Other potassic fertilisers	tonnes	1 352	2 365	2 385	3 020	1 879
Rare earths						
Metals	tonnes	—	97	51	1	2
Cerium compounds	tonnes	13	51	62	8	25
Other rare earth compounds	tonnes	5	34	32	9	9
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	...	...	11
Salt	tonnes	862 994	1 318 019	1 311 651	807 581	1 496 873
Sillimanite minerals	tonnes	33	288	358	796	1 585
Silver						
Ores and concentrates	kilograms	30	377	9 847	30 748	896
Metal	kilograms	233 084	417 381	383 412	626 782	670 633
Sulphur and pyrites						
Sulphur	tonnes	198 585	138 168	361 188	438 368	456 025
Sulphur, sublimed and precipitated	tonnes	523	612	289	264	165

## Spain

### Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Talc	tonnes	29 580	11 206	28 980	9 771	8 823
Tantalum and niobium						
Tantalum	tonnes	5	4	11	3	13
Tin						
Unwrought (b)	tonnes	427	513	449	558	978
Scrap	tonnes	2 038	376	4 543	2 436	932
Titanium						
Titanium minerals	tonnes	25 892	2 405	650	4 011	297
Metal	tonnes	1 018	1 928	1 698	1 779	2 896
Oxides	tonnes	33 721	35 233	48 870	51 919	85 355
Tungsten						
Ores and concentrates	tonnes	457	400	981	1 074	958
Metal	tonnes	156	315	880	453	504
Vanadium						
Pentoxide	tonnes	26	22	774	26	9
Zinc						
Ores and concentrates	tonnes	40 118	82 009	122 429	133 939	92 125
Unwrought	tonnes	216 633	318 527	351 354	359 605	303 548
Unwrought alloys	tonnes	62 544	91 054	35 318	38 229	42 674
Scrap	tonnes	26 675	37 362	15 625	8 283	17 625
Zirconium						
Concentrates	tonnes	13 581	28 166	29 952	14 360	8 031
Metal	tonnes	746	51	3	64	73

### Notes

(a) Including burnt pyrites

(b) Including alloys

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

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	889 156	982 128	677 289	618 871	475 414
Aluminium and bauxite						
Bauxite	tonnes	3 509 294	3 325 099	3 080 295	3 693 740	3 510 247
Alumina	tonnes	22 239	31 527	61 184	28 910	31 683
Alumina hydrate	tonnes	30 522	29 317	22 917	16 162	13 491
Unwrought	tonnes	95 461	119 589	110 612	107 320	122 958
Unwrought alloys	tonnes	162 026	229 036	219 925	207 511	202 690
Scrap	tonnes	63 517	111 942	125 190	155 371	176 445
Antimony						
Ores and concentrates	tonnes	55	103	29	10	7
Metal	tonnes	1 478	2 642	2 450	1 553	2 760
Oxide	tonnes	493	516	494	720	630
Arsenic						
Metallic arsenic	tonnes	48	96	93	143	117
Asbestos						
Unmanufactured	tonnes	—	—	6	28	51
Barytes						
Barium minerals	tonnes	30 503	106 611	70 896	49 674	47 798
Bentonite	tonnes	72 993	108 066	146 344	114 421	103 691
Bismuth						
Metal	tonnes	52	141	99	103	107
Bromine	kilograms	75 099	222 746	250 417	188 015	181 058
Cadmium						
Metal	tonnes	118	153	38	37	39
Cement						
Cement clinkers	tonnes	2 079 944	1 342 279	490 164	80 228	106 170
Portland cement	tonnes	694 757	637 322	450 416	363 065	274 456
Other cement	tonnes	73 362	14 516	15 894	17 347	24 997
Chromium						
Ores and concentrates	tonnes	4 031	5 579	9 262	10 487	6 644
Metal	tonnes	1 192	1 878	2 350	1 479	1 438

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Coal						
Anthracite	tonnes	767 027	846 015	852 813	594 330	544 040
Other coal	tonnes	15 967 793	10 983 379	15 315 861	21 819 298	13 118 931
Cobalt						
Metal	tonnes	135	144	159	233	209
Oxides	tonnes	1 035	1 543	1 837	1 941	2 053
Copper						
Ores and concentrates	tonnes	1 184 321	1 229 148	1 482 354	1 517 856	1 575 657
Matte and cement	tonnes	21	992	17 530	9 417	4 889
Scrap	tonnes	68 166	82 931	89 499	97 129	104 671
Unwrought, unrefined	tonnes	3 133	518	12 747	685	209
Unwrought, refined	tonnes	80 898	73 904	62 695	44 567	60 873
Unwrought alloys	tonnes	3 473	3 947	6 719	4 109	4 549
Diamond						
Unsorted	Carats	£1 591 000	£1 814 000	£3 864 000	£2 441 000	£2 139 000
Gem, rough	Carats	£207 000	£312 000	£276 000	£487 000	£207 000
Gem, cut	Carats	£30 290 000	£26 488 000	£25 312 000	£24 197 000	£25 904 000
Industrial	Carats	£917 000	£275 000	£605 000	£774 000	£580 000
Dust	Carats	30 861 760	27 500 320	27 699 364	* 19 429 000	* 19 405 000
Diatomite	tonnes	9 600	8 191	7 989	7 368	6 480
Feldspar	tonnes	664 830	856 406	993 378	926 809	1 092 403
Fluorspar	tonnes	17 148	12 008	14 198	16 542	23 713
Gold						
Metal	kilograms	68 562	44 542	46 695	24 180	103 946
Waste and scrap	kilograms	109	2 780	29 069	33 912	25 382
Graphite	tonnes	15 669	34 268	10 765	5 579	4 736
Gypsum						
Crude	tonnes	25 963	20 776	13 185	11 943	5 398
Calcined	tonnes	7 349	6 015	5 787	5 548	12 354
Iodine	kilograms	512 821	342 914	522 768	357 482	534 309
Iron ore	tonnes	(a) 4 237 845	(a) 5 874 304	(a) 5 143 562	4 505 772	(a) 6 260 115
Iron, steel and ferro-alloys						
Pig iron	tonnes	380 731	442 656	315 904	274 202	219 240
Sponge and powder	tonnes	295 665	636 496	640 549	487 073	724 592
Ferro-chrome	tonnes	113 275	164 125	152 254	180 740	168 647
Ferro-silico-chrome	tonnes	312	1 854	5 448	4 037	5 878
Ferro-silico-magnesium	tonnes	865	1 567	2 139	2 696	1 935
Ferro-manganese	tonnes	13 357	19 930	15 256	23 224	14 088
Ferro-silico-manganese	tonnes	50 683	39 895	36 803	39 584	36 653
Ferro-molybdenum	tonnes	3 756	6 446	6 943	10 662	7 733
Ferro-nickel	tonnes	43 936	47 389	43 284	45 528	47 485
Ferro-niobium	tonnes	553	983	1 334	1 000	3 627
Ferro-phosphorus	tonnes	193	1 425	1 816	1 282	1 478
Ferro-silicon	tonnes	27 140	27 581	29 894	28 149	30 794
Ferro-titanium and ferro-silico-titanium	tonnes	611	1 203	1 120	957	1 575
Ferro-tungsten and ferro-silico-tungsten	tonnes	125	55	60	1 079	187
Ferro-vanadium	tonnes	809	1 088	1 094	964	3 595
Other ferro-alloys	tonnes	4 954	6 138	8 566	7 401	7 581
Silicon metal	tonnes	9 523	8 446	11 801	12 573	16 647
Ingots, blooms, billets	tonnes	1 007 820	1 269 577	1 061 766	1 025 012	789 798
Scrap	tonnes	4 674 099	5 708 900	4 764 338	4 348 807	4 851 614
Kaolin	tonnes	757 859	1 061 732	1 055 122	856 355	1 016 611
Lead						
Ores and concentrates	tonnes	3 199	10 946	6 722	4 651	1 536
Unwrought	tonnes	121 522	110 217	114 380	122 913	110 576
Scrap	tonnes	35 703	43 432	42 236	34 702	35 284
Lithium						
Oxides	tonnes	521	1 007	698	763	645
Carbonate	tonnes	2 825	3 239	3 423	2 638	2 905
Magnesite and magnesia						
Magnesite	tonnes	10 029	3 926	6 164	2 695	2 189
Magnesia	tonnes	42 980	94 840	97 566	82 320	65 530
Manganese						
Ores and concentrates	tonnes	54 606	407 450	508 794	413 613	542 836
Metal	tonnes	3 994	7 510	10 951	6 470	7 047
Mercury	kilograms	467 614	335 852	54 748	54 994	70 325

## Spain

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Mica	tonnes	1 467	1 183	1 534	1 017	1 538
Molybdenum						
Ores and concentrates	tonnes	1 724	2 585	3 572	3 041	3 136
Metal	tonnes	236	239	83	78	42
Nickel						
Ores and concentrates	tonnes	5	5	1	—	6 888
Scrap	tonnes	236	151	806	554	386
Unwrought	tonnes	12 290	16 468	17 567	20 230	18 352
Unwrought alloys	tonnes	821	1 125	966	1 368	1 510
Oxides	tonnes	50	329	323	131	43
Crude petroleum	tonnes	52 331 324	52 714 224	51 960 524	58 285 251	58 583 900
Natural gas	tonnes	28 024 572	27 795 263	27 529 122	26 622 307	26 177 038
Phosphate rock	tonnes	438 755	1 017 820	377 348	345 571	312 525
Platinum metals						
Platinum and platinum metals (b)	kilograms	* 3 000	* 3 500	* 3 000	* 2 500	* 3 000
Waste and scrap	kilograms	29 448	29 183	17 845	13 104	5 866
Potash						
Sulphate	tonnes	21 022	40 507	39 133	43 865	46 773
Chloride	tonnes	71 444	211 595	257 920	232 397	242 393
Other potassic fertilisers	tonnes	3 721	1 607	1 283	968	426
Rare earths						
Metals	tonnes	108	421	9	19	93
Cerium compounds	tonnes	443	543	636	455	729
Other rare earth compounds	tonnes	140	216	102	155	438
Ferro-cerium and other pyrophoric alloys	tonnes	19	41	33	22	35
Salt	tonnes	81 729	85 807	111 597	52 046	182 413
Sillimanite minerals						
Sillimanite minerals	tonnes	19 824	27 611	32 091	12 372	24 416
Mullite	tonnes	1 824	4 934	6 153	2 465	3 274
Silver						
Ores and concentrates	kilograms	66 088	11 317	17 131	123 171	11 356
Metal	kilograms	754 262	1 513 257	828 017	431 934	8 665 969
Sulphur and pyrites						
Pyrites	tonnes	958	1 160	476	384	922
Sulphur	tonnes	24 015	68 214	44 724	13 291	20 710
Sulphur, sublimed and precipitated	tonnes	187	229	176	300	669
Talc	tonnes	81 043	82 425	88 655	80 421	91 965
Tin						
Unwrought	tonnes	5 457	6 410	5 967	5 744	5 300
Unwrought alloys	tonnes	243	172	428	122	82
Scrap	tonnes	441	2 410	5 386	801	799
Titanium						
Ilmenite	tonnes	26 512	...	...	...	...
Other titanium minerals	tonnes	522	(c) 111 298	(c) 123 284	(c) 99 055	(c) 130 406
Metal	tonnes	1 735	2 627	3 673	3 411	4 285
Oxides	tonnes	93 267	91 822	90 581	67 970	79 052
Tungsten						
Ores and concentrates	tonnes	147	44	15	17	13
Metal	tonnes	681	426	216	506	596
Carbide	tonnes	13	25	51	35	41
Vanadium						
Pentoxide	tonnes	50	115	52	56	57
Zinc						
Ores and concentrates	tonnes	909 078	1 003 388	977 695	1 069 671	994 451
Unwrought	tonnes	16 091	7 583	16 841	6 091	4 623
Unwrought alloys	tonnes	9 230	15 627	11 050	7 235	7 156
Scrap	tonnes	3 127	10 935	23 205	9 620	38 266
Zirconium						
Concentrates	tonnes	95 103	149 442	143 493	63 341	99 858
Metal	tonnes	83	132	97	124	136

## Notes

(a) Including burnt pyrites

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

(c) Includes Ilmenite

## Sweden

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	14 400 000	* 17 000 000	* 17 000 000	13 809 028	11 399 554
Crushed rock	tonnes	57 500 000	* 57 000 000	* 58 000 000	71 839 600	66 621 935
Primary aluminium	tonnes	69 708	93 000	111 000	129 000	131 000
Cement						
Cement, clinker	tonnes	1 702 019	1 790 784	* 1 750 000	* 1 750 000	* 1 750 000
Cement, finished	tonnes	1 586 000	1 796 000	2 064 000	2 500 000	* 2 800 000
Copper, mine	tonnes (metal content)	55 414	76 514	82 967	82 422	82 904
Copper, refined	tonnes	205 759	190 497	219 316	214 050	206 000
Copper, smelter	tonnes	183 400	181 500	206 100	207 300	140 400
Crude steel	tonnes	2 803 700	4 845 600	4 867 000	4 326 000	4 404 000
Feldspar	tonnes	18 000	22 000	30 000	27 000	30 000
Pig iron	tonnes	1 966 000	3 447 000	3 240 000	2 805 000	3 000 000
Ferro-alloys						
Ferro-chrome	tonnes	31 100	64 400	80 140	35 800	55 078
Gold	kilograms	5 542	6 285	5 994	6 015	6 530
Iron ore	tonnes	20 646 000	28 797 000	30 840 000	32 198 000	37 411 000
Lead, mine	tonnes (metal content)	69 293	67 697	62 028	63 551	59 556
Lead, refined	tonnes	51 574	59 179	52 438	61 528	69 000
Selenium metal	tonnes	129	72	* 70	* 70	* 70
Silver	kilograms (metal content)	288 590	302 145	301 959	309 337	341 346
Sulphur and pyrites						
Recovered (a)	tonnes (sulphur content)	186 100	179 833	202 289	195 032	189 750
Recovered (b)	tonnes (sulphur content)	83 646	83 947	92 973	93 442	64 587
Talc	tonnes	4 000	4 000	3 000	—	—
Tellurium metal	tonnes	—	—	—	6 791	24 457
Zinc, mine	tonnes (metal content)	192 502	198 687	194 021	188 325	176 582

#### Notes

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

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	1 867 320	2 248 515	1 624 154	1 602 379	1 234 782
Aluminium and bauxite						
Alumina	tonnes	14 464	19 037	13 870	10 401	9 818
Unwrought	tonnes	2 143	195	735	873	1 061
Unwrought alloys	tonnes	145 554	190 394	182 946	188 063	171 496
Scrap	tonnes	89 940	88 070	95 632	108 353	103 323
Antimony						
Metal	tonnes	489	4	—	4	...
Bentonite	tonnes	5 588	3 457	3 300	5 492	9 949
Bismuth						
Metal	tonnes	106	11	1	—	—
Cadmium						
Oxide	tonnes	305	360	429	335	330
Cement						
Cement clinkers	tonnes	577 571	505 585	267 884	391 898	357 876
Portland cement	tonnes	482 223	467 559	590 443	782 362	752 187
Other cement	tonnes	7 166	5 819	7 120	8 546	7 774
Chromium						
Metal	tonnes	100	191	167	123	122
Coal	tonnes	5201	583	450	660	779
Cobalt						
Metal	tonnes	285	220	99	200	364

## Sweden

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Ores and concentrates	tonnes	—	24	8 010	4 266	4
Unwrought	tonnes	77 745	71 394	92 971	105 338	91 292
Scrap	tonnes	55 603	43 311	58 031	58 829	56 469
Unwrought alloys	tonnes	3 181	8 563	5 615	3 585	4 773
Diatomite	tonnes	693	829	1 098	1 214	1 116
Feldspar	tonnes	7 646	11 251	19 258	16 831	14 081
Fluorspar	tonnes	6 745	8 101	11 053	13 714	11 668
Gold						
Metal	kilograms	14 500	14 700	12 900	16 600	15 100
Waste and scrap	kilograms	60 900	5 100	21 000	9 700	2 400
Graphite	tonnes	159	254	129	129	114
Gypsum						
Crude and calcined	tonnes	9 358	8 155	3 865	4 466	6 522
Iodine	kilograms	300	700	900	7 900	(a)* 500
Iron ore	tonnes	16 104 129	20 726 152	21 115 203	22 869 383	23 455 915
Iron, steel and ferro-alloys						
Pig iron	tonnes	141 261	146 027	133 387	109 644	34 960
Sponge and powder	tonnes	296 251	12 335	313 081	297 427	293 451
Ferro-chrome	tonnes	35 886	51 010	2 752	2 525	37 393
Ferro-manganese and ferro-silico-manganese	tonnes	2 423	3 517	3 581	2 835	2 395
Ferro-molybdenum	tonnes	193	340	375	294	253
Ferro-phosphorus	tonnes	364	582	448	479	497
Ferro-silicon	tonnes	3 004	6 905	6 903	15 630	20 102
Ferro-vanadium	tonnes	250	50	57	64	32
Other ferro-alloys	tonnes	330	498	665	950	1 170
Silicon metal	tonnes	968	2 337	1 274	1 206	1 409
Ingots, blooms, billets	tonnes	58 631	261 273	235 814	450 860	415 798
Scrap	tonnes	1 439 126	1 352 399	1 484 197	1 543 542	1 317 282
Kaolin	tonnes	31 122	23 103	16 444	7 032	769
Lead						
Ores and concentrates	tonnes	72 220	111 153	73 996	68 646	43 506
Unwrought	tonnes	46 795	55 501	54 370	51 796	71 771
Scrap	tonnes	1 044	1 445	1 471	1 425	1 113
Magnesite and magnesia						
Magnesia	tonnes	380	303	165	130	69
Nickel						
Scrap	tonnes	1 376	1 022	1 137	13 853	1 265
Unwrought (b)	tonnes	522	497	599	1 690	385
Oxides	tonnes	363	534	516	429	406
Crude petroleum	tonnes	45	2	3 105	22 040	2 797
Natural gas	tonnes	961	21	6 159	475	13 416
Phosphate rock	tonnes	1 228	125	2 253	1 826	1 558
Platinum metals						
Platinum and platinum metals	kilograms	£177 000	£429 000	£1 203 000	£801 000	£1 550 000
Waste and scrap	kilograms	40 400	69 000	43 600	39 100	24 900
Potash						
Sulphate	tonnes	59 252	93 796	84 381	69 205	79 724
Rare earths						
Cerium compounds	tonnes	1	9	* 0	5	3
Salt	tonnes	10 025	12 742	13 297	8 973	6 459
Silver						
Metal	kilograms	476 300	412 900	428 500	480 100	457 100
Sulphur and pyrites						
Sulphur	tonnes	3 018	2 768	3 980	10 145	13 751
Sulphur, sublimed and precipitated	tonnes	12 242	11 564	10 344	5 248	1 601
Talc	tonnes	8 032	9 014	8 308	4 598	4 915
Tin						
Unwrought (b)	tonnes	122	163	52	32	46
Titanium						
Metal	tonnes	717	925	1 086	1 111	981
Oxides	tonnes	15 921	20 567	18 331	16 429	15 109

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Tungsten						
Ores and concentrates	tonnes	96	—	21	149	105
Metal	tonnes	431	289	218	122	495
Carbide	tonnes	253	401	186	109	87
Zinc						
Ores and concentrates	tonnes	395 616	362 085	374 501	343 725	333 534
Scrap	tonnes	1 840	2 900	3 257	3 166	2 877
Zirconium						
Metal	tonnes	118	90	137	95	121

## Notes

- (a) BGS estimates, based on known imports into certain countries  
 (b) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	355 022	533 148	802 173	944 006	924 873
Aluminium and bauxite						
Bauxite	tonnes	10 755	6 660	10 460	12 271	13 074
Alumina	tonnes	109 806	211 393	266 978	258 634	278 411
Alumina hydrate	tonnes	81 026	95 073	77 121	64 907	66 055
Unwrought	tonnes	39 248	35 506	22 371	26 948	22 447
Unwrought alloys	tonnes	124 277	188 198	175 194	125 377	108 735
Scrap	tonnes	30 093	48 508	47 458	49 270	59 064
Antimony						
Oxide	tonnes	203	219	227	194	153
Barytes						
Barium minerals	tonnes	3 346	4 406	4 224	3 947	2 666
Bentonite	tonnes	120 079	200 422	214 173	231 973	189 875
Bismuth						
Metal	tonnes	6	12	2	4	2
Bromine	kilograms	3 100	4 200	4 300	7 800	3 800
Cadmium						
Metal	tonnes	588	825	1 127	1 172	1 108
Oxide	tonnes	42	107	172	145	105
Cement						
Cement clinkers	tonnes	10 434	36 629	58 132	5 230	8 044
Portland cement	tonnes	29 482	348 431	419 332	391 030	403 823
Other cement	tonnes	37 308	36 399	42 002	43 520	51 897
Chromium						
Ores and concentrates (a)	tonnes	* 127 500	* 169 000	* 128 600	* 135 900	* 79 000
Metal	tonnes	4 396	4 999	6 598	6 139	5 490
Coal						
Anthracite	tonnes	20 373	48 767	38 136	34 827	32 706
Other coal	tonnes	1 831 397	3 236 437	2 971 646	2 218 768	2 499 142
Cobalt						
Metal	tonnes	189	396	571	443	287
Copper						
Ores and concentrates	tonnes	362 803	302 514	300 878	310 772	270 120
Scrap	tonnes	96 542	108 971	121 099	139 188	152 058
Unwrought, unrefined	tonnes	22 072	3 100	5 843	6 690	7 826
Unwrought, refined	tonnes	23 107	46 383	31 760	30 772	6 906
Unwrought alloys	tonnes	2 040	5 181	3 186	2 588	3 222
Diamond						
Unsorted	Carats	£23 000	£125 000	£105 000	£178 000	£128 828
Gem, cut	Carats	...	9 615	* 12 118	* 8 000	* 8 000
Industrial	Carats	6 907	26 277	5 390	* 8 100	* 12 000
Dust	Carats	1 500 000	8 000 000	9 500 000	* 9 100 000	* 13 250 000
Diatomite	tonnes	6 082	8 099	8 247	7 532	7 410
Feldspar	tonnes	4 268	6 410	4 363	547	3 803
Fluorspar	tonnes	12 959	9 451	14 980	10 729	6 815

## Sweden

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Gold						
Metal	kilograms	£26 296 000	£32 625 000	£42 028 000	£33 413 000	£38 738 665
Waste and scrap	kilograms	£53 000	£12 243 000	£33 337 000	£26 246 000	£1 074 504
Graphite	tonnes	835	1 315	1 129	779	893
Gypsum						
Crude	tonnes	94 656	256 696	324 584	294 946	271 096
Calcined	tonnes	158 842	73 865	58 751	48 111	60 279
Iodine	kilograms	400	1 100	1 800	8 600	1 700
Iron ore						
Burnt pyrites	tonnes	2 919	16 743	24 561	22 191	...
Iron ore	tonnes	41 087	55 078	51 334	44 285	26 028
Iron, steel and ferro-alloys						
Pig iron	tonnes	40 076	58 974	78 818	58 329	53 075
Sponge and powder	tonnes	2 691	11 668	24 398	34 982	39 343
Ferro-chrome	tonnes	78 244	90 630	74 988	56 996	64 917
Ferro-silico-chrome	tonnes	1 215	1 805	4 133	803	1 251
Ferro-silico-magnesium	tonnes	246	424	20	44	28
Ferro-manganese	tonnes	27 869	60 577	57 927	45 423	36 501
Ferro-silico-manganese	tonnes	5 754	9 099	11 586	15 965	15 241
Ferro-molybdenum	tonnes	2 652	4 388	4 723	4 913	5 205
Ferro-nickel	tonnes	3 286	7 995	10 119	10 119	11 819
Ferro-niobium	tonnes	604	1 146	1 544	1 614	1 645
Ferro-phosphorus	tonnes	430	415	632	584	671
Ferro-silicon	tonnes	25 880	37 424	37 743	44 736	38 173
Ferro-titanium and ferro-silico-titanium	tonnes	653	1 127	1 459	1 731	1 421
Ferro-vanadium	tonnes	547	729	1 058	954	766
Other ferro-alloys	tonnes	1 938	2 097	1 894	1 691	1 676
Silicon metal	tonnes	4 404	6 818	5 375	6 112	8 391
Ingots, blooms, billets	tonnes	119 549	193 605	203 669	151 187	121 328
Scrap	tonnes	174 279	217 682	245 225	236 125	256 251
Kaolin	tonnes	408 564	367 948	389 358	359 345	316 362
Lead						
Ores and concentrates	tonnes	—	14 763	—	—	—
Unwrought	tonnes	5 028	5 340	5 783	6 616	6 876
Scrap	tonnes	5 176	9 464	8 401	9 624	9 282
Lithium						
Oxides	tonnes	149	214	243	213	235
Carbonate	tonnes	191	87	69	159	126
Magnesite and magnesia						
Magnesia	tonnes	15 832	12 004	20 425	19 081	18 068
Manganese						
Ores and concentrates	tonnes	854	522	438	412	504
Metal	tonnes	1 880	3 815	5 241	3 438	4 838
Mercury	kilograms	21 300	2 700	2 400	1 400	1 200
Mica	tonnes	721	673	545	419	429
Molybdenum						
Ores and concentrates	tonnes	2 514	5 487	5 893	6 110	5 988
Metal	tonnes	470	644	360	356	160
Oxides	tonnes	219	414	357	496	880
Nickel						
Mattes, sinters etc	tonnes	1 607	1 239	1 723	1 008	777
Scrap	tonnes	8 709	10 491	10 332	8 801	8 898
Unwrought	tonnes	16 544	23 375	23 191	17 878	17 406
Unwrought alloys	tonnes	661	397	216	542	1 226
Crude petroleum	tonnes	16 818 080	18 236 284	17 988 419	20 429 251	15 900 863
Natural gas	tonnes	860 497	1 066 174	899 467	816 561	804 417
Phosphate rock	tonnes	2 918	3 869	12 968	10 687	4 831
Platinum metals						
Platinum and platinum metals	kilograms	£5 934 000	£7 551 000	£8 430 000	£12 301 000	£8 081 000
Waste and scrap	kilograms	80 200	1 500	19 800	12 700	1 100
Potash						
Sulphate	tonnes	965	1 789	2 551	1 340	1 855
Chloride	tonnes	4 769	55 671	79 863	81 282	74 406
Other potassic fertilisers	tonnes	4 211	5 858	9 276	8 187	5 193

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Rare earths						
Metals	tonnes	28	37	48	72	62
Cerium compounds	tonnes	47	47	55	31	1
Other rare earth compounds	tonnes	8	7	9	16	37
Salt	tonnes	910 606	905 190	933 936	745 276	958 222
Sillimanite minerals	tonnes	2 395	4 782	5 174	4 225	4 677
Silver						
Ores and concentrates	kilograms	2 330 100	...	...	...	...
Metal	kilograms	85 300	83 700	90 900	94 900	80 900
Sulphur and pyrites						
Pyrites	tonnes	544	874	825	744	820
Sulphur	tonnes	21 772	56 961	65 296	42 457	34 206
Sulphur, sublimed and precipitated	tonnes	143	200	145	130	138
Talc	tonnes	28 459	25 998	22 202	22 507	18 259
Tin						
Unwrought (b)	tonnes	364	435	189	149	201
Titanium						
Titanium minerals	tonnes	726	1 854	645	629	661
Metal	tonnes	1 593	1 936	2 390	2 245	2 072
Oxides	tonnes	53 071	61 191	62 054	53 030	52 729
Tungsten						
Metal	tonnes	175	179	302	538	407
Carbide	tonnes	233	1 308	2 050	852	1 088
Zinc						
Unwrought	tonnes	29 750	37 524	30 598	24 686	23 619
Unwrought alloys	tonnes	2 691	5 905	6 282	5 907	6 536
Scrap	tonnes	1 208	226	336	44	129
Zirconium						
Metal	tonnes	218	220	120	146	119

## Notes

- (a) BGS estimates, based on known exports from certain countries  
 (b) Including alloys

## Switzerland

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	* 37 000 000	* 40 000 000	* 40 000 000	* 40 000 000	* 40 000 000
Crushed rock	tonnes	* 5 000 000	* 5 000 000	* 5 000 000	* 5 000 000	* 5 000 000
Cement						
Cement, finished (a)	tonnes	4 333 096	4 553 077	4 687 138	4 395 084	4 563 931
Crude steel	tonnes	934 000	1 320 000	1 400 000	* 1 450 000	* 1 530 000
Gypsum	tonnes	* 300 000	* 300 000	* 350 000	* 320 000	* 340 000
Lead, refined	tonnes	800	—	—	—	—
Salt	tonnes	554 000	643 000	478 324	* 528 000	* 652 000

Note

(a) Includes production in Liechtenstein

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	194 006	193 312	188 183	274 029	215 232
Aluminium and bauxite						
Alumina	tonnes	1 240	854	341	538	277
Unwrought (a)	tonnes	14 444	20 954	23 397	23 439	25 570
Scrap	tonnes	116 520	131 819	138 643	141 836	149 337
Asbestos						
Unmanufactured	tonnes	30	42	17	10	30
Cement						
Cement clinkers	tonnes	70 207	6 983	104	35	350
Portland cement	tonnes	15 044	103 952	63 262	72 143	142 900
Other cement	tonnes	4 062	2 959	51	67	467
Chromium						
Metal	tonnes	44	82	92	111	322
Cobalt						
Metal	tonnes	70	80	97	113	125
Copper						
Unwrought	tonnes	623	832	1 030	935	1 470
Scrap	tonnes	71 204	75 973	84 373	86 964	80 104
Diamond						
Gem, rough	Carats	1 230	14 892	3 628	5 000	5 000
Gem, cut	Carats	252 685	357 976	435 272	145 000	110 000
Dust	Carats	30 400 000	60 980 000	70 880 000	59 620 000	72 175 000
Diatomite	tonnes	99	453	564	629	447
Gold						
Metal	kilograms	1 010 085	1 605 359	1 867 822	1 627 583	2 853 431
Waste and scrap	kilograms	107 918	105 407	94 837	71 297	162 383
Graphite	tonnes	355	326	100	96	85
Gypsum						
Crude and calcined	tonnes	2 454	8 536	8 606	7 283	5 386
Iodine	kilograms	97	349	239	238	17 244
Iron, steel and ferro-alloys						
Sponge and powder	tonnes	1 564	2 191	981	1 013	908
Ferro-alloys	tonnes	943	1 191	1 299	848	1 026
Ingots, blooms, billets	tonnes	48 349	66 642	85 201	70 375	74 934
Scrap	tonnes	565 415	623 910	630 837	626 757	714 655
Kaolin	tonnes	203	287	55	201	425
Lead						
Unwrought	tonnes	1 765	230	19	23	18
Scrap	tonnes	4 748	5 497	5 732	5 301	4 424
Lithium						
Oxides	tonnes	2 041	190	1	83	91
Mercury	kilograms	25 372	8 529	53 581	164 517	132 596

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Nickel						
Scrap	tonnes	1 519	1 090	909	1 214	1 069
Unwrought (a)	tonnes	53	173	130	62	63
Platinum metals						
Palladium	kilograms	57 571	70 662	60 859	56 950	50 029
Platinum	kilograms	61 433	72 006	63 853	64 331	53 309
Other platinum metals	kilograms	192	464	494	836	977
Waste and scrap	kilograms	362 419	314 061	289 174	241 307	365 333
Rare earths						
Cerium compounds	tonnes	1	2	9	5	3
Other rare earth compounds	tonnes	26	1	1	5	1
Salt	tonnes	68 947	67 537	71 525	58 820	70 945
Silver						
Metal	kilograms	916 560	1 456 475	1 779 063	1 719 300	2 490 396
Sulphur and pyrites						
Sulphur	tonnes	4 837	5 310	4 864	2 160	5 494
Tin						
Unwrought (a)	tonnes	87	60	16	8	17
Scrap	tonnes	136	118	131	169	102
Titanium						
Metal	tonnes	734	805	868	724	887
Oxides	tonnes	1 203	1 466	1 666	1 623	2 009
Tungsten						
Metal	tonnes	239	476	398	400	323
Zinc						
Scrap	tonnes	2 574	2 582	2 846	2 284	1 889

## Notes

(a) Including alloys

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	7 246 506	8 010 059	8 566 572	8 611 775	8 315 656
Aluminium and bauxite						
Bauxite	tonnes	8 360	6 718	11 898	10 924	10 792
Alumina	tonnes	9 074	10 662	9 957	8 625	8 295
Alumina hydrate	tonnes	15 269	20 697	19 131	17 473	16 761
Unwrought	tonnes	108 096	148 099	166 853	159 296	162 271
Unwrought alloys	tonnes	50 341	84 113	70 200	59 087	60 952
Scrap	tonnes	23 195	33 341	36 829	43 797	50 969
Antimony						
Oxide	tonnes	793	1 108	1 131	583	505
Barytes						
Barium minerals	tonnes	2 605	3 020	3 156	3 359	3 429
Bentonite	tonnes	20 407	20 362	19 316	19 203	19 982
Bismuth						
Metal	tonnes	12	25	18	12	16
Cement						
Cement clinkers	tonnes	27 649	74 946	46 117	2 580	62 514
Portland cement	tonnes	364 034	465 699	538 979	526 305	588 965
Other cement	tonnes	36 464	49 549	73 361	92 633	121 136
Chromium						
Ores and concentrates	tonnes	974	1 051	809	1 359	1 253
Metal	tonnes	38	74	71	93	147
Coal						
Anthracite	tonnes	5 444	7 164	7 144	12 121	16 400
Other coal	tonnes	172 990	124 096	92 473	129 051	128 071
Lignite	tonnes	66 483	62 756	69 378	48 704	59 651
Briquettes	tonnes	4 933	3 328	2 887	3 750	4 490
Cobalt						
Metal	tonnes	243	318	298	260	222

## Switzerland

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Copper						
Unwrought	tonnes	3 473	3 229	2 353	2 006	2 371
Scrap	tonnes	2 710	6 061	4 178	2 244	4 039
Unwrought alloys	tonnes	3 276	4 137	3 520	3 489	3 495
Diamond						
Gem, rough	Carats	4 498	20 460	3 263	* 3 000	* 7 000
Gem, cut	Carats	534 700	840 245	1 227 118	* 1 012 000	1 280 000
Dust	Carats	39 130 000	74 015 000	101 250 000	82 185 000	103 905 000
Diatomite	tonnes	5 071	5 758	4 642	5 177	5 634
Feldspar	tonnes	6 478	6 593	6 124	4 575	4 504
Fluorspar	tonnes	370	492	210	181	111
Gold						
Metal	kilograms	2 198 967	2 343 070	2 684 244	2 280 196	3 091 840
Waste and scrap	kilograms	319 257	219 260	205 846	28 550	14 390
Graphite	tonnes	306	848	823	454	841
Gypsum						
Crude	tonnes	101 228	112 555	94 474	81 642	78 329
Calcined	tonnes	87 350	100 958	104 574	113 112	116 822
Iodine	kilograms	7 156	10 238	10 839	13 172	13 865
Iron ore						
Burnt pyrites	tonnes	15 045	15 171	14 916	13 386	10 991
Iron ore	tonnes	1 445	5 382	12 537	12 046	9 224
Iron, steel and ferro-alloys						
Pig iron	tonnes	12 256	16 812	17 969	13 207	15 397
Sponge and powder	tonnes	5 931	6 668	4 812	4 780	4 959
Ferro-chrome	tonnes	288	1 480	1 846	1 519	1 852
Ferro-manganese	tonnes	8 003	11 566	9 721	10 871	10 771
Ferro-silico-manganese	tonnes	1 595	3 767	4 948	4 292	5 474
Ferro-molybdenum	tonnes	76	174	230	157	190
Ferro-phosphorus	tonnes	173	321	191	200	235
Ferro-silicon	tonnes	4 287	5 014	5 937	4 527	4 607
Ferro-vanadium	tonnes	82	548	544	187	130
Other ferro-alloys	tonnes	280	381	561	272	606
Silicon metal	tonnes	1 256	1 385	1 661	1 014	953
Ingots, blooms, billets	tonnes	9 188	18 026	61 349	49 448	45 336
Scrap	tonnes	313 055	452 626	456 700	343 770	417 588
Kaolin	tonnes	33 555	24 249	21 460	21 551	17 924
Lead						
Unwrought	tonnes	9 446	5 664	2 838	5 519	3 186
Lithium						
Oxides	tonnes	110	118	141	98	136
Magnesite and magnesia						
Magnesite	tonnes	502	362	793	521	1 122
Magnesia	tonnes	4 762	4 625	4 917	5 734	13 961
Manganese						
Ores and concentrates	tonnes	340	214	333	357	181
Metal	tonnes	282	556	509	490	385
Mercury	kilograms	801	1 370	471	5 096	246
Mica	tonnes	669	1 226	866	893	630
Nickel						
Unwrought (a)	tonnes	1 202	1 370	1 199	1 320	1 224
Crude petroleum	tonnes	4 755 189	4 534 930	4 302 674	3 231 713	4 891 059
Natural gas	tonnes	2 450 414	2 759 930	2 521 494	2 644 533	2 857 193
Phosphate rock	tonnes	585	3 657	20 007	15 024	13 770
Platinum metals						
Platinum	kilograms	91 048	49 089	57 415	39 955	38 007
Palladium	kilograms	50 258	41 454	43 310	27 123	28 836
Other platinum metals	kilograms	1 319	813	873	1 065	1 488
Waste and scrap	kilograms	688 973	912 680	459 360	413 819	410 984
Potash						
Sulphate	tonnes	3 967	4 914	5 899	6 638	5 248
Chloride	tonnes	7 595	16 865	14 730	11 866	12 201
Other potassic fertilisers	tonnes	1 676	2 049	1 159	1 136	990

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Rare earths						
Metals	tonnes	1	4	5	21	11
Cerium compounds	tonnes	15	31	18	15	11
Other rare earth compounds	tonnes	15	16	12	17	40
Ferro-cerium and other pyrophoric alloys	tonnes	44	...	5	3	23
Salt	tonnes	70 386	37 731	58 307	23 179	27 569
Sillimanite minerals	tonnes	527	1 162	1 596	1 079	1 580
Silver						
Ores and concentrates (b)	kilograms	* 100 900	* 55 800	* 15 107 700	* 39 200	* 528 600
Metal	kilograms	2 136 092	1 746 243	2 155 625	2 397 273	1 935 822
Sulphur and pyrites						
Sulphur	tonnes	12 086	17 414	13 072	14 257	14 183
Talc	tonnes	7 987	8 490	7 666	6 975	7 377
Tin						
Unwrought (a)	tonnes	800	863	737	799	857
Titanium						
Metal	tonnes	862	971	1 081	1 177	1 207
Oxides	tonnes	17 086	19 725	22 198	16 806	18 186
Tungsten						
Metal	tonnes	105	143	226	234	176
Zinc						
Unwrought	tonnes	9 431	15 521	12 747	11 702	11 554
Unwrought alloys	tonnes	1 549	2 276	2 158	1 930	1 648

## Notes

(a) Including alloys

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

# Turkey

## Production

Commodity	Units	2009	2010	2011	2012	2013
Bauxite	tonnes	406 700	700 000	500 000	450 000	* 400 000
Alumina	tonnes ( $\text{Al}_2\text{O}_3$ content)	* 100 000	* 160 000	* 210 000	* 220 000	* 186 000
Primary aluminium	tonnes	30 000	54 100	56 400	43 700	32 200
Antimony	tonnes (metal content)	1 346	1 403	2 340	7 119	* 7 500
Barytes	tonnes	213 187	172 618	250 786	* 250 000	* 250 000
Bentonite and fuller's earth						
Bentonite	tonnes	753 155	718 260	379 917	251 667	* 255 000
Sepiolite	tonnes	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
Borates	tonnes	1 687 102	2 504 249	2 729 849	1 814 725	* 1 800 000
Cement						
Cement, clinker	tonnes	41 084 368	54 222 939	53 228 248	* 53 000 000	* 53 000 000
Cement, finished	tonnes	55 741 176	70 800 657	66 656 800	67 019 400	71 337 000
Chromium	tonnes	1 770 029	2 461 314	2 281 981	2 029 403	* 2 000 000
Coal						
Anthracite	tonnes	3 773 603	6 312 137	5 619 316	3 358 843	* 3 100 000
Bituminous	tonnes	*3 000 000	* 3 000 000	3 542 223	3 502 009	* 3 500 000
Lignite	tonnes	82 263 104	86 943 392	79 968 510	75 036 558	* 75 000 000
Copper, mine	tonnes (metal content)	72 400	79 900	92 500	104 300	120 500
Copper, refined	tonnes	33 500	47 300	74 354	59 673	* 60 000
Copper, smelter	tonnes	—	—	* 25 000	* 25 000	* 35 800
Diatomite	tonnes	27 634	18 448	45 187	86 403	* 85 000
Feldspar	tonnes	4 212 547	6 281 597	7 076 068	9 479 699	* 9 000 000
Fluorspar	tonnes	3 756	25 189	4 524	5 197	* 5 000
Gold	kilograms	14 470	16 890	24 000	29 390	31 044
Graphite	tonnes	2 400	—	5 250	31 500	* 32 000
Gypsum	tonnes	4 369 589	6 321 891	5 723 439	8 248 446	* 8 000 000
Iron ore	tonnes	4 169 972	5 378 455	6 308 448	7 599 511	* 7 700 000
Pig iron	tonnes	6 913 325	16 362 115	14 877 155	18 289 109	* 18 000 000
Crude steel	tonnes	25 303 741	29 029 789	30 562 184	35 885 000	34 658 000
Ferro-alloys						
Ferro-chrome	tonnes	41 028	* 50 000	* 40 000	* 40 000	* 40 000
Ferro-silico-chrome	tonnes	2 903	* 3 000	* 3 000	* 3 000	* 3 000
Kaolin	tonnes	234 614	787 287	1 229 352	* 1 300 000	* 1 300 000
Lead, mine	tonnes (metal content)	21 600	39 000	38 682	57 017	* 78 000
Lead, refined	tonnes	* 42 000	* 42 000	* 48 000	* 50 000	* 50 000
Magnesite	tonnes	861 180	2 316 763	2 588 276	2 443 478	* 2 400 000
Manganese	tonnes	141 246	134 336	172 480	192 756	* 200 000
Mica	tonnes	40 681	36 009	17 542	1 253	* 1 260
Nickel, mine	tonnes (metal content)	1 199	2 539	848	3 805	* 1 200
Perlite	tonnes	522 832	545 585	702 673	887 600	* 900 000
Crude petroleum	tonnes	2 489 914	2 602 114	* 2 600 000	* 2 500 000	* 2 600 000
Natural gas	million m <sup>3</sup>	660	626	536	547	* 550
Salt	tonnes	3 765 564	4 044 254	6 545 546	5 251 878	* 5 000 000
Silver	kilograms (metal content)	351 600	363 520	246 500	193 890	186 621
Talc						
Pyrophyllite	tonnes	140 263	192 643	115 462	85 251	* 80 000
Talc	tonnes	6 887	1 826	9 959	14 537	* 19 000
Zinc, mine	tonnes (metal content)	135 800	195 500	158 057	195 793	* 200 000

### Note

(1) Turkey is also believed to produce sulphur

## Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	908 010	955 765	1 237 704	1 299 391	1 534 475
Aluminium and bauxite						
Bauxite	tonnes	103 317	331 458	158 232	166 744	215 732
Alumina	tonnes	1 890	190 094	96	—	...
Alumina hydrate	tonnes	75 837	2 910	21 172	—	—
Unwrought	tonnes	26 337	42 090	4 868	—	...
Unwrought alloys	tonnes	9 368	36 994	38 640	36 106	30 280
Scrap	tonnes	14 483	14 291	12 020	9 905	13 346
Antimony						
Ores and concentrates	tonnes	1 408	2 765	2 977	2 450	3 150
Metal	tonnes	8	21	6	113	554
Barytes						
Barium minerals	tonnes	121 744	175 497	144 238	157 967	215 363
Bentonite	tonnes	250 082	307 891	319 189	337 860	394 169
Cement						
Cement clinkers	tonnes	3 856 403	2 792 332	2 472 979	2 980 566	2 176 337
Portland cement	tonnes	16 356 895	15 842 398	11 750 755	10 716 605	10 290 995
Other cement	tonnes	245 770	415 763	315 159	104 504	165 249
Chromium						
Ores and concentrates	tonnes	1 748 194	2 256 387	2 161 001	2 129 693	2 218 264
Metal	tonnes	2 667	184	1 930	2 344	63
Coal						
Anthracite	tonnes	194	717	5 210	5 700	1 356
Other coal	tonnes	1 715	37 319	802	1 534	4 464
Lignite	tonnes	6 253	4 554	43 942	48 706	13 204
Copper						
Ores and concentrates	tonnes	356 922	421 536	257 914	351 882	428 144
Unwrought	tonnes	4 505	2 106	2 845	5 701	1 026
Scrap	tonnes	16 426	12 426	5 124	9 226	23 251
Unwrought alloys	tonnes	2 237	6 764	10 135	7 673	9 101
Diamond						
Dust	Carats	1 000 025	1 253 750	7 702 486	400 000	10 000
Diatomite	tonnes	39 267	37 432	28 104	36 985	55 673
Feldspar	tonnes	2 888 388	3 759 104	3 973 160	4 107 038	4 139 071
Fluorspar	tonnes	46	174	243	244	357
Gold						
Metal	kilograms	162 208	56 035	30 226	282 160	71 980
Waste and scrap	kilograms	1 188	619	1 360	...	580
Graphite	tonnes	257	220	761	766	836
Gypsum						
Crude	tonnes	145 717	134 905	111 864	107 000	62 545
Calcined	tonnes	643 873	682 898	708 056	789 505	882 998
Iodine	kilograms	31 908	2 960	4 877	2 480	3 393
Iron ore						
Burnt pyrites	tonnes	52	4 830	22 752	100 447	96 577
Iron ore	tonnes	3 309	195 770	273 798	323 089	858 755
Iron, steel and ferro-alloys						
Pig iron	tonnes	10 616	8 028	9 357	7 723	6 240
Sponge and powder	tonnes	219	1 326	7 581	1 422	3 174
Ferro-chrome	tonnes	75 236	74 570	76 255	75 555	104 259
Ferro-manganese	tonnes	1 614	4 410	3 536	2 003	2 249
Ferro-silico-manganese	tonnes	2 247	2 362	2 172	1 237	1 472
Ferro-silicon	tonnes	1 280	4 619	5 807	2 653	2 676
Other ferro-alloys	tonnes	1 059	507	4 886	795	1 920
Ingots, blooms, billets	tonnes	2 431 211	3 716 586	2 459 563	2 985 209	1 566 856
Scrap	tonnes	66 673	94 498	105 914	95 152	101 685
Kaolin	tonnes	61 828	137 963	83 203	110 139	91 294
Lead						
Ores and concentrates	tonnes	35 973	64 247	65 917	93 590	130 217
Unwrought	tonnes	361	400	802	2 522	1 726
Magnesite and magnesia						
Magnesite	tonnes	35 097	24 213	37 902	28 747	38 569
Magnesia	tonnes	162 651	209 633	238 620	245 537	266 279
Manganese						
Ores and concentrates	tonnes	59 183	51 731	100 172	118 953	310 479
Metal	tonnes	81	4 952	12	3 535	1 468

Turkey

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Mercury	kilograms	89	2 156	10 890	4 392	1 245
Mica	tonnes	570	601	1 039	1 054	624
Molybdenum						
Ores and concentrates	tonnes	...	160	266	—	1 498
Metal	tonnes	14	42	64	11	22
Nickel						
Scrap	tonnes	470	519	841	783	992
Ores and concentrates	tonnes	99 700	172 682	378 350	302 100	104 212
Unwrought (a)	tonnes	141	292	96	204	223
Crude petroleum (b)	tonnes	* 2 956 000	* 1 139 000	* 702 000	* 99 000	* 2 371 000
Natural gas	tonnes	665 247	590 182	(b)* 653 000	(b)* 589 000	(b)* 498 000
Phosphate rock	tonnes	159	620	1 454	937	105 453
Platinum metals						
Platinum and platinum metals	kilograms	3 142	5 124	2 765	589	4 743
Waste and scrap	kilograms	9 967	4 491	5 332	13 244	550
Potash						
Potassic fertilisers	tonnes	6 438	6 533	6 504	3 654	6 620
Rare earths						
Cerium compounds	tonnes	8	5	10	5	9
Ferro-cerium and other pyrophoric alloys	tonnes	...	...	...	...	50
Salt	tonnes	26 223	262 050	417 596	66 690	90 656
Sillimanite minerals	tonnes	1 647	2 623	3 357	4 444	6 278
Silver						
Metal	kilograms	170 009	144 942	202 886	216 509	209 094
Sulphur and pyrites						
Pyrites	tonnes	1	1	...	48	1 243
Sulphur	tonnes	6 495	279 822	56 143	59 116	47 765
Sulphur, sublimed and precipitated	tonnes	14 769	21 068	7 949	8 757	9 454
Talc	tonnes	1 712	2 865	2 711	2 635	3 401
Tantalum and niobium						
Tantalum	tonnes	126	2	—	22	13
Tin						
Unwrought (a)	tonnes	37	79	56	43	76
Titanium						
Metal	tonnes	47	85	95	122	193
Oxides	tonnes	2 237	2 650	3 170	2 538	2 749
Tungsten						
Metal	tonnes	213	139	237	210	227
Vanadium						
Pentoxide	tonnes	119	—	24	0	—
Zinc						
Ores and concentrates	tonnes	272 559	392 725	316 714	412 744	399 384
Unwrought (a)	tonnes	451	666	1 704	2 130	2 443
Scrap	tonnes	1 929	1 536	2 997	2 960	1 903

Notes

(a) Including alloys

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

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	3 636	9 372	3 487	7 129	10 516
Aluminium and bauxite						
Bauxite	tonnes	17 350	35 652	36 358	28 947	34 716
Alumina	tonnes	10 394	15 772	15 434	14 740	19 709
Alumina hydrate	tonnes	15 269	27 721	35 739	41 275	49 347
Unwrought	tonnes	358 748	460 915	553 191	576 670	627 747
Unwrought alloys	tonnes	201 124	281 588	332 228	356 862	362 548
Scrap	tonnes	14 215	24 952	25 107	20 811	21 408
Antimony						
Ores and concentrates	tonnes	0	82	121	0	11
Metal	tonnes	369	219	245	256	273
Oxide	tonnes	588	885	739	705	817

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Arsenic						
Metallic arsenic	tonnes	74	55	10	49	78
Barytes						
Barium minerals	tonnes	507	342	2 863	5 567	29 019
Bentonite	tonnes	1 827	1 641	1 915	1 952	2 037
Bismuth						
Metal	tonnes	15	11	16	7	15
Bromine (a)	kilograms	6 497	8 373	11 462	6 869	3 475
Cement						
Cement clinkers	tonnes	6 053	58 176	10 511	58 098	99 947
Portland cement	tonnes	13 471	5 875	3 406	21 972	23 322
Other cement	tonnes	3 358	6 168	10 847	7 142	6 982
Chromium						
Ores and concentrates	tonnes	113 461	113 487	122 070	162 266	152 549
Metal	tonnes	54	65	108	91	183
Coal						
Anthracite	tonnes	457 575	972 425	990 996	854 104	665 244
Other coal	tonnes	19 501 679	21 048 121	22 721 500	28 405 516	25 960 988
Lignite	tonnes	...	5 339	—	75	7 103
Cobalt						
Metal	tonnes	125	145	171	159	190
Oxides	tonnes	150	199	277	364	384
Copper						
Ores and concentrates	tonnes	0	1 329	5	29	51
Scrap	tonnes	870	3 943	6 181	3 806	3 663
Unwrought, unrefined	tonnes	4 852	5 892	4 329	2 824	478
Unwrought, refined	tonnes	289 672	332 482	337 337	348 938	362 854
Unwrought alloys	tonnes	2 828	6 601	9 450	6 695	2 946
Diamond						
Gem	Carats	51 740	131 146	141 277	2 080 000	1 270 000
Industrial	Carats	29 724	46 890	82 417	65 000	90 000
Dust	Carats	19 120 000	25 190 000	31 125 000	36 995 000	34 835 000
Diatomite	tonnes	1 392	1 319	1 702	2 124	2 247
Feldspar	tonnes	28 166	39 953	34 726	47 361	39 456
Fluorspar	tonnes	36 114	37 977	48 210	53 627	56 451
Gold						
Metal	kilograms	52 654	64 105	128 367	157 629	350 563
Graphite	tonnes	6 788	11 191	13 138	8 171	11 776
Gypsum						
Crude	tonnes	201 077	232 713	375 169	295 462	347 834
Calcined	tonnes	1 419	1 782	1 916	2 259	2 485
Iodine	kilograms	12 133	3 218	6 641	6 163	4 423
Iron ore						
Burnt pyrites	tonnes	14 097	—	—	—	—
Iron ore	tonnes	7 757 561	7 220 977	6 644 310	7 842 126	8 114 387
Iron, steel and ferro-alloys						
Pig iron	tonnes	770 160	557 398	1 137 729	1 376 572	982 579
Sponge and powder	tonnes	81 008	284 608	180 591	387 667	510 327
Ferro-chrome	tonnes	2 787	8 159	9 061	6 493	8 093
Ferro-silico-chrome	tonnes	—	1	200	600	0
Ferro-silico-magnesium	tonnes	3 082	786	1 344	2 064	1 910
Ferro-manganese	tonnes	46 760	61 866	59 326	54 195	47 517
Ferro-silico-manganese	tonnes	191 605	229 451	243 637	252 758	243 123
Ferro-molybdenum	tonnes	1 173	1 577	1 091	1 181	1 106
Ferro-niobium	tonnes	338	147	424	550	392
Ferro-phosphorus	tonnes	412	1 050	1 035	1 117	817
Ferro-silicon	tonnes	60 164	87 552	107 151	100 727	108 702
Ferro-titanium and ferro-silico-titanium	tonnes	651	167	480	629	701
Ferro-vanadium	tonnes	323	261	591	562	769
Other ferro-alloys	tonnes	2 978	7 366	8 213	6 639	5 653
Silicon metal	tonnes	5 852	9 978	10 363	10 777	7 215
Ingots, blooms, billets	tonnes	3 590 665	2 350 758	2 157 532	3 355 265	5 429 936
Scrap	tonnes	15 372 727	19 138 460	21 452 724	22 415 045	19 725 026
Kaolin	tonnes	301 086	424 152	497 148	479 665	404 283
Lead						
Unwrought	tonnes	73 520	73 057	85 131	99 137	91 337

Turkey

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Lithium						
Oxides	tonnes	208	268	261	236	273
Carbonate	tonnes	613	770	865	1 006	1 304
Magnesite and magnesia						
Magnesia	tonnes	40 595	60 121	58 556	50 199	56 723
Manganese						
Ores and concentrates	tonnes	540	694	1 295	534	529
Metal	tonnes	583	980	1 202	863	1 356
Mercury	kilograms	1 635	719	9 772	3 143	1 490
Mica	tonnes	477	317	508	285	483
Molybdenum						
Ores and concentrates	tonnes	291	46	12	14	0
Nickel						
Unwrought (b)	tonnes	2 711	3 391	4 047	4 012	4 233
Oxides	tonnes	145	144	108	104	170
Crude petroleum	tonnes	14 219 427	16 873 392	18 049 163	19 479 238	20 091 078
Phosphate rock	tonnes	707 595	686 966	814 382	711 627	745 424
Platinum metals						
Platinum and platinum metals	kilograms	235	200	213	240	354
Potash						
Sulphate	tonnes	11 576	34 986	28 989	36 459	22 799
Chloride	tonnes	50 634	82 923	93 471	94 930	116 098
Other potassic fertilisers	tonnes	303	1 075	109	107	113
Rare earths						
Metals	tonnes	9	14	13	10	5
Cerium compounds	tonnes	200	233	128	120	160
Other rare earth compounds	tonnes	4	13	8	4	11
Ferro-cerium and other pyrophoric alloys	tonnes	10	...	...	13	18
Salt	tonnes	99 400	154 536	254 045	248 663	(c)* 72 000
Sillimanite minerals						
Sillimanite minerals	tonnes	4 891	5 466	6 907	6 905	9 434
Mullite	tonnes	3 635	12 675	10 733	8 827	5 530
Silver						
Metal	kilograms	57 700	90 064	209 909	226 227	299 109
Sulphur and pyrites						
Pyrites	tonnes	67	480	323	142	205
Sulphur	tonnes	164 034	141 478	161 866	151 955	136 430
Sulphur, sublimed and precipitated	tonnes	1 315	592	292	382	302
Talc	tonnes	14 893	20 026	26 952	23 496	28 004
Tin						
Unwrought (b)	tonnes	1 630	2 558	2 707	2 195	2 420
Titanium						
Titanium minerals	tonnes	5 628	7 390	9 454	7 328	9 292
Metal	tonnes	188	298	357	356	556
Oxides	tonnes	98 100	127 266	144 383	117 269	130 866
Tungsten						
Metal	tonnes	34	74	70	71	46
Zinc						
Unwrought	tonnes	137 765	182 598	201 409	224 683	234 744
Unwrought alloys	tonnes	1 714	2 876	6 504	5 261	10 059
Zirconium						
Concentrates	tonnes	2 918	4 823	4 770	3 268	4 130

Notes

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

## United Kingdom

### Production

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates						
Sand and gravel	tonnes	66 226 000	61 700 000	63 100 000	56 600 000	58 000 000
Crushed rock (a)	tonnes	104 626 000	94 203 000	102 800 000	94 800 000	94 300 000
Primary aluminium	tonnes	252 000	186 000	213 000	60 000	45 000
Barytes	tonnes	36 000	34 099	31 000	30 000	29 000
Cement						
Cement, clinker	tonnes	6 421 000	6 598 000	7 096 000	6 555 000	6 712 000
Cement, finished (b)	tonnes	7 623 000	7 883 000	8 529 000	7 952 000	8 203 000
Coal						
Bituminous (c)	tonnes	17 874 000	18 417 000	18 627 000	17 047 000	12 839 000
Fluorspar	tonnes	18 536	26 420	—	—	30 000
Gold	kilograms	187	177	202	102	42
Gypsum	tonnes	* 1 200 000	* 1 200 000	* 1 200 000	* 1 200 000	* 1 200 000
Indium	tonnes	* 5	* 5	* 5	* 5	* 5
Pig iron	tonnes	7 671 100	7 233 000	6 625 000	7 183 100	9 471 000
Crude steel	tonnes	10 074 500	9 708 000	9 478 000	9 579 100	11 857 500
Kaolin	tonnes	1 059 848	* 1 140 000	* 1 290 000	* 1 150 000	* 1 110 000
Lead, mine (d)	tonnes (metal content)	243	251	280	61	36
Lead, refined	tonnes	312 000	301 000	275 000	311 930	329 200
Nickel, smelter/refinery	tonnes	17 800	31 600	37 400	34 300	40 400
Crude petroleum	tonnes	68 198 000	62 962 000	51 972 000	44 560 000	40 646 000
Natural gas	million m <sup>3</sup>	63 022	59 674	47 911	41 396	38 090
Potash						
Chloride	tonnes (K <sub>2</sub> O content)	* 403 800	* 403 800	* 462 000	* 540 000	* 540 000
Salt	tonnes	6 166 000	6 666 000	6 060 000	6 460 000	* 6 500 000
Silver	kilograms (metal content)	514	506	531	230	82
Talc	tonnes	2 861	2 633	3 708	3 667	2 947

#### Notes

- (1) United Kingdom is also believed to produce arsenic and sulphur  
(2) Production capacity for synthetic mullite is known to exist in the United Kingdom, but output is believed to be zero

- (a) Includes small quantities for other purposes in Northern Ireland  
(b) Great Britain only  
(c) Including anthracite  
(d) By-product of gold mining in Northern Ireland.

### Exports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	10 714 861	10 992 431	10 800 338	8 823 773	9 223 816
Aluminium and bauxite						
Bauxite	tonnes	3 873	3 140	5 936	2 929	4 804
Alumina	tonnes	16 810	5 879	5 114	3 590	3 247
Alumina hydrate (a)	tonnes	* 4 400	* 2 100	* 2 600	* 10 700	* 5 000
Unwrought	tonnes	17 688	43 665	49 959	9 597	8 510
Unwrought alloys	tonnes	305 849	364 612	356 170	279 263	188 996
Scrap	tonnes	422 574	443 466	440 399	445 730	402 060
Antimony						
Metal	tonnes	75	77	57	237	425
Oxide	tonnes	407	490	290	422	152
Arsenic						
Metallic arsenic	tonnes	0	0	0	7	7
Barytes						
Barium minerals (b)	tonnes	13 095	17 851	15 648	19 072	13 854
Bentonite	tonnes	34 622	41 323	38 478	39 535	37 694
Bismuth						
Metal	tonnes	941	427	1 038	744	407
Bromine	kilograms	497 246	780 704	1 472 523	1 377 726	645 676

## United Kingdom

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Cadmium						
Metal	tonnes	25	2 545	1 441	272	99
Cement						
Cement clinkers	tonnes	4 708	5 500	15 531	31 458	24 056
Portland cement	tonnes	92 628	134 223	121 537	239 058	85 405
Other cement	tonnes	51 359	56 781	62 333	75 502	76 851
Chromium						
Ores and concentrates	tonnes	32 507	297	168	50	50
Metal	tonnes	5 058	7 441	8 017	7 737	7 061
Coal						
Anthracite	tonnes	119 472	89 701	97 014	119 826	143 133
Other coal	tonnes	391 414	615 067	502 581	417 654	456 259
Briquettes	tonnes	68 226	89 125	117 025	150 783	106 890
Cobalt						
Oxides	tonnes	891	1 267	820	1 179	1 493
Metal	tonnes	2 572	1 780	1 739	1 865	3 136
Copper						
Ores and concentrates	tonnes	68	39	51	4	3
Matte	tonnes	14	33	...	...	...
Matte and cement	tonnes	14	33	36	18	31
Scrap	tonnes	429 467	421 868	513 394	373 943	291 924
Unwrought, unrefined	tonnes	205	185	194	647	206
Unwrought, refined	tonnes	14 059	8 863	17 951	24 498	17 332
Unwrought alloys	tonnes	11 839	12 782	16 872	15 441	21 946
Diamond						
Unsorted	Carats	4 090 534	3 689 202	2 735 369	2 974 099	11 165 256
Gem, rough	Carats	43 775 775	51 769 860	41 541 219	46 117 478	34 651 963
Gem, cut	Carats	257 202	283 435	1 292 162	1 702 424	284 182
Industrial	Carats	4 440 922	2 478 568	3 864 054	3 949 553	2 001 018
Dust	Carats	105 427 105	113 451 535	42 269 921	32 288 331	28 709 324
Diatomite	tonnes	533	1 650	797	659	497
Feldspar	tonnes	369	38	34	92	84
Fluorspar	tonnes	303	412	590	75	16 127
Gold						
Metal	kilograms	96 231	293 153	775 261	266 572	1 736 966
Waste and scrap	kilograms	533 182	496 924	272 597	1 928 197	388 290
Graphite	tonnes	2 271	2 981	3 660	2 196	2 011
Gypsum						
Crude	tonnes	1 978	3 330	3 428	4 036	4 745
Calcined	tonnes	32 551	24 552	25 504	21 216	19 481
Iodine	kilograms	121 370	393 005	234 182	370 132	190 878
Iron ore	tonnes	32 579	5 228	179 699	108 399	71 801
Iron, steel and ferro-alloys						
Pig iron	tonnes	27 765	4 339	2 074	3 775	1 652
Sponge and powder	tonnes	3 103	2 938	3 775	4 585	4 858
Ferro-alloys	tonnes	28 899	45 314	43 918	49 357	47 949
Ferro-chrome	tonnes	1 475	2 403	1 853	2 288	2 108
Ferro-silico-chrome	tonnes	50	22	364	72	168
Ferro-silico-magnesium	tonnes	458	366	338	327	240
Ferro-manganese	tonnes	963	8 361	819	658	407
Ferro-silico-manganese	tonnes	65	52	132	7 503	3 626
Ferro-molybdenum	tonnes	7 634	11 248	12 948	12 421	11 922
Ferro-nickel	tonnes	18	15	49	539	183
Ferro-niobium	tonnes	52	224	179	257	162
Ferro-phosphorus	tonnes	312	667	766	562	558
Ferro-silicon	tonnes	3 338	2 958	6 594	4 659	5 109
Ferro-titanium and ferro-silico-titanium	tonnes	13 098	15 197	17 662	18 040	22 652
Ferro-tungsten and ferro-silico-tungsten	tonnes	1	4	3	20	9
Ferro-vanadium	tonnes	64	24	52	31	45
Other ferro-alloys	tonnes	1 373	3 774	2 158	1 979	760
Silicon metal	tonnes	7 753	2 901	3 662	3 027	4 979
Ingots, blooms, billets	tonnes	2 118 701	1 137 160	668 885	1 817 820	3 164 861
Scrap	tonnes	6 007 656	7 507 853	7 744 411	7 160 639	6 777 534
Kaolin	tonnes	1 393 939	1 722 335	1 157 780	1 039 460	1 003 841

## Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Lead						
Unwrought	tonnes	126 743	105 235	144 877	169 739	144 718
Unwrought, base bullion	tonnes	0	21	822	1 993	926
Unwrought, refined	tonnes	126 697	103 988	79 009	97 771	74 945
Unwrought alloys	tonnes	54 505	62 406	4 820	6 050	5 521
Scrap	tonnes	56 055	69 404	74 789	57 990	53 746
Lithium						
Oxides	tonnes	569	144	7	41	39
Carbonate	tonnes	193	123	50	102	86
Magnesite and magnesia						
Magnesite	tonnes	518	470	745	1 163	1 744
Magnesia	tonnes	9 662	14 497	28 042	14 869	14 017
Manganese						
Ores and concentrates	tonnes	65	97	129	101	284
Metal (a)	tonnes	* 2 200	* 2 000	* 2 100	* 1 600	* 1 200
Mercury	kilograms	178 571	9 321	5 368	2 991	3 405
Mica	tonnes	3 944	4 137	4 238	3 639	4 680
Molybdenum						
Ores and concentrates	tonnes	35	305	3	64	—
Metal	tonnes	433	572	403	375	472
Nepheline-syenite	tonnes	204	291	337	403	311
Nickel						
Mattes, sinters etc	tonnes	107	389	157	111	381
Scrap	tonnes	12 693	19 361	17 405	33 614	20 994
Unwrought	tonnes	15 834	18 639	28 994	30 322	31 742
Unwrought alloys	tonnes	4 753	4 530	6 025	6 711	7 324
Crude petroleum	tonnes	43 550 953	41 591 305	34 304 184	33 679 090	35 581 067
Natural gas (c)	tonnes	11 160 939	14 461 473	15 239 637	11 325 170	8 562 644
Perlite	tonnes	414	(d) 1 059	(d) 1 116	(d) 1 228	(d) 1 459
Phosphate rock						
Calcium phosphates	tonnes	3 506	2 459	3 716	3 171	4 131
Platinum metals						
Platinum	kilograms	43 177	24 464	37 836	55 114	42 712
Palladium	kilograms	53 091	42 864	50 917	55 864	55 322
Other platinum metals	kilograms	20 044	23 021	17 319	18 945	17 843
Waste and scrap	kilograms	4 273 222	527 862	287 198	1 066 729	1 193 612
Potash						
Sulphate	tonnes	443	71	108	118	428
Chloride (a)	tonnes	* 205 600	* 339 000	* 429 000	* 440 000	* 504 000
Other potassic fertilisers	tonnes	228	420	5 283	15 732	29 558
Rare earths						
Metals (e)	tonnes	54	46	272	54	65
Cerium compounds	tonnes	105	182	149	273	48
Other rare earth compounds (f)	tonnes	459	614	347	214	220
Ferro-cerium and other pyrophoric alloys	tonnes	6	37	48	79	40
Salt	tonnes	449 303	450 246	489 633	396 155	497 670
Sillimanite minerals	tonnes	1 414	1 378	1 761	1 141	1 459
Silver						
Ores and concentrates	kilograms	1 338	2 035	206	—	2 174
Metal	kilograms	943 522	2 579 909	3 937 294	3 197 152	4 219 571
Waste and scrap	kilograms	8 412 093	5 160 290	11 649 846	19 737 958	17 177 345
Sulphur and pyrites						
Sulphur, crude	tonnes	2 545	41 491	101 964	37 239	27 018
Sulphur, refined	tonnes	38 723	1 198	3 686	14 609	7 560
Sulphur, sublimed and precipitated	tonnes	1 902	1 349	2 151	21 385	7 359
Talc	tonnes	2 402	3 074	3 171	5 026	4 681
Tantalum and niobium						
Tantalum	tonnes	72	191	97	336	43
Niobium (g)	tonnes	23	45	72	29	142
Tin						
Concentrates	tonnes	61	163	58	241	86
Unwrought	tonnes	928	1 856	1 797	2 092	1 726
Unwrought alloys	tonnes	537	389	545	246	319
Scrap	tonnes	22 597	13 115	4 414	3 435	1 526

United Kingdom

Exports continued

Commodity	Units	2009	2010	2011	2012	2013
Titanium						
Metal	tonnes	9 555	12 060	11 926	11 541	11 493
Oxides	tonnes	203 873	208 518	223 190	142 135	169 548
Tungsten						
Ores and concentrates	tonnes	3	29	35	102	67
Metal	tonnes	1 541	1 650	2 135	1 674	2 448
Carbide	tonnes	80	41	597	463	400
Vanadium						
Pentoxide	tonnes	487	694	6	0	—
Metal	tonnes	18	23	...	...	...
Zinc						
Ores and concentrates	tonnes	11 418	8 405	9 714	5 561	4 720
Unwrought	tonnes	3 600	3 580	2 724	1 823	2 138
Unwrought alloys	tonnes	13 578	14 561	12 737	13 580	11 251
Scrap	tonnes	6 030	14 903	12 545	9 897	4 375
Zirconium						
Concentrates	tonnes	742	1 405	1 661	818	1 037
Metal	tonnes	19	90	102	213	66

Notes

- (a) BGS estimates, based on known imports into certain countries
- (b) Mainly barites with some witherite
- (c) Tonnes of oil equivalent, converted from GWh using 85.985 tonnes of oil equivalent to 1 GWh. Source: Department of Energy and Climate Change
- (d) Figure also includes vermiculite and chlorites
- (e) Including yttrium and scandium
- (f) Including yttrium and scandium compounds
- (g) Including rhenium

## Imports

Commodity	Units	2009	2010	2011	2012	2013
Primary aggregates	tonnes	2 054 272	2 239 950	2 062 760	1 792 148	923 566
Aluminium and bauxite						
Bauxite	tonnes	37 461	41 650	41 497	33 925	41 256
Alumina	tonnes	352 250	229 158	110 265	56 724	50 376
Alumina hydrate	tonnes	98 516	87 278	90 065	72 468	80 674
Unwrought	tonnes	304 621	138 975	201 428	144 629	144 616
Unwrought alloys	tonnes	43 601	62 686	62 784	64 561	70 720
Scrap	tonnes	117 651	126 584	109 122	106 654	113 461
Antimony						
Metal	tonnes	88	45	121	237	260
Oxide	tonnes	1 548	2 598	1 785	1 750	1 688
Arsenic						
Metallic arsenic	tonnes	60	7	5	15	11
Barytes						
Barium minerals (a)	tonnes	61 308	89 474	99 872	88 042	102 274
Bentonite and fuller's earth						
Bentonite	tonnes	140 301	141 849	200 332	183 343	173 094
Sepiolite	tonnes	70 651	...	...	...	...
Bismuth						
Metal	tonnes	310	366	411	481	441
Bromine	kilograms	6 534 300	5 787 829	9 485 963	7 817 484	6 833 649
Cadmium						
Metal	tonnes	246	470	542	229	609
Oxide	tonnes	181	309	281	169	182
Cement						
Cement clinkers	tonnes	206 857	201 308	208 595	206 086	290 071
Portland cement	tonnes	1 718 146	1 759 841	1 746 862	1 429 848	1 776 713
Other cement	tonnes	30 815	92 031	100 453	31 045	32 498
Chromium						
Ores and concentrates	tonnes	33 867	7 084	10 572	9 124	10 033
Metal	tonnes	2 904	3 007	2 346	1 663	1 751

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Coal						
Anthracite	tonnes	207 327	187 246	193 474	29 186	23 059
Other coal	tonnes	36 553 574	23 227 529	31 627 894	42 069 614	44 867 788
Coal	tonnes	36 760 900	23 414 775	31 821 368	42 098 800	44 890 847
Briquettes	tonnes	9 021	11 169	21 142	15 004	14 954
Cobalt						
Ore	tonnes	200	143	124	125	137
Metal	tonnes	3 928	5 963	6 093	6 197	5 215
Oxides	tonnes	168	198	256	164	180
Copper						
Scrap	tonnes	18 549	27 495	29 010	27 214	25 055
Unwrought, unrefined	tonnes	3 034	2 039	1 267	147	409
Unwrought, refined	tonnes	45 249	40 708	34 627	38 674	34 723
Unwrought alloys	tonnes	4 066	5 688	5 498	5 957	12 098
Diamond						
Unsorted	Carats	8 348 854	8 703 907	8 484 526	9 238 531	12 754 564
Gem, rough	Carats	44 064 081	40 559 260	38 472 604	33 227 748	29 495 262
Gem, cut	Carats	868 406	761 455	18 292 931	7 009 031	1 494 267
Industrial	Carats	3 321 670	7 299 364	10 236 376	7 747 613	6 399 457
Dust	Carats	88 148 090	111 136 020	32 411 894	26 886 717	25 157 153
Diatomite (b)	tonnes	22 014	18 649	20 042	19 752	19 713
Feldspar	tonnes	9 299	17 584	16 750	21 610	24 568
Fluorspar	tonnes	6 436	1 294	45 327	19 739	(c)* 15 600
Gold						
Metal	kilograms	1 166 948	800 602	1 012 882	1 052 573	334 032
Waste and scrap	kilograms	213 440	65 833	71 449	164 833	101 612
Graphite	tonnes	7 850	6 989	6 869	4 114	4 951
Gypsum						
Crude	tonnes	396 138	216 605	539 327	490 661	376 972
Calcined	tonnes	60 337	54 209	46 526	47 545	33 620
Iodine	kilograms	1 075 328	1 253 806	1 426 239	1 573 126	1 135 699
Iron ore						
Burnt pyrites	tonnes	232	—	598	150	193
Iron ore	tonnes	9 185 919	10 597 085	9 175 254	10 062 173	14 136 967
Iron, steel and ferro-alloys						
Pig iron	tonnes	19 703	41 959	69 095	55 845	38 057
Sponge and powder	tonnes	17 483	97 745	147 870	176 638	33 518
Ferro-alloys	tonnes	160 285	208 817	225 819	212 787	216 722
Ferro-chrome	tonnes	34 884	58 398	70 191	65 219	48 587
Ferro-silico-chrome	tonnes	13	9	362	723	163
Ferro-silico-magnesium	tonnes	512	931	1 328	1 360	1 211
Ferro-manganese	tonnes	49 700	46 985	39 159	47 706	59 517
Ferro-silico-manganese	tonnes	37 114	49 280	51 928	36 661	43 823
Ferro-molybdenum	tonnes	325	322	573	458	259
Ferro-nickel	tonnes	2 777	6 284	13 888	17 916	13 439
Ferro-niobium	tonnes	686	859	395	250	987
Ferro-phosphorus	tonnes	282	836	1 134	474	810
Ferro-silicon	tonnes	31 091	43 703	45 918	39 351	42 966
Ferro-titanium and ferro-silico-titanium	tonnes	396	274	187	902	687
Ferro-tungsten and ferro-silico-tungsten	tonnes	26	48	44	34	30
Ferro-vanadium	tonnes	209	340	368	246	339
Other ferro-alloys	tonnes	2 296	595	388	1 520	3 904
Silicon metal	tonnes	68 109	99 651	101 005	97 454	97 524
Ingots, blooms, billets	tonnes	212 829	714 541	1 185 242	835 691	443 657
Scrap	tonnes	213 818	270 986	423 744	284 986	302 580
Kaolin	tonnes	77 504	95 865	102 396	88 505	85 534
Lead						
Unwrought, base bullion (d)	tonnes	130 312	151 653	127 691	168 669	145 762
Unwrought, refined	tonnes	14 179	14 359	18 468	19 605	25 153
Unwrought, other	tonnes	15 479	14 359	18 601	19 606	25 406
Unwrought alloys	tonnes	1 798	787	1 287	1 331	1
Scrap	tonnes	4 962	8 858	4 792	3 317	4 169
Lithium						
Oxides	tonnes	914	218	215	119	281
Carbonate	tonnes	622	427	376	344	364

## United Kingdom

## Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Magnesite and magnesia						
Magnesite	tonnes	3 567	8 640	7 903	5 059	5 015
Magnesia	tonnes	43 873	49 076	52 263	70 330	69 822
Manganese						
Ores and concentrates (e)	tonnes	941	1 517	1 656	1 597	2 168
Metal	tonnes	4 123	6 619	5 444	3 721	3 796
Mercury	kilograms	1 121	22 065	425	21 138	41 836
Mica						
Unmanufactured	tonnes	328	43	243	407	131
Ground	tonnes	6 396	7 341	7 926	9 203	7 307
Waste	tonnes	49	902	0	0	24
Molybdenum						
Ores and concentrates	tonnes	9 007	12 581	15 844	16 041	14 396
Metal	tonnes	707	1 099	1 415	1 487	1 271
Oxides	tonnes	510	1 638	2 316	1 971	2 101
Nepheline-syenite	tonnes	32 462	39 092	35 573	30 744	3 272
Nickel						
Mattes, sinters etc	tonnes	25 929	50 263	58 519	57 108	63 129
Ores and concentrates	tonnes	150	16	1	0	864
Scrap	tonnes	9 593	8 154	6 741	9 237	9 887
Unwrought	tonnes	8 003	14 200	12 707	11 521	8 130
Unwrought alloys	tonnes	3 596	3 310	4 644	4 771	4 309
Crude petroleum	tonnes	50 656 965	50 447 008	53 647 056	56 471 508	48 380 730
Natural gas (f)	tonnes	38 706 148	50 244 561	50 045 076	46 191 572	45 144 017
Perlite	tonnes	36 315	(g) 58 456	(g) 98 437	(g) 66 298	(g) 59 424
Phosphate rock						
Calcium phosphates	tonnes	81 205	68 902	86 333	90 653	89 196
Phosphate rock	tonnes	5 600	9 873	15 885	15 314	3 186
Platinum metals						
Platinum	kilograms	30 339	58 659	46 092	54 073	39 973
Palladium	kilograms	36 652	73 184	42 167	59 803	49 348
Other platinum metals	kilograms	6 713	9 487	7 768	4 374	6 953
Waste and scrap	kilograms	1 100 117	819 769	1 556 736	2 163 943	1 186 431
Potash						
Sulphate	tonnes	15 766	15 766	13 232	10 795	10 905
Chloride	tonnes	80 842	270 096	153 141	161 388	149 121
Other potassic fertilisers	tonnes	10 422	10 565	2 373	7 899	8 484
Rare earths						
Metals (h)	tonnes	99	119	79	65	256
Cerium compounds	tonnes	612	1 119	1 713	485	633
Other rare earth compounds (i)	tonnes	103	322	629	518	1 308
Ferro-cerium and other pyrophoric alloys	tonnes	148	150	79	14	50
Salt	tonnes	410 434	1 288 253	1 814 865	418 028	738 670
Sillimanite minerals						
Sillimanite minerals (j)	tonnes	7 763	7 419	12 485	10 562	6 058
Mullite	tonnes	5 255	8 276	3 491	4 588	3 746
Silver						
Ores and concentrates	kilograms	1 106	9 737	1 209	6 287	72 454
Metal	kilograms	6 649 190	3 278 015	3 686 011	8 525 994	6 097 865
Waste and scrap	kilograms	3 311 165	4 137 096	13 713 610	5 946 307	6 668 845
Sulphur and pyrites						
Pyrites	tonnes	104	2 581	1 734	168	435
Sulphur, crude	tonnes	74	274	590	1 125	1 374
Sulphur, refined	tonnes	6 211	10 201	10 391	8 670	8 485
Sulphur, sublimed and precipitated	tonnes	473	767	691	698	946
Talc	tonnes	39 520	50 309	53 339	57 751	53 099
Tantalum and niobium						
Tantalum	tonnes	145	284	176	144	203
Niobium (k)	tonnes	98	104	176	130	62
Tin						
Unwrought	tonnes	4 522	4 327	4 186	3 850	3 484
Unwrought alloys	tonnes	370	365	396	1 113	4 049
Scrap	tonnes	121	196	121	147	69

Imports continued

Commodity	Units	2009	2010	2011	2012	2013
Titanium						
Titanium minerals	tonnes	112 091	90 622	32 127	117 860	104 134
Metal	tonnes	23 178	20 681	69 844	33 943	27 099
Oxides	tonnes	53 864	59 460	62 311	63 058	75 316
Titanium slag	tonnes	127 224	187 913	...	...	...
Tungsten						
Ores and concentrates	tonnes	35	2	25	3	8
Metal	tonnes	1 477	1 676	1 999	1 888	1 906
Carbide	tonnes	614	1 111	3 622	1 245	878
Vanadium						
Pentoxide	tonnes	84	5	17	21	0
Metal	tonnes	112	197	376	261	...
Zinc						
Unwrought	tonnes	84 594	97 066	85 516	77 847	98 448
Unwrought alloys	tonnes	1 869	2 973	9 306	8 917	8 469
Scrap	tonnes	344	447	339	412	533
Zirconium						
Concentrates (I)	tonnes	6 386	8 450	14 709	8 928	6 879
Metal	tonnes	203	411	616	482	513

## Notes

- (a) Mainly barites with some witherite
- (b) Officially recorded under the heading 'Siliceous fossil meals and similar siliceous earths'. Excludes flux calcined diatomite
- (c) BGS estimates, based on known exports from certain countries
- (d) Includes a substantial precious metal content, mainly silver
- (e) Including manganeseiferous iron ore
- (f) Tonnes of oil equivalent, converted from GWh using 85.985 GWh to 1 tonne of oil equivalent. Source: Department of Energy and Climate Change
- (g) Figure also includes vermiculite and chlorites
- (h) Including yttrium and scandium
- (i) Including yttrium and scandium compounds
- (j) Andalusite, kyanite and sillimanite
- (k) Including rhenium
- (l) Mainly zircon



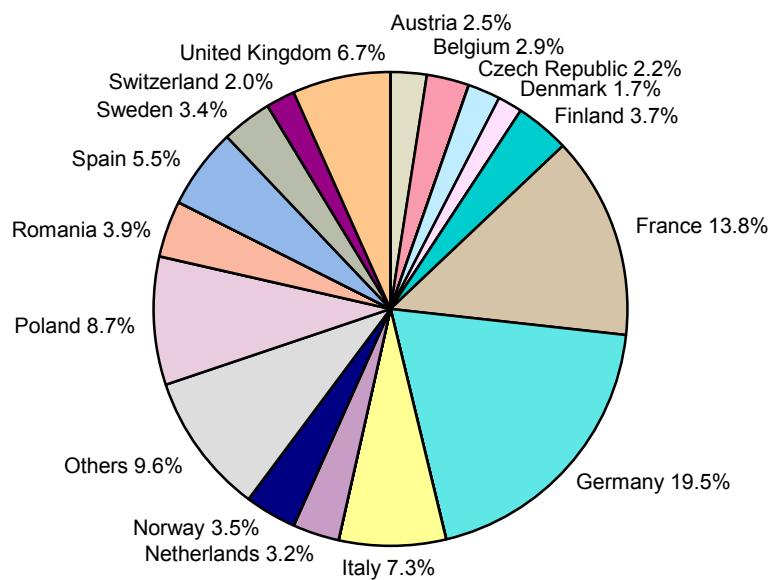
## **STATISTICAL INFORMATION BY COMMODITY**

Aggregates

## 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 accurately. 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.

**EU36 Production of aggregates 2013**



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

tonnes

Country	2009	2010	2011	2012	2013
<b>Austria</b>					
Sand and gravel (a)	30 120 263	30 182 855	35 507 353	31 285 739	30 120 263
Crushed rock (a)	29 784 794	24 399 380	26 866 150	26 348 996	25 866 612
<b>Belgium</b>					
Sand and gravel	* 19 000 000	* 22 000 000	* 23 000 000	* 21 000 000	* 21 000 000
Crushed rock	* 43 000 000	* 44 000 000	* 49 000 000	* 46 000 000	* 45 000 000
<b>Bulgaria</b>					
Sand and gravel	12 882 651	5 199 000	10 054 205	9 293 819	8 433 198
Crushed rock	15 667 880	16 876 900	17 979 678	18 281 353	20 897 466
<b>Croatia</b>					
Sand and gravel	6 583 880	3 646 572	5 012 106	4 345 920	3 779 919
<b>Cyprus</b>					
Crushed rock	11 467 987	12 981 444	11 816 397	7 308 056	4 561 152
<b>Czech Republic</b>					
Sand and gravel	23 974 000	19 327 000	21 424 000	18 785 000	17 363 000
Crushed rock	41 302 000	37 260 000	36 717 000	32 535 000	33 004 000
<b>Denmark</b>					
Sand and gravel	36 240 000	33 978 000	42 878 000	39 332 000	* 38 000 000
Crushed rock	260 000	240 000	337 000	293 000	243 000

## Production continued

tonnes

Country	2009	2010	2011	2012	2013
Estonia					
Sand and gravel	3 911 980	3 469 220	3 568 680	3 954 600	5 185 580
Crushed rock	6 034 500	5 849 600	5 919 500	6 170 200	6 242 500
Finland					
Sand and gravel	* 37 000 000	* 36 000 000	* 36 000 000	* 34 000 000	* 31 960 000
Crushed rock	* 47 000 000	* 48 000 000	* 53 000 000	* 54 000 000	* 52 000 000
France					
Sand and gravel	146 290 000	141 290 000	148 680 000	138 280 000	* 129 983 200
Crushed rock	209 440 000	201 860 000	204 980 000	196 600 000	* 184 804 000
Germany					
Sand and gravel	245 000 000	239 000 000	252 000 000	235 300 000	236 000 000
Crushed rock	217 000 000	208 000 000	229 000 000	211 000 000	207 000 000
Greece					
* 65 000 000	* 41 000 000	* 33 000 000	* 30 000 000	* 31 000 000	
Hungary					
Sand and gravel	35 591 131	25 059 000	23 361 598	* 22 250 000	* 27 000 000
Crushed rock	15 808 088	11 390 100	9 128 819	* 9 000 000	* 10 000 000
Iceland					
Sand and gravel	599 816	201 280	221 920	232 112	291 384
Ireland, Republic of					
Sand and gravel	* 15 000 000	* 10 000 000	* 7 000 000	* 7 000 000	* 9 000 000
Crushed rock	* 50 000 000	* 40 000 000	* 25 000 000	* 22 000 000	* 21 000 000
Italy					
Sand and gravel (a)	164 218 753	150 996 352	131 770 340	105 221 496	102 381 384
Crushed rock (a)	84 717 579	80 336 696	76 793 269	74 169 360	63 782 880
Latvia					
Sand and gravel	6 520 363	6 016 126	7 855 125	8 358 839	7 234 582
Crushed rock	818 390	1 375 197	2 050 976	2 072 775	2 664 580
Lithuania					
Sand and gravel	5 029 476	5 655 401	5 776 850	5 081 166	6 930 916
Crushed rock	2 849 122	3 281 330	4 456 089	3 241 831	3 801 100
Montenegro					
Sand and gravel	183 235	255 678	133 947	201 896	176 435
Crushed rock	186 221	265 066	167 405	112 630	299 453
Netherlands					
Sand and gravel	63 350 000	56 865 000	71 320 000	* 71 000 000	* 72 000 000
Norway					
Sand and gravel	13 047 000	13 011 000	13 215 000	14 262 000	13 984 000
Crushed rock	51 378 000	54 134 000	63 855 000	67 670 000	66 259 000
Poland					
Sand and gravel (b)	* 141 114 000	* 157 236 000	* 176 000 000	* 145 000 000	* 141 000 000
Crushed rock	58 245 900	62 886 200	88 696 900	64 859 600	57 945 103
Portugal					
Sand and gravel	10 191 339	8 569 474	7 658 205	6 093 188	5 893 671
Crushed rock	56 509 630	50 628 649	48 737 535	32 966 351	21 577 096
Romania					
Sand and gravel	23 199 337	22 085 231	25 319 433	21 068 344	50 829 386
Crushed rock	4 835 584	3 774 309	6 189 078	5 593 429	36 888 195
Slovakia					
Sand and gravel	6 919 826	6 931 873	6 020 641	3 794 873	3 953 525
Crushed rock	15 233 400	14 909 400	13 834 800	10 157 400	10 009 000
Slovenia					
Sand and gravel	3 001 291	2 422 771	1 899 770	1 707 455	2 143 013
Crushed rock	13 609 728	12 072 532	9 626 791	7 557 431	7 067 895
Spain					
Sand and gravel	96 000 000	72 000 000	59 000 000	41 000 000	* 35 000 000
Crushed rock	160 000 000	170 000 000	144 000 000	117 000 000	* 90 000 000
Sweden					
Sand and gravel	14 400 000	* 17 000 000	* 17 000 000	13 809 028	11 399 554
Crushed rock	57 500 000	* 57 000 000	* 58 000 000	71 839 600	66 621 935
Switzerland					
Sand and gravel	* 37 000 000	* 40 000 000	* 40 000 000	* 40 000 000	* 40 000 000
Crushed rock	* 5 000 000	* 5 000 000	* 5 000 000	* 5 000 000	* 5 000 000

## Aggregates

### Production continued

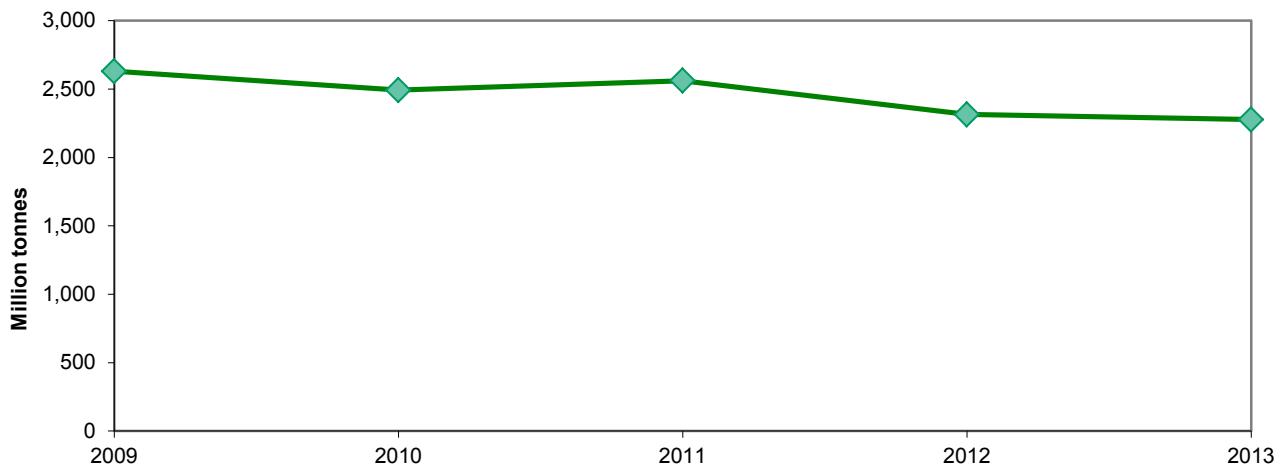
tonnes

Country	2009	2010	2011	2012	2013
United Kingdom					
Sand and gravel	66 226 000	61 700 000	63 100 000	56 600 000	58 000 000
Crushed rock (c)	104 626 000	94 203 000	102 800 000	94 800 000	94 300 000
EU36 Total	2 630 000 000	2 492 000 000	2 562 000 000	2 315 000 000	2 277 000 000

### Notes

- (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 Prodcom codes 0812 1190, 0812 1210, 0812 1230, 0812 1250 and 0812 1290
- (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 EU36 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) Includes an estimate for small producers
  - (c) Includes small quantities for other purposes in Northern Ireland

### EU36 Production of aggregates 2009 - 13



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

tonnes

Country	2009	2010	2011	2012	2013
Albania	9 410	887	8 321	24 363	2 517
Austria	2 634 211	2 828 621	2 646 753	2 387 082	2 659 189
Belgium	13 354 957	12 427 043	13 083 592	12 886 680	12 158 112
Bulgaria	76 129	262 166	325 857	513 135	377 613
Croatia	3 087 216	1 858 348	992 712	586 991	556 143
Cyprus	38 469	—	2	78	67
Czech Republic	597 101	683 786	1 010 339	645 164	701 217
Denmark	955 036	907 149	961 853	1 224 741	1 433 979
Estonia	503 048	810 298	745 353	689 854	625 329
Finland	645 609	1 396 025	2 020 822	953 926	712 702
France	7 586 323	8 142 237	7 226 413	7 769 899	8 224 326
Germany	27 973 749	25 337 558	29 162 240	25 160 776	21 825 199
Greece	59 216	60 851	76 495	118 173	318 563

## Exports continued

Country	2009	2010	2011	2012	2013
Hungary	1 294 700	1 191 521	1 137 425	1 003 456	1 122 883
Iceland	29 712	44 512	85 854	92 094	81 265
Ireland, Republic of	40 626	13 318	16 005	88 530	147 770
Italy	1 308 016	1 507 704	1 071 579	1 073 466	1 120 193
Latvia	121 260	101 406	59 930	19 683	49 235
Lithuania	163 850	57 255	139 291	118 463	137 961
Luxembourg	132 842	160 773	161 019	165 025	152 062
Macedonia	...	...	39 217	47 352	59 365
Montenegro	127 600	112 522	32 451	15 527	45 091
Netherlands	7 140 000	9 311 275	15 472 833	15 140 085	14 071 676
Norway	13 843 722	16 877 617	20 858 955	19 761 572	18 103 600
Poland	902 193	1 031 013	1 058 307	962 169	1 565 938
Portugal	101 421	67 505	120 946	71 399	353 360
Romania	160 241	360 161	255 970	438 328	889 084
Serbia	334 517	127 309	497 637	485 266	211 015
Slovakia (a)	* 768 000	* 598 000	* 615 008	* 525 000	* 534 000
Slovenia	451 012	488 256	426 686	406 872	562 005
Spain	1 060 445	1 153 923	1 306 103	1 026 358	953 044
Sweden	1 867 320	2 248 515	1 624 154	1 602 379	1 234 782
Switzerland	194 006	193 312	188 183	274 029	215 232
Turkey	908 010	955 765	1 237 704	1 299 391	1 534 475
United Kingdom	10 714 861	10 992 431	10 800 338	8 823 773	9 223 816

## Notes

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

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

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

Country	2009	2010	2011	2012	2013
Albania	20 791	15 253	20 645	26 226	41 918
Austria	2 924 359	2 284 169	2 184 095	2 521 253	2 420 461
Belgium	22 175 332	22 484 726	23 911 051	22 934 219	20 869 873
Bulgaria	22 189	14 843	15 075	18 661	50 149
Croatia	1 871 236	926 574	1 366 197	1 689 891	1 446 658
Cyprus	11 564	2 648	1 517	16 792	1 432
Czech Republic	398 613	353 419	357 455	352 553	405 141
Denmark	2 932 586	2 777 604	3 531 658	3 934 656	3 688 045
Estonia	1 006 376	1 395 122	1 302 589	1 215 348	1 308 292
Finland	330 108	284 066	52 920	96 804	137 333
France	10 907 837	9 838 820	11 224 302	10 814 082	10 481 744
Germany	12 866 444	11 936 108	13 786 596	11 636 491	9 868 728
Greece	177 887	13 538	16 892	4 102	5 633
Hungary	446 187	473 730	369 445	515 141	1 028 054
Iceland	4 846	6 492	7 524	32 327	14 981
Ireland, Republic of	781 470	652 594	695 162	817 052	840 968
Italy	3 654 570	3 057 378	2 135 306	966 588	1 035 371
Latvia	565 877	467 414	611 872	895 335	1 212 414
Lithuania	695 973	849 462	1 046 066	991 388	1 678 898
Luxembourg	1 757 604	2 097 069	2 211 572	2 036 554	1 934 764
Macedonia	894	1 029	1 180	3 403	1 085
Malta	47 363	37 324	28 813	38 373	51 082
Montenegro	44 639	26 703	12 574	4 709	1 933
Netherlands	* 25 007 000	26 065 573	28 239 777	23 457 644	22 724 647
Norway	66 884	82 706	98 721	107 087	83 631
Poland	5 349 230	5 014 564	9 022 494	5 766 695	3 143 654
Portugal	175 576	224 514	255 625	242 987	185 020
Romania	205 133	248 484	370 249	512 538	331 523
Serbia	12 664	15 910	8 759	9 907	14 742
Slovakia	692 609	666 380	527 259	419 992	385 376

Aggregates

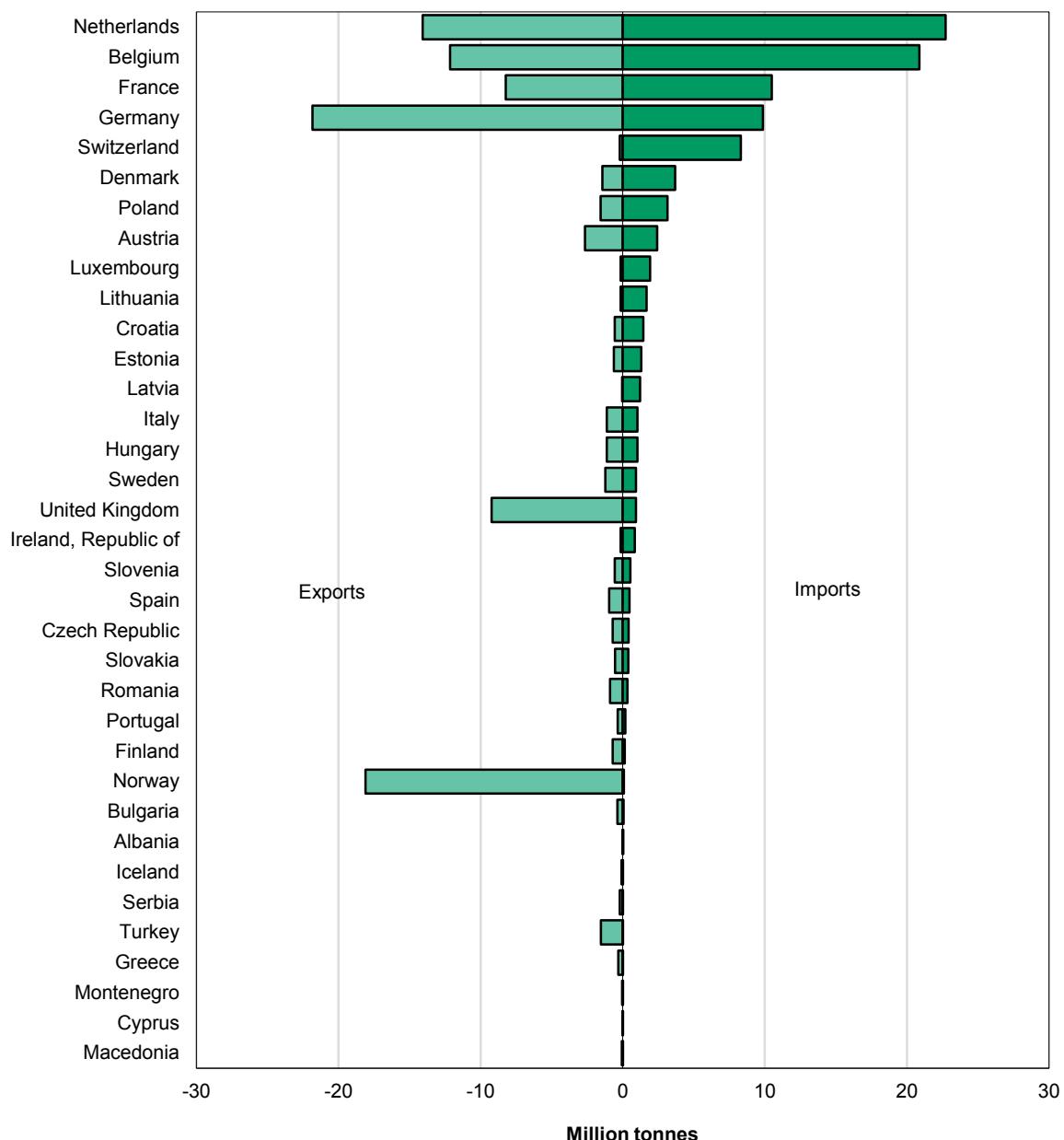
Imports continued

Country	2009	2010	2011	2012	2013
Slovenia	1 165 083	771 814	486 627	461 601	531 904
Spain	889 156	982 128	677 289	618 871	475 414
Sweden	355 022	533 148	802 173	944 006	924 873
Switzerland	7 246 506	8 010 059	8 566 572	8 611 775	8 315 656
Turkey	3 636	9 372	3 487	7 129	10 516
United Kingdom	2 054 272	2 239 950	2 062 760	1 792 148	923 566

Note

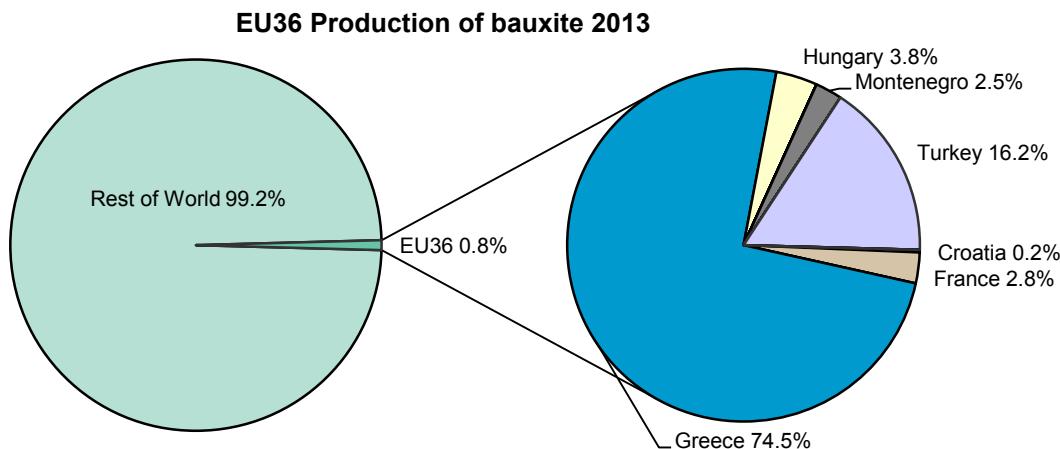
(1) The figures in this table include construction sands; pebbles, gravel shingle, flint; crushed rock; granules, chippings and powders covered by Harmonised System codes 2505.90, 2517.10, 2517.41 and 2517.49

**Aggregates - EU36 trade in 2013**



## Bauxite

- Bauxite is the only source of aluminium that is currently mined and it is formed by deep chemical weathering of rocks in tropical to sub-tropical climates.
- 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 was the world's largest producer in 2013, with 27 per cent of the total world output. The second largest producer was Indonesia (19 per cent), followed by China (17 per cent), Brazil (11 per cent), India (seven per cent) and Guinea (six per cent).



## Production of bauxite

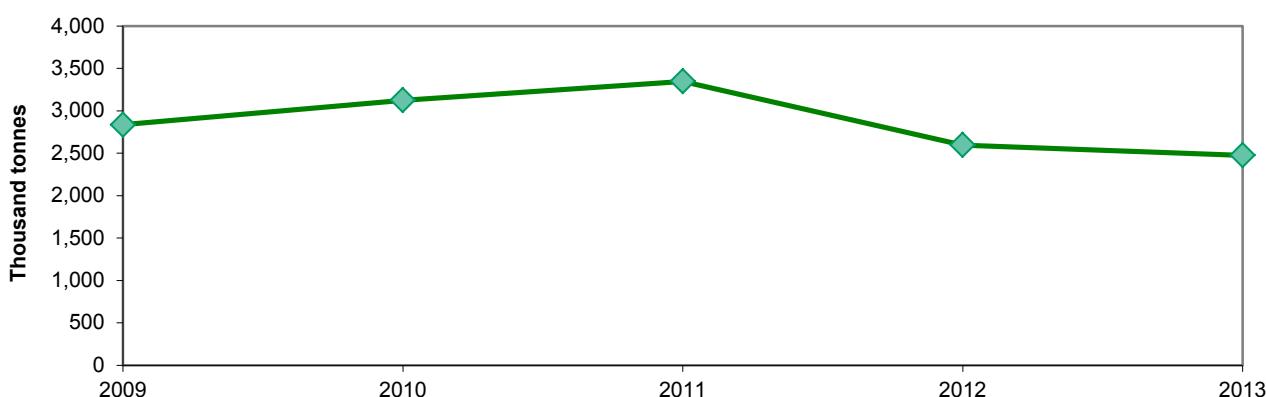
tonnes

Country	2009	2010	2011	2012	2013
Croatia	500	2 300	4 800	5 700	* 6 000
France	129 700	93 100	80 800	69 500	* 70 000
Greece	1 935 000	1 902 000	2 324 000	1 816 000	1 844 000
Hungary	317 000	365 000	277 800	255 000	94 000
Montenegro	45 779	61 205	158 614	—	61 154
Turkey	406 700	700 000	500 000	450 000	* 400 000
EU36 Total	2 835 000	3 124 000	3 346 000	2 596 000	2 475 000

Note

(1) This table includes production of refractory bauxite

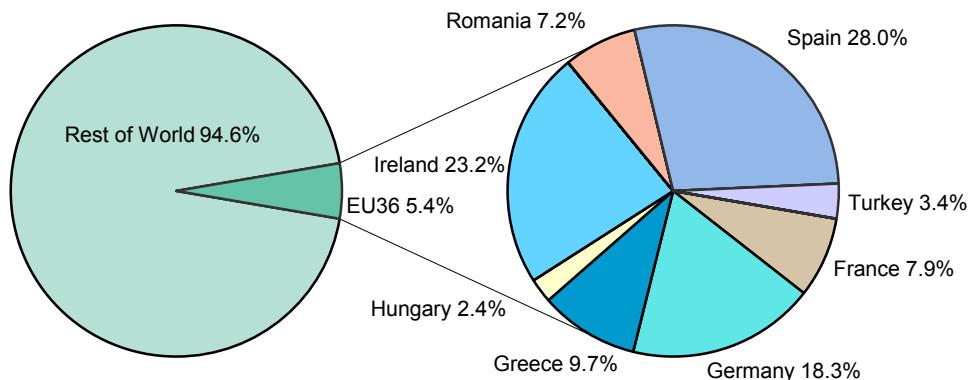
## EU36 Production of bauxite 2009 - 13



## 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 is used in the paper, petroleum, paint and other industries.
- China was the world's largest producer of alumina in 2013, with 44 per cent of the total world output. Australia was the second largest producer (21 per cent) followed by Brazil (10 per cent), USA and India (four per cent each).

**EU36 Production of alumina 2013**



### Production of alumina

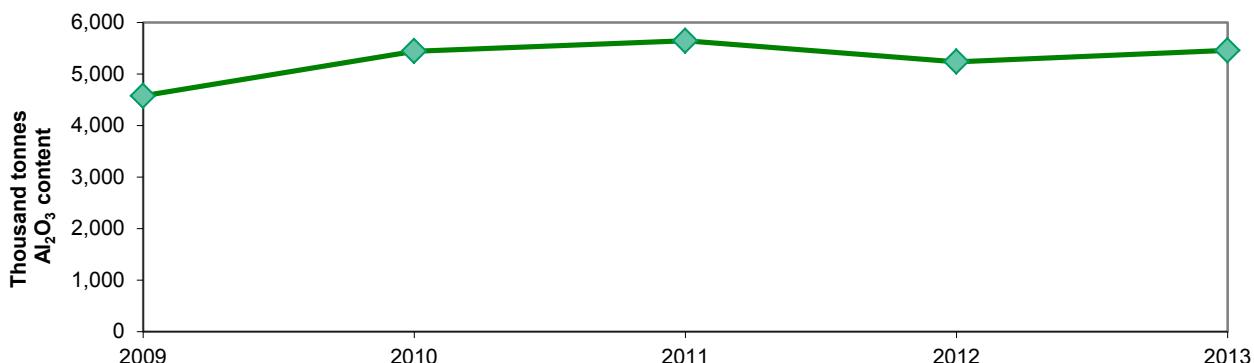
tonnes ( $\text{Al}_2\text{O}_3$  content)

Country	2009	2010	2011	2012	2013
France	348 000	481 000	470 000	430 000	430 000
Germany	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000	* 1 000 000
Greece	642 900	661 882	683 030	653 011	527 500
Hungary	* 185 000	* 214 000	* 250 000	* 170 000	* 130 000
Ireland, Republic of	806 000	1 211 600	1 249 300	1 250 600	1 264 689
Italy	92 000	—	—	—	—
Montenegro	58 528	—	—	—	—
Romania	44 000	414 000	484 000	414 000	391 000
Spain	* 1 300 000	* 1 300 000	* 1 300 000	* 1 100 000	1 530 000
Turkey	* 100 000	* 160 000	* 210 000	* 220 000	* 186 000
EU36 Total	4 576 000	5 442 000	5 646 000	5 238 000	5 459 000

#### Notes

- (1) Where possible, figures in this table show the alumina equivalent ( $\text{Al}_2\text{O}_3$ ) of total hydrate produced, whether or not calcined
- (2) The figures in this table represent alumina produced from bauxite. Alumina-rich materials can also be derived from salt slags formed during the production of secondary aluminum

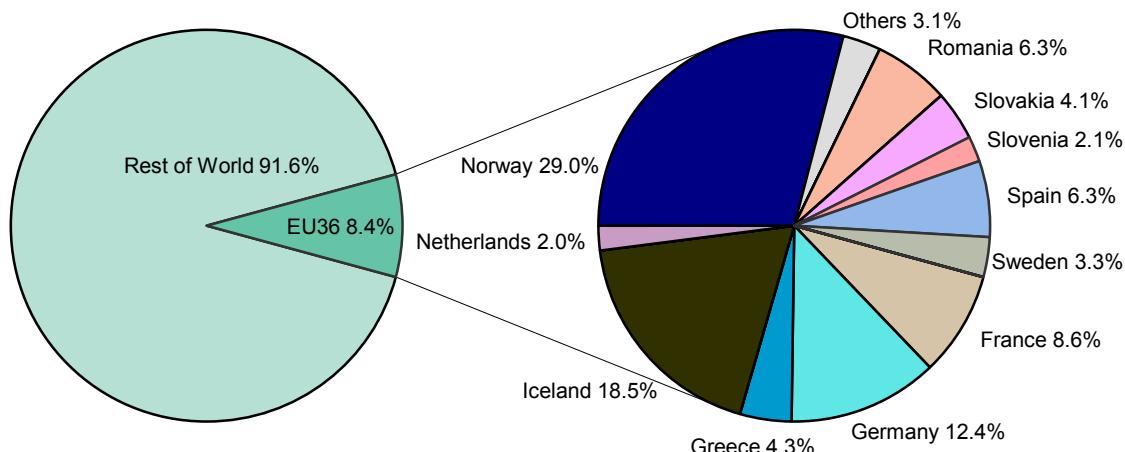
**EU36 Production of alumina 2009 - 13**



## Aluminium metal

- Aluminium is a strong, lightweight metallic element that has many applications. The chief uses are in transportation, packaging and construction.
- China was the world's largest producer in 2013, with 47 per cent of the total world output. The second largest was Russia (eight per cent), followed by Canada (six per cent), USA and United Arab Emirates (four per cent each).

**EU36 Production of primary aluminium 2013**



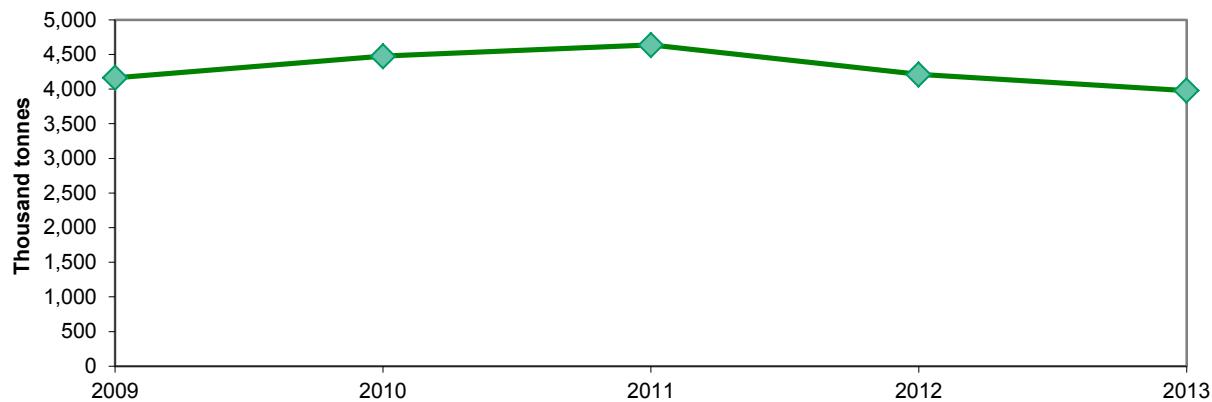
## Production of primary aluminium

tonnes

Country	2009	2010	2011	2012	2013
Croatia	—	666	600	—	—
France	345 000	356 000	334 000	349 000	343 000
Germany	291 750	402 480	432 472	410 413	492 368
Greece	134 737	137 000	165 150	165 050	169 480
Iceland	804 605	825 803	780 853	802 827	736 429
Italy	165 800	129 500	141 900	99 600	—
Montenegro	63 960	82 043	92 838	74 813	47 951
Netherlands	165 000	217 000	* 200 000	86 300	81 000
Norway	1 098 200	1 090 000	1 201 000	1 110 900	1 154 900
Romania	228 630	241 000	261 000	249 000	250 000
Slovakia	149 604	163 000	162 840	160 662	163 000
Slovenia	35 148	40 177	75 300	83 300	* 83 000
Spain	329 500	456 500	408 400	386 395	* 250 000
Sweden	69 708	93 000	111 000	129 000	131 000
Turkey	30 000	54 100	56 400	43 700	32 200
United Kingdom	252 000	186 000	213 000	60 000	45 000
EU36 Total	4 164 000	4 474 000	4 637 000	4 211 000	3 979 000

### Note

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

**EU36 Production of primary aluminium 2009 - 13****Exports of bauxite, alumina and aluminium**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Unwrought (a)	526	2 805	3 309	1 940	4 124
Scrap	3 784	5 290	4 670	6 260	5 854
Austria					
Bauxite	546	1	897	11 944	21 832
Alumina	705	14 322	34 555	32 486	15 897
Unwrought	2 332	3 236	2 344	2 465	2 299
Unwrought alloys	98 966	151 559	209 748	211 491	276 249
Scrap	118 028	122 057	105 138	128 589	151 419
Belgium					
Bauxite	44 530	48 683	37 533	36 651	34 078
Alumina	5 666	7 516	21 284	5 218	28 210
Unwrought	121 708	257 888	150 542	95 405	166 743
Unwrought alloys	22 665	14 204	30 285	61 019	74 265
Scrap	219 846	274 819	321 484	311 716	286 908
Bulgaria					
Unwrought alloys	2 775	6 798	7 555	5 866	6 440
Scrap	20 577	31 728	26 302	25 579	22 765
Croatia					
Unwrought	124	2 338	2 674	2 161	2 553
Unwrought alloys	124	1 017	2 055	2 114	2 516
Scrap	15 779	22 346	23 009	23 867	19 095
Cyprus					
Scrap	5 934	6 896	6 310	7 688	5 595
Czech Republic					
Alumina	3 069	3 861	3 659	4 065	5 384
Unwrought (a)	59 913	51 307	53 600	61 017	64 991
Scrap	49 251	71 467	89 690	85 939	55 875
Denmark					
Bauxite	1 568	3 279	6 769	9 432	4 600
Alumina	4 002	4 661	4 958	5 879	4 709
Unwrought alloys	7 505	9 515	7 382	7 440	7 896
Scrap	70 649	73 402	67 000	73 392	73 142
Estonia					
Bauxite	80	...	29 492	23 317	...
Unwrought (a)	8 357	4 132	52	1 220	1 090
Scrap	6 958	65 948	63 880	11 342	10 523
Finland					
Unwrought alloys	8 939	15 346	11 289	14 185	15 200
Scrap	34 910	33 304	38 862	43 221	48 252

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
France					
Bauxite	9 296	12 116	13 594	11 975	11 125
Alumina	178 570	270 769	281 634	309 291	265 798
Alumina hydrate	100 293	131 035	83 054	139 311	97 170
Unwrought	91 682	51 275	71 970	45 172	64 410
Unwrought alloys	125 580	166 807	130 384	127 551	129 161
Scrap	345 372	405 847	425 541	423 298	447 687
Germany					
Bauxite	16 591	26 178	26 306	34 814	22 966
Alumina	382 750	424 236	372 191	369 337	374 471
Alumina hydrate	461 601	551 817	485 074	455 157	463 704
Unwrought	67 356	111 815	83 675	42 580	40 775
Unwrought alloys	288 023	361 396	374 917	361 850	383 882
Scrap	753 218	823 810	947 252	968 539	935 218
Greece					
Bauxite	409 508	436 513	519 999	437 305	337 274
Alumina	412 888	224 607	202 986	320 795	315 348
Alumina hydrate	74 996	99 574	102 136	110 605	160 632
Unwrought	17 533	20 727	19 668	5 925	4 626
Unwrought alloys	57 668	68 924	103 326	102 092	120 261
Scrap	14 681	32 250	27 738	20 367	16 636
Hungary					
Alumina	89 857	112 819	107 937	99 699	78 432
Alumina hydrate	88 515	92 011	71 834	64 000	51 224
Unwrought (a)	26 176	41 719	38 819	36 491	39 897
Scrap	35 060	51 508	66 599	68 156	78 773
Iceland					
Unwrought	805 450	812 981	765 999	787 071	788 366
Scrap	4 467	10 136	6 397	3 799	3 672
Ireland, Republic of					
Alumina	895 034	1 542 563	1 794 148	1 616 065	1 867 541
Alumina hydrate	95 548	124 803	103 631	30 328	55 265
Unwrought alloys	2 455	2 576	3 109	2 684	3 095
Scrap	18 257	22 810	29 261	24 137	29 763
Italy					
Bauxite	4 585	66 218	46 330	93 847	169 411
Alumina	61 223	17 056	16 821	3 424	4 411
Alumina hydrate	1 243	4 346	7 023	6 448	7 809
Unwrought	30 019	49 442	25 882	30 378	23 224
Unwrought alloys	122 294	220 237	286 525	311 381	322 614
Scrap	82 055	107 131	102 696	103 518	106 916
Latvia					
Alumina	203	140	64 225	115 744	14 622
Unwrought alloys	11 772	14 493	21 793	18 481	9 196
Scrap	4 419	5 461	4 414	4 876	4 771
Lithuania					
Alumina	7	22	59	413	2 574
Unwrought alloys	2 614	7 754	7 534	6 363	4 286
Scrap	4 796	5 298	8 952	10 306	12 777
Luxembourg					
Unwrought alloys	85 636	157 473	151 330	145 882	145 487
Scrap	3 785	6 034	6 051	6 902	5 993
Macedonia					
Scrap	1 514	2 351	2 432	2 724	2 833
Malta					
Scrap	1 361	1 865	1 788	2 058	1 811
Montenegro					
Bauxite	17 122	85 623	127 268	26 354	100 291
Unwrought	(a) 82 877	(a) 76 891	108 813	75 180	(a) 48 052
Scrap	1 570	2 045	2 357	2 356	2 337
Netherlands					
Bauxite	* 59 000	26 997	12 739	19 133	68 646
Alumina	62 131	8 665	43 695	9 831	583 016
Alumina hydrate	65 279	76 244	89 612	128 448	159 168
Unwrought	218 141	424 733	390 062	371 106	381 464
Unwrought alloys	191 239	320 263	246 826	203 792	223 326
Scrap	200 650	317 038	322 834	372 917	320 523

## Aluminium and bauxite

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Norway					
Alumina	145	156	187	228	2 715
Unwrought	106 593	74 941	58 478	66 997	57 855
Unwrought alloys	1 249 830	1 420 662	1 370 411	1 287 135	1 196 035
Scrap	80 729	77 216	88 312	76 950	61 112
Poland					
Bauxite	833	448	8 546	—	2
Unwrought (a)	66 065	103 803	111 421	118 356	153 672
Scrap	102 757	123 503	130 472	155 032	151 679
Portugal					
Unwrought alloys	90 869	102 856	59 056	40 526	5 593
Scrap	32 481	51 888	45 775	52 782	40 273
Romania					
Bauxite	161	1 513	2 318	5 274	—
Alumina	99	25 559	38 406	29 070	30 444
Unwrought	50 496	10 312	14 004	6 074	6 534
Unwrought alloys	5 898	51 556	70 697	83 687	90 163
Scrap	20 775	17 733	12 801	14 200	12 046
Serbia					
Unwrought	7 387	17 602	15 353	10 130	10 713
Scrap	10 972	13 574	22 248	20 752	16 939
Slovakia					
Unwrought	77 013	44 989	40 011	576	5 715
Unwrought alloys	110 484	111 769	118 485	80 141	164 465
Scrap	9 441	10 260	14 044	18 207	31 339
Slovenia					
Bauxite	2 537	6 665	5 738	1 576	1 713
Alumina	242 215	239 729	161 747	203 376	196 342
Unwrought alloys	61 800	78 619	95 251	94 531	104 253
Scrap	23 382	33 972	39 961	52 712	50 473
Spain					
Bauxite	4 951	3 628	2 038	1 676	3 118
Alumina	612 933	299 703	391 516	426 925	636 058
Alumina hydrate	163 303	126 398	186 543	282 062	227 359
Unwrought	19 816	26 693	19 248	29 433	42 539
Unwrought alloys	230 539	148 884	175 112	181 026	174 067
Scrap	46 307	66 976	51 518	90 881	94 856
Sweden					
Alumina	14 464	19 037	13 870	10 401	9 818
Unwrought	2 143	195	735	873	1 061
Unwrought alloys	145 554	190 394	182 946	188 063	171 496
Scrap	89 940	88 070	95 632	108 353	103 323
Switzerland					
Alumina	1 240	854	341	538	277
Unwrought (a)	14 444	20 954	23 397	23 439	25 570
Scrap	116 520	131 819	138 643	141 836	149 337
Turkey					
Bauxite	103 317	331 458	158 232	166 744	215 732
Alumina	1 890	190 094	96	—	...
Alumina hydrate	75 837	2 910	21 172	—	—
Unwrought	26 337	42 090	4 868	—	...
Unwrought alloys	9 368	36 994	38 640	36 106	30 280
Scrap	14 483	14 291	12 020	9 905	13 346

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
United Kingdom					
Bauxite	3 873	3 140	5 936	2 929	4 804
Alumina	16 810	5 879	5 114	3 590	3 247
Alumina hydrate (b)	* 4 400	* 2 100	* 2 600	* 10 700	* 5 000
Unwrought	17 688	43 665	49 959	9 597	8 510
Unwrought alloys	305 849	364 612	356 170	279 263	188 996
Scrap	422 574	443 466	440 399	445 730	402 060

## Notes

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

(2) In this table the term 'unwrought' aluminium corresponds to item 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	2009	2010	2011	2012	2013
Albania					
Bauxite	348	5 408	497	...	...
Unwrought	7 579	7 092	7 661	9 843	10 398
Scrap	132	1 268	1 234	548	1 802
Austria					
Bauxite	2 370	8 489	7 842	6 169	9 235
Alumina	27 193	47 681	53 232	40 520	20 675
Alumina hydrate	13 219	12 914	12 821	14 603	15 411
Unwrought	103 145	177 751	197 795	131 764	156 583
Unwrought alloys	175 583	239 493	280 502	314 594	235 575
Scrap	168 055	268 845	282 707	304 272	280 710
Belgium					
Bauxite	40 837	75 600	52 727	41 111	41 968
Alumina	7 265	19 028	20 406	25 501	21 092
Alumina hydrate	29 635	34 978	52 806	36 956	63 875
Unwrought	322 792	517 946	412 600	400 947	364 106
Unwrought alloys	126 490	193 103	218 350	159 147	168 240
Scrap	204 621	228 517	257 366	249 187	206 775
Bulgaria					
Alumina	1 859	2 887	1 875	3 429	3 946
Unwrought	39 759	44 468	43 192	43 405	50 232
Unwrought alloys	16 050	27 444	35 685	42 685	55 507
Scrap	3 014	6 897	4 625	1 582	1 742
Croatia					
Bauxite	72 103	85 634	66 169	67 410	73 689
Unwrought	37 828	50 354	45 493	54 040	38 781
Unwrought alloys	28 251	29 270	40 783	31 807	40 502
Cyprus					
Unwrought (a)	8 761	9 225	7 104	6 458	4 768
Czech Republic					
Bauxite	9 857	33 794	32 556	27 514	24 765
Alumina	5 995	7 407	7 980	7 682	9 089
Alumina hydrate	6 672	9 547	10 052	8 851	9 574
Unwrought	62 972	76 945	84 560	77 128	71 737
Unwrought alloys	108 231	135 648	153 819	141 484	166 166
Scrap	50 379	61 802	86 969	103 385	81 351
Denmark					
Bauxite	8 108	8 364	9 112	7 515	10 371
Alumina	21 968	22 484	21 012	25 210	28 552
Unwrought (a)	61 259	79 479	86 057	77 796	54 482
Scrap	5 321	5 175	5 891	5 267	13 785
Estonia					
Unwrought (a)	5 956	3 176	2 231	2 811	902
Scrap	535	4 495	2 488	488	250

Aluminium and bauxite

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Finland					
Bauxite	1 584	9 294	3 036	1 328	3 168
Alumina	1 733	2 401	2 422	2 479	3 057
Alumina hydrate	20 614	29 607	25 676	22 996	26 702
Unwrought	1 204	2 008	2 070	1 596	1 691
Unwrought alloys	29 303	37 539	37 589	32 897	33 081
Scrap	10 998	15 466	15 803	14 080	14 731
France					
Bauxite	1 024 569	984 804	1 577 328	1 443 488	1 198 412
Alumina	849 798	734 935	619 175	734 773	720 649
Alumina hydrate	46 113	47 336	47 510	43 650	37 402
Unwrought	87 130	103 937	152 348	134 309	147 016
Unwrought alloys	311 287	364 962	387 038	277 335	326 472
Scrap	216 872	260 871	292 597	267 325	246 746
Germany					
Bauxite	2 069 109	2 005 053	2 436 413	2 777 032	2 407 688
Alumina	518 456	661 379	654 946	476 257	832 700
Alumina hydrate	168 216	260 488	176 692	196 301	160 162
Unwrought	495 511	799 780	768 797	732 599	759 344
Unwrought alloys	1 157 271	1 591 991	1 810 035	1 750 733	1 759 155
Scrap	362 582	479 413	535 304	575 925	560 479
Greece					
Bauxite	351 677	314 423	288 647	90 804	330 522
Alumina	963	1 546	1 346	1 822	1 887
Unwrought	110 311	153 771	126 051	119 587	141 469
Unwrought alloys	32 252	66 134	59 931	51 875	60 864
Scrap	17 339	43 866	95 166	54 011	40 371
Hungary					
Bauxite	178 031	244 095	254 039	142 246	146 245
Alumina	9 246	22 660	36 305	42 371	51 768
Alumina hydrate	3 352	6 856	9 123	7 382	69 615
Unwrought	100 897	146 221	135 392	129 030	130 942
Unwrought alloys	79 437	165 833	190 175	181 695	187 798
Scrap	30 212	43 720	59 661	47 904	35 042
Iceland					
Alumina	1 557 309	1 612 188	1 539 080	1 590 521	1 646 175
Unwrought	(a) 1 461	6 127	5 560	(a) 1 356	(a) 1 968
Ireland, Republic of					
Bauxite	2 786 723	4 111 457	4 215 019	4 169 784	4 434 990
Alumina	4 711	4 903	4 378	9 679	9 288
Italy					
Bauxite	36 975	62 666	45 146	55 504	31 679
Alumina	88 864	252 028	406 774	292 537	122 812
Alumina hydrate	142 005	198 253	205 274	180 778	199 553
Unwrought	284 779	432 393	482 850	355 557	465 484
Unwrought alloys	310 560	488 002	563 882	489 373	520 800
Scrap	268 836	372 686	461 302	444 544	448 220
Latvia					
Scrap	5 974	7 828	10 381	10 956	13 929
Lithuania					
Bauxite	6 923	4 348	...	0	0
Alumina	1 815	16 411	26 876	23 690	21 348
Scrap	888	2 460	6 014	3 238	3 682
Luxembourg					
Unwrought	33 315	62 504	51 627	44 826	37 496
Unwrought alloys	4 480	7 362	5 586	8 278	8 556
Scrap	98 962	128 632	121 295	161 015	168 410
Macedonia					
Unwrought (a)	2 164	2 839	2 642	2 785	2 856
Scrap	1 341	1 554	1 842	1 073	834
Montenegro					
Alumina	55 777	157 753	185 103	139 940	93 297

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Netherlands					
Bauxite	68 038	113 499	113 653	108 492	35 459
Alumina	153 891	692 413	955 665	626 715	792 007
Alumina hydrate	52 798	167 596	246 013	243 186	287 325
Unwrought	134 950	384 724	424 915	487 639	163 027
Unwrought alloys	284 410	462 371	537 289	464 926	444 992
Scrap	88 053	184 066	241 081	270 014	220 965
Norway					
Bauxite	15 444	8 645	459	746	485
Alumina	2 069 424	2 144 519	2 185 976	2 191 352	2 302 823
Alumina hydrate	45 252	35 379	53 224	50 386	47 789
Unwrought	240 409	512 340	450 432	298 464	286 320
Unwrought alloys	95 120	68 086	27 867	41 031	21 577
Scrap	26 598	38 039	42 078	31 750	32 529
Poland					
Bauxite	49 033	48 664	45 672	51 430	46 961
Alumina	27 626	29 920	34 691	35 709	34 969
Alumina hydrate	23 083	31 406	26 536	25 912	28 557
Unwrought	67 561	125 567	125 147	112 325	99 308
Unwrought alloys	144 983	192 393	232 859	245 491	254 479
Scrap	67 408	84 622	98 484	108 168	175 534
Portugal					
Alumina	13 742	14 862	8 762	8 863	9 472
Unwrought	15 200	20 152	18 744	17 371	13 634
Unwrought alloys	149 759	170 057	113 150	96 190	74 013
Scrap	15 819	10 183	5 305	7 409	4 460
Romania					
Bauxite	104 404	1 277 587	1 271 274	1 297 303	1 064 823
Alumina	353 846	1 928	15 037	2 554	22 819
Alumina hydrate	7 996	10 412	5 768	2 841	537
Unwrought	1 023	2 163	3 024	2 751	10 877
Unwrought alloys	16 360	33 711	24 287	26 311	31 608
Scrap	3 838	83 381	62 768	66 878	92 702
Serbia					
Bauxite	4 773	10 972	7 800	5 979	3 807
Alumina	2 668	3 682	2 673	3 092	3 190
Unwrought	36 626	54 512	51 717	51 578	54 127
Unwrought alloys	12 913	13 600	15 834	14 446	17 668
Scrap	4 411	8 404	6 870	7 209	10 334
Slovakia					
Bauxite	5 443	4 233	6 136	6 087	9 087
Alumina	288 753	270 786	232 187	183 051	320 673
Unwrought (a)	27 853	42 273	44 357	39 235	49 057
Scrap	1 760	2 098	3 181	3 667	6 174
Slovenia					
Bauxite	13 966	41 846	42 555	22 700	44 860
Alumina	302 520	328 453	322 872	381 845	376 159
Alumina hydrate	20 629	27 252	26 173	15 753	21 712
Unwrought	62 162	87 848	65 523	66 209	74 611
Unwrought alloys	34 530	65 950	71 318	66 410	84 970
Scrap	37 677	51 159	52 860	60 468	69 046
Spain					
Bauxite	3 509 294	3 325 099	3 080 295	3 693 740	3 510 247
Alumina	22 239	31 527	61 184	28 910	31 683
Alumina hydrate	30 522	29 317	22 917	16 162	13 491
Unwrought	95 461	119 589	110 612	107 320	122 958
Unwrought alloys	162 026	229 036	219 925	207 511	202 690
Scrap	63 517	111 942	125 190	155 371	176 445
Sweden					
Bauxite	10 755	6 660	10 460	12 271	13 074
Alumina	109 806	211 393	266 978	258 634	278 411
Alumina hydrate	81 026	95 073	77 121	64 907	66 055
Unwrought	39 248	35 506	22 371	26 948	22 447
Unwrought alloys	124 277	188 198	175 194	125 377	108 735
Scrap	30 093	48 508	47 458	49 270	59 064

Aluminium and bauxite

Imports continued

tonnes

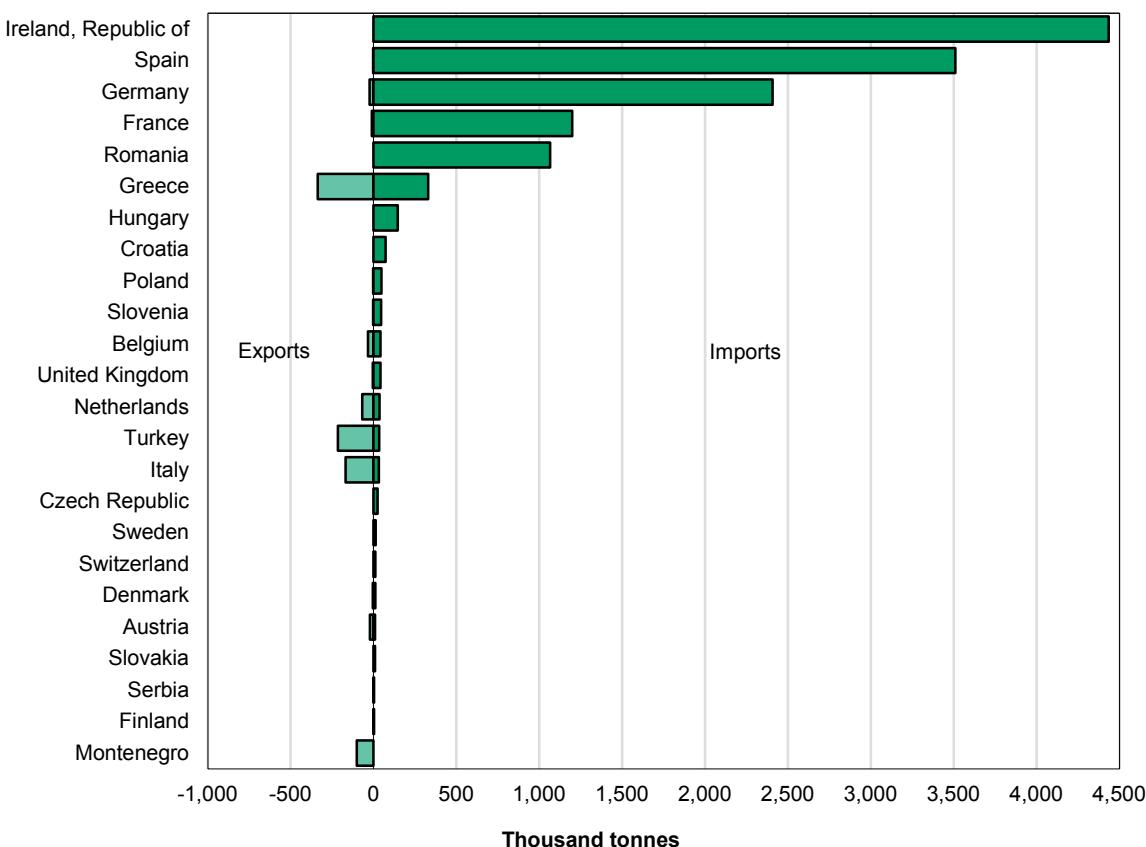
Country	2009	2010	2011	2012	2013
Switzerland					
Bauxite	8 360	6 718	11 898	10 924	10 792
Alumina	9 074	10 662	9 957	8 625	8 295
Alumina hydrate	15 269	20 697	19 131	17 473	16 761
Unwrought	108 096	148 099	166 853	159 296	162 271
Unwrought alloys	50 341	84 113	70 200	59 087	60 952
Scrap	23 195	33 341	36 829	43 797	50 969
Turkey					
Bauxite	17 350	35 652	36 358	28 947	34 716
Alumina	10 394	15 772	15 434	14 740	19 709
Alumina hydrate	15 269	27 721	35 739	41 275	49 347
Unwrought	358 748	460 915	553 191	576 670	627 747
Unwrought alloys	201 124	281 588	332 228	356 862	362 548
Scrap	14 215	24 952	25 107	20 811	21 408
United Kingdom					
Bauxite	37 461	41 650	41 497	33 925	41 256
Alumina	352 250	229 158	110 265	56 724	50 376
Alumina hydrate	98 516	87 278	90 065	72 468	80 674
Unwrought	304 621	138 975	201 428	144 629	144 616
Unwrought alloys	43 601	62 686	62 784	64 561	70 720
Scrap	117 651	126 584	109 122	106 654	113 461

Notes

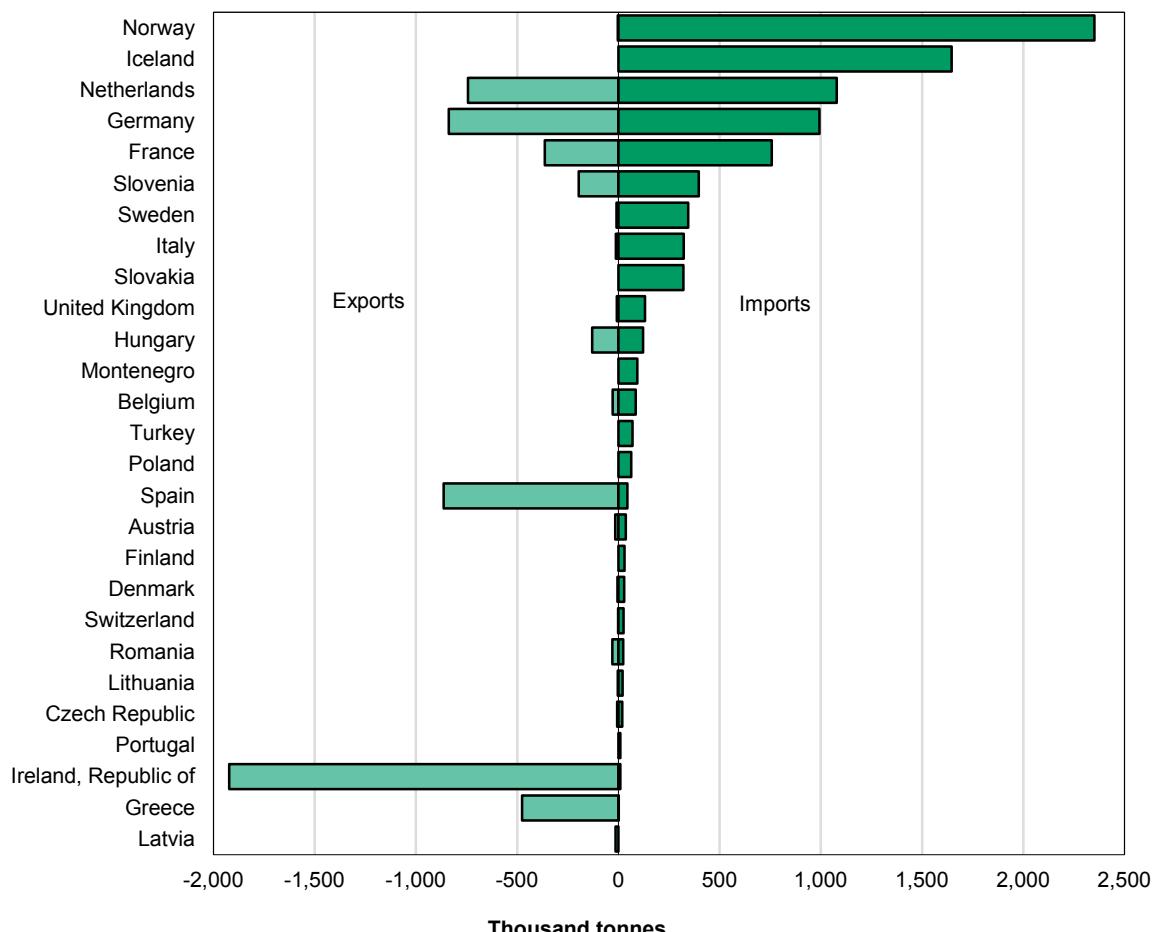
- (1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
- (2) In this table the term 'unwrought' aluminium corresponds to item 7601 of the Harmonised System and comprises ingots, blocks, unwrought bars, etc.
- (3) Metal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

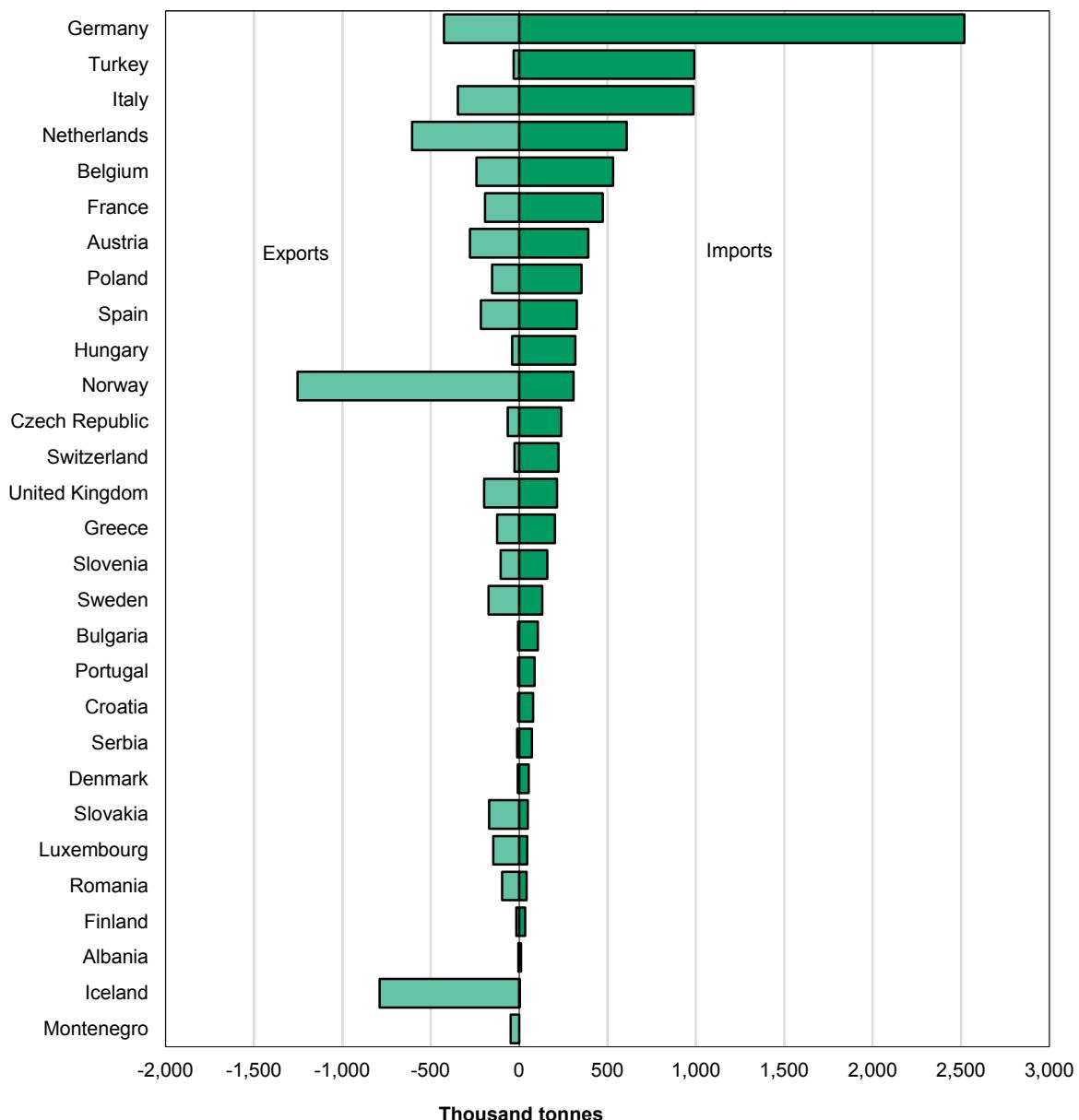
(a) Including alloys

Bauxite - EU36 trade in 2013



### Alumina and alumina hydrate - EU36 trade in 2013



**Aluminium metal - EU36 trade in 2013**

## 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 the largest mine producer of antimony in 2013, with 77 per cent of world production. The second largest producer was Turkey (five per cent), followed by Tajikistan (four per cent), Russia (four per cent) and Bolivia (three per cent). Antimony is also produced as a by-product of lead refining in many countries.

### Mine production of antimony

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Turkey	1 346	1 403	2 340	7 119	* 7 500

## Notes

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

### Exports of antimony

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Ores and concentrates	530	433	274	1 187	4
Metal	533	776	732	259	271
Oxide	8 811	10 599	10 417	7 818	7 751
Estonia					
Metal	...	67	113	...	—
France					
Metal	34	145	24	60	95
Oxide	6 788	6 853	6 124	5 482	5 192
Germany					
Metal	101	132	239	103	86
Oxide	448	961	1 132	688	669
Italy					
Ores and concentrates	566	960	898	1 311	1 669
Metal	2	19	80	2	7
Oxide	391	226	261	215	399
Netherlands					
Metal	171	219	385	475	429
Oxide	285	433	264	206	155
Poland					
Metal	65	27	47	40	38
Portugal					
Metal	119	138	70	277	138
Spain					
Metal	62	19	50	247	2
Oxide	894	1 716	1 784	1 204	2 361
Sweden					
Metal	489	4	—	4	...
Turkey					
Ores and concentrates	1 408	2 765	2 977	2 450	3 150
Metal	8	21	6	113	554
United Kingdom					
Metal	75	77	57	237	425
Oxide	407	490	290	422	152

## Antimony

**Imports of antimony**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metal	64	37	214	267	316
Oxide	192	249	204	156	164
Belgium					
Metal	7 511	10 280	9 451	7 195	6 713
Oxide	624	904	831	1 822	786
Czech Republic					
Metal	55	75	64	31	42
Oxide	209	379	356	411	367
Finland					
Oxide	101	116	80	104	73
France					
Ores and concentrates	26	101	74	0	0
Metal	7 682	9 068	7 413	6 502	5 372
Oxide	1 277	1 577	2 854	1 677	1 572
Germany					
Ores and concentrates	13	11	8	6	922
Metal	552	494	456	376	462
Oxide	5 072	7 986	6 949	6 013	5 675
Greece					
Metal	85	74	84	47	98
Oxide	55	75	94	86	100
Hungary					
Oxide	173	156	148	173	196
Ireland, Republic of					
Metal	2	64	0	0	0
Italy					
Ores and concentrates	935	1 378	1 169	1 474	1 964
Metal	198	233	298	132	332
Oxide	4 602	5 460	4 227	3 538	3 201
Netherlands					
Metal	150	314	208	586	697
Oxide	2 257	57 454	26 729	18 315	16 031
Norway					
Oxide	200	264	193	211	162
Poland					
Metal	71	47	68	62	115
Oxide	1 034	1 044	1 026	949	841
Portugal					
Oxide	146	240	184	239	229
Romania					
Metal	36	61	43	9	55
Oxide	87	88	120	163	138
Slovenia					
Metal	50	36	150	25	49
Oxide	34	29	25	26	21
Spain					
Ores and concentrates	55	103	29	10	7
Metal	1 478	2 642	2 450	1 553	2 760
Oxide	493	516	494	720	630
Sweden					
Oxide	203	219	227	194	153
Switzerland					
Oxide	793	1 108	1 131	583	505
Turkey					
Ores and concentrates	0	82	121	0	11
Metal	369	219	245	256	273
Oxide	588	885	739	705	817
United Kingdom					
Metal	88	45	121	237	260
Oxide	1 548	2 598	1 785	1 750	1 688

## 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 2013 and is estimated to produce more than half of the total world output. Other significant producers are Chile, Russia and Belgium.

### Production of white arsenic

Country	2009	2010	2011	2012	2013
Belgium	* 1 000	* 1 000	* 1 000	* 1 000	* 1 000
Portugal	* 15	* 15	* 15	* 15	* 15

## Notes

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

### Exports of metallic arsenic

Country	2009	2010	2011	2012	2013
Belgium	42	114	120	191	104
France	9	5	8	10	3
Germany	31	57	66	128	40
Netherlands	* 30	11	62	55	22
United Kingdom	0	0	0	7	7

## Note

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

### Imports of metallic arsenic

Country	2009	2010	2011	2012	2013
Belgium	17	114	634	284	72
Bulgaria	11	3	10	10	27
France	4	17	21	30	18
Germany	...	69	9	43	45
Greece	11	33	9	3	3
Italy	45	19	74	33	81
Netherlands	* 45	2	19	0	—
Poland	20	42	45	44	39
Slovenia	3	* —	11	11	10
Spain	48	96	93	143	117
Turkey	74	55	10	49	78
United Kingdom	60	7	5	15	11

## Note

- (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. The largest world producer is Russia with an estimated 52 per cent of the total world output, followed by China with 21 per cent. Other significant producers are Brazil and Kazakhstan.

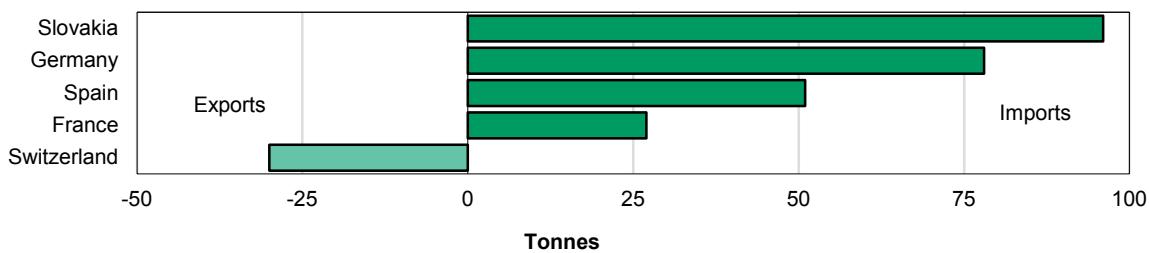
### Exports of unmanufactured asbestos

Country	2009	2010	2011	2012	2013
Serbia	62	1	306	...	...
Switzerland	30	42	17	10	30

### Imports of unmanufactured asbestos

Country	2009	2010	2011	2012	2013
Belgium	166	0	0	...	...
France	34	42	19	14	27
Germany	36	72	88	554	78
Luxembourg	—	—	37	1	...
Poland	35	0	...	...	—
Slovakia	...	0	64	76	96
Spain	—	—	6	28	51

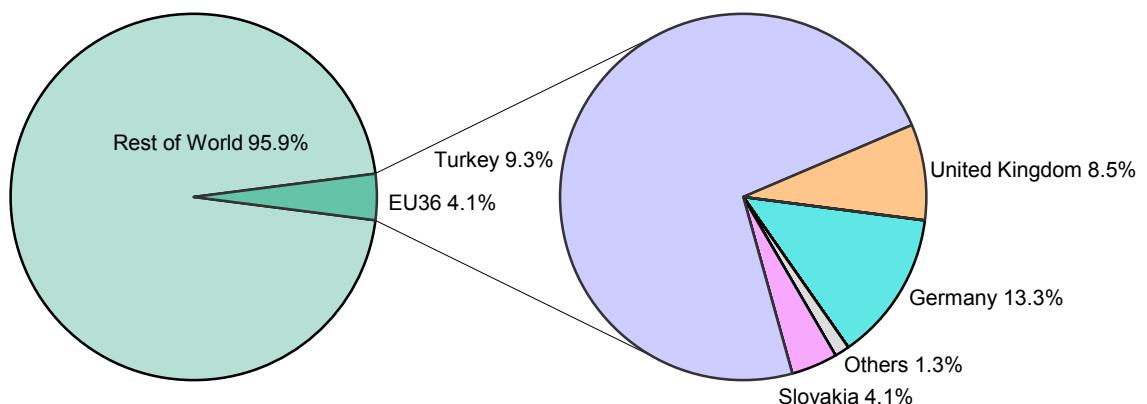
### Asbestos - EU36 trade in 2013



## 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 80 per cent of barytes production is used in the manufacture and utilisation of drilling fluids in oil and gas exploration.
- China was the world's largest producer in 2013, with 42 per cent of the total world output. The second largest producer was India (13 per cent), followed by Morocco (11 per cent), USA (eight per cent) and Kazakhstan (six per cent).

**EU36 Production of barytes 2013**



## Production of barytes

tonnes

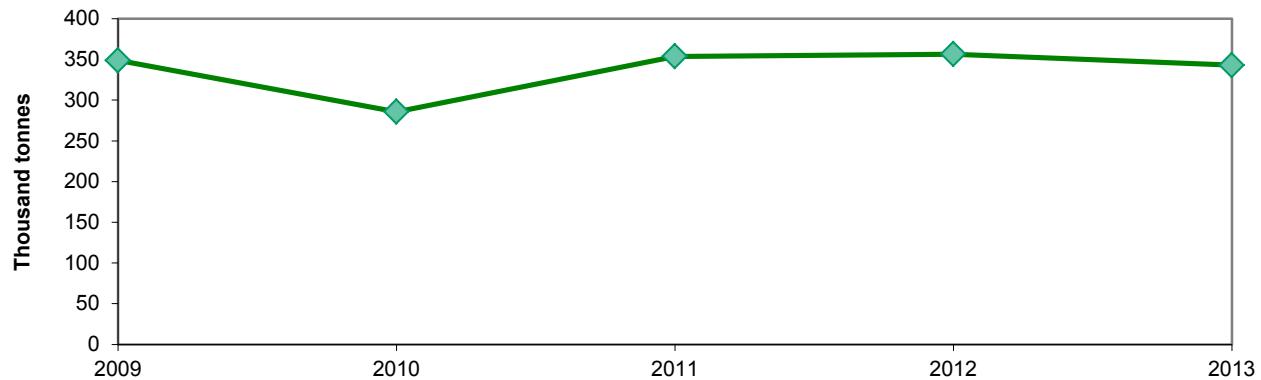
Country	2009	2010	2011	2012	2013
Bulgaria	14 300	500	200	—	1 000
Germany	45 606	55 887	55 342	52 030	45 446
Italy	* 3 500	* 3 500	* 3 500	* 3 500	* 3 500
Portugal	1 078	15	—	—	—
Slovakia	30 000	17 000	13 000	21 000	14 000
Spain	5 212	2 050	—	—	—
Turkey	213 187	172 618	250 786	* 250 000	* 250 000
United Kingdom	36 000	34 099	31 000	30 000	29 000
EU36 Total	349 000	287 000	354 000	357 000	343 000

Note

(1) This table may include small quantities of witherite

## Barytes

### EU36 Production of barytes 2009 - 13



### Exports of barytes

Country	2009	2010	2011	2012	2013
Austria	1 276	345	618	766	769
Belgium	2 638	3 216	213	1 713	11 796
Bulgaria	14 326	505	231	—	960
France (a)	* 11 500	* 10 500	* 10 600	* 11 700	* 6 500
Germany	45 360	(a)* 33 000	(a)* 34 000	(a)* 29 000	(a)* 12 500
Hungary	...	...	...	180	2 034
Italy	2 890	1 906	2 623	4 898	4 427
Netherlands	121 567	79 880	71 719	92 823	95 795
Norway	4 069	12 071	8 008	9 954	13 246
Romania	1 812	258	2 009	1 326	6 802
Slovakia	6 309	641	230	197	10 831
Spain	29 776	32 427	34 285	34 402	34 361
Turkey	121 744	175 497	144 238	157 967	215 363
United Kingdom (b)	13 095	17 851	15 648	19 072	13 854

#### Notes

(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

(b) Mainly barites with some witherite.

### Imports of barytes

Country	2009	2010	2011	2012	2013
Albania	720	320	1 192	2 665	363
Austria	2 733	3 115	4 711	5 157	3 545
Belgium	4 490	5 637	4 294	12 095	7 961
Bulgaria	57	155	112	848	1 840
Croatia	889	710	125	2 225	1 105
Cyprus	9	5	58	2	848
Czech Republic	4 641	7 004	7 431	7 008	6 525
Denmark	27 656	14 178	17 322	8 615	16 538
Finland	2 573	4 406	4 383	4 101	3 988
France	26 227	41 513	29 516	40 294	32 790
Germany	129 220	263 839	291 716	237 254	171 262
Greece	2 133	1 318	2 277	1 222	2 667
Hungary	4 536	1 441	2 852	516	1 106
Italy	51 615	67 303	88 574	69 098	93 846

## Imports continued

tonnes

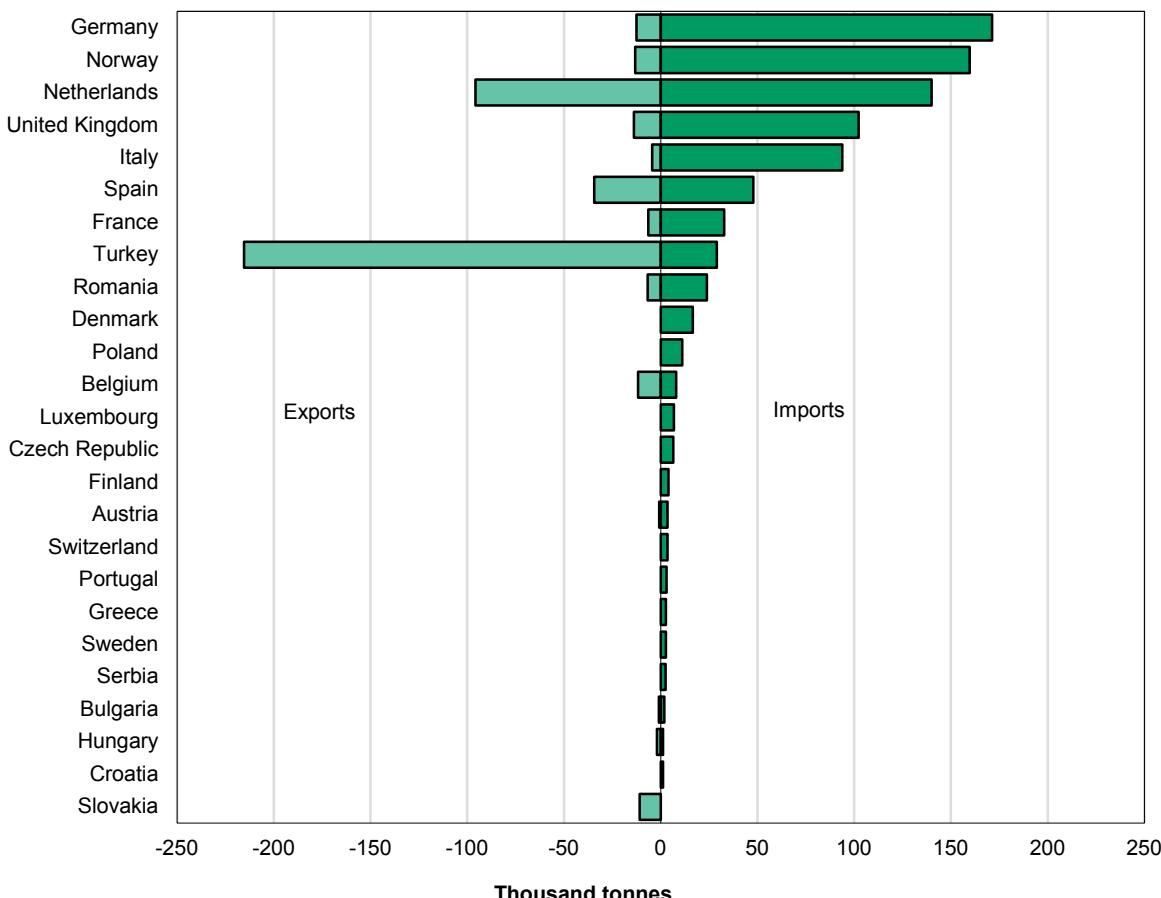
Country	2009	2010	2011	2012	2013
Luxembourg	16 377	17 182	17 049	12 350	6 827
Netherlands	43 928	161 343	148 240	168 963	140 000
Norway	146 535	149 510	139 620	124 210	159 682
Poland	8 349	11 758	15 723	21 567	11 154
Portugal	3 744	4 448	2 509	2 286	2 985
Romania	8 351	8 501	15 598	16 874	23 859
Serbia	0	421	1 494	3 468	2 491
Slovenia	530	457	609	881	860
Spain	30 503	106 611	70 896	49 674	47 798
Sweden	3 346	4 406	4 224	3 947	2 666
Switzerland	2 605	3 020	3 156	3 359	3 429
Turkey	507	342	2 863	5 567	29 019
United Kingdom (a)	61 308	89 474	99 872	88 042	102 274

## Notes

(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) Mainly barites with some witherite.

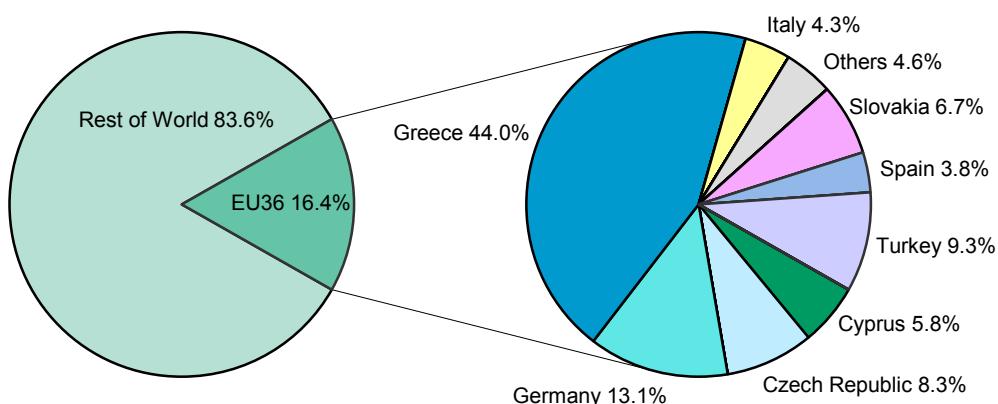
## Barytes - EU36 trade in 2013



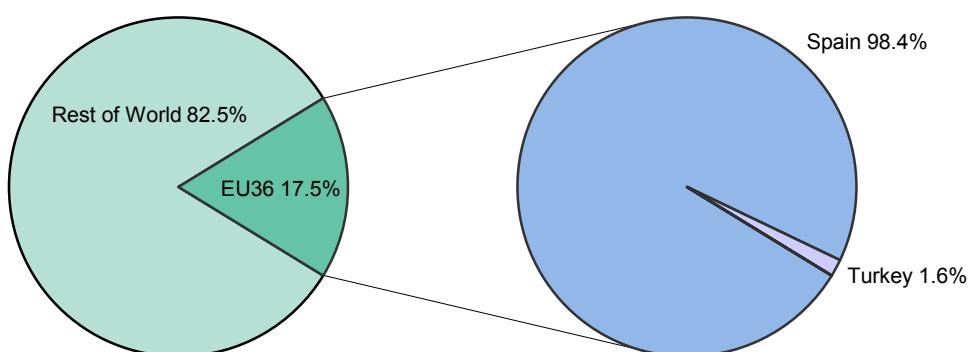
## Bentonite and fuller's earth

- 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.
- USA was the world's largest producer of bentonite in 2013, with 30 per cent of the total world output. The second largest producer was China (21 per cent), followed by India (nine per cent) Greece (seven per cent) and Mexico (four per cent). The USA was also the world's largest producer of fuller's earth.

**EU36 Production of bentonite 2013**



**EU36 Production of attapulgite and sepiolite 2013**



### Production of bentonite and fuller's earth

tonnes

Country	2009	2010	2011	2012	2013
Bulgaria					
Bentonite	108 400	99 700	53 900	77 900	—
Cyprus					
Bentonite	152 722	162 969	160 625	160 180	158 386
Czech Republic					
Bentonite	177 000	183 000	160 000	221 000	226 000
Denmark					
Bentonite	24 040	23 832	38 300	30 330	56 355

## Production of bentonite and fuller's earth continued

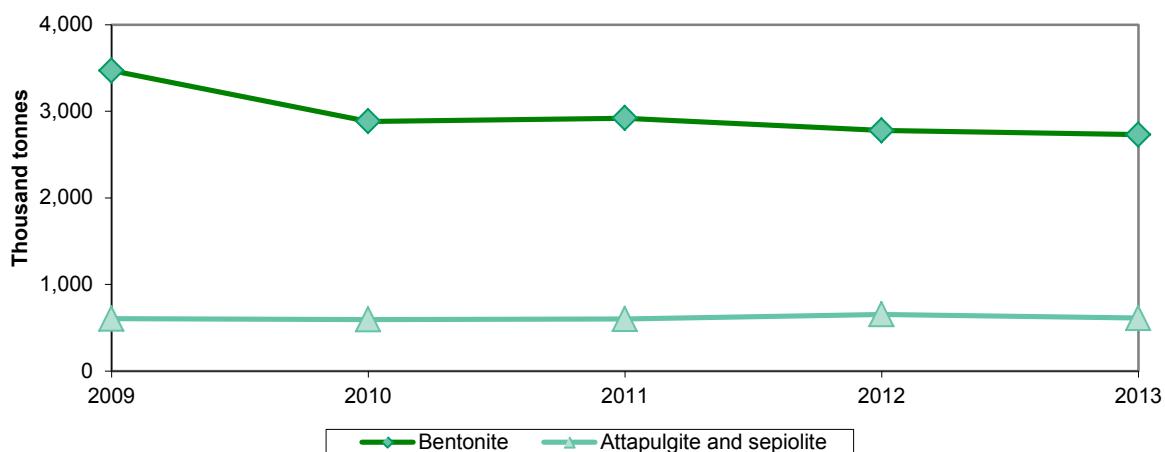
tonnes

Country	2009	2010	2011	2012	2013
France					
Bentonite	25 000	25 000	20 000	28 000	* 25 000
Germany					
Bentonite	326 461	362 623	375 332	366 220	358 844
Greece					
Bentonite	1 500 000	844 804	1 250 000	1 235 110	1 200 000
Hungary					
Bentonite	5 298	17 200	22 931	1 392	1 671
Italy					
Bentonite	114 212	104 279	105 952	109 576	118 235
Macedonia					
Bentonite	9 033	7 084	8 918	2 355	18 520
Poland					
Bentonite	2 800	2 000	900	800	1 050
Romania					
Bentonite	13 756	21 637	19 864	19 241	24 127
Slovakia					
Bentonite	109 000	153 000	213 000	177 000	184 000
Slovenia					
Bentonite	104	135	168	98	143
Spain					
Bentonite	147 090	157 001	110 371	96 605	102 709
Attapulgite	21 110	27 841	26 021	23 537	25 439
Sepiolite	573 937	557 862	566 270	622 372	576 608
Turkey					
Bentonite	753 155	718 260	379 917	251 667	* 255 000
Sepiolite	* 10 000	* 10 000	* 10 000	* 10 000	* 10 000
EU36 Total					
Bentonite	3 468 000	2 883 000	2 920 000	2 777 000	2 730 000
Attapulgite and sepiolite	605 000	596 000	602 000	656 000	612 000

## Notes

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

## EU36 Production of bentonite, attapulgite and sepiolite 2009 - 13



**Exports of bentonite and fuller's earth**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Bentonite	4 350	3 447	4 954	4 513	4 947
Belgium					
Bentonite	36 263	28 632	28 512	31 222	29 489
Bulgaria					
Bentonite	79 359	72 183	67 118	63 090	45 919
Cyprus					
Bentonite	95 674	98 803	114 923	130 413	122 699
Czech Republic					
Bentonite	99 584	120 859	143 788	151 474	162 165
Denmark					
Bentonite	13 004	13 787	13 827	17 711	20 620
Finland					
Bentonite	803	0	61	27	123
France					
Bentonite	9 211	12 709	11 472	8 826	7 658
Germany					
Bentonite	52 424	84 920	91 477	82 504	72 020
Greece					
Bentonite	5 116	13 203	33 306	14 233	7 770
Hungary					
Bentonite	555	954	782	1 047	813
Italy					
Bentonite	186 219	257 173	214 775	225 729	224 684
Lithuania					
Bentonite	266	442	1 628	1 386	1 530
Macedonia					
Bentonite	3 716	3 310	3 730	3 635	3 237
Netherlands					
Bentonite	135 722	178 093	186 574	141 709	137 010
Norway					
Bentonite	294	3 726	318	1 318	494
Poland					
Bentonite	23 918	21 987	25 050	23 563	38 087
Portugal					
Bentonite	691	1 175	1 356	1 935	1 672
Serbia					
Bentonite	5 107	4 823	11 903	2 972	3 367
Slovakia					
Bentonite	65 429	32 981	85 760	98 257	144 198
Spain					
Bentonite	1 021 034	66 118	54 449	54 147	56 416
Sepiolite	418 644	...	...	...	...
Sweden					
Bentonite	5 588	3 457	3 300	5 492	9 949
Turkey					
Bentonite	250 082	307 891	319 189	337 860	394 169
United Kingdom					
Bentonite	34 622	41 323	38 478	39 535	37 694

## Notes

- (1) See Notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, Harmonised System 2508.10
- (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 the table
- (5) From 2007 Harmonised System 2508.20, used previously in this table for fuller's earth, is no longer available

**Imports of bentonite and fuller's earth**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Bentonite	128	1 059	1 549	373	377
Austria					
Bentonite	66 575	90 229	83 313	91 208	93 506
Belgium					
Bentonite	62 885	72 971	91 291	68 771	71 394
Bulgaria					
Bentonite	2 422	2 548	2 591	2 074	2 659
Croatia					
Bentonite	22 383	7 852	16 906	5 394	6 159
Cyprus					
Bentonite	5 709	4 629	142	280	6 246
Czech Republic					
Bentonite	25 129	18 472	39 439	43 334	44 995
Denmark					
Bentonite	35 089	43 049	34 130	41 931	38 382
Estonia					
Bentonite	1 631	3 352	2 937	2 670	2 958
Finland					
Bentonite	19 429	16 293	21 194	24 913	26 294
France					
Bentonite	158 715	159 096	194 555	180 301	132 657
Germany					
Bentonite	335 990	386 261	447 793	450 850	489 843
Greece					
Bentonite	8 593	3 668	7 193	5 831	4 125
Hungary					
Bentonite	3 608	4 360	4 648	6 527	10 490
Iceland					
Bentonite	1 259	432	563	281	304
Ireland, Republic of					
Bentonite	2 741	2 734	2 623	2 788	3 975
Italy					
Bentonite	96 698	130 508	140 458	133 041	158 054
Latvia					
Bentonite	2 148	2 787	3 434	2 701	3 501
Lithuania					
Bentonite	3 368	4 378	6 250	6 656	7 366
Macedonia					
Bentonite	142	219	302	725	400
Malta					
Bentonite	635	921	844	446	440
Netherlands					
Bentonite	* 190 000	237 683	289 615	277 221	216 441
Norway					
Bentonite	12 612	14 506	12 668	11 620	16 045
Poland					
Bentonite	122 165	155 173	212 585	233 200	212 103
Portugal					
Bentonite	12 788	18 205	23 436	26 466	21 319
Romania					
Bentonite	3 859	4 825	6 341	8 463	8 787
Serbia					
Bentonite	2 274	1 683	1 804	5 294	3 906
Slovakia					
Bentonite	5 890	6 416	26 935	25 923	6 917
Slovenia					
Bentonite	4 421	4 191	4 790	5 905	8 555
Spain					
Bentonite	72 993	108 066	146 344	114 421	103 691
Sweden					
Bentonite	120 079	200 422	214 173	231 973	189 875
Switzerland					
Bentonite	20 407	20 362	19 316	19 203	19 982
Turkey					
Bentonite	1 827	1 641	1 915	1 952	2 037

Bentonite and fuller's earth

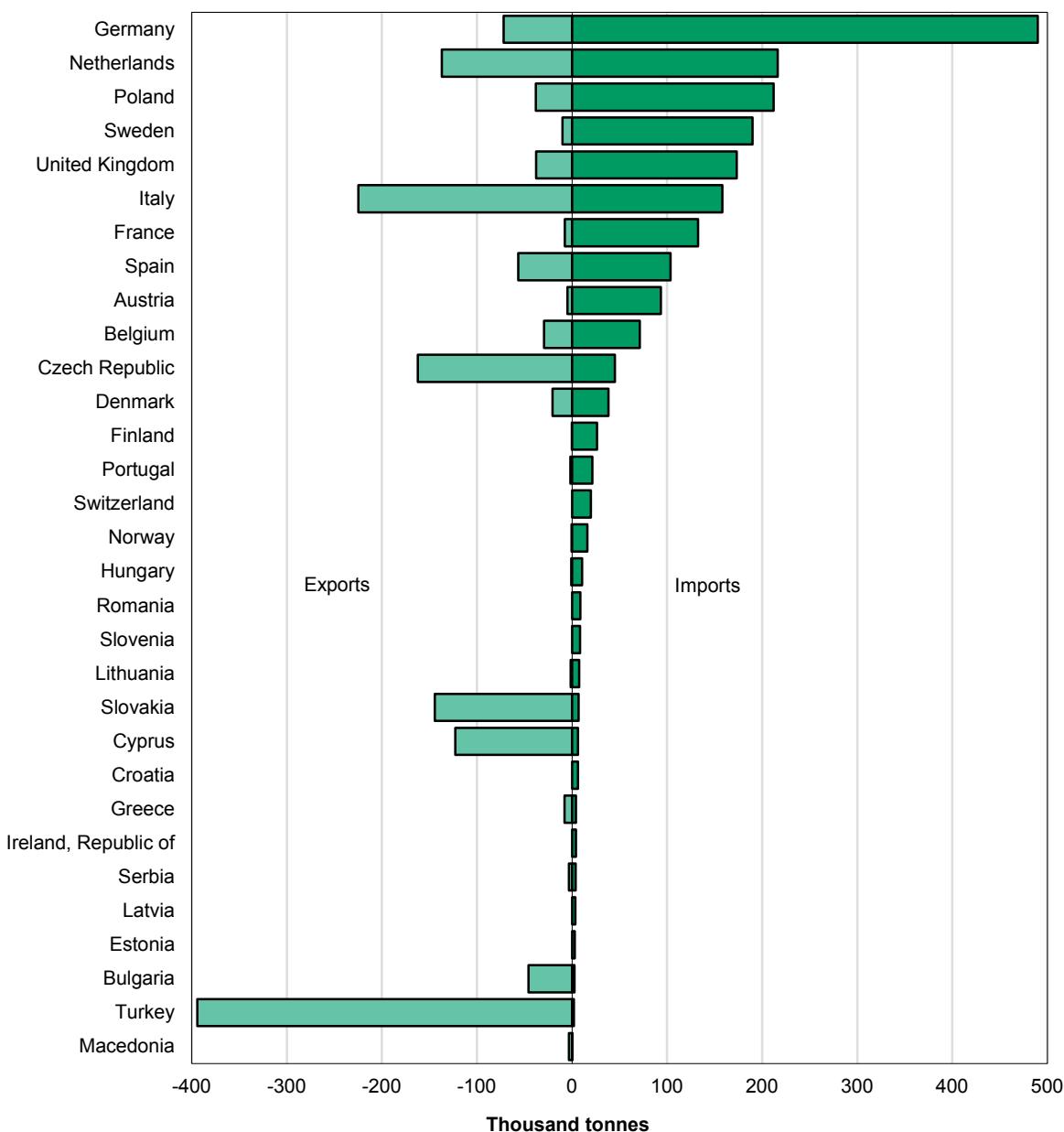
Imports continued

Country	2009	2010	2011	2012	2013
United Kingdom					
Bentonite	140 301	141 849	200 332	183 343	173 094
Sepiolite	70 651	...	...	...	...

Notes

- (1) See Notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, Harmonised System 2508.10
- (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 previously in this table for fuller's earth, is no longer available

### Bentonite - EU36 trade in 2013



## 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 was the world's largest producer in 2013, with 51 per cent of the total world output. The second largest producer was Mexico (29 per cent), followed by Japan (17 per cent) and Russia (two per cent). Bismuth is also produced as a by-product of lead and zinc refining.

### Mine production of bismuth

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Bulgaria	* —	* 3	* 3	* 3	* 3

## Notes

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

### Exports of bismuth metal

tonnes

Country	2009	2010	2011	2012	2013
Belgium	413	1	6	4	4
Czech Republic	—	19	3	4	8
France	6	20	49	115	259
Germany	143	178	210	195	86
Italy	5	1	13	11	2
Netherlands	28	34	32	52	107
Norway	—	25	—	—	—
Spain	14	9	9	4	6
Sweden	106	11	1	—	—
United Kingdom	941	427	1 038	744	407

### Imports of bismuth metal

tonnes

Country	2009	2010	2011	2012	2013
Austria	80	130	138	139	175
Belgium	9	1	24	16	30
Czech Republic	53	106	264	110	101
France	102	100	205	281	311
Germany	881	1 052	1 282	1 155	1 406
Greece	0	0	12	21	60
Hungary	84	106	50	43	35
Ireland, Republic of	14	5	1	1	1
Italy	152	355	378	154	146
Netherlands	42	259	192	427	694
Poland	20	34	23	24	33
Slovenia	24	49	63	57	75
Spain	52	141	99	103	107
Sweden	6	12	2	4	2
Switzerland	12	25	18	12	16
Turkey	15	11	16	7	15
United Kingdom	310	366	411	481	441

## Bromine

### 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. Jordan was the world's largest producer in 2013, with 32 per cent of the total world output. The second largest was the USA (29 per cent), followed by Israel (24 per cent), China (13 per cent) and Japan (three per cent).

### Exports of bromine

Country	2009	2010	2011	2012	2013
Belgium	17 466 300	12 619 000	25 002 100	25 239 600	27 339 200
Bulgaria	0	...	0	0	25 200
Finland	...	...	22 200	—	—
Germany	6 031	6 119	7 543	8 559	28 941
Netherlands	1 960 700	1 477 700	1 154 400	84 300	95 800
Poland	5 500	9 800	7 100	3 600	5 400
Spain	2 578	15 627	86 311	10 480	72 396
United Kingdom	497 246	780 704	1 472 523	1 377 726	645 676

#### Note

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

### Imports of bromine

Country	2009	2010	2011	2012	2013
Austria	65 300	318 400	238 900	384 600	647 900
Belgium	20 618 700	18 693 500	28 221 500	28 260 600	27 220 500
Bulgaria	250	...	4 321	52	19 500
Croatia	121	67	120	168	22 800
Finland	242 982	318 478	322 231	441 332	371 829
France	11 720 470	5 275 994	8 449 327	8 999 985	10 135 985
Germany	456 893	657 303	722 036	783 214	669 944
Hungary	10 500	4 500	8 800	5 600	9 300
Ireland, Republic of	799	743	38 566	675	501
Italy	958 588	1 259 187	1 207 042	939 005	939 294
Netherlands (a)	63 310	321 599	114 504	297 589	1 417
Poland	6 100	17 200	11 200	66 300	35 300
Spain	75 099	222 746	250 417	188 015	181 058
Sweden	3 100	4 200	4 300	7 800	3 800
Turkey (a)	6 497	8 373	11 462	6 869	3 475
United Kingdom	6 534 300	5 787 829	9 485 963	7 817 484	6 833 649

#### Notes

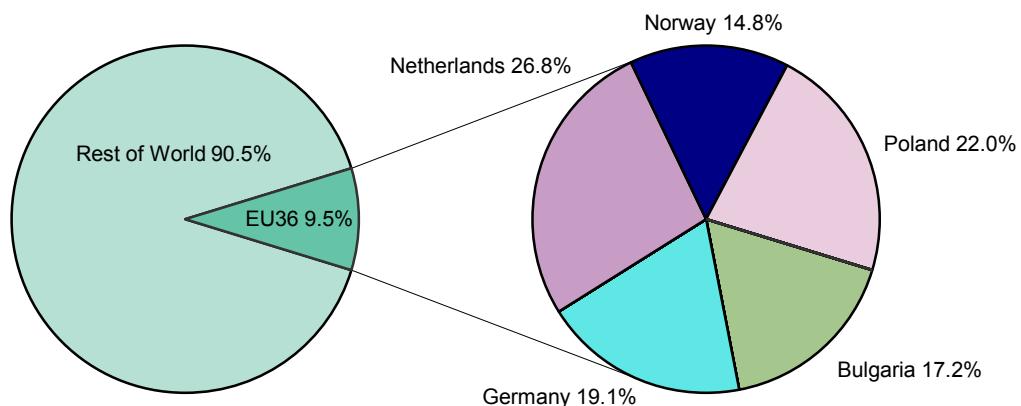
(1) This table does not purport to be comprehensive: trade in bromine is not separately distinguished from other halogens by many countries

(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.
- China was the world's largest producer in 2013, with 32 per cent of the total world output. The second largest producer was South Korea (18 per cent), followed by Japan (eight per cent), Mexico (7 per cent), Kazakhstan and Canada (both with six per cent).

**EU36 Production of cadmium 2013**



## Production of cadmium

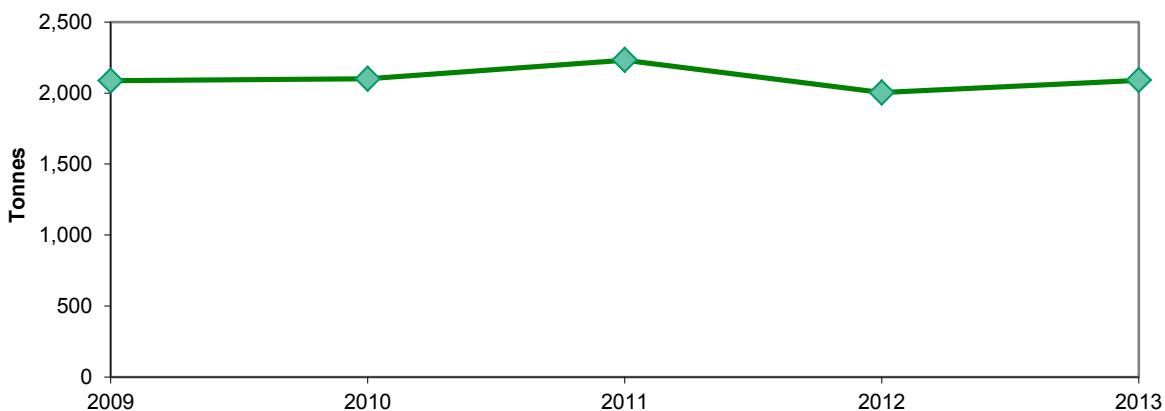
tonnes

Country	2009	2010	2011	2012	2013
Bulgaria	413	389	427	363	* 360
Germany	* 400	* 400	* 400	* 400	* 400
Netherlands	* 490	* 560	* 570	* 560	* 560
Norway	249	300	309	* 310	* 310
Poland	534	451	526	370	460
EU36 Total	2 100	2 100	2 200	2 000	2 100

Note

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

**EU36 Production of cadmium 2009 - 13**



## Cadmium

**Exports of cadmium**

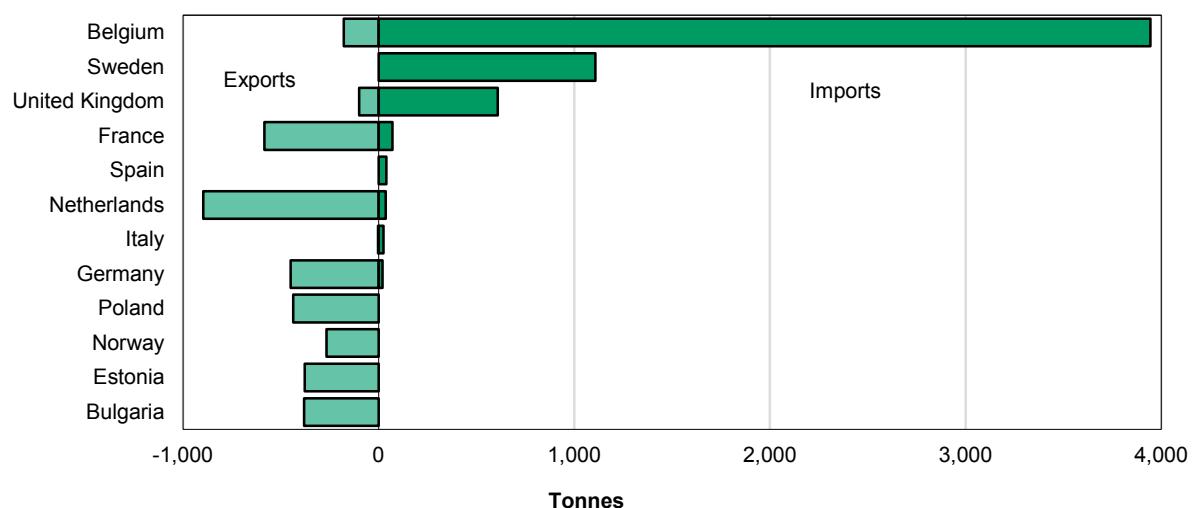
tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Metal	452	459	545	690	178
Oxide	4 033	4 413	3 734	3 764	2 767
Bulgaria					
Metal	569	474	421	394	382
Estonia					
Metal	...	...	...	564	378
France					
Metal	1 022	763	549	733	584
Germany					
Metal	276	523	348	379	450
Italy					
Metal	2 030	3 104	1 722	363	3
Netherlands					
Metal	305	606	617	839	896
Norway					
Metal	211	329	317	221	267
Poland					
Metal	590	484	579	388	437
Sweden					
Oxide	305	360	429	335	330
United Kingdom					
Metal	25	2 545	1 441	272	99

**Imports of cadmium**

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Metal	3 439	6 456	5 932	3 683	3 944
Oxide	28	43	109	7	32
Czech Republic					
Oxide	396	464	487	439	415
France					
Metal	455	212	100	285	70
Oxide	605	18	7	6	7
Germany					
Metal	11	18	40	69	19
Oxide	522	625	489	653	621
Greece					
Metal	39	1	0	0	1
Italy					
Metal	43	3	44	37	24
Netherlands					
Metal	50	102	1	15	36
Spain					
Metal	118	153	38	37	39
Sweden					
Metal	588	825	1 127	1 172	1 108
Oxide	42	107	172	145	105
United Kingdom					
Metal	246	470	542	229	609
Oxide	181	309	281	169	182

**Cadmium metal - EU36 trade in 2013**

## 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.

## Production of cement clinker

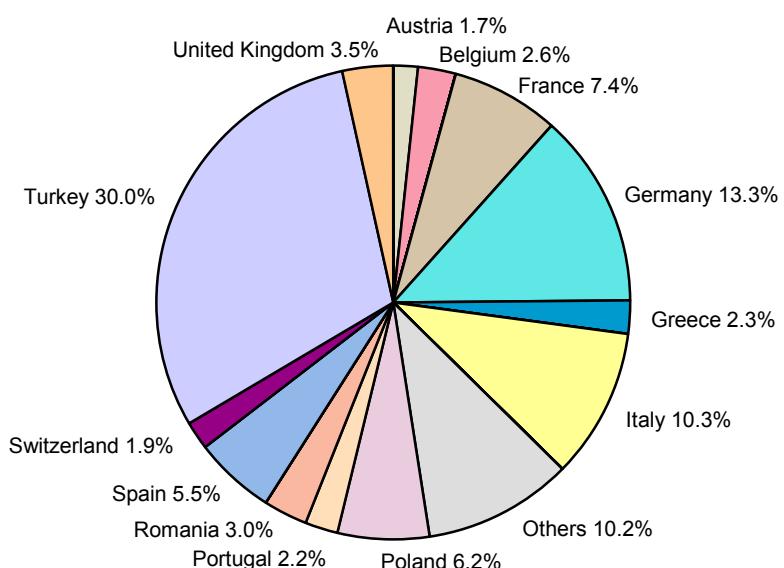
tonnes

Country	2009	2010	2011	2012	2013
Austria	160 223	54 369	131 734	* 125 000	* 120 000
Belgium	1 123 722	858 871	* 700 000	726 690	911 116
Bulgaria	1 858 850	2 071 100	1 475 700	* 1 500 000	* 1 500 000
Cyprus	30 286	—	—	23 363	807 041
Czech Republic	2 923 203	2 748 472	3 132 268	2 837 600	2 472 196
Denmark	122	3 819	25	24 256	—
Estonia	448 500	537 000	719 000	714 600	301 100
France	14 568 000	14 901 000	15 229 000	14 178 000	13 778 000
Germany	23 232 000	22 996 000	24 775 000	24 581 000	23 143 000
Greece	8 649 322	7 446 775	4 569 167	5 544 951	6 754 154
Hungary	* 2 200 000	* 1 500 000	1 167 942	1 332 354	* 1 300 000
Italy (a)	637 853	966 577	1 286 791	1 284 500	1 199 742
Latvia	...	1 158 000	1 277 000	1 485 720	* 1 500 000
Lithuania	233 292	—	—	—	—
Luxembourg	706 426	736 000	770 232	* 740 000	* 710 000
Norway	1 528 300	1 433 783	1 382 809	1 435 497	1 399 012
Poland	10 659 214	11 767 782	13 629 500	11 807 300	10 855 278
Portugal	6 484 970	6 483 644	5 351 024	4 881 543	5 427 443
Romania	—	—	33 363	84 853	50 617
Slovakia	1 822 820	1 607 025	1 823 306	1 490 768	* 1 500 000
Spain	21 594 604	21 234 637	17 000 000	16 719 769	* 16 000 000
Sweden	1 702 019	1 790 784	* 1 750 000	* 1 750 000	* 1 750 000
Turkey	41 084 368	54 222 939	53 228 248	* 53 000 000	* 53 000 000
United Kingdom	6 421 000	6 598 000	7 096 000	6 555 000	6 712 000
EU36 Total	148 000 000	161 000 000	157 000 000	153 000 000	151 000 000

Note

(a) Sales

## EU36 Production of finished cement 2013



## Production of finished cement

tonnes

Country	2009	2010	2011	2012	2013
Austria	4 847 862	4 499 402	4 291 449	4 162 406	3 967 440
Belgium	6 113 000	5 990 000	6 844 000	6 280 000	6 119 000
Bulgaria	2 660 176	1 981 971	1 889 502	1 754 204	1 796 021
Cyprus	1 480 843	1 328 763	1 206 786	1 025 666	854 778
Czech Republic	3 637 000	3 345 000	3 831 000	3 434 000	3 211 000
Denmark	1 578 614	1 566 624	1 852 804	1 817 334	1 852 445
Estonia	326 200	375 000	451 000	481 500	456 700
Finland (a)	1 041 866	1 204 581	1 379 760	1 292 855	1 292 430
France	18 300 000	17 998 000	19 433 000	18 018 000	17 469 000
Germany	30 441 000	29 915 000	33 540 000	32 432 000	31 458 000
Greece	11 160 205	8 778 949	5 822 967	5 422 499	(a) 5 371 480
Hungary	* 3 200 000	* 2 560 000	* 2 200 000	* 2 300 000	...* 2 300 000
Ireland, Republic of	* 2 720 000	* 2 290 000	* 1 700 000	1 573 000	1 450 000
Italy	33 611 625	37 061 576	35 687 105	27 490 415	24 334 169
Latvia	* 650 000	* 1 100 000	* 1 100 000	* 1 100 000	* 110 000
Lithuania	583 067	834 000	996 284	1 014 977	1 069 593
Luxembourg	929 820	1 030 700	1 232 633	1 177 000	1 127 000
Netherlands	* 2 700 000	* 2 700 000	* 2 700 000	* 2 700 000	* 2 700 000
Norway	1 434 439	1 467 363	1 579 505	1 661 157	1 694 150
Poland	15 536 984	15 756 000	18 929 000	15 918 614	14 831 323
Portugal (a)	6 862 969	6 665 585	6 072 751	5 392 995	5 301 473
Romania	7 897 656	6 867 596	7 646 612	7 727 046	7 120 934
Slovakia	3 011 460	2 887 749	3 219 557	2 915 166	3 121 000
Slovenia	* 1 000 000	* 1 000 000	* 1 000 000	745 000	614 000
Spain	29 504 574	26 217 200	22 000 000	15 538 965	* 13 170 000
Sweden	1 586 000	1 796 000	2 064 000	2 500 000	* 2 800 000
Switzerland (b)	4 333 096	4 553 077	4 687 138	4 395 084	4 563 931
Turkey	55 741 176	70 800 657	66 656 800	67 019 400	71 337 000
United Kingdom (c)	7 623 000	7 883 000	8 529 000	7 952 000	8 203 000
EU36 Total	260 500 000	270 500 000	268 500 000	245 200 000	237 400 000

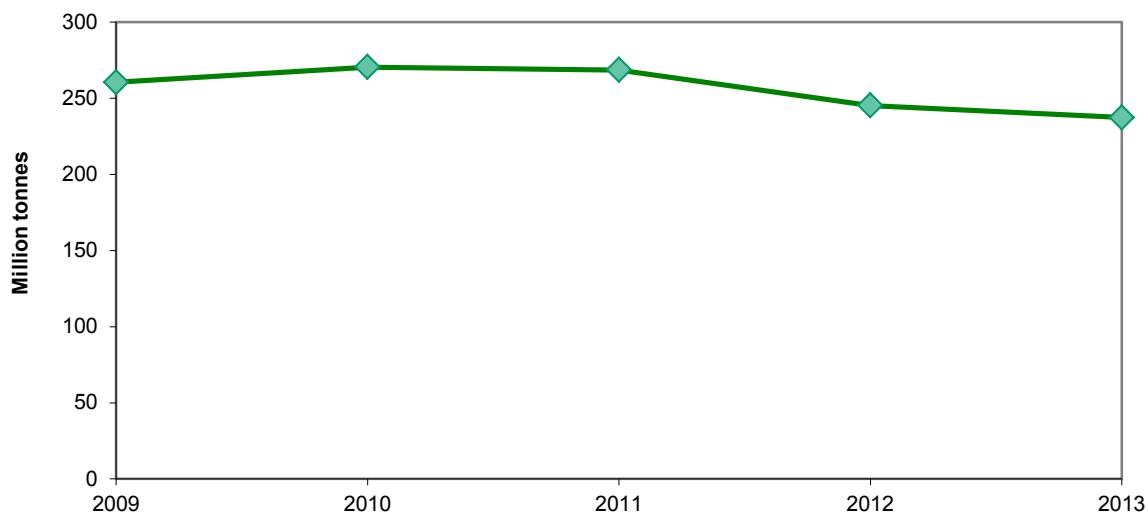
## Notes

(a) Sales

(b) Includes production in Liechtenstein

(c) Great Britain only, excludes Northern Ireland

EU36 Production of finished cement 2009 - 13



## Cement

**Exports of cement**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Cement clinkers	12 716	87 590	...	23 341	18 066
Portland cement	195 346	511 681	674 037	1 026 560	997 924
Other cement	0	25	...	0	1 667
Austria					
Cement clinkers	146 991	46 560	173 312	121 529	72 246
Portland cement	272 440	213 082	330 710	299 060	277 032
Other cement	56 934	50 592	25 432	21 521	41 174
Belgium					
Cement clinkers	936 451	582 766	744 707	638 496	775 332
Portland cement	1 722 252	1 676 150	1 729 402	1 631 167	1 719 988
Other cement	417 798	410 909	353 126	253 759	239 879
Bulgaria					
Cement clinkers	14 836	5 246	8 131	296 372	237 020
Portland cement	109 923	164 404	190 570	269 199	269 977
Other cement	394	1 772	6 516	21 341	4 713
Croatia					
Cement clinkers	169 394	176 403	103 281	284 480	324 551
Portland cement	615 827	639 236	1 189 738	897 747	1 250 523
Other cement	276 981	601 470	180 836	102 405	146 025
Cyprus					
Cement clinkers	24 215	—	—	6 535	739 613
Portland cement	27 324	12 866	42 438	248 521	343 434
Czech Republic					
Cement clinkers	85 427	88 236	169	10 362	1 222
Portland cement	374 515	402 537	844 920	665 669	598 254
Other cement	156 650	218 689	232	124	124
Denmark					
Cement clinkers	7 784	11 884	2 689	24 658	39
Portland cement	568 656	731 730	813 938	767 554	754 399
Other cement	20 751	3 860	4 175	4 565	4 574
Estonia					
Cement clinkers	395 641	222 190	426 994	347 754	346 684
Portland cement	120 294	148 505	186 255	208 131	202 614
Other cement	59	488	752	1 107	3
Finland					
Cement clinkers	47	30	58	28	18
Portland cement	1 275	373	92	6	1 172
Other cement	29	13	33	50	42
France					
Cement clinkers	170 883	282 673	179 184	210 901	218 646
Portland cement	621 568	766 167	764 305	765 777	896 682
Germany					
Cement clinkers	467 042	680 552	761 406	475 987	443 142
Portland cement	4 445 980	4 173 112	5 002 240	4 672 927	4 217 917
Other cement	2 101 709	2 010 734	2 159 075	1 794 724	1 664 700
Greece					
Cement clinkers	851 946	722 142	459 716	1 877 641	1 828 644
Portland cement	3 051 954	3 122 615	1 548 482	2 398 675	3 733 819
Other cement	297 036	47 435	155 000	604	9 525
Hungary					
Cement clinkers	1 701	296	25	203 686	8 551
Portland cement	220 069	185 279	277 497	269 382	231 601
Other cement	2 987	795	6 451	1 363	11 762
Iceland					
Cement clinkers	1	46	7	2	—
Portland cement	16	4	146	1	35
Ireland, Republic of					
Cement clinkers	4 823	1	—	16 698	0
Portland cement	1 054 533	1 025 910	942 940	1 238 718	1 234 596
Other cement	1 317	8 787	1 158	971	1 074
Italy					
Cement clinkers	5 280	52 673	45 472	47 155	129 335
Portland cement	1 637 605	2 035 118	1 681 397	1 838 228	2 440 982
Other cement	469 636	393 746	250 624	200 038	162 360

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Latvia					
Cement clinkers	2 382	68 802	201 050	163 102	26 930
Portland cement	147 960	562 435	673 260	759 738	734 184
Other cement	126	76	250	176	237
Lithuania					
Cement clinkers	39 878	14	98	19	4
Portland cement	170 273	352 750	450 601	529 457	604 824
Other cement	491	1 151	406	36	280
Luxembourg					
Cement clinkers	58 463	7 695	4 215	1	2
Portland cement	119 660	341 075	424 306	321 903	407 310
Other cement	137 975	219 688	320 980	338 240	216 961
Macedonia					
Cement clinkers	5 638	...	0	154 117	20 118
Portland cement	361 677	315 074	277 326	136 803	164 396
Montenegro					
Portland cement	...	...	2 372	1 583	3 250
Netherlands					
Cement clinkers	352	34	3 911	33 160	2 022
Portland cement	194 392	201 065	310 479	274 856	291 279
Other cement	11 447	57 922	150 175	203 678	419 501
Norway					
Cement clinkers (a)	* 104 000	* 150 000	* 251 000	* 104 000	* 40 000
Portland cement (a)	* 14 200	* 144 000	* 94 000	* 138 000	* 148 000
Poland					
Cement clinkers	127 806	89 692	46 295	99 977	147 787
Portland cement	405 940	415 187	358 847	303 667	419 673
Other cement	35 305	22 984	17 523	28 200	20 620
Portugal					
Cement clinkers	1 553 992	1 888 362	916 431	994 099	1 410 579
Portland cement	758 854	996 778	1 345 607	2 000 541	2 668 095
Other cement	15 231	10 440	8 111	40 461	57 065
Romania					
Cement clinkers	182	265	24 810	84 874	7 092
Portland cement	17 869	20 039	278 795	333 946	156 625
Other cement	155	214	16 310	16 668	10 984
Serbia					
Cement clinkers	66 309	...	...	...	0
Portland cement	76 539	156 477	115 432	138 914	81 091
Other cement	125	33	28	29	65
Slovakia					
Cement clinkers	127 016	69 366	44 607	—	0
Portland cement	1 344 258	1 396 241	1 795 235	1 407 502	1 876 911
Other cement	217 328	21 660	10	28	77
Slovenia					
Cement clinkers	—	42 475	140 361	175 807	256 109
Portland cement	96 736	168 056	200 615	172 090	153 772
Other cement	97 258	4 731	988	308	2 487
Spain					
Cement clinkers	1 181 783	1 545 705	1 590 245	3 487 481	3 870 209
Portland cement	1 411 588	2 768 457	2 577 325	3 033 778	3 333 949
Other cement	74 007	87 864	184 099	117 093	194 554
Sweden					
Cement clinkers	577 571	505 585	267 884	391 898	357 876
Portland cement	482 223	467 559	590 443	782 362	752 187
Other cement	7 166	5 819	7 120	8 546	7 774
Switzerland					
Cement clinkers	70 207	6 983	104	35	350
Portland cement	15 044	103 952	63 262	72 143	142 900
Other cement	4 062	2 959	51	67	467
Turkey					
Cement clinkers	3 856 403	2 792 332	2 472 979	2 980 566	2 176 337
Portland cement	16 356 895	15 842 398	11 750 755	10 716 605	10 290 995
Other cement	245 770	415 763	315 159	104 504	165 249

Cement

Exports continued

Country	2009	2010	2011	2012	2013
United Kingdom					
Cement clinkers	4 708	5 500	15 531	31 458	24 056
Portland cement	92 628	134 223	121 537	239 058	85 405
Other cement	51 359	56 781	62 333	75 502	76 851

Note

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

**Imports of cement**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Cement clinkers	19	40	...	5 260	79 661
Portland cement	817 589	593 883	384 655	284 837	122 507
Other cement	550 840	300 788	211 346	162 203	107 529
Austria					
Cement clinkers	404 998	407 616	393 132	297 009	262 939
Portland cement	639 545	637 550	913 116	797 976	749 455
Other cement	52 715	71 535	60 349	54 115	133 721
Belgium					
Cement clinkers	684 634	740 528	717 664	649 014	779 293
Portland cement	819 923	1 030 282	1 113 638	1 310 336	978 809
Other cement	252 247	172 609	158 441	163 298	138 660
Bulgaria					
Cement clinkers	45 002	16 167	17 478	14 586	4 929
Portland cement	481 991	448 220	431 780	436 036	368 272
Other cement	955	2 510	6 147	8 567	6 496
Croatia					
Cement clinkers	1	967	144	44	9
Portland cement	393 613	344 352	326 526	315 804	261 584
Other cement	10 620	7 619	4 200	1 001	1 197
Cyprus					
Cement clinkers	15 455	29 579	69 780	6 498	10 100
Portland cement	249	2 512	545	416	466
Other cement	279	242	138	78	113
Czech Republic					
Cement clinkers	101 031	121 682	44 577	86 089	141 404
Portland cement	890 776	702 257	765 382	638 364	593 385
Other cement	51 482	48 336	31 074	26 875	9 941
Denmark					
Cement clinkers	31 847	23 732	29 888	24 464	25 822
Portland cement	208 467	180 249	244 007	211 379	209 012
Other cement	46 117	38 797	19 941	19 569	15 876
Estonia					
Cement clinkers	—	13 474	(a)* 1 800	4 688	4 526
Portland cement	30 424	36 354	52 807	27 404	34 852
Other cement	458	827	1 545	13 043	31 565
Finland					
Cement clinkers	536	14 191	16 790	7 512	2 912
Portland cement	320 084	587 410	549 673	498 577	401 067
Other cement	12 232	10 202	16 408	13 870	20 606
France					
Cement clinkers	784 892	838 538	849 577	693 269	1 118 820
Portland cement	1 744 423	2 422 582	3 113 977	3 057 832	2 776 280
Other cement	980 685	559 436	246 702	239 915	289 020
Germany					
Cement clinkers	9 200	18 037	52 111	82 345	43 676
Portland cement	904 023	939 310	1 054 856	1 023 170	1 043 382
Other cement	272 741	255 027	217 931	218 486	273 164
Greece					
Cement clinkers	4 249	12 100	34 712	65 317	87 439
Portland cement	136 300	206 164	159 514	49 204	24 791
Other cement	2 359	15 136	22 371	22 214	13 618

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Hungary					
Cement clinkers	117 232	69 469	67 770	43 196	68 506
Portland cement	565 552	495 045	785 166	710 516	978 968
Other cement	49 051	34 191	33 802	6 809	27 678
Iceland					
Cement clinkers	30	42	49	71	39
Portland cement	38 640	24 481	26 714	64 565	82 861
Other cement	241	4 405	226	229	255
Ireland, Republic of					
Cement clinkers	31 983	15 459	23 190	24 718	25 005
Portland cement	192 556	133 977	100 440	86 608	87 458
Other cement	10 698	4 974	4 112	4 375	5 793
Italy					
Cement clinkers	1 495 609	797 703	844 108	729 063	450 465
Portland cement	1 433 820	1 298 080	1 119 225	998 392	804 854
Other cement	308 222	139 459	125 066	106 926	108 775
Latvia					
Cement clinkers	34 375	158	6 551	701	68
Portland cement	87 660	94 873	89 751	108 596	137 815
Other cement	1 088	643	281	306	229
Lithuania					
Cement clinkers	996	176 461	227 793	173 488	24 015
Portland cement	133 039	122 178	144 824	147 329	199 114
Other cement	...	...	...	...	671
Luxembourg					
Cement clinkers	17 827	27 238	34 532	34 703	8 589
Portland cement	56 666	34 642	42 548	37 740	67 220
Other cement	16 255	12 119	14 934	15 382	11 592
Macedonia					
Cement clinkers	(a)* 17 000	(a)* 2 000	8 932	(b)* 23	...
Portland cement	193 076	185 378	148 954	193 978	178 196
Other cement	397	1 213	409	501	545
Malta					
Cement clinkers	142	17	...	...	3
Portland cement	328 411	285 182	258 304	260 664	223 401
Other cement	1 552	13 002	6 676	2 906	2 122
Montenegro					
Cement clinkers	...	0	...	...	72
Portland cement	279 497	266 063	250 759	248 013	267 715
Other cement	171 150	116 132	90 911	92 927	96 956
Netherlands					
Cement clinkers	511 560	636 694	424 274	558 153	634 548
Portland cement	904 788	1 123 936	1 580 140	1 278 033	1 259 993
Other cement	842 190	1 136 163	1 475 035	1 488 241	1 271 302
Norway					
Cement clinkers	6 904	7 070	170	312	376
Portland cement	237 896	353 102	409 018	435 344	464 686
Other cement	20 474	21 621	25 809	28 533	31 974
Poland					
Cement clinkers	35 106	111 677	35 663	13 558	12 497
Portland cement	421 822	565 893	932 507	695 629	659 111
Other cement	21 466	26 247	25 467	21 027	108 490
Portugal					
Cement clinkers	24 156	24 143	3 238	6 011	1 106
Portland cement	150 065	186 170	134 000	169 109	212 948
Other cement	11 072	11 771	5 043	5 293	7 746
Romania					
Cement clinkers	23 613	75 812	144 547	144 116	216 322
Portland cement	296 687	307 977	239 373	240 469	208 701
Other cement	15 779	22 004	21 297	18 626	14 882
Serbia					
Cement clinkers	...	1 321	5 309	51 360	27 469
Portland cement	41 744	52 582	92 665	194 728	198 866
Other cement	1 003	728	784	664	1 979

Cement

Imports continued

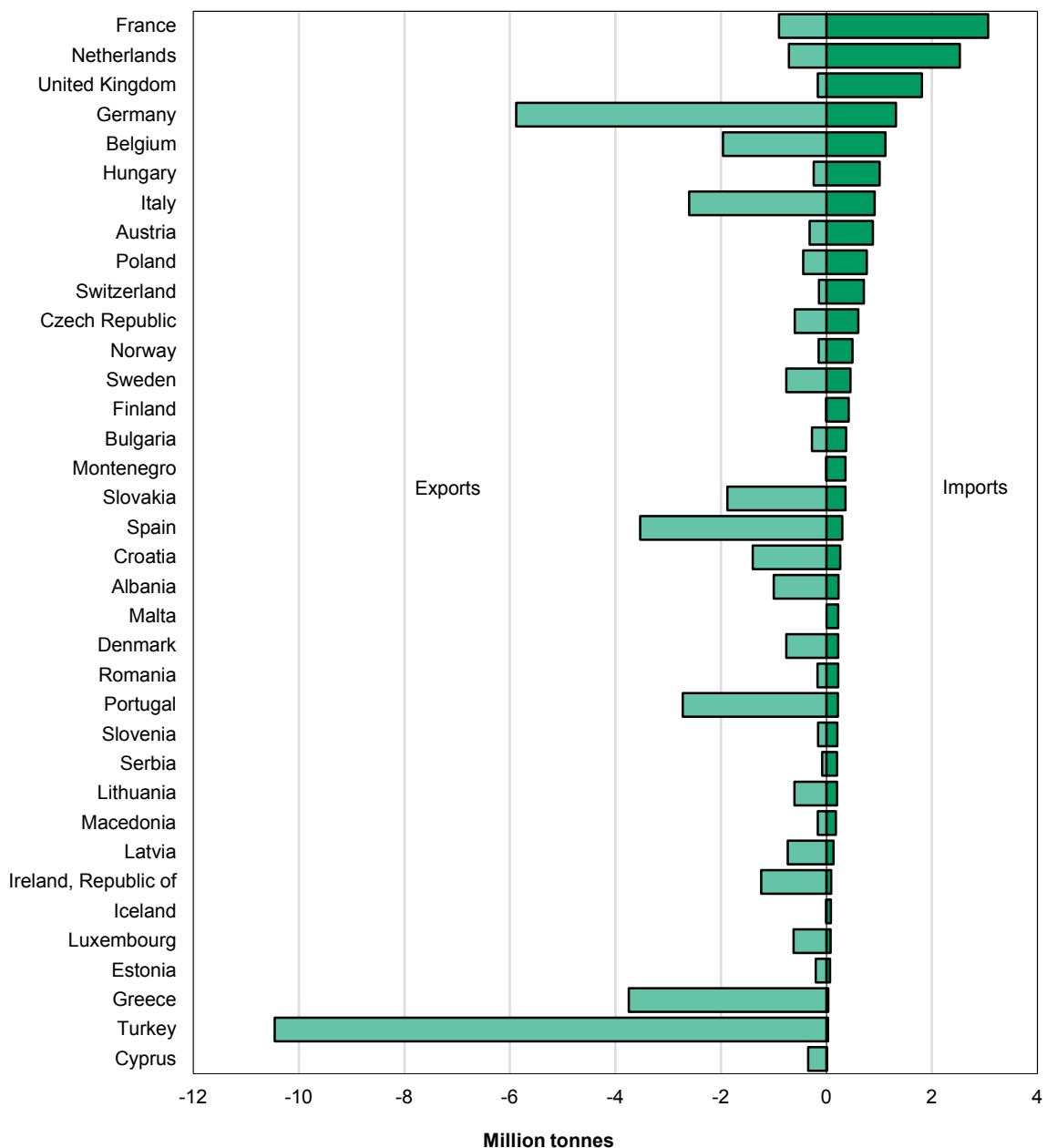
tonnes

Country	2009	2010	2011	2012	2013
Slovakia					
Cement clinkers	13 076	6 380	9 706	5 840	29 373
Portland cement	284 457	256 358	281 910	266 308	300 277
Other cement	56 060	34 733	102 134	71 001	60 034
Slovenia					
Cement clinkers	60	129	95 704	168 235	2 549
Portland cement	297 617	328 563	334 053	210 734	206 144
Other cement	17 414	17 328	8 237	4 077	2 626
Spain					
Cement clinkers	2 079 944	1 342 279	490 164	80 228	106 170
Portland cement	694 757	637 322	450 416	363 065	274 456
Other cement	73 362	14 516	15 894	17 347	24 997
Sweden					
Cement clinkers	10 434	36 629	58 132	5 230	8 044
Portland cement	29 482	348 431	419 332	391 030	403 823
Other cement	37 308	36 399	42 002	43 520	51 897
Switzerland					
Cement clinkers	27 649	74 946	46 117	2 580	62 514
Portland cement	364 034	465 699	538 979	526 305	588 965
Other cement	36 464	49 549	73 361	92 633	121 136
Turkey					
Cement clinkers	6 053	58 176	10 511	58 098	99 947
Portland cement	13 471	5 875	3 406	21 972	23 322
Other cement	3 358	6 168	10 847	7 142	6 982
United Kingdom					
Cement clinkers	206 857	201 308	208 595	206 086	290 071
Portland cement	1 718 146	1 759 841	1 746 862	1 429 848	1 776 713
Other cement	30 815	92 031	100 453	31 045	32 498

Note

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

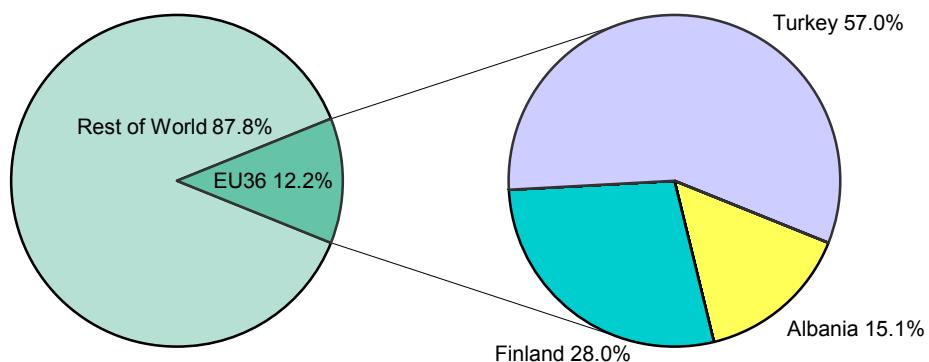
## Cement - EU36 trade in 2013



## 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.
- South Africa was the world's largest producer in 2013, with 47 per cent of the total world output. The second largest producer was Kazakhstan (18 per cent), followed by India (10 per cent), Turkey (seven per cent), Finland and Oman (both with three per cent).

**EU36 Production of chromium ores and concentrates 2013**



## Production of chromium ores and concentrates

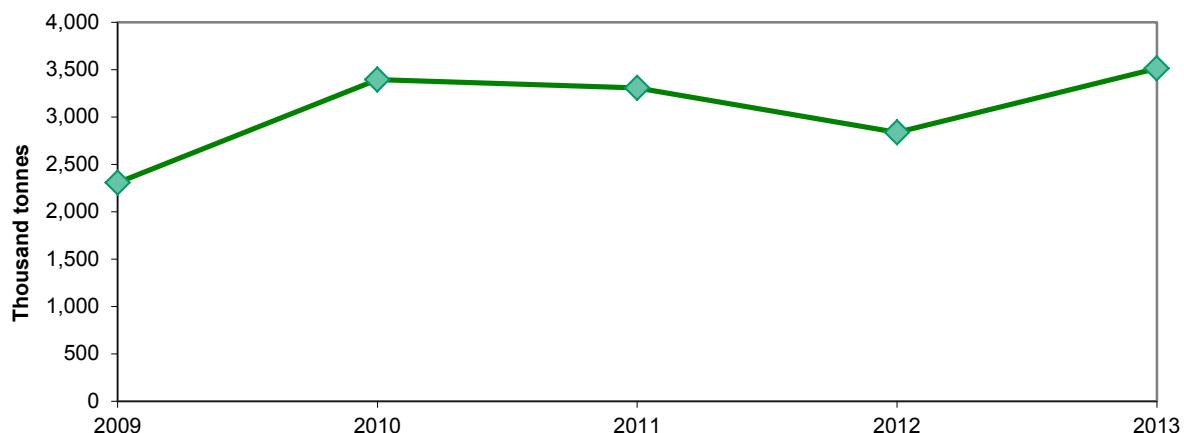
tonnes

Country	2009	2010	2011	2012	2013
Albania	288 759	334 467	330 938	380 349	529 592
Finland	247 000	598 000	693 000	425 000	982 000
Turkey	1 770 029	2 461 314	2 281 981	2 029 403	* 2 000 000
EU36 Total	2 306 000	3 394 000	3 306 000	2 835 000	3 512 000

Note

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

**EU36 Production of chromium ores and concentrates 2009 - 13**



**Exports of chromium**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ores and concentrates	275 879	428 385	346 792	427 092	756 361
Austria					
Ores and concentrates	333	4	1 163	413	9
Metal	5 845	10 245	2 138	565	707
Belgium					
Ores and concentrates	15 562	18 415	13 945	34 801	44 009
Metal	1 226	1 311	1 010	676	915
Bulgaria					
Metal	15	2	603	304	91
Czech Republic					
Ores and concentrates	369	764	1 140	1 061	838
Metal	662	21	103	31	149
Denmark					
Metal	659	1 056	601	548	427
Finland					
Ores and concentrates	2 050	8 291	5 231	4 575	3 424
Metal	1 577	1 813	2 366	1 950	2 542
France					
Ores and concentrates	1 935	2 422	2 168	1 858	3 390
Metal	4 767	7 612	8 034	9 720	9 509
Germany					
Ores and concentrates	15 922	32 070	53 989	60 354	59 965
Metal	4 685	4 606	2 995	6 308	3 496
Italy					
Ores and concentrates	1 762	1 617	3 764	1 831	1 828
Netherlands					
Ores and concentrates	32 485	74 483	126 012	156 975	175 682
Metal	885	3 569	2 197	3 112	5 870
Norway					
Metal	85	97	78	202	61
Poland					
Ores and concentrates	107	425	3 604	536	373
Metal	861	7 948	7 135	2 977	4 423
Slovakia					
Metal	424	777	83	2	2
Slovenia					
Metal	14	123	174	1	1
Spain					
Ores and concentrates	1 022	600	1 252	4 225	2 250
Metal	516	665	237	555	470
Sweden					
Metal	100	191	167	123	122
Switzerland					
Metal	44	82	92	111	322
Turkey					
Ores and concentrates	1 748 194	2 256 387	2 161 001	2 129 693	2 218 264
Metal	2 667	184	1 930	2 344	63
United Kingdom					
Ores and concentrates	32 507	297	168	50	50
Metal	5 058	7 441	8 017	7 737	7 061

## Note

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

**Imports of chromium**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ores and concentrates	580	4 651	7 477	...	...
Austria					
Ores and concentrates	25 891	54 945	20 921	33 317	29 138
Metal	4 325	6 109	7 868	4 854	4 365

## Chromium

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Ores and concentrates	19 050	25 350	22 896	39 090	52 755
Metal	871	1 593	3 023	977	834
Bulgaria					
Ores and concentrates	637	671	971	1 086	679
Croatia					
Metal	307	419	345	404	177
Czech Republic					
Ores and concentrates	7 798	7 975	7 986	8 413	6 822
Metal	83	514	139	147	218
Denmark					
Ores and concentrates	384	480	864	880	724
Finland					
Ores and concentrates	4 521	9 197	20 853	9 372	3 726
Metal	105	139	194	139	94
France					
Ores and concentrates	10 813	11 273	15 835	14 844	10 639
Metal	478	1 155	524	466	837
Germany					
Ores and concentrates	45 684	101 972	180 377	188 783	191 488
Metal	3 328	4 783	5 931	6 887	7 596
Hungary					
Metal	—	82	99	95	130
Ireland, Republic of					
Metal	138	83	179	40	77
Italy					
Ores and concentrates	23 842	22 012	31 861	30 547	28 069
Metal	943	881	1 738	1 598	1 960
Macedonia					
Ores and concentrates	495	294	512	324	268
Netherlands					
Ores and concentrates	18 702	88 788	135 776	180 648	150 921
Metal	2 157	6 642	5 773	4 789	5 260
Norway					
Ores and concentrates (a)	* 400	* 400	* 500	* 300	* 200
Metal	74	90	437	453	543
Poland					
Ores and concentrates	12 728	15 672	30 863	27 723	30 554
Metal	679	103	4 533	78	526
Portugal					
Ores and concentrates	2 361	2 108	2 727	2 639	2 206
Romania					
Ores and concentrates	705	7 054	1 637	2 288	1 514
Metal	39	16	105	50	151
Serbia					
Ores and concentrates	436	641	725	211	140
Slovakia					
Ores and concentrates	2 533	4 546	5 542	3 562	5 459
Slovenia					
Ores and concentrates	1 005	1 912	966	466	677
Metal	143	104	97	101	98
Spain					
Ores and concentrates	4 031	5 579	9 262	10 487	6 644
Metal	1 192	1 878	2 350	1 479	1 438
Sweden					
Ores and concentrates (a)	* 127 500	* 169 000	* 128 600	* 135 900	* 79 000
Metal	4 396	4 999	6 598	6 139	5 490
Switzerland					
Ores and concentrates	974	1 051	809	1 359	1 253
Metal	38	74	71	93	147
Turkey					
Ores and concentrates	113 461	113 487	122 070	162 266	152 549
Metal	54	65	108	91	183

## Chromium

Imports continued

tonnes

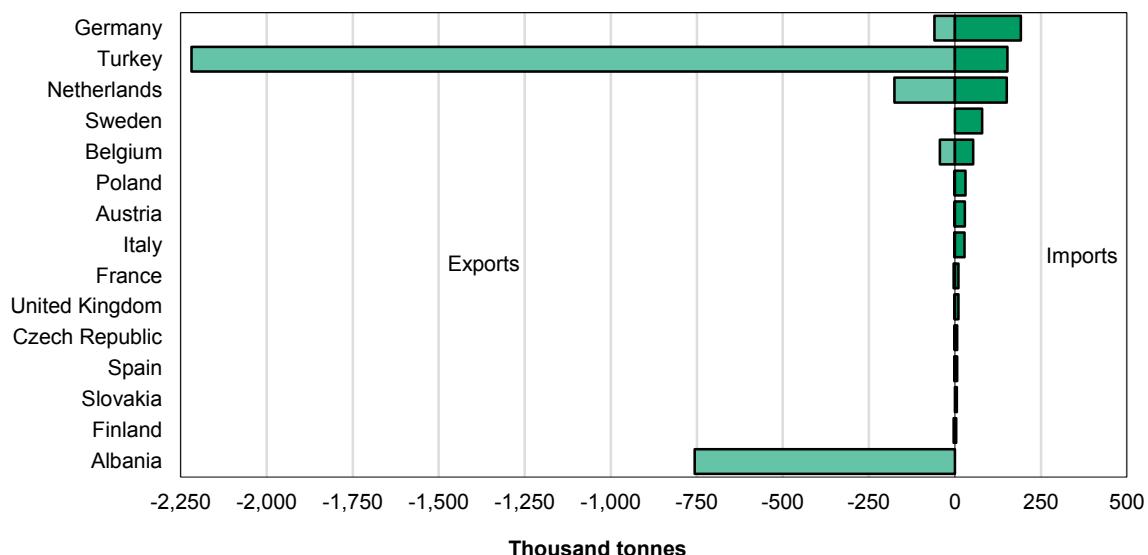
Country	2009	2010	2011	2012	2013
United Kingdom					
Ores and concentrates	33 867	7 084	10 572	9 124	10 033
Metal	2 904	3 007	2 346	1 663	1 751

Notes

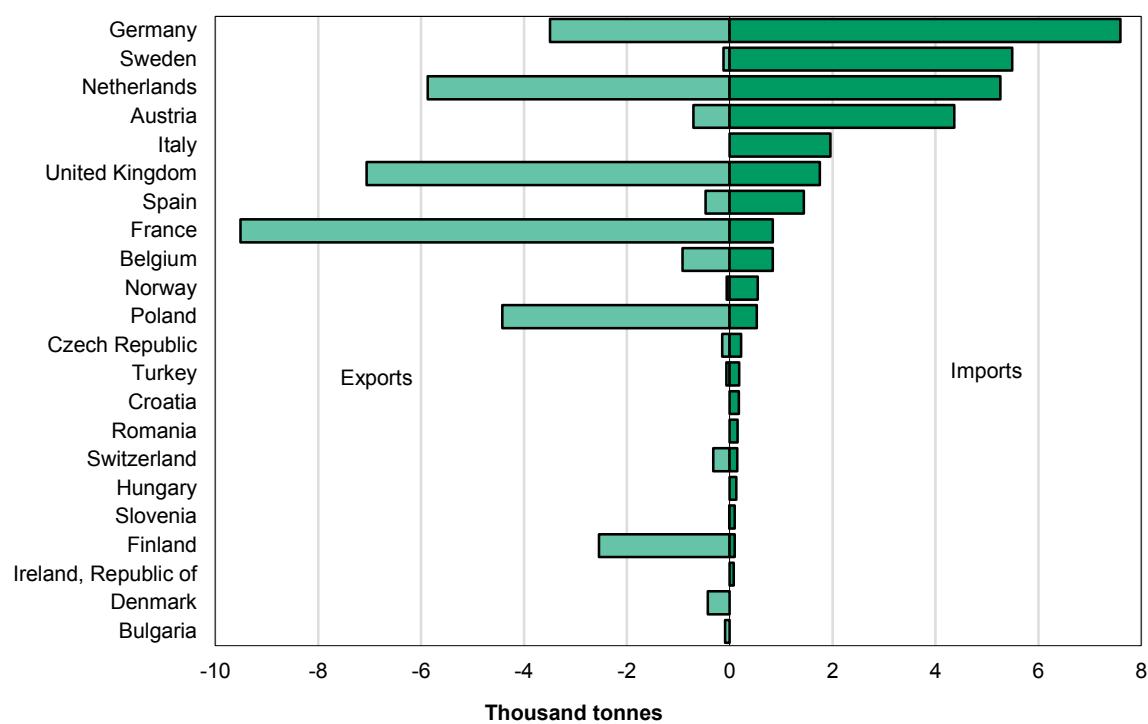
(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

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

### Chromium ores and concentrates - EU36 trade in 2013



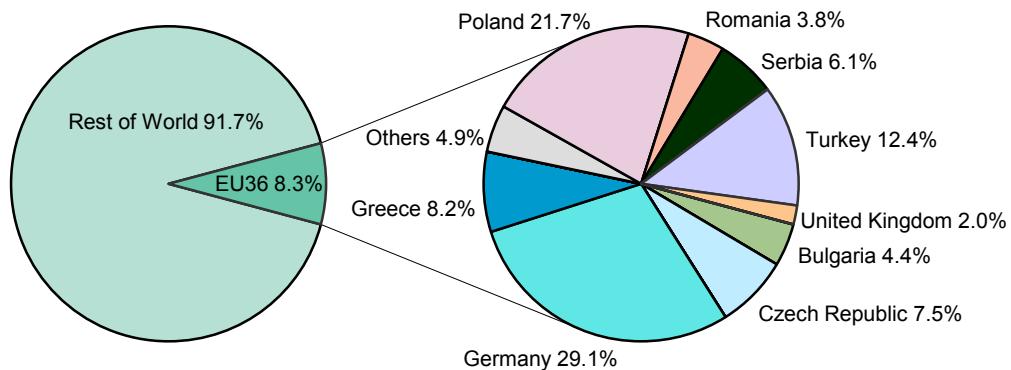
### Chromium metal - EU36 trade in 2013



## 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.
- China was the world's largest producer in 2013, with 47 per cent of the total world output. The second largest producer was USA (12 per cent), followed by India (eight per cent), Australia (six per cent) and Indonesia (five per cent).

**EU36 Production of coal (all forms) 2013**



## Production of coal

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Lignite	2 000	3 000	100	—	—
Bulgaria					
Lignite	25 014 800	27 148 300	34 496 200	31 040 700	26 459 300
Brown coal	2 243 800	2 321 200	2 743 500	2 556 700	2 301 500
Czech Republic					
Bituminous	10 621 000	11 193 000	10 967 000	10 796 000	8 610 000
Lignite	262 000	—	—	—	—
Brown coal	45 354 000	43 931 000	46 848 000	43 710 000	40 585 000
Germany					
Anthracite and Bituminous	14 971 000	14 110 000	12 960 000	11 558 000	8 260 000
Brown coal	169 857 142	169 402 544	176 502 048	185 432 000	182 696 000
Greece					
Lignite	61 800 000	53 600 000	58 400 000	62 334 800	54 000 000
Hungary					
Lignite	8 026 587	8 202 859	8 800 783	8 438 000	8 834 000
Brown coal	944 139	813 403	699 129	875 944	749 000
Macedonia					
Lignite	7 395 915	6 583 074	7 902 084	7 309 546	6 633 560
Montenegro					
Lignite	957 164	1 937 847	1 972 671	1 706 302	1 692 535
Norway					
Bituminous (a)	2 437 000	1 685 000	1 640 000	1 325 000	2 135 000
Poland					
Bituminous	78 064 462	76 727 802	76 447 604	79 854 904	77 016 910
Lignite	57 108 304	56 510 125	62 841 269	64 297 772	65 848 670
Romania					
Anthracite and Bituminous	—	—	2 121 574	1 876 062	* 2 000 000
Lignite	28 460 152	28 774 244	33 779 130	31 529 377	22 902 291
Brown coal	63 458	62 448	46 071	17 700	—

## Production continued

tonnes

Country	2009	2010	2011	2012	2013
Serbia					
Bituminous	69 000	108 000	134 000	141 000	155 000
Lignite (b)	38 070 579	37 562 840	40 467 132	37 707 017	39 752 741
Brown coal	209 660	193 492	349 861	316 507	340 892
Slovakia					
Lignite	155 000	176 000	124 000	136 000	179 000
Brown coal	2 221 000	2 026 000	1 989 000	1 964 000	2 009 000
Slovenia					
Lignite	3 921 746	4 010 930	4 066 278	3 967 064	3 721 188
Brown coal	510 769	419 466	435 800	314 262	50 744
Spain					
Anthracite	4 306 033	3 212 603	2 489 797	2 259 236	2 213 775
Bituminous	2 898 340	2 776 918	1 774 992	1 651 496	1 799 242
Sub-bituminous	2 493 577	2 428 877	2 358 930	2 275 409	1 870 569
Turkey					
Anthracite	3 773 603	6 312 137	5 619 316	3 358 843	* 3 100 000
Bituminous	* 3 000 000	* 3 000 000	3 542 223	3 502 009	* 3 500 000
Lignite	82 263 104	86 943 392	79 968 510	75 036 558	* 75 000 000
United Kingdom					
Bituminous (c)	17 874 000	18 417 000	18 627 000	17 047 000	12 839 000
EU36 Total	675 300 000	670 600 000	701 100 000	694 300 000	657 300 000

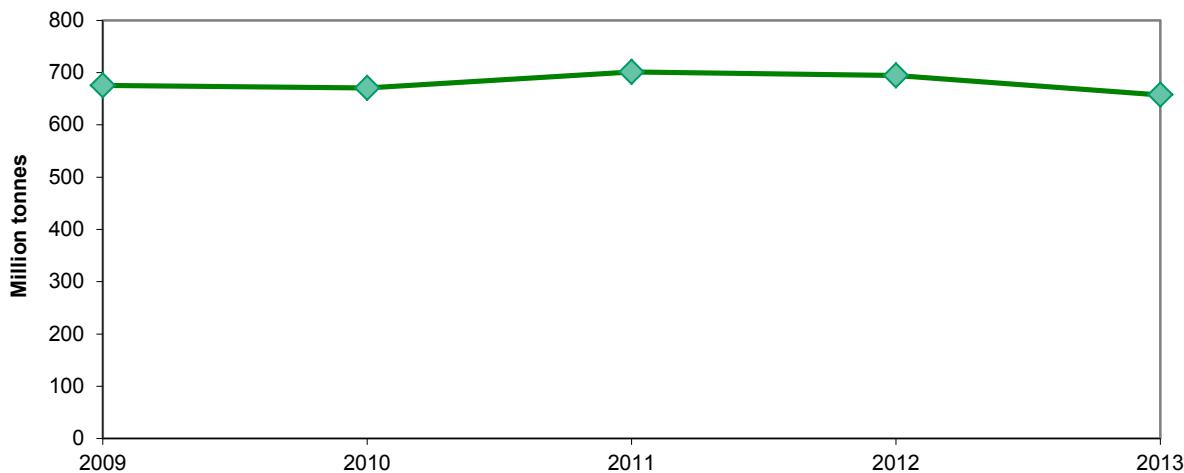
## Notes

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

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

(b) Excluding production in Kosovo

(c) Including anthracite

**EU36 Production of coal (all forms) 2009 - 13**

**Exports of coal**

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Anthracite	675 097	1 652 015	1 915 992	1 668 940	1 772 455
Other coal	7 961 212	7 647 714	4 558 763	6 021 719	2 502 987
Lignite	7 267	18 781	42 164	51 514	42 225
Briquettes	11 452	18 899	40 374	41 363	55 684
Bulgaria					
Anthracite	1 970	150	2 538	2 731	2 914
Other coal	10 957	111 894	159 399	174 081	129 657
Lignite	5 862	9 525	2 744	635	127
Croatia					
Hard coal	(a) 1	(a) 1	156	(a) 488	(a) 10 733
Czech Republic					
Anthracite	2 783	1 126	3 463	3 583	4 144
Other coal	9 607 378	9 945 335	8 788 780	8 325 924	4 832 928
Lignite	1 207 715	1 019 645	1 071 038	12 779 156	1 186 782
Briquettes	93 479	90 864	103 816	54 148	45 025
Denmark					
Hard coal	(a) 44 115	61 612	153 532	(a) 10 585	(a) 80 771
Estonia					
Hard coal	(a) 20 296	(a) 16 452	(a) 2 312	(a) 741	1
Finland					
Hard coal (a)	19	12	32	0	5 270
France					
Anthracite	5 272	9 551	4 760	11 423	100 873
Other coal	182 382	243 138	227 114	320 110	96 081
Briquettes	6 045	4 495	2 390	109	39
Germany					
Anthracite	179 880	222 458	165 471	166 704	198 318
Other coal	243 134	41 128	52 555	181 712	52 793
Lignite	523 720	696 279	789 315	1 134 350	919 347
Briquettes	493 552	463 102	467 383	450 270	386 161
Greece					
Anthracite	3 274	2 073	2 175	1 424	702
Other coal	3 050	2 998	12 956	17 698	8 758
Lignite	—	—	10 242	18 262	16 976
Briquettes	—	113	—	8 502	1
Hungary					
Anthracite	...	9 151	5 077	210	11
Other coal	—	1 366	476	208	42 521
Lignite	41 329	3 390	4 886	4 539	14 179
Ireland, Republic of					
Hard coal	(a) 3 863	5 820	(a) 2 857	18 914	(a) 35 038
Briquettes	9 858	12 695	11 333	12 115	12 113
Italy					
Anthracite	15 474	12 817	17 611	12 841	13 515
Other coal	15 292	2 148	871	58 822	1 953
Briquettes	514	3 923	213	798	45
Latvia					
Hard coal (a)	170	3 136	26 100	13 823	32 847
Briquettes	74	3 262	6 402	4 007	2 772
Lithuania					
Hard coal (a)	10 915	33 109	28 271	5 762	33 957
Montenegro					
Lignite	58 381	69 130	48 940	47 778	22 877
Netherlands					
Anthracite	78 064	41 054	303 741	153 370	91 575
Other coal	21 484 806	26 690 844	28 593 353	23 505 830	11 303 627
Briquettes	16 347	144 797	294 637	148 931	14 240
Poland					
Anthracite	5 282	41 908	43 370	37 906	52 188
Other coal	10 225 319	12 268 541	2 446 283	7 008 161	10 805 260
Lignite	68 273	116 682	145 063	133 531	217 825
Briquettes	363	2 114	15 992	1 676	1 637

Coal

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Portugal					
Anthracite	4 409	7 136	7 405	11 385	9 679
Other coal	—	—	17 850	4	...
Romania					
Hard coal	(a) 19 771	(a) 73 002	35 712	19 701	(a) 5 599
Serbia					
Anthracite	3 784	4 434	2 507	160	3 009
Other coal	14 530	3 801	1 116	441	1 112
Lignite	120 553	112 009	32 337	28 266	51 729
Briquettes	630	8 724	573	53	62 273
Slovakia					
Anthracite	2 927	725	6 198	9 373	7 955
Other coal	193 936	13 043	5 042	10	9 463
Lignite	7 477	55	908	53	18 063
Briquettes	609	108	65	6 486	6 953
Slovenia					
Anthracite	426	759	5 932	624	6 932
Other coal	50	4	200	625	6 326
Lignite	4 615	...	—	19	—
Spain					
Anthracite	123 114	337 930	337 833	240 630	351 794
Other coal	2 504 290	2 299 750	1 696 416	1 709 598	356 469
Turkey					
Anthracite	194	717	5 210	5 700	1 356
Other coal	3 305	74 487	1 528	2 985	4 464
Lignite	6 253	4 554	43 942	48 706	13 204
United Kingdom					
Anthracite	119 472	89 701	97 014	119 826	143 133
Other coal	755 169	1 162 108	939 564	810 160	456 259
Briquettes	68 226	89 125	117 025	150 783	106 890

## Notes

(1) This table excludes bunker shipments

(a) Including anthracite

## Imports of coal

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Anthracite	2 142	5 023	8 245	9 240	8 729
Other coal	88 601	59 663	82 438	90 273	84 406
Austria					
Anthracite	3 454	3 774	5 760	5 932	1 654
Other coal	4 081 243	3 616 072	3 956 977	3 872 658	3 178 153
Lignite	72 734	68 777	74 609	75 705	82 039
Briquettes	30 538	34 999	35 695	26 598	28 482
Belgium					
Anthracite	1 436 499	2 660 267	3 382 132	2 377 808	2 077 612
Other coal	11 391 422	13 448 004	11 464 597	13 301 047	6 870 834
Lignite	256 167	362 257	411 424	425 918	474 879
Briquettes	31 346	27 379	53 793	40 447	60 486
Bulgaria					
Anthracite	1 938 000	1 858 397	2 203 775	1 132 609	732 939
Other coal	1 724 218	1 651 207	1 689 109	1 785 317	964 062
Briquettes	10 238	46 754	19	47	24
Croatia					
Hard coal (b)	712 873	1 112 822	1 092 794	875 116	1 181 025
Lignite	47 504	85 413	85 316	44 423	49 158
Briquettes	1 730	1 823	2 302	2 175	6 848
Cyprus					
Hard coal (b)	28 911	7 714	129	164	386

## Coal

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Czech Republic					
Anthracite	24 054	24 471	95 762	121 247	183 417
Other coal	2 637 873	3 382 152	3 781 348	3 028 345	1 940 720
Lignite	36 617	49 426	91 889	350 322	304 216
Briquettes	60 962	137 933	157 513	156 682	167 695
Denmark					
Anthracite	12 593	(c)* 21 000	(c)* 6 000	(c)* 6 000	(c)* 500
Other coal	6 471 046	3 670 544	(c)* 7 104 000	(c)* 3 799 000	(c)* 451 000
Briquettes	455	7 554	14 768	4 106	3 522
Estonia					
Hard coal (b)	30 413	77 300	89 422	81 082	58 945
Finland					
Hard coal (b)	5 937 153	5 919 757	6 972 540	3 954 916	5 064 181
France					
Anthracite	1 914 614	2 291 609	1 304 643	1 527 937	1 766 268
Other coal	27 548 446	33 109 724	27 848 085	32 067 576	16 699 467
Lignite	51 577	52 076	82 504	75 621	146 480
Briquettes	151 863	129 465	102 257	164 158	120 067
Germany					
Anthracite	3 893 429	3 643 048	2 535 881	1 399 126	1 047 216
Other coal	55 359 299	60 608 324	71 664 044	74 604 670	49 515 475
Lignite	37 839	24 400	41 768	21 509	71 697
Briquettes	132 895	404 681	291 675	138 019	137 275
Greece					
Anthracite	37 585	48 783	117 406	21 961	21 083
Other coal	268 511	838 343	339 930	130 174	339 450
Lignite	58 053	87 707	165 417	206 384	163 191
Briquettes	5 827	62	12 986	53 028	61 330
Hungary					
Hard coal (b)	1 340 769	1 744 778	1 570 645	1 556 689	1 366 089
Lignite	413 094	297 335	318 792	224 685	187 326
Briquettes	17 519	14 352	11 018	21 885	31 443
Iceland					
Anthracite	104 094	101 220	103 822	103 989	125 109
Other coal	9 903	3 521	6 701	4	2
Ireland, Republic of					
Anthracite	53 413	77 112	33 665	30 564	43 709
Other coal	3 327 563	3 090 869	4 246 173	3 950 754	2 300 643
Lignite	415	242	60	21 901	21 901
Briquettes	40 482	31 507	30 673	46 258	91 158
Italy					
Anthracite	210 384	408 391	394 026	266 462	162 364
Other coal	37 998 259	41 337 671	45 313 376	49 538 162	20 184 762
Briquettes	7 786	6 233	3 857	1 905	3 975
Latvia					
Anthracite	78	1 273	12 649	5 111	3 903
Other coal	238 003	345 973	340 806	295 064	132 348
Lithuania					
Anthracite	15 755	3 616	24 260	62 934	3 435
Other coal	286 330	483 714	698 459	512 873	416 369
Luxembourg					
Anthracite	16 525	24 834	16 256	10 994	10 869
Other coal	89 675	76 210	73 395	69 700	62 674
Lignite	7 093	7 090	7 710	8 620	3 483
Macedonia					
Hard coal (b)	85 660	160 162	189 549	233 556	163 242
Lignite	340	23 409	42 052	27 024	51 273
Briquettes	9 207	7 623	22 546	18 209	90 103
Montenegro					
Lignite	6 734	—	62	39	—
Briquettes	3 448	(e) 0	3	14	16
Netherlands					
Anthracite	8 005	44 958	225 184	257 485	160 206
Other coal	32 285 125	39 388 075	36 819 234	45 352 155	22 978 921
Lignite	29 239	21 933	15 824	22 991	62 285
Briquettes	53 030	132 281	429 514	1 398 836	2 702 367

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Norway					
Anthracite (a)	54 199	78 387	79 140	78 412	68 231
Other coal (a)(c)	* 506 575	* 688 048	* 360 998	* 604 056	* 463 955
Poland					
Anthracite	310 290	583 158	582 605	407 120	384 053
Other coal	15 486 270	21 405 901	23 136 185	15 553 823	10 434 564
Lignite	30 307	35 973	67 550	134 135	221 819
Briquettes	25 788	60 548	60 758	53 873	57 782
Portugal					
Anthracite	28 472	21 454	30 860	42 657	32 258
Other coal	9 843 258	5 297 302	7 184 392	9 999 634	4 182 028
Romania					
Anthracite	56 296	72 776	148 260	137 388	143 627
Other coal	1 190 184	1 082 971	992 361	1 266 624	785 892
Lignite	62 469	718	1 706	3 492	2 611
Briquettes	102 372	96 428	197	197	511
Serbia					
Anthracite	10 752	18 056	16 456	13 988	21 017
Other coal	89 731	156 846	183 713	178 984	83 968
Lignite	276 033	307 250	615 026	716 035	321 145
Briquettes	2 181	11 130	8 975	18 239	2 085
Slovakia					
Anthracite	264 286	293 054	713 105	635 877	499 374
Other coal	6 730 203	5 726 104	5 769 884	35 217 321	3 084 364
Lignite	693 786	563 021	534 118	624 731	436 339
Briquettes	7 877	12 799	14 836	16 545	25 808
Slovenia					
Anthracite	3 997	7 898	15 300	8 745	15 621
Other coal	29 219	18 975	15 329	15 595	13 345
Lignite	507 013	544 523	515 659	599 679	496 183
Spain					
Anthracite	767 027	846 015	852 813	594 330	544 040
Other coal	27 834 056	19 700 375	24 492 214	35 060 845	13 118 931
Sweden					
Anthracite	20 373	48 767	38 136	34 827	32 706
Other coal	3 595 407	6 298 240	5 775 183	4 235 371	2 499 142
Switzerland					
Anthracite	5 444	7 164	7 144	12 121	16 400
Other coal	345 234	247 688	184 270	256 218	128 071
Lignite	66 483	62 756	69 378	48 704	59 651
Briquettes	4 933	3 328	2 887	3 750	4 490
Turkey					
Anthracite	457 575	972 425	990 996	854 104	665 244
Other coal	38 999 998	42 096 242	45 443 000	56 746 637	25 960 988
Lignite	...	5 339	—	75	7 103
United Kingdom					
Anthracite	207 327	187 246	193 474	29 186	23 059
Other coal	60 402 511	39 593 856	54 388 568	71 310 430	44 867 788
Briquettes	9 021	11 169	21 142	15 004	14 954

## Notes

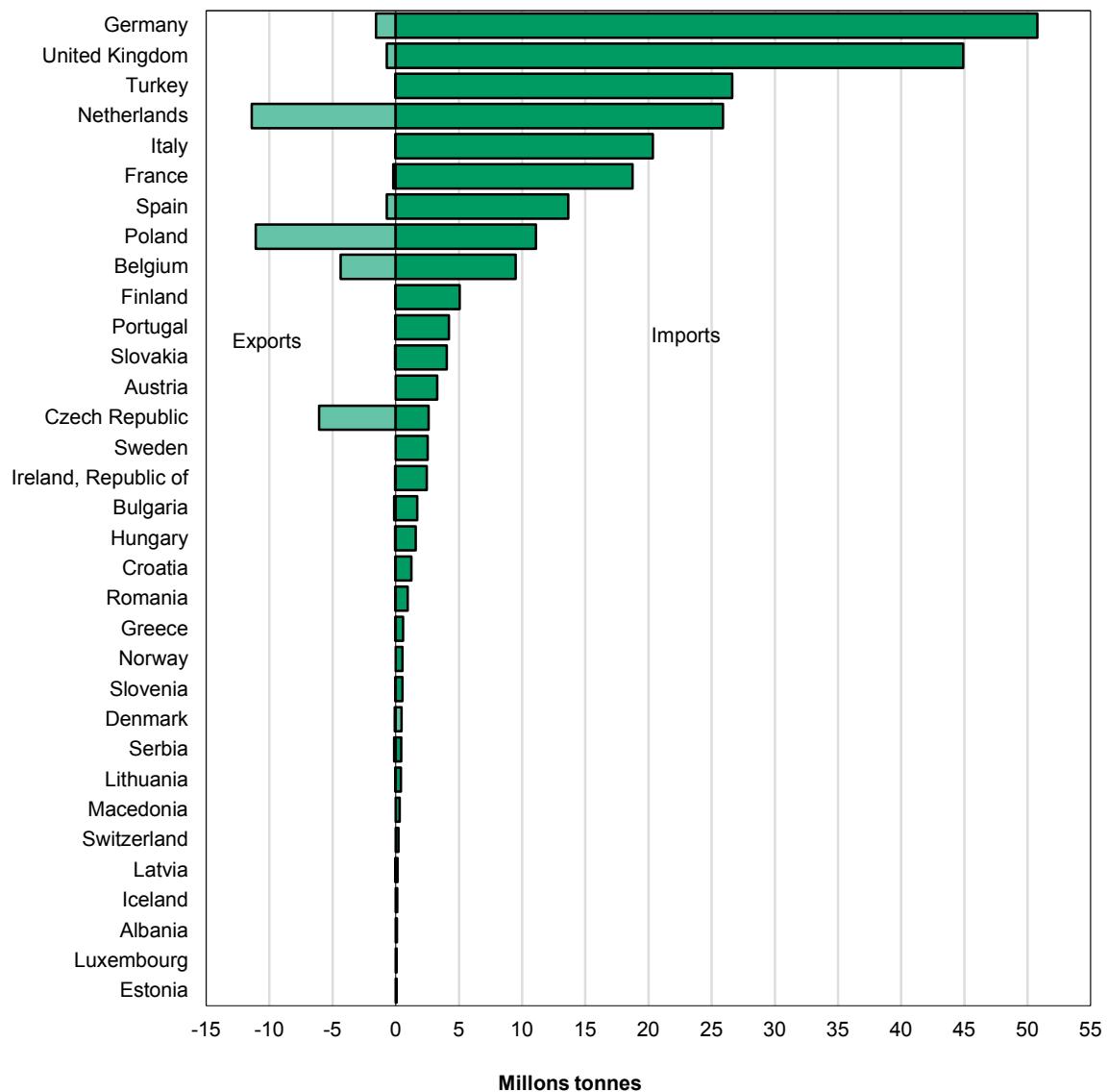
(a) Excludes coal imported from Spitzbergen

(b) Including anthracite

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

Coal

### Coal - EU36 trade in 2013



## Cobalt

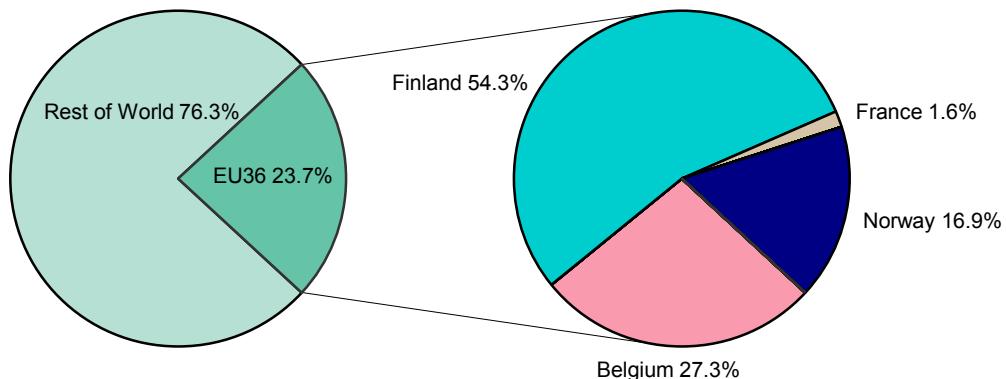
- Cobalt is a lustrous, greyish-silver, brittle metal. It is also very hard and can take a high polish. It retains its strength at high temperatures and is ferromagnetic, which means it is capable of being magnetised. Cobalt is extensively used as an alloying metal and is valued for its ability to produce 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 world's largest producer of mined cobalt in 2013, with 61 per cent of the total world output. The second largest producer was China (six per cent), followed by Australia and Zambia (five per cent each). China was the world's largest producer of cobalt metal in 2013, with 43 per cent of the total world output. The second producer largest was Finland (13 per cent), followed by Belgium, Zambia, Australia and Canada (all with six per cent each).

### Mine production of cobalt

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Finland	* 27	* 140	480	* 1 381	2 061

EU36 Production of cobalt metal 2013



### Production of cobalt metal

tonnes

Country	2009	2010	2011	2012	2013
Belgium (a)	2 150	2 600	3 187	4 200	5 415
Finland	8 970	9 429	10 627	10 562	10 798
France	368	302	354	326	308
Norway	3 510	3 208	3 067	2 969	3 348
EU36 Total	15 000	15 500	17 200	18 100	19 900

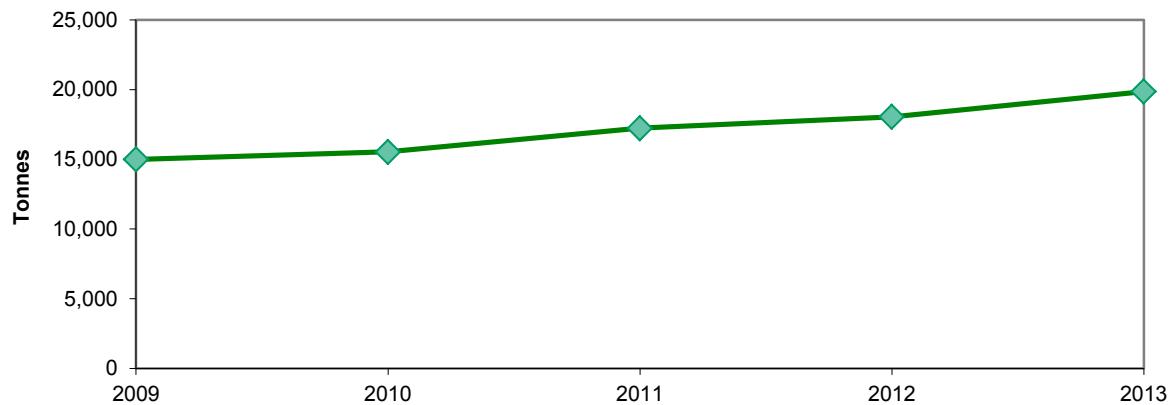
#### Notes

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

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

Cobalt

**EU36 Production of cobalt metal 2009 - 13**



**Exports of cobalt**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metal	60	72	60	111	68
Belgium					
Ore	1 227	633	2 431	362	175
Metal (a)	* 4 700	* 4 400	* 2 400	* 2 300	* 2 500
Finland					
Oxides (a)	* 3 100	* 5 400	* 6 400	* 4 300	* 5 200
Metal (a)	* 4 500	* 3 900	* 4 200	* 6 000	* 5 300
France					
Oxides	50	3	3	4	3
Metal	706	785	1 086	1 100	1 217
Germany					
Ore	103	88	—	8	—
Oxides	69	102	113	84	53
Metal	1 067	1 481	1 393	1 533	1 641
Ireland, Republic of					
Ore	84	184	68	177	144
Metal	145	234	125	234	272
Italy					
Oxides	141	206	224	188	390
Metal	205	187	230	177	184
Luxembourg					
Metal	3	1	305	1	1
Netherlands					
Oxides	65	144	67	132	45
Metal	353	1 733	2 062	1 934	2 054
Norway					
Metal	3 550	3 325	3 064	3 059	2 876
Poland					
Oxides	64	8	3	2	3
Slovenia					
Metal	50	65	33	71	96
Spain					
Oxides	33	19	14	37	66
Metal	17	4	25	72	6
Sweden					
Metal	285	220	99	200	364
Switzerland					
Metal	70	80	97	113	125
United Kingdom					
Oxides	891	1 267	820	1 179	1 493
Metal	2 572	1 780	1 739	1 865	3 136

Note

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

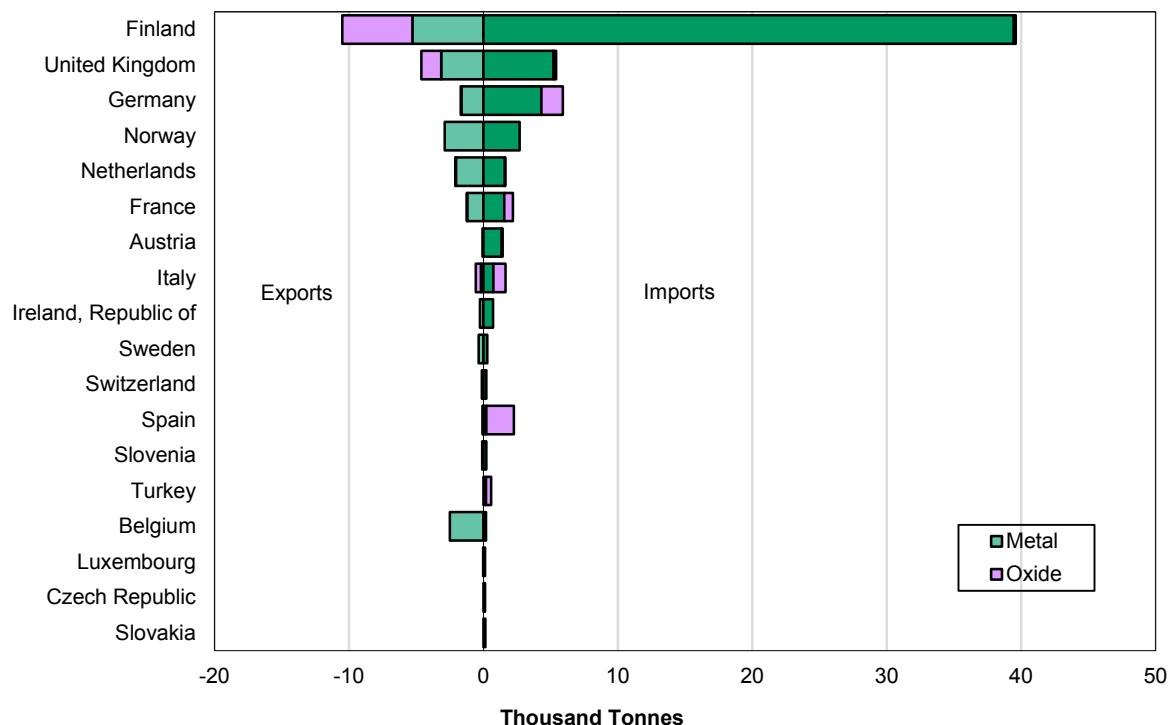
**Imports of cobalt**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metal	331	653	718	730	1 363
Oxides	5	10	9	8	54
Belgium					
Ore	272	156	379	349	66
Metal	249	222	368	246	181
Czech Republic					
Metal	220	60	60	73	59
Oxides	17	20	20	32	57
Denmark					
Oxides	15	19	42	16	0
Finland					
Ore	15 146	9 867	8 994	7 477	5 352
Metal	24 002	30 623	53 059	54 106	39 435
Oxides	46	233	172	298	154
France					
Metal	1 203	1 681	2 338	2 013	1 533
Oxides	578	635	841	611	650
Germany					
Ore	42	115	170	128	76
Metal	2 017	3 864	4 946	4 505	4 309
Oxides	902	1 069	900	878	1 580
Greece					
Metal	14	3	17	64	39
Ireland, Republic of					
Metal	777	756	601	743	701
Italy					
Metal	632	477	758	609	744
Oxides	473	707	719	679	901
Luxembourg					
Metal	11	163	811	80	113
Netherlands					
Metal	* 491	962	1 023	1 249	1 581
Oxides	54	118	596	16	7
Norway					
Metal	3 012	2 132	684	5 090	2 678
Oxides	155	0	0	3	0
Poland					
Metal	53	52	47	52	48
Oxides	15	18	114	17	20
Romania					
Oxides	37	41	79	27	32
Slovakia					
Oxides	5 327	137	97	147	144
Slovenia					
Metal	149	141	110	92	206
Spain					
Metal	135	144	159	233	209
Oxides	1 035	1 543	1 837	1 941	2 053
Sweden					
Metal	189	396	571	443	287
Switzerland					
Metal	243	318	298	260	222
Turkey					
Metal	125	145	171	159	190
Oxides	150	199	277	364	384
United Kingdom					
Ore	200	143	124	125	137
Metal	3 928	5 963	6 093	6 197	5 215
Oxides	168	198	256	164	180

Cobalt

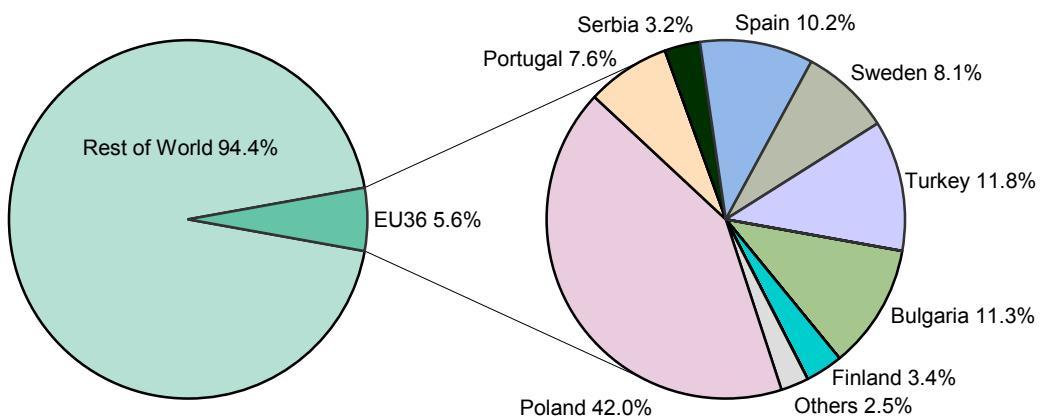
**Cobalt - EU36 trade in 2013**



## 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.
- Chile was the world's largest producer of mined copper in 2013, with 32 per cent of the total world output. The second largest was China (nine per cent), followed by Peru (eight per cent), USA (seven per cent) and Australia (five per cent).
- China was the world's largest producer of refined copper in 2013, with 27 per cent of the total world output. The second producer largest was Chile (10 per cent), followed by Japan (nine per cent), Russia (six per cent) and India (four per cent).

**EU36 Mine production of copper 2013**



## Mine production of copper

tonnes (metal content)

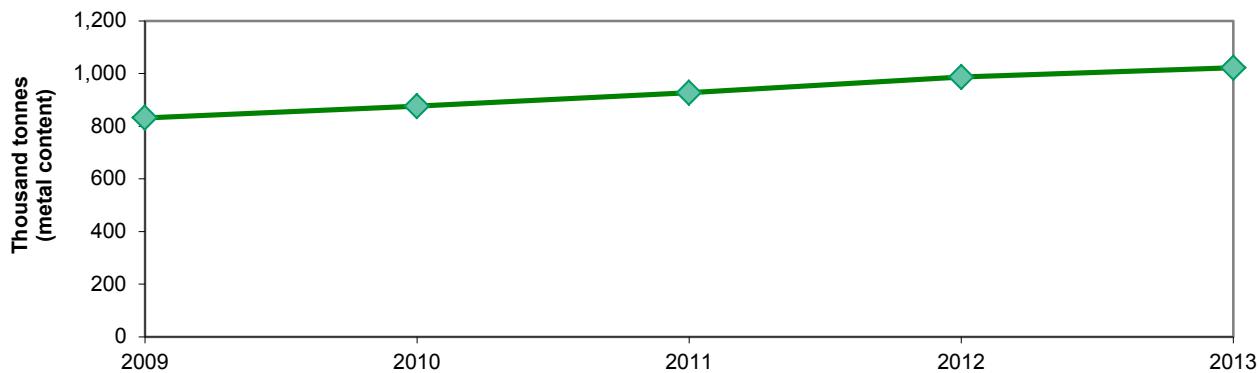
Country	2009	2010	2011	2012	2013
Albania	2 600	2 672	4 379	5 691	5 454
Bulgaria (a)	110 652	112 904	114 603	118 255	115 149
Cyprus	2 380	2 595	3 660	4 328	3 631
Finland	14 600	14 700	14 000	25 446	34 451
Macedonia	7 440	7 912	7 555	9 506	9 802
Poland	439 365	425 725	426 665	427 064	428 879
Portugal	86 462	74 426	79 686	74 043	77 236
Romania	3 129	5 127	6 355	5 902	6 700
Serbia	19 400	19 000	25 800	32 200	32 600
Slovakia	14	22	28	31	...
Spain	17 663	54 335	68 511	97 452	104 600
Sweden	55 414	76 514	82 967	82 422	82 904
Turkey	72 400	79 900	92 500	104 300	120 500
EU36 Total	832 000	876 000	927 000	987 000	1 022 000

Note

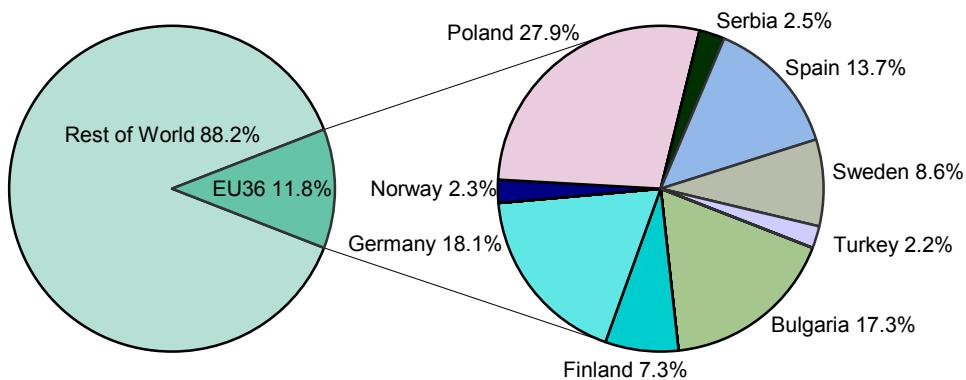
(a) Metal content of ore

## Copper

### EU36 Mine production of copper 2009 - 13



### EU36 Smelter production of copper 2013

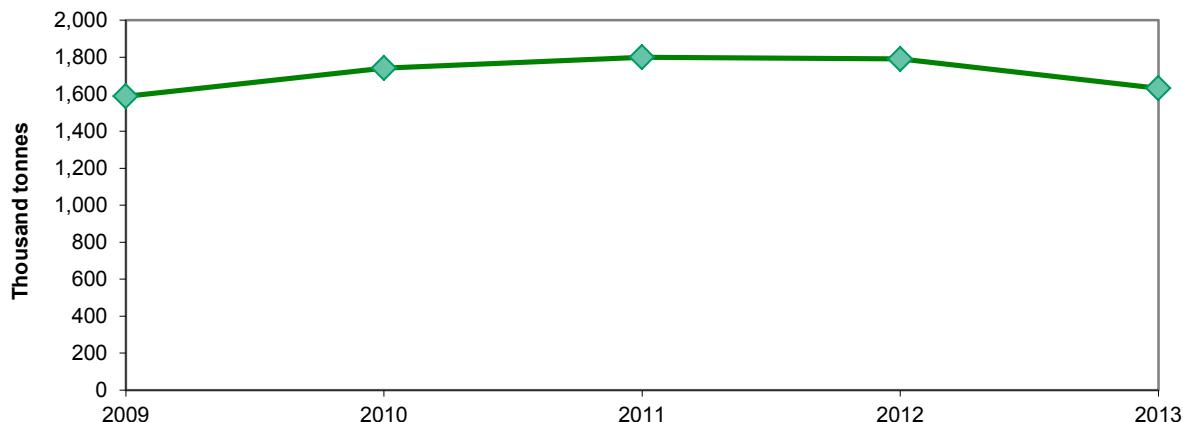
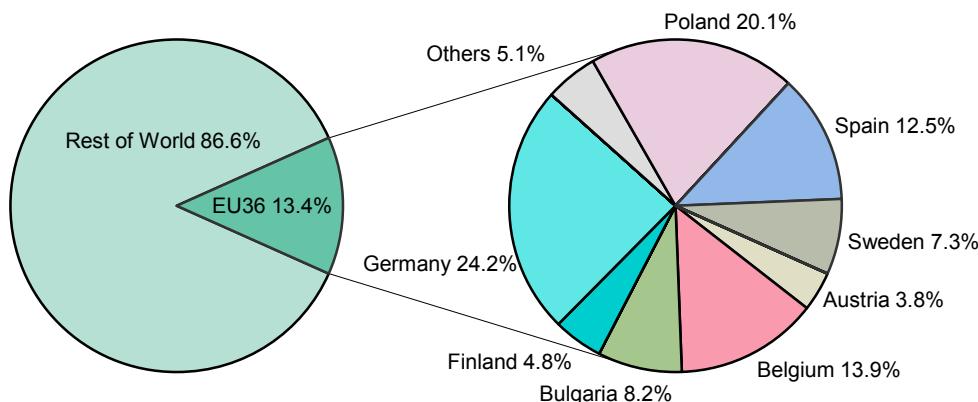


### Smelter production of copper

Country	2009	2010	2011	2012	2013
Bulgaria	256 200	265 000	285 900	264 200	283 000
Finland	115 490	131 548	130 041	130 262	118 552
Germany	251 000	378 700	346 200	352 400	295 200
Norway	33 900	36 200	36 000	37 891	37 461
Poland	457 510	469 656	481 875	466 715	456 100
Serbia	27 000	20 000	28 200	36 800	41 300
Spain	264 971	259 119	260 730	270 200	224 400
Sweden	183 400	181 500	206 100	207 300	140 400
Turkey	—	—	* 25 000	* 25 000	* 35 800
EU36 Total	1 589 000	1 742 000	1 800 000	1 791 000	1 632 000

#### Note

(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

**EU36 Smelter production of copper 2009 - 13****EU36 Production of refined copper 2013****Production of refined copper**

tonnes

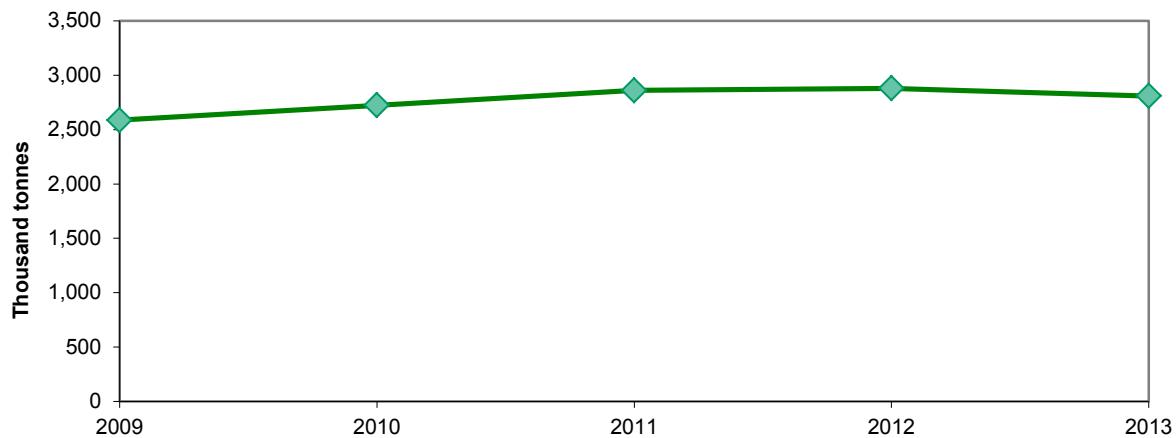
Country	2009	2010	2011	2012	2013
Austria	96 200	113 700	112 500	113 600	108 100
Belgium	372 700	381 200	394 200	396 700	389 400
Bulgaria	196 900	216 000	226 100	226 000	230 100
Cyprus	2 380	2 595	3 660	4 328	3 631
Finland	105 411	112 687	124 360	129 256	135 840
Germany	668 945	704 300	708 800	682 132	679 700
Italy	6 500	1 800	7 600	7 700	4 900
Macedonia	—	—	—	1 100	1 900
Norway	33 900	36 200	36 000	37 891	37 461
Poland	502 462	547 074	571 041	565 834	565 155
Romania	4 600	—	—	—	—
Serbia	27 400	22 200	28 400	34 700	35 800
Spain	329 356	347 518	353 790	406 600	351 000
Sweden	205 759	190 497	219 316	214 050	206 000
Turkey	33 500	47 300	74 354	59 673	* 60 000
EU36 Total	2 586 000	2 723 000	2 860 000	2 880 000	2 809 000

## Note

(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

**EU36 Production of refined copper 2009 - 13**



**Exports of copper**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ores and concentrates	21 974	24 820	31 481	36 482	38 311
Scrap	2 748	4 953	5 656	5 725	4 613
Austria					
Matte and cement	3 109	960	0	—	2
Scrap	50 748	52 702	55 454	60 033	50 784
Unwrought, unrefined	217	7 636	7 780	1 049	412
Unwrought, refined	115 480	135 132	128 551	124 897	99 847
Unwrought alloys	1 058	804	690	528	503
Belgium					
Ores and concentrates	4 594	4 549	2 046	3 242	1 874
Matte and cement	2 432	6 935	9 042	10 231	13 334
Scrap	110 355	141 380	165 713	168 705	144 000
Unwrought, unrefined	11 570	42 836	40 660	27 586	37 012
Unwrought, refined	248 500	189 253	187 595	242 533	230 392
Unwrought alloys	9 253	12 116	11 763	12 436	12 049
Bulgaria					
Ores and concentrates	134 910	86 171	131 874	204 416	231 388
Matte and cement	4 749	5 048	5 827	4 565	3 967
Scrap	10 717	18 226	12 982	12 318	10 760
Unwrought, unrefined	73 379	7 926	10 844	70 347	121 280
Unwrought, refined	153 025	206 309	353 450	202 885	199 698
Croatia					
Scrap	10 202	13 329	12 597	14 016	11 319
Cyprus					
Unwrought	2 449	2 550	3 660	4 328	3 615
Scrap	3 400	4 619	4 086	5 435	3 511
Czech Republic					
Unwrought	10 653	11 041	10 703	20 225	47 442
Scrap	105 230	123 688	85 202	74 592	66 568
Unwrought alloys	3 992	3 515	2 884	1 238	1 331
Denmark					
Scrap	31 711	30 006	33 289	27 276	29 167
Estonia					
Unwrought	520	1 790	744	2 386	860
Scrap	5 633	6 915	5 171	5 549	5 820
Finland					
Matte and cement	...	...	19 610	18 588	28 640
Scrap	32 762	32 819	33 714	32 739	28 583
Unwrought, unrefined	37 084	35 132	24 908	29 714	21 400
Unwrought, refined	41 139	57 969	41 603	59 950	59 318

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
France					
Ores and concentrates	219	847	128	536	2 286
Scrap	235 277	292 631	305 883	317 556	298 873
Unwrought, unrefined	1 002	7 356	9 545	2 430	2 895
Unwrought, refined	59 426	23 258	35 309	39 858	29 397
Unwrought alloys	9 455	12 786	10 624	11 182	11 025
Germany					
Ores and concentrates	58 932	48 761	54 856	57 074	47 039
Matte and cement	1	8 431	9	2	1
Scrap	449 990	578 448	585 346	587 935	516 590
Unwrought, unrefined	88	104	1 446	2 014	6 688
Unwrought, refined	194 016	136 006	195 181	276 943	225 139
Unwrought alloys	9 781	13 276	12 276	14 578	14 422
Greece					
Unwrought	2 748	825	4 458	981	852
Scrap	15 742	21 994	18 672	28 705	20 599
Unwrought alloys	1 071	2 097	4 346	969	646
Hungary					
Scrap	19 120	15 319	31 459	37 048	35 024
Unwrought, refined	...	24	786	5 867	10 432
Unwrought alloys	314	571	1 120	476	294
Ireland, Republic of					
Scrap	23 305	13 172	10 168	10 046	9 601
Italy					
Matte and cement	90	61	1	333	1 041
Scrap	158 062	167 424	174 068	181 600	172 601
Unwrought, unrefined	2 752	7 290	8 502	7 811	5 612
Unwrought, refined	13 186	8 648	13 506	21 312	12 227
Unwrought alloys	12 787	15 553	20 024	21 264	17 927
Latvia					
Unwrought	2	—	642	4 314	6 428
Scrap	6 138	7 106	13 679	8 494	7 847
Unwrought alloys	2 512	722	1 008	1 156	2 053
Lithuania					
Unwrought	610	591	4 873	1 481	1 558
Scrap	3 375	4 128	5 724	7 582	10 680
Luxembourg					
Scrap	1 787	2 492	2 449	2 449	3 823
Macedonia					
Ores and concentrates	(a)* 39 000	41 135	39 014	45 119	51 838
Unwrought	14	8	8	1 090	1 919
Scrap	2 029	576	2 845	2 221	2 144
Malta					
Scrap	1 828	919	1 096	1 287	736
Montenegro					
Scrap	1 029	1 769	2 356	1 650	1 705
Netherlands					
Ores and concentrates	4	0	0	6 540	56 629
Unwrought	29 260	20 175	34 435	59 260	27 722
Scrap	143 329	283 847	315 437	328 463	295 139
Unwrought alloys	2 413	2 379	3 057	2 389	2 497
Norway					
Matte and cement	0	0	2	3 852	2 387
Unwrought	33 497	35 975	36 549	38 146	37 287
Scrap	25 339	37 829	45 889	55 842	57 357
Poland					
Matte and cement	1 515	956	1 567	1 306	1 724
Unwrought	325 395	332 989	327 585	333 648	343 628
Scrap	64 606	68 686	60 544	49 128	57 215
Unwrought alloys	2 358	1 180	1 260	2 571	2 279
Portugal					
Ores and concentrates	371 881	305 485	327 096	312 192	328 240
Unwrought	2 098	1 887	9 969	8 425	248
Scrap	20 213	24 491	36 151	41 285	36 744

Copper

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
<b>Romania</b>					
Ores and concentrates	6 711	31 582	39 704	41 879	44 995
Matte and cement	4 502	956	186	379	—
Unwrought	601	797	308	1 603	380
Scrap	42 148	49 248	54 536	51 844	44 056
<b>Serbia</b>					
Ores and concentrates	1 452	1 666	2 234	4 276	4 158
Matte and cement	1 928	2 501	1 649	358	714
Unwrought	3 699	10 280	8 840	15 242	19 712
Scrap	7 920	12 286	9 991	10 496	7 705
Unwrought alloys	654	641	704	370	1 308
<b>Slovakia</b>					
Scrap	15 114	15 550	19 522	23 250	25 452
Unwrought, unrefined	26 492	31 685	38 566	40 404	20 077
Unwrought, refined	3 268	2 597	4 435	2 751	13 189
Unwrought alloys	1 287	1 346	704	619	1 343
<b>Slovenia</b>					
Unwrought	1 376	7 042	5 847	561	2 135
Scrap	17 991	29 276	22 126	33 239	25 751
<b>Spain</b>					
Ores and concentrates	110 724	221 429	583 874	529 494	729 177
Matte and cement	—	...	17 649	9 409	...
Scrap	100 498	102 236	87 122	159 419	156 511
Unwrought, unrefined	38 761	33 973	37 314	43 168	37 762
Unwrought, refined	108 716	151 204	86 800	145 142	113 585
Unwrought alloys	12 150	15 881	15 809	17 571	16 646
<b>Sweden</b>					
Ores and concentrates	—	24	8 010	4 266	4
Unwrought	77 745	71 394	92 971	105 338	91 292
Scrap	55 603	43 311	58 031	58 829	56 469
Unwrought alloys	3 181	8 563	5 615	3 585	4 773
<b>Switzerland</b>					
Unwrought	623	832	1 030	935	1 470
Scrap	71 204	75 973	84 373	86 964	80 104
<b>Turkey</b>					
Ores and concentrates	356 922	421 536	257 914	351 882	428 144
Unwrought	4 505	2 106	2 845	5 701	1 026
Scrap	16 426	12 426	5 124	9 226	23 251
Unwrought alloys	2 237	6 764	10 135	7 673	9 101
<b>United Kingdom</b>					
Ores and concentrates	68	39	51	4	3
Matte	14	33	...	...	...
Matte and cement	14	33	36	18	31
Scrap	429 467	421 868	513 394	373 943	291 924
Unwrought, unrefined	205	185	194	647	206
Unwrought, refined	14 059	8 863	17 951	24 498	17 332
Unwrought alloys	11 839	12 782	16 872	15 441	21 946

Notes

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

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

**Imports of copper**

tonnes

Country	2009	2010	2011	2012	2013
<b>Austria</b>					
Scrap	134 063	145 903	130 675	127 187	102 554
Unwrought, unrefined	24 445	36 218	44 412	42 637	21 970
Unwrought, refined	4 868	10 361	16 680	8 374	5 348
Unwrought alloys	1 617	1 412	1 376	2 183	2 567

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Ores and concentrates	17 378	10 554	13 735	1 278	3 413
Matte and cement	36 352	29 857	41 741	40 104	(a)* 9 000
Scrap	215 202	272 816	255 661	303 702	307 373
Unwrought, unrefined	212 932	191 159	206 987	181 032	174 338
Unwrought, refined	79 524	61 447	34 734	71 465	59 309
Unwrought alloys	2 669	4 917	5 134	2 971	3 686
Bulgaria					
Ores and concentrates	635 039	575 192	836 387	756 349	1 008 680
Matte and cement	15 160	13 642	2 006	98	17
Unwrought	8 016	8 272	12 441	6 982	15 532
Scrap	20 730	35 464	52 461	64 563	56 040
Croatia					
Unwrought	760	944	1 627	744	2 835
Czech Republic					
Unwrought	21 475	6 846	6 252	16 354	29 583
Scrap	9 639	11 804	18 859	18 874	14 107
Unwrought alloys	3 050	3 674	3 388	1 867	2 400
Denmark					
Unwrought	1 413	1 978	2 255	1 692	2 039
Scrap	10 388	9 125	9 075	7 547	9 477
Estonia					
Unwrought	489	520	484	1 480	395
Finland					
Ores and concentrates	352 370	458 174	415 365	424 982	391 822
Unwrought	16 298	4 212	4 711	6 366	2 330
Scrap	7 349	6 967	7 726	9 839	7 444
Unwrought alloys	2 415	2 783	2 528	1 819	2 067
France					
Unwrought	265 766	227 271	226 312	218 176	230 041
Scrap	50 753	72 220	81 824	76 972	63 604
Unwrought alloys	7 980	9 242	9 148	8 200	8 742
Germany					
Ores and concentrates	1 252 430	1 128 472	1 124 525	1 215 273	1 013 432
Matte and cement	4 133	12 739	2 742	2 415	1 867
Scrap	454 753	626 442	647 084	655 895	617 454
Unwrought, unrefined	46 840	23 331	68 147	45 707	112 940
Unwrought, refined	658 703	743 934	737 763	702 577	685 731
Unwrought alloys	38 538	36 249	35 493	37 491	39 025
Greece					
Unwrought	57 367	63 443	53 615	53 416	54 236
Scrap	11 245	20 017	29 253	43 607	33 690
Hungary					
Unwrought	2 168	3 637	4 819	11 217	12 871
Scrap	10 091	4 038	5 416	4 831	3 942
Ireland, Republic of					
Ores and concentrates	42 945	2	2	2	3
Italy					
Cement copper	...	24	0	...	...
Matte and cement	1 503	24	0	25	1
Unwrought	544 635	628 325	615 251	583 215	559 334
Scrap	91 519	129 074	148 358	137 709	151 708
Unwrought alloys	8 166	14 679	15 910	14 795	16 689
Latvia					
Unwrought	3 049	712	2 153	4 310	(a)* 3 000
Scrap	1 307	2 942	3 855	5 014	8 145
Unwrought alloys	926	698	950	2 597	4 103
Lithuania					
Unwrought	415	596	4 652	1 251	472
Scrap	409	436	634	2 505	5 696
Luxembourg					
Scrap	7 533	10 708	10 061	14 275	11 913

Copper

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Netherlands					
Ores and concentrates	46	40	125	2 529	(a)* 66 000
Scrap	—	144 426	204 327	214 211	166 106
Unwrought, unrefined	2 678	7 194	5 502	9	68
Unwrought, refined	33 771	26 982	41 659	25 369	21 677
Unwrought alloys	1 329	2 101	2 111	1 930	2 982
Norway					
Unwrought	1 627	4 609	909	704	1 460
Scrap	9 727	9 891	12 856	12 073	11 674
Poland					
Ores and concentrates	78 027	38 000	45 484	41 333	112 568
Scrap	22 153	24 316	26 201	53 828	49 205
Unwrought, unrefined	40 030	33 717	23 581	22 766	17 481
Unwrought, refined	13 838	26 944	11 822	19 234	17 078
Unwrought alloys	2 408	2 813	2 939	4 229	2 693
Portugal					
Unwrought	4 027	5 534	4 725	4 688	5 613
Scrap	7 550	8 819	7 973	5 169	6 797
Unwrought alloys	4 453	4 127	4 378	3 993	3 445
Romania					
Unwrought	10 926	2 282	2 915	1 899	1 997
Scrap	437	2 443	3 218	2 355	6 279
Serbia					
Ores and concentrates	33 808	...	3 063	0	...
Unwrought	41 399	37 129	26 995	14 679	8 262
Scrap	208	342	769	809	2 259
Slovakia					
Ores and concentrates	2 113	462	1	—	...
Cement copper	...	799	...	...	...
Matte and cement	3 300	799	10	—	...
Unwrought	4 685	6 153	7 531	8 665	10 099
Scrap	29 141	40 347	30 687	37 623	28 454
Slovenia					
Unwrought	2 826	8 369	7 062	1 287	1 892
Scrap	11 452	22 407	12 350	10 222	8 120
Spain					
Ores and concentrates	1 184 321	1 229 148	1 482 354	1 517 856	1 575 657
Matte and cement	21	992	17 530	9 417	4 889
Scrap	68 166	82 931	89 499	97 129	104 671
Unwrought, unrefined	3 133	518	12 747	685	209
Unwrought, refined	80 898	73 904	62 695	44 567	60 873
Unwrought alloys	3 473	3 947	6 719	4 109	4 549
Sweden					
Ores and concentrates	362 803	302 514	300 878	310 772	270 120
Scrap	96 542	108 971	121 099	139 188	152 058
Unwrought, unrefined	22 072	3 100	5 843	6 690	7 826
Unwrought, refined	23 107	46 383	31 760	30 772	6 906
Unwrought alloys	2 040	5 181	3 186	2 588	3 222
Switzerland					
Unwrought	3 473	3 229	2 353	2 006	2 371
Scrap	2 710	6 061	4 178	2 244	4 039
Unwrought alloys	3 276	4 137	3 520	3 489	3 495
Turkey					
Ores and concentrates	0	1 329	5	29	51
Scrap	870	3 943	6 181	3 806	3 663
Unwrought, unrefined	4 852	5 892	4 329	2 824	478
Unwrought, refined	289 672	332 482	337 337	348 938	362 854
Unwrought alloys	2 828	6 601	9 450	6 695	2 946

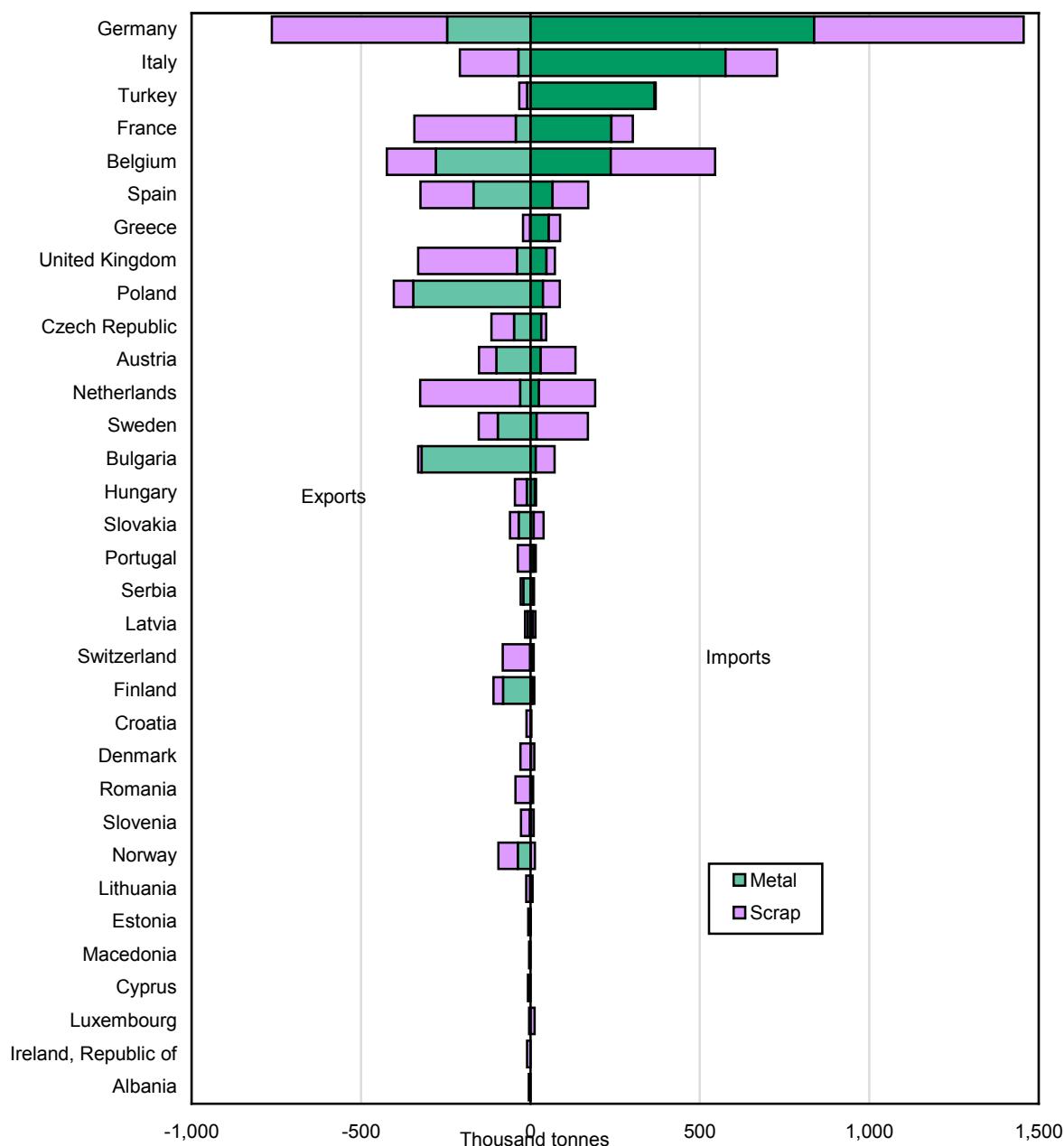
	Copper tonnes				
Imports continued	2009	2010	2011	2012	2013
Country	2009	2010	2011	2012	2013
United Kingdom					
Scrap	18 549	27 495	29 010	27 214	25 055
Unwrought, unrefined	3 034	2 039	1 267	147	409
Unwrought, refined	45 249	40 708	34 627	38 674	34 723
Unwrought alloys	4 066	5 688	5 498	5 957	12 098

#### Notes

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

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

Copper - EU36 trade in 2013



## Diamond

- Diamond is a polymorph of carbon and is the hardest substance known. It is used mainly in jewellery, abrasives and cutting tools.
- Russia was the world's largest producer in 2013, with 29 per cent of the total world output. The second largest producer is Botswana (17 per cent), followed by the Democratic Republic of Congo (13 per cent), Australia (nine per cent), Canada and Zimbabwe (eight per cent each).

### Exports of diamond

Carats

Country	2009	2010	2011	2012	2013
Austria					
Unsorted	...	£ 191 000	£ 3 305 000	£ 17 000	...
Gem, cut	£ 4 053 000	£ 3 564 000	£ 6 211 000	£ 3 657 000	£ 2 823 000
Dust	£ 260 000	£ 225 000	£ 66 000	£ 34 000	£ 122 000
Belgium					
Gem, rough	85 500 000	113 000 000	90 500 000	89 000 000	95 000 000
Gem, cut	5 178 000	6 034 000	6 232 100	* 5 500 000	* 6 300 000
Industrial	1 670 000	3 320 000	3 170 746	* 5 900 000	* 4 465 000
Dust	£ 11 148 000	£ 13 948 000	£ 12 800 000	£ 11 590 000	£ 11 072 000
Czech Republic					
Gem, cut	£ 3 046 000	£ 4 465 000	£ 7 709 000	£ 6 721 000	£ 5 038 000
Denmark					
Unsorted	15 000	...	2 875 000	60 000	—
Gem, cut	685 000	520 000	545 000	360 000	3 500 000
Industrial	40 000	90 000	125 000	55 000	65 000
Dust	5 400 000	7 625 000	24 850 000	18 500 000	10 000
Finland					
Dust	...	...	20 000	35 000	105 000
France					
Gem	394 845	145 682	129 943	* 230 000	* 180 000
Dust	940 610	1 609 470	8 768 911	2 075 000	3 335 000
Germany					
Unsorted (a)	£* 775 000	£* 863 000	£* 489 000	£* 283 000	£* 3 271 000
Gem	179 213	161 687	155 370	129 830	126 640
Dust	2 560 000	7 355 000	13 670 000	15 095 000	16 665 000
Greece					
Unsorted	£ 206 000	£ 43 000	£ 99 000	£ 213 000	£ 789 000
Gem	£ 1 356 000	£ 1 956 000	£ 405 000	£ 270 000	£ 247 000
Industrial	£ 31 000	£ 49 000	£ 20 000	£ 24 000	£ 114 000
Hungary					
Unsorted	...	4 000 000	5 500 000	3 500 000	...
Dust	...	...	9 500 000	14 500 000	14 000 000
Ireland, Republic of					
Gem, rough	5 000	10 000	100 000	—	5 000
Gem, cut	210 000	345 000	260 000	600 000	405 000
Industrial	204 108	58 658	2 801 447	460 000	3 170 000
Dust	25 398 022	65 787 012	283 458 829	...	69 945 000
Italy					
Unsorted	200 000	210 000	205 000	2 880 000	12 935 000
Gem, rough	...	15 000	—	120 000	370 000
Gem, cut	155 195	243 170	181 572	12 605 000	86 540 000
Industrial	170 000	250 000	285 000	1 585 000	18 865 000
Dust	1 550 895	15 054 770	14 873 656	10 850 000	7 825 000
Luxembourg					
Dust	313 330	750 900	1 006 960	13 945 000	12 465 000
Netherlands					
Unsorted	£ 494 000	£ 371 000	£ 1 799 000	£ 823 000	£ 308 000
Gem, cut	£ 3 780 000	£ 3 132 000	£ 16 418 000	£ 8 002 000	£ 10 206 000
Industrial	£ 1 415 000	£ 2 179 000	£ 1 282 000	£ 1 508 000	£ 2 148 000
Dust	£ 196 000	£ 51 000	£ 57 000	£ 97 000	£ 794 000
Portugal					
Gem, cut	£ 52 000	£ 550	£ 61 000	£ 136 000	£ 507 000
Industrial	1 500 000	3 500 000	1 000 000	1 500 000	500 000
Dust	10 000	92 107	788 459	1 000 000	550 000

## Exports of diamond

Carats

Country	2009	2010	2011	2012	2013
Slovakia					
Gem, cut	...	7 000 000	3 000 000	500 000	75 000
Dust	100	6 250 000	2 934 017	...	...
Spain					
Unsorted	£ 266 000	£ 292 000	£ 154 000	£ 490 000	£ 390 000
Gem, rough	£ 273 000	...	£ 500 000	£ 130 000	£ 160 000
Gem, cut	£ 5 328 000	£ 7 350 000	£ 9 802 000	£ 9 021 000	£ 11 894 000
Industrial	£ 171 000	£ 210 000	£ 590 000	£ 42 000	£ 499 000
Dust	182 628	689 563	8 454 551	21 675 000	23 795 000
Switzerland					
Gem, rough	1 230	14 892	3 628	5 000	5 000
Gem, cut	252 685	357 976	435 272	145 000	110 000
Dust	30 400 000	60 980 000	70 880 000	59 620 000	72 175 000
Turkey					
Dust	1 000 025	1 253 750	7 702 486	400 000	10 000
United Kingdom					
Unsorted	4 090 534	3 689 202	2 735 369	2 974 099	11 165 256
Gem, rough	43 775 775	51 769 860	41 541 219	46 117 478	34 651 963
Gem, cut	257 202	283 435	1 292 162	1 702 424	284 182
Industrial	4 440 922	2 478 568	3 864 054	3 949 553	2 001 018
Dust	105 427 105	113 451 535	42 269 921	32 288 331	28 709 324

## Notes

- (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

(a) BGS estimates, based on known value of imports to certain countries

## Imports of diamond

Carats

Country	2009	2010	2011	2012	2013
Austria					
Unsorted	£ 543 000	£ 729 000	£ 3 371 000	£ 203 000	£ 108 000
Gem, cut	£ 9 795 000	£ 9 838 000	£ 19 112 000	£ 10 309 000	£ 9 666 000
Industrial	£ 313 000	£ 193 000	£ 5 500	£ 149 000	£ 132 000
Dust	17 000 000	30 000 000	38 000 000	30 500 000	44 000 000
Belgium					
Unsorted	495 270	462 450	418 531	* 550 000	* 4 250 000
Gem, rough	44 000 000	63 000 000	67 500 000	54 500 000	64 000 000
Gem, cut	500 000	3 000 000	3 000 000	500 000	* 2 260 000
Industrial	3 500 000	3 000 000	1 000 000	2 500 000	2 000 000
Dust	35 000 000	61 000 000	58 000 000	68 500 000	57 500 000
Bulgaria					
Dust	4 940 300	7 251 395	7 571 255	* 7 641 000	* 9 090 000
Cyprus					
Gem, cut	£ 1 724 000	£ 955 000	£ 976 000	£ 921 000	£ 697 000
Industrial	£ 587 000	£ 1 007 000	£ 944 000	£ 1 474 000	£ 890 000
Czech Republic					
Gem, cut	7 306	5 567	6 796	* 10 000	* 7 000
Dust	£ 977 000	£ 1 704 000	£ 1 954 000	£ 2 057 000	£ 2 229 000
Denmark					
Unsorted	£ 40 000	£ 255 000	£ 82 000	£ 17 000	£ 94 000
Gem, cut	£ 4 680 000	£ 5 339 000	£ 5 884 000	£ 8 897 000	£ 11 316 000
Industrial	£ 223 000	£ 59 000	£ 88 000	£ 137 000	£ 105 000
Dust	10 680 000	2 075 000	1 940 000	1 210 000	(a)* 1 505 000

Diamond

Imports of diamond	Carats				
Country	2009	2010	2011	2012	2013
Finland					
Unsorted	£ 91 000	£ 419 000	£ 315 000	£ 288 000	£ 228 000
Gem, rough	£ 56 000	£ 168 000	£ 131 000	£ 111 000	£ 41 000
Gem, cut	£ 3 133 000	£ 3 575 000	£ 3 346 000	£ 3 201 000	£ 3 018 000
Industrial	20 000	65 000	520 000	20 000	40 000
Dust	273 415	519 830	773 725	645 000	735 000
France					
Unsorted	15 326	9 402	10 015	* 41 800	* 27 200
Gem, rough	1 854	469	2 960	* 3 100	* 1 800
Gem, cut	691 852	468 867	660 561	* 843 000	* 861 000
Industrial	40 221	30 480	30 012	* 54 000	* 29 000
Dust	9 314 960	12 512 821	22 167 841	21 135 000	15 530 000
Germany					
Gem	301 075	377 399	366 385	314 347	339 068
Industrial	211 630	122 838	143 922	149 572	171 664
Dust	25 210 000	64 065 000	89 060 000	94 175 000	90 495 000
Greece					
Unsorted	2 375 000	910 000	470 000	135 000	(a)* 150 000
Gem, rough	3 365 000	920 000	...	15 000	* 221 000
Gem, cut	6 370 000	8 365 000	2 615 000	5 390 000	4 000 000
Industrial	43 195 000	4 375 000	3 680 000	2 150 000	220 000
Dust (a)	* 1 813 000	* 214 000	* 77 000	* 90 000	* 100 000
Hungary					
Gem, cut	£ 167 000	£ 280 000	£ 657 000	£ 421 000	£ 454 000
Industrial	£ 171 000	£ 168 000	£ 675 000	£ 346 000	£ 153 000
Dust	(a)* 5 450 000	(a)* 8 910 000	(a)* 12 690 000	14 500 000	14 000 000
Iceland					
Gem, cut	* 100 000	110 592	90 000	160 000	210 000
Ireland, Republic of					
Unsorted	£ 478 000	£ 362 000	£ 320 000	£ 314 000	£ 172 000
Gem, rough	1 885 000	1 565 000	1 620 000	1 595 000	1 475 000
Gem, cut	18 170 000	11 385 000	6 745 000	3 905 000	3 305 000
Industrial	2 100 000	4 585 000	2 570 000	1 545 000	750 000
Dust	86 782 073	86 782 073	737 418 949	358 020 000	405 650 000
Italy					
Unsorted	£ 1 738 000	£ 8 198 000	£ 8 652 000	£ 7 050 000	£ 9 648 000
Gem, rough	25 000	60 000	115 000	175 000	28 050 000
Gem, cut	£ 203 538 000	£ 285 718 000	£ 370 521 000	£ 338 455 000	£ 347 587 000
Industrial	£ 1 481 000	£ 7 993 000	£ 7 254 000	£ 4 318 000	£ 8 721 000
Dust	121 055 000	196 860 000	248 520 000	252 160 000	306 965 000
Luxembourg					
Unsorted	£ 47 000	£ 20 000	£ 248 000	£ 262 000	£ 38 000
Gem, cut	£ 446 000	£ 418 000	£ 533 000	£ 864 000	£ 2 332 000
Industrial	60 000	105 000	35 000	860 000	360 000
Dust	£ 227 000	£ 609 000	£ 472 000	£ 891 000	£ 553 000
Montenegro					
Dust	17 850	45 000	...	...	...
Netherlands					
Unsorted	£ 551 000	£ 80 000	£ 192 000	£ 144 000	£ 885 000
Gem, rough	£ 95 000	£ 47 000	£ 38 000	£ 61 000	£ 16 000
Gem, cut	£ 10 757 000	£ 15 248 000	£ 35 316 000	£ 30 128 000	£ 33 465 000
Industrial	£ 613 000	£ 624 000	£ 1 393 000	£ 1 392 000	£ 2 340 000
Dust	426 830	290 475	2 074 815	820 000	(a)* 4 170 000
Norway					
Gem, cut	9 604	8 545	5 305	* 4 400	* 6 800
Industrial	85 000	160 000	140 000	285 000	130 000
Dust	...	...	...	115 000	55 000
Poland					
Gem, cut	£ 2 509 000	£ 2 128 000	£ 3 805 000	£ 2 532 000	£ 3 286 000
Industrial	169 851	35 260	16 703	* 8 300	* 8 200
Dust	£ 196 000	£ 179 000	£ 273 000	£ 376 000	£ 388 000
Portugal					
Gem, cut	£ 1 756 000	£ 2 039 000	£ 3 732 000	£ 2 906 000	£ 2 414 000
Industrial	£ 246 000	£ 111 000	£ 122 000	£ 86 000	£ 65 000
Dust	5 514 973	10 117 653	16 401 864	5 595 000	4 610 000
Serbia					
Dust	478 650	550 000	885 000	425 000	580 000

## Imports of diamond

Carats

Country	2009	2010	2011	2012	2013
Slovakia					
Gem, cut	£ 1 993 000	£ 2 530 000	£ 2 720 000	£ 6 610 000	£ 2 749 557
Industrial	* 2 600	55 000	1 037 208	* 10 000	40 000
Dust	59 781	18 560 000	129 250	* 600 000	160 000
Slovenia					
Dust	723 391	1 656 306	1 423 460	990 000	1 280 000
Spain					
Unsorted	£ 1 591 000	£ 1 814 000	£ 3 864 000	£ 2 441 000	£ 2 139 000
Gem, rough	£ 207 000	£ 312 000	£ 276 000	£ 487 000	£ 207 000
Gem, cut	£ 30 290 000	£ 26 488 000	£ 25 312 000	£ 24 197 000	£ 25 904 000
Industrial	£ 917 000	£ 275 000	£ 605 000	£ 774 000	£ 580 000
Dust	30 861 760	27 500 320	27 699 364	* 19 429 000	* 19 405 000
Sweden					
Unsorted	£ 23 000	£ 125 000	£ 105 000	£ 178 000	£ 128 828
Gem, cut	...	9 615	* 12 118	* 8 000	* 8 000
Industrial	6 907	26 277	5 390	* 8 100	* 12 000
Dust	1 500 000	8 000 000	9 500 000	* 9 100 000	* 13 250 000
Switzerland					
Gem, rough	4 498	20 460	3 263	* 3 000	* 7 000
Gem, cut	534 700	840 245	1 227 118	* 1 012 000	1 280 000
Dust	39 130 000	74 015 000	101 250 000	82 185 000	103 905 000
Turkey					
Gem	51 740	131 146	141 277	2 080 000	1 270 000
Industrial	29 724	46 890	82 417	65 000	90 000
Dust	19 120 000	25 190 000	31 125 000	36 995 000	34 835 000
United Kingdom					
Unsorted	8 348 854	8 703 907	8 484 526	9 238 531	12 754 564
Gem, rough	44 064 081	40 559 260	38 472 604	33 227 748	29 495 262
Gem, cut	868 406	761 455	18 292 931	7 009 031	1 494 267
Industrial	3 321 670	7 299 364	10 236 376	7 747 613	6 399 457
Dust	88 148 090	111 136 020	32 411 894	26 886 717	25 157 153

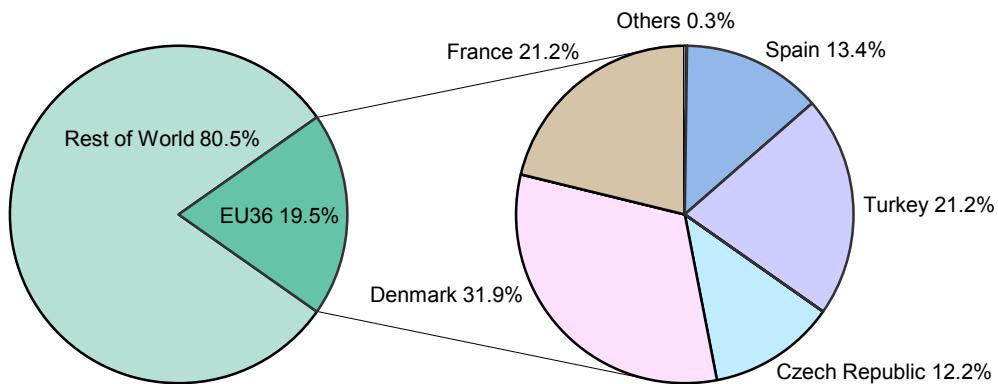
## Notes

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

## 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 in high-quality filters and as an industrial absorbent.
- USA was the world's largest producer in 2013, with 37 per cent of the total world output. The second largest producer was China (20 per cent), followed by Denmark and Peru (six per cent each).

**EU36 Production of diatomite 2013**



## Production of diatomite

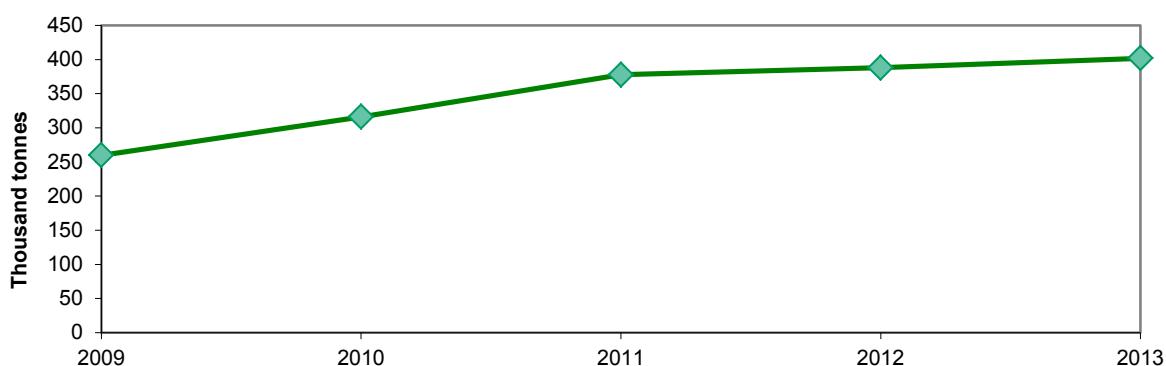
Country	2009	2010	2011	2012	2013
Czech Republic	—	32 000	46 000	43 000	49 000
Denmark					
Moler (a)	126 000	124 000	126 000	111 000	128 125
France	* 75 000	* 75 000	* 75 000	* 85 000	* 85 000
Hungary	1 277	1 197	1 309	1 229	434
Poland	670	1 000	580	600	600
Spain (b)	29 194	64 346	83 624	60 777	53 713
Turkey	27 634	18 448	45 187	86 403	* 85 000
EU36 Total	260 000	316 000	378 000	388 000	402 000

### Notes

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

(b) Including Tripoli

**EU36 Production of diatomite 2009 - 13**



**Exports of diatomite**

tonnes

Country	2009	2010	2011	2012	2013
Austria	3 286	3 467	2 756	3 550	3 275
Belgium	1 907	3 004	3 122	2 690	3 566
Czech Republic	3 789	4 231	5 182	6 751	7 031
Denmark (a)	* 57 500	* 57 300	* 56 800	* 42 700	* 55 700
France	21 713	26 822	25 420	25 245	22 688
Germany	5 035	5 361	14 251	22 190	27 103
Italy	10 392	6 716	2 226	1 229	1 458
Lithuania	78	551	615	234	280
Netherlands	1 365	359	633	807	864
Norway	6	1	—	9	56
Poland	85	111	788	3 012	5 823
Portugal	473	7 545	7 299	11 538	18 246
Spain	4 678	7 382	6 637	10 384	4 271
Sweden	693	829	1 098	1 214	1 116
Switzerland	99	453	564	629	447
Turkey	39 267	37 432	28 104	36 985	55 673
United Kingdom	533	1 650	797	659	497

## Note

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

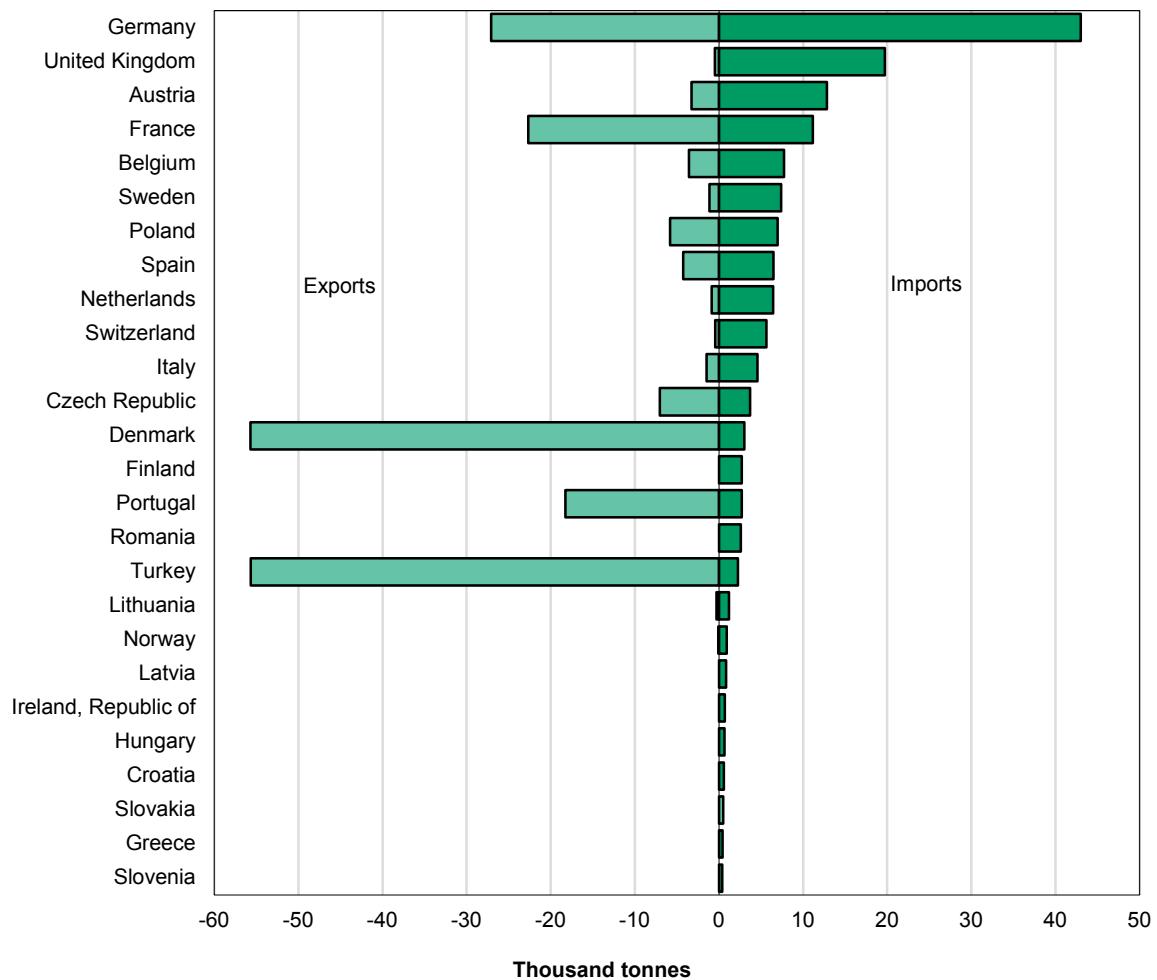
**Imports of diatomite**

tonnes

Country	2009	2010	2011	2012	2013
Austria	16 327	13 324	12 798	12 452	12 827
Belgium	6 414	11 813	10 815	7 143	7 753
Croatia	462	402	555	616	598
Czech Republic	3 173	2 753	3 263	3 829	3 694
Denmark	3 347	3 294	4 165	3 056	2 998
Finland	3 015	4 367	3 432	3 426	2 724
France	15 163	17 477	14 098	13 279	11 150
Germany	38 258	43 487	39 892	42 122	43 006
Greece	482	668	623	647	424
Hungary	796	957	1 189	885	649
Ireland, Republic of	1 243	640	699	965	683
Italy	2 497	3 920	5 555	5 091	4 571
Latvia	534	412	805	812	836
Lithuania	836	744	1 174	865	1 187
Luxembourg	7 054	7 858	7 394	129	48
Netherlands	3 794	4 641	6 034	6 232	6 445
Norway	931	842	808	867	937
Poland	9 790	6 753	9 365	7 802	6 980
Portugal	1 127	2 284	2 340	2 242	2 702
Romania	2 477	2 269	2 459	1 827	2 583
Slovakia	901	784	415	461	498
Slovenia	550	718	623	397	394
Spain	9 600	8 191	7 989	7 368	6 480
Sweden	6 082	8 099	8 247	7 532	7 410
Switzerland	5 071	5 758	4 642	5 177	5 634
Turkey	1 392	1 319	1 702	2 124	2 247
United Kingdom	22 014	18 649	20 042	19 752	19 713

Diatomite

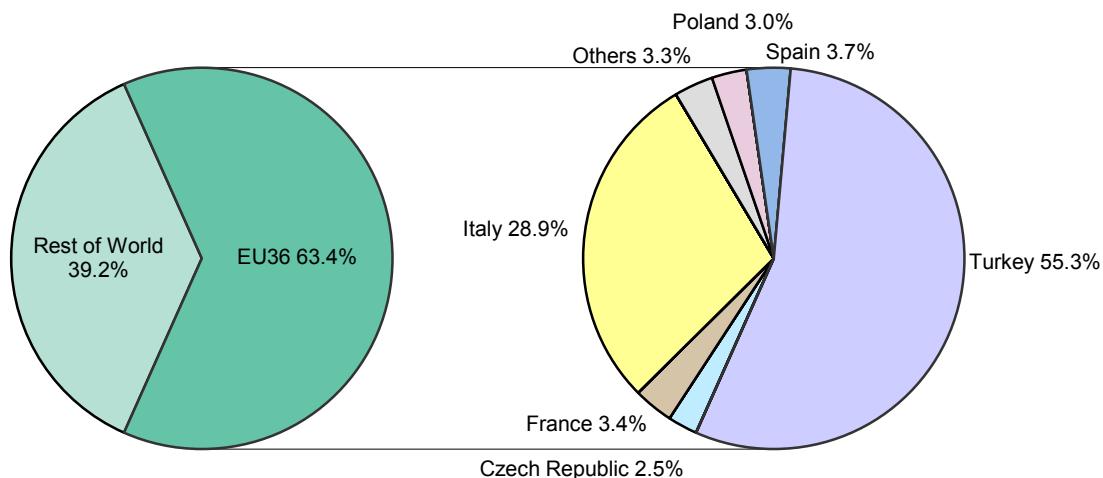
Diatomite - EU36 trade in 2013



## Feldspar

- Feldspar is an abundant rock-forming alumino-silicate 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 was the world's largest producer in 2013, with 35 per cent of the total world output. The second largest producer was Italy (18 per cent), followed by China (eight per cent), India (five per cent) and Thailand (four per cent).

**EU36 Production of feldspar 2013**



## Production of feldspar

tonnes

Country	2009	2010	2011	2012	2013
Bulgaria	* 80 000	* 80 000	* 80 000	* 80 000	* 80 000
Czech Republic	431 000	388 000	407 000	445 000	411 000
Finland	23 120	28 013	26 292	43 124	47 636
France	* 550 000	* 650 000	* 600 000	* 600 000	* 550 000
Germany	106 837	150 000	218 000	205 000	* 200 000
Greece	55 737	23 050	10 200	13 000	—
Italy	* 4 700 000	* 4 700 000	* 4 700 000	* 4 700 000	* 4 700 000
Macedonia	19 377	23 188	25 032	17 168	15 168
Norway	48 000	56 000	25 271	—	—
Poland	445 500	513 700	538 800	487 200	483 000
Portugal (a)	210 266	169 722	187 159	167 287	138 715
Romania	14 317	6 049	3 814	4 112	7 060
Serbia	149	253	23 586	19 927	* 20 000
Slovakia	13 000	—	—	—	—
Spain	597 496	691 894	662 418	530 238	602 908
Sweden	18 000	22 000	30 000	27 000	30 000
Turkey	4 212 547	6 281 597	7 076 068	9 479 699	* 9 000 000
EU36 Total	11 525 000	13 783 000	14 614 000	16 819 000	16 285 000

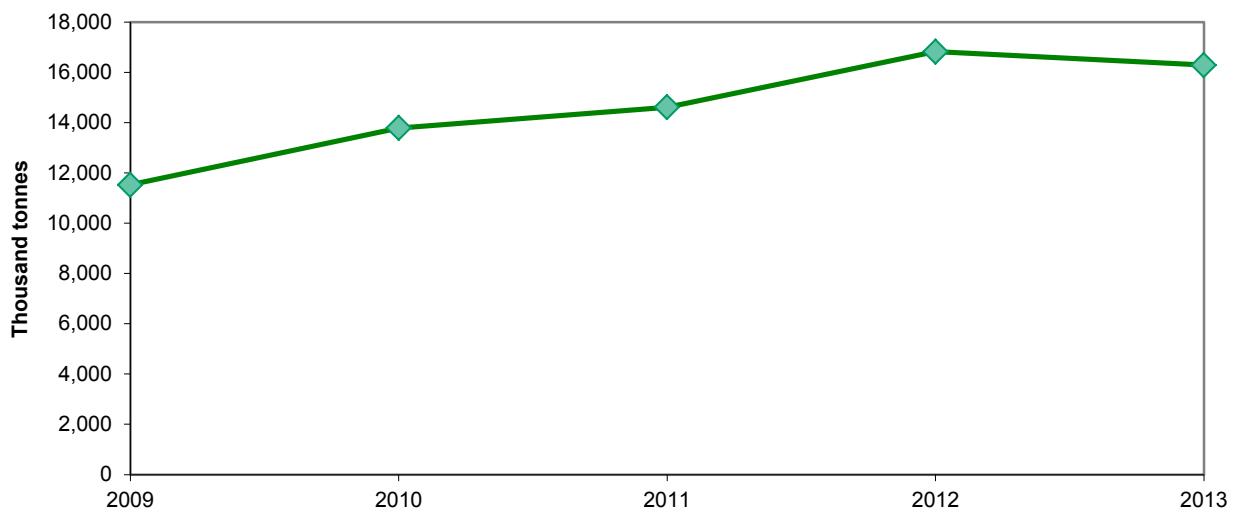
### Notes

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

(a) Includes feldspathic sand

## Feldspar

### EU36 Production of feldspar 2009 - 13



### Exports of feldspar

tonnes

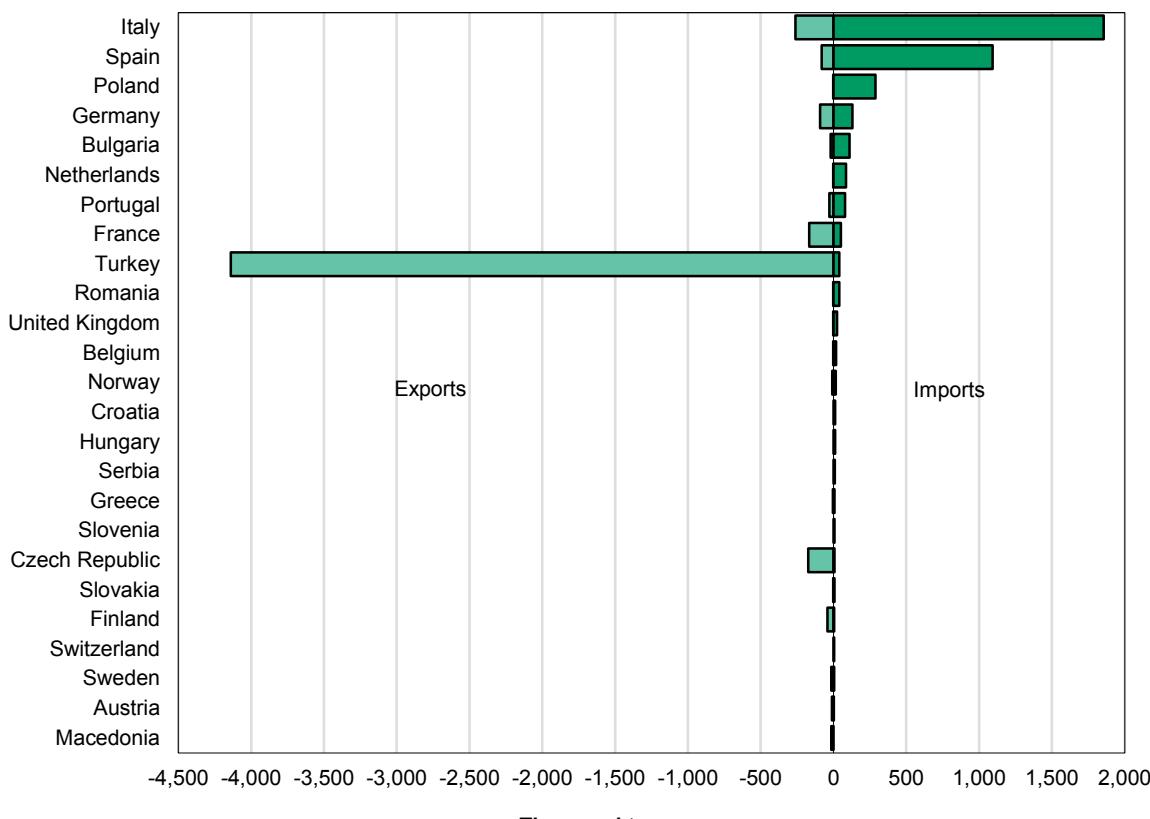
Country	2009	2010	2011	2012	2013
Austria	14 025	13 474	11 807	11 452	11 488
Belgium	1 117	64	317	417	2 830
Bulgaria	15 007	19 087	19 329	19 414	19 433
Czech Republic	135 533	129 715	166 859	171 207	173 282
Finland	26 613	31 844	31 700	47 889	42 359
France	182 575	226 149	226 934	207 687	167 806
Germany	70 130	78 610	76 300	70 936	91 047
Greece	718	1 119	1 562	1 279	5 064
Italy	126 289	194 763	288 246	220 404	261 124
Macedonia	18 457	21 924	25 111	14 857	15 477
Netherlands	1 355	105	112	281	228
Norway	47 711	55 637	30 617	4 821	9 146
Poland	1 829	3 050	3 012	1 376	1 222
Portugal	1 290	2 190	3 197	17 482	29 205
Romania	8 375	1	283	260	301
Slovakia	...	...	58	1	1 532
Spain	56 161	69 337	71 959	63 369	81 429
Sweden	7 646	11 251	19 258	16 831	14 081
Turkey	2 888 388	3 759 104	3 973 160	4 107 038	4 139 071
United Kingdom	369	38	34	92	84

## Imports of feldspar

tonnes

Country	2009	2010	2011	2012	2013
Austria	1 933	2 433	2 804	2 442	2 094
Belgium	27 113	24 495	22 623	17 062	18 181
Bulgaria	54 178	86 861	86 056	84 230	110 954
Croatia	14 603	14 763	14 001	11 676	11 503
Czech Republic	5 330	6 298	6 527	4 735	5 920
Denmark	2 666	1 211	2 612	45	2
Estonia	115	94	109	17 881	2 477
Finland	851	1 209	1 217	4 902	5 660
France	43 981	31 721	34 907	36 109	50 725
Germany	130 081	139 663	153 713	109 157	129 123
Greece	5 851	12 195	9 469	20	6 128
Hungary	14 499	14 235	14 211	13 905	10 755
Italy	1 570 345	1 951 827	1 954 499	1 905 805	1 855 315
Latvia	9	577	561	1 292	1 522
Lithuania	2 958	6 265	10 278	6 700	1 405
Netherlands	8 849	15 721	9 071	57 431	85 487
Norway	13 781	16 413	18 228	14 322	15 794
Poland	176 717	243 645	324 426	287 882	288 728
Portugal	72 275	63 675	49 902	61 516	79 625
Romania	37 639	36 924	45 421	47 688	39 447
Serbia	8 424	10 139	11 864	11 302	9 794
Slovakia	16 352	5 886	5 590	5 518	5 809
Slovenia	8 899	14 954	13 168	6 012	5 963
Spain	664 830	856 406	993 378	926 809	1 092 403
Sweden	4 268	6 410	4 363	547	3 803
Switzerland	6 478	6 593	6 124	4 575	4 504
Turkey	28 166	39 953	34 726	47 361	39 456
United Kingdom	9 299	17 584	16 750	21 610	24 568

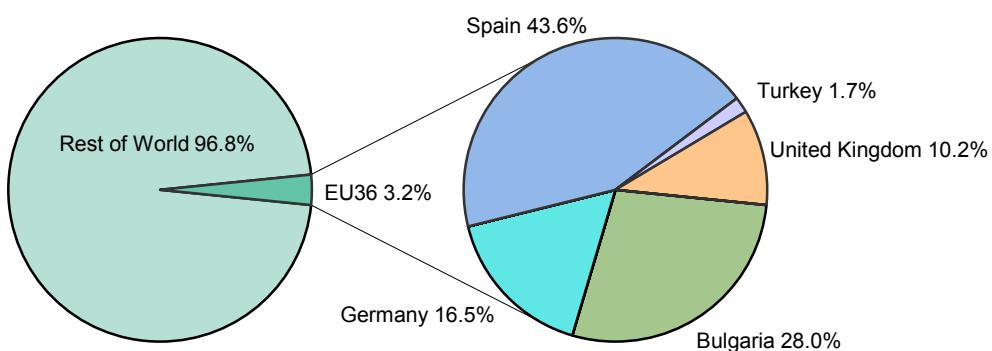
Feldspar - EU36 trade in 2013



## 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 agrichemical industries. Fluorspar is also used in steel and aluminium manufacture.
- China was the world's largest producer in 2013, with 72 per cent of the total world output. The second largest producer was Mexico (13 per cent), followed by Mongolia (four per cent) and South Africa (two per cent).

**EU36 Production of fluorspar 2013**



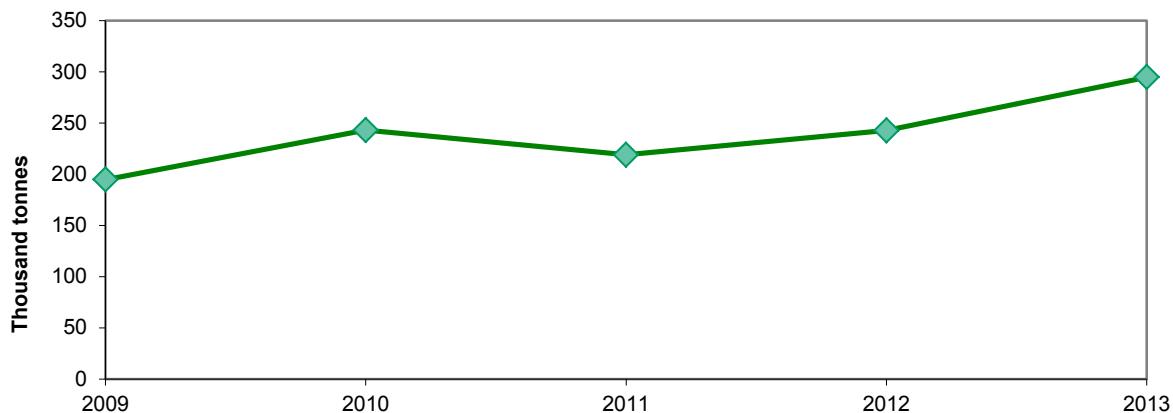
### Production of fluorspar

Country	2009	2010	2011	2012	2013
Bulgaria	32	10	31 800	69 700	82 500
Germany	49 962	59 086	65 619	54 202	48 744
Spain	122 533	132 341	117 063	113 570	128 512
Turkey	3 756	25 189	4 524	5 197	* 5 000
United Kingdom	18 536	26 420	—	—	30 000
EU36 Total	195 000	243 000	219 000	243 000	295 000

Note

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

**EU36 Production of fluorspar 2009 - 13**



**Exports of fluorspar**

tonnes

Country	2009	2010	2011	2012	2013
Belgium	84 491	122 483	118 782	147 771	106 343
Bulgaria	189	821	33	60	986
Czech Republic	6 147	10 575	10 564	9 634	10 722
Germany	31 157	33 487	45 955	38 029	37 087
Italy	9 518	6 740	28 942	48 048	54 013
Netherlands	11 333	14 023	28 870	19 488	16 659
Spain	35 366	1 680	3 312	5 519	12 754
Sweden	6 745	8 101	11 053	13 714	11 668
Turkey	46	174	243	244	357
United Kingdom	303	412	590	75	16 127

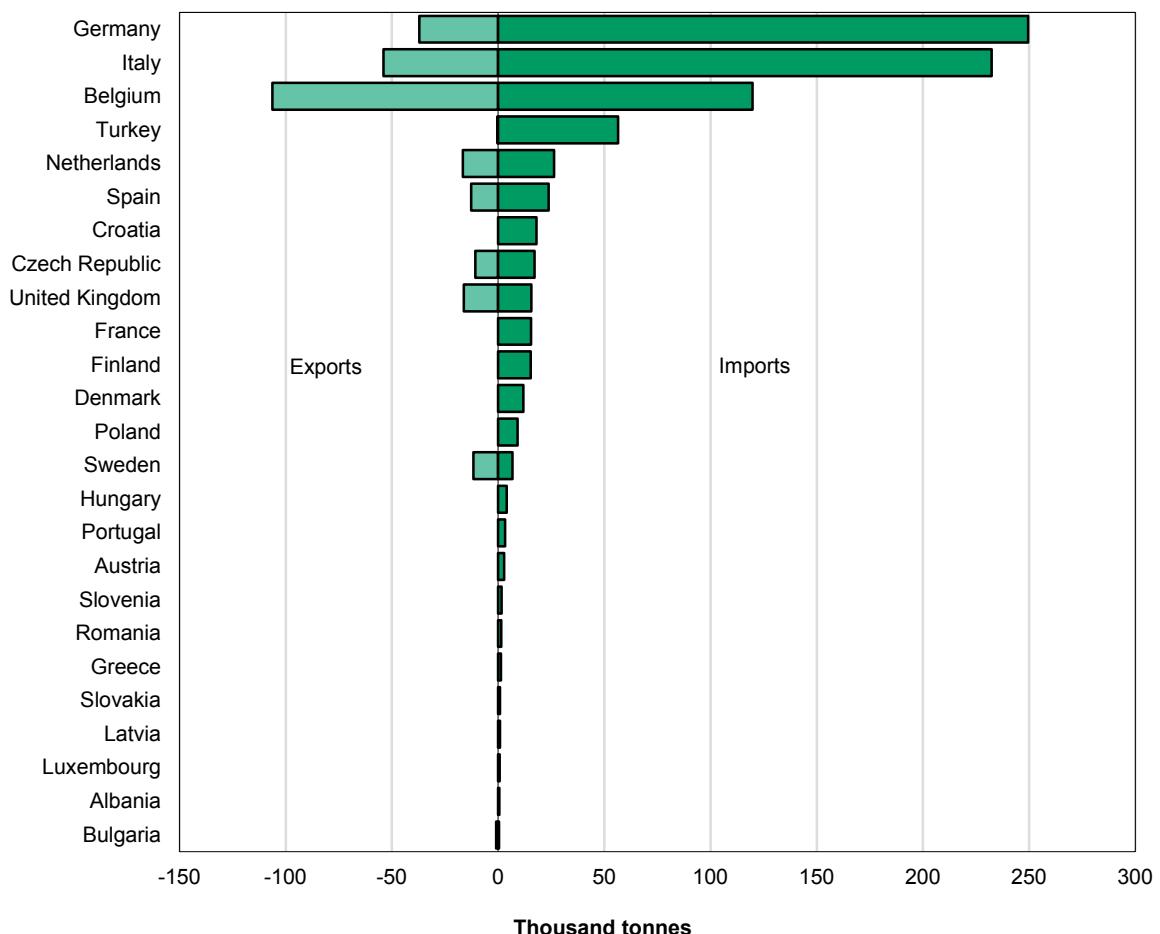
**Imports of fluorspar**

tonnes

Country	2009	2010	2011	2012	2013
Albania	...	350	650	55	500
Austria	1 956	3 490	2 911	2 935	2 847
Belgium	91 928	134 266	145 776	173 038	119 747
Bulgaria	778	700	1 742	1 262	421
Croatia	165	146	3 527	15 513	18 082
Czech Republic	8 626	14 495	15 547	15 388	17 129
Denmark	33 149	13 086	22 462	16 043	11 860
Finland	23 178	16 740	17 605	16 818	15 398
France	13 124	14 601	14 655	15 879	15 453
Germany	187 330	261 999	380 027	280 867	249 532
Greece	1 954	2 652	3 073	2 104	1 349
Hungary	(a)* 1 500	2 662	4 152	3 014	3 984
Italy	212 415	200 184	246 374	232 908	232 279
Latvia	468	678	775	1 269	811
Luxembourg	618	983	887	795	739
Macedonia	457	350	600	244	122
Netherlands	13 014	14 295	23 603	11 725	26 299
Poland	8 562	11 013	12 239	11 747	9 106
Portugal	2 243	1 384	2 350	3 234	3 291
Romania	1 481	2 911	3 817	3 178	1 475
Slovakia	644	954	762	896	820
Slovenia	1 064	1 754	1 463	1 481	1 586
Spain	17 148	12 008	14 198	16 542	23 713
Sweden	12 959	9 451	14 980	10 729	6 815
Switzerland	370	492	210	181	111
Turkey	36 114	37 977	48 210	53 627	56 451
United Kingdom	6 436	1 294	45 327	19 739	(b)* 15 600

## Note

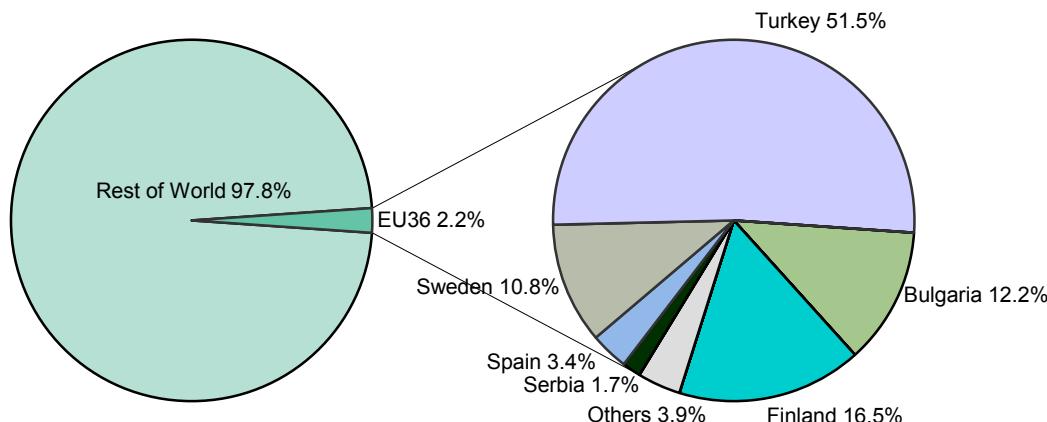
(a) BGS estimates, based on known exports from certain countries

**Fluorspar - EU36 trade in 2013**

## 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 was the world's largest producer in 2013, with 15 per cent of the total world output. The second largest producer was Australia (ten per cent), followed by USA and Russia (eight per cent each), South Africa (six per cent) and Peru (five per cent).

**EU36 Mine production of gold 2013**



## Mine production of gold

kilograms

Country	2009	2010	2011	2012	2013
Bulgaria	4 482	4 489	5 302	7 058	7 385
Finland	3 996	5 896	6 674	9 100	9 981
Greece	—	—	—	26	823
Poland	600	500	400	469	431
Romania	* 500	* 500	* 500	* 500	* 500
Serbia (a)	818	856	1 534	1 400	* 1 000
Slovakia	346	534	398	546	533
Spain	—	—	290	1 333	2 053
Sweden	5 542	6 285	5 994	6 015	6 530
Turkey	14 470	16 890	24 000	29 390	31 044
United Kingdom	187	177	202	102	42
EU36 Total	31 000	36 000	45 000	56 000	60 000

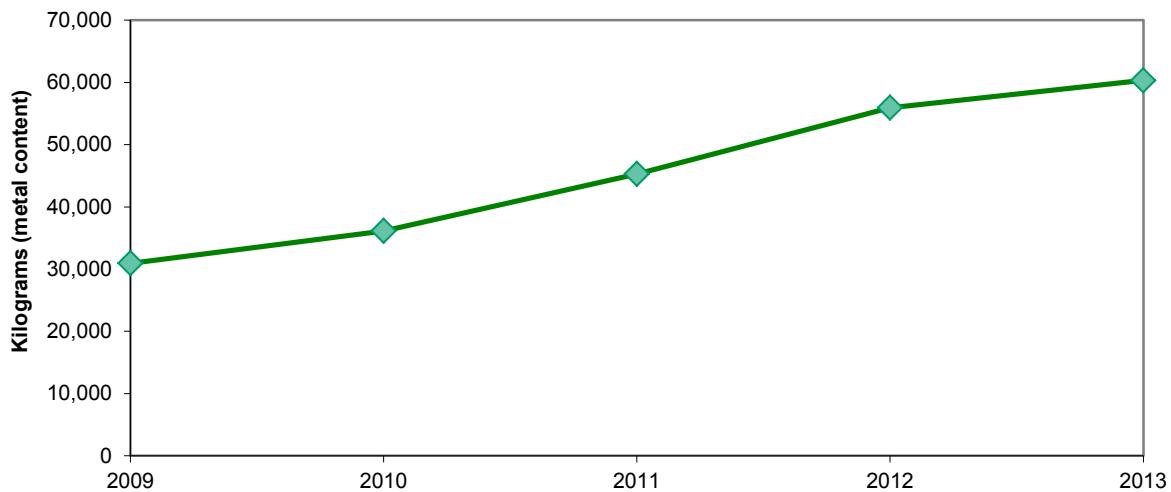
### Notes

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

(a) Metal production

Gold

### EU36 Mine production of gold 2009 - 13



### Exports of gold

Country	2009	2010	2011	2012	2013
Austria					
Metal	18 800	27 800	22 500	18 000	16 600
Waste and scrap	2 700	5 900	2 900	1 600	2 800
Belgium					
Metal	25 683	22 842	6 200	12 900	18 100
Waste and scrap	29 100	173 700	67 800	58 600	70 800
Croatia					
Metal	140	256	1 408	6 046	4 200
Cyprus					
Metal	700	300	600	1 200	1 300
Czech Republic					
Metal	9 800	12 000	21 400	5 300	82 100
Waste and scrap	5 600	4 400	2 700	11 700	1 500
Denmark					
Metal	868	761	1 224	1 556	5 560
Waste and scrap	500	500	1 800	3 000	1 300
Estonia					
Metal	—	400	2 300	1 600	2 300
Finland					
Metal	2 207	4 168	4 970	2 841	639
Waste and scrap	539	878	1 268	88 389	1 243
France					
Metal	22 447	27 729	45 303	54 233	41 186
Waste and scrap	34 094	24 189	29 961	10 955	9 694
Germany					
Metal	113 039	221 003	226 243	212 936	183 267
Waste and scrap	62 603	904 379	688 482	956 113	80 219
Greece					
Metal	581	48	2 455	1 426	2 600
Waste and scrap	...	...	12 300	9 300	24 800
Hungary					
Metal	1 312	1 827	2 214	2 529	2 535
Waste and scrap	...	2 221 600	2 665 300	2 115 900	11 900
Ireland, Republic of					
Waste and scrap	11 155	10 480	9 268	68 063	179 072
Italy					
Metal	106 646	109 762	176 952	200 363	138 471
Waste and scrap	173	154 845	1 006	7 001	10 283
Luxembourg					
Metal	38 000	32 700	8 000	4 500	100

Gold

## Exports continued

kilograms

Country	2009	2010	2011	2012	2013
Malta					
Waste and scrap	...	17 008	27 387	...	...
Netherlands					
Metal	15 515	34 851	50 559	37 629	31 713
Waste and scrap	1 222	57 680	112 629	123 769	58 592
Norway					
Metal	3 865	4 567	7 439	8 498	4 912
Waste and scrap	1 197	1 482	1 904	4 261	1 027
Poland					
Metal	121 100	1 100	3 000	12 300	7 100
Waste and scrap	18 000	588	26	1 000	180
Portugal					
Metal	—	6 600	13 100	17 000	10 600
Waste and scrap	800	800	100	457 000	274 800
Serbia					
Metal	3 278	93	78	141	579
Slovakia					
Metal	3 196	2 926	20 000	3 300	267 600
Waste and scrap	1 200	7 300	6 800	4 800	6 500
Slovenia					
Waste and scrap	200	5 450	12 200	14 800	1 100
Spain					
Metal	31 466	282 816	9 444 195	4 268 966	3 562 857
Waste and scrap	131 376	258 156	176 652	113 264	621 165
Sweden					
Metal	14 500	14 700	12 900	16 600	15 100
Waste and scrap	60 900	5 100	21 000	9 700	2 400
Switzerland					
Metal	1 010 085	1 605 359	1 867 822	1 627 583	2 853 431
Waste and scrap	107 918	105 407	94 837	71 297	162 383
Turkey					
Metal	162 208	56 035	30 226	282 160	71 980
Waste and scrap	1 188	619	1 360	...	580
United Kingdom					
Metal	96 231	293 153	775 261	266 572	1 736 966
Waste and scrap	533 182	496 924	272 597	1 928 197	388 290

## Note

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

## Imports of gold

kilograms

Country	2009	2010	2011	2012	2013
Austria					
Metal	86 500	56 600	63 500	47 300	54 400
Waste and scrap	1 700	1 400	2 400	3 300	6 900
Belgium					
Metal	13 100	10 100	9 100	9 400	10 900
Waste and scrap (a)	* 115 800	* 339 000	* 141 000	* 807 000	* 42 629
Bulgaria					
Metal	56	55	1 596	342	137
Croatia					
Metal	1 221	310	11	11	...
Czech Republic					
Metal	3 055	2 600	23 800	3 600	5 500
Waste and scrap	60 440	84 000	192 500	245 400	12 200
Denmark					
Metal	3 100	900	100 900	1 100	47 900
Estonia					
Metal	300	900	1 600	900	3 200

## Gold

## Imports continued

kilograms

Country	2009	2010	2011	2012	2013
Finland					
Metal	549	650	595	1 358	905
France					
Metal	16 877	20 037	19 721	18 994	26 979
Waste and scrap	6 248	25 070	3 886	697	1 324
Germany					
Metal	164 511	192 815	162 289	133 260	149 337
Waste and scrap	1 126 326	1 396 280	2 680 174	2 568 174	1 997 032
Greece					
Metal	917	1 055	500	346	12 373
Hungary					
Metal	1 076	396	1 512	* 1 500	1 200
Ireland, Republic of					
Metal	£ 4 365 000	£ 4 047 000	£ 5 356 000	£ 7 079 000	£ 11 433 187
Italy					
Metal	146 721	149 022	175 415	195 214	175 188
Waste and scrap	864	649	1 223	5 075	4 360
Lithuania					
Waste and scrap	103	—	64 453	12 202	—
Luxembourg					
Metal	41 901	42 136	184 535	83 757	36 175
Malta					
Metal	5 500	8 200	3 400	3 100	7 100
Netherlands					
Metal	42 806	37 888	38 349	35 027	38 821
Waste and scrap	111	110 465	188 490	117	52 603
Norway					
Metal	670	969	1 220	1 338	1 007
Waste and scrap	3 568	4 127	5 415	4 915	3 928
Poland					
Metal	100	200	1 500	1 800	1 900
Portugal					
Metal	1 077	1 500	1 200	800	700
Waste and scrap	...	...	49 685	121 743	19 509
Slovakia					
Metal	208 400	220 470	189 400	523 800	120 600
Slovenia					
Metal	400	1 100	1 700	1 100	800
Waste and scrap	1 210	5 400	5 600	1 800	2 300
Spain					
Metal	68 562	44 542	46 695	24 180	103 946
Waste and scrap	109	2 780	29 069	33 912	25 382
Sweden					
Metal	£ 26 296 000	£ 32 625 000	£ 42 028 000	£ 33 413 000	£ 38 738 665
Waste and scrap	£ 53 000	£ 12 243 000	£ 33 337 000	£ 26 246 000	£ 1 074 504
Switzerland					
Metal	2 198 967	2 343 070	2 684 244	2 280 196	3 091 840
Waste and scrap	319 257	219 260	205 846	28 550	14 390
Turkey					
Metal	52 654	64 105	128 367	157 629	350 563
United Kingdom					
Metal	1 166 948	800 602	1 012 882	1 052 573	334 032
Waste and scrap	213 440	65 833	71 449	164 833	101 612

## Notes

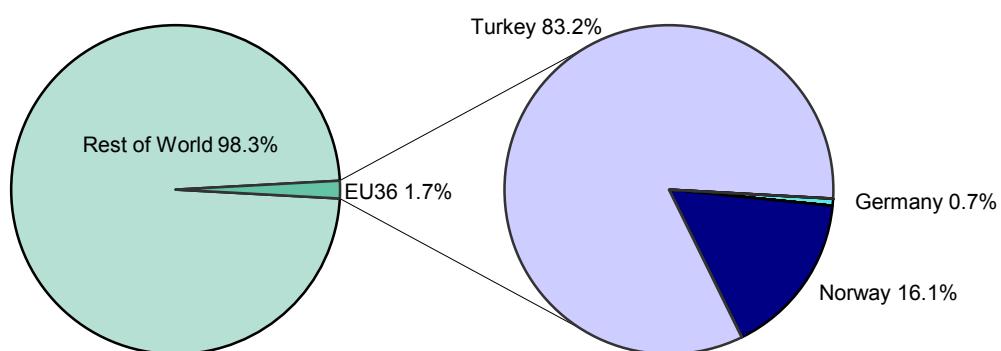
- (1) In this table the term 'metal' includes both unwrought and partly worked gold but excludes gold coin  
(2) Kilograms have been used as the unit except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling.  
(3) See explanatory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

(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.
- China was the world's largest producer in 2013, with 83 per cent of the total world output. The second largest producer was India (seven per cent) followed by Brazil (four per cent).

**EU36 Production of graphite 2013**



### Production of graphite

tonnes

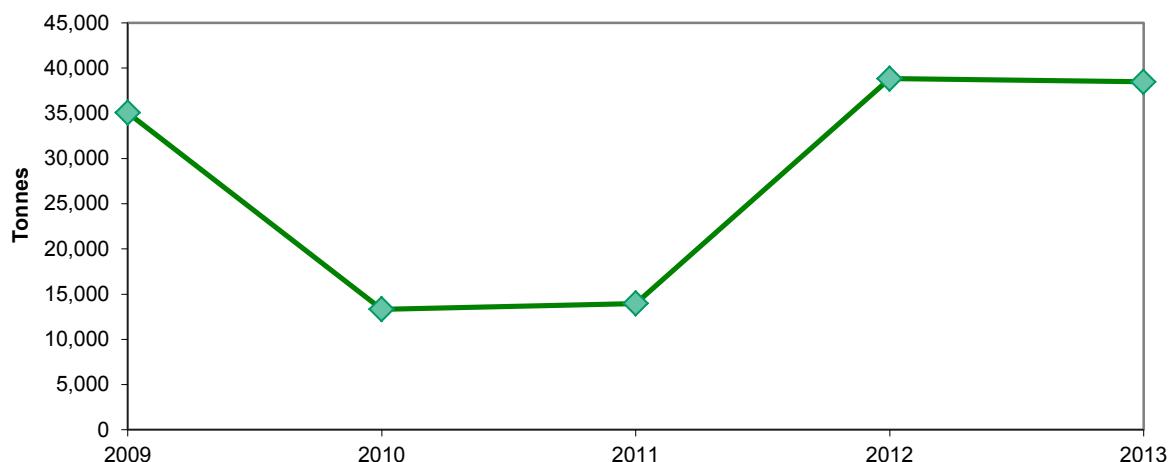
Country	2009	2010	2011	2012	2013
Austria (a)	750	420	925	219	...
Czech Republic	3 000	—	—	—	—
Germany	—	—	—	109	269
Norway	4 562	6 270	7 789	6 992	6 207
Romania	24 352	6 633	—	—	—
Turkey	2 400	—	5 250	31 500	* 32 000
EU36 Total	35 000	13 000	14 000	39 000	38 000

#### Notes

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

(a) Crude

**EU36 Production of graphite 2009 - 13**



Graphite

### Exports of graphite

tonnes

Country	2009	2010	2011	2012	2013
Austria	6 260	9 518	9 936	5 562	5 216
Belgium	2 634	993	1 316	1 716	1 366
Czech Republic	2 150	3 154	3 417	3 108	2 673
France	226	361	321	166	222
Germany	12 722	20 583	15 600	12 721	13 601
Italy	820	798	512	310	233
Netherlands	1 974	2 967	10 651	11 201	8 019
Poland	80	233	505	977	796
Slovenia	15	14	661	252	79
Spain	8 160	5 369	6 142	5 184	1 620
Sweden	159	254	129	129	114
Switzerland	355	326	100	96	85
Turkey	257	220	761	766	836
United Kingdom	2 271	2 981	3 660	2 196	2 011

Note

(1) This table excludes synthetic graphite

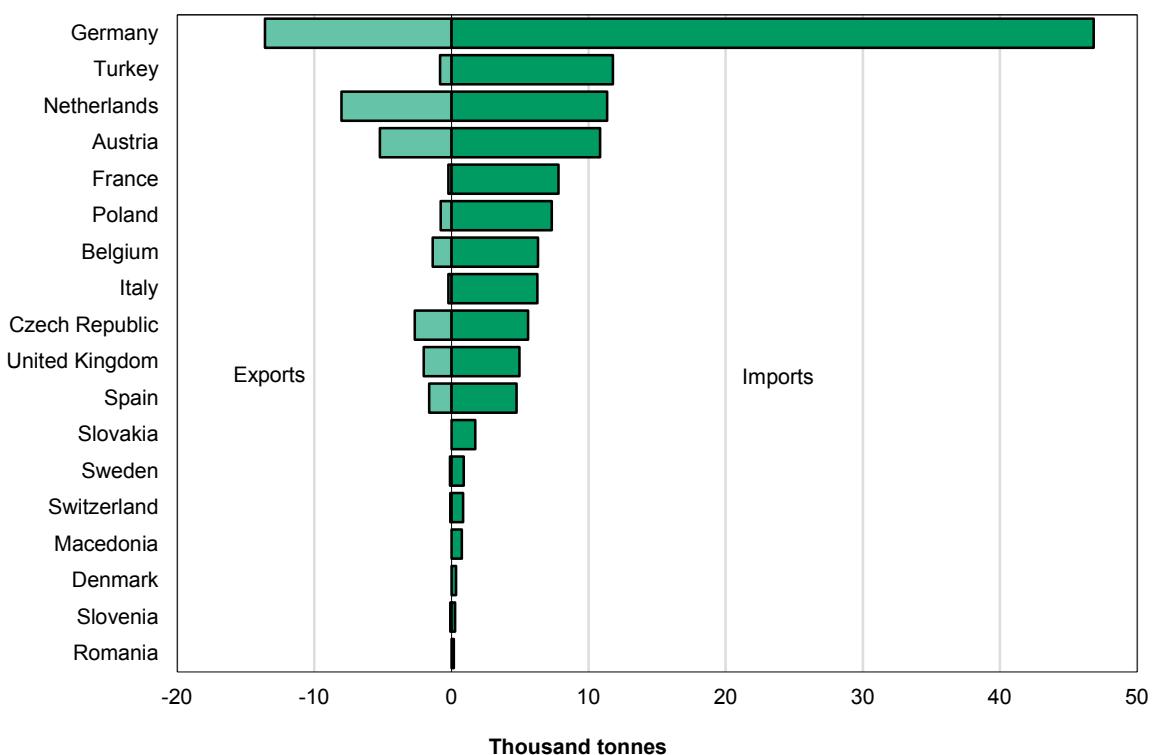
### Imports of graphite

tonnes

Country	2009	2010	2011	2012	2013
Austria	4 622	18 501	21 867	9 272	10 843
Belgium	5 048	7 243	7 473	6 109	6 321
Bulgaria	132	66	65	56	54
Czech Republic	2 554	3 605	5 149	4 757	5 588
Denmark	269	303	405	424	335
France	10 376	9 981	11 725	8 201	7 799
Germany	33 293	56 333	57 411	43 349	46 829
Greece	918	219	92	68	64
Iceland	2 132	18	18	33	...
Italy	5 995	8 308	12 559	6 411	6 274
Latvia	—	1	1	3 813	4
Macedonia	761	875	911	648	764
Netherlands	2 487	16 692	14 266	13 498	11 342
Norway	508	400	129	124	45
Poland	3 078	6 933	10 267	6 833	7 317
Romania	144	204	742	601	182
Slovakia	962	1 899	1 688	1 847	1 741
Slovenia	89	295	844	440	258
Spain	15 669	34 268	10 765	5 579	4 736
Sweden	835	1 315	1 129	779	893
Switzerland	306	848	823	454	841
Turkey	6 788	11 191	13 138	8 171	11 776
United Kingdom	7 850	6 989	6 869	4 114	4 951

Note

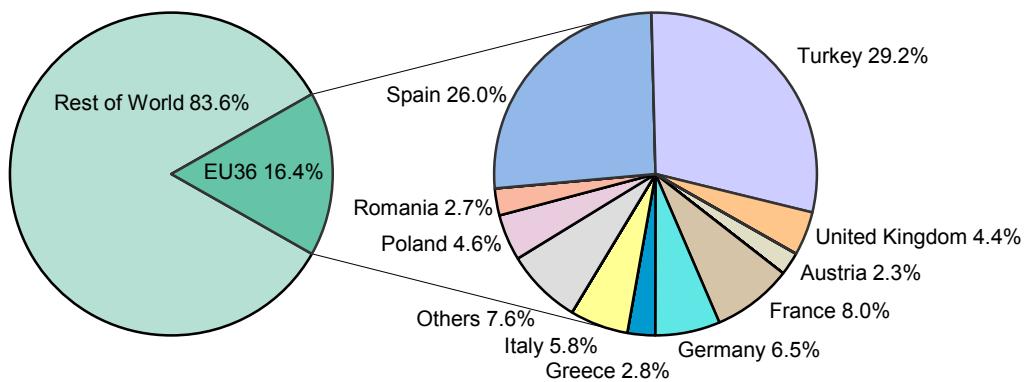
(1) This table excludes synthetic graphite

**Graphite - EU36 trade in 2013**

## 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 to make building and decorative plaster. It is used as an additive to cement, in farming as a soil conditioner, as a filler and for a variety of uses in the chemical industry.
- The overall situation with gypsum is 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.
- China was the world's largest producer in 2013, with an estimated 22 per cent of the total world output. The second largest producer was USA (ten per cent), followed by Iran (eight per cent), Thailand (seven per cent), and Iraq (six per cent).

**EU36 Production of gypsum 2013**



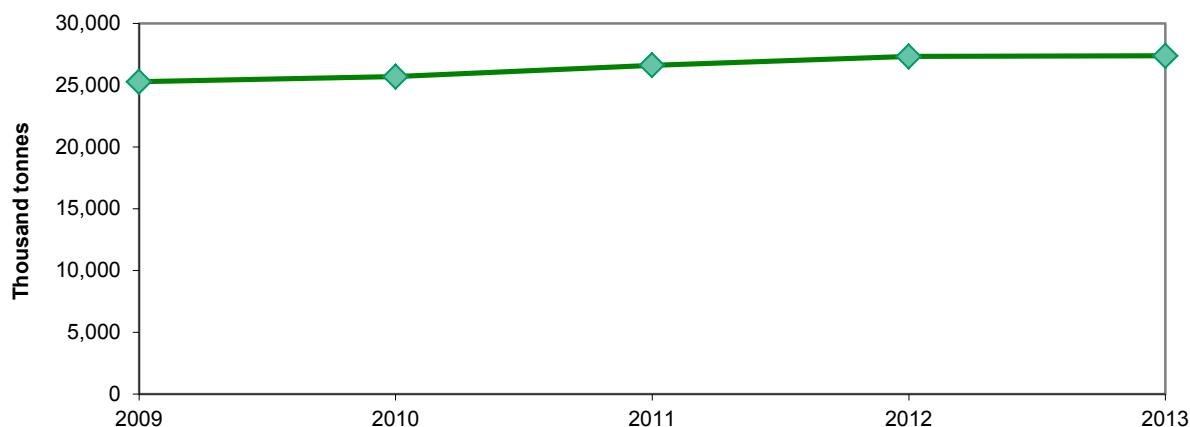
## Production of gypsum

Country	2009	2010	2011	2012	2013
Albania	* 78 000	* 80 000	* 80 000	91 021	126 399
Austria (a)	910 945	872 273	815 438	791 961	635 299
Bulgaria	127 600	109 200	114 800	113 700	119 100
Croatia	318 139	248 675	231 008	182 557	114 450
Cyprus	317 000	333 000	335 000	327 800	315 000
Czech Republic	13 000	5 000	11 000	14 000	11 000
France (a)	1 887 260	2 065 814	2 452 204	2 314 788	2 189 971
Germany (a)	1 898 000	1 822 000	2 021 000	1 949 000	1 778 000
Greece (a)	730 000	* 600 000	587 000	700 000	760 000
Hungary (a)	19 766	20 000	3 000	—	—
Ireland, Republic of	* 400 000	* 300 000	* 300 000	* 200 000	* 200 000
Italy	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000	* 1 600 000
Latvia (a)	175 870	176 510	216 000	252 714	* 250 000
Macedonia (a)	154 550	143 118	162 984	157 844	162 661
Norway (a)(b)	68 103	36 395	88 953	85 296	* 80 000
Poland (a)	1 326 928	1 398 500	1 225 600	1 227 900	1 270 100
Portugal	335 189	336 755	337 272	321 988	299 038
Romania	720 713	639 010	834 009	765 251	736 099
Slovakia (a)	131 000	87 000	88 000	88 000	60 000
Spain	8 181 315	6 990 249	7 825 747	6 359 923	7 125 463
Switzerland	* 300 000	* 300 000	* 350 000	* 320 000	* 340 000
Turkey	4 369 589	6 321 891	5 723 439	8 248 446	* 8 000 000
United Kingdom	* 1 200 000	* 1 200 000	* 1 200 000	* 1 200 000	* 1 200 000
EU36 Total	25 300 000	25 700 000	26 600 000	27 300 000	27 400 000

### Notes

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

(a) Including anhydrite  
(b) Sales

**EU36 Production of gypsum 2009 - 13****Exports of gypsum**

Country	2009	2010	2011	2012	2013
Albania					
Crude and calcined	6 034	1 955	791	2 019	7 439
Austria					
Crude	20 694	19 124	23 007	18 485	24 898
Calcined	78 839	55 927	76 548	79 280	75 787
Belgium					
Crude	113 954	92 533	101 382	72 899	81 189
Calcined	1 823	177 046	(a)* 195 000	(a)* 184 000	(a)* 187 000
Bulgaria					
Crude and calcined	11 965	3 641	10 953	21 872	11 800
Croatia					
Crude and calcined	3 119	10	66	23	317
Cyprus					
Crude and calcined	236 427	250 034	248 284	249 250	248 863
Czech Republic					
Crude	10 195	48 605	103 363	63 751	70 706
Calcined	6 430	5 235	3 448	3 537	3 421
Denmark					
Crude	8 440	2 211	63	5 155	126
Calcined	1 455	8 299	6 725	13 990	1 748
Estonia					
Crude and calcined	22	87	105	1 781	1 282
France					
Crude	267 315	259 192	239 815	267 365	328 277
Calcined	282 254	286 799	310 248	289 668	242 886
Germany					
Crude	393 691	430 977	516 024	501 487	425 608
Calcined	1 290 391	1 558 288	1 333 953	1 444 714	1 156 749
Greece					
Crude	49 037	38 459	95 699	142 598	338 023
Calcined	580	337	621	3 750	3 415
Hungary					
Crude and calcined	22 019	17 367	44 845	59 059	27 914
Ireland, Republic of					
Crude	10 425	23 355	5 390	5 176	7 039
Calcined	28 491	15 129	21 274	16 585	16 699
Italy					
Crude	17 907	12 035	9 614	8 383	35 889
Calcined	21 848	18 484	39 465	79 661	84 696
Latvia					
Crude and calcined	37 352	38 596	47 016	84 358	97 074
Luxembourg					
Crude and calcined	661	1 596	1 919	1 698	1 594
					235

Gypsum

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Macedonia					
Crude and calcined	12 604	30 273	32 328	29 321	27 891
Netherlands					
Crude	* 39 600	15 773	42 080	36 388	39 777
Calcined	5 550	1 656	2 714	3 005	2 818
Norway					
Crude and calcined	68 140	36 298	85 598	90 159	77 012
Poland					
Crude and calcined	40 512	47 654	121 689	111 389	119 406
Portugal					
Crude and calcined	12 394	20 016	47 278	56 546	31 679
Romania					
Crude and calcined	17 966	17 672	15 576	15 693	13 360
Slovenia					
Crude and calcined	6 575	205	220	303	249
Spain					
Crude	2 187 816	2 678 208	3 367 083	3 780 980	3 454 407
Calcined	182 982	165 424	156 461	135 415	188 096
Sweden					
Crude and calcined	9 358	8 155	3 865	4 466	6 522
Switzerland					
Crude and calcined	2 454	8 536	8 606	7 283	5 386
Turkey					
Crude	145 717	134 905	111 864	107 000	62 545
Calcined	643 873	682 898	708 056	789 505	882 998
United Kingdom					
Crude	1 978	3 330	3 428	4 036	4 745
Calcined	32 551	24 552	25 504	21 216	19 481

Notes

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

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

**Imports of gypsum**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Crude	1 038	1 632	669	339	184
Austria					
Crude	12 098	22 432	84 817	36 806	67 145
Calcined	73 588	70 850	72 696	77 931	70 371
Belgium					
Crude	702 104	616 338	683 957	838 204	641 842
Calcined	424 465	396 873	507 725	455 117	422 056
Bulgaria					
Crude	15 830	6 239	11 399	6 338	5 416
Calcined	42 086	44 383	37 323	29 471	32 856
Croatia					
Crude	14 470	1 608	11 421	13 269	37 283
Calcined	22 154	14 076	12 709	11 790	9 308
Cyprus					
Crude and calcined	10 807	9 292	6 461	5 165	3 061
Czech Republic					
Crude	83 819	55 087	57 962	48 657	42 413
Calcined	53 954	33 763	34 353	33 209	34 644
Denmark					
Crude	106 304	53 577	97 219	133 652	85 185
Calcined	58 675	42 290	21 696	79 529	34 987
Estonia					
Crude	381	11 295	11 922	16 772	13 952
Calcined	8 760	8 950	8 343	7 718	8 328

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Finland					
Crude	146 141	235 787	182 082	223 784	150 748
Calcined	5 664	7 281	11 020	9 270	7 061
France					
Crude	354 086	313 842	249 933	283 071	367 325
Calcined	101 840	85 849	76 800	73 772	90 451
Germany					
Crude	28 315	29 132	26 182	21 712	16 062
Calcined	75 319	82 341	80 574	98 665	93 803
Greece					
Crude and calcined	2 097	1 759	1 400	3 714	4 576
Hungary					
Crude	3 248	5 362	5 198	5 241	3 608
Calcined	43 128	12 413	18 039	24 138	31 969
Iceland					
Crude	4 724	2 579	892	682	730
Ireland, Republic of					
Crude	15 931	20 637	2 731	10 715	10 688
Calcined	13 930	5 410	9 318	7 623	8 944
Italy					
Crude	5 754	3 618	2 205	8 793	7 299
Calcined	16 645	16 267	16 976	17 916	17 911
Latvia					
Crude	1 037	22 669	33 495	48 578	45 012
Calcined	883	2 027	2 787	2 523	1 918
Lithuania					
Crude	28 754	54 772	63 632	64 379	82 504
Calcined	19 974	17 377	18 503	19 211	19 504
Luxembourg					
Crude	57 828	50 104	69 918	63 994	61 079
Calcined	15 793	10 715	18 459	24 216	19 003
Malta					
Crude and calcined	2 305	10 446	11 428	12 507	6 191
Montenegro					
Crude and calcined	3 356	653	730	521	525
Netherlands					
Crude	249 206	203 179	307 971	280 623	349 844
Calcined	418 481	368 523	611 145	570 600	504 609
Norway					
Crude	76 435	84 359	94 824	79 789	78 521
Calcined	234 564	270 721	275 909	299 898	264 601
Poland					
Crude	157 974	129 336	134 230	122 407	20 267
Calcined	82 586	53 613	47 261	39 845	43 204
Portugal					
Crude	81 971	73 822	40 153	28 175	44 712
Calcined	244 809	270 783	237 788	167 437	133 151
Romania					
Crude	45 891	40 703	63 658	92 883	54 106
Calcined	62 134	47 912	50 866	43 118	36 964
Serbia					
Crude	13 273	14 601	22 546	32 566	25 738
Calcined	11 684	9 276	9 962	9 096	7 441
Slovakia					
Crude	53 104	74 512	80 966	70 308	99 454
Calcined	52 703	16 732	17 194	17 335	15 319
Slovenia					
Crude	5 565	942	785	37	57
Calcined	9 432	7 615	6 218	6 095	5 354
Spain					
Crude	25 963	20 776	13 185	11 943	5 398
Calcined	7 349	6 015	5 787	5 548	12 354
Sweden					
Crude	94 656	256 696	324 584	294 946	271 096
Calcined	158 842	73 865	58 751	48 111	60 279

Gypsum

Imports continued

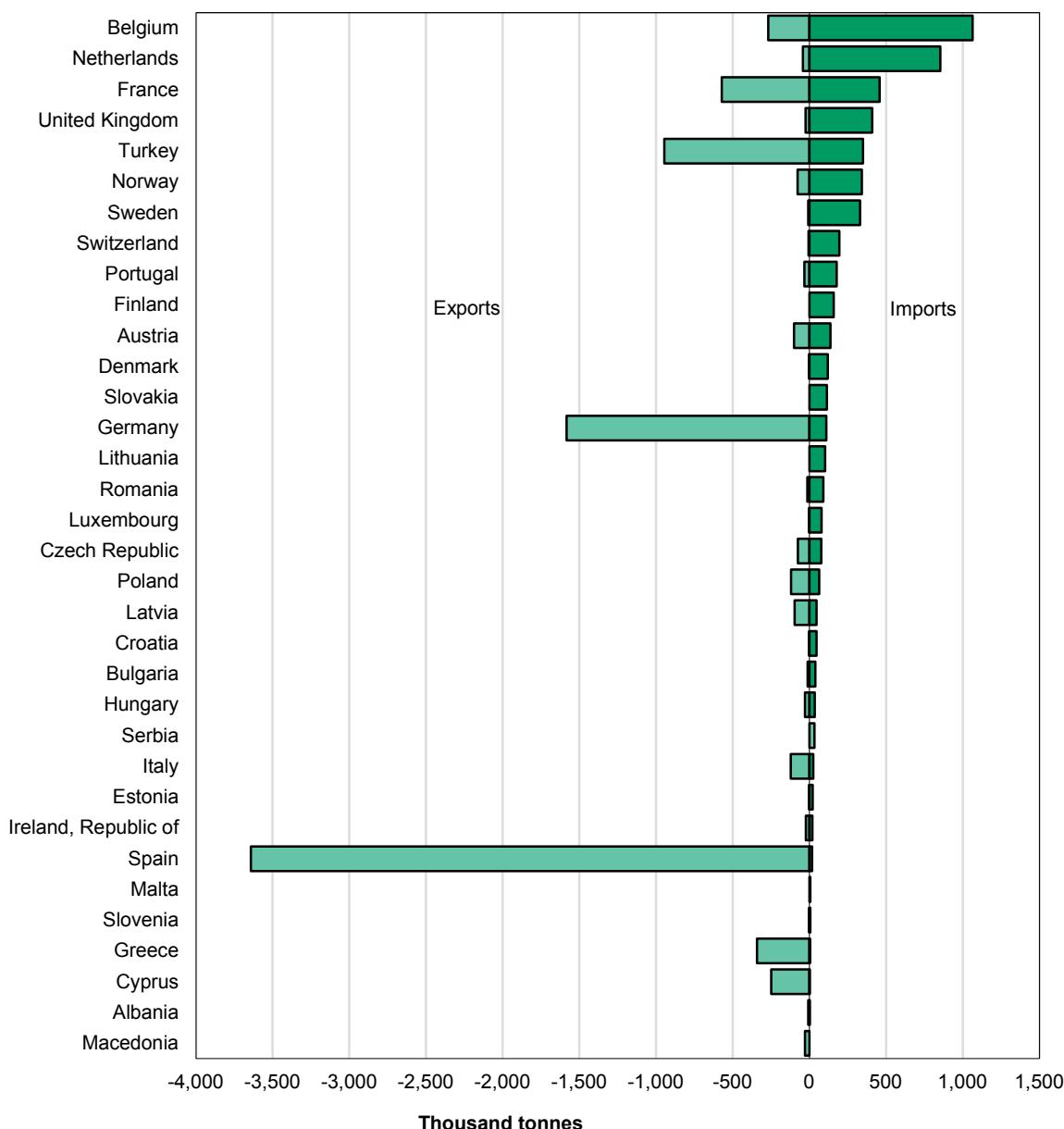
tonnes

Country	2009	2010	2011	2012	2013
Switzerland					
Crude	101 228	112 555	94 474	81 642	78 329
Calcined	87 350	100 958	104 574	113 112	116 822
Turkey					
Crude	201 077	232 713	375 169	295 462	347 834
Calcined	1 419	1 782	1 916	2 259	2 485
United Kingdom					
Crude	396 138	216 605	539 327	490 661	376 972
Calcined	60 337	54 209	46 526	47 545	33 620

Note

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

Gypsum - EU36 trade in 2013



## 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.
- Chile was the world's largest producer in 2013, with 63 per cent of the total world output. The second largest producer was Japan (29 per cent), followed by USA (four per cent), and China (two per cent).

### Exports of iodine

kilograms

Country	2009	2010	2011	2012	2013
Austria	339	564	413	10 652	200
Belgium	2 582 300	3 989 500	3 584 800	3 391 900	4 457 300
Bulgaria	300	600	600	500	400
Czech Republic	500	1 000	2 000	4 000	5 300
Denmark	1 500	3	100	—	—
France	101 909	47 103	89 357	187 560	86 018
Germany	112 690	62 331	124 705	109 595	62 042
Hungary	...	...	...	92 300	40 900
Ireland, Republic of	1 982	—	2 589	—	—
Italy	86 917	24 722	20 112	22 559	26 637
Latvia	—	4 200	—	7 400	—
Lithuania	—	4	8 900	3 000	6 900
Luxembourg	...	83 600	40 900	—	—
Netherlands	386 170	124 797	152 295	122 569	502 562
Norway	250	—	13 250	1 127	—
Poland	5 100	16 400	4 000	3 700	2 700
Spain	15 376	14 704	7 909	43 289	90 312
Sweden	300	700	900	7 900	(a)* 500
Switzerland	97	349	239	238	17 244
Turkey	31 908	2 960	4 877	2 480	3 393
United Kingdom	121 370	393 005	234 182	370 132	190 878

## Note

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

### Imports of iodine

kilograms

Country	2009	2010	2011	2012	2013
Austria	204 100	213 000	198 500	147 200	195 100
Belgium	3 189 200	4 087 700	3 814 500	4 663 100	4 773 300
Bulgaria	2 900	2 300	2 800	3 600	3 200
Czech Republic	31 900	35 100	36 500	22 600	16 400
Denmark	8 674	10 168	5 895	8 447	11 900
Estonia	196	13 157	258	39	5 024
Finland	2 901	1 443	1 174	856	719
France	1 189 569	1 530 436	1 492 427	1 501 344	1 237 444
Germany	1 168 886	1 422 575	1 576 165	1 700 953	1 771 622
Greece	800	1 300	200	300	753
Hungary	2 100	2 700	6 100	4 000	8 000
Ireland, Republic of	24 358	13 311	22 220	32 305	23 685
Italy	1 256 232	1 080 203	1 375 868	1 633 655	1 673 429
Latvia	200	140	300	300	708
Lithuania	4 510	17 732	20 100	3 200	2 000
Netherlands	23 376	16 031	1 352 421	811 065	1 174 000
Norway	1 270 662	1 708 338	1 663 657	1 759 025	2 035 784
Poland	10 600	21 700	11 600	12 900	21 800
Portugal	8 000	8 700	8 600	6 300	10 800
Romania	330	300	500	400	2 500
Serbia	4 030	8 137	10 876	2 790	748
Slovakia	235	325	500	300	500
Slovenia	631	45	35	111	3 500

## Iodine

## Imports continued

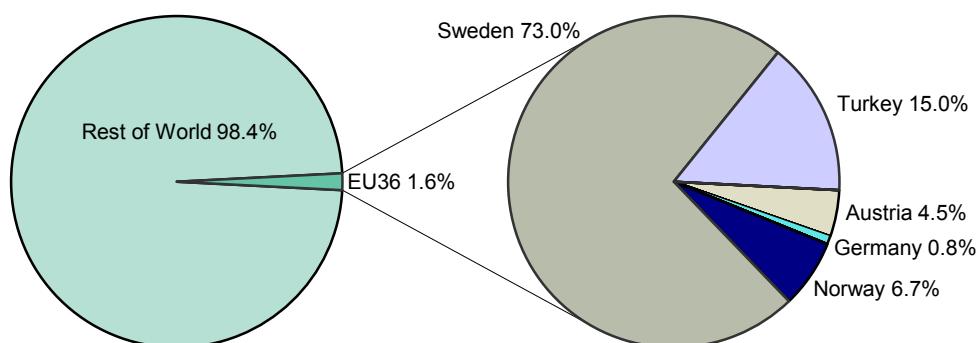
kilograms

Country	2009	2010	2011	2012	2013
Spain	512 821	342 914	522 768	357 482	534 309
Sweden	400	1 100	1 800	8 600	1 700
Switzerland	7 156	10 238	10 839	13 172	13 865
Turkey	12 133	3 218	6 641	6 163	4 423
United Kingdom	1 075 328	1 253 806	1 426 239	1 573 126	1 135 699

## Iron ore

- There are two main commercial ores of iron — magnetite and haematite (both iron oxides). Iron is also recovered from pyrites ( $\text{FeS}_2$ ). 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.
- China was the world's largest producer in 2013, with 46 per cent of the total world output. The second largest producer was Australia (19 per cent), followed by Brazil (10 per cent), India (five per cent) and Russia (three per cent).

**EU36 Production of iron ore 2013**



## Production of iron ore

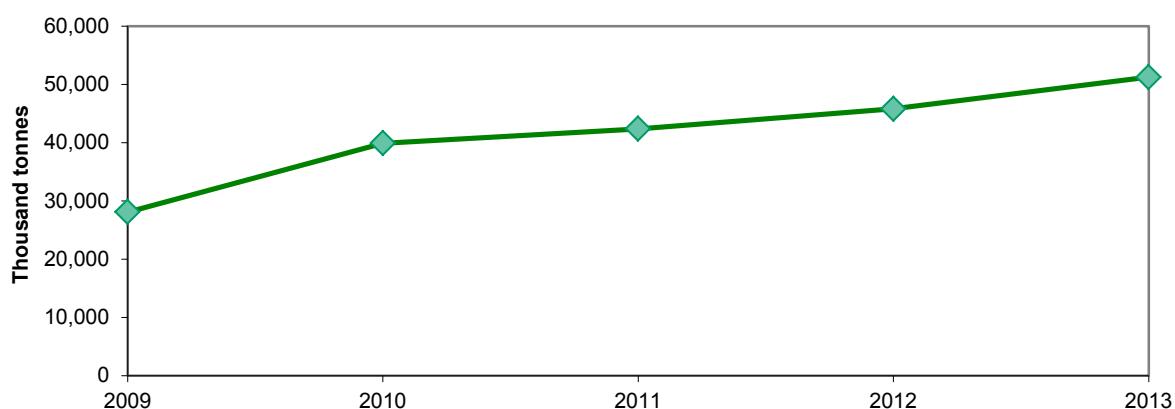
tonnes

Country	2009	2010	2011	2012	2013
Austria (a)	2 002 131	2 068 853	2 206 910	2 142 255	2 323 323
Germany (b)(c)	363 699	390 353	489 091	447 515	413 404
Norway	896 000	3 266 000	2 532 100	3 420 684	3 409 269
Sweden	20 646 000	28 797 000	30 840 000	32 198 000	37 411 000
Turkey	4 169 972	5 378 455	6 308 448	7 599 511	* 7 700 000
EU36 Total	28 078 000	39 901 000	42 377 000	45 808 000	51 257 000

Notes

- (a) Including micaceous iron oxide
- (b) Including manganeseiferous iron ore
- (c) Used as aggregate in the construction industry

**EU36 Production of iron ore 2009 - 13**



## Iron ore

**Exports of iron ore**

tonnes

Country	2009	2010	2011	2012	2013
Albania	176 337	277 026	606 577	191 531	191 934
Belgium	178 567	366 331	455 069	76 216	7 694
Bulgaria	12 705	1	—	26 823	—
Finland					
Iron ore	0	298 912	(a)* 700 000	(a)* 1 200 000	(a)* 1 700 000
Burnt pyrites	244 225	391 549	(a)* 80 000	(a)* 30 000	(a)* 13 000
France	124 492	(b) 19 349	129 374	(b) 88 094	167 799
Germany					
Iron ore	4 497	22 373	54 555	42 763	50 451
Burnt pyrites	10 865	7 994	15 999	—	—
Greece					
Burnt pyrites	...	...	6 559	—	10 180
Hungary	—	52 400	64 435	63 373	11 382
Italy (b)	354	8 779	6 742	14 191	18 697
Netherlands	(b) 239 932	121 426	208 469	49 903	241 379
Norway	775 828	1 803 242	2 435 415	3 659 210	3 567 408
Poland	14 893	16 130	4 400	1 573	29 699
Romania					
Iron ore	172 372	1 718	2 728	53 998	317 571
Burnt pyrites	12 694	1 359	1 690	2 887	10 757
Serbia					
Burnt pyrites	...	0	34 828	1 547 491	1 288 928
Slovakia	5 923	62 568	22 481	118 695	121 558
Spain (b)	17 348	9 079	165 589	184 056	270 073
Sweden	16 104 129	20 726 152	21 115 203	22 869 383	23 455 915
Turkey					
Iron ore	3 309	195 770	273 798	323 089	858 755
Burnt pyrites	52	4 830	22 752	100 447	96 577
United Kingdom	32 579	5 228	179 699	108 399	71 801

## Notes

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

(b) Including burnt pyrites

**Imports of iron ore**

tonnes

Country	2009	2010	2011	2012	2013
Austria (a)	6 095 762	9 309 860	9 966 338	9 628 923	8 269 199
Belgium					
Iron ore	3 254 834	7 567 453	7 425 015	6 309 506	6 303 550
Burnt pyrites	23 648	45	...	0	67
Bulgaria					
Iron ore	3 110	7 991	1 265	1 987	9 634
Burnt pyrites	15 831	16 653	16 679	11 794	4 344
Croatia (a)	12 057	20 147	2 123	2 764	1 924
Czech Republic (a)	4 803 009	5 902 011	7 363 983	5 870 744	6 268 042
Denmark					
Iron ore	69 990	53 896	49 597	49 006	40 005
Burnt pyrites	—	15 457	8	—	2
Finland	2 204 018	(a) 3 052 609	3 728 222	3 220 998	(a) 2 903 196
France					
Iron ore	10 014 901	15 259 049	13 531 471	13 718 095	15 344 995
Burnt pyrites	5 375	11 603	11 452	23 894	13 099
Germany					
Iron ore	28 812 134	43 082 309	41 678 285	38 908 327	40 322 561
Burnt pyrites	7 087	3 077	4 513	23 495	13 696
Hungary	876 109	1 985 510	1 780 865	(a) 1 632 969	(a) 845 366
Iceland	34 404	36 318	42 846	19 251	22 916
Ireland, Republic of	(a) 31 488	(a) 109	(a) 507	(a) 147	4
Italy	8 159 741	12 092 237	15 134 122	13 396 809	11 522 381
Netherlands	(a) 4 585 303	(a) 8 810 077	8 921 399	7 445 399	(a) 5 200 141
Norway	134 167	148 809	127 127	92 702	74 266
Poland	(a) 3 752 010	6 494 457	5 977 338	6 576 287	6 640 058

## Imports continued

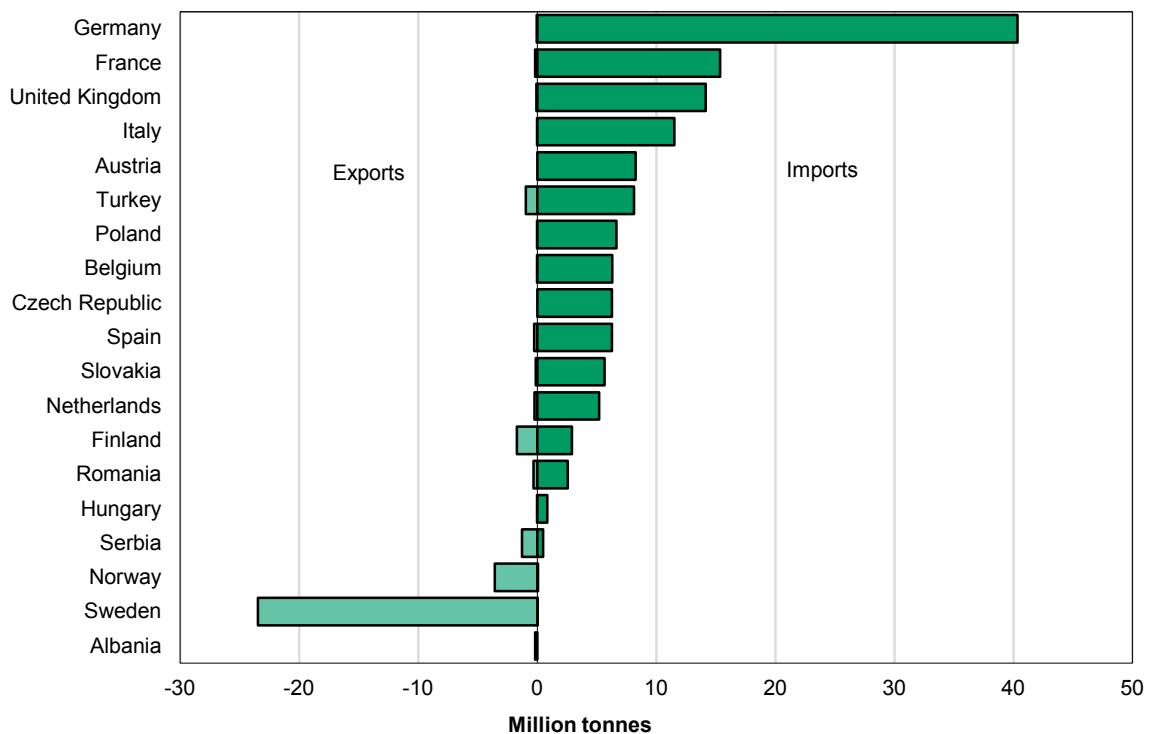
tonnes

Country	2009	2010	2011	2012	2013
Romania					
Iron ore	1 597 033	2 848 921	2 186 674	2 023 063	2 545 657
Burnt pyrites	11 572	29 544	35 551	30 178	17 263
Serbia	1 397 755	1 860 593	(a) 1 624 795	(a) 465 170	(a) 486 247
Slovakia	4 499 385	5 796 813	5 103 229	5 404 215	5 647 197
Slovenia	...	...	...	...	(a) 159
Spain	(a) 4 237 845	(a) 5 874 304	(a) 5 143 562	4 505 772	(a) 6 260 115
Sweden					
Iron ore	41 087	55 078	51 334	44 285	26 028
Burnt pyrites	2 919	16 743	24 561	22 191	...
Switzerland					
Iron ore	1 445	5 382	12 537	12 046	9 224
Burnt pyrites	15 045	15 171	14 916	13 386	10 991
Turkey					
Iron ore	7 757 561	7 220 977	6 644 310	7 842 126	8 114 387
Burnt pyrites	14 097	—	—	—	—
United Kingdom					
Iron ore	9 185 919	10 597 085	9 175 254	10 062 173	14 136 967
Burnt pyrites	232	—	598	150	193

## Note

(a) Including burnt pyrites

## Iron ore - EU36 trade in 2013



## Production of pig iron

tonnes

Country	2009	2010	2011	2012	2013
Austria	4 353 000	5 621 000	5 815 000	5 751 000	6 200 000
Belgium	3 087 000	4 688 000	4 700 000	4 073 000	4 343 000
Czech Republic	3 483 000	3 987 000	4 137 000	3 935 207	4 039 528
Finland	2 042 000	2 564 000	2 600 000	2 461 000	2 100 000
France	8 104 318	10 136 827	9 697 535	9 531 844	10 300 000
Germany	20 104 000	28 560 000	27 943 000	27 046 000	27 177 000
Hungary	1 050 000	1 325 000	1 315 000	1 229 000	600 000
Italy	5 670 000	8 555 000	9 824 000	9 424 000	6 935 000
Netherlands	4 655 000	5 799 000	5 943 000	5 909 000	5 700 000
Norway	83 000	108 000	101 000	100 000	* 100 000
Poland	2 983 500	3 637 995	3 974 930	3 943 968	4 013 877
Romania	1 576 679	1 723 418	1 595 000	1 580 000	* 1 300 000
Serbia	964 607	1 158 628	1 197 693	318 651	366 277
Slovakia	3 019 000	3 649 000	3 346 000	3 519 755	3 616 850
Spain	2 920 000	3 572 000	3 540 000	3 081 000	3 949 000
Sweden	1 966 000	3 447 000	3 240 000	2 805 000	3 000 000
Turkey	6 913 325	16 362 115	14 877 155	18 289 109	* 18 000 000
United Kingdom	7 671 100	7 233 000	6 625 000	7 183 100	9 471 000
EU36 Total	80 646 000	112 127 000	110 471 000	110 181 000	111 212 000

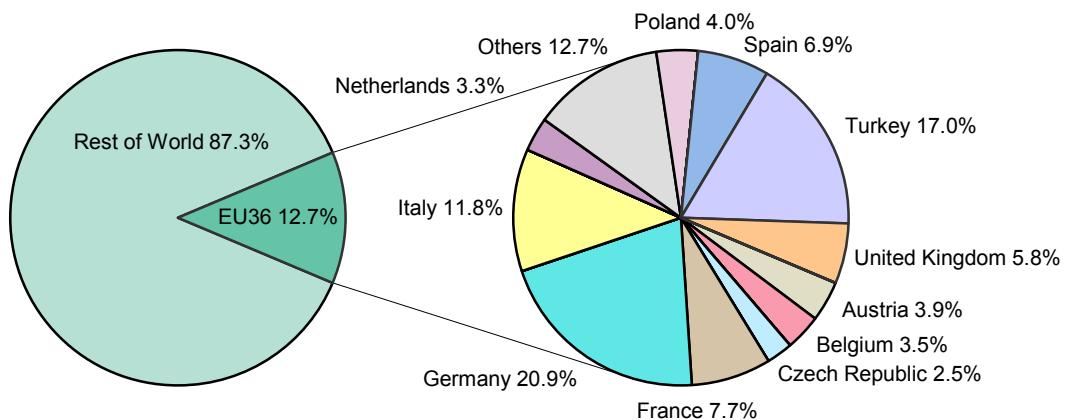
## Note

(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 product 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 world total steel production.
- The majority of industrialised countries produce steel. China was the world's largest producer in 2013, with 48 per cent of the total world output. The second largest producer was Japan (seven per cent), followed by USA and India (five per cent each), and Russia and South Korea (four per cent each).

EU36 Production of crude steel 2013



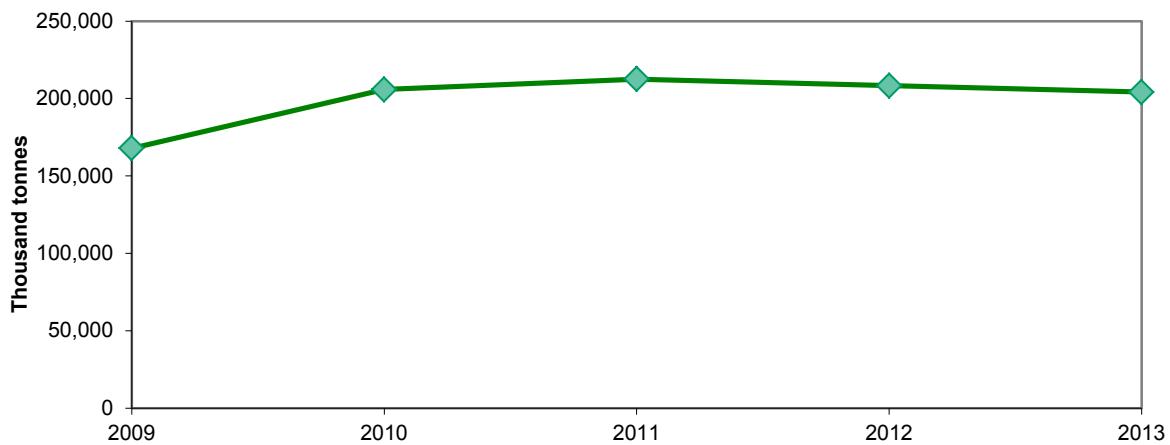
**Production of crude steel**

tonnes

Country	2009	2010	2011	2012	2013
Albania	221 000	390 000	464 000	390 000	312 000
Austria	5 662 000	7 206 000	7 474 000	7 421 000	7 953 000
Belgium	5 635 000	7 973 000	8 026 000	7 301 000	7 127 000
Bulgaria	726 000	744 000	835 000	633 000	523 000
Croatia	54 266	103 429	162 709	1 016	125 000
Czech Republic	4 594 000	5 180 000	5 583 000	5 072 082	5 171 255
Estonia	—	—	1	185	395
Finland	3 066 000	4 029 000	3 989 000	3 759 000	3 517 000
France	12 840 108	15 413 577	15 780 639	15 607 227	15 685 000
Germany	32 670 000	43 830 000	44 284 000	42 661 000	42 645 000
Greece	2 000 000	1 821 000	1 934 000	1 247 000	1 030 000
Hungary	1 403 000	1 678 000	1 733 000	1 543 000	883 000
Italy	19 848 000	25 750 000	28 735 000	27 257 000	24 079 000
Latvia	692 000	655 000	568 000	805 000	198 000
Luxembourg	2 141 000	2 548 000	2 521 000	2 214 000	2 090 000
Macedonia	299 332	344 866	348 576	225 224	145 633
Montenegro	90 404	48 272	61 164	28 161	19 723
Netherlands	5 194 000	6 651 000	6 937 000	6 879 000	6 713 000
Norway	595 000	520 000	620 000	683 000	605 000
Poland	7 128 482	7 993 025	8 776 458	8 539 302	8 199 353
Portugal	1 557 000	1 504 000	1 871 000	1 960 000	2 050 000
Romania	2 772 679	3 720 775	3 835 000	3 780 000	2 985 000
Serbia	1 054 336	1 254 386	1 304 954	346 000	396 000
Slovakia	3 747 000	4 583 000	4 236 000	4 403 447	4 510 535
Slovenia	430 000	606 000	648 000	632 000	618 000
Spain	14 358 000	16 343 000	15 504 000	13 639 000	14 130 000
Sweden	2 803 700	4 845 600	4 867 000	4 326 000	4 404 000
Switzerland	934 000	1 320 000	1 400 000	* 1 450 000	* 1 530 000
Turkey	25 303 741	29 029 789	30 562 184	35 885 000	34 658 000
United Kingdom	10 074 500	9 708 000	9 478 000	9 579 100	11 857 500
EU36 Total	167 895 000	205 793 000	212 539 000	208 267 000	204 160 000

## Notes

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

**EU36 Production of crude steel 2009 - 13**

## Ferro-alloys

- Ferro-alloys are alloys of iron with a number of metals, such as chromium, silicon or manganese. They are used as additives to steel with the object of modifying its properties. Silicon metal is included within the table for ferro-alloys as it is used for the same purpose
- China was the largest producer in 2013, followed by South Africa, India, Russia and Kazakhstan

### Production of ferro-alloys

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ferro-chrome	5 705	23 233	28 433	24 018	24 692
Austria					
Ferro-molybdenum	4 000	4 000	4 000	4 000	4 000
Ferro-nickel	2 500	2 500	2 500	2 500	2 500
Ferro-vanadium	6 200	8 000	8 000	8 000	8 000
Bulgaria					
Ferro-silicon	3 000	—	—	—	* —
Czech Republic					
Ferro-vanadium	* 1 900	* 3 400	* 4 600	* 5 800	* 6 400
Finland					
Ferro-chrome	123 310	238 000	231 000	229 000	434 000
France					
Ferro-manganese	46 000	138 100	130 500	* 131 000	* 131 000
Ferro-silico-manganese	54 100	62 400	63 400	* 64 000	* 64 000
Ferro-silicon	* 18 300	* 27 000	* 59 000	* 60 000	* 60 000
Silicon metal	* 80 000	* 112 000	* 128 000	* 110 000	* 110 000
Germany					
Ferro-chrome	13 667	* 18 300	* 18 900	* 17 800	* 17 800
Other ferro-alloys	6 336	* 9 200	9 985	8 248	* 8 200
Silicon metal	27 620	30 105	30 134	28 574	30 283
Greece					
Ferro-nickel	42 400	69 600	94 000	96 435	86 850
Iceland					
Ferro-silicon	112 992	114 230	120 076	131 818	125 204
Italy					
Ferro-manganese	* 20 000	* 25 000	* 25 000	* 27 000	* 27 000
Ferro-silico-manganese	56 000	108 000	145 000	110 000	* 110 000
Macedonia					
Ferro-silico-manganese	—	36 705	50 756	14 179	—
Ferro-nickel	12 000	14 413	17 292	19 247	20 001
Ferro-silicon	7 657	30 044	56 167	42 402	72 279
Norway					
Ferro-manganese	196 700	297 300	337 900	* 320 000	* 780 000
Ferro-silico-manganese	(a) 247 615	(a) 281 266	266 000	* 250 000	* 250 000
Ferro-silicon	233 974	* 200 000	170 102	203 886	349 389
Silicon metal	169 643	* 170 000	* 170 000	* 150 000	* 150 000
Poland					
Ferro-manganese	1 736	800	800	800	820
Ferro-silico-manganese	72	100	400	200	100
Ferro-silicon	9 673	53 206	72 668	79 400	73 590
Other ferro-alloys	4 190	200	300	300	11 250
Romania					
Ferro-chrome	15 377	14 353	—	—	—
Ferro-silico-manganese	—	20 605	* 30 000	* 30 000	* 30 000
Slovakia					
Ferro-silico-manganese	32 000	34 960	25 036	50 089	* 50 000
Ferro-silicon	4 600	26 419	32 304	32 726	41 664
Other ferro-alloys	22 250	38 860	18 575	20 059	* 20 000
Spain					
Ferro-manganese	* 60 100	* 134 000	* 108 000	* 108 000	* 108 000
Ferro-silico-manganese	* 59 200	* 132 000	* 164 000	* 165 000	* 166 000
Ferro-silicon	* 44 000	* 64 400	* 57 000	* 57 000	* 57 000
Silicon metal	* 23 000	* 32 500	* 43 000	* 45 000	* 45 000

## Production continued

tonnes

Country	2009	2010	2011	2012	2013
Sweden					
Ferro-chrome	31 100	64 400	80 140	35 800	55 078
Turkey					
Ferro-chrome	41 028	* 50 000	* 40 000	* 40 000	* 40 000
Ferro-silico-chrome	2 903	* 3 000	* 3 000	* 3 000	* 3 000

## Note

(a) Sales

## Exports of iron, steel and ferro-alloys

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ferro-alloys	586	23 493	31 364	29 813	28 389
Ingots, blooms, billets	(a)* 72 000	132 144	162 632	124 525	42 798
Scrap	17 764	55 885	99 445	86 884	23 038
Austria					
Pig iron	2 354	4 476	3	74	776
Sponge and powder	193	1 195	653	49 019	46 756
Ferro-alloys	5 953	2 618	1 690	2 291	2 526
Silicon metal	4 795	7 403	597	1 643	842
Ingots, blooms, billets	187 410	190 343	293 647	238 922	297 349
Scrap	1 067 926	1 034 398	950 865	1 008 503	963 641
Belgium					
Pig iron	160 120	254 854	255 067	232 381	218 946
Sponge and powder	14 655	35 395	10 029	14 734	22 163
Ferro-chrome	20 403	25 965	23 538	26 098	26 507
Ferro-silico-chrome	15 645	5 849	1 549	666	—
Ferro-manganese	9 915	26 544	41 161	43 319	30 129
Ferro-silico-manganese	31 374	48 652	47 762	10 280	4 867
Ferro-molybdenum	16 396	19 593	20 134	21 760	23 643
Ferro-silicon	47 214	23 071	33 676	25 595	32 322
Other ferro-alloys	2 988	4 137	16 124	8 045	9 676
Silicon metal	5 954	8 522	8 396	2 327	2 127
Ingots, blooms, billets	279 680	487 535	484 510	336 540	288 335
Scrap	3 245 159	3 754 403	3 533 560	3 618 789	3 218 658
Bulgaria					
Pig iron	1 420	1 141	854	1 249	2 157
Ferro-silico-manganese	...	19	1	136	761
Ferro-silicon	2 890	980	248	1 563	1 463
Other ferro-alloys	9 867	2 115	312	907	1 652
Ingots, blooms, billets	54 115	30 327	24 822	14 564	11 786
Scrap	510 997	949 000	850 898	730 749	610 990
Croatia					
Ferro-alloys	3 397	6 526	5 254	2 368	73
Ingots, blooms, billets	7	2 495	30 004	4 041	78 244
Scrap	302 085	357 015	517 438	516 600	349 730
Cyprus					
Scrap	80 349	96 654	138 529	136 351	103 981
Czech Republic					
Pig iron	24 041	65 473	45 677	82 769	82 515
Ferro-silicon	4 285	9 806	7 354	7 571	10 533
Ferro-vanadium	1 868	3 440	4 603	5 737	6 368
Other ferro-alloys	12 274	23 873	6 732	9 311	12 895
Silicon metal	783	847	584	74	168
Ingots, blooms, billets	222 780	320 821	356 146	292 066	259 268
Scrap	1 442 865	1 814 398	2 011 915	2 042 131	1 908 593
Denmark					
Pig iron	53	239	1 102	1 681	674
Ferro-silicon	55	77	164	1 043	602
Other ferro-alloys	291	54	43	48	52
Ingots, blooms, billets	13 287	19 143	21 926	21 050	21 075
Scrap	1 335 754	1 596 485	1 554 808	1 359 467	1 245 646

## Iron, steel and ferro-alloys

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Estonia					
Ferro-alloys	100	124	142	1 012	2 175
Scrap	384 299	512 766	563 124	631 831	517 330
Finland					
Pig iron	11 317	2 564	373	14 459	5 780
Ferro-chrome	61 319	126 713	97 322	104 829	283 425
Other ferro-alloys	308	560	211	217	202
Ingots, blooms, billets	253 440	263 863	219 129	127 904	49 814
Scrap	276 010	229 680	341 937	361 107	402 310
France					
Pig iron	151 699	52 439	53 736	44 010	42 234
Sponge and powder	5 261	18 917	20 857	9 484	7 372
Ferro-chrome	2 217	2 447	2 035	2 837	1 995
Ferro-silico-magnesium	844	1 259	1 222	2 381	1 485
Ferro-manganese	2 882	2 200	2 554	1 704	782
Ferro-silico-manganese	41 324	51 330	54 023	51 068	79 510
Ferro-molybdenum	379	548	802	972	724
Ferro-nickel	10 496	6 104	1 042	787	59
Ferro-niobium	261	505	220	186	186
Ferro-silicon	51 676	77 144	84 879	74 961	75 639
Ferro-titanium and ferro-silico-titanium	844	1 869	1 985	1 660	1 744
Other ferro-alloys	10 077	37 932	33 076	45 776	39 004
Silicon metal	231	261	298	85	65
Ingots, blooms, billets	1 814 051	1 858 111	2 088 739	2 232 987	1 141 631
Scrap	5 402 426	6 665 264	6 240 254	6 233 179	6 174 335
Germany					
Pig iron	86 491	180 542	183 310	171 347	149 745
Sponge and powder	28 183	56 763	43 160	35 370	35 330
Ferro-chrome	27 831	54 956	45 048	32 760	28 644
Ferro-silico-magnesium	1 113	1 718	2 355	2 062	2 981
Ferro-manganese	9 043	12 387	22 690	11 811	11 501
Ferro-silico-manganese	4 436	3 377	17 756	12 006	16 084
Ferro-molybdenum	3 229	3 174	4 440	2 815	3 438
Ferro-nickel	1 725	7 869	5 775	391	1 146
Ferro-niobium	321	538	237	228	283
Ferro-phosphorus	475	1 452	1 233	1 250	1 449
Ferro-silicon	63 214	95 683	81 464	67 351	65 014
Ferro-titanium and ferro-silico-titanium	1 662	4 180	5 350	4 687	4 010
Ferro-tungsten and ferro-silico-tungsten	339	640	402	417	381
Ferro-vanadium	755	659	391	226	389
Other ferro-alloys	8 210	10 799	8 722	3 952	5 080
Silicon metal	20 207	29 309	33 077	49 693	58 466
Ingots, blooms, billets	1 655 376	2 150 091	2 150 120	1 712 813	1 844 387
Scrap	7 275 257	9 175 802	9 859 197	9 658 280	9 146 441
Greece					
Pig iron	351	2 009	2 650	2	...
Ferro-alloys	377	999	294	11 299	4 816
Ingots, blooms, billets	102 721	143 318	139 537	64 523	44 379
Scrap	34 840	66 989	59 592	57 511	70 956
Hungary					
Ferro-alloys	...	104	207	272	112
Silicon metal	...	...	4 317	2 887	1 809
Ingots, blooms, billets	4 315	9 274	44 796	7 260	14 694
Scrap	636 805	1 132 142	1 272 473	1 171 610	1 109 969
Iceland					
Ferro-silicon	112 993	114 231	120 076	131 818	125 204
Other ferro-alloys	4 595	5 603	6	0	0
Silicon metal	200	—	—	—	13
Scrap	38 075	37 328	38 954	28 581	40 564
Ireland, Republic of					
Sponge and powder	9	...	18 709	150	1 268
Ingots, blooms, billets	547	262	9 240	510	425
Scrap	428 416	484 871	609 985	517 800	447 391

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
<b>Italy</b>					
Pig iron	61 761	38 026	22 412	51 911	39 597
Sponge and powder	452	729	1 534	3 904	3 571
Ferro-chrome	2 066	5 020	5 639	3 399	4 180
Ferro-silico-magnesium	163	33	27	114	527
Ferro-manganese	7 457	9 186	9 761	11 603	8 233
Ferro-silico-manganese	4 322	4 316	3 890	15 215	15 371
Ferro-molybdenum	1 266	149	41	1 048	368
Ferro-nickel	418	176	215	52	186
Ferro-silicon	6 395	6 329	8 642	7 741	10 028
Other ferro-alloys	2 523	863	951	968	1 001
Silicon metal	3 200	3 284	4 293	1 621	1 246
Ingots, blooms, billets	570 380	909 562	908 493	831 477	702 422
Scrap	325 026	422 731	317 626	324 451	253 587
<b>Latvia</b>					
Ferro-chrome	204	4 051	9 502	30 189	13 006
Ferro-manganese	402	794	1 132	515	679
Ferro-silico-manganese	...	6 247	16 563	20 152	11 513
Ferro-silicon	1	11 029	23 706	13 874	26 207
Ingots, blooms, billets	2 323	2 442	5 045	72 535	32 687
Scrap	213 766	396 794	563 192	507 285	468 154
<b>Lithuania</b>					
Ferro-alloys	3 093	104	141	3 280	1 235
Scrap	422 436	595 721	664 225	562 585	493 483
<b>Luxembourg</b>					
Ingots, blooms, billets	16 793	10 953	37 393	27 521	26 104
Scrap	114 924	165 832	133 133	102 625	127 509
<b>Macedonia</b>					
Ferro-manganese	773	50	4	209	21
Ferro-silico-manganese	10 938	31 344	46 254	22 482	441
Ferro-nickel	(a)* 91 800	67 384	77 107	89 302	94 714
Ferro-silicon	16 621	19 491	52 684	41 131	71 956
Scrap	59 407	71 830	83 784	88 861	75 972
<b>Malta</b>					
Scrap	27 775	29 498	38 408	34 244	28 134
<b>Montenegro</b>					
Ingots, blooms, billets	15 423	18 775	6 866	9 199	3 540
Scrap	14 442	28 570	55 204	43 998	56 423
<b>Netherlands</b>					
Pig iron	89 714	111 189	133 861	184 975	78 365
Sponge and powder	(a)* 140	359	625	745	26 189
Ferro-chrome	62 439	170 489	242 310	232 408	168 967
Ferro-silico-chrome	* 300	448	14 816	31 811	6 589
Ferro-manganese	33 193	35 353	66 053	57 013	88 182
Ferro-silico-manganese	37 593	66 085	62 737	99 228	124 570
Ferro-molybdenum	1 894	6 462	6 544	8 031	8 399
Ferro-nickel	3 564	6 264	7 514	10 306	23 130
Ferro-niobium	925	1 175	2 070	1 280	1 941
Ferro-silicon	87 348	219 244	238 469	226 217	112 552
Ferro-titanium and ferro-silico-titanium	2 730	10 510	13 620	10 357	11 011
Ferro-tungsten and ferro-silico-tungsten	476	727	1 155	990	1 663
Ferro-vanadium	926	1 909	2 343	1 772	1 525
Other ferro-alloys	* 33 000	50 903	16 535	15 559	7 145
Silicon metal	46 466	69 896	65 055	86 097	47 748
Ingots, blooms, billets	157 861	849 018	1 553 519	1 601 063	702 912
Scrap	* 2 835 000	5 541 773	5 692 223	5 635 229	5 517 477
<b>Norway</b>					
Pig iron (a)	* 75 000	* 118 000	* 110 000	* 91 000	* 118 000
Sponge and powder	286	678	169	1 269	3 722
Ferro-chrome	—	(a)* 30	(a)* 65	(a)* 90	(a)* 89
Ferro-manganese (a)	* 203 000	* 332 000	* 379 000	* 370 000	* 825 000
Ferro-silico-manganese	200 279	245 095	246 808	277 070	279 907
Ferro-silicon	115 682	214 643	246 711	244 224	246 718
Other ferro-alloys	16 247	2 479	47	9	20
Silicon metal	109 254	162 649	154 191	161 468	174 217
Ingots, blooms, billets	106 505	64 474	92 475	163 423	87 907
Scrap	228 138	337 675	289 943	345 558	365 332

## Iron, steel and ferro-alloys

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Poland					
Pig iron	10 543	17 340	21 122	79 889	49 925
Sponge and powder	4 448	5 293	16 519	7 185	7 040
Ferro-manganese and ferro-silico-manganese	21 640	10 113	3 284	5 844	44 294
Ferro-silicon	16 401	59 845	76 121	72 741	83 700
Other ferro-alloys	2 655	7 452	8 135	4 919	15 087
Silicon metal	1 033	845	1 390	1 674	2 161
Ingots, blooms, billets	664 035	490 919	846 908	618 682	360 816
Scrap	978 862	1 334 069	1 838 699	1 955 438	1 946 832
Portugal					
Pig iron	51	18 502	21 606	18 330	17 431
Ferro-alloys	255	1 746	2 392	793	443
Ingots, blooms, billets	136 284	172 983	119 353	54 844	71 231
Scrap	216 037	303 013	239 842	236 115	246 687
Romania					
Sponge and powder	18 807	24 454	29 320	25 038	24 992
Ferro-chrome	3 543	14 234	10 996	8 577	1 715
Ferro-manganese	1 801	45	26	195	92
Ferro-silico-manganese	8 120	19 087	34 387	4 171	14 170
Ferro-niobium	72	53	66	136	217
Ferro-silicon	727	24	0	—	45
Other ferro-alloys	130	223	101	1 716	755
Ingots, blooms, billets	51 644	196 302	267 543	199 986	156 285
Scrap	2 565 443	2 519 237	2 348 565	1 908 069	1 947 543
Serbia					
Pig iron	71 778	70 090	46 629	374 860	910
Ingots, blooms, billets	46 587	20 547	111 080	187 578	266 510
Scrap	328 763	416 713	357 778	372 846	330 259
Slovakia					
Pig iron	29 779	70 588	26 976	29 527	42 978
Ferro-chrome	4 029	10 029	11 189	12 893	10 802
Ferro-manganese	19 204	14 032	10 229	4 308	13 223
Ferro-silico-manganese	37 792	35 764	28 660	44 202	41 345
Ferro-molybdenum	119	78	2 416	172	98
Ferro-silicon	15 823	19 656	31 004	26 389	39 296
Other ferro-alloys	1 129	3 390	3 226	4 940	6 596
Ingots, blooms, billets	255 917	631 135	221 697	413 032	128 932
Scrap	318 290	556 952	651 135	430 539	360 818
Slovenia					
Pig iron	4 412	10 507	21 823	19 227	10 834
Ferro-chrome	3 648	5 320	4 757	12 373	14 421
Ferro-manganese	1 056	1 769	1 317	3 076	5 676
Ferro-silico-manganese	1 938	5 959	4 268	3 281	1 200
Ferro-silicon	6 628	7 280	13 397	9 241	5 150
Ferro-titanium and ferro-silico-titanium	50	124	123	53	46
Other ferro-alloys	3 297	4 214	4 554	5 193	5 672
Silicon metal	3 049	5 568	4 753	764	1 303
Ingots, blooms, billets	12 296	17 320	39 269	33 034	36 092
Scrap	284 958	343 716	409 401	417 264	395 560
Spain					
Pig iron	4 772	2 998	7 023	11 831	17 049
Sponge and powder	2 566	2 658	3 233	3 000	3 659
Ferro-chrome	367	1 025	1 181	1 359	2 224
Ferro-manganese	29 403	52 296	37 866	42 486	71 628
Ferro-silico-manganese	25 859	58 097	65 469	66 101	58 380
Ferro-molybdenum	242	359	7	55	22
Ferro-silicon	5 939	12 854	12 952	20 235	17 571
Other ferro-alloys	208	2 191	2 326	1 901	4 259
Silicon metal	5 571	18 463	21 864	20 690	19 644
Ingots, blooms, billets	261 758	337 566	194 482	134 781	253 033
Scrap	302 465	277 401	431 394	737 203	567 955

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Sweden					
Pig iron	141 261	146 027	133 387	109 644	34 960
Sponge and powder	296 251	12 335	313 081	297 427	293 451
Ferro-chrome	35 886	51 010	2 752	2 525	37 393
Ferro-manganese and ferro-silico-manganese	2 423	3 517	3 581	2 835	2 395
Ferro-molybdenum	193	340	375	294	253
Ferro-phosphorus	364	582	448	479	497
Ferro-silicon	3 004	6 905	6 903	15 630	20 102
Ferro-vanadium	250	50	57	64	32
Other ferro-alloys	330	498	665	950	1 170
Silicon metal	968	2 337	1 274	1 206	1 409
Ingots, blooms, billets	58 631	261 273	235 814	450 860	415 798
Scrap	1 439 126	1 352 399	1 484 197	1 543 542	1 317 282
Switzerland					
Sponge and powder	1 564	2 191	981	1 013	908
Ferro-alloys	943	1 191	1 299	848	1 026
Ingots, blooms, billets	48 349	66 642	85 201	70 375	74 934
Scrap	565 415	623 910	630 837	626 757	714 655
Turkey					
Pig iron	10 616	8 028	9 357	7 723	6 240
Sponge and powder	219	1 326	7 581	1 422	3 174
Ferro-chrome	75 236	74 570	76 255	75 555	104 259
Ferro-manganese	1 614	4 410	3 536	2 003	2 249
Ferro-silico-manganese	2 247	2 362	2 172	1 237	1 472
Ferro-silicon	1 280	4 619	5 807	2 653	2 676
Other ferro-alloys	1 059	507	4 886	795	1 920
Ingots, blooms, billets	2 431 211	3 716 586	2 459 563	2 985 209	1 566 856
Scrap	66 673	94 498	105 914	95 152	101 685
United Kingdom					
Pig iron	27 765	4 339	2 074	3 775	1 652
Sponge and powder	3 103	2 938	3 775	4 585	4 858
Ferro-alloys	28 899	45 314	43 918	49 357	47 949
Ferro-chrome	1 475	2 403	1 853	2 288	2 108
Ferro-silico-chrome	50	22	364	72	168
Ferro-silico-magnesium	458	366	338	327	240
Ferro-manganese	963	8 361	819	658	407
Ferro-silico-manganese	65	52	132	7 503	3 626
Ferro-molybdenum	7 634	11 248	12 948	12 421	11 922
Ferro-nickel	18	15	49	539	183
Ferro-niobium	52	224	179	257	162
Ferro-phosphorus	312	667	766	562	558
Ferro-silicon	3 338	2 958	6 594	4 659	5 109
Ferro-titanium and ferro-silico-titanium	13 098	15 197	17 662	18 040	22 652
Ferro-tungsten and ferro-silico-tungsten	1	4	3	20	9
Ferro-vanadium	64	24	52	31	45
Other ferro-alloys	1 373	3 774	2 158	1 979	760
Silicon metal	7 753	2 901	3 662	3 027	4 979
Ingots, blooms, billets	2 118 701	1 137 160	668 885	1 817 820	3 164 861
Scrap	6 007 656	7 507 853	7 744 411	7 160 639	6 777 534

## Notes

- (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
- (2) In this table "ferro-silico-magnesium" includes both HS codes 7207 9930 and 7202 9980 even though the description appears to have changed

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

**Imports of iron, steel and ferro-alloys**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Ferro-silico-chrome	3 161	2 033	...	...	...
Ferro-manganese	22	...	10	...	201
Ferro-silico-manganese	2 189	3 354	4 145	4 217	3 095
Ferro-silicon	1 018	484	1 447	915	618
Ingots, blooms, billets	84 083	310	180	63	105
Scrap	150 003	292 096	312 746	211 910	201 240
Austria					
Pig iron	30 084	25 355	30 367	18 706	18 579
Sponge and powder	13 980	13 537	18 585	90 782	49 177
Ferro-chrome	20 400	29 355	38 422	35 000	31 026
Ferro-silico-magnesium	79	132	150	97	101
Ferro-manganese	18 962	17 840	21 671	21 540	27 737
Ferro-silico-manganese	17 927	22 976	19 931	18 862	17 957
Ferro-molybdenum	801	742	1 402	1 503	1 127
Ferro-nickel	1	...	973	906	971
Ferro-niobium	665	1 061	1 191	1 865	1 165
Ferro-phosphorus	1 095	1 232	2 497	610	761
Ferro-silicon	12 825	27 063	33 709	38 402	58 296
Ferro-titanium and ferro-silico-titanium	388	471	630	607	367
Ferro-tungsten and ferro-silico-tungsten	208	552	715	624	533
Ferro-vanadium	32	166	65	300	204
Other ferro-alloys	1 764	3 549	4 806	3 067	2 974
Silicon metal	7 288	11 497	10 180	7 189	8 773
Ingots, blooms, billets	46 762	159 527	186 929	196 328	155 829
Scrap	1 196 327	991 574	1 016 301	1 007 906	1 168 752
Belgium					
Pig iron	281 872	331 652	320 083	286 145	261 257
Sponge and powder	19 389	39 503	54 212	42 889	65 817
Ferro-chrome	185 381	263 715	248 006	275 926	312 300
Ferro-silico-chrome	—	1 950	10 437	19 741	5 569
Ferro-silico-magnesium	1 292	1 992	1 716	1 258	831
Ferro-manganese	21 327	48 471	69 017	70 732	59 929
Ferro-silico-manganese	36 931	72 195	77 001	28 938	29 946
Ferro-molybdenum	2 215	2 160	3 261	3 437	4 248
Ferro-nickel	46 248	48 017	64 242	40 217	45 403
Ferro-niobium	1 089	1 890	1 598	1 687	2 047
Ferro-phosphorus	3 124	2 612	1 459	1 227	1 536
Ferro-silicon	62 888	92 785	105 445	87 805	88 808
Ferro-titanium and ferro-silico-titanium	2 161	2 926	2 377	2 525	2 157
Ferro-tungsten and ferro-silico-tungsten	159	229	93	249	227
Ferro-vanadium	246	214	146	263	397
Other ferro-alloys	3 363	7 039	8 777	7 451	9 086
Silicon metal	18 995	23 566	21 688	10 440	13 602
Ingots, blooms, billets	1 966 055	2 554 975	2 916 336	2 458 279	1 634 190
Scrap	3 678 867	4 726 992	4 634 651	4 330 264	4 238 922
Bulgaria					
Pig iron	6 736	14 781	17 521	13 807	19 196
Sponge and powder	14 572	317	294	97	823
Ferro-chrome	182	356	578	489	441
Ferro-silico-magnesium	180	164	183	177	237
Ferro-manganese	3 137	3 137	6 280	3 816	2 531
Ferro-silico-manganese	3 479	4 291	6 324	6 966	5 503
Ferro-molybdenum	24	47	82	37	728
Ferro-silicon	1 152	2 520	3 246	4 203	4 090
Ferro-titanium and ferro-silico-titanium	34	72	175	173	101
Ferro-vanadium	87	91	134	125	93
Other ferro-alloys	708	685	4 238	5 108	532
Ingots, blooms, billets	306 020	258 743	411 534	300 224	412 924
Scrap	202 276	269 483	230 401	113 497	93 301

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Croatia					
Pig iron	8 420	10 343	14 072	12 353	13 950
Ferro-alloys	2 239	4 051	2 490	1 223	2 578
Ferro-manganese	95	135	546	59	361
Ferro-silico-manganese	728	2 005	743	56	927
Ferro-phosphorus	186	168	196	192	184
Ferro-silicon	1 072	1 416	878	828	1 055
Other ferro-alloys	344	495	323	280	51
Silicon metal	33	95	208	347	16 466
Ingots, blooms, billets	19 396	6 514	1 943	14 199	2 139
Scrap	10 628	30 395	44 335	4 875	43 945
Czech Republic					
Pig iron	47 666	54 625	76 416	67 036	65 101
Sponge and powder	10 006	15 391	24 059	18 754	13 440
Ferro-chrome	14 715	16 962	10 933	9 658	18 172
Ferro-silico-magnesium	564	820	1 061	699	530
Ferro-manganese	23 630	26 204	25 281	24 826	22 787
Ferro-silico-manganese	34 418	40 732	41 411	39 572	45 720
Ferro-molybdenum	949	1 868	2 401	3 415	3 962
Ferro-nickel	2	96	136	47	380
Ferro-niobium	183	275	310	360	295
Ferro-phosphorus	410	645	650	451	521
Ferro-silicon	23 936	31 908	33 418	29 475	31 596
Ferro-titanium and ferro-silico-titanium	160	239	317	212	173
Ferro-vanadium	299	482	472	526	935
Other ferro-alloys	2 709	3 012	2 749	2 358	2 316
Silicon metal	4 408	5 805	5 809	4 910	6 325
Ingots, blooms, billets	220 524	651 182	322 206	352 697	358 780
Scrap	377 942	410 647	472 576	475 327	551 957
Denmark					
Pig iron	10 299	10 263	17 316	17 014	18 760
Sponge and powder	1 742	3 229	3 586	8 505	28 389
Ferro-silico-magnesium	16	114	8	32	89
Ferro-manganese	101	139	121	248	151
Ferro-silicon	569	2 864	3 328	3 655	3 010
Other ferro-alloys	448	149	98	87	189
Ingots, blooms, billets	328 893	538 503	609 342	420 037	554 999
Scrap	269 841	337 192	242 848	208 231	322 275
Estonia					
Ferro-niobium	220	438	374	411	410
Ferro-silicon	2	21	149	61	83
Ferro-titanium and ferro-silico-titanium	0	...	...	11	500
Other ferro-alloys	83	213	79	102	103
Scrap	9 267	8 434	12 230	8 305	25 634
Finland					
Pig iron	18 097	36 120	31 235	21 728	20 360
Sponge and powder	493 087	872 476	1 871	1 102	1 361
Ferro-chrome	5 094	7 055	8 274	33 392	6 865
Ferro-silico-magnesium	309	190	158	220	100
Ferro-manganese	5 985	10 595	11 784	10 170	9 005
Ferro-silico-manganese	20 642	30 204	30 169	* 22 000	30 754
Ferro-molybdenum	584	1 316	1 717	* 1 200	1 001
Ferro-nickel	17 098	25 746	40 962	* 51 000	35 930
Ferro-niobium	318	629	849	874	804
Ferro-phosphorus	285	543	499	325	537
Ferro-silicon	21 437	31 395	30 207	34 361	34 600
Ferro-titanium and ferro-silico-titanium	710	1 043	1 843	942	994
Ferro-vanadium	91	235	193	134	119
Other ferro-alloys	1 028	4 648	4 839	1 545	1 260
Silicon metal	548	1 390	1 281	845	1 821
Ingots, blooms, billets	30 206	18 268	17 119	10 111	12 616
Scrap	467 642	754 398	710 558	* 600 000	556 007

## Iron, steel and ferro-alloys

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
<b>France</b>					
Pig iron	115 722	139 186	160 336	140 321	187 416
Sponge and powder	26 695	52 795	84 787	38 973	72 852
Ferro-chrome	71 570	111 080	99 240	106 591	121 183
Ferro-silico-magnesium	1 375	1 047	1 102	483	572
Ferro-manganese	33 948	44 405	43 245	37 724	40 090
Ferro-silico-manganese	34 758	35 405	44 217	58 938	40 432
Ferro-molybdenum	3 263	3 720	4 857	4 441	4 081
Ferro-nickel	12 709	7 724	16 270	4 818	6 119
Ferro-niobium	1 183	2 195	2 225	1 608	1 673
Ferro-phosphorus	1 670	2 656	2 227	1 833	1 857
Ferro-silicon	30 913	51 906	65 306	54 824	52 768
Ferro-titanium and ferro-silico-titanium	2 647	5 457	5 756	3 958	4 314
Ferro-tungsten and ferro-silico-tungsten	247	343	378	303	328
Ferro-vanadium	819	1 065	1 113	811	815
Other ferro-alloys	10 711	16 247	15 035	8 602	11 741
Silicon metal	15 243	19 135	19 373	27 828	30 215
Ingots, blooms, billets	1 113 710	1 807 094	2 047 778	1 728 612	1 696 098
Scrap	2 407 619	2 450 993	2 682 258	2 732 380	2 377 000
<b>Germany</b>					
Pig iron	402 132	421 287	589 302	614 096	533 932
Sponge and powder	294 393	500 970	326 097	210 328	461 742
Ferro-chrome	305 008	454 005	447 242	392 515	329 237
Ferro-silico-chrome	8 648	29 047	18 334	8 573	9 585
Ferro-silico-magnesium	5 914	2 972	6 208	4 528	3 412
Ferro-manganese	122 063	203 200	232 613	192 817	204 941
Ferro-silico-manganese	111 008	185 067	208 913	206 967	224 049
Ferro-molybdenum	12 484	16 375	18 760	16 934	17 025
Ferro-nickel	127 087	192 394	155 881	139 658	84 470
Ferro-niobium	4 047	5 923	6 579	6 297	5 857
Ferro-phosphorus	1 332	6 067	5 137	5 587	5 471
Ferro-silicon	146 127	272 466	298 352	248 310	227 634
Ferro-titanium and ferro-silico-titanium	5 461	8 754	9 818	9 912	9 423
Ferro-tungsten and ferro-silico-tungsten	1 366	787	977	1 010	1 313
Ferro-vanadium	3 421	5 034	5 305	5 096	4 962
Other ferro-alloys	6 325	11 783	15 982	21 651	14 401
Silicon metal	183 516	255 977	241 565	232 640	219 791
Ingots, blooms, billets	1 171 865	1 611 091	2 401 066	1 768 289	1 532 302
Scrap	3 865 110	5 305 194	6 658 407	5 737 878	5 656 924
<b>Greece</b>					
Pig iron	9 107	4 427	9 127	470	2 615
Sponge and powder	9 685	5 772	3 302	429	680
Ferro-chrome	916	693	1 217	1 304	1 174
Ferro-manganese	1 216	837	271	203	162
Ferro-silico-manganese	8 023	18 515	12 695	10 971	12 124
Ferro-silicon	4 569	4 888	4 361	2 924	2 623
Other ferro-alloys	170	849	167	156	401
Silicon metal	906	1 426	1 746	1 212	1 487
Ingots, blooms, billets	159 350	28 092	71 878	17 546	45 081
Scrap	1 159 166	1 008 235	935 510	413 394	301 661
<b>Hungary</b>					
Pig iron	3 403	7 158	5 662	5 527	5 079
Sponge and powder	425	756	638	479	653
Ferro-chrome	150	187	223	279	323
Ferro-manganese	2 037	12 015	16 011	12 255	5 753
Ferro-silico-manganese	922	724	1 785	225	1 191
Ferro-molybdenum	73	85	105	108	89
Ferro-niobium	...	75	141	111	71
Ferro-phosphorus	...	652	60	111	161
Ferro-silicon	3 100	3 630	3 999	2 969	2 275
Other ferro-alloys	15 557	569	312	410	263
Silicon metal	2 589	4 010	7 832	5 619	4 061
Ingots, blooms, billets	104 855	30 505	240 299	565 955	1 156 777
Scrap	34 357	56 974	68 566	34 219	51 899

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Iceland					
Pig iron	1 333	1 148	841	844	792
Ferro-alloys	5 641	6 838	204	727	69
Silicon metal	237	4 366	3 204	4 816	6 377
Scrap	643	11 545	4 680	7	145
Ireland, Republic of					
Pig iron	1 202	1 345	947	1 182	799
Sponge and powder	955	989	1 176	1 216	698
Ferro-chrome	53	89	128	100	91
Other ferro-alloys	683	296	233	139	213
Ingots, blooms, billets	5 373	7 332	5 423	4 952	7 230
Scrap	4 388	4 030	3 310	6 565	3 496
Italy					
Pig iron	895 818	1 018 615	1 288 014	1 106 558	1 517 045
Sponge and powder	174 364	278 989	540 005	551 034	732 306
Ferro-chrome	296 813	390 374	414 410	416 091	388 133
Ferro-silico-chrome	—	97	841	3	99
Ferro-silico-magnesium	1 759	1 943	1 683	2 125	2 586
Ferro-manganese	46 537	71 406	86 512	82 933	86 923
Ferro-silico-manganese	119 670	158 540	176 855	167 310	173 051
Ferro-molybdenum	3 998	6 141	8 541	9 547	10 710
Ferro-nickel	78 383	98 168	116 806	128 877	124 343
Ferro-niobium	1 395	2 751	2 521	2 619	2 490
Ferro-phosphorus	550	631	414	365	380
Ferro-silicon	89 909	137 031	160 561	118 880	129 155
Ferro-titanium and ferro-silico-titanium	4 462	3 876	3 819	3 139	2 418
Ferro-tungsten and ferro-silico-tungsten	300	247	252	269	298
Ferro-vanadium	1 158	1 901	2 330	2 367	2 011
Other ferro-alloys	4 267	7 325	9 198	7 117	8 392
Silicon metal	27 402	48 392	53 131	41 277	43 173
Ingots, blooms, billets	2 655 726	3 681 439	3 662 856	3 169 000	3 198 102
Scrap	3 321 387	4 609 403	5 752 270	5 271 612	4 957 195
Latvia					
Pig iron	38 140	45 454	2 244	2 653	1 163
Sponge and powder	14 931	4 460	565	104	84
Ferro-chrome	588	6 995	9 782	17 179	13 045
Ferro-manganese	2 345	4 090	1 480	584	782
Ferro-silico-manganese	14 722	18 898	17 085	25 026	10 122
Ferro-silicon	15 085	24 660	25 992	15 963	25 583
Ferro-tungsten and ferro-silico-tungsten	...	...	...	80	120
Other ferro-alloys	415	158	245	119	51
Silicon metal	783	1 553	981	1 134	879
Ingots, blooms, billets	226 967	206 428	402 711	3 861	2 695
Scrap	214 564	443 817	366 039	923 037	318 371
Lithuania					
Ferro-chrome	2 842	32	35	42	60
Ferro-molybdenum	2	—	3	936	3
Ferro-nickel	...	...	674	986	—
Ferro-silicon	39	102	40	40	46
Other ferro-alloys	71	59	42	1 464	1 065
Ingots, blooms, billets	1 229	4 270	5 384	4 536	7 537
Scrap	29 805	35 270	71 858	59 444	30 690
Luxembourg					
Ferro-manganese	1 132	910	1 317	1 193	1 032
Ferro-silico-manganese	25 617	27 116	29 053	29 843	29 419
Ferro-niobium	166	192	226	212	243
Ferro-silicon	2 846	3 428	3 828	3 642	3 337
Ferro-vanadium	150	292	328	298	308
Other ferro-alloys	432	614	851	797	1 050
Ingots, blooms, billets	364 945	407 419	370 786	237 293	131 957
Scrap	1 829 754	2 693 481	2 632 849	2 259 684	2 330 581
Macedonia					
Pig iron	1 732	1 823	1 382	1 075	967
Ferro-alloys	1 618	2 401	5 970	3 251	2 436
Ingots, blooms, billets	157 566	145 509	97 889	100 791	90 116
Scrap	7 375	292 049	318 612	157 401	55 654

## Iron, steel and ferro-alloys

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Montenegro					
Pig iron	13 954	322	1 150	119	...
Ferro-chrome	103	242	395	249	147
Ferro-silico-manganese	1 664	1 663	891	306	168
Ferro-silicon	271	288	187	402	241
Other ferro-alloys	24	55	171	38	80
Scrap	54 801	19 950	27 396	11 306	16 280
Netherlands					
Pig iron	122 185	98 575	213 530	190 874	118 277
Sponge and powder	109 768	378 111	402 025	416 889	190 235
Ferro-chrome	40 931	93 919	123 284	76 613	264 401
Ferro-silico-chrome	1 394	2 838	525	353	6 227
Ferro-manganese	39 045	86 504	89 805	84 529	141 367
Ferro-silico-manganese	29 335	57 967	80 905	21 583	78 217
Ferro-molybdenum	2 868	4 643	7 753	4 548	3 397
Ferro-nickel	4 274	19 378	25 849	20 222	7 243
Ferro-niobium	949	920	1 354	1 397	78
Ferro-silicon	79 461	178 138	152 194	181 213	62 226
Ferro-titanium and ferro-silico-titanium	1 860	11 922	13 484	14 189	9 816
Ferro-tungsten and ferro-silico-tungsten	554	1 168	1 298	726	1 108
Ferro-vanadium	519	2 014	1 890	1 710	1 102
Other ferro-alloys	6 951	11 263	17 558	7 372	6 993
Silicon metal	41 740	82 599	75 664	81 148	100 682
Ingots, blooms, billets	110 561	536 157	1 335 875	1 040 244	404 473
Scrap	* 1 135 000	1 988 278	2 188 452	2 408 332	2 290 454
Norway					
Pig iron	10 639	1 498	10 709	9 749	7 650
Sponge and powder	292	575	39 665	36 216	28 156
Ferro-chrome	1 162	1 311	1 534	1 293	1 170
Ferro-manganese	6 608	5 303	5 254	1 200	124
Ferro-silico-manganese	1 186	548	0	2	197
Ferro-molybdenum	103	121	172	133	142
Ferro-silicon	9 097	10 615	9 595	5 383	3 478
Other ferro-alloys	823	1 544	2 090	1 022	1 845
Silicon metal	29 810	49 349	53 897	28 196	19 763
Ingots, blooms, billets	59 344	4 733	5 411	5 977	8 395
Scrap	91 114	108 802	138 814	210 426	194 345
Poland					
Pig iron	156 970	176 145	228 357	200 340	157 826
Sponge and powder	4 677	7 594	14 597	7 336	8 430
Ferro-chrome	6 064	7 785	8 042	9 413	19 247
Ferro-silico-magnesium	2 366	3 402	2 326	1 752	1 352
Ferro-manganese	32 935	30 721	45 192	31 083	64 426
Ferro-silico-manganese	71 585	56 882	65 816	60 667	71 356
Ferro-molybdenum	711	612	547	470	1 316
Ferro-niobium	244	395	279	379	278
Ferro-phosphorus	675	917	1 253	1 183	850
Ferro-silicon	16 132	21 576	18 457	15 818	23 324
Ferro-titanium and ferro-silico-titanium	117	194	259	291	291
Ferro-vanadium	313	370	10	447	621
Other ferro-alloys	3 096	4 355	5 856	6 658	4 775
Silicon metal	11 839	16 219	17 091	17 754	22 669
Ingots, blooms, billets	157 799	119 466	370 144	575 506	603 525
Scrap	596 733	374 076	409 454	383 472	510 652
Portugal					
Pig iron	7 507	10 623	4 980	1 895	3 230
Sponge and powder	38 849	6 919	37 376	27 383	30 100
Ferro-chrome	245	810	683	617	770
Ferro-silico-magnesium	1 104	1 475	470	79	21
Ferro-manganese	762	856	722	683	593
Ferro-silico-manganese	9 921	4 396	9 877	15 041	13 097
Ferro-silicon	3 707	2 902	3 408	3 130	2 240
Other ferro-alloys	3 516	657	2 611	4 500	2 868
Silicon metal	410	753	950	1 182	606
Ingots, blooms, billets	53 089	28 583	33 675	33 266	31 844
Scrap	887 110	672 856	616 063	1 165 785	1 409 187

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Romania					
Pig iron	61 027	111 702	48 365	58 954	35 635
Sponge and powder	1 518	2 740	22 355	1 777	2 551
Ferro-chrome	984	1 500	2 856	2 564	1 911
Ferro-silico-magnesium	36	49	25	104	92
Ferro-manganese	9 063	15 530	18 136	21 039	19 489
Ferro-silico-manganese	11 461	19 151	24 215	19 093	10 013
Ferro-molybdenum	177	274	315	420	365
Ferro-niobium	61	55	132	177	172
Ferro-phosphorus	188	217	154	119	135
Ferro-silicon	4 998	9 859	9 602	10 392	8 149
Ferro-titanium and ferro-silico-titanium	40	183	412	284	250
Ferro-vanadium	57	153	166	166	211
Other ferro-alloys	949	1 255	1 495	635	677
Silicon metal	1 104	3 098	3 205	2 730	2 097
Ingots, blooms, billets	109 046	458 742	771 167	328 843	224 868
Scrap	4 204	5 501	8 416	49 468	17 655
Serbia					
Pig iron	523	2 739	1 281	1 073	1 017
Sponge and powder	122	217	187	89	1 524
Ferro-chrome	1 104	1 272	1 884	1 327	1 146
Ferro-manganese	8 571	9 524	9 270	2 299	4 893
Ferro-silico-manganese	6	440	2 431	3 727	3 970
Ferro-silicon	2 089	2 418	3 285	2 631	2 355
Other ferro-alloys	275	324	357	219	219
Ingots, blooms, billets	205 528	283 255	34 913	2 021	1 325
Scrap	15 178	12 403	35 192	90 554	169 512
Slovakia					
Pig iron	19 468	33 258	43 874	38 466	36 404
Sponge and powder	4 090	13 227	7 294	6 124	6 188
Ferro-chrome	2 635	6 829	6 684	8 014	7 056
Ferro-manganese	16 912	13 202	16 391	17 286	19 133
Ferro-silico-manganese	2 720	1 776	4 904	3 902	22 205
Ferro-molybdenum	171	140	374	252	213
Ferro-niobium	154	315	426	549	540
Ferro-phosphorus	590	282	629	463	307
Ferro-silicon	14 970	15 250	12 660	9 171	10 200
Ferro-titanium and ferro-silico-titanium	315	535	435	281	224
Ferro-vanadium	7	62	123	144	127
Other ferro-alloys	664	1 627	981	201	267
Silicon metal	4 460	6 309	7 196	6 329	6 735
Ingots, blooms, billets	54 781	10 020	24 162	7 314	12 664
Scrap	164 985	224 868	146 065	342 657	383 012
Slovenia					
Pig iron	24 031	29 120	25 327	30 517	29 660
Sponge and powder	1 053	1 225	1 630	794	1 020
Ferro-chrome	15 951	26 575	36 528	36 673	51 232
Ferro-silico-magnesium	286	624	786	1 485	1 377
Ferro-manganese	4 157	6 175	5 763	6 318	8 882
Ferro-silico-manganese	3 467	8 810	7 697	7 477	5 608
Ferro-molybdenum	410	717	885	1 028	1 060
Ferro-phosphorus	522	846	968	1 115	710
Ferro-silicon	11 335	13 114	15 739	15 371	12 419
Ferro-titanium and ferro-silico-titanium	108	230	232	228	219
Ferro-tungsten and ferro-silico-tungsten	14	99	136	65	60
Ferro-vanadium	230	481	449	413	471
Other ferro-alloys	1 421	1 795	1 687	1 714	1 433
Silicon metal	4 929	7 874	8 318	5 862	5 810
Ingots, blooms, billets	1 568	8 191	31 931	20 897	20 770
Scrap	281 950	495 432	561 713	552 363	539 994

## Iron, steel and ferro-alloys

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
<b>Spain</b>					
Pig iron	380 731	442 656	315 904	274 202	219 240
Sponge and powder	295 665	636 496	640 549	487 073	724 592
Ferro-chrome	113 275	164 125	152 254	180 740	168 647
Ferro-silico-chrome	312	1 854	5 448	4 037	5 878
Ferro-silico-magnesium	865	1 567	2 139	2 696	1 935
Ferro-manganese	13 357	19 930	15 256	23 224	14 088
Ferro-silico-manganese	50 683	39 895	36 803	39 584	36 653
Ferro-molybdenum	3 756	6 446	6 943	10 662	7 733
Ferro-nickel	43 936	47 389	43 284	45 528	47 485
Ferro-niobium	553	983	1 334	1 000	3 627
Ferro-phosphorus	193	1 425	1 816	1 282	1 478
Ferro-silicon	27 140	27 581	29 894	28 149	30 794
Ferro-titanium and ferro-silico-titanium	611	1 203	1 120	957	1 575
Ferro-tungsten and ferro-silico-tungsten	125	55	60	1 079	187
Ferro-vanadium	809	1 088	1 094	964	3 595
Other ferro-alloys	4 954	6 138	8 566	7 401	7 581
Silicon metal	9 523	8 446	11 801	12 573	16 647
Ingots, blooms, billets	1 007 820	1 269 577	1 061 766	1 025 012	789 798
Scrap	4 674 099	5 708 900	4 764 338	4 348 807	4 851 614
<b>Sweden</b>					
Pig iron	40 076	58 974	78 818	58 329	53 075
Sponge and powder	2 691	11 668	24 398	34 982	39 343
Ferro-chrome	78 244	90 630	74 988	56 996	64 917
Ferro-silico-chrome	1 215	1 805	4 133	803	1 251
Ferro-silico-magnesium	246	424	20	44	28
Ferro-manganese	27 869	60 577	57 927	45 423	36 501
Ferro-silico-manganese	5 754	9 099	11 586	15 965	15 241
Ferro-molybdenum	2 652	4 388	4 723	4 913	5 205
Ferro-nickel	3 286	7 995	10 119	10 119	11 819
Ferro-niobium	604	1 146	1 544	1 614	1 645
Ferro-phosphorus	430	415	632	584	671
Ferro-silicon	25 880	37 424	37 743	44 736	38 173
Ferro-titanium and ferro-silico-titanium	653	1 127	1 459	1 731	1 421
Ferro-vanadium	547	729	1 058	954	766
Other ferro-alloys	1 938	2 097	1 894	1 691	1 676
Silicon metal	4 404	6 818	5 375	6 112	8 391
Ingots, blooms, billets	119 549	193 605	203 669	151 187	121 328
Scrap	174 279	217 682	245 225	236 125	256 251
<b>Switzerland</b>					
Pig iron	12 256	16 812	17 969	13 207	15 397
Sponge and powder	5 931	6 668	4 812	4 780	4 959
Ferro-chrome	288	1 480	1 846	1 519	1 852
Ferro-manganese	8 003	11 566	9 721	10 871	10 771
Ferro-silico-manganese	1 595	3 767	4 948	4 292	5 474
Ferro-molybdenum	76	174	230	157	190
Ferro-phosphorus	173	321	191	200	235
Ferro-silicon	4 287	5 014	5 937	4 527	4 607
Ferro-vanadium	82	548	544	187	130
Other ferro-alloys	280	381	561	272	606
Silicon metal	1 256	1 385	1 661	1 014	953
Ingots, blooms, billets	9 188	18 026	61 349	49 448	45 336
Scrap	313 055	452 626	456 700	343 770	417 588

## Imports continued

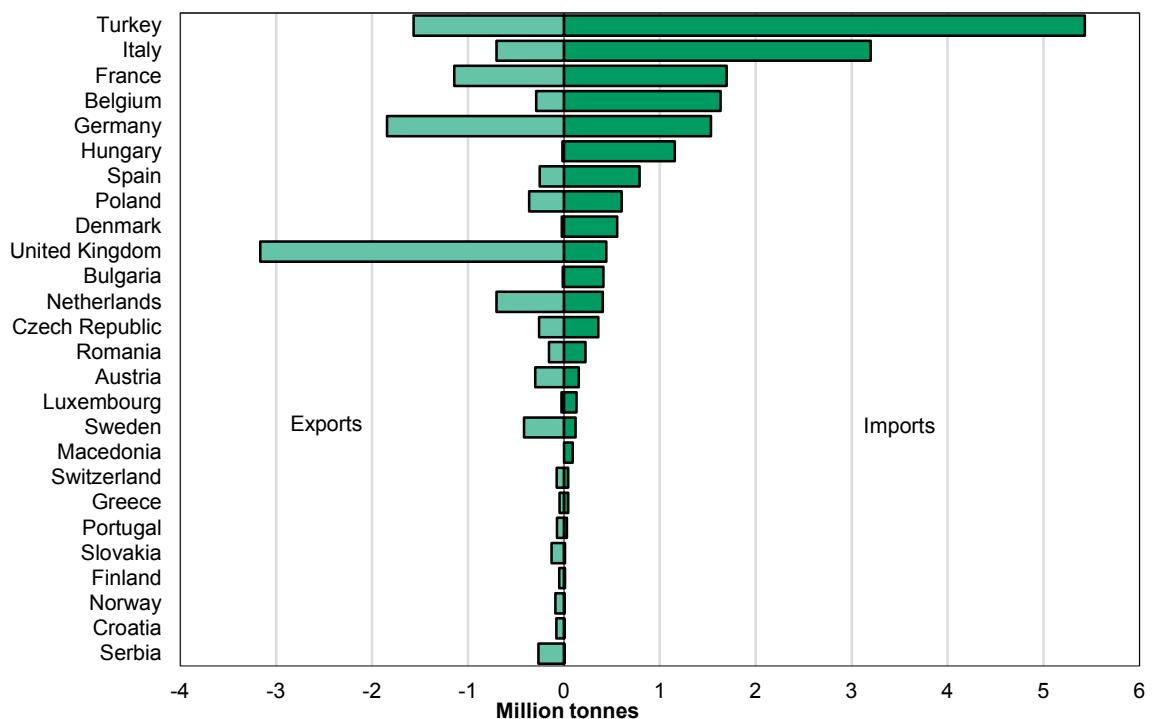
tonnes

Country	2009	2010	2011	2012	2013
Turkey					
Pig iron	770 160	557 398	1 137 729	1 376 572	982 579
Sponge and powder	81 008	284 608	180 591	387 667	510 327
Ferro-chrome	2 787	8 159	9 061	6 493	8 093
Ferro-silico-chrome	—	1	200	600	0
Ferro-silico-magnesium	3 082	786	1 344	2 064	1 910
Ferro-manganese	46 760	61 866	59 326	54 195	47 517
Ferro-silico-manganese	191 605	229 451	243 637	252 758	243 123
Ferro-molybdenum	1 173	1 577	1 091	1 181	1 106
Ferro-niobium	338	147	424	550	392
Ferro-phosphorus	412	1 050	1 035	1 117	817
Ferro-silicon	60 164	87 552	107 151	100 727	108 702
Ferro-titanium and ferro-silico-titanium	651	167	480	629	701
Ferro-vanadium	323	261	591	562	769
Other ferro-alloys	2 978	7 366	8 213	6 639	5 653
Silicon metal	5 852	9 978	10 363	10 777	7 215
Ingots, blooms, billets	3 590 665	2 350 758	2 157 532	3 355 265	5 429 936
Scrap	15 372 727	19 138 460	21 452 724	22 415 045	19 725 026
United Kingdom					
Pig iron	19 703	41 959	69 095	55 845	38 057
Sponge and powder	17 483	97 745	147 870	176 638	33 518
Ferro-alloys	160 285	208 817	225 819	212 787	216 722
Ferro-chrome	34 884	58 398	70 191	65 219	48 587
Ferro-silico-chrome	13	9	362	723	163
Ferro-silico-magnesium	512	931	1 328	1 360	1 211
Ferro-manganese	49 700	46 985	39 159	47 706	59 517
Ferro-silico-manganese	37 114	49 280	51 928	36 661	43 823
Ferro-molybdenum	325	322	573	458	259
Ferro-nickel	2 777	6 284	13 888	17 916	13 439
Ferro-niobium	686	859	395	250	987
Ferro-phosphorus	282	836	1 134	474	810
Ferro-silicon	31 091	43 703	45 918	39 351	42 966
Ferro-titanium and ferro-silico-titanium	396	274	187	902	687
Ferro-tungsten and ferro-silico-tungsten	26	48	44	34	30
Ferro-vanadium	209	340	368	246	339
Other ferro-alloys	2 296	595	388	1 520	3 904
Silicon metal	68 109	99 651	101 005	97 454	97 524
Ingots, blooms, billets	212 829	714 541	1 185 242	835 691	443 657
Scrap	213 818	270 986	423 744	284 986	302 580

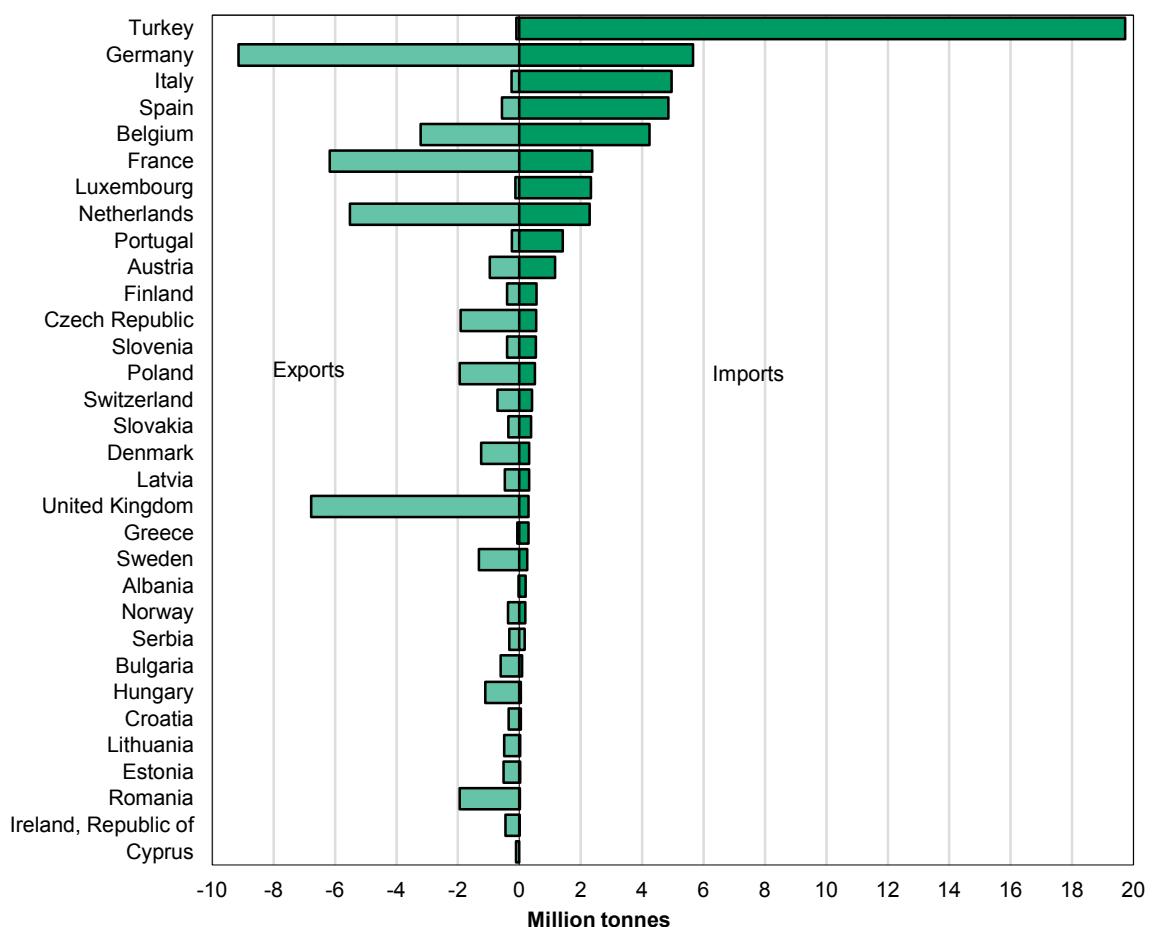
## Notes

- (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
- (2) In this table "ferro-silico-magnesium" includes both HS codes 7207 9930 and 7202 9980 even though the description appears to have changed

### Iron and steel ingots, blooms and billets - EU36 trade in 2013



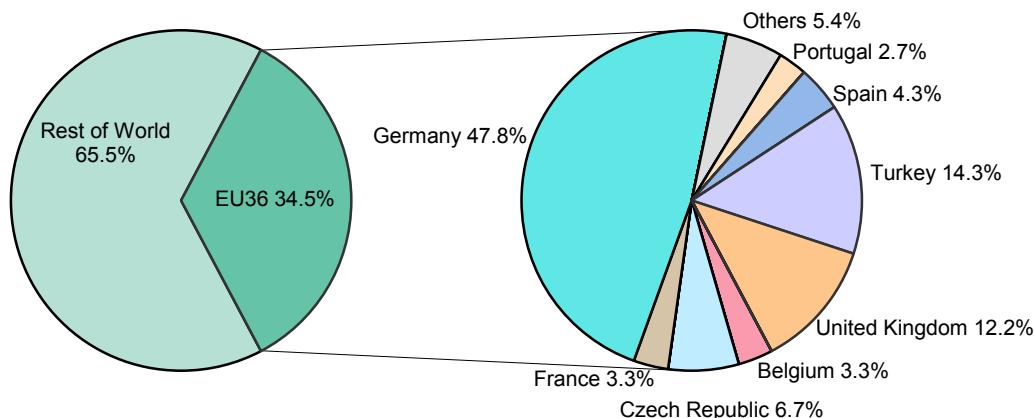
### Iron and steel scrap - EU36 trade in 2013



## 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.
- USA was the world's largest producer in 2013, with 23 per cent of the total world output. The second largest producer was Germany (16 per cent), followed by China (12 per cent), Brazil (eight per cent) and Iran (six per cent).

**EU36 Production of kaolin 2013**



## Production of kaolin

Country	2009	2010	2011	2012	2013
Austria	18 148	18 914	18 897	* 14 000	* 13 000
Belgium	* 300 000	* 300 000	* 300 000	* 300 000	* 300 000
Bulgaria	* 11 829	* 16 832	7 700	33 900	22 600
Czech Republic (a)	488 000	636 000	660 000	624 000	609 000
France	350 000	350 000	310 000	308 000	* 300 000
Germany (b)	4 513 753	4 578 097	4 898 516	4 398 796	4 348 562
Greece	—	3 493	7 250	6 268	5 786
Italy	* 180 000	* 180 000	* 180 000	* 180 000	* 180 000
Poland (c)	136 561	125 000	163 600	137 800	166 000
Portugal	274 925	273 890	322 041	321 689	246 308
Romania	651	326	—	—	32 722
Serbia	163 616	76 197	90 472	69 487	* 70 000
Slovakia	10 000	—	4 000	3 000	6 000
Spain (c)	270 298	310 993	384 179	402 251	393 427
Turkey	234 614	787 287	1 229 352	* 1 300 000	* 1 300 000
United Kingdom	1 059 848	* 1 140 000	* 1 290 000	* 1 150 000	* 1 110 000
EU36 Total	8 000 000	8 800 000	9 900 000	9 200 000	9 100 000

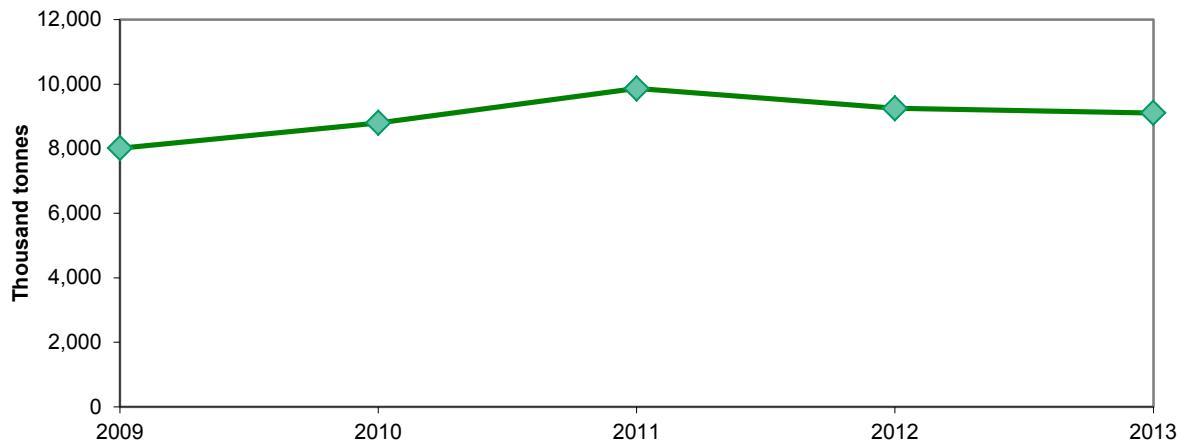
### Notes

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

- (a) Beneficiated  
 (b) Washed and dried  
 (c) Washed

## Kaolin

### EU36 Production of kaolin 2009 - 13



### Exports of kaolin

tonnes

Country	2009	2010	2011	2012	2013
Austria	8 954	27 908	6 588	6 958	6 318
Belgium	783 512	523 697	232 664	219 024	193 131
Bulgaria	119 736	159 669	197 114	193 385	200 655
Czech Republic	174 814	485 203	537 962	507 689	504 179
Denmark	352	607	1 370	1 489	1 245
Estonia	—	878	830	1 019	352
Finland	13 832	18 176	30 760	40 550	38 900
France	268 674	272 778	273 802	244 439	232 133
Germany	374 313	389 927	431 815	361 915	372 171
Hungary	2 847	2 436	3 272	2 861	2 753
Italy	21 392	36 208	27 994	21 393	24 241
Lithuania	18	40	648	1 258	258
Luxembourg	414	22	6	54	28
Netherlands	33 563	33 923	24 652	25 254	26 668
Norway	271	103	85	492	20
Poland	11 515	9 781	13 591	12 366	10 173
Portugal	51 014	31 390	102 721	122 029	103 161
Serbia	4 239	1 868	1 282	1 069	4 649
Slovakia	1 425	4 493	552	42	14 067
Slovenia	327	359	277	197	504
Spain	156 915	167 811	161 156	173 061	164 350
Sweden	31 122	23 103	16 444	7 032	769
Switzerland	203	287	55	201	425
Turkey	61 828	137 963	83 203	110 139	91 294
United Kingdom	1 393 939	1 722 335	1 157 780	1 039 460	1 003 841

#### Note

(1) The term 'kaolin', as used here, includes kaolin and kaolinitic clay

### Imports of kaolin

tonnes

Country	2009	2010	2011	2012	2013
Austria	192 860	194 396	187 831	171 310	161 876
Belgium	905 784	1 001 057	890 863	868 298	854 056
Bulgaria	20 623	23 784	25 789	29 038	26 218
Croatia	14 486	10 238	11 278	8 655	9 456
Czech Republic	13 228	14 125	18 733	17 045	15 677
Denmark	37 738	37 007	37 755	53 815	26 349
Estonia	1 588	881	211	8 568	3 090
Finland	708 210	941 387	936 544	860 241	806 954
France	200 203	231 779	220 764	223 649	198 892

## Imports continued

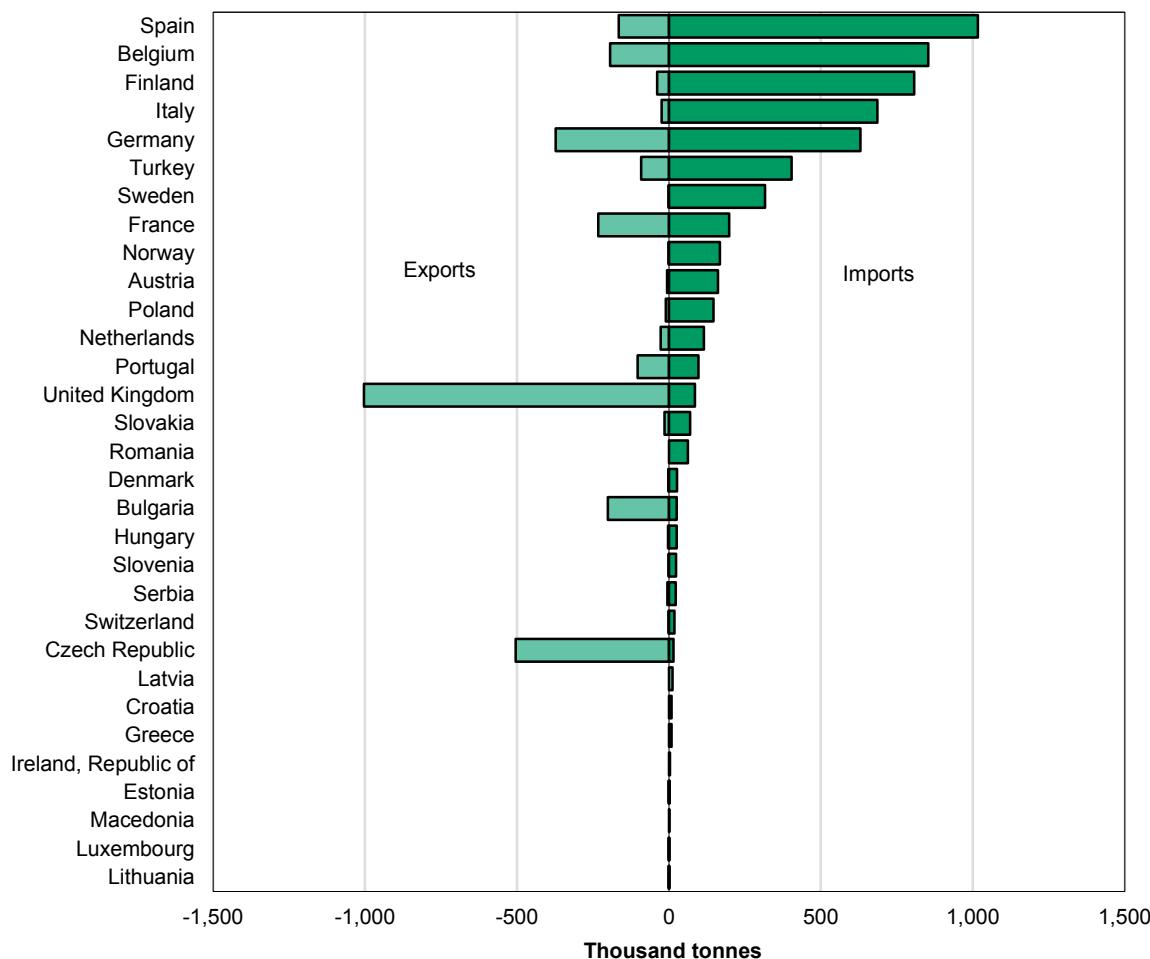
tonnes

Country	2009	2010	2011	2012	2013
Germany	585 675	715 770	705 107	625 826	629 989
Greece	49 509	31 132	14 336	7 454	8 808
Hungary	25 094	24 175	29 736	23 099	26 053
Ireland, Republic of	3 155	4 039	3 414	3 377	3 489
Italy	505 593	823 461	707 622	681 595	686 567
Latvia	7 476	10 594	9 289	10 768	12 151
Lithuania	159	486	360	480	508
Luxembourg	6 316	904	563	736	1 046
Macedonia	4 879	4 985	3 815	1 440	1 497
Netherlands	68 072	150 929	150 310	149 090	115 525
Norway	190 562	225 576	149 002	176 164	168 419
Poland	90 183	117 914	143 476	138 026	146 430
Portugal	73 081	96 851	106 955	103 863	97 034
Romania	40 326	51 754	56 871	60 170	62 370
Serbia	32 091	50 421	38 810	25 922	22 219
Slovakia	58 509	62 748	70 451	64 345	70 545
Slovenia	20 776	27 287	28 779	22 614	23 877
Spain	757 859	1 061 732	1 055 122	856 355	1 016 611
Sweden	408 564	367 948	389 358	359 345	316 362
Switzerland	33 555	24 249	21 460	21 551	17 924
Turkey	301 086	424 152	497 148	479 665	404 283
United Kingdom	77 504	95 865	102 396	88 505	85 534

## Note

(1) The term 'kaolin', as used here, includes kaolin and kaolinitic clay

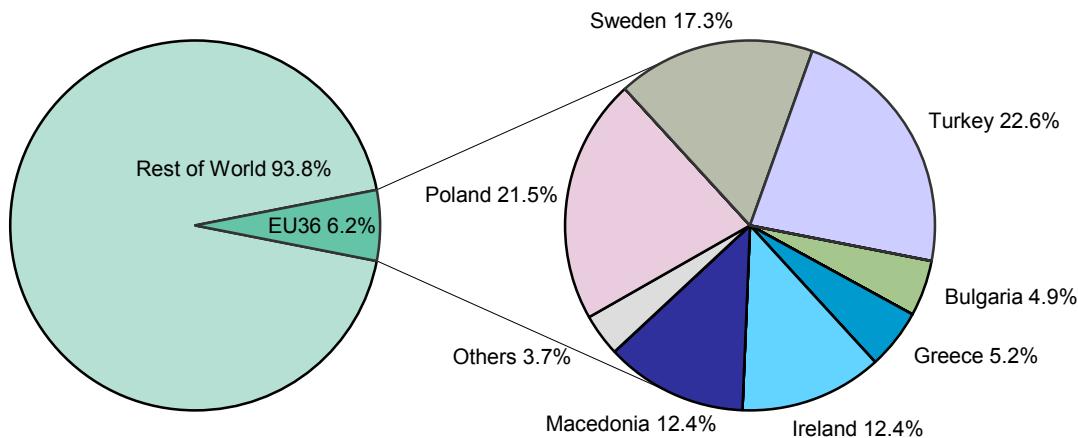
Kaolin - EU36 trade in 2013



## 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 producer of mined lead in 2013, with 54 per cent of the total world output. The second largest was Australia (13 per cent), followed by USA (six per cent), Peru and Mexico (five per cent each).
- China was also the world's largest producer of refined lead in 2013, with 42 per cent of the total world output. The second largest producer was USA (12 per cent), followed by India, South Korea and Germany (four per cent each).

**EU36 Mine production of lead 2013**



## Mine production of lead

tonnes (metal content)

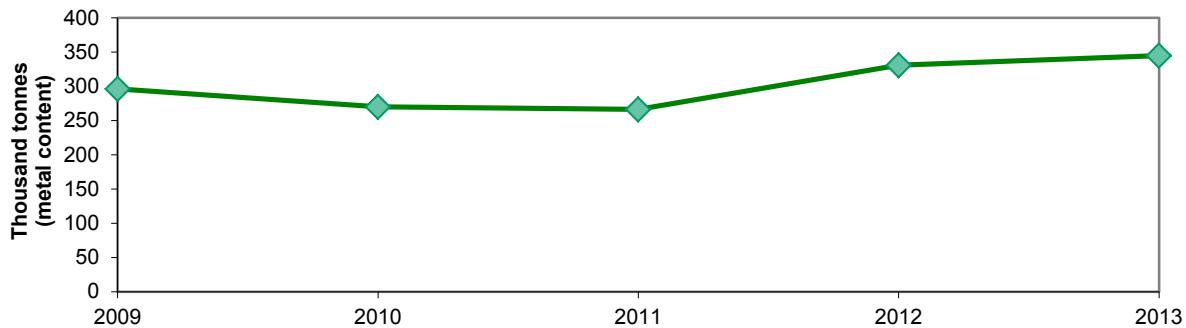
Country	2009	2010	2011	2012	2013
Bulgaria (a)	12 981	12 705	14 369	15 949	16 914
Greece	10 000	12 200	13 400	18 060	18 010
Ireland, Republic of	49 500	39 100	50 700	47 400	42 950
Italy	17 000	—	—	—	—
Macedonia	46 788	41 293	37 295	39 184	42 826
Montenegro	—	—	1 200	1 500	1 700
Poland	62 910	48 050	40 492	73 231	74 000
Portugal	—	—	—	87	1 496
Romania	* 3 000	* 7 700	* —	* 5 300	* 400
Serbia	1 800	1 800	2 100	2 500	3 100
Slovakia	63	94	114	166	...
Spain	1 000	229	5 705	6 800	6 000
Sweden	69 293	67 697	62 028	63 551	59 556
Turkey	21 600	39 000	38 682	57 017	* 78 000
United Kingdom (b)	243	251	280	61	36
EU36 total	296 200	270 100	266 400	330 800	345 000

### Notes

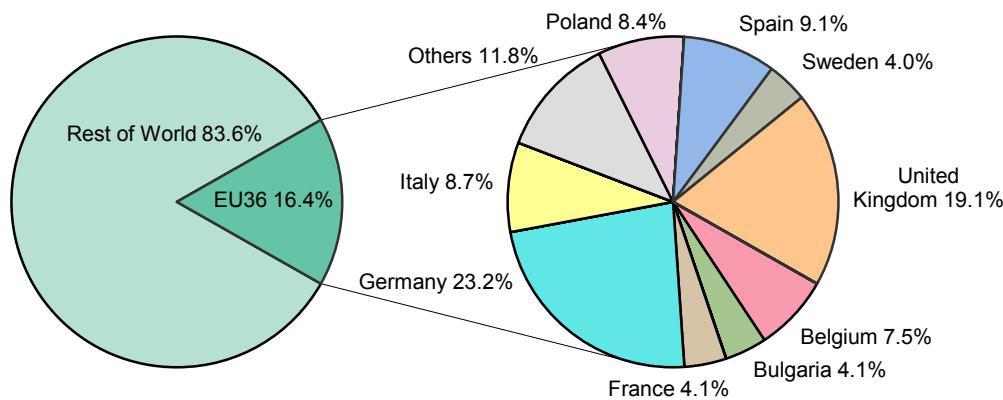
(a) Metal content of ore

(b) By-product of gold mining in Northern Ireland

### EU36 Mine production of lead 2009 - 13



### EU36 Production of refined lead 2013



### Production of refined lead

tonnes

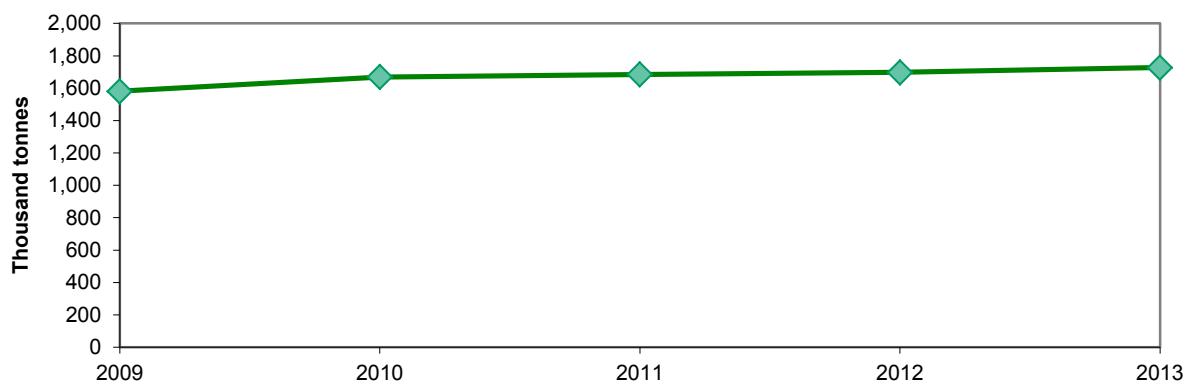
Country	2009	2010	2011	2012	2013
Austria	22 200	25 500	26 200	24 504	38 786
Belgium	109 000	121 000	119 000	119 000	129 000
Bulgaria	83 100	80 600	71 000	68 000	71 000
Czech Republic	29 000	30 000	34 000	30 000	28 000
Estonia	5 000	7 200	7 800	8 046	7 581
France	62 000	71 000	80 000	83 000	71 000
Germany	390 600	405 400	429 100	423 000	400 000
Greece	* 11 000	* 11 000	* 7 000	* 6 000	* 6 000
Ireland, Republic of	19 000	19 000	18 000	16 000	17 000
Italy	149 000	150 000	149 500	138 400	151 000
Netherlands	* 27 000	* 27 000	* 27 000	* 27 000	* 27 000
Poland	100 400	120 300	135 500	141 000	145 400
Portugal	7 000	9 000	6 000	5 000	4 000
Romania	8 687	11 263	6 854	13 000	14 000
Slovenia	14 000	14 000	15 000	12 000	12 000
Spain	138 000	165 000	177 000	160 000	157 000
Sweden	51 574	59 179	52 438	61 528	69 000
Switzerland	800	—	—	—	—
Turkey	* 42 000	* 42 000	* 48 000	* 50 000	* 50 000
United Kingdom	312 000	301 000	275 000	311 930	329 200
EU36 total	1 581 000	1 669 000	1 684 000	1 697 000	1 727 000

#### Note

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

Lead

**EU36 Production of refined lead 2009 - 13**



**Exports of lead**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Unwrought	2 324	2 914	1 568	1 117	811
Austria					
Unwrought	12 512	16 427	15 619	13 329	11 929
Scrap	2 173	871	729	983	1 521
Belgium					
Ores and concentrates	148 562	101 160	167 055	136 787	290 625
Unwrought	108 442	145 571	130 655	127 052	159 411
Scrap	21 962	21 479	18 945	18 051	17 405
Bulgaria					
Ores and concentrates	4 188	4 611	9 331	2 120	6 896
Unwrought	77 713	78 977	68 472	64 354	73 577
Croatia					
Scrap	1 025	1 697	1 842	1 906	2 051
Cyprus					
Scrap	188	252	465	237	1 056
Czech Republic					
Unwrought	23 617	32 743	27 649	23 614	27 893
Scrap	4 832	1 914	2 357	1 157	1 139
Denmark					
Unwrought	615	896	478	588	1 375
Scrap	4 057	3 485	4 118	4 167	5 165
Estonia					
Unwrought	8 861	10 624	11 513	11 042	10 334
Finland					
Scrap	357	340	328	1 231	1 895
France					
Unwrought	14 554	36 293	40 470	53 971	46 991
Scrap	20 815	37 654	20 392	15 936	22 573
Germany					
Ores and concentrates	1 000	4 296	19 697	60 356	14 517
Unwrought	204 075	203 077	196 443	178 589	146 285
Scrap	13 100	9 892	12 932	7 982	12 859
Greece					
Unwrought	2 360	5 209	3 068	11 313	7 681
Scrap	913	1 945	735	1 516	1 579
Hungary					
Scrap	4 001	1 898	2 428	1 615	2 942
Ireland, Republic of					
Ores and concentrates	109 877	62 729	64 470	80 910	70 125
Scrap	114	638	4 144	42 384	30 813
Italy					
Unwrought	23 006	7 821	15 455	8 646	7 058
Scrap	7 594	9 776	10 173	14 804	11 681
Latvia					
Scrap	1 352	3 243	3 086	2 687	2 362
Lithuania					
Scrap	4 210	5 941	5 335	6 603	4 019

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Macedonia					
Ores and concentrates	60 702	55 482	48 959	49 055	54 266
Unwrought	1 271	801	421	685	2 136
Scrap	226	226	219	218	146
Netherlands					
Ores and concentrates	74 725	63 921	94 100	46 688	41 266
Unwrought	11 061	12 971	16 989	14 432	17 260
Scrap	13 807	35 168	30 486	21 665	38 896
Norway					
Scrap	504	1 800	1 444	1 944	1 290
Poland					
Ores and concentrates	59 790	35 459	30 132	60 549	56 766
Unwrought	48 599	43 945	59 599	62 941	62 616
Scrap	1 525	1 668	1 010	1 392	1 282
Portugal					
Unwrought	6 647	8 785	8 050	5 124	3 952
Scrap	2 222	1 710	1 855	1 363	3 639
Romania					
Ores and concentrates	15 759	9 096	5 952	11 051	1 631
Unwrought	9 049	10 573	18 722	18 859	21 331
Scrap	2 526	5 659	6 846	5 419	3 884
Serbia					
Ores and concentrates	9 133	10 265	13 981	13 479	14 917
Unwrought	6 695	5 661	7 848	5 777	1 847
Slovakia					
Unwrought	247	250	539	373	1 577
Scrap	287	662	737	759	1 258
Slovenia					
Unwrought	6 891	8 090	6 008	5 391	5 995
Spain					
Ores and concentrates	14 147	9 513	24 608	50 216	45 055
Unwrought	13 434	6 630	15 683	37 882	13 350
Scrap	3 862	6 781	5 029	3 361	7 505
Sweden					
Ores and concentrates	72 220	111 153	73 996	68 646	43 506
Unwrought	46 795	55 501	54 370	51 796	71 771
Scrap	1 044	1 445	1 471	1 425	1 113
Switzerland					
Unwrought	1 765	230	19	23	18
Scrap	4 748	5 497	5 732	5 301	4 424
Turkey					
Ores and concentrates	35 973	64 247	65 917	93 590	130 217
Unwrought	361	400	802	2 522	1 726
United Kingdom					
Unwrought	126 743	105 235	144 877	169 739	144 718
Unwrought alloys	54 505	62 406	4 820	6 050	5 521
Scrap	56 055	69 404	74 789	57 990	53 746

## Notes

(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

## Lead

**Imports of lead**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Unwrought	21 580	19 391	31 675	29 938	40 143
Scrap	826	264	837	558	1 560
Belgium					
Ores and concentrates	192 496	169 356	154 976	139 771	214 596
Unwrought	18 121	14 467	27 696	77 349	33 247
Scrap	34 085	31 992	33 219	26 023	24 479
Bulgaria					
Ores and concentrates	63 185	81 307	74 810	72 008	74 199
Unwrought	10 182	7 283	21 566	21 064	23 536
Scrap	12 145	17 462	4 627	1 660	11 050
Czech Republic					
Unwrought	65 896	81 762	36 233	60 258	104 236
Scrap	4 150	2 901	2 763	2 560	4 177
Denmark					
Scrap	2 583	2 890	1 989	2 655	2 601
Finland					
Unwrought	2 346	1 512	2 446	3 821	4 146
France					
Unwrought	42 187	34 090	39 305	38 918	42 523
Scrap	13 579	12 848	15 182	14 265	2 941
Germany					
Ores and concentrates	234 102	184 018	205 464	228 444	258 922
Unwrought	103 642	157 301	157 653	148 576	149 465
Scrap	40 547	39 653	35 823	28 058	28 091
Greece					
Unwrought	10 644	11 149	16 980	17 028	16 937
Scrap	1 753	1 692	2 136	2 183	915
Hungary					
Unwrought	2 663	6 138	9 497	11 372	8 710
Ireland, Republic of					
Unwrought	15 784	14 357	15 345	5 199	2 916
Scrap	16 689	12 074	12 305	14 089	16 874
Italy					
Ores and concentrates	29 210	20	0	9 419	39 748
Unwrought	86 054	111 301	109 458	89 266	71 393
Scrap	2 031	2 609	4 976	4 111	3 059
Latvia					
Scrap	24	93	1 221	502	922
Lithuania					
Scrap	3 301	4 459	5 755	1 892	3 350
Netherlands					
Ores and concentrates	1 935	1 558	8 083	29 375	7 383
Unwrought	7 195	8 717	8 496	4 020	5 484
Scrap	13 593	21 255	16 886	15 622	10 578
Norway					
Unwrought	5 026	6 449	7 713	8 071	9 630
Poland					
Unwrought	29 861	46 810	52 011	42 108	44 237
Scrap	2 293	7 154	6 673	4 980	10 330
Portugal					
Unwrought	6 642	5 593	9 403	8 661	13 630
Scrap	258	395	266	1 113	5 026
Romania					
Ores and concentrates	5 889	7 052	9 420	463	831
Unwrought	9 245	11 834	16 789	12 777	14 707
Serbia					
Ores and concentrates	...	5 978	8 127	2 642	1 475
Unwrought	4 493	6 018	5 302	9 163	3 862
Scrap	0	1 228	2 643	2 087	45
Slovenia					
Unwrought	13 036	16 025	17 594	17 294	21 844
Scrap	1 985	3 812	3 611	3 741	4 117

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Spain					
Ores and concentrates	3 199	10 946	6 722	4 651	1 536
Unwrought	121 522	110 217	114 380	122 913	110 576
Scrap	35 703	43 432	42 236	34 702	35 284
Sweden					
Ores and concentrates	—	14 763	—	—	—
Unwrought	5 028	5 340	5 783	6 616	6 876
Scrap	5 176	9 464	8 401	9 624	9 282
Switzerland					
Unwrought	9 446	5 664	2 838	5 519	3 186
Turkey					
Unwrought	73 520	73 057	85 131	99 137	91 337
United Kingdom					
Unwrought, base bullion (a)	130 312	151 653	127 691	168 669	145 762
Unwrought, other	15 479	14 359	18 601	19 606	25 406
Unwrought alloys	1 798	787	1 287	1 331	1
Scrap	4 962	8 858	4 792	3 317	4 169

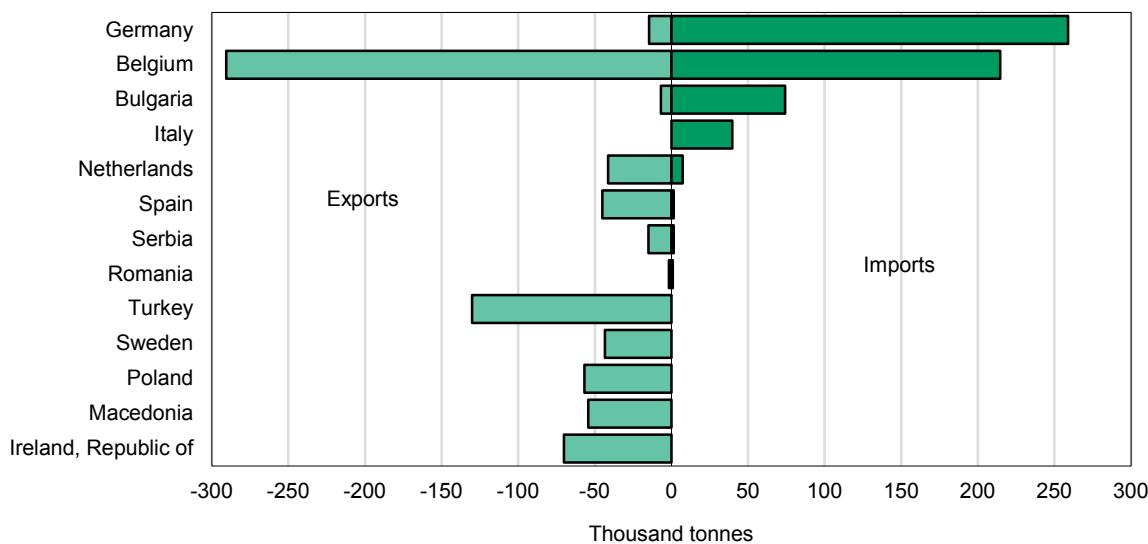
## Notes

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

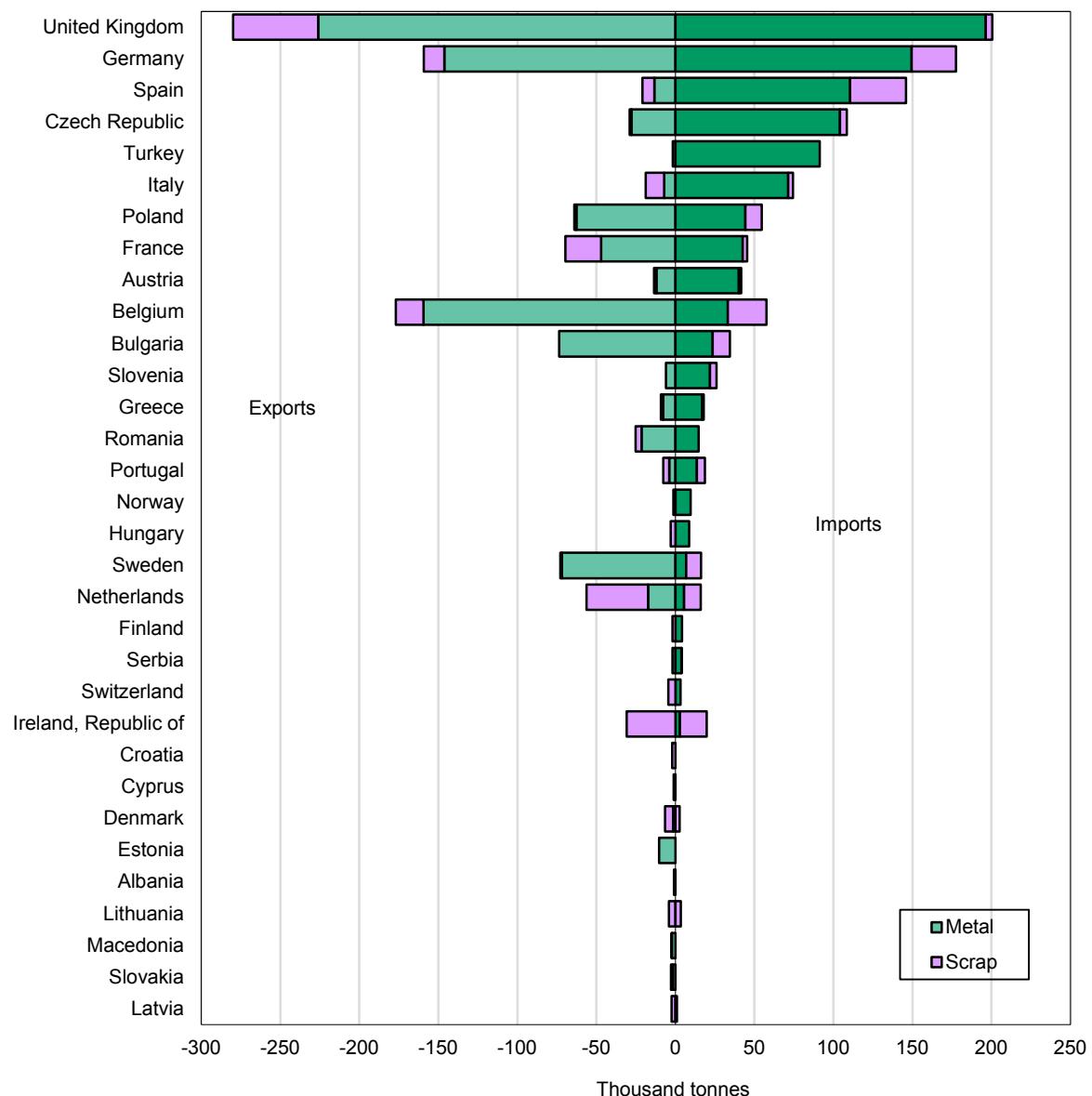
(2) The term 'unwrought' as used here includes alloys unless these are separately specified

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

Lead ore - EU36 trade in 2013



## Lead - EU36 trade in 2013



## Lithium

- Lithium is a very light metallic element. It is mainly used as lithium compounds in rechargeable batteries, as fluxes in the ceramics and glass industries, and in lubricants. The metal is an important alloying agent with primary aluminium.
- Lithium can either be produced from minerals, such as spodumene or lepidolite, or from brine extracted from beneath salt lakes. Based on lithium content, Chile was the world's largest producer in 2013, with an estimated 45 per cent of the total world output, which was entirely from brine extraction. The second largest producer was Australia (31 per cent, entirely from minerals), followed by Argentina (nine per cent, from brine), USA (six per cent, from brine) and China (five per cent, from both minerals and brine).

### Production of lithium minerals

Country	2009	2010	2011	2012	2013
Portugal					
Lepidolite	37 359	40 109	37 534	20 698	19 940
Spain					
Lepidolite	4 270	7 824	—	—	—

### Exports of lithium

Country	2009	2010	2011	2012	2013
Austria					
Carbonate	10	170	166	9	13
Belgium					
Oxides	781	2 284	1 890	2 320	2 380
Carbonate	3 042	4 539	4 428	4 985	6 736
France					
Oxides	91	46	108	103	72
Germany					
Carbonate	1 880	2 387	2 927	2 259	2 809
Italy					
Carbonate	145	49	105	73	84
Netherlands					
Oxides	205	116	365	303	492
Carbonate	227	160	300	567	266
Slovenia					
Carbonate	128	88	91	98	67
Spain					
Carbonate	228	175	268	100	2 477
Switzerland					
Oxides	2 041	190	1	83	91
United Kingdom					
Oxides	569	144	7	41	39
	193	123	50	102	86

## Lithium

**Imports of lithium**

tonnes

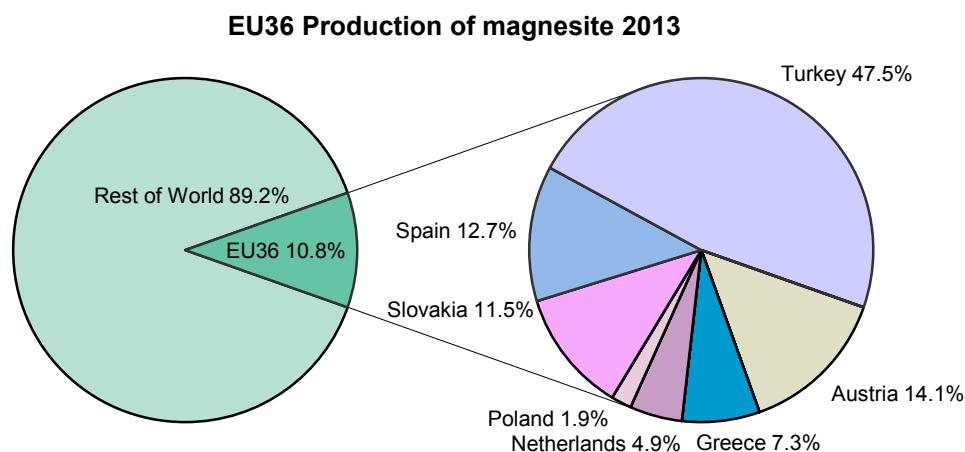
Country	2009	2010	2011	2012	2013
Austria					
Carbonate	327	402	463	359	298
Belgium					
Oxides	1 179	2 410	2 953	2 515	3 179
Carbonate	3 410	4 183	7 770	7 205	6 403
Denmark					
Carbonate	402	340	358	80	63
France					
Oxides	362	570	479	547	505
Carbonate	1 172	1 137	2 792	1 756	1 162
Germany					
Oxides (a)	* 3 000	* 1 800	* 1 700	* 1 300	* 1 600
Carbonate	4 433	6 486	5 735	6 064	5 977
Italy					
Oxides	96	175	148	143	121
Carbonate	1 185	1 123	1 369	1 052	1 241
Netherlands					
Oxides	228	290	494	201	229
Carbonate	316	431	527	462	524
Poland					
Oxides	86	86	114	141	100
Carbonate	137	175	177	177	165
Slovenia					
Oxides	139	95	125	190	298
Spain					
Oxides	521	1 007	698	763	645
Carbonate	2 825	3 239	3 423	2 638	2 905
Sweden					
Oxides	149	214	243	213	235
Carbonate	191	87	69	159	126
Switzerland					
Oxides	110	118	141	98	136
Turkey					
Oxides	208	268	261	236	273
Carbonate	613	770	865	1 006	1 304
United Kingdom					
Oxides	914	218	215	119	281
Carbonate	622	427	376	344	364

## Note

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

## Magnesite

- Magnesite is the commonly used name for magnesium carbonate rock. Magnesite has excellent thermal resistance and is most commonly used as refractory bricks in furnaces. It is also used in fertilisers.
- China was the world's largest producer in 2013, with 79 per cent of the total world output. The second largest producer was Russia (six per cent), followed by Turkey (five per cent) and Austria (two per cent).



## Production of magnesite

tonnes

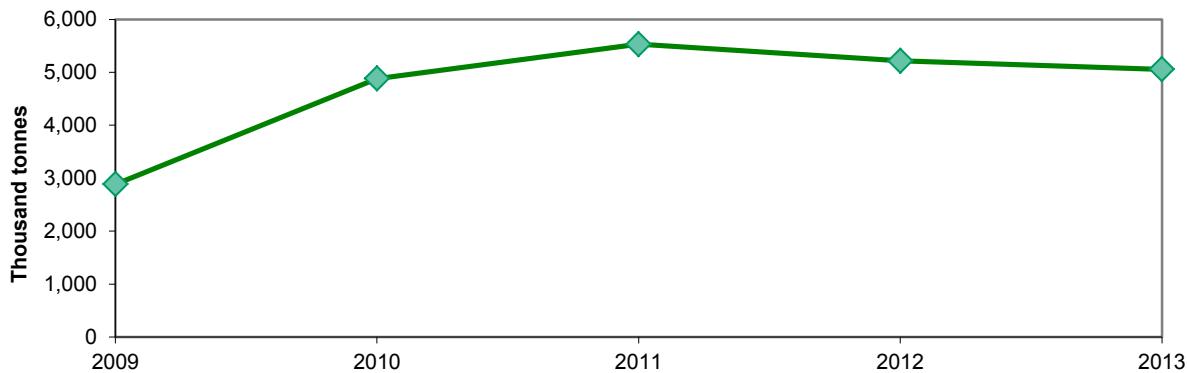
Country	2009	2010	2011	2012	2013
Austria	544 716	757 063	867 912	778 810	714 422
Greece	380 834	396 497	393 880	349 998	368 588
Netherlands (a)	183 256	236 053	274 877	290 873	249 568
Poland	47 000	63 000	75 350	84 000	97 000
Slovakia	477 600	650 100	751 700	618 400	584 000
Spain	390 311	462 959	577 725	649 977	643 827
Turkey	861 180	2 316 763	2 588 276	2 443 478	* 2 400 000
EU36 total	2 885 000	4 882 000	5 530 000	5 216 000	5 057 000

### Notes

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

(a) Chloride produced from solution mining

**EU36 Production of magnesite 2009 - 13**



## Magnesite and Magnesia

**Exports of magnesite and magnesia**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Magnesite	1 746	989	780	774	559
Magnesia	26 716	39 589	79 519	71 453	70 253
Belgium					
Magnesite	876	1 235	914	150	2 469
Magnesia	59 644	96 513	58 237	49 561	17 793
Bulgaria					
Magnesite	—	—	537	241	94
Czech Republic	3 728	3 809	7 096	5 997	4 690
Denmark					
Magnesite	425	244	147	1	60
Magnesia	93	522	497	179	437
France					
Magnesite	576	274	207	250	195
Magnesia	35 523	52 553	35 543	38 098	53 989
Germany					
Magnesite	140	229	1 303	381	474
Magnesia	58 604	94 198	67 605	73 154	84 986
Greece					
Magnesite	—	...	8 766	4 012	1 268
Magnesia	84 399	108 020	110 276	87 550	98 204
Hungary					
Magnesia	—	...	317	309	643
Ireland, Republic of					
Magnesite	9 133	3 383	18 665	13 218	4 114
Magnesia	8 595	33 334	11 761	3 465	41 749
Italy					
Magnesite	1 945	2 535	3 236	2 902	2 305
Magnesia	5 873	7 393	6 194	7 283	7 237
Lithuania					
Magnesia	537	717	352	350	294
Luxembourg					
Magnesite	621	943	1 325	1 171	1 081
Netherlands					
Magnesite	180	423	744	31	99
Magnesia	160 337	139 516	402 976	370 287	273 416
Poland					
Magnesite	474	66	101	79	69
Magnesia	250	1 013	550	3 303	5 873
Portugal					
Magnesite	...	11	1	716	503
Magnesia	10	4	1	528	712
Romania					
Magnesia	381	460	212	412	309
Serbia					
Magnesite	242	1 851	1 524	1 852	2 551
Magnesia	319	328	5 831	8 704	3 283
Slovakia					
Magnesite (a)	* 7 400	* 8 400	* 4 900	* 3 800	* 2 600
Magnesia	261 876	336 786	340 612	272 677	266 320
Slovenia					
Magnesite	59	4 798	78	22	20
Magnesia	344	334	259	9 577	125 735
Spain					
Magnesite	2 167	410	573	1 051	798
Magnesia	156 027	224 590	259 493	257 527	234 020
Sweden					
Magnesia	380	303	165	130	69
Turkey					
Magnesite	35 097	24 213	37 902	28 747	38 569
Magnesia	162 651	209 633	238 620	245 537	266 279

Magnesite and magnesia

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
United Kingdom					
Magnesite	518	470	745	1 163	1 744
Magnesia	9 662	14 497	28 042	14 869	14 017

Notes

(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	2009	2010	2011	2012	2013
Austria					
Magnesite	937	848	1 512	1 069	489
Magnesia	21 708	272 232	214 788	180 117	219 973
Belgium					
Magnesite	1 412	3 820	2 076	643	800
Magnesia	104 577	80 845	70 954	58 355	46 379
Bulgaria	3 180	5 678	11 378	6 204	6 125
Croatia	1 289	1 208	1 061	710	2 019
Czech Republic					
Magnesite	3 460	7 108	4 578	5 270	3 386
Magnesia	38 048	38 862	40 975	43 235	46 261
Denmark					
Magnesite	2 680	2 728	2 299	1 784	2 000
Magnesia	5 472	4 636	4 927	5 219	4 187
Estonia					
Magnesia	260	297	382	380	528
Finland					
Magnesite	224	118	576	568	264
Magnesia	6 439	7 387	9 214	8 959	8 074
France					
Magnesite	1 209	784	1 087	4 013	3 948
Magnesia	117 821	126 821	127 469	115 590	131 742
Germany					
Magnesite	6 731	12 751	5 625	5 285	4 637
Magnesia	276 674	473 545	515 139	496 202	535 966
Greece					
Magnesite	19 803	3 603	14 704	14 475	21 012
Magnesia	1 729	2 198	7 506	1 442	882
Hungary					
Magnesite	1 081	1 331	1 499	1 124	1 351
Magnesia	1 563	6 783	4 369	4 739	6 291
Iceland	2	1	3	2	365
Ireland, Republic of					
Magnesite	4 191	5 535	6 333	1 731	7 853
Magnesia	22 523	39 638	49 122	48 779	43 182
Italy					
Magnesite	9 375	21 454	27 347	13 774	8 223
Magnesia	93 262	143 725	133 451	120 185	105 816
Latvia					
Magnesia	2 827	5 524	2 735	12 507	3 596
Lithuania					
Magnesia	855	1 245	593	1 159	939
Luxembourg	2 202	2 612	2 375	3 805	2 116
Macedonia	10 113	11 266	9 418	5 547	2 115
Netherlands					
Magnesite	3 259	459	3 115	195	645
Magnesia	80 478	345 154	458 372	340 922	235 685
Norway					
Magnesia	4 904	10 987	8 714	9 795	8 060
Poland					
Magnesite	2 658	3 966	1 375	1 948	659
Magnesia	81 304	113 757	137 148	116 632	103 475

Magnesite and magnesia

Imports continued

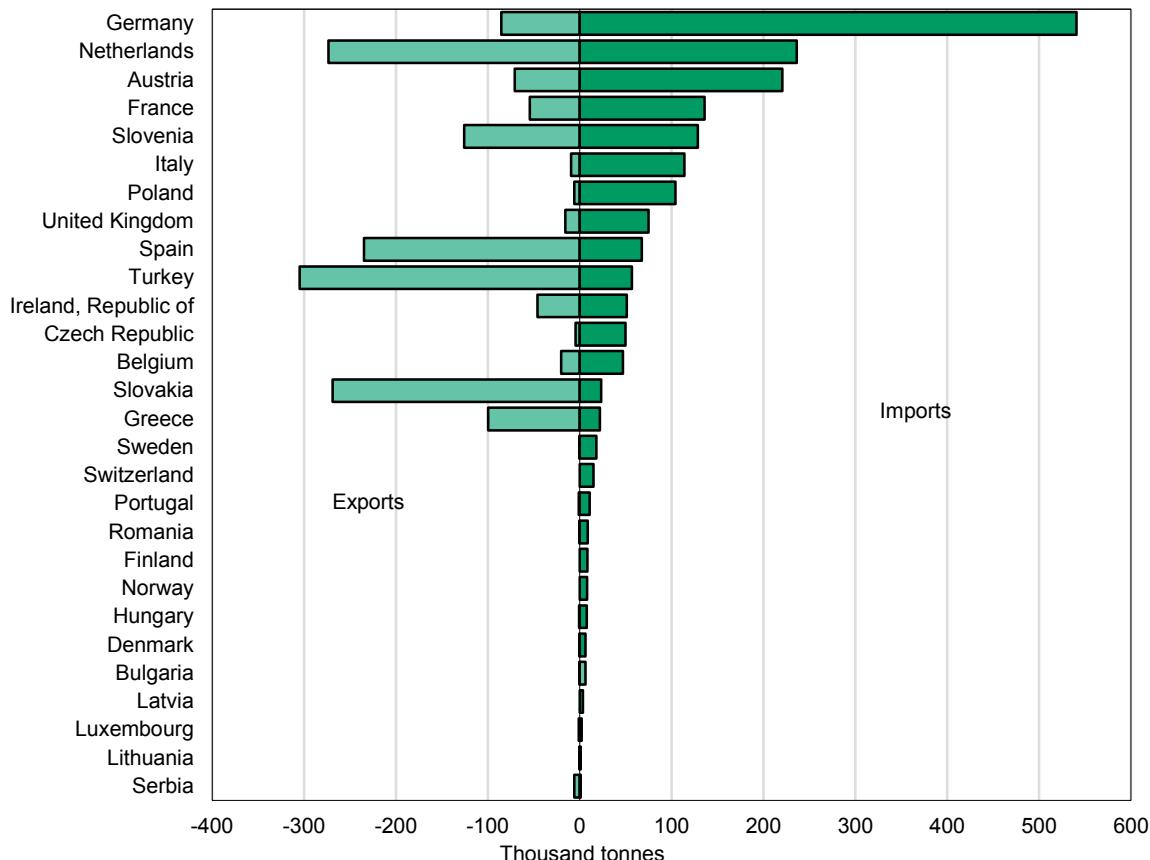
Country	2009	2010	2011	2012	2013
Portugal					
Magnesite	697	1 162	1 379	1 249	1 652
Magnesia	8 538	4 504	5 523	7 130	9 037
Romania					
Magnesia	7 427	10 389	13 391	11 402	8 838
Serbia					
Magnesia	585	570	547	623	899
Slovakia					
Magnesite	2 906	3 916	4 960	(a)* 2 000	(a)* 3 000
Magnesia	12 731	28 639	27 100	23 363	20 405
Slovenia					
Magnesia	4 346	7 279	64 675	109 365	128 518
Spain					
Magnesite	10 029	3 926	6 164	2 695	2 189
Magnesia	42 980	94 840	97 566	82 320	65 530
Sweden					
Magnesia	15 832	12 004	20 425	19 081	18 068
Switzerland					
Magnesite	502	362	793	521	1 122
Magnesia	4 762	4 625	4 917	5 734	13 961
Turkey					
Magnesia	40 595	60 121	58 556	50 199	56 723
United Kingdom					
Magnesite	3 567	8 640	7 903	5 059	5 015
Magnesia	43 873	49 076	52 263	70 330	69 822

Notes

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

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

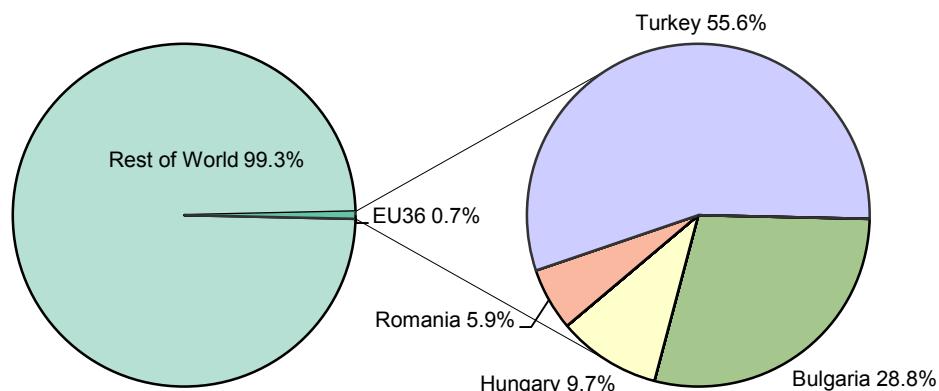
### Magnesite and magnesia - EU36 trade in 2013



## 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 wear resistance. Manganese is also an important constituent of many aluminium alloys. Manganese dioxide is a component of dry-cell batteries; other compounds are used in the chemical industry. Manganese ore, ferro-manganese, electrolytic manganese dioxide and manganese metal are the chief forms in international trade.
- China was the world's largest producer of manganese ore in 2013, with an estimated 29 per cent of the total world output. The second largest was South Africa (21 per cent), followed by Australia (14 per cent), Gabon (eight per cent) and Kazakhstan, India and Brazil (five per cent each).

**EU36 Production of manganese ore 2013**

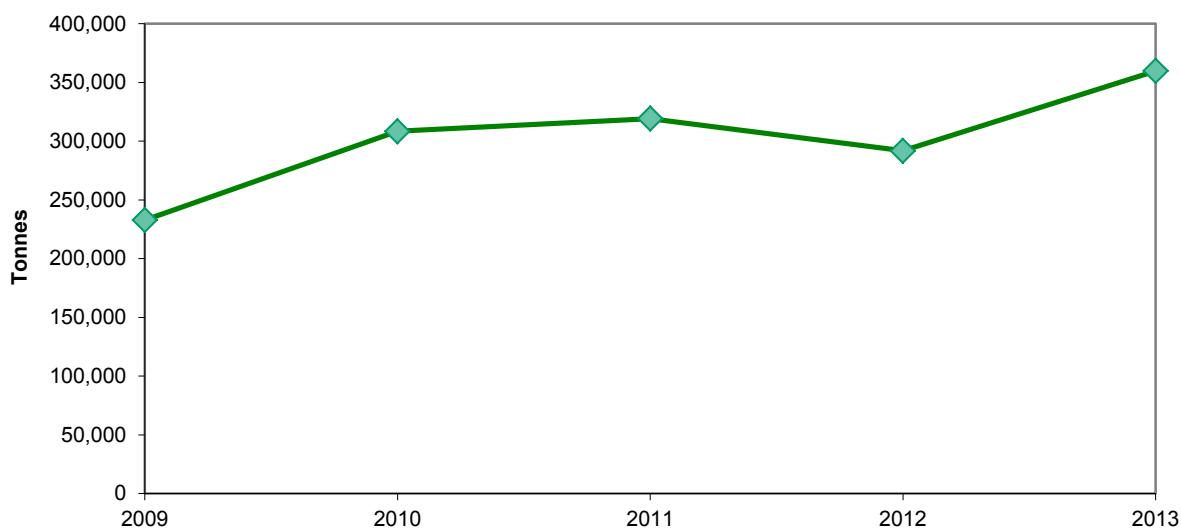


## Production of manganese ore

tonnes

Country	2009	2010	2011	2012	2013
Bulgaria	28 300	106 000	85 600	39 100	103 600
Hungary	43 000	55 000	58 000	51 000	35 000
Romania	20 304	13 120	3 180	8 993	21 300
Turkey	141 246	134 336	172 480	192 756	* 200 000
EU36 total	233 000	308 000	319 000	292 000	360 000

**EU36 Production of manganese ore 2009 - 13**



Manganese

### Exports of manganese

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Ores and Concentrates	5 192	4 444	9 982	4 236	7 751
Metal	714	1 185	1 625	1 447	2 959
Bulgaria					
Ores and Concentrates	29 715	163 257	91 110	76 140	50 390
Czech Republic					
Ores and Concentrates	—	—	50	383	65
Finland					
Metal	341	32	25	2	1
France					
Ores and Concentrates (a)	138 787	152 425	125 827	118 915	130 333
Metal	631	717	805	1 081	582
Germany					
Ores and Concentrates	3 710	4 480	5 035	4 387	4 114
Metal	6 727	8 243	8 907	13 598	9 758
Italy					
Metal	326	716	963	897	600
Netherlands					
Ores and Concentrates	28 701	21 806	29 097	27 154	30 072
Metal	15 642	38 159	44 310	29 855	26 866
Norway					
Ores and Concentrates	9 214	10 709	2 600	39 355	8 211
Metal	59	112	462	95	0
Poland					
Metal	603	2 875	41	97	198
Romania					
Ores and Concentrates	...	...	...	9 085	6 623
Spain					
Ores and Concentrates	21 456	707	623	621	5 367
Metal	3 386	1 297	1 735	4 665	3 880
Turkey					
Ores and Concentrates	59 183	51 731	100 172	118 953	310 479
Metal	81	4 952	12	3 535	1 468
United Kingdom					
Ores and Concentrates	65	97	129	101	284
Metal (b)	* 2 200	* 2 000	* 2 100	* 1 600	* 1 200

Notes

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

(a) Including manganiferous iron ore

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

### Imports of manganese

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Ores and Concentrates	184	152	334	222	198
Metal	11 512	16 696	21 123	21 692	20 665
Belgium					
Ores and Concentrates	61 980	49 731	49 393	50 509	51 271
Metal	3 076	4 377	5 466	4 636	5 946
Bulgaria					
Ores and Concentrates	20	5	133	—	7 893
Czech Republic					
Ores and Concentrates	16 063	25 758	28 810	335	14 189
Metal	2 219	984	907	521	629
Denmark					
Ores and Concentrates	1 158	257	1 051	352	566
Estonia					
Metal	168	576	85	—	71

Imports continued

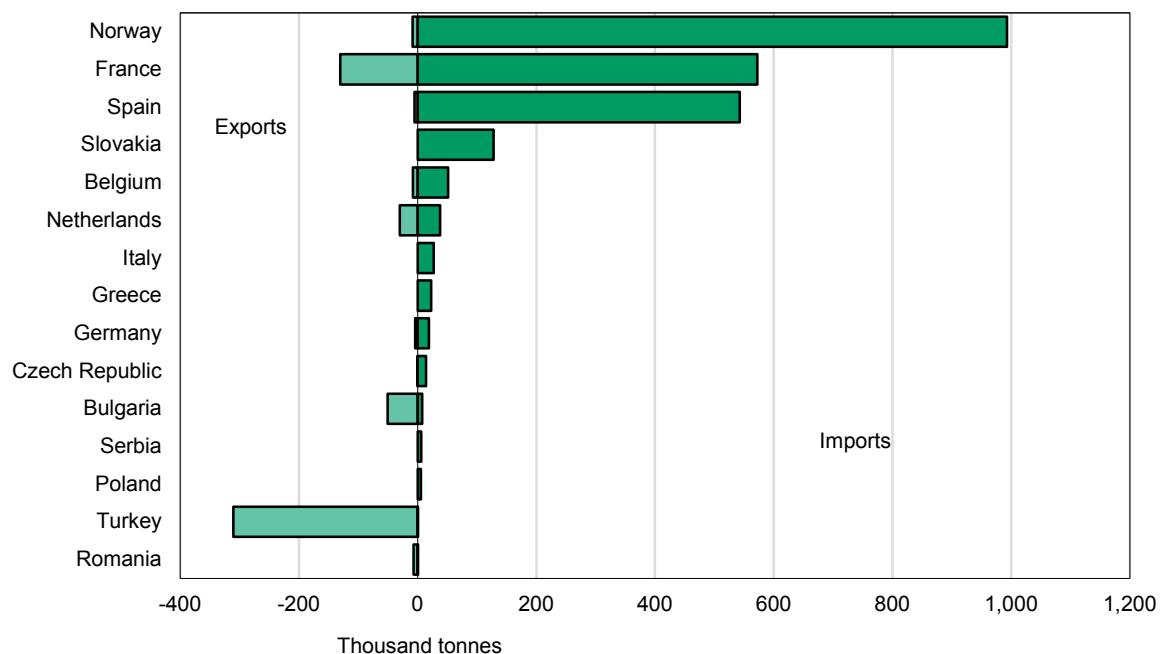
tonnes

Country	2009	2010	2011	2012	2013
Finland					
Ores and Concentrates	12 224	21 961	3 792	329	248
Metal	912	2 134	2 123	2 144	1 747
France					
Ores and Concentrates (a)	193 684	721 272	647 182	562 298	572 043
Metal	8 905	17 586	21 186	9 231	10 304
Germany					
Ores and Concentrates (a)	14 645	17 346	19 137	18 532	18 872
Metal	33 989	43 346	40 705	35 671	32 039
Greece					
Ores and Concentrates	31 776	22 888	51 374	26 294	22 943
Metal	162	292	175	855	1 029
Hungary					
Ores and Concentrates	220	198	159	142	304
Metal	280	336	461	500	589
Ireland, Republic of					
Ores and Concentrates (a)	65	54	9 565	31	19
Italy					
Ores and Concentrates (a)	77 075	55 284	81 629	107 907	27 243
Metal	3 709	5 788	5 759	5 804	6 274
Latvia					
Ores and Concentrates	26	27	92	97	200
Macedonia					
Ores and Concentrates	...	56 893	110 589	42 109	503
Netherlands					
Ores and Concentrates	9 398	23 045	33 555	66 281	38 141
Metal	19 083	50 866	35 618	40 131	30 706
Norway					
Ores and Concentrates	525 674	1 121 716	1 085 383	1 072 991	992 832
Metal	1 297	1 974	2 697	1 636	2 158
Poland					
Ores and Concentrates	1 930	4 345	4 509	4 951	5 459
Metal	507	1 514	436	764	1 030
Romania					
Ores and Concentrates	16	87 880	66 285	244	13
Metal	527	220	588	415	517
Serbia					
Ores and Concentrates	16 833	17 003	14 366	4 229	5 829
Metal	180	324	317	254	184
Slovakia					
Ores and Concentrates	74 712	146 434	130 519	144 936	127 764
Metal	395	442	659	228	207
Slovenia					
Metal	264	433	420	483	417
Spain					
Ores and Concentrates	54 606	407 450	508 794	413 613	542 836
Metal	3 994	7 510	10 951	6 470	7 047
Sweden					
Ores and Concentrates	854	522	438	412	504
Metal	1 880	3 815	5 241	3 438	4 838
Switzerland					
Ores and Concentrates	340	214	333	357	181
Metal	282	556	509	490	385
Turkey					
Ores and Concentrates	540	694	1 295	534	529
Metal	583	980	1 202	863	1 356
United Kingdom					
Ores and Concentrates (a)	941	1 517	1 656	1 597	2 168
Metal	4 123	6 619	5 444	3 721	3 796

## Notes

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

(a) Including manganiferous iron ore

**Manganese ores and concentrates - EU36 trade in 2013**

## 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 2013. China was the world's largest producer, with 68 per cent of the total world output. The second largest producer was Mexico (23 per cent), followed by Kyrgyzstan (three per cent) and Russia (two per cent).

### Production of mercury

kilograms

Country	2009	2010	2011	2012	2013
Finland	6 210	9 000	5 000	—	—

## Note

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

EU36 Production of mercury 2009 - 13



### Exports of mercury

kilograms

Country	2009	2010	2011	2012	2013
Austria	2 000	(a)* 3 300	(a)* 1 600	(a)* 500	(a)* 200
Belgium	1 400	11 500	600	8 700	7 900
Czech Republic	6 400	1 100	1 700	193	182
Denmark	108	9	119	843	68 876
Finland	6 211	9 321	4 830	—	—
France	718	1 595	49 992	2 233	1 092
Germany	120 587	110 405	197 989	102 650	133 626
Hungary	...	6 400	10 700	6 500	22 800
Italy	89 228	202 273	68 623	12 706	8 743
Netherlands	419 480	195 272	72 020	67 263	64 995
Poland	46 200	106 100	7 300	—	—
Portugal	—	200	6 700	25 600	—
Spain	376 885	964 922	824 421	950 824	1 008 952
Switzerland	25 372	8 529	53 581	164 517	132 596
Turkey	89	2 156	10 890	4 392	1 245
United Kingdom	178 571	9 321	5 368	2 991	3 405

## Note

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

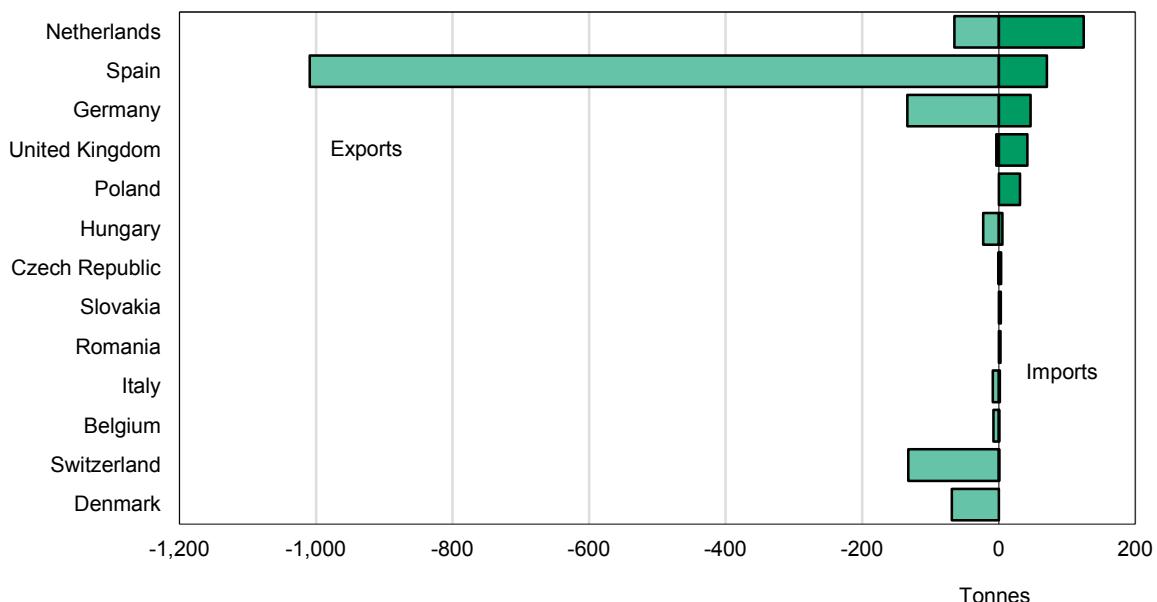
## Mercury

### Imports of mercury

kilograms

Country	2009	2010	2011	2012	2013
Belgium	15 700	57 200	12 500	505	707
Czech Republic	4 400	2 400	4 400	2 600	3 300
Finland	2 136	2 203	4 069	36	17
France	222 224	19 073	1 406	252	180
Germany	28 678	104 241	134 666	52 469	46 484
Greece	668	211	1 200	7 500	900
Hungary	4 800	5 000	8 400	6 100	5 400
Ireland, Republic of	1 182	8 582	24	81	69
Italy	19 992	10 510	15 246	4 247	1 863
Netherlands	* 101 000	30 636	213 259	154 983	124 697
Poland	10 900	4 300	39 900	13 700	31 300
Portugal	25 100	152 900	125 400	59	18
Romania	415	18 149	19 500	4 200	2 600
Slovakia	4 500	4 700	27 700	10 000	3 000
Spain	467 614	335 852	54 748	54 994	70 325
Sweden	21 300	2 700	2 400	1 400	1 200
Switzerland	801	1 370	471	5 096	246
Turkey	1 635	719	9 772	3 143	1 490
United Kingdom	1 121	22 065	425	21 138	41 836

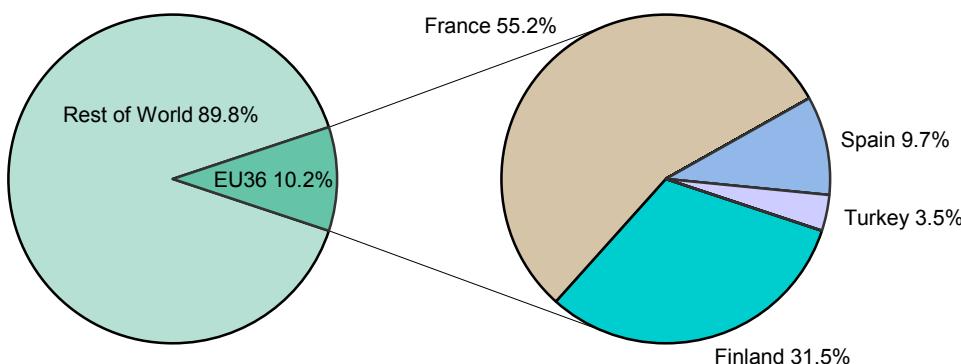
### Mercury - EU36 trade in 2013



## 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 as a decorative material.
- China was the world's largest producer in 2013, with an estimated 46 per cent of the total world output. The second largest producer was USA (14 per cent), followed by South Korea (seven per cent), Canada and France (six per cent each).

**EU36 Production of mica 2013**



## Production of mica

tonnes

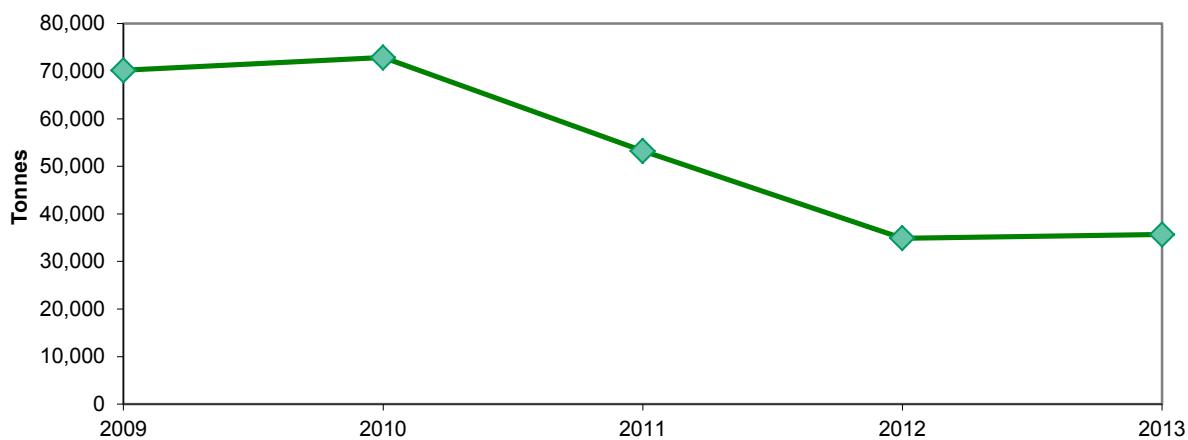
Country	2009	2010	2011	2012	2013
Finland	7 855	13 809	12 896	12 112	11 244
France (a)	* 18 000	* 19 000	* 19 000	* 18 000	* 19 700
Spain (a)	3 655	4 034	3 775	3 518	3 462
Turkey	40 681	36 009	17 542	1 253	* 1 260
EU36 total	70 000	73 000	53 000	35 000	36 000

### Notes

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

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

**EU36 Production of mica 2009 - 13**



## Mica

**Exports of mica**

tonnes

Country	2009	2010	2011	2012	2013
Austria	3 328	4 303	4 245	4 024	3 554
Belgium	1 562	1 590	2 363	3 587	2 561
Czech Republic	59	96	163	212	82
Finland	6 125	11 377	8 636	9 242	11 073
France	10 819	12 455	12 821	11 771	13 352
Germany	2 888	4 197	4 479	4 474	6 157
Italy	857	697	1 014	1 138	1 336
Netherlands	3 214	1 687	2 396	1 986	1 897
Norway	1 835	2 078	2 144	2 093	2 447
Spain					
Unmanufactured	563	1 339	1 823	1 826	1 904
Ground	1 521	2 269	2 193	1 993	613
Turkey	570	601	1 039	1 054	624
United Kingdom	3 944	4 137	4 238	3 639	4 680

## Notes

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

**Imports of mica**

tonnes

Country	2009	2010	2011	2012	2013
Austria	492	874	656	625	493
Belgium					
Unmanufactured	3 454	2 636	2 395	4 331	1 893
Ground	3 507	4 086	4 722	3 314	3 803
Waste	45	8	120	1 212	929
Czech Republic	981	2 513	740	915	604
Denmark	242	237	150	148	185
Finland	1 988	3 647	3 351	2 267	208
France					
Unmanufactured	370	255	848	488	541
Ground	1 844	1 861	2 149	1 828	1 941
Germany					
Unmanufactured	221	1 330	10 527	8 934	7 986
Ground	25 682	29 716	26 405	24 116	24 104
Waste	316	428	20	—	—
Greece	317	169	175	155	211
Italy					
Unmanufactured	417	136	209	205	187
Ground	2 597	3 854	3 849	3 489	3 329
Netherlands					
Unmanufactured	523	191	419	418	540
Ground	3 490	21 756	20 744	4 632	4 504
Waste	...	748	462	24	0
Norway					
Unmanufactured	1 021	1 224	1 573	1 964	2 027
Ground	1 140	1 179	294	285	193
Waste	...	...	...	82	355
Poland	1 134	1 150	2 019	1 504	1 459
Portugal	139	284	288	258	263
Romania	441	785	1 077	810	1 039
Spain	1 467	1 183	1 534	1 017	1 538
Sweden	721	673	545	419	429
Switzerland	669	1 226	866	893	630
Turkey	477	317	508	285	483

Imports continued					tonnes
Country	2009	2010	2011	2012	2013
United Kingdom					
Unmanufactured	328	43	243	407	131
Ground	6 396	7 341	7 926	9 203	7 307
Waste	49	902	0	0	24

## Note

(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'

## 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 2013 was confined to only 13 countries, of which China was the world's largest producer, with 41 per cent of the total world output. The second largest producer was USA (23 per cent), followed by Chile (14 per cent), Peru (seven per cent) and Mexico (five per cent).

### Mine production of molybdenum

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Norway	...	...	...	4	8

### Exports of molybdenum

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metal (a)	* 1 800	* 2 300	* 2 800	* 2 500	* 2 500
Belgium					
Ores and concentrates	15 581	24 396	25 337	19 444	18 384
Metal	105	371	128	204	650
Oxides	91	83	366	688	59
Bulgaria					
Metal	132	122	355	133	139
Czech Republic					
Oxides	18	25	25	20	214
Estonia					
Ores and concentrates	20	40	80	180	848
France					
Ores and concentrates	75	205	352	81	30
Metal	34	47	36	317	262
Germany					
Ores and concentrates	2 502	5 017	3 955	3 738	3 127
Metal	725	763	1 248	1 395	1 475
Italy					
Ores and concentrates	205	1 523	2 299	3 153	2 503
Metal	488	911	443	409	76
Oxides	982	443	286	22	126
Netherlands					
Ores and concentrates	4 408	17 126	19 765	24 083	29 792
Metal	46	249	492	128	141
Oxides	1 805	6 429	6 434	6 407	7 319
Romania					
Ores and concentrates	...	...	...	652	525
Spain					
Metal	68	243	14	69	79
Turkey					
Ores and concentrates	...	160	266	—	1 498
Metal	14	42	64	11	22
United Kingdom					
Ores and concentrates	35	305	3	64	—
Metal	433	572	403	375	472

#### Notes

(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	2009	2010	2011	2012	2013
Austria					
Metal	430	548	951	440	414
Belgium					
Ores and concentrates	37 101	46 899	42 498	39 523	45 135
Metal	344	142	235	304	720
Oxides	968	694	1 204	1 659	1 542
Bulgaria					
Metal	47	10	193	9	3
Czech Republic					
Ores and concentrates	1 040	184	118	79	91
Metal	127	82	104	57	64
Denmark					
Oxides	388	418	253	345	570
Finland					
Ores and concentrates (a)	* 1 214	* 1 724	* 1 679	* 2 013	* 3 707
France					
Ores and concentrates	769	1 209	1 764	1 575	1 653
Metal	541	888	1 098	942	998
Oxides	1 018	1 095	1 465	1 365	1 387
Germany					
Ores and concentrates	6 953	9 134	9 500	7 158	6 165
Metal	1 726	3 038	3 761	4 016	3 479
Oxides	1 661	2 890	2 699	2 385	2 423
Hungary					
Metal	69	70	60	51	60
Italy					
Ores and concentrates	6 703	9 108	5 248	4 794	5 394
Metal	171	136	219	192	161
Oxides	176	276	199	187	128
Lithuania					
Metal	7	65	37	45	6
Netherlands					
Ores and concentrates	9 555	35 335	40 562	39 782	30 242
Metal	84	274	261	236	154
Oxides	230	594	865	596	617
Poland					
Metal	281	889	1 292	72	72
Oxides	80	162	198	237	195
Romania					
Ores and concentrates	1	1	41	1 516	1
Slovakia					
Metal	106	1	2	2	31
Slovenia					
Ores and concentrates	292	561	523	473	476
Spain					
Ores and concentrates	1 724	2 585	3 572	3 041	3 136
Metal	236	239	83	78	42
Sweden					
Ores and concentrates	2 514	5 487	5 893	6 110	5 988
Metal	470	644	360	356	160
Oxides	219	414	357	496	880
Turkey					
Ores and concentrates	291	46	12	14	0
United Kingdom					
Ores and concentrates	9 007	12 581	15 844	16 041	14 396
Metal	707	1 099	1 415	1 487	1 271
Oxides	510	1 638	2 316	1 971	2 101

## Notes

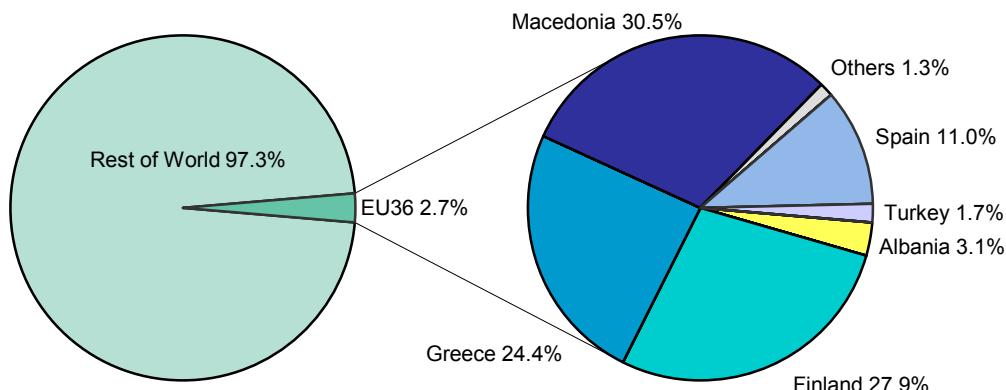
(1) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

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

## 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.
- Indonesia was the world's largest producer of mined nickel in 2013, with 34 per cent of the total world output. The second largest producer was the Philippines (12 per cent), followed by Russia, Australia and Canada (nine per cent each).
- China was the world's largest producer of refined nickel in 2013, with 36 per cent of the total world output. The second largest producer was Russia (12 per cent), followed by Japan (nine per cent), Australia and Canada (seven per cent each).

**EU36 Mine production of nickel 2013**



### Mine production of nickel

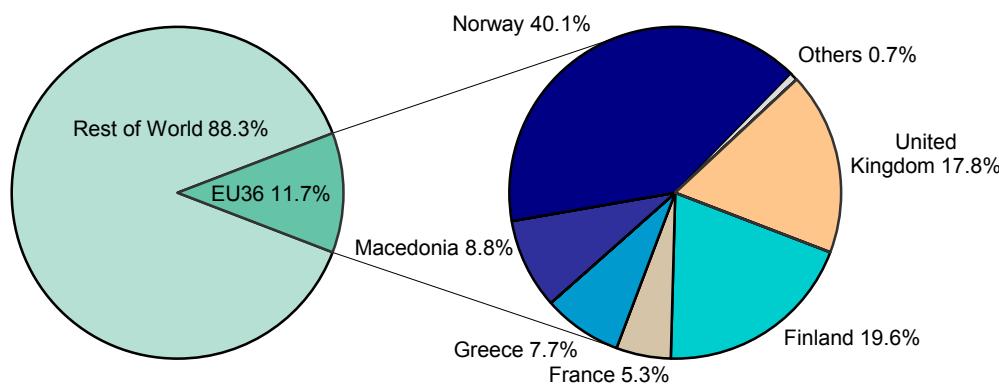
tonnes (metal content)

Country	2009	2010	2011	2012	2013
Albania	550	1 954	914	750	2 151
Finland	735	12 100	18 244	19 073	19 300
Greece	9 600	16 100	21 700	18 630	16 890
Macedonia	12 000	14 200	25 600	10 800	21 100
Norway	336	348	339	351	296
Poland	600	600	900	800	600
Spain	8 029	6 296	—	2 398	7 574
Turkey	1 199	2 539	848	3 805	* 1 200
EU36 total	33 000	54 100	68 500	56 600	69 100

**EU36 Mine production of nickel 2009 - 13**



### EU36 Smelter/refinery production of nickel 2013



### Smelter/refinery production of nickel

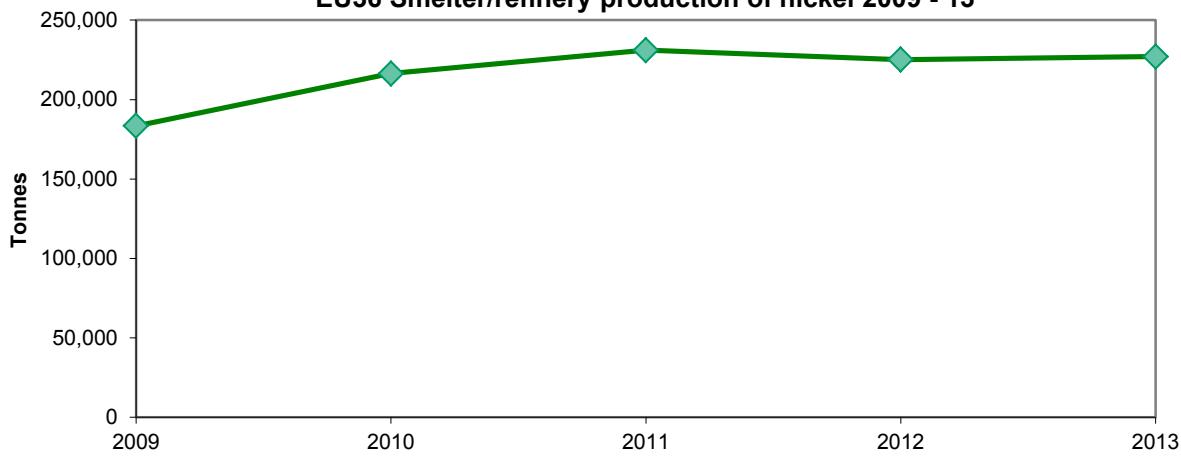
tonnes

Country	2009	2010	2011	2012	2013
Austria	700	1 000	1 000	1 000	1 000
Finland	41 556	49 772	49 823	46 275	44 498
France	13 900	12 900	13 700	13 200	12 100
Greece	8 269	13 960	18 530	18 630	17 500
Macedonia	12 000	14 400	17 300	19 200	20 000
Norway	88 577	92 185	92 427	91 687	91 017
Poland	600	600	900	840	600
United Kingdom	17 800	31 600	37 400	34 300	40 400
EU36 total	183 400	216 400	231 100	225 100	227 100

## Note

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

### EU36 Smelter/refinery production of nickel 2009 - 13



## Nickel

**Exports of nickel**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Scrap	0	1	7	477	7
Ores and concentrates	...	...	...	103	191 605
Austria					
Scrap	1 775	1 606	2 709	2 633	3 322
Unwrought (a)	265	208	234	351	305
Belgium					
Mattes, sinters etc	921	697	2 380	3 328	2 379
Scrap	6 883	3 443	7 430	2 407	2 953
Ores and concentrates	1 212	724	1 161	—	77
Unwrought	11 883	9 271	9 684	11 517	12 067
Unwrought alloys	2 479	1 357	1 838	3 838	14 106
Oxides	834	221	910	498	1 080
Bulgaria					
Scrap	364	1 220	2	...	9
Czech Republic					
Scrap	2 420	4 558	3 427	6 851	6 560
Unwrought (a)	228	126	272	725	1 668
Oxides	275	341	338	380	289
Denmark					
Scrap	1 063	1 765	1 244	590	314
Estonia					
Scrap	89	0	536	144	20
Unwrought	(a) —	(a) 2	2	539	(a) 2
Finland					
Mattes, sinters etc	...	...	7 732	13 387	9 473
Ores and concentrates	—	8 946	23 411	55 260	139 017
Scrap	1 511	323	33	39	130
Unwrought	37 202	(a) 31 275	(a) 39 472	36 364	36 113
Oxides (b)	* 200	* 500	* 200	* 200	* 150
France					
Mattes, sinters etc	68	315	1 306	1 384	1 240
Scrap	11 435	30 601	11 685	12 683	9 164
Unwrought	12 095	9 376	10 997	11 477	9 535
Unwrought alloys	1 377	1 307	1 875	1 818	2 517
Germany					
Mattes, sinters etc	8 687	13 981	15 998	19 412	18 951
Scrap	8 227	9 563	8 600	7 727	6 516
Ores and concentrates	1 619	2 673	299	778	74
Unwrought	2 617	3 751	4 184	4 808	4 922
Unwrought alloys	3 083	1 866	4 423	5 036	5 336
Greece					
Ores and concentrates	144 529	20 284	120	86	37
Hungary					
Scrap	203	170	126	126	108
Ireland, Republic of					
Scrap	220	557	269	208	188
Italy					
Scrap	541	3 537	627	1 260	710
Unwrought (a)	1 293	2 408	2 097	2 182	2 766
Latvia					
Scrap	3 301	3 108	2 284	150	291
Unwrought alloys	165	112	116	2	* 0
Macedonia					
Ores and concentrates	0	60 181	25 579	16 219	3 575
Netherlands					
Mattes, sinters etc (b)	* 2 900	* 1 800	* 2 400	* 1 400	* 980
Scrap	1 711	1 956	1 793	1 405	2 948
Ores and concentrates	(b)* 260	(b)* 52	(b)* 11	3 787	(b)* 1 145
Unwrought (a)	105	165	49 681	46 929	45 573
Oxides	...	...	1 456	1 398	1 433
Norway					
Scrap	274	1 042	582	499	674
Ores and concentrates	2 464	4 818	7 598	7 969	5 433
Unwrought	88 080	91 813	92 705	91 591	89 413

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Poland					
Mattes, sinters etc	1 443	1 134	—	—	28
Scrap	260	416	749	709	319
Unwrought	(a) 172	(a) 1 876	(a) 252	(a) 917	2 617
Oxides	260	38	29	5	2
Romania					
Scrap	1 089	816	561	66	131
Slovakia					
Scrap	140	295	1 368	217	149
Unwrought	201	68	84	—	1 095
Slovenia					
Unwrought (a)	117	1 544	520	692	527
Spain					
Ores and concentrates	102 105	93 536	26 597	20 632	100 228
Scrap	875	366	376	454	339
Unwrought (a)	573	738	400	430	390
Sweden					
Scrap	1 376	1 022	1 137	13 853	1 265
Unwrought (a)	522	497	599	1 690	385
Oxides	363	534	516	429	406
Switzerland					
Scrap	1 519	1 090	909	1 214	1 069
Unwrought (a)	53	173	130	62	63
Turkey					
Ores and concentrates	99 700	172 682	378 350	302 100	104 212
Scrap	470	519	841	783	992
Unwrought (a)	141	292	96	204	223
United Kingdom					
Mattes, sinters etc	107	389	157	111	381
Scrap	12 693	19 361	17 405	33 614	20 994
Unwrought	15 834	18 639	28 994	30 322	31 742
Unwrought alloys	4 753	4 530	6 025	6 711	7 324

## Notes

- (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	2009	2010	2011	2012	2013
Austria					
Scrap	367	440	527	1 917	4 359
Unwrought (a)	4 142	6 894	9 231	8 830	8 004
Oxides	11	15	8	247	63
Belgium					
Mattes, sinters etc	499	330	598	1 541	3 770
Ores and concentrates	419	764	1 124	77	831
Scrap	288	918	1 553	1 907	2 109
Unwrought	12 037	15 052	19 170	19 032	19 343
Unwrought alloys	1 915	469	574	3 035	11 930
Oxides	565	700	1 033	576	1 322
Bulgaria					
Unwrought (a)	90	125	201	172	160
Czech Republic					
Scrap	1 468	1 257	178	1 311	1 016
Unwrought (a)	2 179	2 223	3 750	2 799	2 361
Oxides	319	393	399	307	298
Denmark					
Scrap	122	382	234	227	303

## Nickel

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Finland					
Mattes, sinters etc	22 715	33 986	35 284	30 443	29 502
Ores and concentrates	185 202	217 164	276 892	276 587	240 116
Unwrought	9 192	14 558	9 946	—	7 878
Unwrought alloys	792	17 649	2 688	—	490
France					
Mattes, sinters etc	20 015	19 921	19 954	19 395	19 053
Scrap	1 265	2 164	2 988	2 713	3 063
Ores and concentrates	1 783	265	37	290	252
Unwrought	10 909	13 964	21 693	24 002	16 608
Unwrought alloys	5 364	5 029	7 345	5 466	4 943
Oxides	310	524	412	114	66
Germany					
Mattes, sinters etc	561	849	2 048	1 869	766
Scrap	8 259	8 584	11 924	14 191	10 135
Ores and concentrates	1 087	1 667	1 184	8 185	1 637
Unwrought	42 201	69 282	68 023	73 360	66 360
Unwrought alloys	3 839	8 023	11 778	23 191	7 844
Oxides	463	621	476	608	532
Hungary					
Unwrought (a)	219	346	35	47	159
Ireland, Republic of					
Unwrought (a)	626	1 503	1 748	568	409
Italy					
Mattes, sinters etc	93	1	4	78	1 281
Ores and concentrates	...	...	...	...	316
Scrap	763	1 063	656	899	1 330
Unwrought	25 833	39 586	38 075	33 635	28 985
Unwrought alloys	2 841	1 171	1 314	2 626	9 793
Latvia					
Unwrought	1	...	0	584	1
Macedonia					
Ores and concentrates	985 925	1 210 300	1 393 490	1 518 156	1 259 734
Netherlands					
Ores and concentrates	* 220	5 940	9 544	744	0
Scrap	4 666	21 724	4 607	2 584	2 803
Unwrought	...	...	230 179	32 005	41 856
Unwrought alloys	227	638	3 548	982	1 126
Oxides (b)	* 70	* 50	* 70	* 150	* 253
Norway					
Mattes, sinters etc	153 437	170 365	199 173	190 275	178 840
Unwrought (a)	199	235	246	250	175
Poland					
Mattes, sinters etc	1 468	1 223	7	—	10
Scrap	2 122	341	603	325	447
Unwrought (a)	1 353	3 350	2 722	3 189	3 208
Oxides	34	38	28	263	29
Portugal					
Unwrought	316	312	221	285	405
Romania					
Unwrought (a)	288	456	224	190	216
Serbia					
Unwrought	116	143	107	118	147
Slovakia					
Scrap	—	52	312	35	1
Unwrought (a)	120	112	617	103	2 659
Slovenia					
Unwrought (a)	2 020	2 967	3 230	4 304	4 469
Spain					
Ores and concentrates	5	5	1	—	6 888
Scrap	236	151	806	554	386
Unwrought	12 290	16 468	17 567	20 230	18 352
Unwrought alloys	821	1 125	966	1 368	1 510
Oxides	50	329	323	131	43

## Imports continued

tonnes

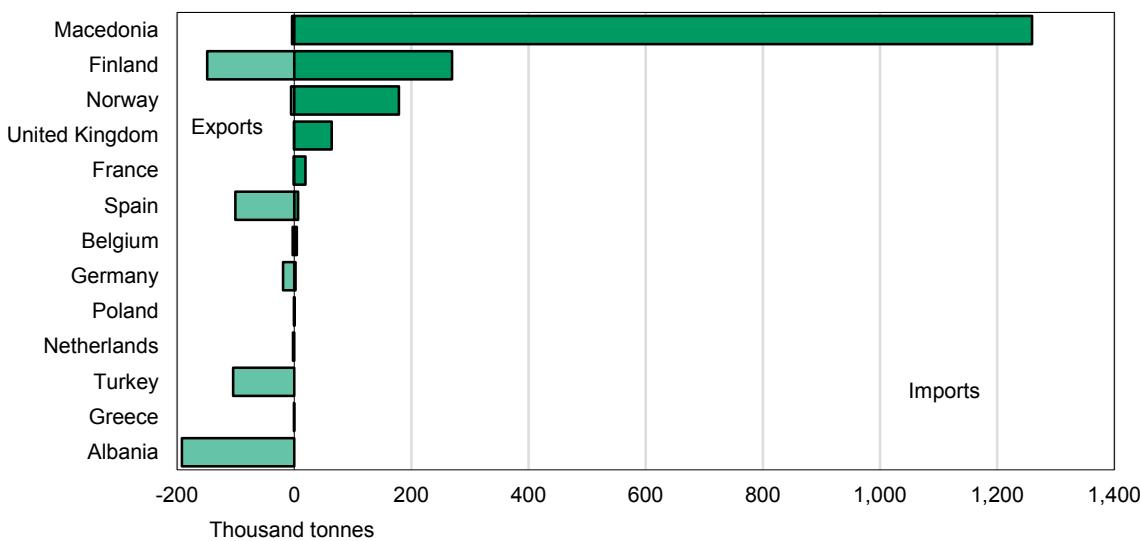
Country	2009	2010	2011	2012	2013
Sweden					
Mattes, sinters etc	1 607	1 239	1 723	1 008	777
Scrap	8 709	10 491	10 332	8 801	8 898
Unwrought	16 544	23 375	23 191	17 878	17 406
Unwrought alloys	661	397	216	542	1 226
Switzerland					
Unwrought (a)	1 202	1 370	1 199	1 320	1 224
Turkey					
Unwrought (a)	2 711	3 391	4 047	4 012	4 233
Oxides	145	144	108	104	170
United Kingdom					
Mattes, sinters etc	25 929	50 263	58 519	57 108	63 129
Ores and concentrates	150	16	1	0	864
Scrap	9 593	8 154	6 741	9 237	9 887
Unwrought	8 003	14 200	12 707	11 521	8 130
Unwrought alloys	3 596	3 310	4 644	4 771	4 309

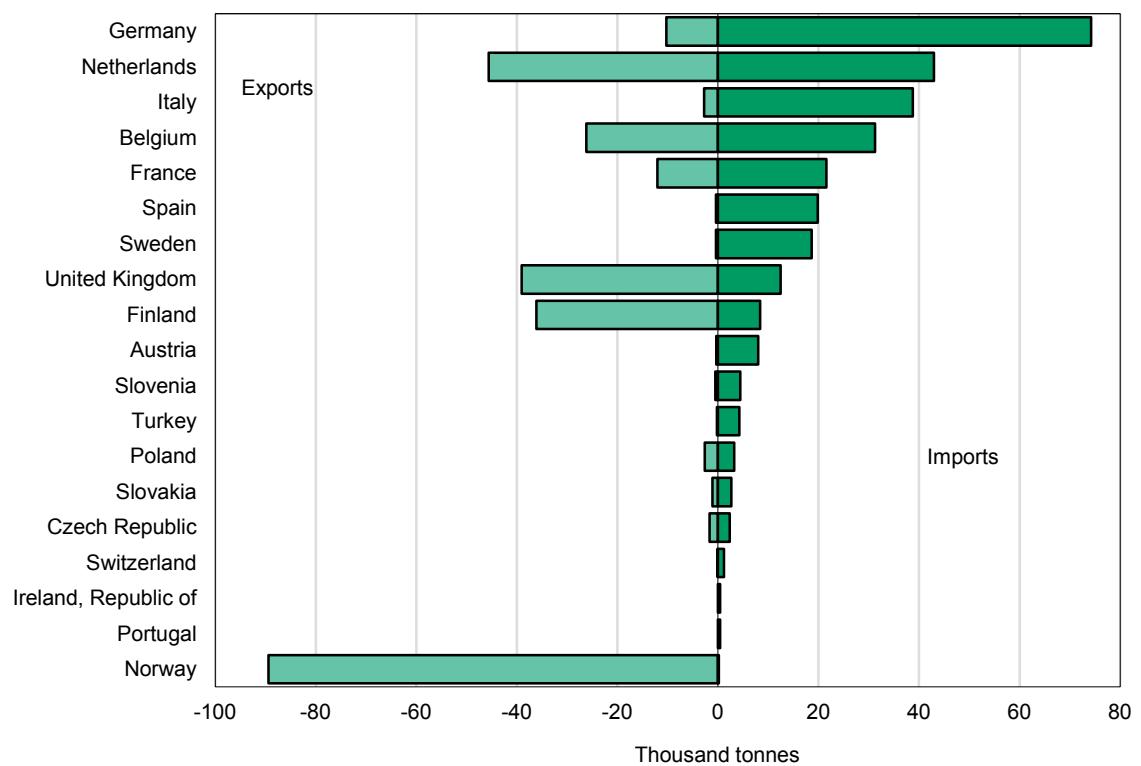
## Notes

- (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

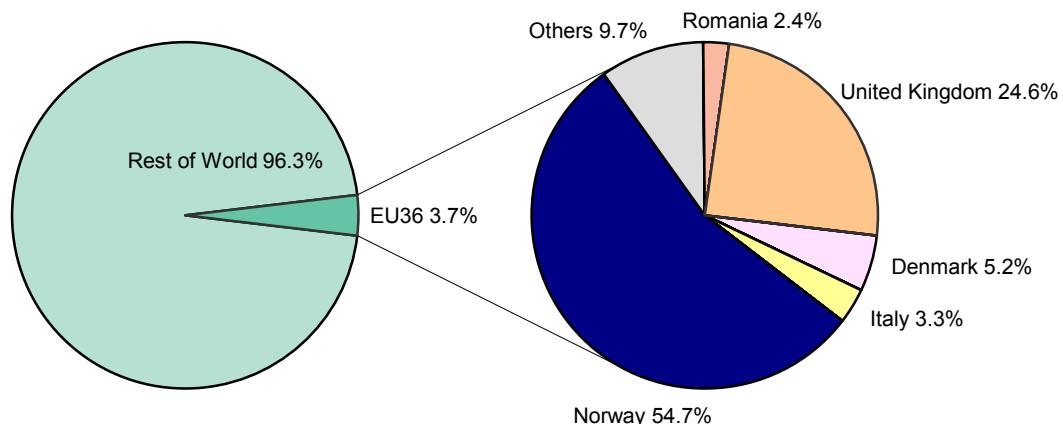
**Nickel ores, mattes and sinters - EU36 trade in 2013**

**Nickel metal- EU36 trade in 2013**

## Crude petroleum

- Petroleum ('oil') is a fundamental energy resource and raw material for lubricants, olefins, polymers (plastics) and other synthetic materials.
- Saudi Arabia was the world's largest producer in 2013, with 12 per cent of the total world output, closely followed by Russia (also with 12 per cent of the world's total), and then the United Arab Emirates and USA (ten per cent each) and China (five per cent).

**EU36 Production of crude petroleum 2013**



## Production of crude petroleum

tonnes

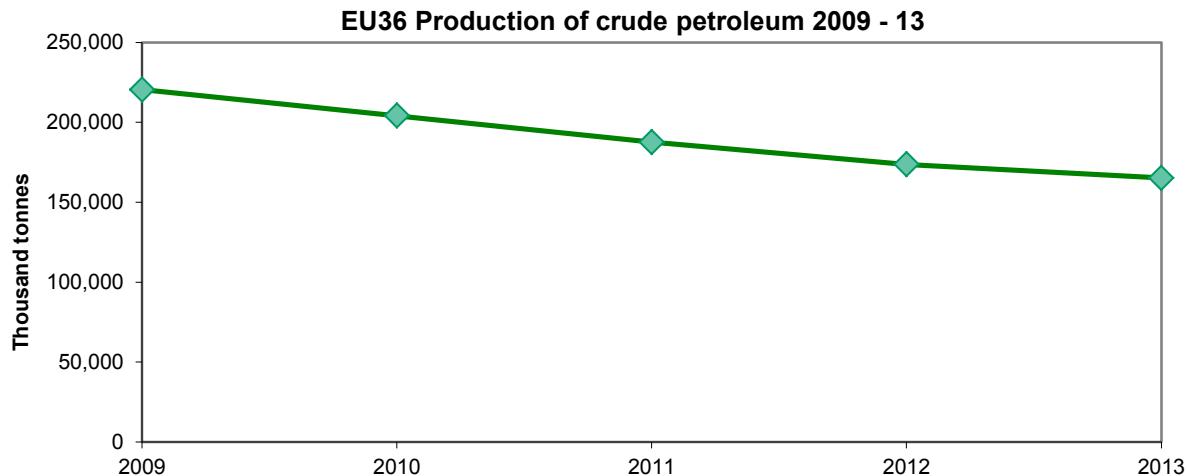
Country	2009	2010	2011	2012	2013
Albania	576 739	742 012	894 530	1 112 000	1 224 000
Austria	905 031	875 969	838 052	837 561	847 952
Bulgaria	23 800	22 400	21 400	23 600	27 400
Croatia	807 424	748 791	664 440	620 835	620 795
Czech Republic	217 000	173 000	163 000	150 000	152 000
Denmark	13 045 000	12 090 000	10 909 000	9 968 000	8 657 000
Estonia (a)	1 733 000	2 080 000	2 173 132	2 180 313	2 379 253
France	971 000	903 000	901 000	888 000	* 800 000
Germany	2 800 063	2 511 174	2 677 136	2 633 000	2 645 000
Greece	87 000	86 000	87 126	83 143	62 233
Hungary	796 000	735 900	657 000	700 931	607 132
Italy	4 550 816	5 080 498	5 286 042	5 376 629	5 480 000
Lithuania	114 956	114 464	113 895	101 644	86 054
Netherlands	1 704 000	1 414 000	1 464 000	1 467 000	1 519 000
Norway	115 612 000	105 146 000	100 343 000	94 497 000	90 347 000
Poland	686 992	686 487	618 163	677 664	962 090
Romania	4 388 940	4 172 411	4 081 979	3 992 011	3 994 122
Serbia	663 005	865 499	1 020 490	1 124 794	1 163 988
Slovakia	19 000	16 000	18 000	14 000	13 000
Slovenia	138	233	263	279	298
Spain	106 817	121 528	99 925	143 526	367 645
Turkey	2 489 914	2 602 114	* 2 600 000	* 2 500 000	* 2 600 000
United Kingdom	68 198 000	62 962 000	51 972 000	44 560 000	40 646 000
EU36 total	220 500 000	204 100 000	187 600 000	173 700 000	165 200 000

### Notes

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

(a) From oil shale

Petroleum and natural gas



**Exports of crude petroleum**

Country	2009	2010	2011	2012	2013
Albania	342 581	537 315	696 762	1 000 850	1 251 513
Belgium	2 390 390	2 593 653	2 278 613	2 085 993	2 149 195
Czech Republic	21 600	18 239	18 685	21 470	24 673
Denmark	8 520 980	7 363 518	6 899 354	5 896 071	6 000 228
Estonia	—	—	1 062	3 124	12 056
France	1 689	161 761	467 914	427 246	67 524
Germany	265 799	180 515	283 784	138 712	108 761
Hungary	...	...	...	1 353	65 964
Ireland, Republic of	11	96	46 629	62	—
Italy	619 630	423 777	713 237	920 740	573 665
Latvia	93	524	42 208	45 767	5 690
Lithuania	113 172	110 597	80 025	78 183	66 924
Netherlands	184 860	340 357	81 621	396 475	8 886 727
Norway	87 982 743	79 030 886	70 031 846	64 341 641	59 375 084
Poland	17 227	3	186 730	211 223	402 670
Romania	...	78 256	76 061	48 688	60 128
Slovakia	14 932	13 048	15 359	11 515	10 042
Spain	(a)* 400	(a)* 164 000	(a)* 300	(a)* 240 000	...
Sweden	45	2	3 105	22 040	2 797
Turkey (a)	* 2 956 000	* 1 139 000	* 702 000	* 99 000	* 2 371 000
United Kingdom	43 550 953	41 591 305	34 304 184	33 679 090	35 581 067

Note

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

**Imports of crude petroleum**

Country	2009	2010	2011	2012	2013
Albania	60 131	21 972	28 163	276	...
Austria	7 428 183	6 770 069	7 358 582	7 463 478	7 831 498
Belgium	32 376 828	35 234 358	34 059 177	35 087 312	32 729 841
Bulgaria	5 770 397	5 355 541	4 999 511	5 901 767	5 726 184
Croatia	4 044 874	3 517 452	2 838 313	2 324 685	2 461 651
Czech Republic	7 451 765	7 770 418	6 968 871	7 024 223	6 630 606
Denmark	3 320 486	2 562 669	2 625 412	3 150 386	4 274 735
Finland	11 516 562	11 211 580	11 504 505	11 088 493	11 639 775
France	70 343 956	59 946 970	62 875 826	56 890 280	55 608 981
Germany	97 648 203	91 239 711	87 338 296	92 277 990	91 465 347
Greece	2 437 424	19 064 118	13 010 825	20 102 882	20 292 638
Hungary	(a)* 6 241 000	5 310 899	5 935 772	5 489 453	5 741 800
Ireland, Republic of	2 792 968	2 931 391	2 720 968	2 843 575	2 989 606

## Imports continued

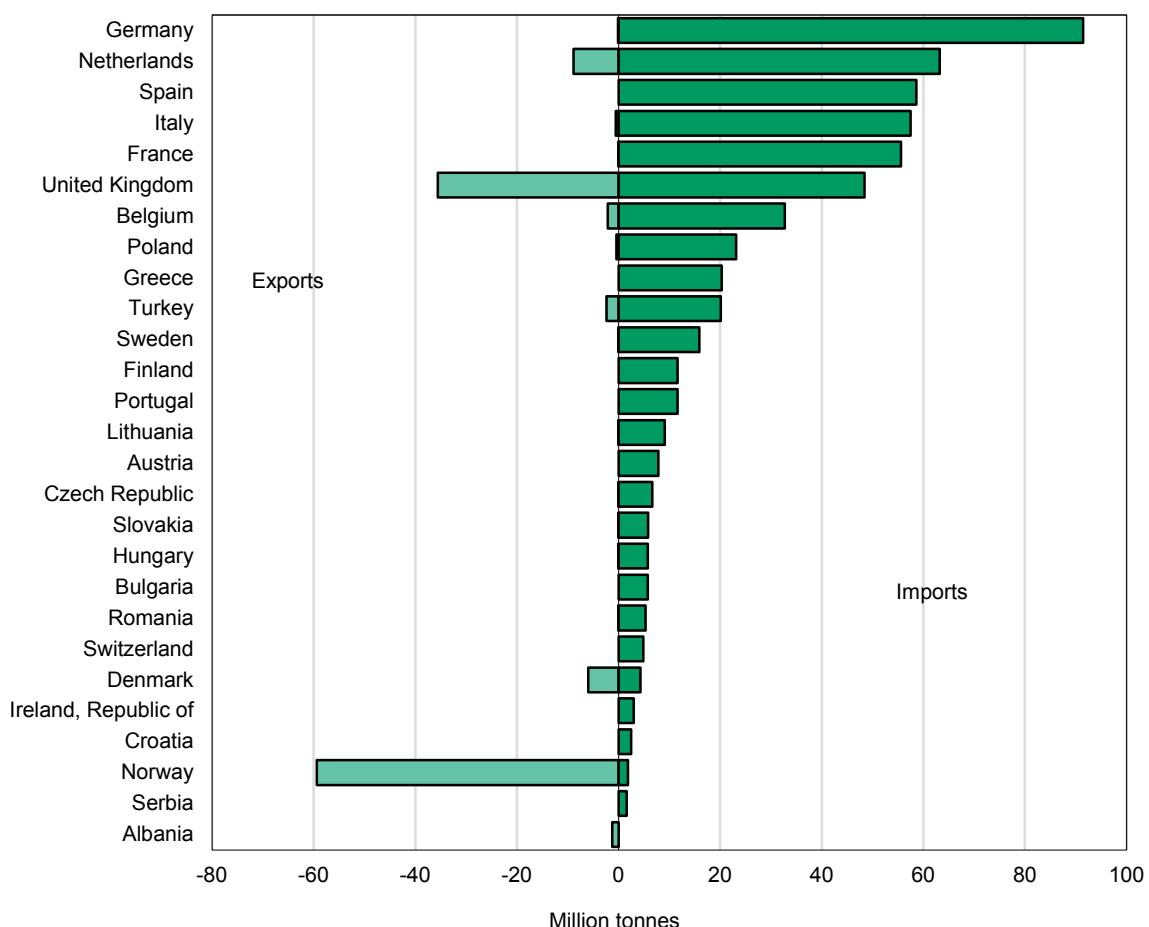
tonnes

Country	2009	2010	2011	2012	2013
Italy	76 301 866	76 729 305	72 173 373	68 812 837	57 467 112
Lithuania	8 413 067	9 018 334	8 943 996	8 523 368	9 077 111
Macedonia	992 672	852 361	685 090	258 896	51 521
Netherlands	35 086 584	60 408 191	55 108 848	63 505 928	63 201 586
Norway	1 225 514	1 508 241	1 238 531	1 305 413	1 815 872
Poland	19 959 321	22 009 801	22 870 416	24 629 744	23 141 408
Portugal	10 193 366	11 251 958	10 152 747	11 456 025	11 600 330
Romania	6 893 956	5 821 640	5 451 662	5 127 631	5 299 043
Serbia	2 280 658	1 869 881	1 497 415	1 091 762	1 596 462
Slovakia	5 787 725	5 555 541	5 988 119	5 345 149	5 821 927
Spain	52 331 324	52 714 224	51 960 524	58 285 251	58 583 900
Sweden	16 818 080	18 236 284	17 988 419	20 429 251	15 900 863
Switzerland	4 755 189	4 534 930	4 302 674	3 231 713	4 891 059
Turkey	14 219 427	16 873 392	18 049 163	19 479 238	20 091 078
United Kingdom	50 656 965	50 447 008	53 647 056	56 471 508	48 380 730

## Note

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

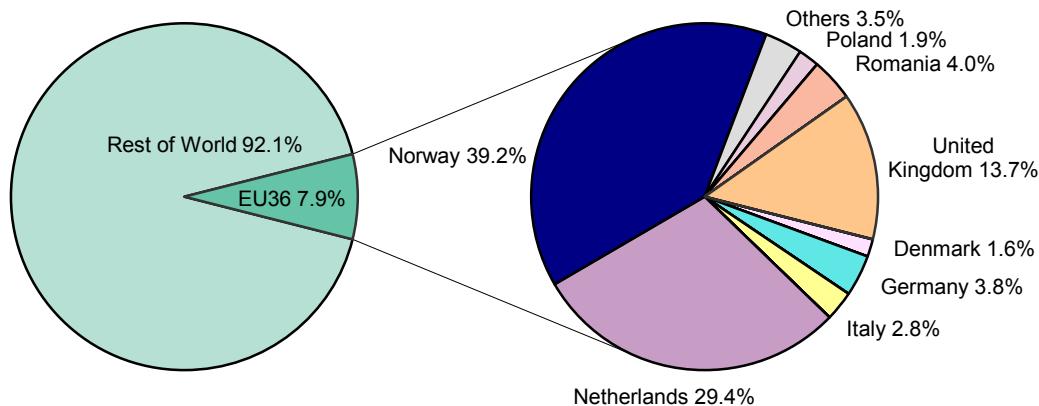
## Crude petroleum - EU36 trade in 2013



## 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).
- USA was the world's largest producer in 2013, with 20 per cent of the total world output. The second largest producer was Russia (19 per cent), followed by Iran and Qatar (five per cent each) and Canada (four per cent).

**EU36 Production of natural gas 2013**



## Production of natural gas

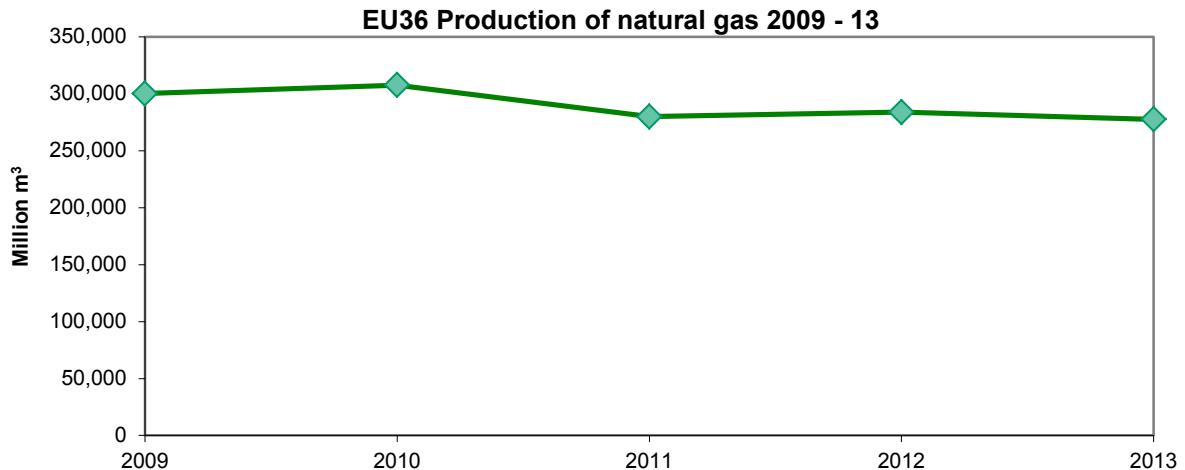
million m<sup>3</sup>

Country	2009	2010	2011	2012	2013
Albania	9	2	2	—	—
Austria	1 559	1 713	1 591	1 729	1 359
Bulgaria	15	74	443	390	282
Croatia	2 591	2 727	2 471	2 013	3 724
Czech Republic	180	201	187	204	207
Denmark	7 998	7 792	6 262	5 480	4 566
France	813	736	623	538	340
Germany	15 554	13 666	12 952	11 706	10 678
Greece	11	7	6	6	5
Hungary	2 748	2 600	2 315	2 205	2 065
Ireland, Republic of (a)	414	402	361	380	354
Italy	7 909	8 265	8 339	8 511	7 710
Netherlands	74 659	83 944	76 429	76 020	81 479
Norway	104 800	107 800	101 697	114 918	108 746
Poland	5 537	5 666	5 921	5 871	5 380
Romania	11 273	11 138	11 164	11 095	11 135
Serbia	279	423	616	672	660
Slovakia	114	106	106	93	91
Slovenia	3	7	2	1	3
Spain	19	58	58	65	62
Turkey	660	626	536	547	* 550
United Kingdom	63 022	59 674	47 911	41 396	38 090
EU36 total	300 000	308 000	280 000	284 000	277 000

### Notes

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

(a) Sales



### Exports of natural gas

tonnes

Country	2009	2010	2011	2012	2013
Austria	2 164 960	2 645 056	2 945 349	1 995 157	992 867
Belgium	10 085 049	12 091 105	24 078 554	14 990 395	21 292 092
Croatia	570 296	347 567	180 323	174 291	260 560
Czech Republic	834 462	1 318 872	1 115 748	1 034 568	965 421
Denmark	2 906 339	(a)* 1 044 000	(a)* 836 000	(a)* 729 000	(a)* 1 527 000
Finland	4 557	9 052	4 729	34	34
France	3 469 724	2 908 272	8 017 462	* 5 800 000	4 729 143
Germany	(a)* 11 354 000	11 720 448	19 128 385	24 489 252	28 752 629
Greece	...	...	2 871	6 027	2 807
Hungary	323 537	—	—	417 151	829 105
Italy	1 620 776	1 427 161	159 619	143 244	190 849
Norway	74 357 298	75 626 277	74 356 856	84 557 156	81 107 905
Portugal	254 997	389 309	875	58 753	243 548
Slovakia	334 205	1 153 269	1 439 467	1 366 942	1 052 157
Spain	61 433	200 027	555 012	1 325 072	2 483 109
Sweden	961	21	6 159	475	13 416
Turkey	665 247	590 182	(a)* 653 000	(a)* 589 000	(a)* 498 000
United Kingdom (b)	11 160 939	14 461 473	15 239 637	11 325 170	8 562 644

#### Notes

- (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 m<sup>3</sup>, multiply by 1.11

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

(b) Tonnes of oil equivalent, converted from GWh using 85.985 tonnes of oil equivalent to 1 GWh. Source: Department of Energy and Climate Change

**Imports of natural gas**

tonnes

Country	2009	2010	2011	2012	2013
Austria	7 566 509	8 697 934	9 390 448	10 043 171	7 317 311
Belgium	14 431 349	14 144 704	13 250 074	12 979 827	12 670 698
Croatia	738 109	587 846	579 005	971 008	1 032 104
Czech Republic	7 080 247	7 471 522	7 175 884	5 652 749	6 622 377
Denmark	...	103 236	198 509	119	683
Estonia	477 844	491 806	478 288	452 299	535 232
Finland	—	3 252 037	3 543 126	(a)* 3 000 000	2 152 696
France	32 440 935	41 624 014	50 897 525	(a)* 37 000 000	(a)* 34 000 000
Germany	78 990 573	82 784 241	87 762 701	92 961 372	98 149 729
Greece	3 086 243	3 520 510	4 233 660	3 927 266	2 835 500
Hungary	6 238 749	5 858 735	5 788 348	5 509 482	6 064 192
Ireland, Republic of	4 192 236	4 738 918	4 430 360	4 282 222	4 372 123
Italy	52 879 546	59 616 091	50 506 295	48 666 707	43 720 221
Latvia	1 047 240	1 160 668	1 099 045	1 034 139	1 081 866
Lithuania	1 761 529	2 048 906	2 385 268	2 265 929	1 954 603
Luxembourg	92 122	3 591	3 077	1 441	10 903
Macedonia	53 192	79 059	93 816	96 877	93 567
Netherlands (a)	* 9 512 000	* 11 044 000	* 12 153 000	* 10 107 568	* 2 884 000
Norway	231	4 393	1 005	444	36
Portugal	3 770 943	3 849 819	3 543 064	3 231 198	3 456 751
Romania	1 451 767	* 2 000 000	3 283 138	(a)* 200 000	(a)* 260 000
Serbia	1 046 465	1 346 955	1 362 390	1 289 674	1 201 886
Slovakia	4 820 301	5 765 254	5 747 975	5 577 333	5 378 551
Slovenia	748 930	828 674	736 641	662 178	719 982
Spain	28 024 572	27 795 263	27 529 122	26 622 307	26 177 038
Sweden	860 497	1 066 174	899 467	816 561	804 417
Switzerland	2 450 414	2 759 930	2 521 494	2 644 533	2 857 193
United Kingdom (b)	38 706 148	50 244 561	50 045 076	46 191 572	45 144 017

## Notes

- (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 m<sup>3</sup>, multiply by 1.11

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

(b) Tonnes of oil equivalent, converted from GWh using 85.985 GWh to 1 tonne of oil equivalent. Source: Department of Energy and Climate Change

## Phosphate rock

- Phosphate rock is the term given to a range of phosphorus-bearing minerals that are commercially exploited. Phosphate rock is chiefly used to produce fertilisers. The remainder is used in the manufacture of detergents, animal feedstock and many other minor applications.
- China was the world's largest producer in 2013, with 46 per cent of the total world output. The second largest producer was USA (14 per cent), followed by Morocco (11 per cent), Peru (six per cent) and Russia (five per cent).

### Production of phosphate rock

Country	2009	2010	2011	2012	2013
Finland	658 347	817 289	869 694	858 005	877 189

### Exports of phosphate rock

Country	2009	2010	2011	2012	2013
Belgium	15 792	30 744	62 021	63 004	66 964
Finland	3 796	52 006	117 304	43 597	—
France (a)	* 22 000	* 18 000	* 19 000	* 31 000	* 33 000
Germany	137	489	1 641	1 742	791
Italy	6 416	10 751	16 139	8 370	8 614
Lithuania	—	—	—	20 000	—
Macedonia	1 233	1 056	651	709	529
Netherlands	11 807	138 239	166 704	162 952	117 248
Norway	25	2	5	6 866	17 506
Poland	4	43	434	226	1 284
Slovenia	56 973	153 182	164 440	172 405	153 665
Spain	1 565	1 888	10 985	620	269
Sweden	1 228	125	2 253	1 826	1 558
Turkey	159	620	1 454	937	105 453

Note

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

### Imports of phosphate rock

Country	2009	2010	2011	2012	2013
Austria	(a)* 58 000	(a)* 160 000	61 030	(a)* 6 500	(a)* 106
Belgium	579 326	1 114 210	1 076 842	1 038 397	946 026
Bulgaria	309 564	455 539	570 288	535 571	410 404
Croatia	117 441	51 010	67 007	56 303	48 227
Czech Republic	543	9 917	13 163	21	35
Finland	(a)* 1 510	28 144	10 181	(a)* 52	41 664
France	130 323	305 259	264 541	312 023	229 553
Germany	28 863	120 580	117 971	133 355	85 115
Greece	192 135	252 644	220 591	140 205	156 936
Hungary	37	45	1 028	312	215
Ireland, Republic of	85	5 328	264	327	55
Italy	89 245	231 808	243 718	196 478	140 749
Lithuania	1 162 070	1 354 093	1 254 579	1 216 427	1 283 243
Netherlands	192 355	779 354	779 537	679 557	287 737
Norway	403 098	9 638	6 499	—	—
Poland	458 923	1 299 106	1 434 124	1 237 885	957 111
Portugal	44 189	93 348	91 703	105 186	73 503
Romania	103 500	233 377	254 061	229 060	63 150
Serbia	3 974	20 394	60 024	85 674	97 293
Slovakia	258	1 688	1 662	1 299	(a)* 1 000
Slovenia	56 969	153 160	164 442	172 406	153 649
Spain	438 755	1 017 820	377 348	345 571	312 525

Phosphate rock

Imports continued

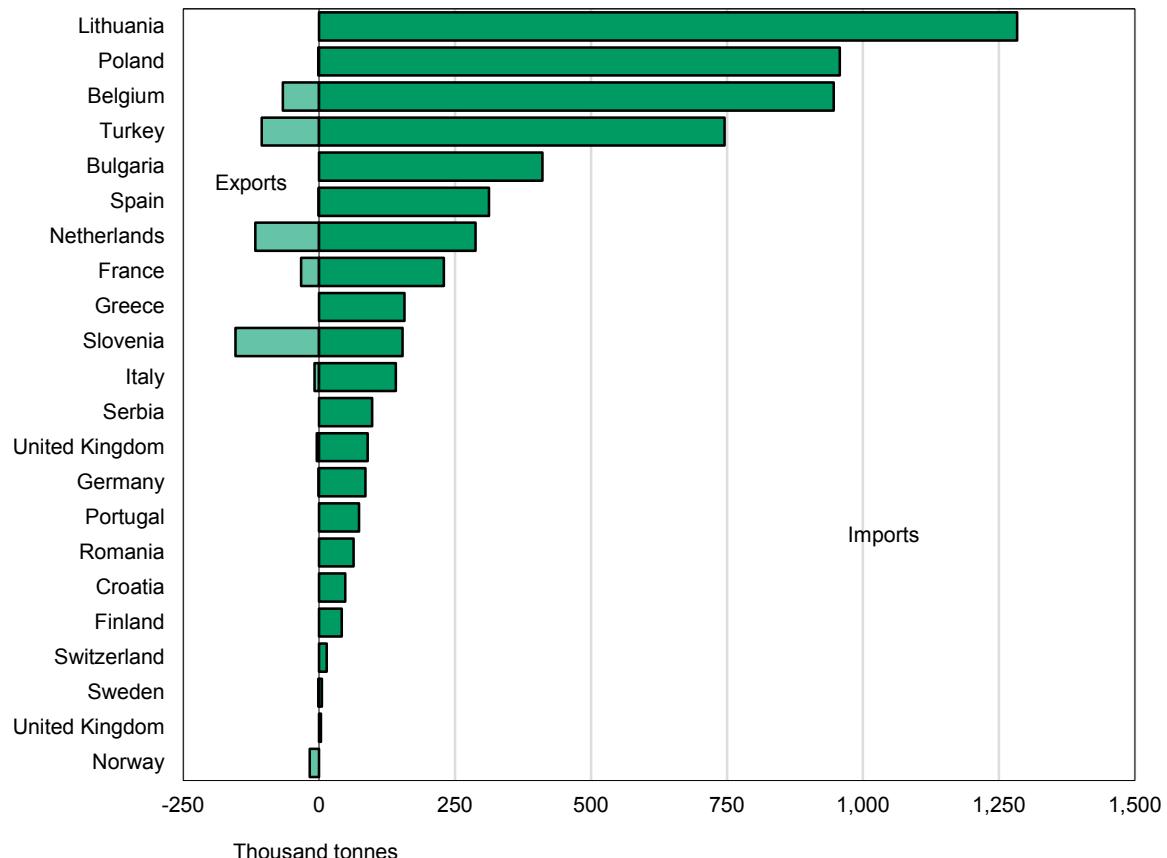
tonnes

Country	2009	2010	2011	2012	2013
Sweden	2 918	3 869	12 968	10 687	4 831
Switzerland	585	3 657	20 007	15 024	13 770
Turkey	707 595	686 966	814 382	711 627	745 424
United Kingdom	5 600	9 873	15 885	15 314	3 186

Note

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

Phosphate rock - EU36 trade in 2013



## 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.
- South Africa was the world's largest producer of platinum in 2013, with 74 per cent of the total world output. The second largest producer was Russia (13 per cent), followed by Canada (five per cent), Zimbabwe (four per cent) and USA (two per cent).
- Russia was the world's largest producer of palladium in 2013, with 42 per cent of the total world output. The second largest producer was South Africa (38 per cent), followed by Canada (eight per cent), USA (six per cent) and Zimbabwe (three per cent).
- South Africa was also the largest producer of other platinum group metals in 2013, with 89 per cent of the world output. Other producers were Russia (five per cent), Zimbabwe (three per cent), Columbia (also three per cent) and Canada (less than one per cent).

### Mine production of platinum group metals

kilograms (metal content)

Country	2009	2010	2011	2012	2013
Finland					
Platinum	—	—	—	429	946
Palladium	—	—	—	379	766
Poland					
Platinum	30	30	* 30	* 30	* 30
Palladium	20	20	* 20	* 20	* 20
Serbia					
Platinum	12	—	6	3	2
Palladium	38	22	20	22	25
EU36 total	100	70	80	880	1 790

### Exports of platinum group metals

kilograms

Country	2009	2010	2011	2012	2013
Austria					
Platinum and platinum metals	£ 38 485 000	£ 83 434 000	£ 110 119 000	£ 105 895 000	£ 101 611 000
Waste and scrap	£ 295 000	£ 1 070 000	£ 757 000	£ 733 000	£ 697 000
Belgium					
Platinum and platinum metals	10 700	7 500	8 900	5 300	5 400
Waste and scrap	315 200	497 000	218 400	31 200	9 300
Bulgaria					
Waste and scrap (a)	* 44 000	* 16 000	* 23 000	* 10 000	* 36 851
Croatia					
Waste and scrap	27 959	53 996	24 958	36 441	35 000
Czech Republic					
Platinum and platinum metals	5 200	6 800	2 900	2 800	3 500
Waste and scrap	—	—	15 300	—	4 600
Denmark					
Platinum and platinum metals	7 000	200	100	200	600
Estonia					
Platinum and platinum metals	7	...	—	654	500
Waste and scrap	800	7 700	9 100	8 800	103 800
Finland					
Platinum and platinum metals	34 126	6 238	6 684	3 927	8 475
Waste and scrap	267	723	75	454	37 096
France					
Platinum	1 140	1 884	2 566	4 139	4 662
Platinum metals	1 396	914	1 255	2 558	3 281
Waste and scrap	609 699	179 798	270 355	352 702	521 192

Platinum metals

Exports continued

kilograms

Country	2009	2010	2011	2012	2013
Germany					
Palladium	43 329	35 462	43 952	43 524	44 596
Platinum	36 204	24 597	24 994	23 627	25 030
Other platinum metals	65 029	33 299	28 158	21 018	23 890
Waste and scrap	3 352 271	5 997 852	6 960 588	6 047 948	6 088 890
Greece					
Platinum and platinum metals	589	345	106	883	37
Waste and scrap	...	—	...	6 300	32 500
Hungary					
Waste and scrap	...	92 300	91 200	149 100	36 600
Ireland, Republic of					
Platinum and platinum metals	* 221	* 213	* 295	* 268	549
Waste and scrap	8 544	5 440	1 763	3 496	1 775
Italy					
Platinum	10 043	10 408	9 982	10 071	9 791
Platinum metals	8 898	12 684	14 436	16 259	23 339
Waste and scrap	311	634	37 750	2 899	6 425
Lithuania					
Waste and scrap	101 900	193 600	126 800	...	—
Luxembourg					
Platinum and platinum metals	149	243	197	469	477
Waste and scrap	24 700	5 600	16 000	...	100
Netherlands					
Platinum	£ 59 804 000	£ 14 634 000	£ 9 386 000	£ 10 282 000	£ 6 146 000
Platinum metals	£ 10 383 000	£ 7 953 000	£ 7 261 000	£ 5 329 000	£ 6 817 000
Waste and scrap	* 163 160	1 877	220	5 714	1 445
Norway					
Platinum and platinum metals	12 341	9 714	11 951	13 707	10 088
Waste and scrap	35 829	157 937	36 399	63 560	19 969
Poland					
Platinum and platinum metals	47 400	1 100	2 400	400	900
Waste and scrap	1 600	300	3 400	63 900	425 200
Portugal					
Waste and scrap	—	...	15 100	3 200	1 600
Slovakia					
Platinum and platinum metals	1 700	5 800	84 100	29 400	1 800
Waste and scrap	423	111	764	97	152
Slovenia					
Platinum and platinum metals	430	77	5	7	151
Spain					
Platinum and platinum metals	1 672	2 347	1 255	21 889	467 717
Waste and scrap	225 411	291 877	163 420	68 805	106 813
Sweden					
Platinum and platinum metals	£ 177 000	£ 429 000	£ 1 203 000	£ 801 000	£ 1 550 000
Waste and scrap	40 400	69 000	43 600	39 100	24 900
Switzerland					
Palladium	57 571	70 662	60 859	56 950	50 029
Platinum	61 433	72 006	63 853	64 331	53 309
Other platinum metals	192	464	494	836	977
Waste and scrap	362 419	314 061	289 174	241 307	365 333
Turkey					
Platinum and platinum metals	3 142	5 124	2 765	589	4 743
Waste and scrap	9 967	4 491	5 332	13 244	550
United Kingdom					
Palladium	53 091	42 864	50 917	55 864	55 322
Platinum	43 177	24 464	37 836	55 114	42 712
Other platinum metals	20 044	23 021	17 319	18 945	17 843
Waste and scrap	4 273 222	527 862	287 198	1 066 729	1 193 612

Notes

- (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 a value. In these cases the national currency figure has been converted to £ sterling. See explanatory notes at the front of this volume regarding currency conversions.

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

**Imports of platinum group metals**

kilograms

Country	2009	2010	2011	2012	2013
Austria					
Platinum and platinum metals	1 600	1 400	4 100	500	2 600
Waste and scrap	—	100	21 400	1 100	700
Belgium					
Platinum and platinum metals	1 200	1 000	400	400	10 418
Cyprus					
Platinum and platinum metals (a)	...	* 900	* 400	* 11	* 340
Czech Republic					
Platinum	81 500	25 000	2 100	13 100	1 200
Platinum metals	600	17 700	100	100	300
Waste and scrap	772	7 835	54 300	169 600	189 400
Denmark					
Platinum and platinum metals	4 699	2 300	796	500	1 600
Estonia					
Waste and scrap	...	...	...	—	59 600
Finland					
Platinum and platinum metals	284	385	356	57 429	107 271
France					
Platinum	3 633	4 516	4 010	4 606	43 645
Palladium	5 177	2 706	25 607	7 919	10 272
Other platinum metals	171	300	270	264	1 308
Waste and scrap	359 138	143 885	296 178	122 641	411 440
Germany					
Platinum	42 452	40 983	38 019	32 874	33 128
Palladium	47 092	53 479	50 926	47 449	41 511
Other platinum metals	12 120	19 655	21 319	18 444	15 626
Waste and scrap	6 224 314	8 069 744	7 290 427	8 020 283	7 091 894
Greece					
Platinum and platinum metals	100	500	1 400	900	400
Hungary					
Platinum and platinum metals	26	1 300	84	—	38
Iceland					
Platinum and platinum metals	158	117	216	150	166
Ireland, Republic of					
Platinum and platinum metals	121 381	9 470	7 826	13 879	15 171
Italy					
Platinum	13 627	12 545	10 630	7 417	8 436
Palladium	13 047	10 019	9 171	7 855	6 411
Other platinum metals	1 909	1 694	1 084	1 244	782
Waste and scrap	8 178	16 918	1 468	3 103	2 150
Latvia					
Platinum and platinum metals	...	...	100	200	100
Waste and scrap	(a)* 3 900	(a)* 400	...	...	—
Lithuania					
Waste and scrap	22 700	76 400	64 600	4 800	59 500
Luxembourg					
Platinum and platinum metals	1 702	1 633	438	329	301
Macedonia					
Platinum and platinum metals	—	2 420	7 649	9 910	13 443
Netherlands					
Platinum	£ 78 613 000	£ 25 740 000	£ 73 911 000	£ 79 002 000	£ 15 407 000
Platinum metals	£ 11 659 000	£ 13 014 000	£ 54 486 000	£ 31 439 659	£ 10 916 000
Waste and scrap	111	260 515	411 332	5 883	116 333
Norway					
Platinum and platinum metals	1 005	1 425	1 430	758	955
Waste and scrap	930	1 362	1 160	1 403	1 225
Poland					
Platinum and platinum metals	31 300	5 100	2 700	1 800	300
Waste and scrap	36	19	1	100	33 000
Portugal					
Platinum and platinum metals	146	796	245	* 800	* 900
Waste and scrap	...	...	...	—	3 600
Slovakia					
Platinum	1 533 869	1 625 761	2 662 700	2 339 500	1 544 400
Palladium	1 191	2 702	4 400	4 800	500

Platinum metals

Imports continued

kilograms

Country	2009	2010	2011	2012	2013
Spain					
Platinum and platinum metals (a)	* 3 000	* 3 500	* 3 000	* 2 500	* 3 000
Waste and scrap	29 448	29 183	17 845	13 104	5 866
Sweden					
Platinum and platinum metals	£ 5 934 000	£ 7 551 000	£ 8 430 000	£ 12 301 000	£ 8 081 000
Waste and scrap	80 200	1 500	19 800	12 700	1 100
Switzerland					
Platinum	91 048	49 089	57 415	39 955	38 007
Palladium	50 258	41 454	43 310	27 123	28 836
Other platinum metals	1 319	813	873	1 065	1 488
Waste and scrap	688 973	912 680	459 360	413 819	410 984
Turkey					
Platinum and platinum metals	235	200	213	240	354
United Kingdom					
Platinum	30 339	58 659	46 092	54 073	39 973
Palladium	36 652	73 184	42 167	59 803	49 348
Other platinum metals	6 713	9 487	7 768	4 374	6 953
Waste and scrap	1 100 117	819 769	1 556 736	2 163 943	1 186 431

Notes

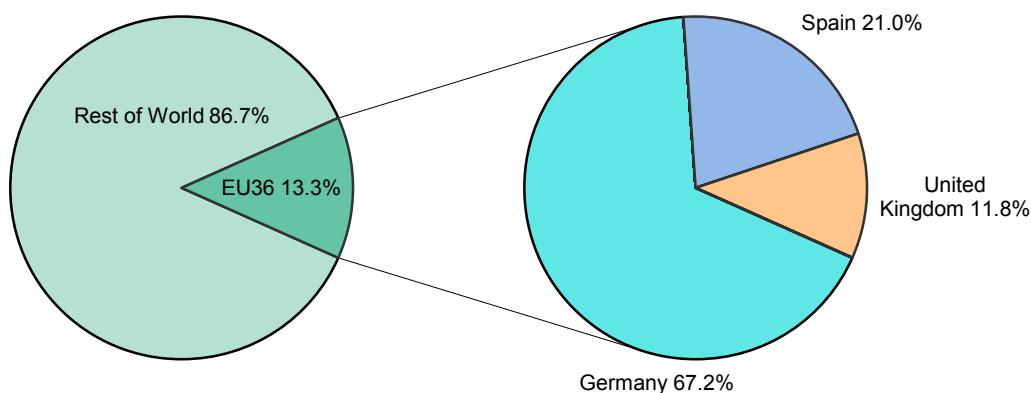
- (1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys  
(2) Kilograms have been used as the unit in this table except where the only obtainable figure is a value. In these cases the national currency figure has been converted to £ sterling. See explanatory notes at the front of this volume regarding currency conversions.

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

## 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.
- Canada was the world's largest producer in 2013, with 27 per cent of the total world output. The second largest producer was Russia (16 per cent), followed by Belarus (11 per cent) and China (ten per cent).

**EU36 Production of potash 2013**

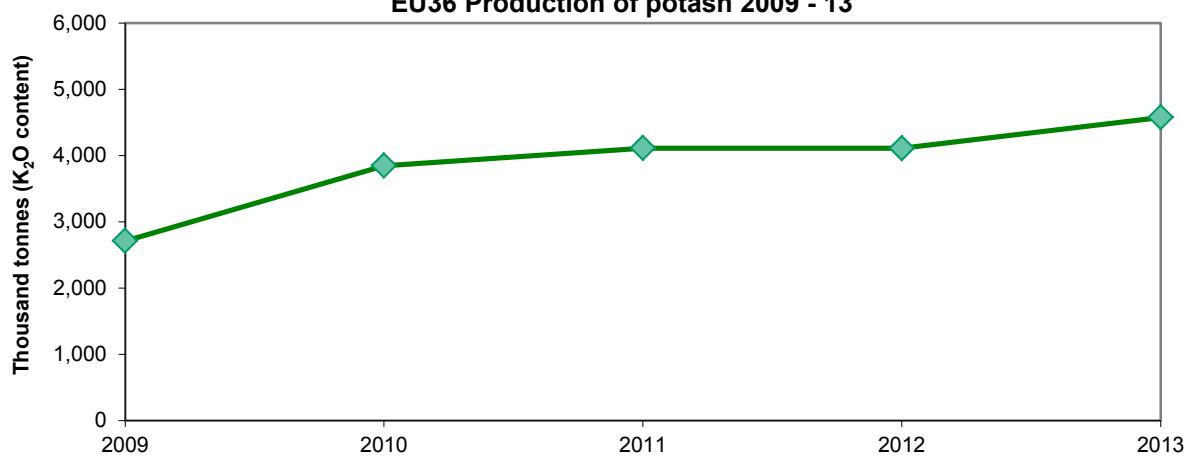


## Production of potash

tonnes ( $K_2O$  content)

Country	2009	2010	2011	2012	2013
Germany Potassic salts	1 825 139	3 023 941	3 214 696	3 149 386	3 075 201
Spain Chloride	481 455	418 778	436 026	421 652	961 865
United Kingdom Chloride	* 403 800	* 403 800	* 462 000	* 540 000	* 540 000
EU36 total	2 710 000	3 847 000	4 113 000	4 111 000	4 577 000

**EU36 Production of potash 2009 - 13**



## Potash

**Exports of potash**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Potassic fertilisers	13 843	20 259	19 304	21 653	25 037
Belgium					
Chloride	58 784	64 018	100 097	217 498	65 796
Croatia					
Chloride	1	3	212	217	1 033
Czech Republic					
Potassic fertilisers	6 843	4 235	4 780	3 839	3 320
Denmark					
Chloride	59	69	2 123	2 579	2 628
Other potassic fertilisers	504	683	8 898	7 664	5 891
Estonia					
Potassic fertilisers	12	48	693	242	131
Finland					
Sulphate	45 800	53 850	* 61 000	* 57 000	* 39 000
France					
Sulphate	18 248	17 085	25 238	17 335	3 224
Chloride	9 858	36 215	15 947	65 461	66 100
Other potassic fertilisers	414	1 788	2 772	3 714	2 660
Germany					
Potassic fertilisers (a)(b)	1 825 139	3 023 941	3 214 696	3 149 386	3 075 201
Greece					
Potassic fertilisers	1 369	1 294	431	336	575
Hungary					
Potassic fertilisers	9 916	5 697	5 805	7 664	13 513
Italy					
Potassic fertilisers	12 725	13 629	8 702	8 551	9 426
Latvia					
Chloride	0	39	28	1 427	137
Potassic fertilisers	379	357	535	1 344	1 070
Lithuania					
Potassic fertilisers	18 714	6 517	4 256	7 989	6 381
Netherlands					
Sulphate	4 431	7 854	45 711	27 002	27 259
Chloride	133 012	174 453	227 456	395 684	327 663
Other potassic fertilisers	2 680	15 619	45 766	31 642	33 173
Poland					
Potassic fertilisers	13 279	10 687	10 078	3 999	15 678
Portugal					
Potassic fertilisers	402	612	895	3 901	10 878
Romania					
Chloride	2 562	5 218	303	390	99
Serbia					
Potassic fertilisers	163	690	3 672	3 546	2 288
Slovakia					
Potassic fertilisers	74	51	580	183	859
Spain					
Sulphate	2 540	6 474	3 713	4 873	4 150
Chloride	319 549	609 607	688 599	733 789	852 298
Other potassic fertilisers	1 352	2 365	2 385	3 020	1 879
Sweden					
Sulphate	59 252	93 796	84 381	69 205	79 724
Turkey					
Potassic fertilisers	6 438	6 533	6 504	3 654	6 620
United Kingdom					
Sulphate	443	71	108	118	428
Chloride (c)	* 205 600	* 339 000	* 429 000	* 440 000	* 504 000
Other potassic fertilisers	228	420	5 283	15 732	29 558

## Notes

(a) K<sub>2</sub>O content

(b) Including sulphate, chloride and other potassic fertilisers

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

**Imports of potash**

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Other potassic fertilisers	10	650	88	48	30
Austria					
Sulphate	4 241	15 074	9 595	15 636	14 738
Chloride	28 000	105 299	102 028	132 302	125 318
Other potassic fertilisers	9 139	18 201	9 418	12 312	16 730
Belgium					
Sulphate	73 074	129 152	120 335	15 461	7 775
Chloride	428 365	1 173 213	1 259 385	740 726	717 841
Other potassic fertilisers	7 668	13 668	13 771	3 794	2 412
Bulgaria					
Potassic fertilisers	1 970	7 985	3 210	9 948	15 194
Croatia					
Chloride	10 538	132 471	102 879	115 375	75 526
Other potassic fertilisers	1 091	1 749	3 717	1 314	2 233
Czech Republic					
Chloride	36 125	82 710	87 248	75 651	66 418
Other potassic fertilisers	2 430	4 773	3 410	3 377	4 381
Denmark					
Sulphate	1 019	1 910	9 335	11 225	15 644
Chloride	4 917	36 608	42 472	30 823	41 611
Other potassic fertilisers	11 052	14 967	8 473	4 816	3 951
Estonia					
Chloride	1	1 517	1 898	2 438	3 120
Other potassic fertilisers	5	57	1 491	1 960	372
Finland					
Chloride (a)	84 600	194 800	211 100	207 500	232 400
Other potassic fertilisers	74	117	4 602	1 100	9
France					
Sulphate	12 477	51 068	40 885	75 743	86 471
Chloride	242 713	626 635	597 658	901 544	826 150
Other potassic fertilisers	7 287	13 998	6 814	13 696	15 213
Germany					
Sulphate	13 194	20 786	22 490	21 559	19 889
Chloride	75 154	131 645	131 244	146 673	172 910
Other potassic fertilisers	633	8 065	11 726	7 729	14 129
Greece					
Sulphate	14 325	39 155	26 686	26 621	24 778
Chloride	20 773	35 176	27 276	19 735	19 026
Other potassic fertilisers	107	3 240	8 166	2 947	2 276
Hungary					
Chloride	38 441	90 063	98 351	106 292	127 342
Other potassic fertilisers	4 372	5 760	6 161	5 449	5 141
Ireland, Republic of					
Chloride	29 932	99 181	95 816	85 536	146 361
Other potassic fertilisers	3 390	7 570	2 011	5 249	6 697
Italy					
Sulphate	31 910	88 593	58 418	52 568	59 966
Chloride	144 086	367 465	287 984	285 476	283 353
Other potassic fertilisers	3 413	8 415	1 368	511	416
Latvia					
Chloride	—	6 414	3 468	8 694	9 043
Lithuania					
Sulphate	2 617	2 581	7 069	6 267	4 521
Chloride	6 631	32 552	35 602	52 573	46 394
Other potassic fertilisers	87	4	112	1 837	98
Luxembourg					
Potassic fertilisers	801	1 681	1 167	1 252	1 832
Netherlands					
Sulphate	28 984	21 982	56 536	66 497	118 050
Chloride	204 377	430 138	756 966	905 233	851 210
Other potassic fertilisers	3 466	1 542	26 231	24 569	80 844
Norway					
Sulphate	123 549	(b)* 99 000	(b)* 65 000	(b)* 27 782	(b)* 49 000
Chloride	199 385	(b)* 377 000	(b)* 354 000	(b)* 395 133	(b)* 371 000
Other potassic fertilisers	509	612	287	320	235

Potash

Imports continued

tonnes

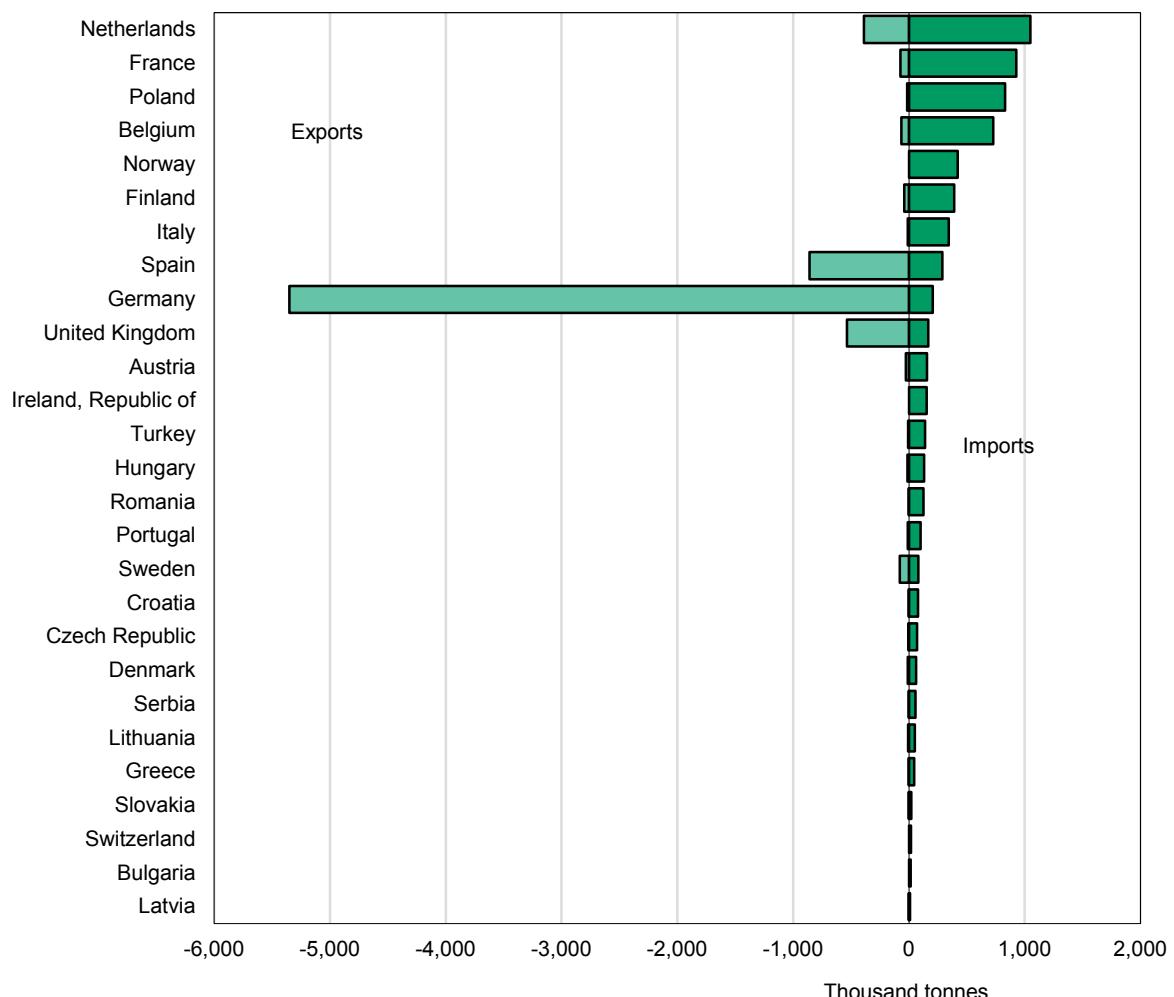
Country	2009	2010	2011	2012	2013
Poland					
Sulphate	10 919	19 155	23 281	23 883	28 911
Chloride	194 900	757 987	769 256	779 023	784 534
Other potassic fertilisers	3 470	4 442	10 317	11 544	17 079
Portugal					
Sulphate	1 574	3 840	4 405	10 798	27 020
Chloride	25 525	50 687	65 352	82 364	64 943
Other potassic fertilisers	5 389	1 899	2 596	5 395	8 477
Romania					
Sulphate	19 592	13 726	6 936	17 559	32 233
Chloride	5 119	56 922	46 842	21 354	46 300
Potassic fertilisers	25 085	71 073	54 460	40 192	45 822
Other potassic fertilisers	374	425	683	1 279	1 161
Serbia					
Chloride	10 710	71 906	53 113	69 712	57 629
Slovakia					
Chloride	4 597	22 561	24 631	23 613	18 670
Other potassic fertilisers	689	2 913	2 260	3 204	1 032
Slovenia					
Potassic fertilisers	766	1 919	2 076	1 447	1 574
Spain					
Sulphate	21 022	40 507	39 133	43 865	46 773
Chloride	71 444	211 595	257 920	232 397	242 393
Other potassic fertilisers	3 721	1 607	1 283	968	426
Sweden					
Sulphate	965	1 789	2 551	1 340	1 855
Chloride	4 769	55 671	79 863	81 282	74 406
Other potassic fertilisers	4 211	5 858	9 276	8 187	5 193
Switzerland					
Sulphate	3 967	4 914	5 899	6 638	5 248
Chloride	7 595	16 865	14 730	11 866	12 201
Other potassic fertilisers	1 676	2 049	1 159	1 136	990
Turkey					
Sulphate	11 576	34 986	28 989	36 459	22 799
Chloride	50 634	82 923	93 471	94 930	116 098
Other potassic fertilisers	303	1 075	109	107	113
United Kingdom					
Sulphate	15 766	15 766	13 232	10 795	10 905
Chloride	80 842	270 096	153 141	161 388	149 121
Other potassic fertilisers	10 422	10 565	2 373	7 899	8 484

Notes

(a) K<sub>2</sub>O content

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

## Potash - EU36 trade in 2013



## Rare earth elements

- Rare earth elements (REE), for which the most commercially important minerals are bastnaesite and monazite, are a group of 17 metallic elements of which cerium, lanthanum and neodymium are used in the largest quantities. Rare earths are widely used in automotive catalysts, as metallurgical additives and in glass and ceramics. An increasingly important use of REE, particularly neodymium, is in high-strength permanent magnets for computer hard disk drives, hybrid and electric vehicles, and wind turbines.
- Production of rare earths is limited to only a few countries of which China is the largest producer (95 per cent of the total world output in 2013). The second largest producer in 2013 was USA (two per cent), followed by Russia and Australia (one per cent each). Minor amounts are also produced in Malaysia and Brazil.

### Exports of rare earths

Country	2009	2010	2011	2012	2013
Austria					tonnes
Metals	244	258	452	500	532
Cerium compounds	2 035	1 936	1 167	888	1 102
Other rare earth compounds	8 437	8 658	4 902	5 696	6 166
Belgium					
Metals	273	476	110	134	171
Rare earth compounds	335	332	265	141	180
Czech Republic					
Rare earth compounds	3	6	2	—	2
Estonia					
Metals	1	1	0	42	77
Rare earth compounds	2 679	1 686	1 124	3 210	3 482
Finland					
Rare earth compounds	0	44	67	0	84
France					
Metals	3	8	11	12	14
Rare earth compounds	1 244	3 411	2 789	2 097	1 878
Germany					
Metals	19	25	29	10	9
Rare earth compounds	652	601	660	699	319
Ferro-cerium and other pyrophoric alloys	...	...	5	3	6
Ireland, Republic of					
Rare earth compounds	7	1	1	4	0
Ferro-cerium and other pyrophoric alloys	...	...	...	...	14
Italy					
Metals	78	101	145	111	100
Rare earth compounds	167	236	322	353	319
Ferro-cerium and other pyrophoric alloys	...	...	3	6	4
Lithuania					
Cerium compounds	8	12	10	7	9
Netherlands					
Metals	* 135	86	70	163	2 688
Rare earth compounds	* 150	177	327	341	256
Ferro-cerium and other pyrophoric alloys	44	49	18	32	14
Norway					
Metals	105	—	19	5	54
Rare earth compounds	21	30	23	13	35
Poland					
Cerium compounds	4	7	86	1	9
Other rare earth compounds	—	4	66	3	4
Portugal					
Other rare earth compounds	20	9	2	—	0
Slovenia					
Metals	...	...	7	2	...
Spain					
Metals	—	97	51	1	2
Cerium compounds	13	51	62	8	25
Other rare earth compounds	5	34	32	9	9
Ferro-cerium and other pyrophoric alloys	...	...	...	...	11
Sweden					
Cerium compounds	1	9	* 0	5	3

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Switzerland					
Cerium compounds	1	2	9	5	3
Other rare earth compounds	26	1	1	5	1
Turkey					
Cerium compounds	8	5	10	5	9
Ferro-cerium and other pyrophoric alloys	...	...	...	...	50
United Kingdom					
Metals	54	46	272	54	65
Cerium compounds	105	182	149	273	48
Other rare earth compounds	459	614	347	214	220
Ferro-cerium and other pyrophoric alloys	6	37	48	79	40

## Notes

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

## Imports of rare earths

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metals	269	550	325	442	595
Cerium compounds	1 985	1 766	1 310	696	979
Other rare earth compounds	2 471	3 375	1 646	802	1 630
Belgium					
Metals	323	411	205	136	205
Cerium compounds	419	323	289	146	204
Other rare earth compounds	292	172	58	41	52
Ferro-cerium and other pyrophoric alloys	62	2	0	7	0
Croatia					
Ferro-cerium and other pyrophoric alloys	87	106	133	116	52
Cyprus					
Cerium compounds	0	24	0	16	...
Ferro-cerium and other pyrophoric alloys	...	18	...	—	—
Czech Republic					
Metals	0	13	35	2	...
Rare earth compounds	124	131	117	344	190
Ferro-cerium and other pyrophoric alloys	5	6	2	1	1
Denmark					
Cerium compounds	734	15	16	19	16
Other rare earth compounds	36	19	6	3	20
Estonia					
Cerium compounds	0	24	501	545	300
Other rare earth compounds	4 125	2 105	3 616	4 499	4 494
Finland					
Cerium compounds	57	72	52	18	23
Other rare earth compounds	9	8	14	5	3
Ferro-cerium and other pyrophoric alloys	1	2	2	10	12
France					
Metals	402	372	506	280	338
Cerium compounds	6 112	5 687	1 867	3 940	* 1 900
Other rare earth compounds	874	1 408	1 359	1 301	1 396
Ferro-cerium and other pyrophoric alloys	26	83	388	940	242
Germany					
Metals	106	459	263	290	267
Cerium compounds	448	1 006	844	553	862
Other rare earth compounds	7 755	9 999	6 904	4 155	5 862
Ferro-cerium and other pyrophoric alloys	2	6	14	11	13
Greece					
Metals	68	...	...	—	...
Rare earth compounds	—	3	4	11	10
Ferro-cerium and other pyrophoric alloys	0	65	62	169	20
Hungary					
Cerium compounds	36	38	33	31	20
Other rare earth compounds	26	31	23	31	11

Rare earths

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Iceland					
Metals	87	350	77	...	...
Ireland, Republic of					
Rare earth compounds	67	8	85	3	2
Italy					
Metals	87	124	108	30	62
Cerium compounds	414	597	616	337	565
Other rare earth compounds	258	303	307	257	232
Ferro-cerium and other pyrophoric alloys	5	10	3	3	1
Lithuania					
Rare earth compounds	3	14	11	10	11
Luxembourg					
Rare earth compounds	2	2	5	2	1
Ferro-cerium and other pyrophoric alloys	—	11	0	—	—
Netherlands					
Metals	* 200	48	18	99	75
Cerium compounds	71	88	223	396	268
Other rare earth compounds	* 1 100	568	173	742	878
Ferro-cerium and other pyrophoric alloys	6	2	1	23	14
Norway					
Metals	24	148	552	438	439
Cerium compounds	9	1	13	3	—
Other rare earth compounds	0	8	9	9	17
Poland					
Metals	2	5	0	2	27
Cerium compounds	43	134	101	68	104
Other rare earth compounds	16	48	32	13	13
Portugal					
Metals	...	1	87	—	1
Cerium compounds	11	7	8	15	6
Other rare earth compounds	2	5	18	3	3
Romania					
Rare earth compounds	5	5	1	2	1
Slovakia					
Rare earth compounds	8	8	10	7	10
Slovenia					
Metals	55	98	26	55	61
Rare earth compounds	2	3	3	9	5
Spain					
Metals	108	421	9	19	93
Cerium compounds	443	543	636	455	729
Other rare earth compounds	140	216	102	155	438
Ferro-cerium and other pyrophoric alloys	19	41	33	22	35
Sweden					
Metals	28	37	48	72	62
Cerium compounds	47	47	55	31	1
Other rare earth compounds	8	7	9	16	37
Switzerland					
Metals	1	4	5	21	11
Cerium compounds	15	31	18	15	11
Other rare earth compounds	15	16	12	17	40
Ferro-cerium and other pyrophoric alloys	44	...	5	3	23
Turkey					
Metals	9	14	13	10	5
Cerium compounds	200	233	128	120	160
Other rare earth compounds	4	13	8	4	11
Ferro-cerium and other pyrophoric alloys	10	...	...	13	18
United Kingdom					
Metals	99	119	79	65	256
Cerium compounds	612	1 119	1 713	485	633
Other rare earth compounds	103	322	629	518	1 308
Ferro-cerium and other pyrophoric alloys	148	150	79	14	50

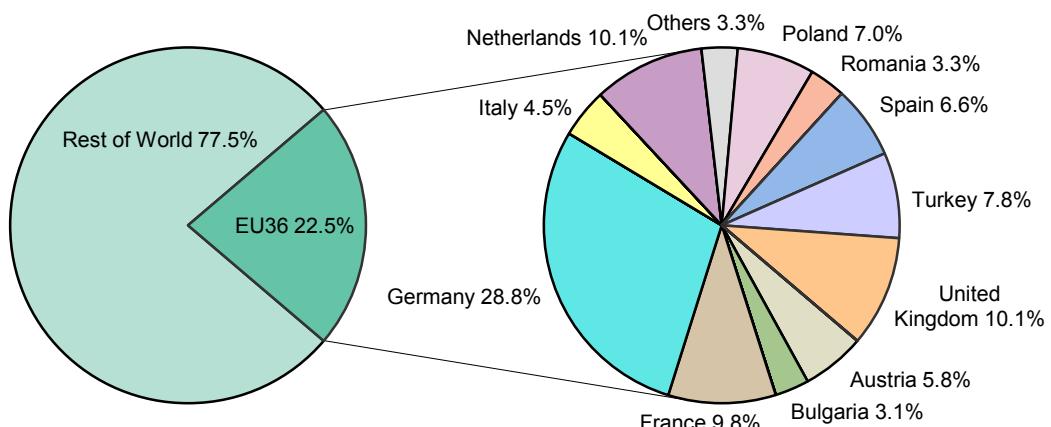
Notes

(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. China was the world's largest producer in 2013, with 22 per cent of the total world output. The second largest producer was USA (14 per cent), followed by India (eight per cent), Germany (six per cent) and Australia (five per cent).

**EU36 Production of salt 2013**



## Production of salt

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Sea salt	* 47 000	* 47 000	* 47 000	* 47 000	* 47 000
Austria					
Rock salt	50	95	169	222	184
Salt in brine	1 035 044	1 071 842	1 150 474	3 193 216	3 717 419
Bulgaria	1 300 000	1 900 000	2 200 000	2 100 000	2 000 000
Croatia	57 186	66 835	53 963	45 992	42 502
Denmark	511 063	601 046	* 595 000	* 590 000	580 000
France	* 6 100 000	* 6 100 000	* 6 100 000	* 6 100 000	* 6 300 000
Germany					
Rock salt	7 709 844	9 992 156	8 765 168	5 938 855	8 510 652
Brine salt	1 862 630	2 118 484	2 217 205	2 182 440	2 164 456
Salt in brine	* 7 300 000	* 4 500 000	* 6 500 000	* 10 900 000	7 878 895
Greece	* 189 000	* 190 000	* 190 000	191 970	189 500
Italy					
Rock salt and brine salt	3 678 234	4 006 882	2 912 128	2 862 440	2 879 174
Montenegro					
Sea salt	17 000	11 200	10 000	16 000	10 000
Netherlands	5 967 000	5 982 000	6 866 000	6 513 000	6 517 000
Poland					
Rock salt	988 545	1 221 700	1 254 000	793 000	1 310 500
Brine salt	2 533 413	2 464 363	2 633 300	2 732 200	2 735 500
Other salt	763 385	763 515	768 000	724 000	499 200
Portugal					
Rock salt	594 578	618 961	631 295	520 284	473 095
Sea salt	72 325	44 574	47 267	88 693	91 282
Romania	2 072 744	2 388 357	2 248 940	1 888 516	2 113 752
Serbia	28 782	30 816	23 334	16 506	13 704
Slovakia	41 000	—	—	—	—
Slovenia	2 924	59	4 291	5 684	3 360

Salt

Production continued

tonnes

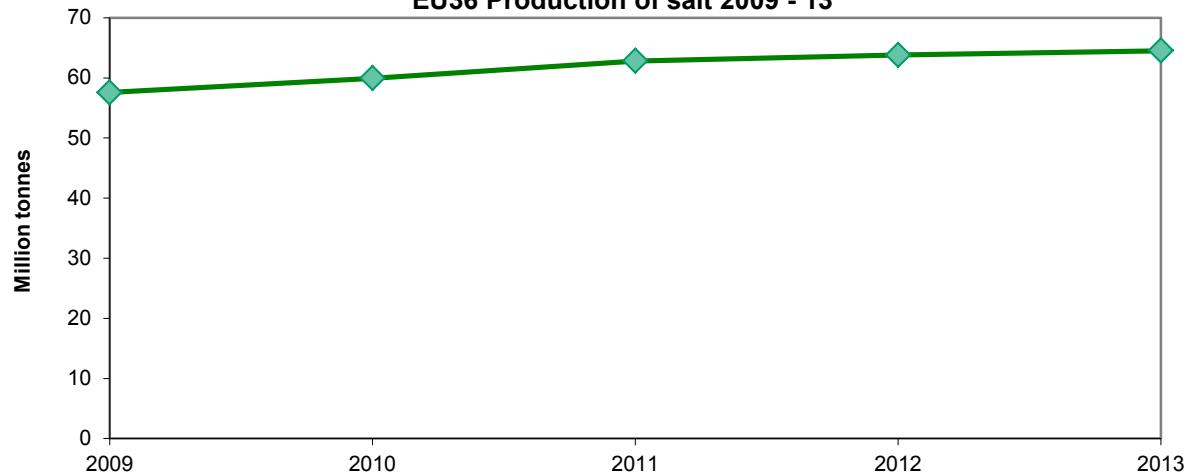
Country	2009	2010	2011	2012	2013
Spain					
Rock salt	2 763 081	3 115 940	3 096 383	2 785 959	2 902 729
Sea salt	1 338 789	1 242 718	1 314 529	1 222 060	1 229 000
Other salt	99 853	92 644	92 850	100 643	147 553
Switzerland	554 000	643 000	478 324	* 528 000	* 652 000
Turkey	3 765 564	4 044 254	6 545 546	5 251 878	* 5 000 000
United Kingdom	6 166 000	6 666 000	6 060 000	6 460 000	* 6 500 000
EU36 total	57 600 000	59 900 000	62 800 000	63 800 000	64 500 000

Notes

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

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

EU36 Production of salt 2009 - 13



Exports of salt

tonnes

Country	2009	2010	2011	2012	2013
Albania	6 054	2 748	13 557	35 464	30 574
Austria	491 981	500 126	392 506	404 069	475 453
Belgium	125 255	288 679	354 644	151 767	269 571
Bulgaria	2 689	1 078	6 074	170	1 313
Croatia	9 995	20 721	24 561	21 548	26 247
Cyprus	2 910	7 929	6 260	5 765	2 308
Czech Republic	31 068	51 289	41 658	25 883	80 306
Denmark	333 383	319 317	296 459	391 879	324 030
Estonia	277	2 055	3 685	2 968	4 383
Finland	336	11 380	1 370	401	935
France	277 617	297 909	190 124	147 441	207 111
Germany	2 744 985	3 097 654	2 735 634	2 207 276	2 685 408
Greece	47 406	59 655	65 014	41 292	38 494
Hungary	3 434	1 356	39 405	14 663	9 460
Iceland	2 115	1 093	1 402	694	1 228
Ireland, Republic of	735	10 183	1 540	2 608	2 656
Italy	558 441	919 673	1 017 938	473 826	776 645
Latvia	15 919	23 172	35 545	21 741	25 536
Lithuania	5 437	19 031	13 514	7 653	19 753
Macedonia	3 616	2 666	5 456	4 898	3 195
Montenegro	3 776	14 316	1 560	1 845	2 158
Netherlands	* 3 412 200	3 456 740	2 631 255	2 456 168	4 304 382
Norway	14 998	12 609	5 775	17 053	9 211
Poland	503 899	572 595	515 723	393 235	625 660
Portugal	15 662	31 022	31 304	37 302	33 633
Romania	372 501	790 530	712 657	635 801	808 606

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Serbia	3 895	16 290	13 362	5 073	9 987
Slovakia	4 606	45 056	27 935	20 917	20 151
Slovenia	15 671	21 711	33 998	30 498	17 001
Spain	862 994	1 318 019	1 311 651	807 581	1 496 873
Sweden	10 025	12 742	13 297	8 973	6 459
Switzerland	68 947	67 537	71 525	58 820	70 945
Turkey	26 223	262 050	417 596	66 690	90 656
United Kingdom	449 303	450 246	489 633	396 155	497 670

## Imports of salt

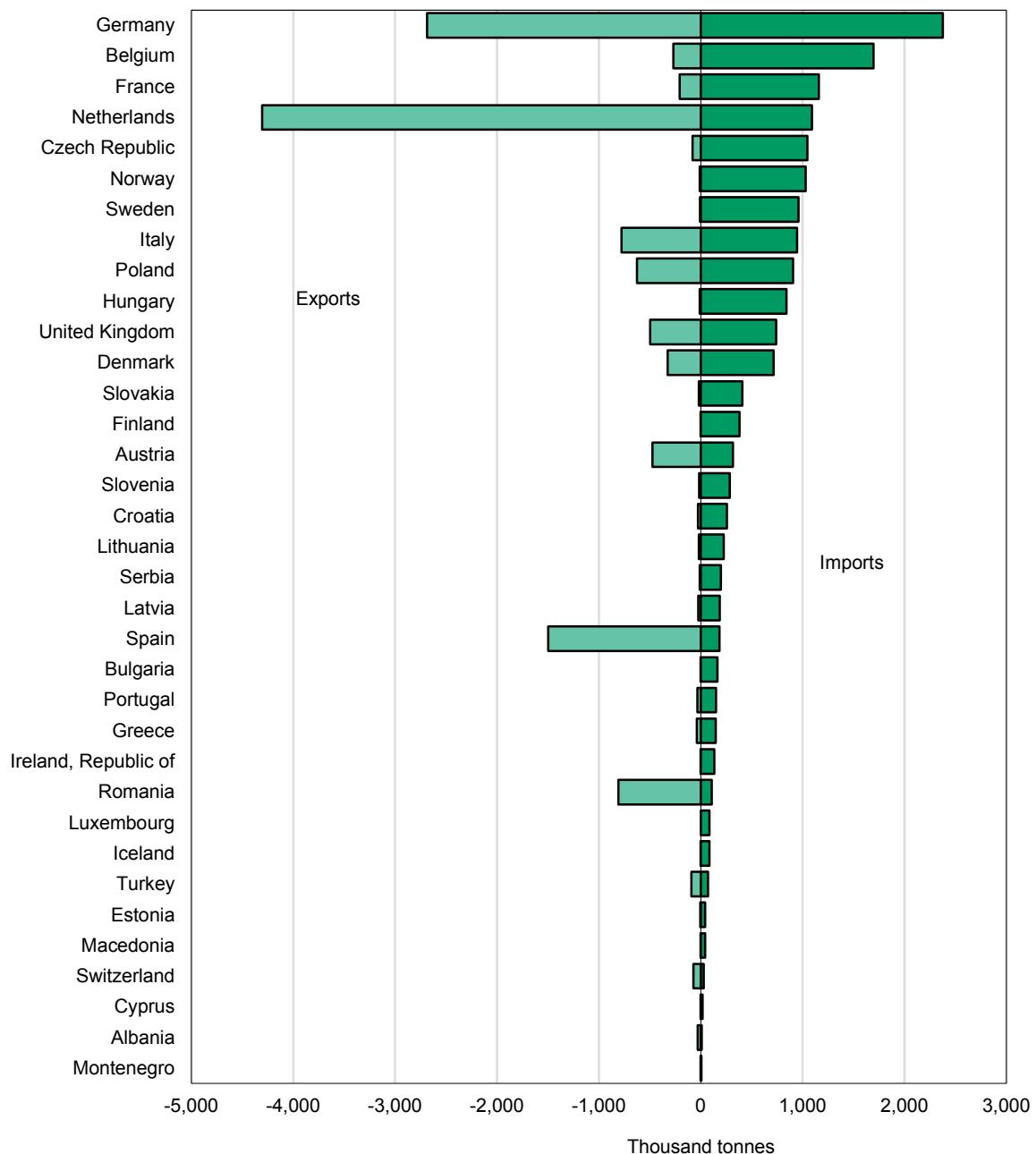
tonnes

Country	2009	2010	2011	2012	2013
Albania	17 174	15 415	22 903	14 098	9 647
Austria	230 979	293 799	291 187	162 790	314 374
Belgium	1 319 896	1 751 650	2 001 517	1 272 556	1 696 164
Bulgaria	102 272	215 355	214 732	252 392	163 880
Croatia	197 644	287 609	190 963	201 542	256 162
Cyprus	16 822	23 836	20 998	20 470	16 683
Czech Republic	711 374	958 474	858 980	560 186	1 046 589
Denmark	421 109	762 420	907 135	351 217	715 813
Estonia	73 931	73 254	85 105	73 248	43 617
Finland	417 495	384 089	452 873	385 359	380 753
France	918 448	1 653 101	1 622 835	705 665	1 157 520
Germany	1 867 023	2 654 736	3 477 233	2 277 714	2 376 658
Greece	149 094	144 367	173 050	154 435	146 686
Hungary	535 928	704 143	800 950	540 297	841 520
Iceland	98 207	65 342	94 177	100 020	84 266
Ireland, Republic of	114 659	172 053	308 884	105 270	131 516
Italy	902 241	1 119 583	1 045 659	1 128 585	943 961
Latvia	151 529	163 486	198 975	135 514	187 521
Lithuania	159 534	209 506	246 724	154 780	225 754
Luxembourg	51 132	77 304	91 033	24 059	86 365
Macedonia	39 232	42 011	39 986	49 248	43 611
Malta	1 364	1 682	1 366	2 567	1 464
Montenegro	10 402	6 470	9 600	6 795	6 137
Netherlands	* 253 000	1 404 032	2 397 781	331 643	1 090 957
Norway	959 630	1 042 489	1 106 066	1 052 197	1 029 977
Poland	483 243	886 294	1 052 650	451 619	906 654
Portugal	108 161	172 107	144 688	182 585	149 922
Romania	82 569	81 441	114 500	94 288	107 859
Serbia	144 711	204 395	274 636	246 280	197 570
Slovakia	168 211	266 329	244 787	226 571	408 235
Slovenia	239 191	317 999	235 663	142 926	284 695
Spain	81 729	85 807	111 597	52 046	182 413
Sweden	910 606	905 190	933 936	745 276	958 222
Switzerland	70 386	37 731	58 307	23 179	27 569
Turkey	99 400	154 536	254 045	248 663	(a)* 72 000
United Kingdom	410 434	1 288 253	1 814 865	418 028	738 670

## Note

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

### Salt - EU36 trade in 2013



## Sillimanite

- 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. South Africa was the world's largest producer in 2013 followed by USA, France and India. China is also believed to be a significant producer of sillimanite minerals but accurate production data are not available.

### Production of sillimanite minerals

Country	2009	2010	2011	2012	2013
France					
Andalusite	* 65 000	* 65 000	* 65 000	* 68 000	* 68 000

#### Notes

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

### Exports of sillimanite minerals

Country	2009	2010	2011	2012	2013
Belgium	39 809	53 940	51 011	35 685	32 902
France	38 494	49 011	55 316	43 751	43 457
Germany	7 965	13 379	18 818	17 287	19 614
Hungary	(a)* 4 321	7 505	8 180	6 335	7 641
Netherlands	5 602	6 907	23 239	13 447	18 958
Spain	33	288	358	796	1 585
Turkey	1 647	2 623	3 357	4 444	6 278
United Kingdom	1 414	1 378	1 761	1 141	1 459

#### Notes

- (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

Country	2009	2010	2011	2012	2013
Austria	1 353	2 089	2 224	3 093	1 941
Belgium					
Sillimanite minerals	40 549	53 115	50 427	32 683	31 070
Mullite	432	1 955	1 690	4 139	3 391
Czech Republic					
Sillimanite minerals	4 227	3 682	4 089	4 132	7 867
Mullite	490	758	818	606	1 142
Denmark					
Sillimanite minerals	1 011	1 124	792	386	1 338
Mullite	1 587	3 199	2 590	1 714	1 639
France					
Sillimanite minerals	3 209	3 110	3 502	1 930	2 576
Mullite	1 327	2 663	3 831	2 919	2 948
Germany					
Sillimanite minerals	27 232	47 738	48 748	54 045	50 227
Mullite	12 279	47 775	72 049	51 709	57 152

Sillimanite minerals

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Hungary					
Sillimanite minerals	1 892	2 100	2 903	3 039	2 515
Mullite	649	1 348	1 854	1 352	1 364
Italy					
Sillimanite minerals	38 590	14 473	17 937	11 720	10 465
Mullite	6 582	16 141	13 564	16 084	6 728
Netherlands					
Sillimanite minerals	2 425	3 576	13 342	13 177	24 417
Mullite	21 064	51 745	64 162	34 244	32 464
Norway	4 359	3 456	3 208	3 626	2 767
Poland					
Sillimanite minerals	7 852	17 956	13 791	17 567	20 761
Mullite	1 040	2 109	2 817	2 757	2 299
Portugal	573	466	641	2 241	794
Slovakia	1 812	2 456	2 917	844	2 002
Slovenia	236	363	921	1 901	3 970
Spain					
Sillimanite minerals	19 824	27 611	32 091	12 372	24 416
Mullite	1 824	4 934	6 153	2 465	3 274
Sweden	2 395	4 782	5 174	4 225	4 677
Switzerland	527	1 162	1 596	1 079	1 580
Turkey					
Sillimanite minerals	4 891	5 466	6 907	6 905	9 434
Mullite	3 635	12 675	10 733	8 827	5 530
United Kingdom					
Sillimanite minerals	7 763	7 419	12 485	10 562	6 058
Mullite	5 255	8 276	3 491	4 588	3 746

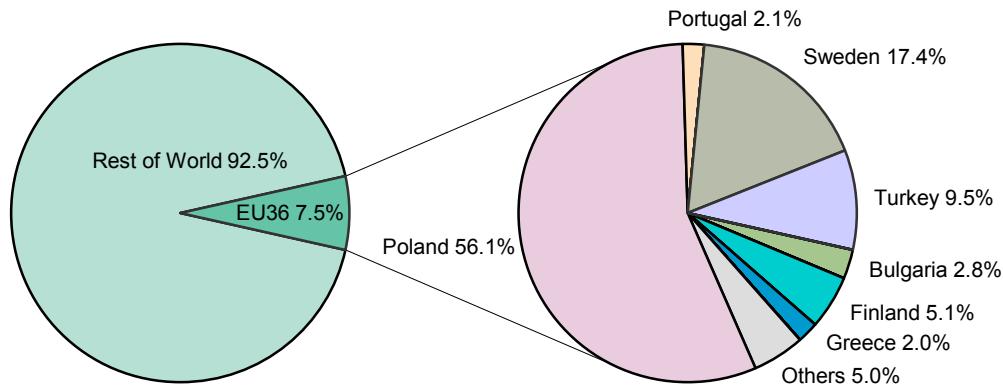
Notes

(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. Mexico was the world's largest producer in 2013, with 22 per cent of the total world output. The second and third largest producers were Peru and China (14 per cent each), followed by Australia (seven per cent), Russia and Bolivia (both with five per cent).

**EU36 Mine production of silver 2013**



## Mine production of silver

kilograms (metal content)

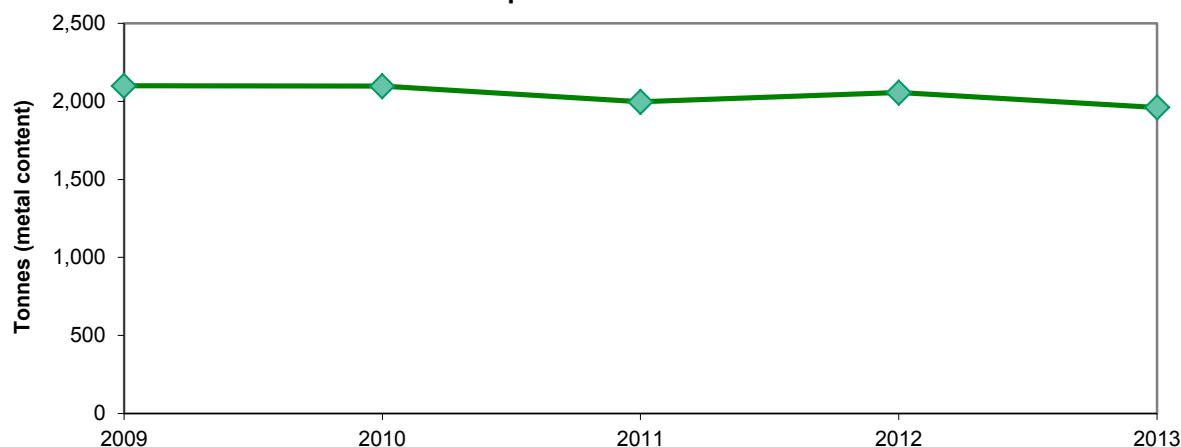
Country	2009	2010	2011	2012	2013
Bulgaria	* 55 000	* 55 000	* 55 000	* 55 000	* 55 000
Finland	70 062	64 596	73 081	128 200	100 890
Greece	27 500	29 000	* 33 300	* 39 800	39 759
Ireland, Republic of	5 267	3 818	6 109	9 454	7 822
Macedonia	* 35 000	* 32 000	* 30 000	* 31 000	* 32 000
Poland	1 221 000	1 183 000	1 167 000	1 200 000	1 100 000
Portugal	20 483	20 561	28 027	29 890	40 621
Romania	* 18 000	* 18 000	* 18 000	* 18 000	18 000
Serbia (a)	4 424	4 384	7 380	8 388	8 400
Slovakia	201	320	330	441	508
Spain	2 200	20 800	29 900	32 943	* 31 000
Sweden	288 590	302 145	301 959	309 337	341 346
Turkey	351 600	363 520	246 500	193 890	186 621
United Kingdom	514	506	531	230	82
EU36 total	2 100 000	2 098 000	1 997 000	2 057 000	1 962 000

Notes

(a) Smelter and/or refinery production

Silver

**EU36 Mine production of silver 2009 - 13**



**Exports of silver**

kilograms

Country	2009	2010	2011	2012	2013
Austria					
Metal	98 600	100 300	136 000	155 200	134 800
Belgium					
Ores and concentrates	6 200	12 300	2 149 800	1 409 800	982 300
Metal	69 900	21 800	197 000	311 900	(a)* 152 906
Bulgaria					
Ores and concentrates	...	...	8 900	...	—
Metal	58 565	37 300	35 200	49 000	52 600
Croatia					
Metal	313	93	839	2 558	5 500
Cyprus					
Metal	100	400	1 900	2 500	1 200
Czech Republic					
Metal	77 000	74 600	399 700	187 000	432 800
Denmark					
Ores and concentrates	...	...	422 100	1 533 800	645 100
Metal	37 200	30 300	53 800	30 100	29 700
Estonia					
Metal	955	200	4 600	1 600	1 400
Finland					
Metal	1 680	1 162	1 336	1 084	3 058
France					
Ores and concentrates	1 597 157	—	4 053	319	591 800
Metal	169 806	258 205	511 716	392 507	420 267
Germany					
Metal	2 169 994	3 397 674	3 368 313	2 984 504	2 944 492
Greece					
Metal	79 400	19 700	13 900	14 100	54 200
Hungary					
Metal	1 300	3 300	29 200	4 000	8 200
Ireland, Republic of					
Metal	...	...	263	824	608
Italy					
Metal	383 782	715 501	995 384	979 652	1 024 151
Latvia					
Metal	—	300	1 600	100	3 600
Lithuania					
Metal	200	1 100	1 600	2 900	3 100
Luxembourg					
Metal	159	1 409	3 324	1 152	1 884
Malta					
Metal	...	100	500	500	100
Netherlands					
Ores and concentrates	—	1 458	6 944	123	—
Metal	196 180	216 182	624 589	241 614	555 475

Silver

## Exports continued

kilograms

Country	2009	2010	2011	2012	2013
Norway					
Metal	58 979	57 617	62 849	49 856	48 129
Poland					
Metal	1 265 200	1 281 800	1 328 900	1 378 800	1 245 000
Portugal					
Ores and concentrates	11 500	12 300	16 300	15 100	25 200
Metal	580	3 400	10 600	40 600	34 200
Serbia					
Metal	3 670	4 355	4 222	3 044	7 084
Slovakia					
Metal	2 700	39 100	15 100	31 500	28 800
Slovenia					
Metal	1 600	3 100	3 600	3 800	14 400
Spain					
Ores and concentrates	30	377	9 847	30 748	896
Metal	233 084	417 381	383 412	626 782	670 633
Sweden					
Metal	476 300	412 900	428 500	480 100	457 100
Switzerland					
Metal	916 560	1 456 475	1 779 063	1 719 300	2 490 396
Turkey					
Metal	170 009	144 942	202 886	216 509	209 094
United Kingdom					
Ores and concentrates	1 338	2 035	206	—	2 174
Metal	943 522	2 579 909	3 937 294	3 197 152	4 219 571
Waste and scrap	8 412 093	5 160 290	11 649 846	19 737 958	17 177 345

## Notes

(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 imports into certain countries

**Imports of silver**

kilograms

Country	2009	2010	2011	2012	2013
Albania					
Metal	8 832	7 819	4 485	2 768	3 327
Austria					
Metal	431 500	481 800	804 000	331 500	583 000
Belgium					
Ores and concentrates	1 567 600	6 000 300	7 619 600	25 085 300	2 799 000
Metal	225 700	86 500	71 100	80 200	60 400
Bulgaria					
Ores and concentrates	...	...	...	...	88 200
Metal	871	2 408	4 300	12 800	4 900
Croatia					
Metal	2 353	3 212	3 868	3 309	2 859
Cyprus					
Metal	1 993	1 200	2 200	500	200
Czech Republic					
Ores and concentrates	5 700	990 200	—	—	—
Metal	163 316	136 000	1 635 700	993 700	865 000
Denmark					
Metal	1 873 817	612 600	172 900	66 700	379 200
Estonia					
Metal	2 900	3 200	5 000	1 700	3 700
Finland					
Metal	(a)* 47 900	50 681	26 764	19 618	13 828
France					
Ores and concentrates	4 279	4 433 810	8 499	100 102	8 713
Metal	435 001	954 773	908 080	612 382	680 836

## Silver

## Imports continued

kilograms

Country	2009	2010	2011	2012	2013
Germany					
Ores and concentrates	2 581 290	4 002 438	3 493 141	5 279 656	2 590 874
Metal	1 784 960	2 322 566	2 434 577	1 858 257	2 203 529
Greece					
Metal	31 300	29 900	55 100	51 900	68 500
Hungary					
Metal	128 985	196 500	234 100	229 700	232 900
Iceland					
Metal	1 096	909	700	640	399
Ireland, Republic of					
Metal	5 316	3 999	5 431	3 571	10 137
Italy					
Ores and concentrates	15	70 440	31 391	11 644	102
Metal	881 205	1 120 080	729 807	645 344	911 101
Latvia					
Metal	556	791	2 300	1 400	7 900
Lithuania					
Metal	5 800	6 300	7 800	9 200	11 300
Luxembourg					
Metal	3 738	24 304	11 000	2 800	1 100
Macedonia					
Metal	2 229	3 294	3 779	2 032	2 781
Malta					
Metal	1 090	128	100	100	800
Netherlands					
Metal	218 279	304 219	338 239	301 089	321 318
Norway					
Ores and concentrates (a)	* 5 700	* 1 100	* 700	* 4 700	* 12 200
Metal	47 040	57 422	49 727	47 768	27 060
Poland					
Metal	122 900	106 700	78 600	82 800	76 900
Portugal					
Metal	18 602	66 900	38 700	22 200	37 300
Romania					
Metal (a)	* 8 800	* 27 500	* 8 100	* 15 900	* 14 600
Slovakia					
Metal	9 000	55 300	* 47 000	268 700	97 800
Slovenia					
Metal	17 800	24 100	29 700	25 100	26 900
Spain					
Ores and concentrates	66 088	11 317	17 131	123 171	11 356
Metal	754 262	1 513 257	828 017	431 934	8 665 969
Sweden					
Ores and concentrates	2 330 100	...	...	...	...
Metal	85 300	83 700	90 900	94 900	80 900
Switzerland					
Ores and concentrates (a)	* 100 900	* 55 800	* 15 107 700	* 39 200	* 528 600
Metal	2 136 092	1 746 243	2 155 625	2 397 273	1 935 822
Turkey					
Metal	57 700	90 064	209 909	226 227	299 109
United Kingdom					
Ores and concentrates	1 106	9 737	1 209	6 287	72 454
Metal	6 649 190	3 278 015	3 686 011	8 525 994	6 097 865
Waste and scrap	3 311 165	4 137 096	13 713 610	5 946 307	6 668 845

## Notes

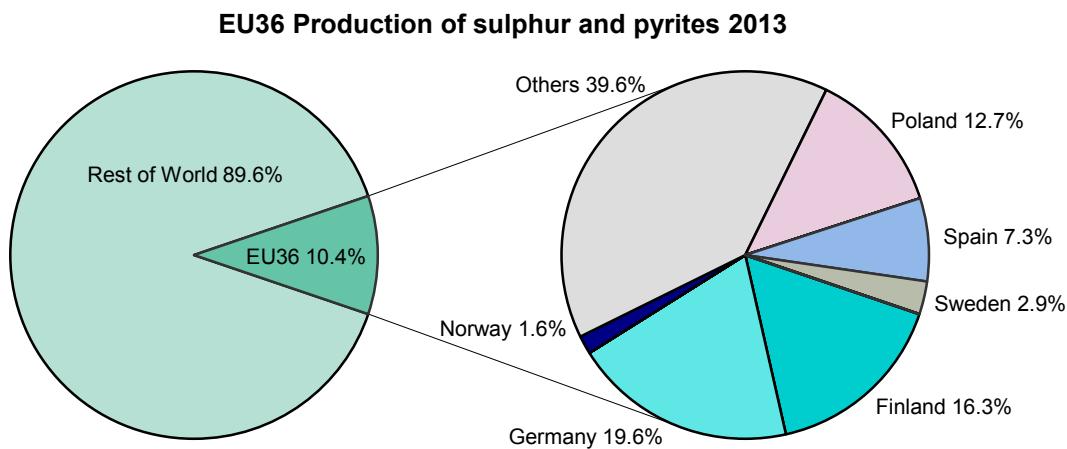
(1) This table excludes silver coin but includes silver shipped for minting

(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 a fundamental feedstock 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 2013 were the USA (13 per cent of the total world output), followed by China (11 per cent) and Russia (ten per cent). The largest world producer of pyrites and sulphur ore was China (94 per cent and 96 per cent respectively of the total world output).



In this graph "Others" includes Belgium, Bulgaria, France, Greece, Italy, the Netherlands, Turkey and the United Kingdom in addition to those countries that produced less than one per cent of the EU36 total.

## Production of sulphur and pyrites

tonnes (sulphur content)

Country	2009	2010	2011	2012	2013
Austria					
Recovered (a)	48 624	40 512	48 612	47 572	* 48 000
Denmark					
Recovered (a)	4 200	3 246	3 045	3 925	3 599
Finland					
Pyrites	153 600	250 000	338 000	375 000	347 000
Recovered (b)	273 600	270 000	940 000	990 000	947 000
Recovered (a)	127 000	122 000	133 300	121 700	130 000
Germany					
Recovered (a)	1 504 000	1 455 000	1 465 000	1 312 000	1 255 000
Recovered (c)	565 000	513 000	542 210	493 169	464 776
Lithuania					
Recovered (a)	69 722	73 470	76 699	73 040	81 449
Norway					
Recovered (b)	* 90 000	* 96 000	* 96 000	126 801	118 487
Recovered (a)	25 000	22 000	19 000	20 000	22 000
Poland					
Frasch	262 769	516 742	657 100	676 500	526 300
Recovered (b)	257 000	253 000	310 500	310 500	310 500
Recovered (a)	214 382	250 075	259 000	285 000	* 280 000
Spain					
Recovered (b)	533 000	547 000	492 000	578 400	539 200
Recovered (a)	* 100 000	* 100 000	* 100 000	* 100 000	* 100 000
Sweden					
Recovered (b)	186 100	179 833	202 289	195 032	189 750
Recovered (a)	83 646	83 947	92 973	93 442	64 587

## Sulphur and pyrites

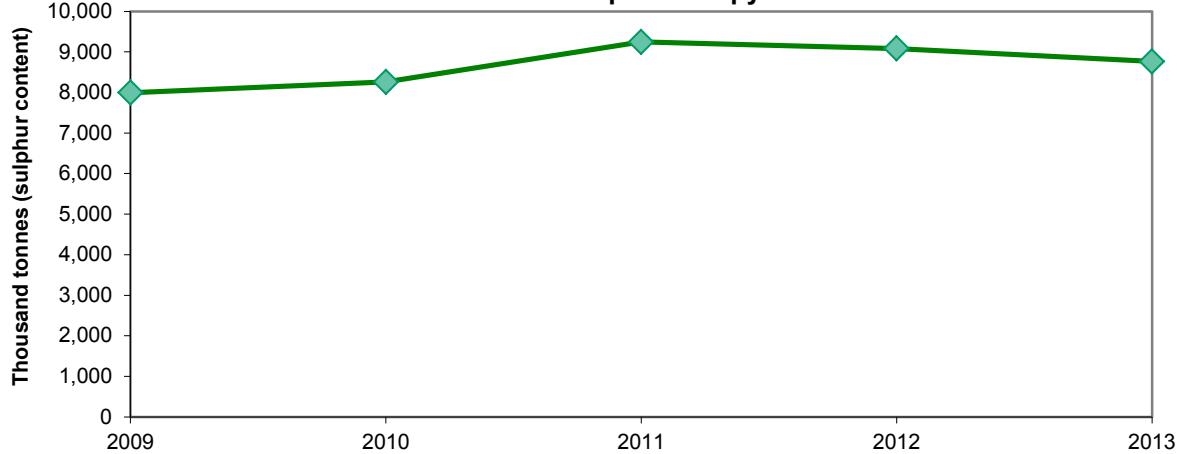
### Production continued

Country	2009	2010	2011	2012	2013
Other EU36 countries	3 496 000	3 482 000	3 470 000	3 280 000	3 335 000
EU36 total					
Pyrites	233 000	329 000	417 000	454 000	426 000
Frasch	263 000	517 000	657 000	677 000	347 000
Recovered	7 499 000	7 412 000	8 172 000	7 952 000	7 810 000

### Notes

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

**EU36 Production of sulphur and pyrites 2009 - 13**



## Exports of sulphur and pyrites

tonnes

Country	2009	2010	2011	2012	2013
Albania					
Pyrites	...	...	...	5 076	10 560
Austria					
Pyrites	1 740	2 794	2 887	2 579	1 523
Sulphur, sublimed and precipitated	7 423	1 145	746	2 138	3 425
Belgium					
Sulphur	74 232	21 533	34 087	10 274	9 828
Sulphur, sublimed and precipitated	345	193	83	119	298
Bulgaria					
Sulphur	20 840	40 286	38 097	41 601	45 592
Croatia					
Sulphur	8 664	6 565	14 256	15 801	12 917
Czech Republic					
Sulphur	20 153	12 124	980	1 852	9 195
Sulphur, sublimed and precipitated	86	330	260	183	44
Denmark					
Sulphur	6	12	39	4 814	14 543
Estonia					
Sulphur	20	45	621	—	—
Finland					
Pyrites (a)	* 88 000	* 198 000	* 460 000	* 520 000	* 316 000
Sulphur	35 701	2 715	2 404	2 871	(c) 80
France					
Sulphur	313 229	296 345	248 989	237 974	193 899
Sulphur, sublimed and precipitated	445	565	556	394	232
Germany					
Pyrites	320	755	440	342	301
Sulphur	681 563	671 836	721 717	525 622	474 875
Sulphur, sublimed and precipitated	78	271	1 380	274	493

Sulphur and pyrites

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Greece					
Pyrites	24 429	28 680	42	3 776	57 800
Sulphur	4 044	4 594	35 279	167 611	204 170
Hungary					
Sulphur	39 638	44 098	48 616	43 855	49 438
Italy					
Pyrites	6 005	13 698	16 032	11 114	13 741
Sulphur	256 614	286 954	285 891	249 274	212 188
Sulphur, sublimed and precipitated	21 430	22 485	55 740	17 021	5 279
Latvia					
Sulphur	5 253	0	1	12	—
Lithuania					
Sulphur	14 038	1 227	403	759	383
Macedonia					
Sulphur	2 052	1 653	877	197	170
Netherlands					
Pyrites	10 039	56 610	101 114	84 734	13 367
Sulphur	36 898	480 968	469 819	561 995	395 938
Poland					
Sulphur	152 484	402 102	394 861	506 641	406 030
Sulphur, sublimed and precipitated	29 540	34 752	26 542	29 757	500
Portugal					
Sulphur	5 737	6 164	9 737	7 065	24 478
Romania					
Pyrites	6 315	8	5	—	—
Sulphur	49 052	55 961	58 437	54 016	63 651
Serbia					
Sulphur	1 451	2 335	3 571	2 760	12 556
Slovakia					
Sulphur	147	448	1 998	2 456	2 075
Sulphur, sublimed and precipitated	72 613	72 910	82 785	74 817	86 343
Slovenia					
Sulphur	3 764	1 016	145	190	79
Spain					
Sulphur	198 585	138 168	361 188	438 368	456 025
Sulphur, sublimed and precipitated	523	612	289	264	165
Sweden					
Sulphur	3 018	2 768	3 980	10 145	13 751
Sulphur, sublimed and precipitated	12 242	11 564	10 344	5 248	1 601
Switzerland					
Sulphur	4 837	5 310	4 864	2 160	5 494
Turkey					
Pyrites	1	1	...	48	1 243
Sulphur	6 495	279 822	56 143	59 116	47 765
Sulphur, sublimed and precipitated	14 769	21 068	7 949	8 757	9 454
United Kingdom					
Sulphur, crude	2 545	41 491	101 964	37 239	27 018
Sulphur, refined	38 723	1 198	3 686	14 609	7 560
Sulphur, sublimed and precipitated	1 902	1 349	2 151	21 385	7 359

Notes

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

Imports of sulphur and pyrites

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Pyrites	1 614	3 154	3 321	3 340	2 133
Sulphur	68 881	75 065	70 892	49 910	51 428
Sulphur, sublimed and precipitated	14 961	15 331	22 109	16 997	22 895
Belgium					
Sulphur	460 990	592 348	562 688	568 833	662 537
Sulphur, sublimed and precipitated	750	621	473	558	561

Sulphur and pyrites

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Croatia					
Sulphur	10 349	2 877	2 752	1 503	176
Cyprus					
Sulphur	1 011	951	625	604	664
Czech Republic					
Pyrites	299	250	247	384	366
Sulphur	20 986	14 762	14 945	70 008	54 000
Sulphur, sublimed and precipitated	71 033	82 355	93 289	39 459	27 870
Denmark					
Sulphur	4 447	7 051	6 123	4 173	4 339
Estonia					
Sulphur	1	1	2	1 344	1 224
Finland					
Sulphur	1 673	21 676	38 923	29 283	16 558
Sulphur, sublimed and precipitated	6	3	4	43	210
France					
Pyrites	159	183	206	136	254
Sulphur	55 212	78 366	92 106	108 471	145 535
Sulphur, sublimed and precipitated	403	410	441	481	1 623
Germany					
Pyrites	52 641	76 101	82 530	74 726	74 610
Sulphur	38 246	44 103	51 714	34 102	49 080
Sulphur, sublimed and precipitated	2 856	1 649	4 363	4 637	3 889
Greece					
Sulphur	26 673	42 673	80 976	31 788	38 372
Hungary					
Sulphur	(a)* 1 200	3 189	1 100	981	934
Sulphur, sublimed and precipitated	186	119	223	172	7
Italy					
Pyrites	228	13 538	29 746	10 436	12 808
Sulphur	13 305	19 263	30 290	22 499	23 964
Sulphur, sublimed and precipitated	3 617	758	732	887	5 066
Latvia					
Sulphur	12 488	24	21	18	35
Lithuania					
Sulphur	319 353	326 485	298 977	293 839	291 622
Luxembourg					
Sulphur	2 981	2 166	1 789	1 432	1 604
Netherlands					
Pyrites	2 119	48	1 593	329	1 481
Sulphur	11 430	49 399	229 496	80 459	117 195
Sulphur, sublimed and precipitated	2	4	7	3 736	1
Norway					
Sulphur	3 102	2 897	3 051	2 725	2 614
Sulphur, sublimed and precipitated	12 127	11 515	11 627	12 685	12 848
Poland					
Pyrites	813	1 866	1 255	1 480	1 473
Sulphur	35 350	44 939	53 828	30 488	8 508
Sulphur, sublimed and precipitated	978	164	387	6	88
Portugal					
Sulphur	3 366	4 861	3 981	2 726	2 367
Romania					
Sulphur	1 884	2 561	2 965	6 246	4 311
Sulphur, sublimed and precipitated	1 254	2 062	2 074	1 807	1 469
Serbia					
Sulphur	621	674	721	635	796
Slovakia					
Sulphur	2 462	3 855	3 173	3 115	3 571
Sulphur, sublimed and precipitated	1 046	864	1 510	735	576
Slovenia					
Pyrites	353	645	836	921	959
Sulphur	53 615	57 411	56 490	51 225	54 707
Spain					
Pyrites	958	1 160	476	384	922
Sulphur	24 015	68 214	44 724	13 291	20 710
Sulphur, sublimed and precipitated	187	229	176	300	669

## Imports continued

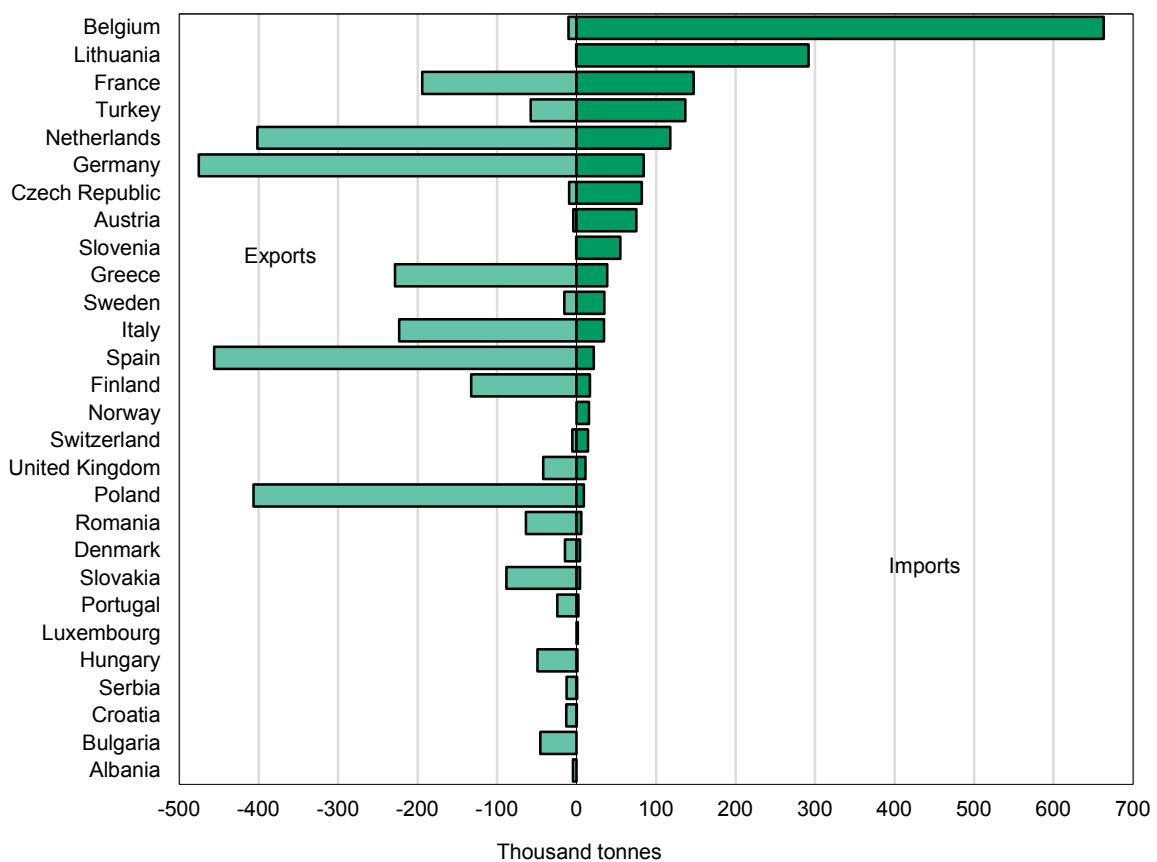
tonnes

Country	2009	2010	2011	2012	2013
Sweden					
Pyrites	544	874	825	744	820
Sulphur	21 772	56 961	65 296	42 457	34 206
Sulphur, sublimed and precipitated	143	200	145	130	138
Switzerland					
Sulphur	12 086	17 414	13 072	14 257	14 183
Turkey					
Pyrites	67	480	323	142	205
Sulphur	164 034	141 478	161 866	151 955	136 430
Sulphur, sublimed and precipitated	1 315	592	292	382	302
United Kingdom					
Pyrites	104	2 581	1 734	168	435
Sulphur, crude	74	274	590	1 125	1 374
Sulphur, refined	6 211	10 201	10 391	8 670	8 485
Sulphur, sublimed and precipitated	473	767	691	698	946

## Notes

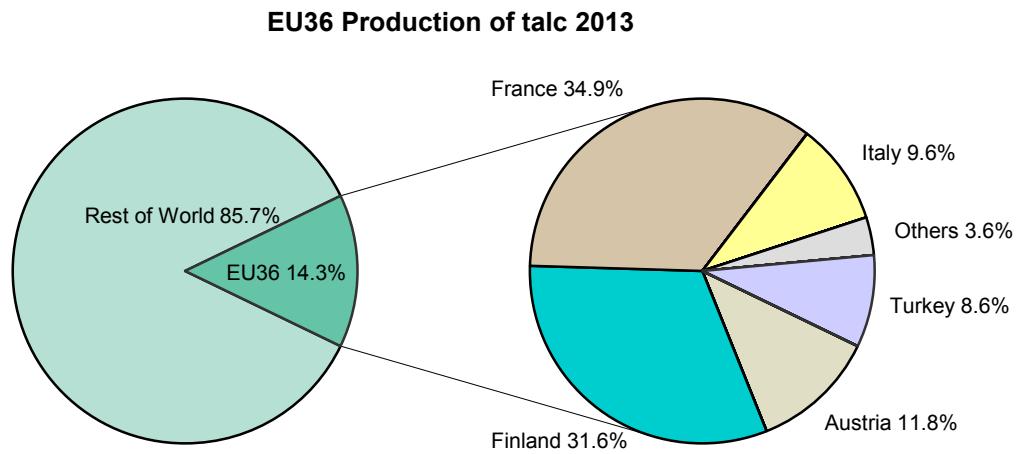
(a) BGS estimates, based on known exports from certain countries

## Sulphur and pyrites - EU36 trade in 2013



## Talc

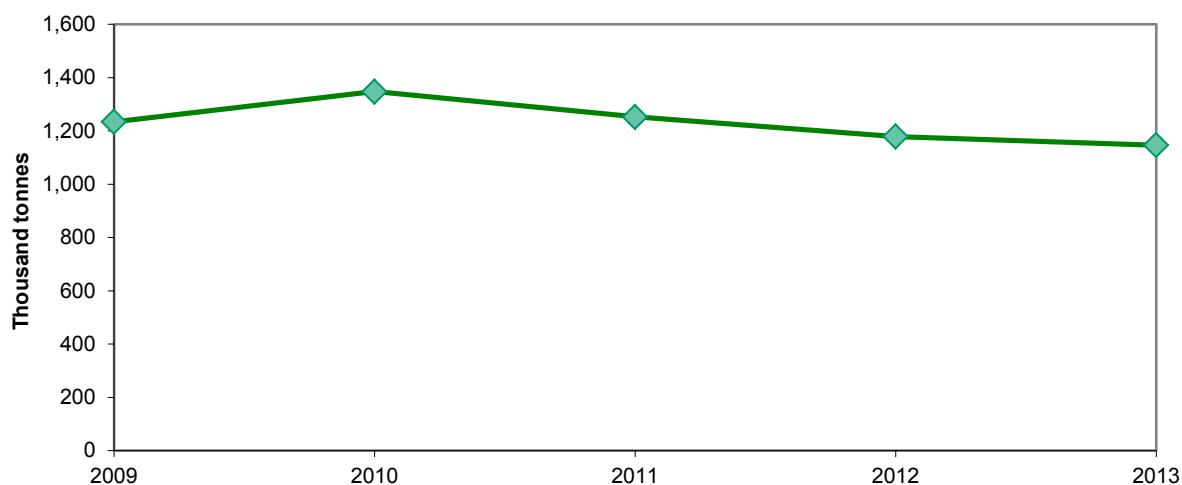
- Talc is a soft hydrous magnesium silicate mineral. It is frequently coloured by the presence of iron-bearing minerals and trace elements but usually turns white when finely ground. The familiar use of talc as a cosmetic powder is minor compared to industrial usage. Talc is chiefly used as a filler 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.
- China was the world's largest producer in 2013, with 27 per cent of the total world output. The second largest producers were India and Mexico (11 per cent each), followed by USA, South Korea (seven per cent each) and Brazil (six per cent).



## Production of talc

tonnes

Country	2009	2010	2011	2012	2013
Austria	111 388	138 367	132 018	134 665	134 814
Finland	375 302	419 345	429 494	396 332	361 840
France	400 000	400 000	400 000	* 400 000	* 400 000
Greece	* 200	* 200	* 200	* 200	* 200
Italy	* 110 000	* 110 000	* 110 000	* 110 000	* 110 000
Macedonia	682	1 292	547	286	—
Norway	23 350	6 392	8 191	7 983	8 459
Portugal	11 567	11 981	15 462	15 131	11 348
Romania	570	296	131	13	—
Slovakia	200	7 000	7 000	2 000	10 000
Spain					
Talc	47 218	51 897	11 957	8 857	* 8 000
Pyrophyllite	—	—	5 600	* —	—
Sweden	4 000	4 000	3 000	—	—
Turkey					
Talc	6 887	1 826	9 959	14 537	* 19 000
Pyrophyllite	140 263	192 643	115 462	85 251	* 80 000
United Kingdom	2 861	2 633	3 708	3 667	2 947
EU36 total	1 234 000	1 348 000	1 253 000	1 179 000	1 147 000

**EU36 Production of talc 2009 - 13****Exports of talc**

Country	2009	2010	2011	2012	2013
Austria	106 423	106 271	115 967	121 264	84 271
Belgium	112 983	128 526	125 040	109 253	114 645
Denmark	269	409	235	235	188
Finland (a)	* 174 000	* 222 000	* 259 000	* 249 000	* 243 000
France	224 419	270 494	269 518	271 399	273 414
Germany	3 662	4 773	6 243	5 274	5 374
Greece	3 898	2 809	4 086	9 312	6 997
Hungary	75	173	51	69	413
Italy	124 212	143 236	135 418	140 618	144 432
Lithuania	17	350	111	126	232
Macedonia	528	636	648	380	618
Netherlands	147 544	173 042	147 492	150 456	145 912
Norway	23 461	728	2 204	535	648
Poland	793	869	744	830	825
Portugal	2 699	4 316	2 526	2 224	1 740
Slovakia	45	47	38	25	939
Spain	29 580	11 206	28 980	9 771	8 823
Sweden	8 032	9 014	8 308	4 598	4 915
Turkey	1 712	2 865	2 711	2 635	3 401
United Kingdom	2 402	3 074	3 171	5 026	4 681

## Note

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

**Imports of talc**

Country	2009	2010	2011	2012	2013
Austria	37 648	74 554	93 985	86 891	84 634
Belgium	149 757	183 625	175 662	163 309	168 067
Bulgaria	747	512	985	956	960
Croatia	1 721	1 813	1 578	1 774	1 989
Cyprus	290	307	267	133	150
Czech Republic	9 312	9 570	12 686	8 827	9 735
Denmark	8 035	7 013	6 276	6 883	6 469
Estonia	332	373	451	429	467
Finland	525	1 202	1 929	1 624	1 153
France	72 274	59 722	48 155	47 883	45 965
Germany	293 417	324 703	330 321	293 175	304 604
Greece	7 862	8 869	8 663	13 779	8 123
Hungary	7 566	6 786	6 226	5 319	6 010

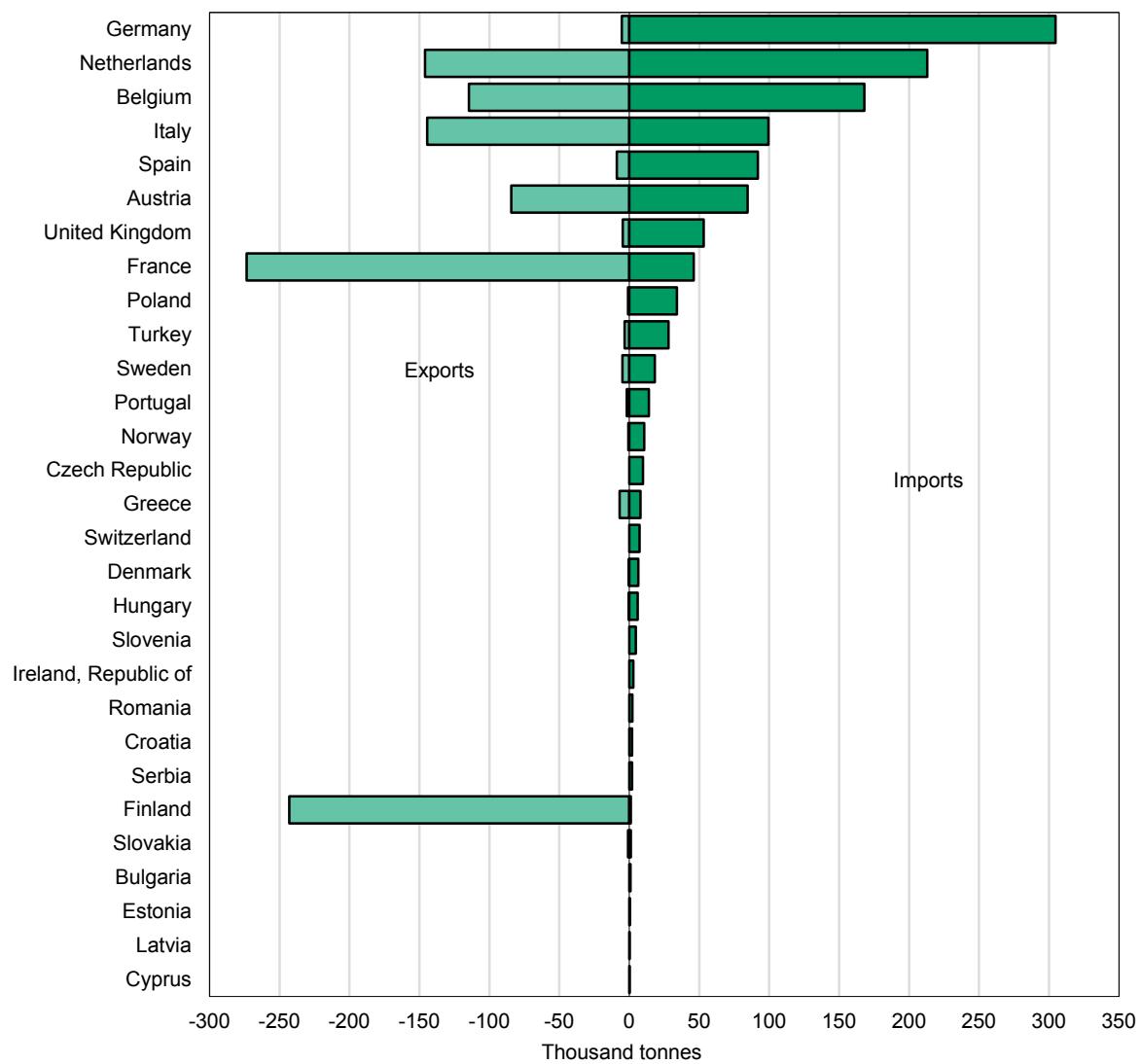
Talc

Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Ireland, Republic of	1 722	1 140	1 320	3 033	2 982
Italy	78 506	100 934	115 046	111 333	99 446
Latvia	314	295	145	126	183
Netherlands	94 407	178 312	199 302	182 898	213 095
Norway	6 517	8 356	8 364	8 374	10 586
Poland	18 325	23 331	26 212	26 430	34 117
Portugal	18 537	24 143	22 388	11 746	14 043
Romania	1 105	2 099	2 248	2 593	2 284
Serbia	1 236	1 616	1 270	1 432	1 957
Slovakia	1 030	719	380	470	1 098
Slovenia	13 756	10 793	4 489	4 413	4 618
Spain	81 043	82 425	88 655	80 421	91 965
Sweden	28 459	25 998	22 202	22 507	18 259
Switzerland	7 987	8 490	7 666	6 975	7 377
Turkey	14 893	20 026	26 952	23 496	28 004
United Kingdom	39 520	50 309	53 339	57 751	53 099

Talc - EU36 trade in 2013



## Tantalum and niobium

- Tantalum and niobium are sometimes produced from the same ore 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.
- The largest producer of tantalum (in terms of content) in 2013 was Rwanda (53 per cent of the total world output), followed by Democratic Republic of Congo (15 per cent), Brazil and China (eight per cent each). The largest producer of niobium was Brazil (94 per cent of the total world output), followed by Canada (five per cent).

### Exports of tantalum

Country	2009	2010	2011	2012	2013
Austria	35	27	29	21	112
Belgium	2	4	2	2	121
Czech Republic	62	95	110	86	118
Estonia	47	34	76	49	24
France	37	20	25	41	138
Germany	8	18	38	33	30
Lithuania	11	9	18	10	6
Netherlands	4	22	42	19	12
Portugal	49	98	81	50	27
Spain	5	4	11	3	13
Turkey	126	2	—	22	13
United Kingdom	72	191	97	336	43

#### Notes

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

### Imports of tantalum

Country	2009	2010	2011	2012	2013
Austria	—	17	4	5	31
Czech Republic	141	265	222	175	224
Estonia	—	37	20	1	—
Finland	* 0	* 0	* 0	* 0	* 87
France	43	22	39	49	39
Germany	67	231	376	221	178
Hungary	0	32	0	0	0
Ireland, Republic of	4	85	0	1	0
Lithuania	24	12	13	4	1
Luxembourg	2	1	1	1	52
Netherlands	4	6	9	(a)* 24	6
Portugal	22	41	44	33	23
Romania	* 0	0	* 0	0	58
United Kingdom	145	284	176	144	203

#### Notes

(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

## Tin

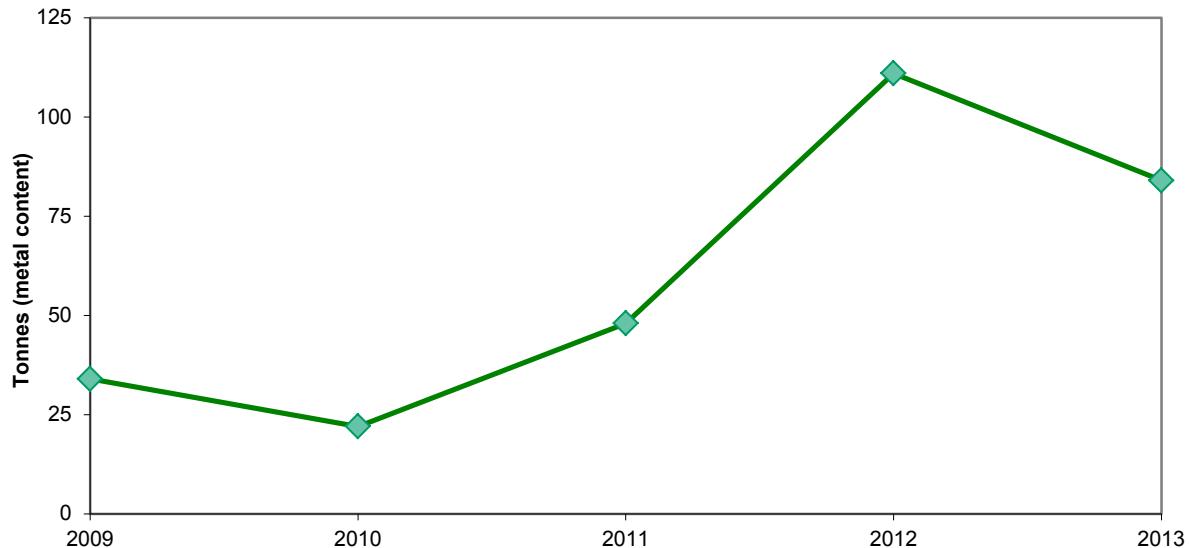
- Tin is a malleable and ductile metal that is resistant to corrosion. The chief use of tin is to coat metals that are more susceptible to corrosion, especially steel. It is also widely used as an alloying agent (i.e. with lead to make pewter) and its use in solders is rapidly growing as it replaces lead. Tin chemicals are used as fungicides and other biocides.
- China was the world's largest producer of mined tin in 2013, with 43 per cent of the total world output. The second largest producer was Indonesia (28 per cent), followed by Peru (seven per cent), Bolivia (six per cent) and Brazil (four per cent).
- China was also the world's largest producer of refined tin in 2013, with 47 per cent of the total world output. The second largest producer was Indonesia (15 per cent), followed by Malaysia (ten per cent), Peru (seven per cent) and Thailand (six per cent).

### Mine production of tin

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Portugal	34	22	39	42	84
Spain	—	—	9	69	* 0

EU36 Mine production of tin 2009 - 13



### Smelter production of tin

tonnes

Country	2009	2010	2011	2012	2013
Belgium	8 700	9 900	10 000	11 400	10 300

### Exports of tin

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Unwrought (a)	71	60	98	103	118
Belgium					
Unwrought	4 753	5 114	4 261	7 428	11 881
Unwrought alloys	5 000	6 236	6 427	5 018	408
Scrap	127	207	1 195	308	2 496

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Czech Republic					
Unwrought (a)	76	276	18	868	1 995
Scrap	118	44	167	191	102
Denmark					
Unwrought	6	1	208	81	98
Estonia					
Scrap	124	120	56	121	276
Finland					
Scrap	124	142	139	171	186
France					
Concentrates	44	341	89	74	23
Unwrought	402	423	413	485	323
Unwrought alloys	140	143	178	145	170
Scrap	282	342	532	484	616
Germany					
Concentrates	163	32	...	—	—
Unwrought	1 000	1 253	1 348	1 223	1 215
Unwrought alloys	1 088	956	1 459	1 352	1 442
Scrap	1 129	1 440	1 175	1 141	1 067
Hungary					
Scrap	222	196	222	268	234
Ireland, Republic of					
Unwrought	(a) 23	(a) 689	—	—	—
Italy					
Unwrought (a)	411	367	383	582	869
Scrap	154	289	243	240	266
Latvia					
Scrap	...	175	8	2	3
Malta					
Scrap	* 1	* 3	4	134	7
Netherlands					
Unwrought	1 536	4 043	3 619	5 670	6 126
Unwrought alloys	558	856	357	314	338
Scrap	547	544	465	363	653
Poland					
Unwrought (a)	279	408	536	533	558
Portugal					
Unwrought	250	—	31	4	(a) 92
Scrap	9	43	82	200	117
Romania					
Unwrought (a)	66	68	128	67	109
Slovakia					
Unwrought	(a) 9	(a) 8	11	688	1 968
Spain					
Unwrought (a)	427	513	449	558	978
Scrap	2 038	376	4 543	2 436	932
Sweden					
Unwrought (a)	122	163	52	32	46
Switzerland					
Unwrought (a)	87	60	16	8	17
Scrap	136	118	131	169	102
Turkey					
Unwrought (a)	37	79	56	43	76
United Kingdom					
Concentrates	61	163	58	241	86
Unwrought	928	1 856	1 797	2 092	1 726
Unwrought alloys	537	389	545	246	319
Scrap	22 597	13 115	4 414	3 435	1 526

## Notes

(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	2009	2010	2011	2012	2013
Austria					
Unwrought (a)	1 915	2 923	3 403	3 186	3 423
Belgium					
Concentrates	16	200	488	253	124
Unwrought	1 350	1 131	847	1 365	657
Unwrought alloys	2 638	3 289	2 785	3 109	3 971
Scrap	2 327	3 560	3 551	7 001	7 843
Bulgaria					
Unwrought (a)	22	47	359	215	353
Czech Republic					
Unwrought (a)	937	449	651	631	1 449
Denmark					
Unwrought (a)	13	110	136	195	173
Finland					
Unwrought (a)	94	188	136	124	77
France					
Unwrought	5 869	5 787	5 252	4 815	4 693
Unwrought alloys	207	389	283	266	305
Scrap	259	100	61	107	57
Germany					
Unwrought	14 193	18 684	21 396	18 865	19 224
Unwrought alloys	175	316	112	196	186
Scrap	674	714	1 578	461	880
Greece					
Unwrought (a)	80	160	211	70	46
Hungary					
Unwrought (a)	208	231	156	205	253
Ireland, Republic of					
Unwrought (a)	100	157	117	22	17
Italy					
Unwrought	2 652	3 828	4 936	3 375	3 617
Unwrought alloys	360	1 074	533	429	643
Scrap	49	60	220	22	35
Luxembourg					
Scrap	0	...	3	95	105
Netherlands					
Unwrought	7 071	13 967	11 303	7 453	11 803
Unwrought alloys	504	665	505	276	389
Scrap	380	606	524	424	3 655
Poland					
Concentrates	220	98	...	...	15
Unwrought (a)	1 102	1 317	1 579	1 281	1 138
Scrap	1 664	1 605	2 790	3 689	4 638
Portugal					
Unwrought	308	317	560	435	510
Unwrought alloys	103	100	19	13	23
Romania					
Unwrought (a)	114	85	125	91	120
Serbia					
Unwrought	49	60	72	148	224
Slovakia					
Unwrought (a)	2 059	2 087	2 120	2 091	4 119
Slovenia					
Unwrought (a)	69	118	70	62	89
Spain					
Unwrought	5 457	6 410	5 967	5 744	5 300
Unwrought alloys	243	172	428	122	82
Scrap	441	2 410	5 386	801	799
Sweden					
Unwrought (a)	364	435	189	149	201
Switzerland					
Unwrought (a)	800	863	737	799	857
Turkey					
Unwrought (a)	1 630	2 558	2 707	2 195	2 420

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
United Kingdom					
Unwrought	4 522	4 327	4 186	3 850	3 484
Unwrought alloys	370	365	396	1 113	4 049
Scrap	121	196	121	147	69

## Notes

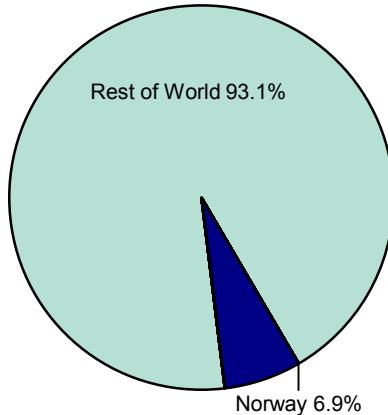
(1) In this table the term 'unwrought' tin corresponds to item 8001 of the Harmonised System and comprises ingots, pigs, unwrought bars, sticks, etc

(a) Including alloys

## Titanium

- The titanium minerals ilmenite and rutile are the main sources of titanium, but a third mineral leucoxene is also produced. Titanium is a low density, strong and corrosion-resistant metal that is important in the aerospace industry. However, the chief use (> 90 per cent) of titanium minerals is in the form of titanium dioxide, a white pigment used in paint, plastics, rubber and paper.
- Canada was the world's largest producer in 2013, with 23 per cent of the total world output. The second largest producer was Australia (17 per cent), followed by South Africa (ten per cent), China (nine per cent each) and Norway (seven per cent).

**EU36 Production of titanium minerals 2013**



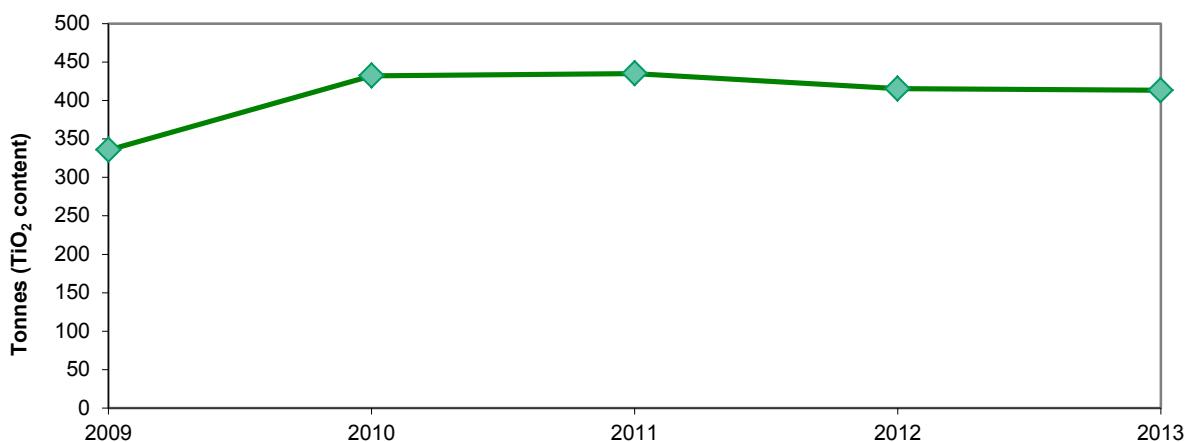
### Production of titanium minerals

Country	2009	2010	2011	2012	tonnes
					2013
Norway Ilmenite	671 000	864 000	870 000	830 614	826 126

Note

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

**EU36 Production of titanium minerals 2009 - 13**



**Exports of titanium**

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Metal	203	129	224	317	159
Oxides	5 344	5 956	4 794	3 965	4 052
Belgium					
Titanium minerals	58 654	106 478	116 859	119 931	96 990
Metal	1 087	895	1 405	1 560	1 336
Oxides	369 495	435 415	390 405	345 752	399 734
Bulgaria					
Metal	2	—	849	64	114
Oxides	677	584	987	408	258
Croatia					
Oxides	331	117	172	42	519
Czech Republic					
Titanium minerals	452	2 378	504	684	758
Metal	339	358	264	384	368
Oxides	46 753	45 842	45 437	43 174	45 164
Denmark					
Metal	102	196	125	194	193
Oxides	442	820	5 792	10 732	10 385
Estonia					
Oxides	158	49	164	468	396
Finland					
Oxides (a)	* 86 000	* 88 000	* 80 000	* 66 000	* 83 000
France					
Metal	4 523	4 907	5 333	5 946	6 633
Oxides	113 798	129 197	140 278	114 715	127 319
Germany					
Titanium minerals	6 864	22 384	18 932	13 648	51 517
Metal	5 367	9 351	13 954	12 561	13 824
Oxides	351 872	391 981	345 661	331 757	374 970
Greece					
Oxides	462	773	731	744	1 079
Hungary					
Metal	11	55	37	68	48
Oxides	1 120	1 942	1 484	1 298	1 871
Italy					
Metal	3 607	3 248	4 789	4 531	4 756
Oxides	23 508	27 450	26 181	22 039	37 137
Latvia					
Metal	—	7	61	42	2
Lithuania					
Oxides	502	1 167	965	1 029	1 122
Luxembourg					
Metal	9	20	17	17	151
Netherlands					
Titanium minerals	13 664	101 840	69 170	57 796	3 396
Metal	895	4 117	9 548	10 173	8 815
Oxides	36 179	31 385	11 305	14 836	114 285
Norway					
Titanium minerals (a)	* 350 000	* 465 000	* 441 000	* 392 000	* 396 000
Metal	227	231	343	243	271
Oxides (a)	* 207 000	* 35 000	* 35 000	* 31 000	* 35 000
Poland					
Metal	105	76	90	47	47
Oxides	20 937	20 996	23 401	20 201	20 329
Portugal					
Oxides	1 166	1 091	3 422	5 322	6 733
Romania					
Metal	541	960	550	375	615
Oxides	560	310	498	536	433
Slovakia					
Metal	3	49	24	199	91
Slovenia					
Metal	23	171	346	356	347
Oxides	57 866	61 637	53 015	47 488	58 140

## Titanium

### Exports continued

Country	2009	2010	2011	2012	2013
Spain					
Titanium minerals	25 892	2 405	650	4 011	297
Metal	1 018	1 928	1 698	1 779	2 896
Oxides	33 721	35 233	48 870	51 919	85 355
Sweden					
Metal	717	925	1 086	1 111	981
Oxides	15 921	20 567	18 331	16 429	15 109
Switzerland					
Metal	734	805	868	724	887
Oxides	1 203	1 466	1 666	1 623	2 009
Turkey					
Metal	47	85	95	122	193
Oxides	2 237	2 650	3 170	2 538	2 749
United Kingdom					
Metal	9 555	12 060	11 926	11 541	11 493
Oxides	203 873	208 518	223 190	142 135	169 548

### Notes

- (1) Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade accounts  
(2) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under 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

Country	2009	2010	2011	2012	2013
Albania					
Oxides	575	326	301	284	341
Austria					
Titanium minerals	362	477	580	284	432
Metal	1 346	1 381	2 590	3 130	2 737
Oxides	28 258	28 288	32 258	21 255	20 972
Belgium					
Titanium minerals	110 028	181 688	213 276	205 930	174 657
Metal	2 132	1 743	1 582	1 160	1 454
Oxides	108 582	* 314 200	114 760	97 229	126 543
Bulgaria					
Titanium minerals	105	506	486	735	—
Metal	65	19	46	127	89
Oxides	5 329	5 675	6 454	4 593	4 897
Croatia					
Oxides	2 697	3 000	2 911	206	2 826
Cyprus					
Oxides	1 189	1 299	1 141	783	621
Czech Republic					
Titanium minerals	140 394	155 485	146 778	98 071	100 317
Metal	918	779	1 333	1 717	1 884
Oxides	7 248	8 857	9 372	7 763	8 863
Denmark					
Metal	670	674	1 723	1 948	1 036
Oxides	17 511	20 427	23 296	17 706	20 220
Estonia					
Metal	50	82	5	683	2 229
Oxides	1 349	1 409	1 724	1 921	1 808
Finland					
Titanium minerals	8 794	(a)* 20	(a)* 3 154	(a)* 20	39 888
Metal	87	60	66	81	62
Oxides	12 524	15 571	15 533	13 638	14 391

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
France					
Ilmenite	17 766	...	...	...	...
Other titanium minerals	11 964	(b) 50 893	(b) 67 259	(b) 184 385	(b) 91 344
Metal	7 282	7 766	10 026	11 881	13 169
Oxides	136 389	148 994	138 687	123 037	129 659
Titanium slag	92 290	15 218	246	20 762	12 707
Germany					
Ilmenite	304 471	...	...	...	...
Other titanium minerals	212 735	(b) 838 768	(b) 794 043	(b) 648 030	(b) 612 633
Metal	11 649	12 919	20 233	17 015	16 198
Oxides	240 120	309 500	329 073	264 304	309 892
Titanium slag	42 042	164	2 499	...	...
Greece					
Titanium minerals	351	504	396	220	275
Metal	11	74	74	47	260
Oxides	19 289	19 003	19 447	12 378	16 796
Hungary					
Titanium minerals	(a)* 1 200	2 677	2 410	3 038	3 254
Metal	216	84	134	116	143
Oxides	6 853	8 927	8 885	7 325	8 809
Iceland					
Metal	99	100	59	75	80
Ireland, Republic of					
Metal	507	414	202	432	1 297
Oxides	4 308	4 922	4 312	3 924	4 044
Italy					
Titanium minerals	74 338	98 978	111 842	(a)* 4 132	55 323
Metal	3 352	4 497	9 420	7 367	6 065
Oxides	139 071	160 361	164 708	137 976	143 083
Latvia					
Oxides	562	739	693	640	586
Lithuania					
Metal	8	7	4	38	71
Oxides	1 259	1 947	2 081	2 028	2 686
Luxembourg					
Metal	66	456	1 842	786	1 898
Oxides	1 114	1 481	1 534	1 494	13 393
Macedonia					
Oxides	427	504	502	455	546
Malta					
Oxides	470	463	445	346	382
Netherlands					
Titanium minerals	* 100 000	238 199	196 960	158 679	83 675
Metal	1 224	5 330	6 094	5 709	5 902
Oxides	40 914	43 542	52 165	38 792	58 718
Norway					
Titanium minerals	29 809	45 018	25 003	...	26 238
Metal	389	412	723	890	671
Oxides	8 209	10 115	10 376	8 093	7 214
Poland					
Titanium minerals	84 396	105 384	99 055	84 143	96 894
Metal	264	616	2 020	329	270
Oxides	42 031	46 110	54 770	44 098	48 200
Portugal					
Titanium minerals	358	714	807	429	517
Oxides	18 456	20 486	19 813	14 788	23 016
Romania					
Titanium minerals	1 513	2 095	5 393	1 354	1 721
Metal	707	771	541	776	801
Oxides	7 151	8 733	10 571	7 511	8 996
Serbia					
Oxides	3 892	3 888	4 498	3 960	4 336
Slovakia					
Metal	130	956	2 271	643	778
Oxides	2 949	2 109	2 409	2 163	2 776

Titanium

Imports continued

Country	2009	2010	2011	2012	2013
Slovenia					
Titanium minerals	32 789	25 081	54 387	20 208	19 761
Metal	233	400	964	739	844
Oxides	2 889	2 917	2 884	2 625	2 954
Titanium slag	66 818	...	39 644	57 097	54 482
Spain					
Ilmenite	26 512	...	...	...	...
Other titanium minerals	522	(b) 111 298	(b) 123 284	(b) 99 055	(b) 130 406
Metal	1 735	2 627	3 673	3 411	4 285
Oxides	93 267	91 822	90 581	67 970	79 052
Sweden					
Titanium minerals	726	1 854	645	629	661
Metal	1 593	1 936	2 390	2 245	2 072
Oxides	53 071	61 191	62 054	53 030	52 729
Switzerland					
Metal	862	971	1 081	1 177	1 207
Oxides	17 086	19 725	22 198	16 806	18 186
Turkey					
Titanium minerals	5 628	7 390	9 454	7 328	9 292
Metal	188	298	357	356	556
Oxides	98 100	127 266	144 383	117 269	130 866
United Kingdom					
Titanium minerals	112 091	90 622	32 127	117 860	104 134
Metal	23 178	20 681	69 844	33 943	27 099
Oxides	53 864	59 460	62 311	63 058	75 316
Titanium slag	127 224	187 913	...	...	...

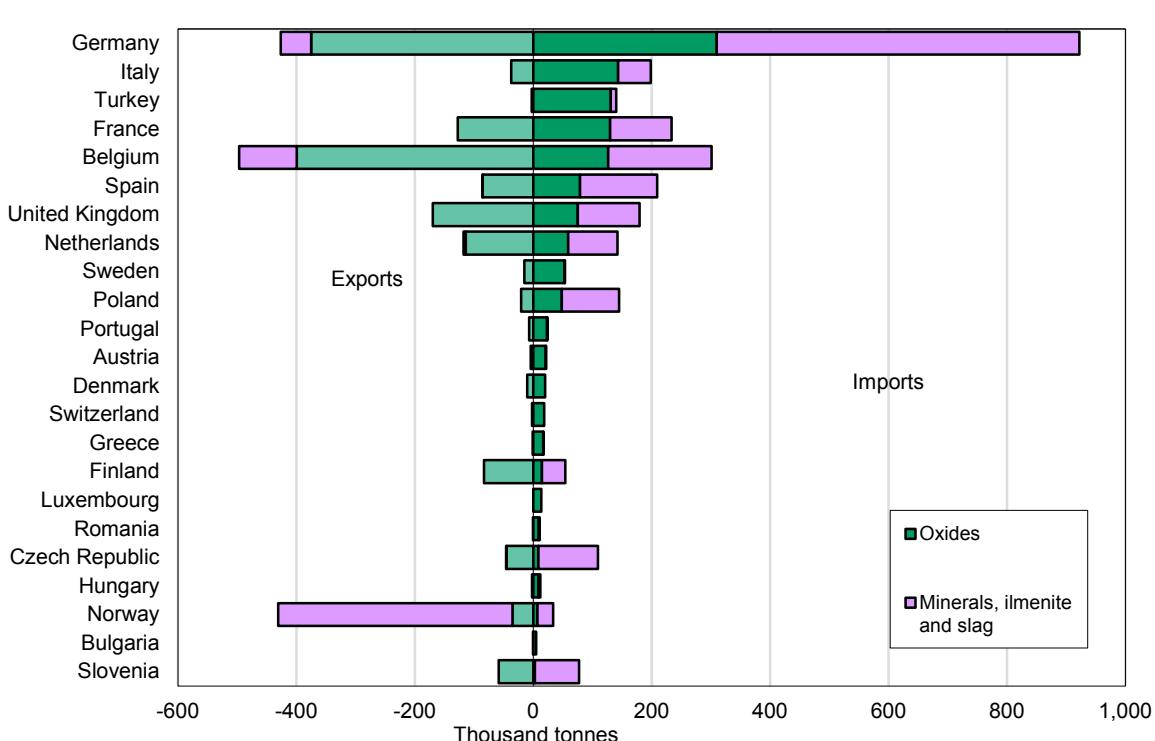
Notes

- (1) Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade accounts  
 (2) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under 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 exports from certain countries

(b) Includes Ilmenite

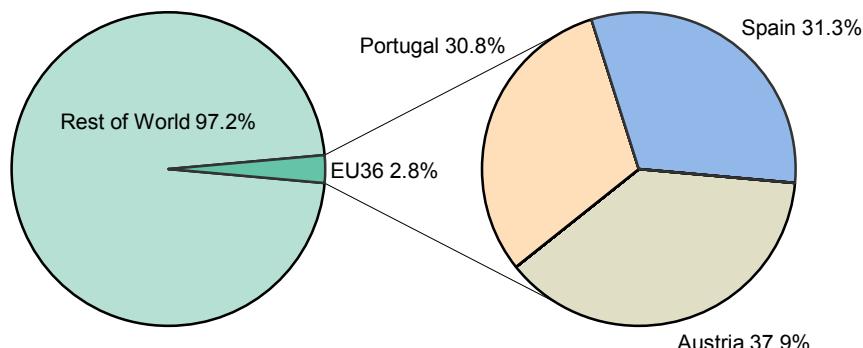
### Titanium - EU36 trade in 2013



## 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 producer in 2013, with 78 per cent of the total world output. The second largest producer was Russia (nine per cent), followed by Canada (four per cent), Rwanda and Bolivia (two per cent each).

**EU36 Mine production of tungsten 2013**



### Mine production of tungsten

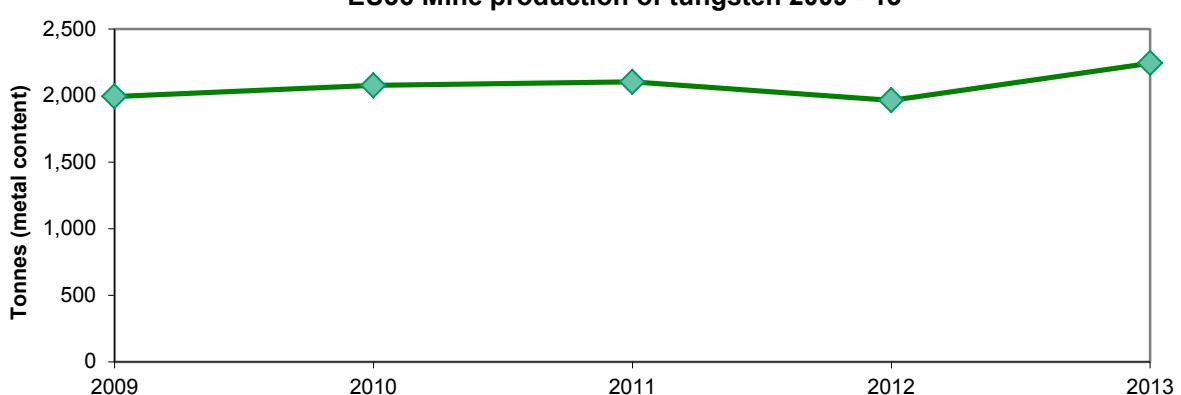
tonnes (metal content)

Country	2009	2010	2011	2012	2013
Austria	887	975	861	706	850
Portugal (a)	823	799	818	763	692
Spain	284	303	425	496	702
EU36 total	2 000	2 100	2 100	2 000	2 200

Note

(a) Wolframite and scheelite

**EU36 Mine production of tungsten 2009 - 13**



### Exports of tungsten

tonnes

Country	2009	2010	2011	2012	2013
Austria Metal (a)	* 4 300	* 3 000	* 2 400	* 2 200	* 1 900

Tungsten

Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Ores and concentrates	120	27	406	544	350
Metal	422	723	368	657	427
Carbide	32	92	92	77	82
Bulgaria					
Metal	2	80	11	12	5
Czech Republic					
Metal	30	211	611	1 011	1 110
Carbide	307	803	903	863	949
Denmark					
Metal	91	113	118	32	12
Estonia					
Metal	—	1	...	61	4
Finland					
Metal	291	450	588	480	643
France					
Ores and concentrates	1	2	3	—	1 335
Metal	398	473	589	962	566
Carbide	261	288	272	353	286
Germany					
Ores and concentrates	196	164	976	524	40
Metal	2 655	3 119	3 064	3 618	4 823
Hungary					
Metal	36	54	53	99	76
Italy					
Metal	670	925	1 091	1 060	687
Lithuania					
Metal	1	—	178	18	17
Luxembourg					
Metal	2	203	47	0	0
Netherlands					
Ores and concentrates	25	104	0	0	63
Metal	133	406	255	119	84
Poland					
Ores and concentrates	...	...	314	...	41
Metal	136	154	179	89	348
Portugal					
Ores and concentrates	1 407	1 289	1 324	1 325	1 253
Metal	20	6	131	51	10
Romania					
Metal	4	9	23	43	5 373
Slovakia					
Metal	4	4	9	43	296
Spain					
Ores and concentrates	457	400	981	1 074	958
Metal	156	315	880	453	504
Sweden					
Ores and concentrates	96	—	21	149	105
Metal	431	289	218	122	495
Carbide	253	401	186	109	87
Switzerland					
Metal	239	476	398	400	323
Turkey					
Metal	213	139	237	210	227
United Kingdom					
Ores and concentrates	3	29	35	102	67
Metal	1 541	1 650	2 135	1 674	2 448
	80	41	597	463	400

Notes

- (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	2009	2010	2011	2012	2013
Austria					
Metal	369	632	1 471	1 017	950
Carbide	568	1 268	1 241	1 076	968
Belgium					
Ores and concentrates	2	28	—	—	48
Metal	326	402	321	202	112
Carbide	35	31	20	22	52
Bulgaria					
Metal	26	86	16	30	21
Czech Republic					
Ores and concentrates	...	...	314	799	100
Metal	4 184	677	367	968	506
Carbide	...	150	219	88	198
Denmark					
Metal	105	51	41	32	30
Finland					
Metal	205	403	567	456	725
France					
Ores and concentrates	1	2	4	14 619	69 283
Metal	547	867	1 027	619	534
Carbide	311	359	583	551	575
Germany					
Ores and concentrates	821	1 029	843	381	119
Metal	3 313	7 168	8 094	6 946	6 351
Carbide	1 333	2 544	3 105	2 478	2 337
Hungary					
Metal	31	54	67	56	78
Ireland, Republic of					
Metal	68	91	76	121	101
Carbide	108	68	186	116	113
Italy					
Metal	147	496	552	656	482
Carbide	103	279	440	240	380
Lithuania					
Metal	—	1	156	52	25
Luxembourg					
Carbide	465	7	2	—	2
Netherlands					
Ores and concentrates (a)	* 900	* 1 200	* 3 100	* 3 400	* 3 203
Metal	71	206	209	211	471
Poland					
Metal	87	124	96	69	170
Portugal					
Metal	193	277	206	151	147
Carbide	46	110	106	79	93
Romania					
Metal	22	79	50	63	45
Slovakia					
Metal	43	366	5 398	5 331	2 207
Spain					
Ores and concentrates	147	44	15	17	13
Metal	681	426	216	506	596
Carbide	13	25	51	35	41
Sweden					
Metal	175	179	302	538	407
Carbide	233	1 308	2 050	852	1 088
Switzerland					
Metal	105	143	226	234	176
Turkey					
Metal	34	74	70	71	46

Tungsten

Imports continued

Country	2009	2010	2011	2012	2013
United Kingdom					
Ores and concentrates	35	2	25	3	8
Metal	1 477	1 676	1 999	1 888	1 906
Carbide	614	1 111	3 622	1 245	878

Notes

- (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 exports from certain countries

## 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 was confined to four countries in 2013: China (58 per cent of the total world output), Russia (21 per cent), South Africa (20 per cent) and Kazakhstan (one per cent). In the USA vanadium has been a significant by-product from the refining of heavy crude oils in previous years.

### Exports of vanadium

Country	2009	2010	2011	2012	2013
Belgium					
Ores and concentrates	131	...	...	...	...
Pentoxide	47	80	* 116	65	7
Italy					
Ores and concentrates	385	...	...	...	...
Netherlands					
Pentoxide	102	122	186	328	492
Spain					
Pentoxide	26	22	774	26	9
Turkey					
Pentoxide	119	—	24	0	—
United Kingdom					
Pentoxide	487	694	6	0	—
	18	23	...	...	...

#### Notes

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

### Imports of vanadium

Country	2009	2010	2011	2012	2013
Austria					
Vanadiferous residues	* 35 000	* 46 000	* 46 000	* 46 000	* 46 000
Belgium					
Ores and concentrates	123	...	...	...	...
Pentoxide	94	123	95	364	200
Czech Republic					
Pentoxide	2 702	5 255	7 004	8 672	9 478
France					
Pentoxide	371	574	605	429	652
Germany					
Pentoxide (a)	* 400	* 1 000	* 700	* 1 300	* 1 500
Greece					
Ores and concentrates	80	...	...	...	...
Italy					
Pentoxide	45	53	45	117	231
Netherlands					
Pentoxide	27	204	888	558	1 240
Spain					
Pentoxide	50	115	52	56	57
United Kingdom					
Pentoxide	84	5	17	21	0
	112	197	376	261	...

#### Notes

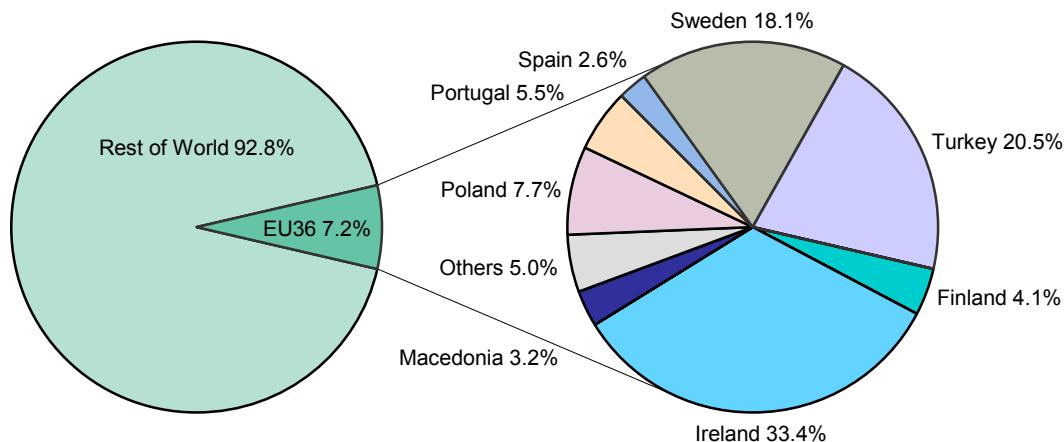
- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any  
(2) Metal traded in ferro-alloy form is included under iron, steel and ferro-alloys

(a) BGS estimates, based on known 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.
- China was the world's largest producer of mined zinc in 2013, with 38 per cent of the total world output. The second largest producer was Australia (11 per cent), followed by Peru (ten per cent), USA and India (six per cent each).
- China was also the world's largest producer of slab zinc in 2013, with 40 per cent of the total world output. The second largest producer was South Korea (eight per cent), followed by India (six per cent) and Canada (five per cent).

**EU36 Mine production of zinc 2013**



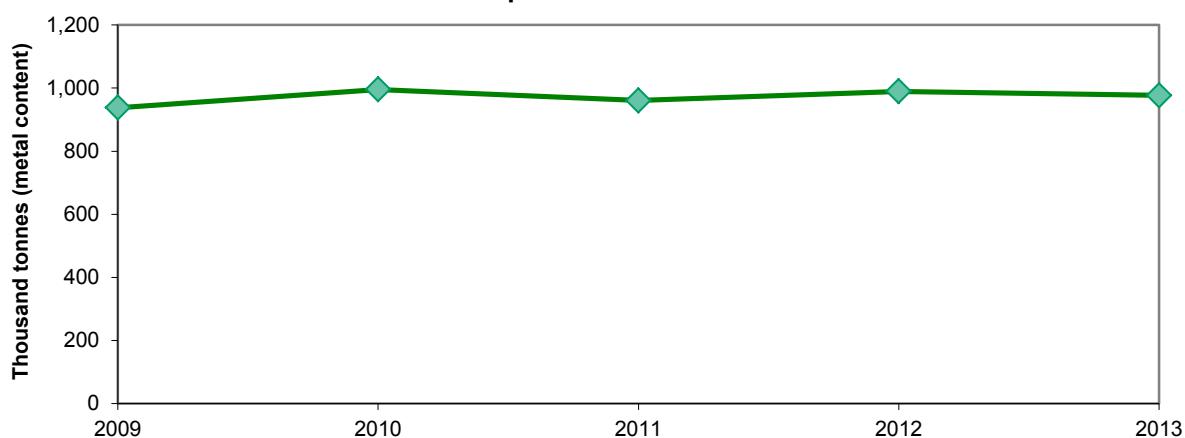
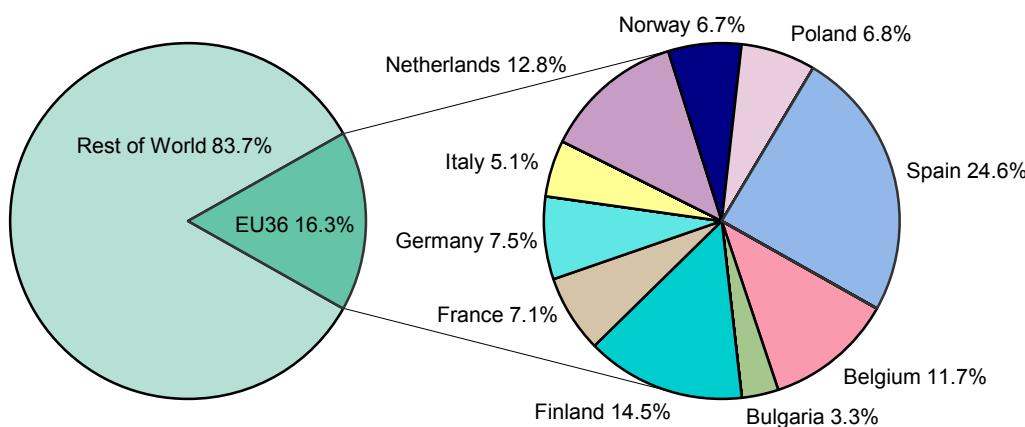
## Mine production of zinc

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Bulgaria (a)	9 339	9 904	10 977	12 116	13 902
Finland	30 233	55 562	64 115	52 200	40 290
Greece	17 800	18 400	21 200	20 800	22 500
Ireland, Republic of	385 700	342 500	344 000	337 500	326 700
Macedonia	38 648	32 872	28 132	28 037	30 907
Montenegro	—	500	3 300	4 600	4 600
Poland	115 500	107 700	87 200	76 700	75 200
Portugal	501	6 422	4 227	30 006	53 382
Romania	* 3 000	* 7 700	* 8 800	* 8 400	* 2 000
Serbia	2 700	2 600	3 100	6 000	5 800
Slovakia	54	82	103	134	...
Spain	5 900	17 323	33 197	28 634	24 975
Sweden	192 502	198 687	194 021	188 325	176 582
Turkey	135 800	195 500	158 057	195 793	* 200 000
EU36 total	938 000	996 000	960 000	989 000	977 000

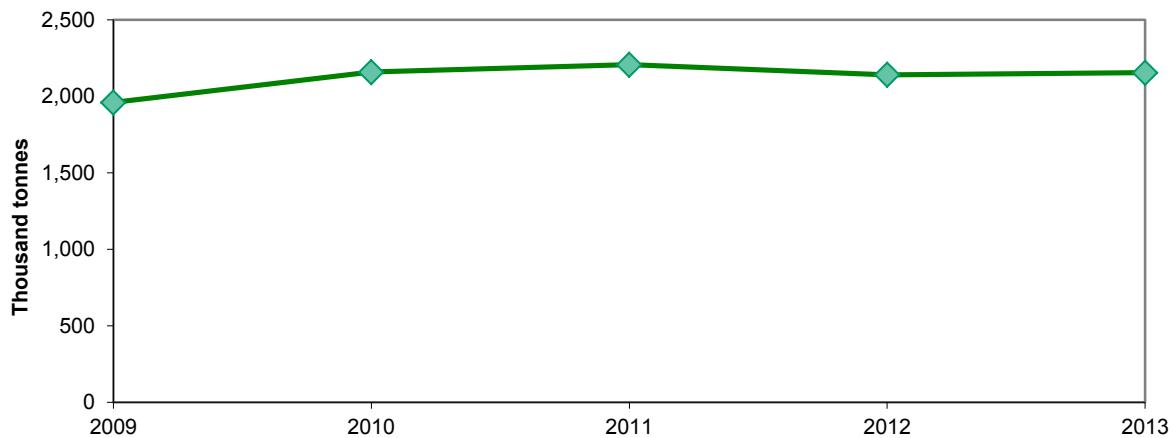
Note

(a) Metal content of ore

**EU36 Mine production of zinc 2009 - 13****EU36 Production of slab zinc 2013****Production of slab zinc**

tonnes

Country	2009	2010	2011	2012	2013
Belgium	137 000	260 000	282 000	250 000	252 000
Bulgaria	92 700	93 800	88 400	73 100	* 72 000
Finland	295 049	307 144	307 352	314 742	311 686
France	161 000	163 000	164 000	161 000	152 000
Germany	153 000	165 000	170 000	169 000	162 000
Italy	103 400	104 700	110 200	97 200	111 000
Netherlands	224 000	264 000	261 000	257 000	275 000
Norway	138 973	148 862	153 200	152 647	143 444
Poland	139 100	135 000	144 100	138 300	146 300
Romania	1 000	—	—	—	—
Spain	515 000	517 100	527 100	528 300	* 530 000
EU36 total	1 960 000	2 159 000	2 207 000	2 141 000	2 155 000

**EU36 Production of slab zinc 2009 - 13****Exports of zinc**

Country	2009	2010	2011	2012	2013
Austria					
Unwrought (a)	5 703	8 532	9 776	6 410	11 065
Scrap	6 052	5 757	8 583	8 591	10 440
Belgium					
Ores and concentrates	785 125	749 582	725 335	859 086	773 334
Unwrought	13 590	155 654	296 197	277 418	244 589
Unwrought alloys	...	...	154 258	140 766	155 488
Scrap	16 644	14 540	11 652	15 063	13 333
Bulgaria					
Unwrought (a)	87 008	81 332	71 894	57 768	54 272
Scrap	2 226	1 949	2 021	2 185	1 353
Croatia					
Scrap	708	518	676	764	833
Czech Republic					
Unwrought (a)	19 982	5 148	5 147	7 407	13 112
Scrap	2 716	4 798	4 189	4 432	3 364
Denmark					
Unwrought (a)	124	318	635	789	1 060
Scrap	2 622	2 563	2 468	2 617	2 271
Estonia					
Scrap	1 065	509	637	410	253
Finland					
Ores and concentrates	1 426	22 479	50 656	39 555	29 613
Unwrought (a)	268 893	266 738	265 686	271 313	272 632
Scrap	1 012	1 369	1 215	1 066	935
France					
Ores and concentrates	39 350	49 652	54 609	62 111	97 317
Unwrought	64 773	79 727	105 934	80 747	73 557
Unwrought alloys	9 362	1 851	2 549	1 938	2 333
Scrap	45 986	51 755	42 736	42 231	47 478
Germany					
Ores and concentrates	888	1 674	73 980	39 533	96 369
Unwrought	63 165	52 483	55 518	59 913	54 476
Unwrought alloys	24 163	31 857	31 170	29 775	27 985
Scrap	68 648	74 208	75 168	73 200	52 974
Greece					
Ores and concentrates	21 311	14 660	36 016	51 007	41 940
Hungary					
Scrap	2 978	2 821	2 314	1 897	1 755
Ireland, Republic of					
Ores and concentrates	594 268	588 143	660 259	647 444	615 916
Italy					
Ores and concentrates	48 051	98 211	71 471	84 569	89 580
Unwrought	5 258	11 071	16 570	14 737	8 016
Unwrought alloys	3 491	6 377	9 385	10 029	8 415
Scrap	12 334	16 427	13 006	7 151	7 019

## Exports continued

tonnes

Country	2009	2010	2011	2012	2013
Latvia					
Scrap	975	587	459	779	821
Luxembourg					
Scrap	423	1 134	739	698	690
Macedonia					
Ores and concentrates	69 509	60 369	51 545	51 154	56 810
Scrap	479	739	313	103	144
Montenegro					
Ores and concentrates	...	499	6 579	9 120	9 283
Netherlands					
Ores and concentrates	425	12 182	132 344	90 253	91 030
Unwrought	133 994	166 281	122 532	213 479	272 732
Unwrought alloys	22 041	42 182	52 382	39 626	48 484
Scrap	* 11 900	32 543	25 629	28 277	26 682
Norway					
Unwrought	128 416	122 649	119 770	115 789	109 485
Unwrought alloys	6 107	19 889	29 094	28 188	30 614
Poland					
Ores and concentrates	45 877	4 213	0	0	3
Unwrought	84 833	96 142	105 552	105 929	128 521
Unwrought alloys	4 699	6 280	6 939	6 541	9 137
Scrap	1 617	902	960	533	570
Portugal					
Ores and concentrates	371	7 438	2 201	67 881	112 125
Unwrought (a)	849	151	734	1 723	492
Scrap	1 646	940	755	5 736	1 745
Romania					
Ores and concentrates	24 528	15 375	17 592	16 745	4 080
Unwrought (a)	8 004	657	776	454	544
Scrap	1 615	711	597	672	592
Serbia					
Ores and concentrates	10 699	14 921	23 247	22 559	25 416
Scrap	330	120	67	907	834
Slovakia					
Unwrought	12 871	7 903	2 836	3 421	2 385
Unwrought alloys	11 365	13 075	7 001	10 336	10 472
Slovenia					
Unwrought (a)	1 469	2 725	918	367	604
Scrap	517	933	832	1 104	1 173
Spain					
Ores and concentrates	40 118	82 009	122 429	133 939	92 125
Unwrought	216 633	318 527	351 354	359 605	303 548
Unwrought alloys	62 544	91 054	35 318	38 229	42 674
Scrap	26 675	37 362	15 625	8 283	17 625
Sweden					
Ores and concentrates	395 616	362 085	374 501	343 725	333 534
Scrap	1 840	2 900	3 257	3 166	2 877
Switzerland					
Scrap	2 574	2 582	2 846	2 284	1 889
Turkey					
Ores and concentrates	272 559	392 725	316 714	412 744	399 384
Unwrought (a)	451	666	1 704	2 130	2 443
Scrap	1 929	1 536	2 997	2 960	1 903
United Kingdom					
Ores and concentrates	11 418	8 405	9 714	5 561	4 720
Unwrought	3 600	3 580	2 724	1 823	2 138
Unwrought alloys	13 578	14 561	12 737	13 580	11 251
Scrap	6 030	14 903	12 545	9 897	4 375

## Notes

(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	2009	2010	2011	2012	2013
Austria					
Unwrought	37 864	37 560	47 394	51 634	72 381
Unwrought alloys	27 886	34 411	38 759	34 920	33 182
Scrap	596	298	4 827	9 832	9 204
Belgium					
Ores and concentrates	(b)* 444 500	1 129 207	1 182 797	1 194 208	1 132 719
Unwrought	237 741	189 980	280 492	267 917	214 491
Unwrought alloys	13 299	10 613	11 844	30 383	40 924
Scrap	61 433	68 233	66 665	57 765	52 498
Bulgaria					
Ores and concentrates	147 579	167 107	166 553	132 500	127 158
Unwrought (a)	2 480	1 761	2 765	6 878	2 765
Croatia					
Unwrought (a)	3 149	3 029	2 886	2 847	3 024
Czech Republic					
Unwrought	24 660	15 121	17 137	19 064	21 687
Unwrought alloys	7 155	11 653	10 590	11 947	8 524
Scrap	2 434	900	909	583	177
Denmark					
Unwrought	6 063	4 427	6 023	6 877	6 968
Unwrought alloys	771	1 310	763	923	1 343
Estonia					
Unwrought (a)	1 595	5 978	8 887	4 987	664
Finland					
Ores and concentrates	532 036	559 918	547 265	558 963	611 240
Unwrought (a)	3 705	4 374	1 471	1 146	1 565
France					
Ores and concentrates	241 976	222 580	234 060	288 110	306 850
Unwrought	128 674	131 993	151 988	126 771	120 553
Unwrought alloys	27 000	34 205	34 022	32 075	34 823
Scrap	4 604	3 003	3 853	23 591	58 552
Germany					
Ores and concentrates	271 554	285 331	344 106	324 954	292 037
Unwrought	285 965	380 807	398 086	365 788	371 332
Unwrought alloys	36 350	57 563	69 972	64 642	64 278
Scrap	16 782	23 694	25 853	25 536	20 363
Greece					
Unwrought (a)	25 422	22 534	11 358	11 341	9 895
Hungary					
Unwrought (a)	9 862	11 767	12 818	12 856	12 139
Ireland, Republic of					
Unwrought (a)	2 210	2 104	2 358	2 058	2 481
Italy					
Ores and concentrates	155 028	184 192	153 982	186 715	140 909
Unwrought	118 424	245 254	244 557	164 716	142 457
Unwrought alloys	22 194	34 595	39 554	31 434	48 303
Scrap	15 315	27 740	36 491	36 134	39 614
Lithuania					
Unwrought (a)	190	460	1 049	1 063	684
Luxembourg					
Unwrought	6 049	9 232	6 819	7 461	7 080
Macedonia					
Unwrought (a)	4 147	5 213	4 920	4 611	4 075
Netherlands					
Ores and concentrates	320 568	391 050	355 644	445 698	474 857
Unwrought	104 253	254 953	227 277	221 680	191 576
Unwrought alloys	15 791	19 827	13 356	8 029	24 859
Scrap	8 274	12 653	9 283	6 759	7 301
Norway					
Ores and concentrates	209 649	228 828	250 537	260 442	237 170
Unwrought (a)	1 612	1 376	1 013	2 313	205
Poland					
Ores and concentrates	130 258	115 561	97 225	178 780	157 232
Unwrought	18 498	53 983	49 569	47 314	48 736
Unwrought alloys	8 922	7 610	10 045	11 622	11 593
Scrap	3 907	7 188	10 421	11 060	14 251

## Imports continued

tonnes

Country	2009	2010	2011	2012	2013
Portugal					
Unwrought	12 830	15 757	13 299	11 135	10 471
Unwrought alloys	4 018	4 522	3 967	4 601	6 084
Romania					
Unwrought (a)	10 523	16 664	17 006	16 883	18 691
Scrap	—	246	439	1 628	1 101
Serbia					
Unwrought	4 178	4 846	5 275	5 344	6 418
Slovakia					
Unwrought (a)	28 863	37 266	34 536	27 313	36 191
Slovenia					
Unwrought	16 766	15 314	14 495	12 916	12 984
Unwrought alloys	6 180	5 850	7 374	6 623	8 457
Spain					
Ores and concentrates	909 078	1 003 388	977 695	1 069 671	994 451
Unwrought	16 091	7 583	16 841	6 091	4 623
Unwrought alloys	9 230	15 627	11 050	7 235	7 156
Scrap	3 127	10 935	23 205	9 620	38 266
Sweden					
Unwrought	29 750	37 524	30 598	24 686	23 619
Unwrought alloys	2 691	5 905	6 282	5 907	6 536
Scrap	1 208	226	336	44	129
Switzerland					
Unwrought	9 431	15 521	12 747	11 702	11 554
Unwrought alloys	1 549	2 276	2 158	1 930	1 648
Turkey					
Unwrought	137 765	182 598	201 409	224 683	234 744
Unwrought alloys	1 714	2 876	6 504	5 261	10 059
United Kingdom					
Unwrought	84 594	97 066	85 516	77 847	98 448
Unwrought alloys	1 869	2 973	9 306	8 917	8 469
Scrap	344	447	339	412	533

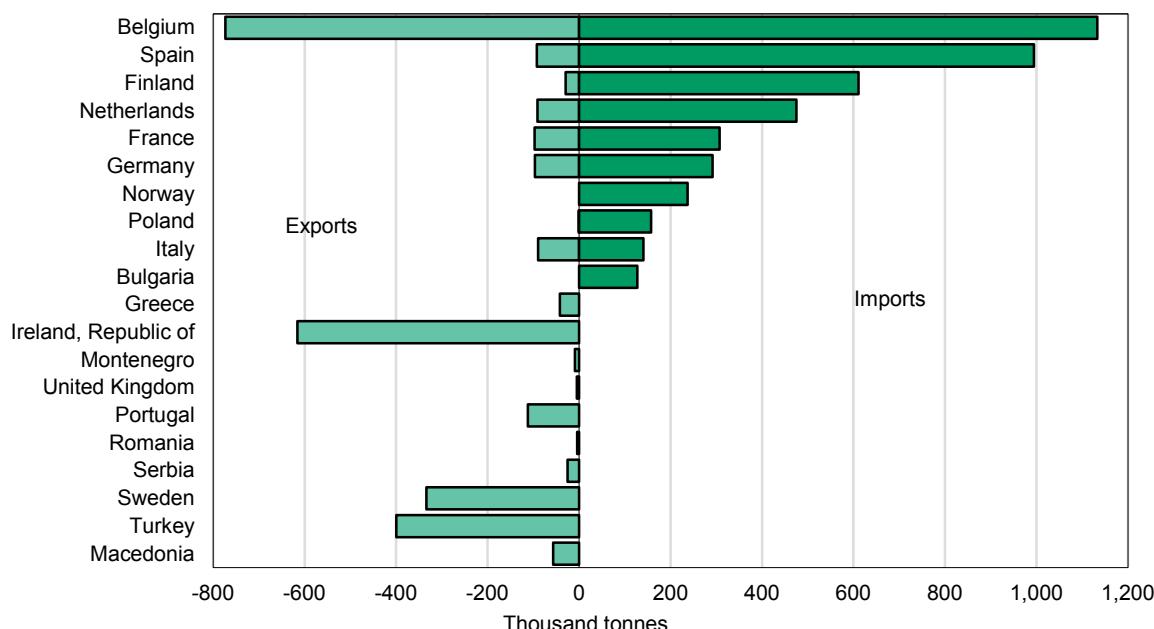
## Notes

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

(a) Including alloys

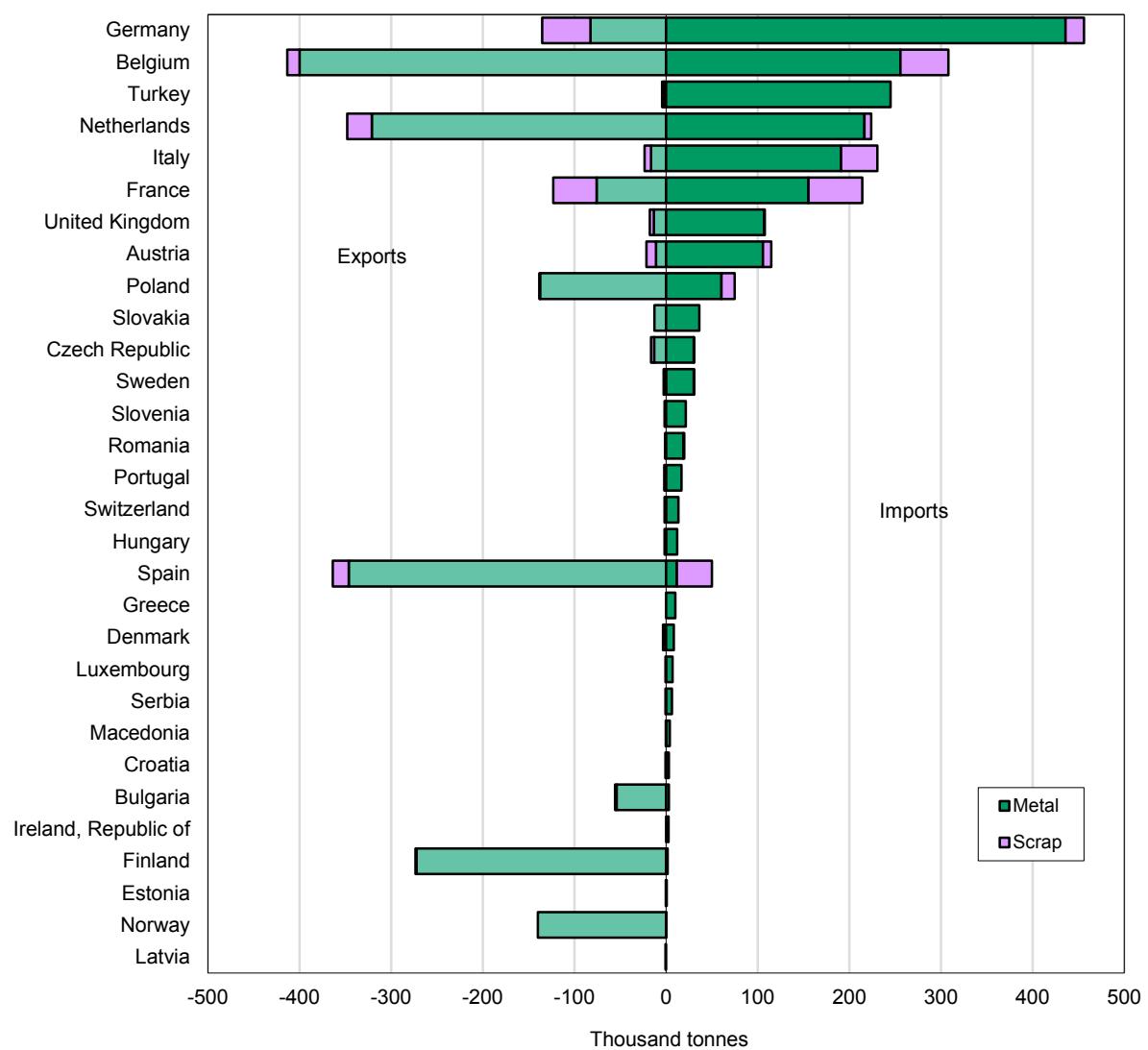
(b) BGS estimates, based on known exports from certain countries

Zinc ore - EU36 trade in 2013



Zinc

## Zinc - EU36 trade in 2013



## Zirconium

- 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. Australia was the world's largest producer in 2013, with 49 per cent of the total world output. The second largest producer was South Africa (23 per cent), followed by USA (nine per cent) and Indonesia (four per cent).

### Exports of zirconium

tonnes

Country	2009	2010	2011	2012	2013
Belgium					
Concentrates	28 907	17 417	12 021	13 246	17 228
Metal	125	187	272	186	197
France					
Concentrates	1 243	2 044	4 973	1 708	1 955
Germany					
Concentrates (a)	* 7 300	* 10 800	* 10 800	* 7 500	* 6 300
Metal	386	384	792	735	896
Italy					
Concentrates	33 219	41 784	44 252	11 012	2 832
Metal	274	136	34	137	27
Netherlands					
Concentrates	4 639	11 091	13 351	9 959	9 514
Metal	32	110	108	147	75
Spain					
Concentrates	13 581	28 166	29 952	14 360	8 031
Metal	746	51	3	64	73
Sweden					
Metal	118	90	137	95	121
United Kingdom					
Concentrates	742	1 405	1 661	818	1 037
Metal	19	90	102	213	66

## Notes

(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 zirconium

tonnes

Country	2009	2010	2011	2012	2013
Austria					
Concentrates	1 298	1 680	1 994	1 344	1 193
Belgium					
Concentrates	28 897	17 469	12 317	12 682	17 652
Metal	213	370	480	309	382
Bulgaria					
Concentrates	573	781	609	95	231
Czech Republic					
Concentrates	268	303	955	595	682
France					
Concentrates	25 087	25 310	35 922	25 784	26 688
Metal	553	326	687	436	363
Germany					
Concentrates (a)	* 24 985	* 26 967	* 29 153	* 20 059	* 25 671
Metal	664	798	676	956	983
Hungary					
Concentrates	1 265	2 455	1 765	1 965	1 444
Ireland, Republic of					
Concentrates	1 323	16 162	886	146	268

Zirconium

Imports continued

Country	2009	2010	2011	2012	2013
Italy					
Concentrates	53 845	98 214	81 360	40 897	56 430
Metal	226	144	184	135	141
Netherlands					
Concentrates	11 027	23 981	43 560	17 070	6 651
Metal	* 70	188	297	211	152
Poland					
Concentrates	340	648	488	670	735
Portugal					
Concentrates	5 620	5 475	4 048	2 386	2 574
Romania					
Metal	301	35	41	1	46
Spain					
Concentrates	95 103	149 442	143 493	63 341	99 858
Metal	83	132	97	124	136
Sweden					
Metal	218	220	120	146	119
Turkey					
Concentrates	2 918	4 823	4 770	3 268	4 130
United Kingdom					
Concentrates (b)	6 386	8 450	14 709	8 928	6 879
Metal	203	411	616	482	513

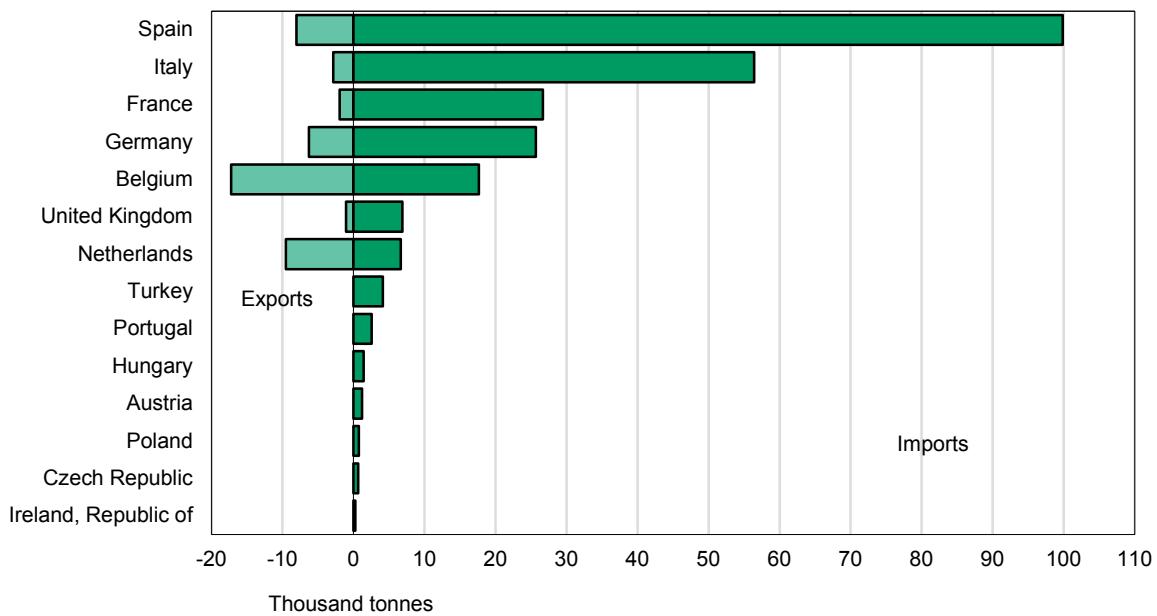
Notes

(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

(b) Mainly zircon

Zirconium concentrates - EU36 trade in 2013



## 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 form in unusual geological environments and so production is restricted to a few countries. Of these, Turkey was the world's largest producer in 2013, with 34 per cent of the total world output. The second largest producer was USA (25 per cent), followed by Argentina (13 per cent), Chile (11 per cent) and Russia (five per cent).

### Production of borates

Country	2009	2010	2011	2012	2013
Turkey	1 687 102	2 504 249	2 729 849	1 814 725	* 1 800 000

## 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 a few countries are known to produce nepheline syenite. Russia was the largest known producer in 2013, followed by Canada and Norway.

### Production of nepheline syenite

Country	2009	2010	2011	2012	2013
Norway	270 000	327 000	330 000	320 000	320 000

## 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 dewater — 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.
- Turkey was the world's largest producer in 2013, with an estimated 24 per cent of the total world output. The next largest producers were Greece and China (19 per cent each), followed by Iran (14 per cent) and USA (ten per cent).

### Production of perlite

Country	2009	2010	2011	2012	2013
Bulgaria	14 800	—	—	3 700	—
Greece	862 935	760 000	720 000	790 000	700 000
Hungary	82 058	70 990	70 900	72 364	64 220
Italy	* 60 000	* 60 000	* 60 000	* 60 000	* 60 000
Slovakia	25 000	23 000	23 000	24 000	16 000
Turkey	522 832	545 585	702 673	887 600	* 900 000
EU36 total	1 570 000	1 460 000	1 580 000	1 840 000	1 740 000

## Rhenium

- Rhenium is a silvery-white, heavy metal used in refractories due to its high melting point. Typical uses include nickel-based superalloys for the combustion chambers, turbine blades and exhaust nozzles of jet engines. It is also used in catalysts.
- Rhenium is mainly produced as a by-product of molybdenum or copper. Worldwide production is limited to nine countries, of which Chile is the largest producer.

### Production of rhenium

Country	2009	2010	2011	2012	2013
Poland	4	4	5	* 5	* 9

## Selenium

- 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. Japan was the world's largest producer in 2013, with 34 per cent of the total world output. The second largest producer was Germany (11 per cent), followed by Belgium (nine per cent), Canada and Russia (seven per cent each).

### Production of selenium metal

Country	2009	2010	2011	2012	2013
Belgium	* 200	* 200	* 200	* 200	* 200
Finland	59	73	86	93	101
Germany	* 230	* 250	* 250	* 250	* 250
Poland	80	79	85	90	80
Sweden	129	72	* 70	* 70	* 70

## Strontium

- Strontium is a soft metallic element. The most common strontium mineral is celestite (strontium sulphate). This is frequently converted into strontium carbonate before marketing. Strontium compounds are also used in pyrotechnics and flares, ceramic ferrite magnets, pigments and fillers, and in glass (particularly the glass for televisions screens).
- China was the world's largest producer in 2013, with 79 per cent of the total world output. The second largest producer was Spain (ten per cent), followed by Mexico (eight per cent).

### Production of strontium minerals

Country	2009	2010	2011	2012	2013
Spain	57 466	83 035	97 102	96 888	90 972

Note

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

## Tellurium

- Tellurium is a brittle, mildly toxic, silvery-white metalloid which is used primarily in steel or copper alloys to improve machinability. It is also used in semi-conductors and solar panels.
- Tellurium is mainly produced as a by-product of copper refining and global reported production is limited to seven countries, of which the USA is the largest producer, followed by Japan and Russia.

### Production of tellurium metal

tonnes

Country	2009	2010	2011	2012	2013
Sweden	—	—	—	6 791	24 457

## Note

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

## 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.
- Kazakhstan was the world's largest producer in 2013, with 38 per cent of the total world output. The second largest producer was Canada (16 per cent), followed by Australia (11 per cent), Namibia and Niger (seven per cent each).

### Mine production of uranium

tonnes (metal content)

Country	2009	2010	2011	2012	2013
Czech Republic	286	259	252	222	232
Germany	—	* 8	52	50	27
Romania	* 75	* 77	* 77	* 90	* 77

## Note

(1) Excluding uranium production from decommissioning operations in France 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.
- China was the world's largest producer in 2013, with 68 per cent of the total world output. The second largest producer was India (18 per cent), followed by USA (six per cent) and Mexico (five per cent).

### Production of wollastonite

tonnes

Country	2009	2010	2011	2012	2013
Finland	9 200	12 100	11 500	* 11 500	* 12 000
Spain	7 000	6 000	7 417	10 918	16 738

## Note

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







Price £30

**NERC**  
SCIENCE OF THE  
ENVIRONMENT