

The EC's initiative could be the key to unlocking EU minerals security



Securing EU competitiveness

Raw materials have never been as central as they are today in the European Union's policies. It is indeed hard to resist this topic, since for months it has dominated the bulk of European Institution debates, Commission workshops, European Parliament hearings, and all sorts of conferences on raw materials. There is no day without the European media, and even the daily press, examining the EU raw materials issue.

This interest dates back November 2008 when the European Commission (EC), acknowledging a real raw materials supply risk, drew attention to the strategic importance of defining raw materials policies by launching the Raw Materials Initiative¹ (see *IM February 2009: Securing raw materials for European competitiveness*).

The Communication recognised that, from a global geological perspective, there is no indication of imminent physical shortage of the majority of natural resources in the world. Nevertheless, this geological availability does not automatically mean access to these raw materials

Supply security has become a key concern for Europe's industrial minerals industry, but the European Commission is now targeting a more competitive and sustainable sector through its Raw Materials Initiative, as *Dr Michelle Wyart-Remy* explains

for EU companies.

Fundamental changes in global markets were threatening the European industry's competitiveness, said the EC, and access to raw materials under fair conditions and at affordable prices was vital for its competitiveness and its future.

BusinessEurope, the EU industry's representation, noted at the beginning of 2011 that even at this early stage in the global economic recovery, raw materials prices had increased 20% since 2010, and market distortions were on the rise with at least 1,250 export restriction measures in place – including by China and Russia.

As a result, EU manufacturing industries, and particularly the automobile, telecoms and other hi-tech sectors, are facing strong competition for raw materials from emerging economies. In a

recent European Parliament hearing, the EC representative noted troubling signals of their programmed relocation in raw materials rich-countries. One of these is the absence of European investors' interest in the Greenland Kvanefjeld multi-element deposit rich in precious rare earths.

Taking the initiative

The Raw Materials Initiative (RMI) set out a strategy to secure and improve access to raw materials based on three pillars:

- 1) Better and undistorted access to raw materials on world markets;
- 2) Improved conditions for raw materials extraction within Europe;

¹ "The Raw Materials Initiative – meeting our critical needs for growth and jobs in Europe" (COM (2008) 699)

3) Reduced EU consumption of raw materials through increased resource efficiency and recycling.

As a follow-up of the Communication, the EC launched a number of initiatives which resulted in an intense activity for Member States, trade associations and companies' experts concerned by raw materials extraction and supply.

Due to the scope of the RMI a number of Directorates-General cooperated, with the Directorate General Enterprise and Industry (DG ENTR) taking the lead. A guidance document on non-energy minerals and Natura 2000 was finalised with DG Environment (DG ENVI).

After intense negotiations, industry was pleased to acknowledge that these guidelines restored the potential for making mining compatible with protected area constraints. In addition the cabinet of president Barroso prompted the drawing of an EU list of "critical raw materials", including minerals such as fluorspar, graphite and rare earths (see *IM July 2010: Europe goes critical*).

A group of experts from the commission, Member States and industry was set up to design the methodology allowing to assess the economic importance of 41 pre-selected raw materials and their supply risk based on production data, country of origin risk estimates, substitutability

and recycling rate.

The report on critical raw materials has a general positive tone outlining that raw materials are essential for the efficient functioning of Europe's economy. 14 raw materials have been identified as critical within the next 10 years (see *Figure 1*).

The benefit for the industrial minerals analysed is that their importance and a number of specific issues are emphasised in the annex to the report. With a view to the plan ned regular update, a few limitations were pointed out in the methodology: the available data are perfectible; the selected 10-year horizon is short compared to mining project time frames; access constraints to the EU domestic resources were not taken into account and remain a critical issue; some minerals with no or minor production in the EU were not assessed; high purity grades could be further distinguished from ordinary grades; market trends, consumption and future demand were lacking.

With respect to the "external pillar", the RMI promoted the development of an actual raw materials diplomacy aiming at ensuring a level playing field in access to resources from developing countries. A EU trade strategy for raw materials has been defined and a first annual report was published by DG Trade in 2009².

A number of concrete measures are already in

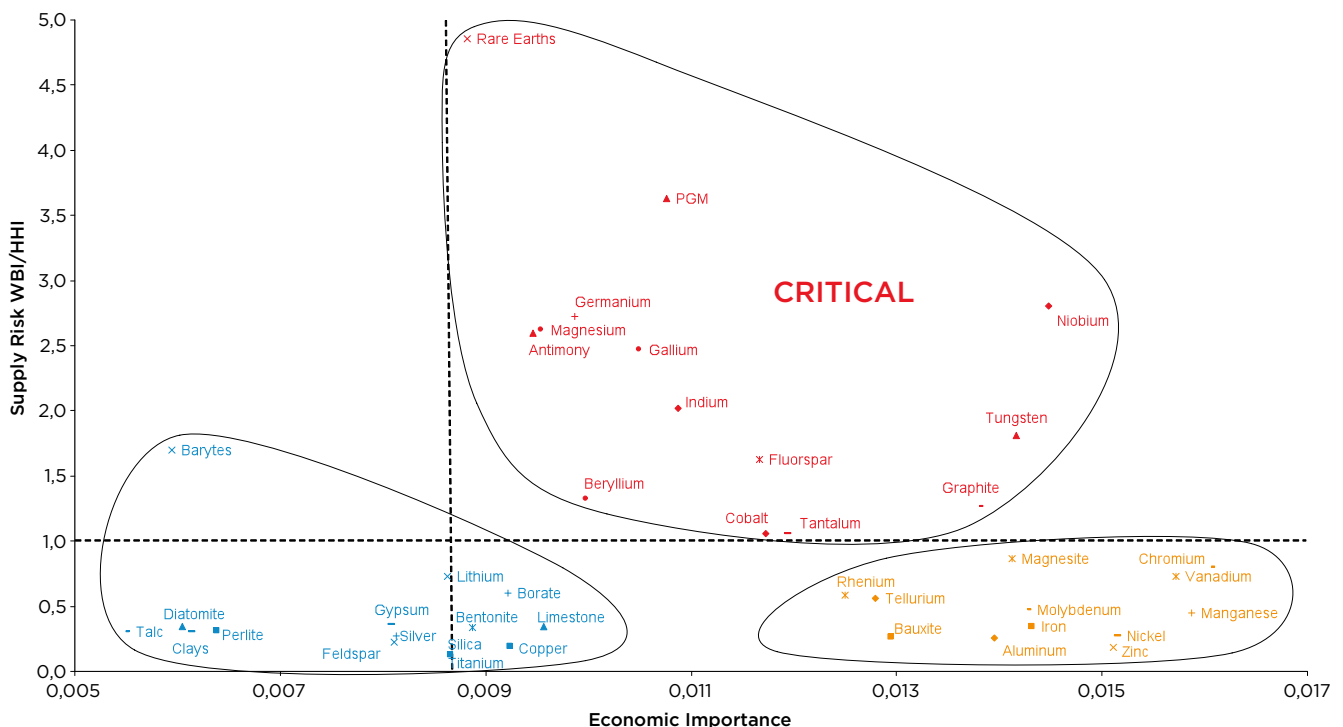
place. These include trade disciplines on export restrictions in all relevant negotiations, such as bans, quotas, duties and non-automatic export licences, and the use of World Trade Organisation (WTO) tools including dispute settlement when dialogue fails.

A number of initiatives were also tackled in the development field, notably related to country-specific technical assistance for greater revenue transparency through the Extractive Industries Transparency Initiative, and the promotion of good governance in tax matters³.

With respect to the "domestic pillar" another expert group was set up to share best practices on permitting conditions, land use planning, authorisation and geological knowledge for mining and quarrying in Europe. The outcome of the WG on Best Practices was also particularly positive.

Most of the IMA-Europe proposals were retained in the report recommendations: a special protection for mineral areas against other use of the land (nature protection, habitat, etc.) in the land use planning; a one-stop shop for the permitting process; and a decrease in the number of impact assessments during the permitting process. The major problems to be overcome still remain that by virtue of the subsidiarity principle these matters are the prerogative of Member States.

Figure 1: EC assessment of 41 raw materials based on its "critical methodology"



Source: European Commission

² DG Trade- Raw Materials Policy - 2009 Annual Report - <http://ec.europa.eu/trade/creating-opportunities/trade-topics/raw-materials/>

³ "Co-operating with Developing Countries on Promoting Good Governance in tax matters", COM (2010) 163

A European strategy

The RMI produced its results in June 2010 with the issuing of two reports and presentation of their conclusions – “The EU Raw Materials Initiative: Sustainable access to resources in Europe” – at the European Minerals Conference in Madrid, Spain. An important outcome was the decision to keep the momentum, with a revision of the two surveys every five years, and the organisation of an annual EU event to debate raw materials issues.

Over the summer, the EC launched a public online consultation on the Raw Materials Initiative with a view to the preparation of the new Communication on raw materials which they intended to issue in early 2011.

The Communication on the new raw materials policy – “Tackling the challenges in commodity markets and on raw materials” – was published on 2 February 2011, and as previously announced, kept the three-pillar approach of the 2008 initiative⁴. It contained, however, a significant emphasis on the resource efficiency third pillar, and an unexpected extension to commodities markets at large. The Communication now covers energy, metals and minerals, wood, natural rubber, agriculture and food; acknowledging that the price volatility in all these physical markets deserves the same attention as in the financial markets.

The Communication highlights how commodity prices and raw materials are closely interrelated. It describes recent developments on the global commodities and raw materials market, the main achievements regarding the implementation of the RMI and other initiatives taken by the EC in the field of food supply security⁵, as well as the steps which are planned to take the work forward for the EU’s commodity markets and raw materials policy.

This fully completes the EC’s work on the regulation of financial and energy markets and at the same time responds to the G20’s request to address the price volatility of commodity and food markets as well as of fossil fuels.

While the introduction of these commodity issues has raised some concerns in Brussels circles, IMA-Europe welcomed the Communication⁶ – pleased to see the essence of the RMI transposed in the 2011 Communication.

The whole approach is fully in line with the Europe 2020 Strategy⁷. In addition, as mentioned above, it is closely related to the flagship initiative for a Resource Efficient Europe⁸. As the seven flagships of the 2020 Strategy will impact all future policies, to fully understand the aim and

scope of the new EU raw materials policy it is essential to be familiar with the basics of this EU new approach.

Resource Efficient Europe

The post-Lisbon strategy was recently adopted to ensure the EU a smart, sustainable and inclusive growth. The strategy puts forward three mutually reinforcing priorities:

- 1) Smart growth: developing a knowledge and innovation based-economy;
- 2) Sustainable growth: promoting a more resource efficient, greener and more competitive economy;
- 3) Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

Resource Efficient Europe is one of the seven flagship initiatives planned by the EC to catalyse progress under each of the three above priorities⁹. The flagships, considered as guiding principles underpinning each and any EU policies in the future, include: *smart growth*: a Digital Agenda for Europe, Innovation Union and Youth on the Move; *sustainable growth*: an Industrial Policy for the Globalisation Era, and the Resource Efficient Europe; and *inclusive growth*: an Agenda for new Skills and Jobs, and the European Platform against Poverty.

Issued as an umbrella Communication by the EC on 26 January 2011, the resource efficiency flagship has been developed by DG Environment. With the global population expected to grow by 30% to around 9bn by 2050, DG Environment’s analysis concludes with many environmental experts that the pressures on resources are increasing at a path the planet cannot afford. Here resources include raw materials such as fuels, minerals and metals but also food, soil, water, air, biomass and ecosystems.

If current trends persist, and people in developing and emerging economies legitimately aspired to the welfare and consumption levels of developed countries, continuing the current patterns of resource use was not an option, said the Communication.

To address these pressures and the related risk of supply, the resource efficiency flagship aims to create a framework for policies to support the shift towards a resource-efficient and low-carbon economy. To achieve this it intends to help decouple economic growth from the use of resources, increase the use of renewable energy sources, modernise the transport sector and

promote energy efficiency. Decoupling is also central to the Natural Resource Sustainable Use Strategy¹⁰ (*see below*).

A number of EC initiatives are currently ongoing that are interlinked to varying degrees and which will be carried out under the Resource Efficient Europe flagship, expecting that it provides directions on how to coordinate them. In addition to the raw materials policy, these notably include a Low Carbon Roadmap 2050, an Energy Roadmap 2050, the Energy Efficiency Action Plan and the Resource Efficiency Roadmap.

It remains unclear whether the EC can envisage the latter Resource Efficiency Roadmap as contributing to the revision of the Thematic Strategy on the Sustainable Use of Natural Resources. Indeed it is wise to remind that in addition the revision of this strategy which is so important for natural resources is also planned in 2011.

Innovation partnership

The raw materials policy, having a strong focus on resource efficiency through its third pillar, was published after the Resource Efficient Europe flagship to guarantee their mutual compatibility. One of the challenges in addressing these multiple and concurrent initiatives is to reconcile the definition of resource efficiency as viewed by the various stakeholders, for instance environmentalists, the recycling sector or naturally-occurring resource producers.

Where environmentalists are promoting a drastic reduction of resource use measured through indicators based on mass flows or domestic mass consumption, or possibly based on land use, industry more generally agrees that the indicators need a holistic lifecycle-based approach to take into account the cradle-to-cradle environmental impact including extraction, processing, usage, product dismantling, waste collection and recycling.

Even within the raw materials industry, depending on how the sector promotes its contribution to recycling, the perspective may be different. In addition, visions on what are the priority areas for action on resource efficiency are so divergent that the debate turns into a rather strong confrontation.

This is particularly true when one puts the concept into practice as is the case with the “Innovation partnership on non-energy raw materials for a modern society” proposed by DG ENTR. A series of “innovation partnerships” will be launched under the Innovation Union flagship

⁴ “Tackling the Challenges in Commodity Markets and on Raw Materials”, COM (2011) 25

⁵ “A better Functioning Food Supply Chain in Europe”, COM (2009) 591; “An EU policy framework to assist developing countries in addressing food security challenges, COM(2010)127

⁶ IMA-Europe position paper on the Commission Communication on Commodity markets and raw materials: <http://www.ima-eu.org/>.

⁷ “Europe 2020: A strategy for smart, sustainable and inclusive growth”, COM (2010) 2020

⁸ “A Resource-Efficient Europe – Flagship under the Europe 2020 Strategy”, COM (2011) 21

⁹ Europe 2020 web site: http://ec.europa.eu/europe2020/tools/flagship-initiatives/index_en.htm

and will be funded through various EU programmes.

Provided industry accepts the principle of funding large innovative projects and setting research pan-European consortia with a number of industrial and academia partners, this innovation initiative should help the European non-energy extractive industry to build its reputation as an essential and smart industry contributing to the sustainable and smart growth objectives of Europe 2020.

The Raw Materials Partnership, if it comes to life, would be built around working packages (WPs). The WP1 research would relate to raw materials extraction and processing, including waste heap extraction (urban mine) and recycling, and would be implemented through a dozen pilot plants. The WP2 would focus on the substitution of critical materials. The WP3 would aim at improving Europe's raw materials knowledge and infrastructure base, while the WP4 would focus on improving the regulatory framework, including land use planning and standardisation of data sets, and promoting recycling through public procurement and private initiatives. Finally the WP5 would deal with international cooperation.

The potential interested partners should come from research institutes and universities, as well as all industry horizons, mining and materials producing sectors, but also in principle chemical, mechanical engineering, waste management and recycling sectors.

That means that the innovation partnership management, procedures, financing and governance are rather challenging, as proved by the debates in the recent workshop organised by the EC to finalise the partnership. The partnership should be adopted by the Parliament and Council later this year, and will probably take off beginning 2012 to deliver its results in 2020.

Feedback from industry

EU industries and NGOs reacted in diverse ways to the commodity markets and raw materials Communication, depending on their focus. The environmental NGO Friends of the Earth Europe (FoEE) has expressed "severe concerns" about the EC's Raw Materials Initiative, notably on its potential "detrimental effect on the environment and developing countries".

Michael Warhurst of FoEE deplored that Europe had "no targets" for reducing resource use, while asserting that "new policies are not assessed for their potential to increase our resource efficiency".

In a press release following up on the European Raw Materials Initiative and the reaffirmation of its three pillars, IMA-Europe encouraged the swift implementation by Member States of the recommendations set out in the RMI regarding land use planning and national minerals policy

European raw materials: policy milestones

November 2008

European Commission presents "integrated strategy" for raw materials

May 2009

EU industry ministers back the strategy, calling for an EU raw materials diplomacy and asking the EC to draw up list of "critical" raw materials

June 2009

EU and US file joint WTO complaint against China for restricting exports of industrial raw materials

November 2009

EU expert group starts drawing up list of critical raw materials

June 2010

Commission tables final report on critical raw materials

July 2010

EU environment ministers discuss Belgian EU Presidency initiative on Sustainable Materials Management (SMM)

February 2011

Commission releases the communication: "Tackling the challenges in commodity markets and on raw materials"

22 April 2011

Deadline for participating in the EC consultation on a roadmap for a resource-efficient Europe, due to be adopted in June 2011

– supporting the guidelines on the implementation of Natura 2000 legislation affirming the compatibility of mining extraction with biodiversity preservation in or around Natura 2000 areas.

IMA reminded firmly that, although not listed as critical resources, industrial minerals are essential to European industry. Unlike most critical raw materials, they cannot be stored on a large scale to help bridge temporary shortages, and, for cost reasons, they can generally not be imported long distances. Supply from domestic sources is therefore vital for many industries and access to resources should be simplified in Europe, explained the association.

Regarding their role in resource efficiency, industrial minerals recall a major role in attaining resource efficiency objectives through the replacement of scarce or less environmentally-friendly resources; through the continuous improvement of the quality and performance of the products they offer customers – thereby increasing efficiency of usage – and through the widespread implementation of sustainable mining and processing practices.

Although not directly recyclable, industrial minerals often enjoy a second or third life – or occasionally even beyond; for example, kaolin and

calcium carbonate are recycled in paper; talc is recycled in plastic; pigments in decorative paints are recycled when buildings are turned into aggregates; and silica and feldspar are recycled in glass, to name a few.

Sustainable access to the raw materials required to meet the 2020 strategy objectives depends on the robustness of the European minerals industry. Therefore the sector encourages EU policy makers – within the framework of the Better Regulation agenda – to assess the impact of new legislation on the competitiveness of the European minerals industry.

The sector would like to commend the EC for the work it has accomplished within the framework of the Raw Material Initiative, and pledges its continued support to improve the regulatory framework and to boost innovation for a more competitive and sustainable mineral industry within the EU.

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¹⁰ Thematic Strategy on the sustainable use of natural resources COM(2005) 670