Raw Materials Supply Issues in the European Union

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Outline

- EU non-energy extractive industry (NEEI) – sector definition
  - “analysis of the competitiveness of the EU NEEI sector”
- EU Sustainable Development Policy Framework
  - Competitiveness and minerals planning
  - Environment
  - Research and development
  - Social issues
  - Stakeholder dialogue
- Recent developments relevant for the NEEI
- Concluding remarks/way forward - discussion
Non-Energy Extractive Industry in the EU

- Turnover: ± 40 billion €
- Employment: ± 250,000
- Contribution to major downstream sectors
  - ..it’s everywhere..!
- 3 sub-sectors
  - Construction minerals
  - Industrial minerals
  - Metallic ores

Appreciation?
Recognition?
Competition on land use issues?
Construction minerals – e.g. sand and gravel, crushed rock, brick clay, gypsum, natural stone
Industrial minerals – e.g. feldspar, magnesite, potash, limestone
Metallic minerals/ores – e.g. copper, lead, zinc ores

Asphalt, concrete
Non-metallic products – glass, cement, lime, bricks
Chemicals
Base metals – e.g. copper, lead, zinc, wire, sheets, castings

Buildings, roads, railways
Machinery (engines, pumps, tractors, domestic appliances)
Office equipment, computers, televisions, optics
Transport equipment (cars, planes, ships)
Trends in global mining

![Graph showing trends in global mining value from 1850 to 2030. The graph compares the global mining value of Europe, USA, China, USSR/CIS, Australia/Canada, and 6 resource-rich developing countries. The data is presented over a timeline from 1850 to 2030.]
Construction Minerals Sector - EU25
± 3 billion tonnes/year
Construction Minerals Sector - EU15

EU15 domestic extraction

Million tonnes

EU15
Germany
France
Italy
Spain
UK


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SDIMI, Milos, Greece, June 18-20th 2007
Production, import & export of aggregates

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SDIMI, Milos, Greece, June 18-20th  2007
Industrial Minerals –
Change EU production (\% ; 1993 – 2003);

Change EU’s percentage of global share of mine production
## Industrial Minerals - world ranking

<table>
<thead>
<tr>
<th>Mineral</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentonite</td>
<td>USA</td>
<td>EU</td>
<td>Turkey</td>
</tr>
<tr>
<td></td>
<td>32%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>Feldspar</td>
<td>EU</td>
<td>China</td>
<td>Turkey</td>
</tr>
<tr>
<td></td>
<td>36%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>Fluorspar</td>
<td>China</td>
<td>Mexico</td>
<td>EU</td>
</tr>
<tr>
<td></td>
<td>52%</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>Fullers Earth</td>
<td>USA</td>
<td>EU</td>
<td>Senegal</td>
</tr>
<tr>
<td></td>
<td>72%</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Gypsum</td>
<td>EU</td>
<td>USA</td>
<td>Iran</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Kaolin</td>
<td>USA</td>
<td>EU</td>
<td>Brazil</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>Magnesite</td>
<td>China</td>
<td>EU</td>
<td>Turkey</td>
</tr>
<tr>
<td></td>
<td>47%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>Perlite</td>
<td>EU</td>
<td>China</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>39%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Potash</td>
<td>Canada</td>
<td>EU</td>
<td>Russia</td>
</tr>
<tr>
<td></td>
<td>32%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Talc</td>
<td>China</td>
<td>EU</td>
<td>USA</td>
</tr>
<tr>
<td></td>
<td>46%</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Salt</td>
<td>EU</td>
<td>USA</td>
<td>China</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>20%</td>
<td>16%</td>
</tr>
</tbody>
</table>
Relative change global production of metallic minerals 1950 -2002 (1950=100)
### Ranking three main producing regions for selected metallic minerals (2004)

<table>
<thead>
<tr>
<th>Mineral</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauxite</td>
<td>Australia</td>
<td>40%</td>
<td>Guinea 12%</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Japan 22%</td>
<td>China 20%</td>
<td>Mexico 12%</td>
</tr>
<tr>
<td>Chromium</td>
<td>South Africa 53%</td>
<td>Kazakhstan 18%</td>
<td>India 8%</td>
</tr>
<tr>
<td>Copper</td>
<td>Chile 37%</td>
<td>USA 8%</td>
<td>Peru 7%</td>
</tr>
<tr>
<td>Iron ore</td>
<td>Brazil 23%</td>
<td>Australia 20%</td>
<td>China 14%</td>
</tr>
<tr>
<td>Lead</td>
<td>China 30%</td>
<td>Australia 21%</td>
<td>USA 14%</td>
</tr>
<tr>
<td>Manganese</td>
<td>China 24%</td>
<td>Gabon 17%</td>
<td>South Africa 13%</td>
</tr>
<tr>
<td>Mercury</td>
<td>EU 43%</td>
<td>Kyrgyzstan 26%</td>
<td>China 23%</td>
</tr>
<tr>
<td>Nickel</td>
<td>Russia 24%</td>
<td>Australia 14%</td>
<td>Canada 14%</td>
</tr>
<tr>
<td>Silver</td>
<td>Mexico 16%</td>
<td>Peru 15%</td>
<td>Australia 12%</td>
</tr>
<tr>
<td>Tungsten</td>
<td>China 87%</td>
<td>Russia 6%</td>
<td>EU 4%</td>
</tr>
<tr>
<td>Zinc</td>
<td>China 26%</td>
<td>Peru 14%</td>
<td>Australia 14%</td>
</tr>
</tbody>
</table>
World mine production –
based on developing status of producer country

[Bar chart showing world mine production from 1984 to 2004, divided into categories: Less developed countries, Least developed countries, Western industrialised countries, Centrally planned economies, Newly reformed countries.]

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SDIMI, Milos, Greece, June 18-20th  2007
EU POLICY FRAMEWORK
Sustainable Development Strategy (SDS)

- continuous improvement of quality of life
- creation of sustainable communities
- manage and use resources efficiently
- ensuring prosperity, environmental protection and social cohesion

- ........development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" ........
- relates to the continuity of economic, social, institutional and environmental aspects of human society, as well as the non-human environment
“Lisbon Strategy”

“….engine of a dynamic economy….”

- Complementary to the EU SDS
- Secure the framework conditions which are favourable to industrial competitiveness
- Take account of the specific needs and characteristics of individual sectors
- Better regulation
- Coherence of policies
Communication “Promoting sustainable development in the EU non-energy extractive industry” (2000)

- **Objective**: promoting SD by reconciling the need for more secure and less polluting extractive activities while maintaining the competitiveness of the industry

Priority areas

1. Competitiveness
2. Environment
3. Social performance and employment
4. Research and Technological Development
5. Enlargement

Stakeholder dialogue

Raw Materials Supply Group....
Stakeholder dialogue

- **Raw Materials Supply Group**: chaired by DG Enterprise and Industry
- Member States
- Candidate countries
- Industry federations (UEPG, …etc.)
- Trade unions, NGOs

http://ec.europa.eu/enterprise/steel/index_en.htm
1. Competitiveness

- ENTR → Analysis of Competitiveness of EU NEEI
  - Detailed analysis of competitiveness
  - Different factors of competitiveness identified
  - Access to land identified as a major issue
  - Separate and independent study: University of Leoben

- Input to High-Level Group on Competitiveness, Energy and Environment - Ad Hoc WG10 on Natural resources and secondary raw materials and waste → report ENTR web page
Competitiveness factors

- Exploration
- Investment and operating costs
- Regulatory framework
- Access to resources within EU
- Availability of skilled workforce
- Research and innovation
- Health and safety
Minerals planning: Leoben study

- EU legislation which impacts on national minerals planning policies and practices
- National systems of ownership of mineral resources
- Existing national legislation, policies and administrative procedures for securing supplies of minerals
- Key features of national and regional land use planning systems which have an effect on the extractive industry
Minerals planning: Leoben study

Main findings

- **Limited knowledge** of importance of NEEI in Europe
- **Lack of appreciation** of strategic importance of non-energy minerals (in part. aggregates)
- In most Member States non-energy minerals are allocated a **low priority**
- In most Member States **access to mineral deposits is becoming more difficult** (in practise)
- **Time** required for authorisation of mineral extraction tends to be very long and outcome is often uncertain
- **Increasing environmental pressures** on the NEEI
Minerals planning: Leoben study

Comments regarding its main recommendations

➢ Need for a more efficient approach to forward planning for minerals supply in some Member States

➢ Increase knowledge of distribution and quality of mineral resources in EU

➢ Consider criteria to assess applications for permits

➢ Protection of certain mineral resources
2. Environment: Objectives

- Prevention of mining accidents……..
- Improvement of overall environmental performance of the industry ………
- Sound management of mining waste…………

Industry: **Implement** it…, **demonstrate** it……….
Environment: Voluntary actions

- Example of the EU Sustainable Development Indicators:
  http://europa.eu.int/comm/enterprise/steel/non-energy-extractive-industry/sd-indicators.htm

- Kick-off 2000, launch 2002
- 2004-2005 to be published 2007
SDI Questionnaire 2004-2005

- Participation requested through RMSG –WG SDI
  - 3 Industry sectors (Euromines, IMA, UEPG)
  - member states

- a.o. circulated to all UEPG Members

- Guidance document
  - Frequently asked questions
  - Translated in all languages
3. Social performance and employment

➢ Ensure the future supply of a sufficiently skilled and educated workforce

➢ Further improve industry’s performance in the field of health and safety

➢ Social Dialogue Committee

Extractive Industries
4. Research & Technological Development

- Develop a common European platform for coordinating and disseminating results, and for identifying areas for future research

- European Technology Platform on Sustainable Mineral Resources:
  
  http://www.etpsmr.org
Recent developments
Competitiveness Council – May 21\textsuperscript{th}

- Requests the Commission to develop a \textit{coherent political approach} with regard to raw materials supplies for industry, \textit{including all relevant areas of policy} (foreign affairs, trade, environment, development and research and innovation)

- Identify appropriate measures for cost-effective, reliable and environmental friendly access to and exploitation of natural resources, secondary raw materials and recyclable waste, especially concerning third country markets.
High Level Group 4\textsuperscript{th} report (June 11\textsuperscript{th})

- Competitiveness, energy and environment
  - Links together EU\textapos;s challenges on consumption patterns, needs for R&D, improve our energy efficiency and be pro-active on climate change

- HLG calls upon EU and Member States to (…..) support the development of a raw materials policy
  - Free and fair global market
  - Taking into account EU Strategy on Sustainable Resource Use & International Panel (…)
  - International multi- and bi-lateral agreements
  - Simplifying and streamlining access to domestic raw materials (one-stop shop…)
  - Improving resource efficiency
  - Opening up EU market for renewables
G8 - Responsibility for Raw Materials: Transparency and Sustainable Growth

- Raw Materials in the extractive industry are a key factor for sustainable growth in industrialised, emerging and developing economies …..
  - We discussed the situation on world commodity markets and recent price increases and reaffirmed our commitment to free, transparent and open markets.
  - We will support increased transparency and build good governance in developing countries with social and environmental standards.
  - We therefore express our continuous support for EITI and we will launch a certification project.
  - We acknowledge that promoting a consolidated set of principles and guidelines that apply to the international mining sectors developing countries would help ensure that the sector contributes to development.
Concluding remarks – way forward...

- NEEI sector receives a lot of attention
  - G8, EU Competitiveness Council’s and HLLG calls upon EC,…

- EU policy framework to sustainable development:
  - Commission working closely with the industry and Member States to achieve the revised Lisbon objectives
  - Member States implementing legislation and providing an efficient, cost effective and transparent (sustainable) mechanisms to enable industry to access new resources
  - Industry work (together) in a pro-active way, including developing voluntary actions → demonstrate, report…?

- No data, no trends, no benchmarking, no policy, but only (NEEI) clichés…..

- So, let’s act together, creatively and critically…………
Thank you for your attention

Questions?

Discussion Points?