

Extractive Industry in Europe

Facts & Figures

- In recent years the total amount of material directly used in the EU economy was more than 8 billion tonnes per year.
- Construction, chemicals, automotive, aerospace, machinery and equipment sectors, which provide a total value added of €1 324 billion and employment for some 30 million people, all depend on access to raw materials.
- Mining industry provides jobs for more than 350,000 people in Europe.
- It is estimated that every job in metal mining generates 2.3 additional jobs elsewhere in the economy, and every non metal mining job generates 1.6 additional jobs.
- Minerals extraction currently takes place on about 0.2% of the EU land area.
- Mining operations are a long term process, usually 10-50 years.
- The mining industry consistently adds more to proven reserves than it takes away.
- Important raw materials sources are increasingly located in parts of the world which lack political and economic stability. Over 50% of major reserves are located in countries with a per capita gross national income \$10 per day or less.
- There are over 450 export restrictions on more than 400 different raw materials.

EU mines are the most efficient in the world

- EU companies are at the forefront of innovation in raw-materials supply;
- World renowned development and manufacture of mining and mineral processing equipment;
- Competing in a global market through stand-out productivity performance;
- Meeting or exceeding the EU's strict environmental & safety standards.

Increased production in the EU: 13 new mines since 2004 (Nickel, Copper, Gold, Tungsten, Zinc)

The EU is self-sufficient in **construction minerals**, in particular in aggregates. The EU is also the world's largest or second largest producer of certain **industrial minerals**, though it remains a net importer of most of them. However, the EU is highly dependent on imports of **metallic minerals**, as its domestic production is limited to about 3% of world production.

EU 20 Critical Raw Materials (published on May 26, 2014 by the European Commission):

Antimony, Beryllium, Borates, Chromium, Cobalt, Coking Coal, Fluorspar, Gallium, Germanium, Indium, Magnesite, Magnesium, Natural Graphite, Niobium, PGMs, Phosphate Rock, REEs (Heavy), REEs (Light), Silicon Metal, Tungsten

European metal mining sector

Table 3 EU35 mine production of selected metals as world percentages.

<i>Metal</i>	<i>% world</i>	<i>EU35 countries with >1% of world output in 2012</i>
Chromium	10.6	Turkey (8.8%), Finland
Silver	8.1	Poland (4.6%), Sweden
Zinc	7.3	Ireland (2.5%), Turkey, Sweden
Titanium	6.7	Norway (6.7%)
Lead	6.1	Poland (1.4%), Sweden, Turkey
Copper	5.8	Poland (2.5%)
Nickel	3.5	Greece (1.1%), Finland, Macedonia
Tungsten	2.6	Portugal (1.0%)
Gold	2.1	Turkey (1.1%)
Iron	1.3	–
Aluminium (bauxite)	1.1	–

EU35: 28 EU Member States, Norway, Switzerland, Iceland, Macedonia, Montenegro, Serbia, Turkey

Source: British Geological Survey, European Minerals Statistics 2008 – 2012, 2014

European industrial minerals sector

Table 2 EU35 production of selected industrial minerals as world percentages

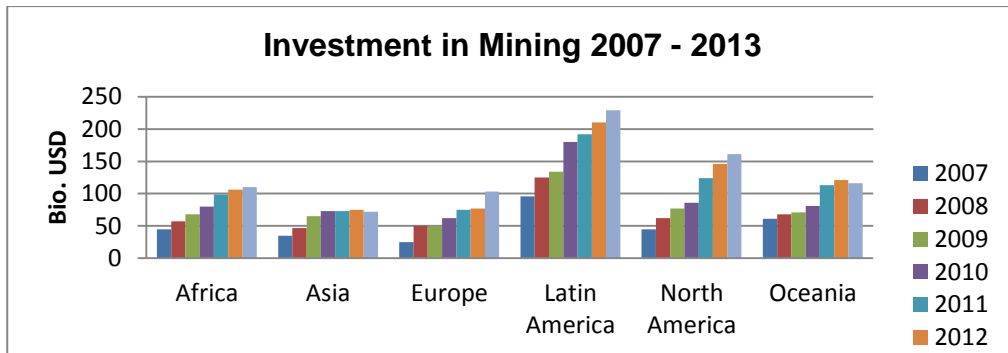
<i>Industrial mineral</i>	<i>% of world</i>	<i>EU35 countries with >2% of world output in 2012</i>
Feldspar	60.9	Turkey (31.8%), Italy, France, Spain
Kaolin	36.1	Germany (16.9%), Turkey, UK, Czech Republic
Salt	22.5	Germany (6.9%), Netherlands, UK, France
Bentonite	18.7	Greece (8.0%), Turkey, Germany
Magnesite	15.4	Turkey (4.1%), Austria, Spain, Slovakia
Diatomite	14.8	Denmark (5.6%), France, Spain, Czech Republic
Gypsum	14.1	Spain (4.5%)
Talc	13.9	Finland (5.1%), France
Potash	12.8	Germany (10.0%)
Mica	12.0	France (5.7%), Finland
Barytes	3.7	Turkey (2.6%)
Fluorspar	3.3	-

EU35: 28 EU Member States, Norway, Switzerland, Iceland, Macedonia, Montenegro, Serbia, Turkey

Source: British Geological Survey, European Minerals Statistics 2008 – 2012, 2014

Exploration in Europe – Investments

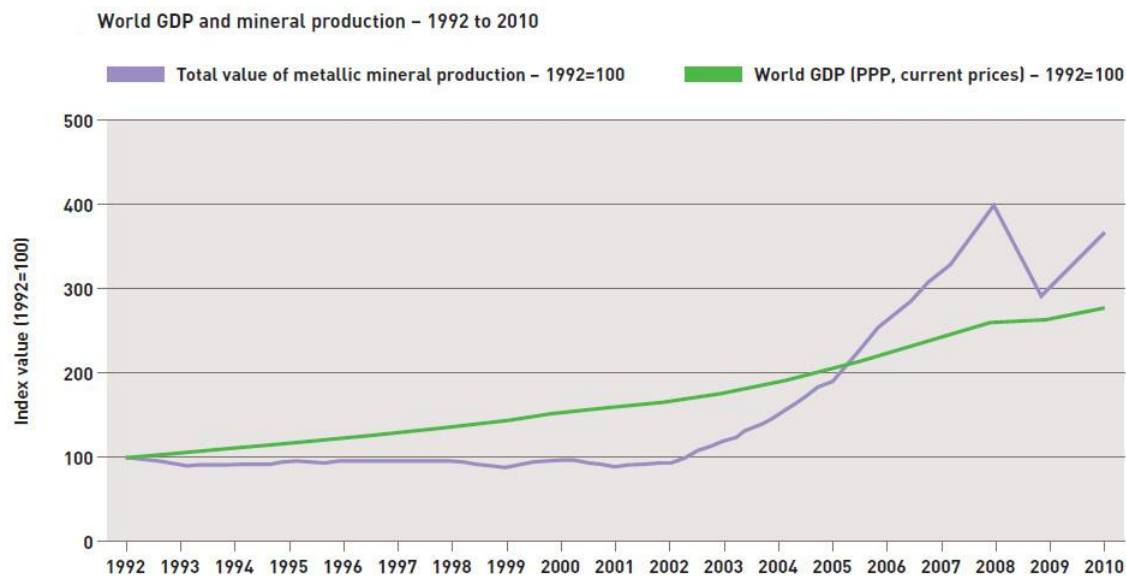
Exploration in Europe is only today starting to reap the benefit of increased investment and improved technology deployed in recent years. In 2013 the investments in the pipeline increased significantly as illustrated in the table.



Source: Raw Materials Group/SNL Metals & Mining.

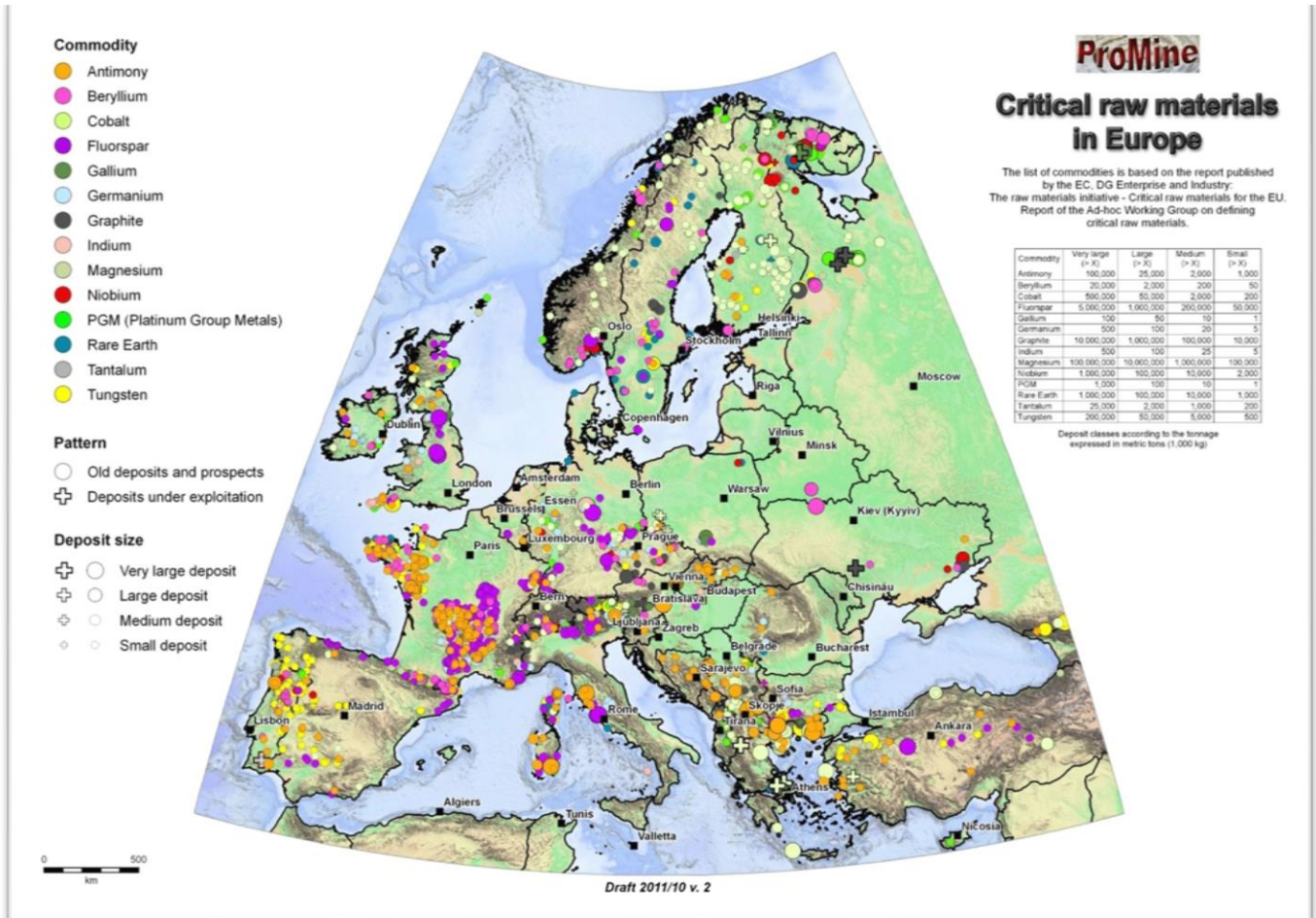
Trends in the nominal value of world mineral production

In 2010, the nominal value of world mineral production was nearly four times higher than it had been in 2002. Figure shows that, during this period, growth in value has been significantly greater than growth in world gross domestic product (GDP).



Source: Raw Materials Group; World Bank.

Critical Raw Materials in Europe



Source: ProMine Project