European Commission

Enterprise Directorate-General

Raw Materials Supply Issues in the European Union

Hans Pietersen

Paul Anciaux

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

SDIMI, Milos, Greece, June 18-20th 2007

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

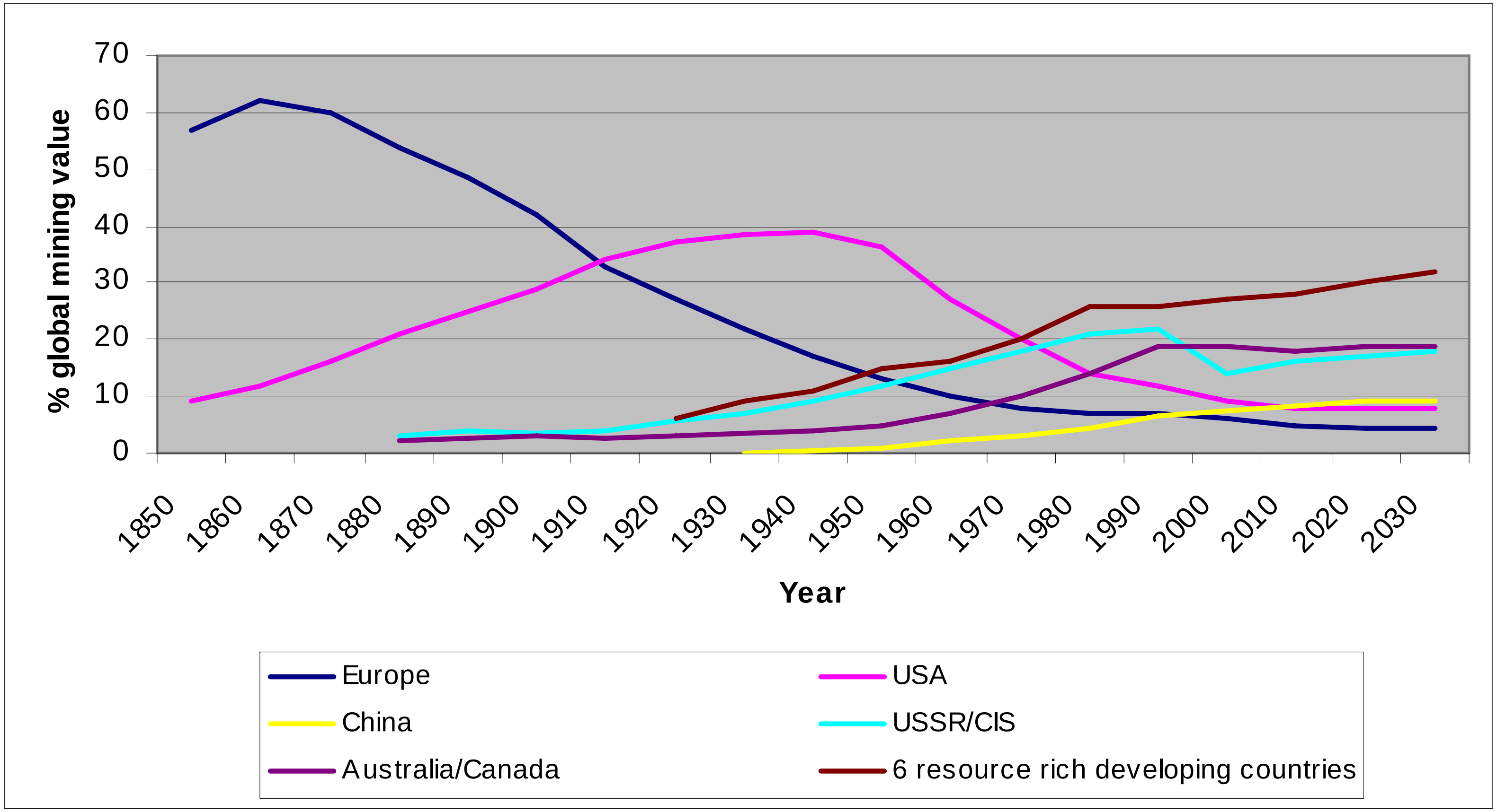
Non-Energy Extractive Industry in the EU

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

Value chain → from mined raw materials → to finished products

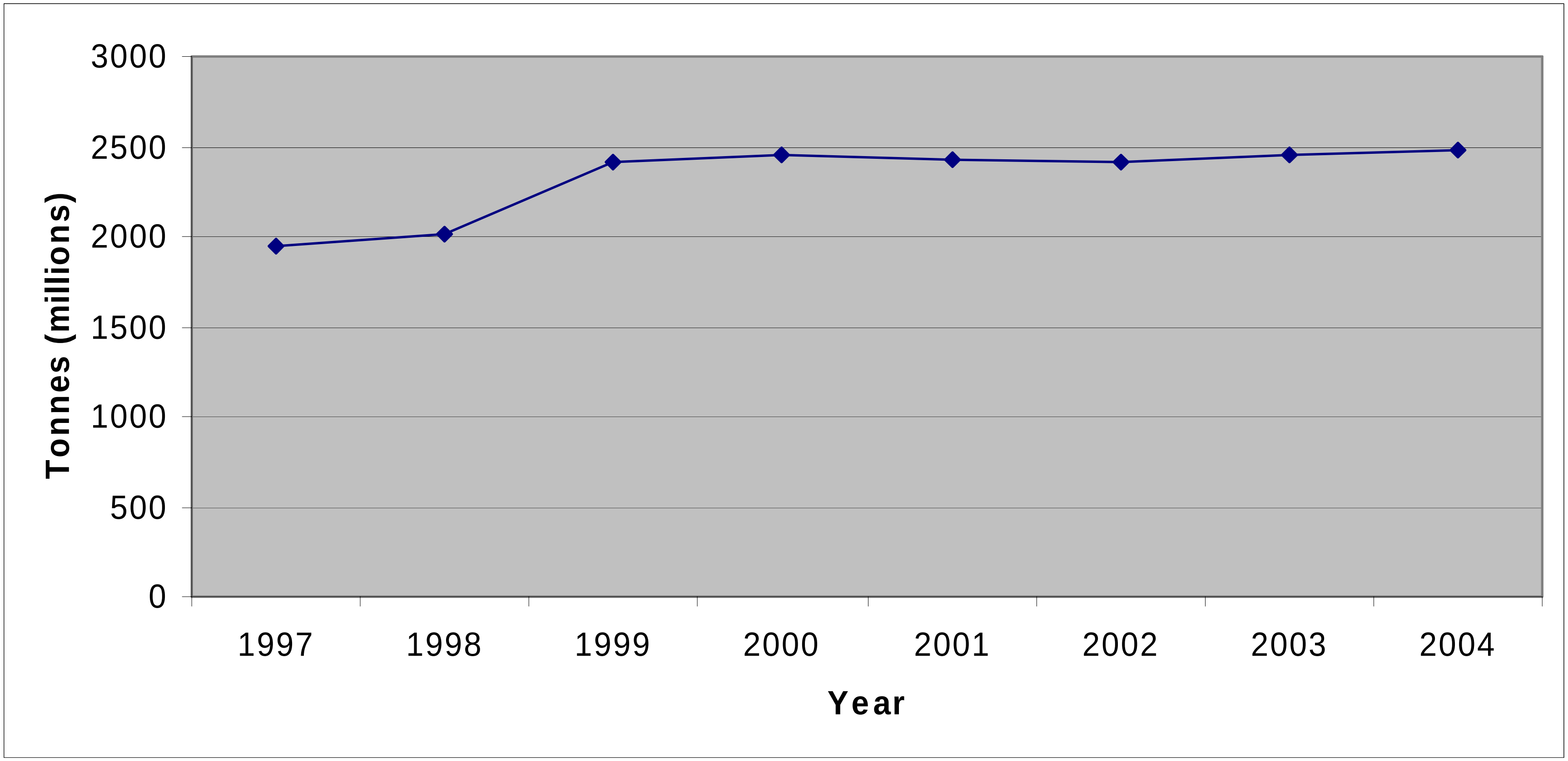
Mined raw material production	Construction minerals – e.g. sand and gravel, crushed rock, brick clay, gypsum, natural stone Industrial minerals – e.g. feldspar, magnesite, potash, limestone Metallic minerals/ores – e.g. copper, lead, zinc ores
Intermediate products	Asphalt, concrete Non-metallic products – glass, cement, lime, bricks Chemicals Base metals – e.g. copper, lead, zinc, wire, sheets, castings
Finished products	Buildings, roads, railways Machinery (engines, pumps, tractors, domestic appliances) Office equipment, computers, televisions, optics Transport equipment (cars, planes, ships)

Trends in global mining

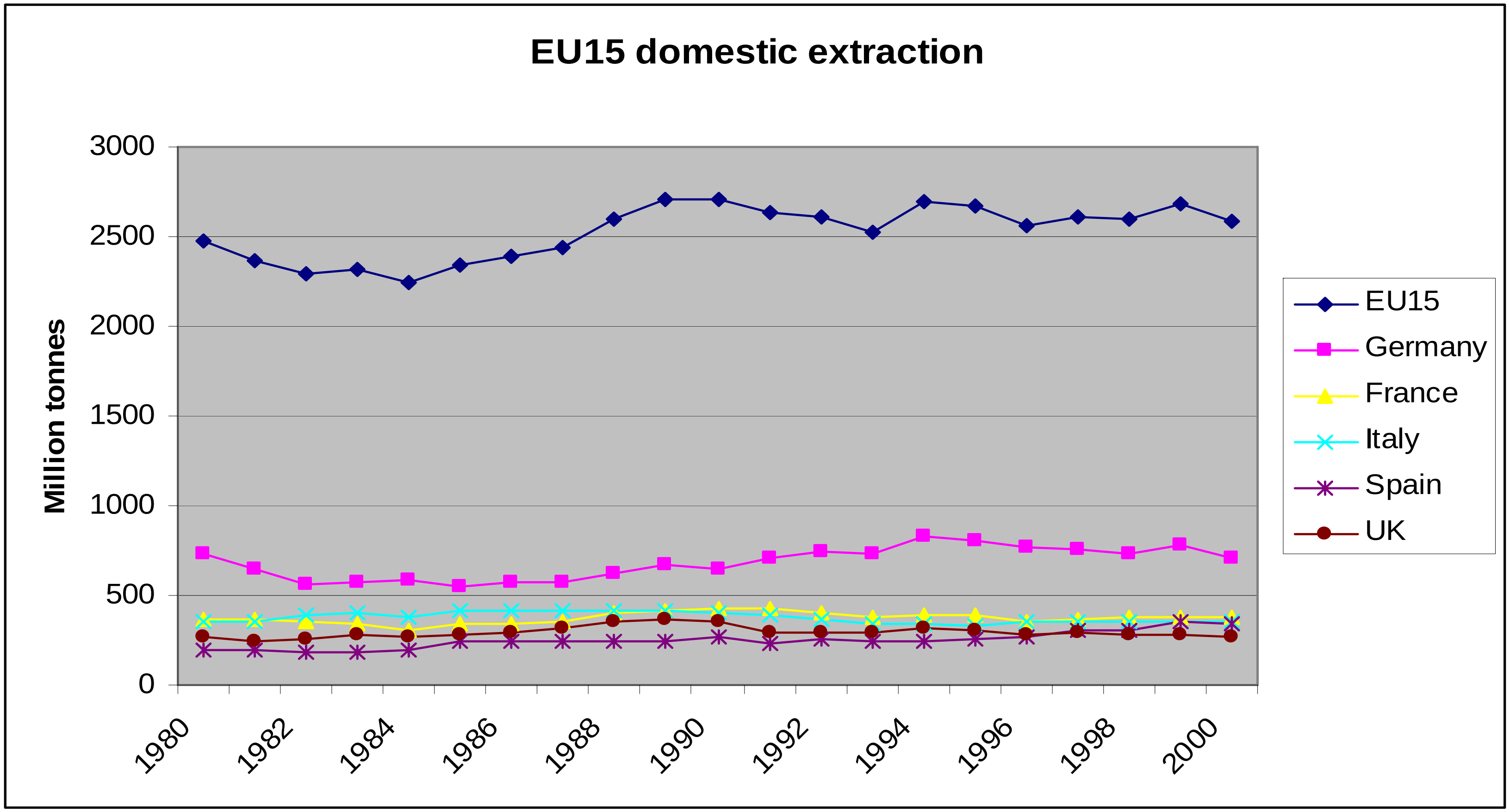


EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Construction Minerals Sector - EU25
± 3 billion tonnes/year

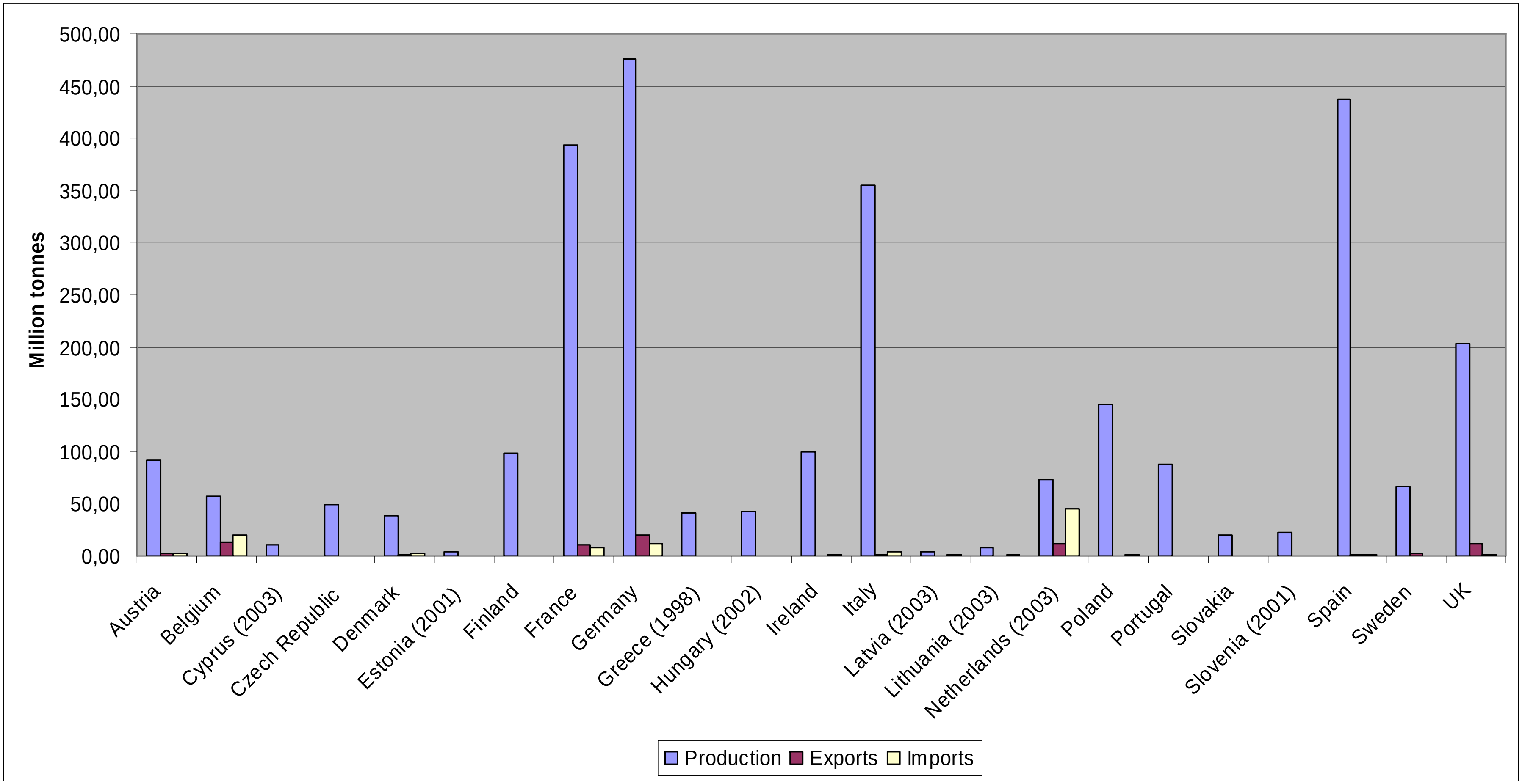


Construction Minerals Sector - EU15



EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Production, import & export of aggregates

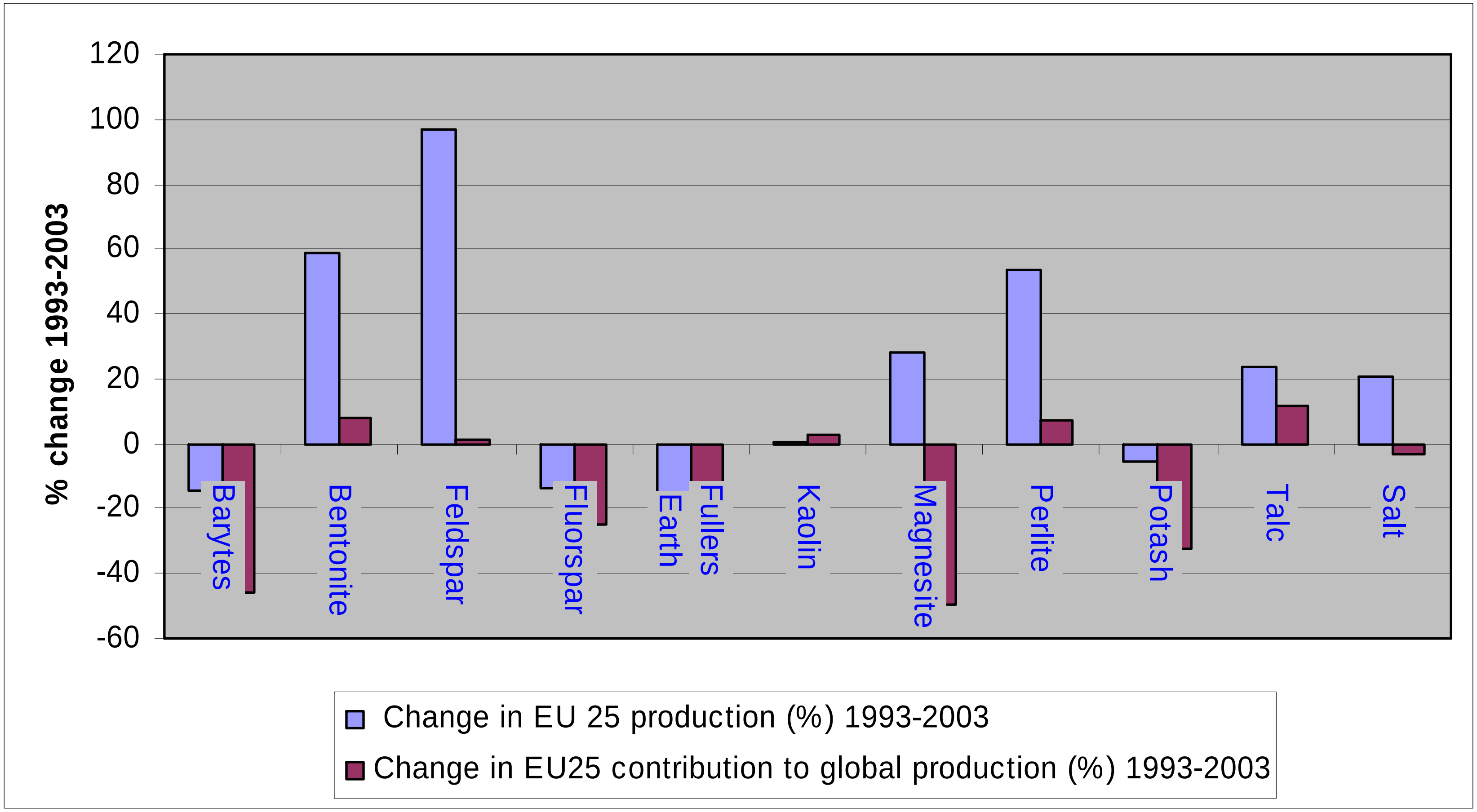


EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Industrial Minerals –

Change EU production (%; 1993 – 2003);

Change EU’s percentage of global share of mine production

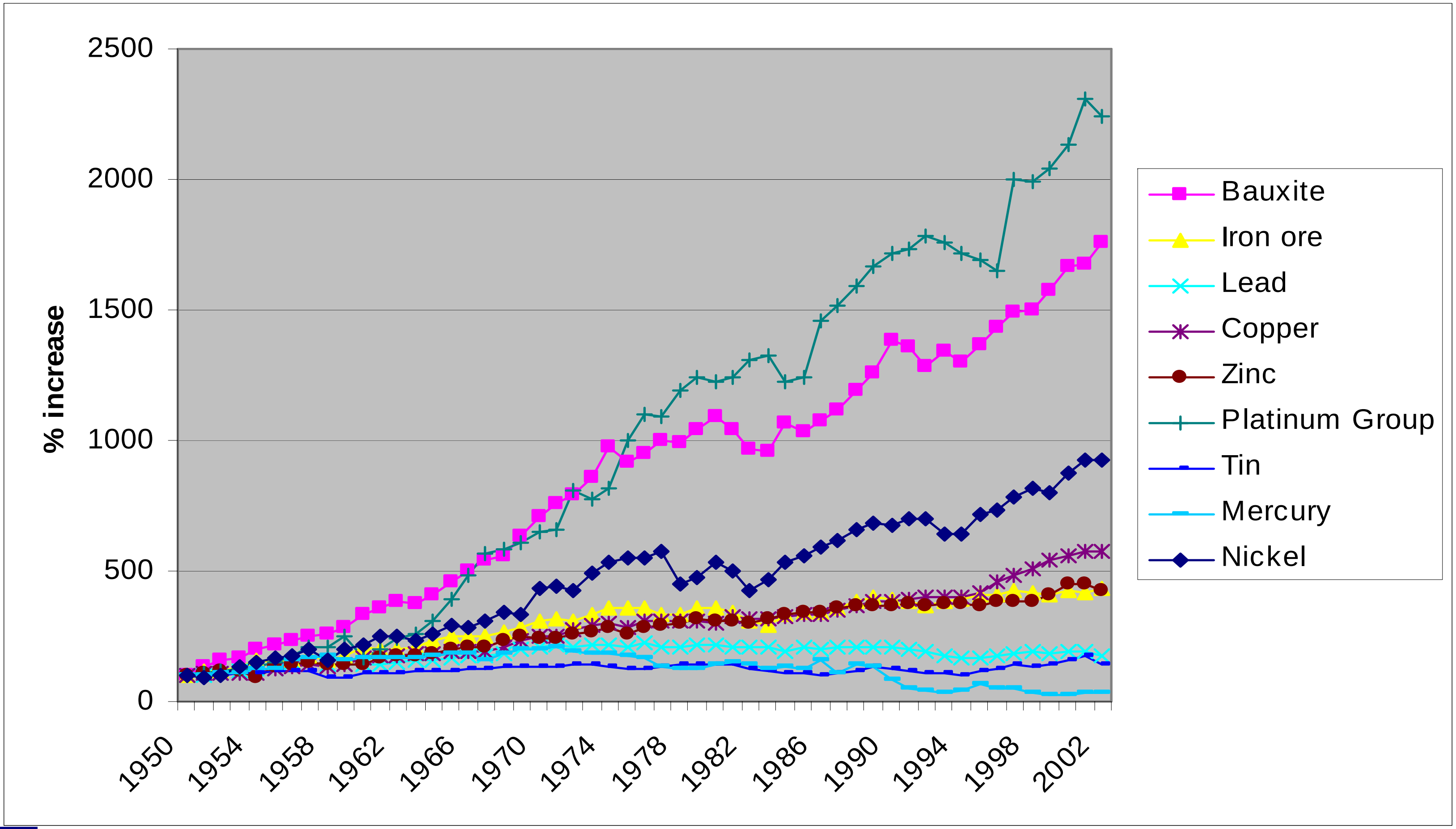


EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Industrial Minerals - world ranking

	First		Second		Third	
Bentonite	USA	32%	**EU**	**19%**	Turkey	7%
Feldspar	**EU**	**36%**	China	13%	Turkey	12%
Fluorspar	China	52%	Mexico	17%	**EU**	**8%**
Fullers Earth	USA	72%	**EU**	**12%**	Senegal	4%
Gypsum	**EU**	**24%**	USA	16%	Iran	12%
Kaolin	USA	34%	**EU**	**23%**	Brazil	19%
Magnesite	China	47%	**EU**	**17%**	Turkey	15%
Perlite	**EU**	**39%**	China	20%	USA	15%
Potash	Canada	32%	**EU**	**16%**	Russia	16%
Talc	China	46%	**EU**	**20%**	USA	13%
Salt	**EU**	**21%**	USA	20%	China	16%

Relative change global production of metallic minerals 1950 -2002 (1950=100)



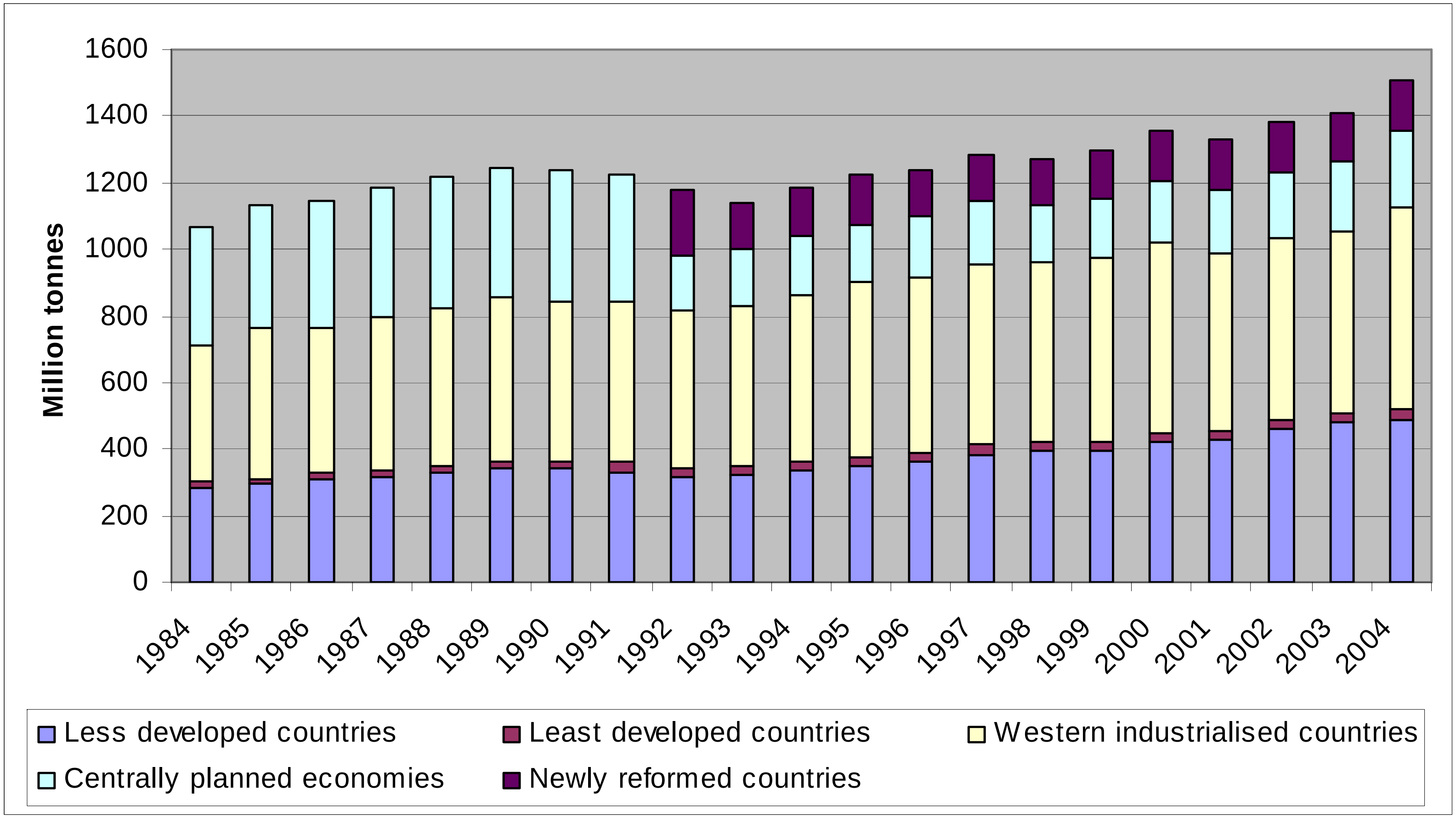
EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Ranking three main producing regions for selected metallic minerals (2004)

	First		Second		Third	
Bauxite	Australia	40%	Guinea	12%	Jamaica	10%
Cadmium	Japan	22%	China	20%	Mexico	12%
Chromium	South Africa	53%	Kazakhstan	18%	India	8%
Copper	Chile	37%	USA	8%	Peru	7%
Iron ore	Brazil	23%	Australia	20%	China	14%
Lead	China	30%	Australia	21%	USA	14%
Manganese	China	24%	Gabon	17%	South Africa	13%
Mercury	**EU**	43%	Kyrgyzstan	26%	China	23%
Nickel	Russia	24%	Australia	14%	Canada	14%
Silver	Mexico	16%	Peru	15%	Australia	12%
Tungsten	China	87%	Russia	6%	**EU**	4%
Zinc	China	26%	Peru	14%	Australia	14%

World mine production –

based on developing status of producer country



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
- http://ec.europa.eu/enterprise/steel/index_en.htm

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Priority areas

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

Stakeholder dialogue

Raw Materials Supply Group….

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

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

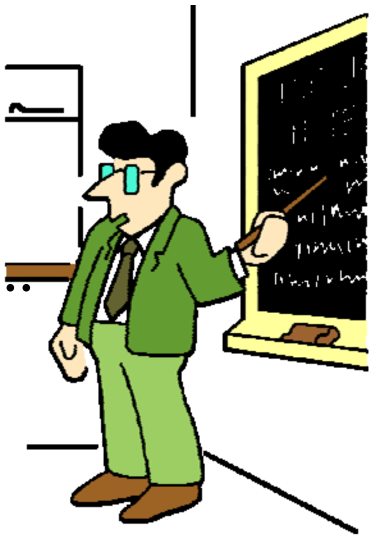
Minerals planning: Leoben study

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

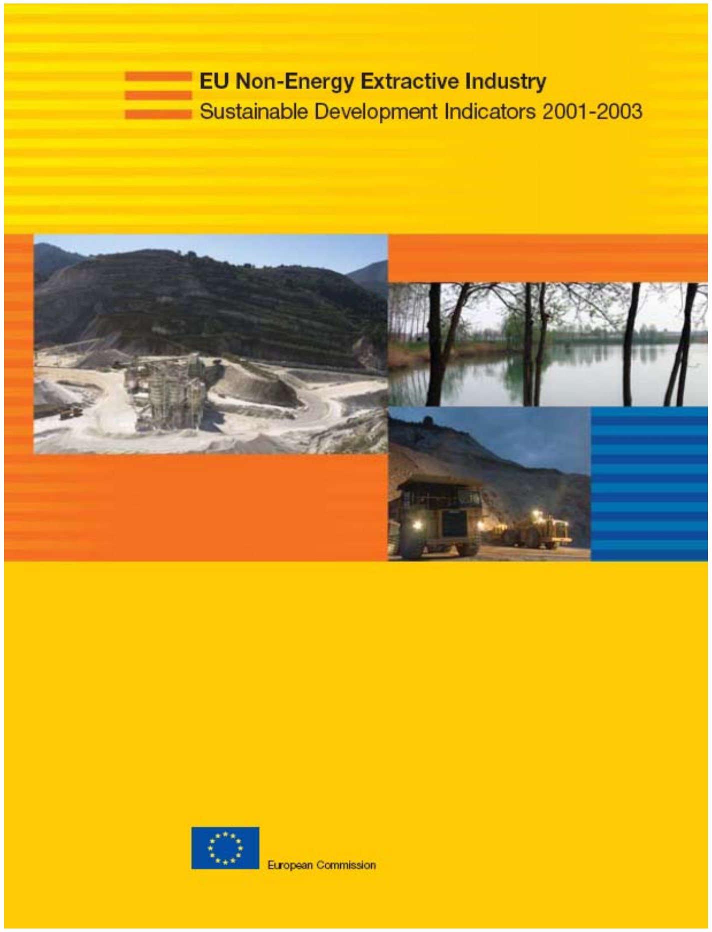
2. Environment: Objectives

- Prevention of mining accidents…….
- Improvement of overall environmental performance of the industry ……..
- Sound management of mining waste……….
- **Industry:** <u>Implement</u> it…, <u>demonstrate</u> 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
- 2001-2003 published 2006
- 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

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

3. Social performance and employment

- Ensure the future supply of a sufficiently skilled and educated <u>workforce</u>
- Further <u>improve</u> industry's performance in the field of <u>health and safety</u>
  - 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 21th

- Requests the Commission to develop a coherent political approach with regard to raw materials supplies for industry, 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 4th report (June 11th)

- Competitiveness, energy and environment
  - Links together EUs 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 a 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,………

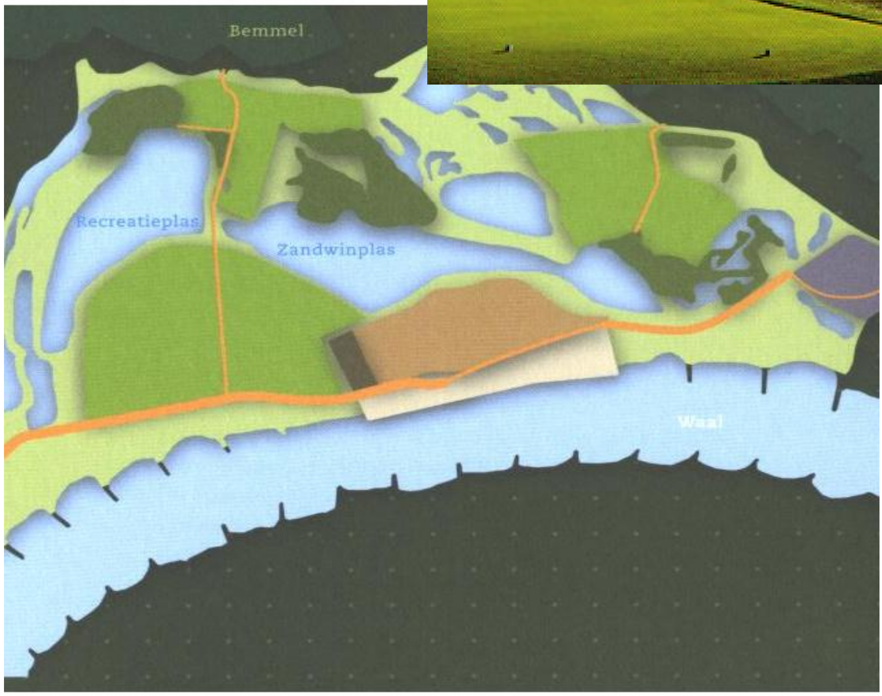
- EU policy framework to sustainable development:
  - Commission working closely with the industry and Member States to achieve the revised Lisbon objectives
  - Member States implementing legislation and providing an efficient, cost effective and transparent (sustainable) mechanisms to enable industry 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………..

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products

Thank you for your attention



Questions ?

Discussion Points ?

EUROPEAN COMMISSION
DG Enterprise and Industry
Unit G3 Steel, metals, minerals and mineral products