

European Mining Policy – Environmental Protection and Resource Development

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SveMin

(Swedish Association of Mines, Mineral and Metal Producers)

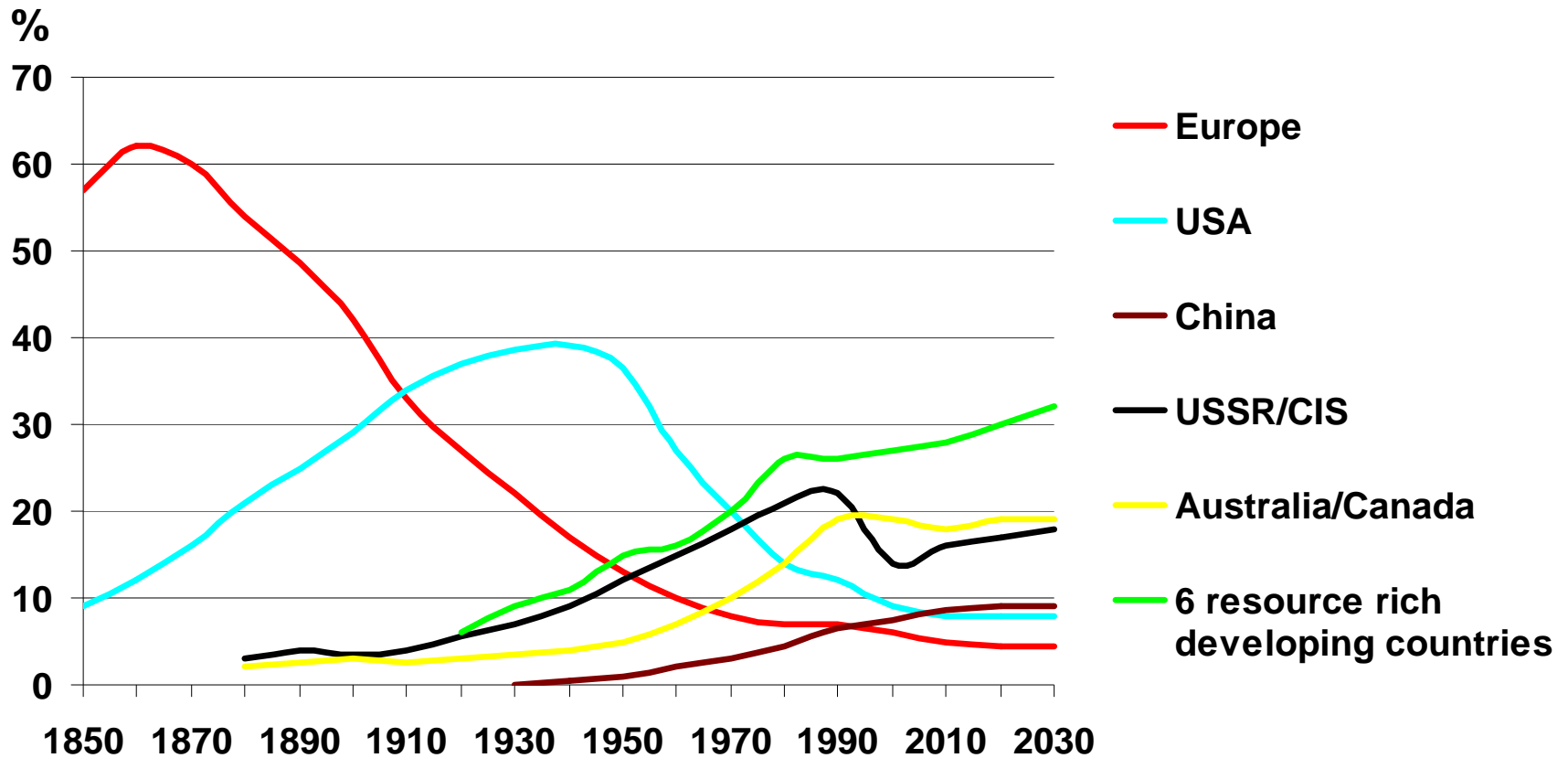
Sudbury2007

Outline

- Background on mining in Europe and in Sweden
- European Environmental Regulation
- Raw Materials Supply



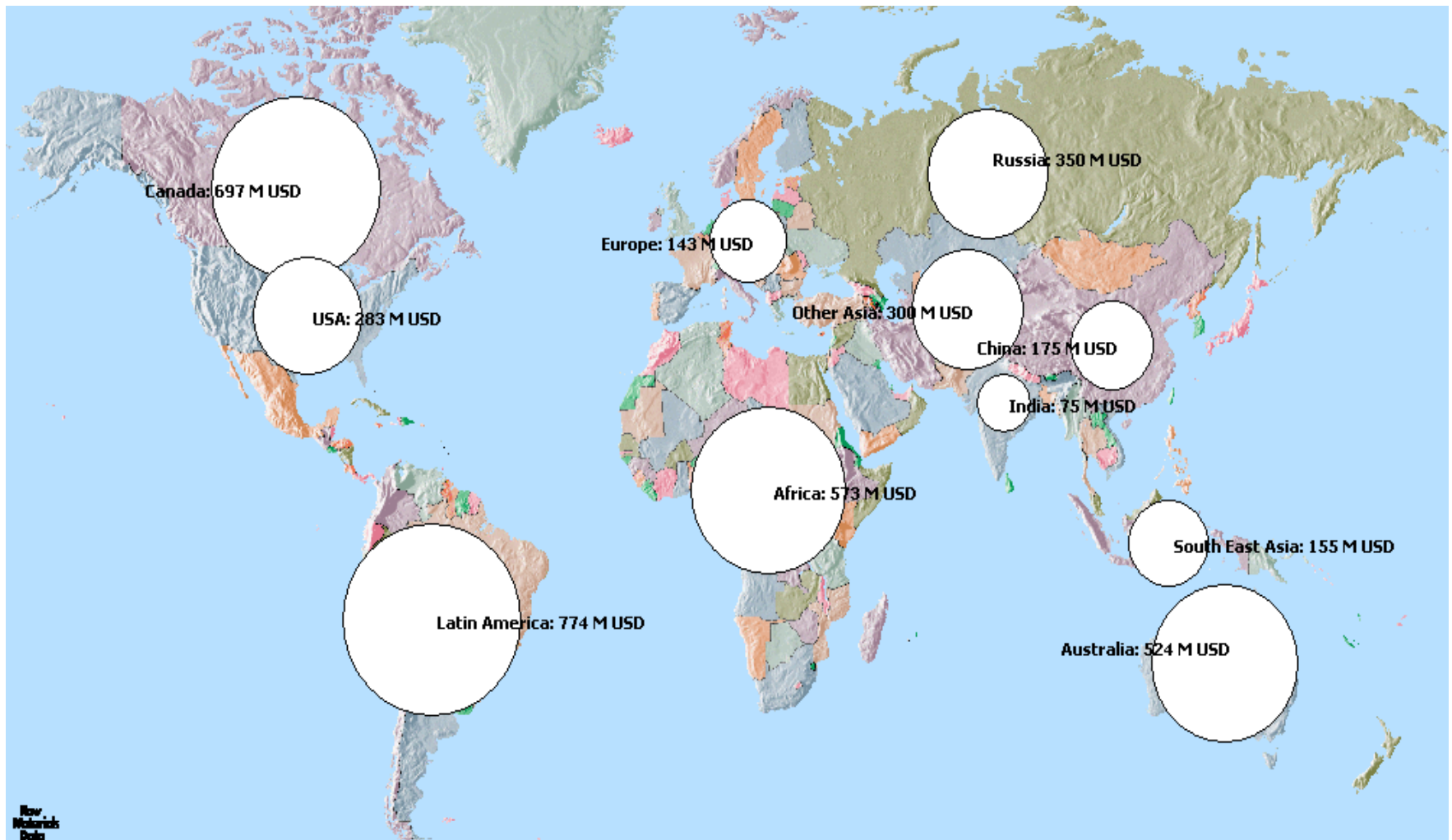
World Mining to 2030



Sources: Raw Materials Data, Stockholm 2004 and Sames.

(The six countries are Chile, Peru, Brasil, the Congo, Zambia and South Africa)

Global Exploration





Remote Controlled Electrical Loader TORO 2500E

Kiruna mine, underground

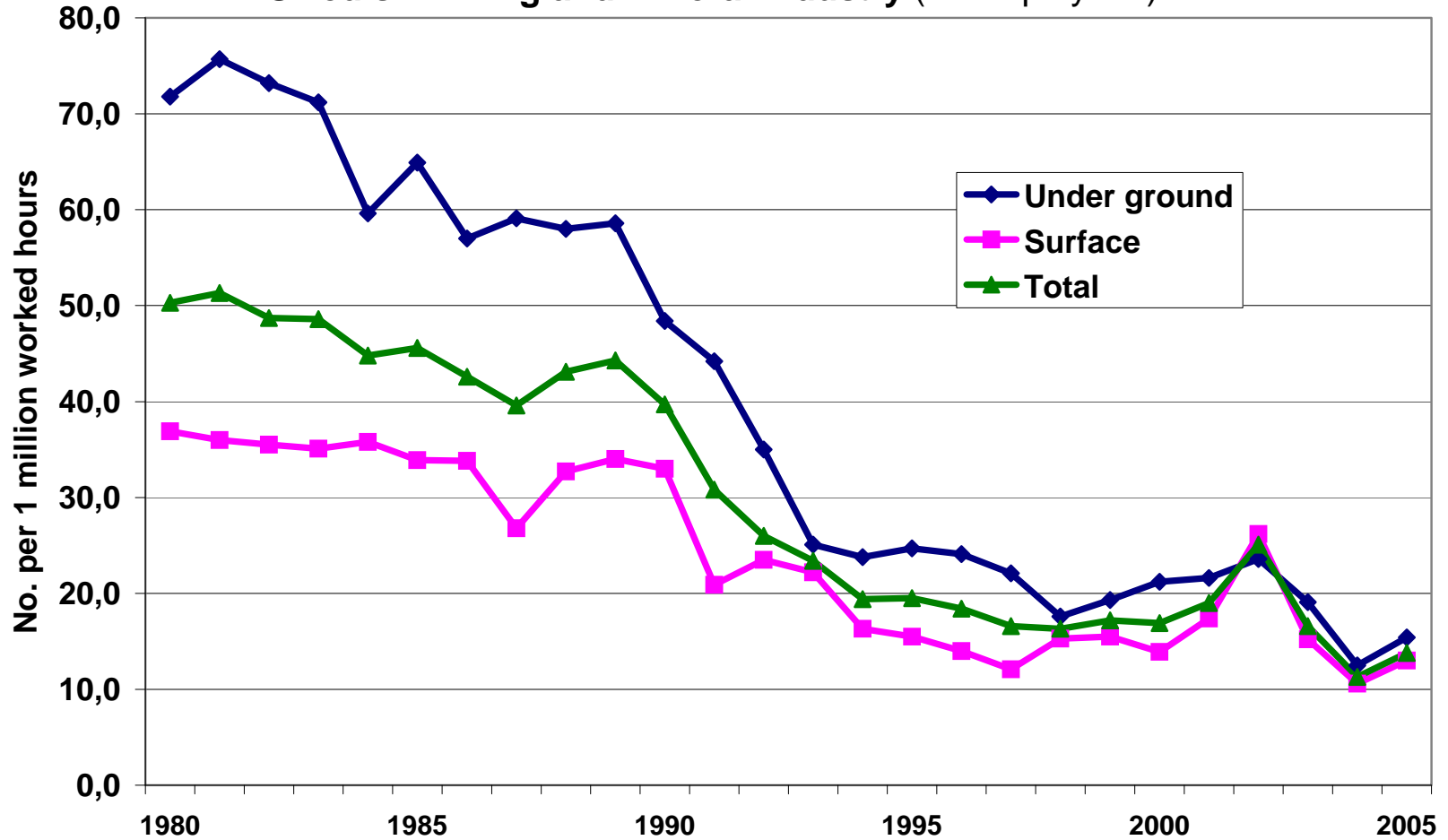
KIRUNA MINE (LKAB)



THE AITIK MINE (Boliden)

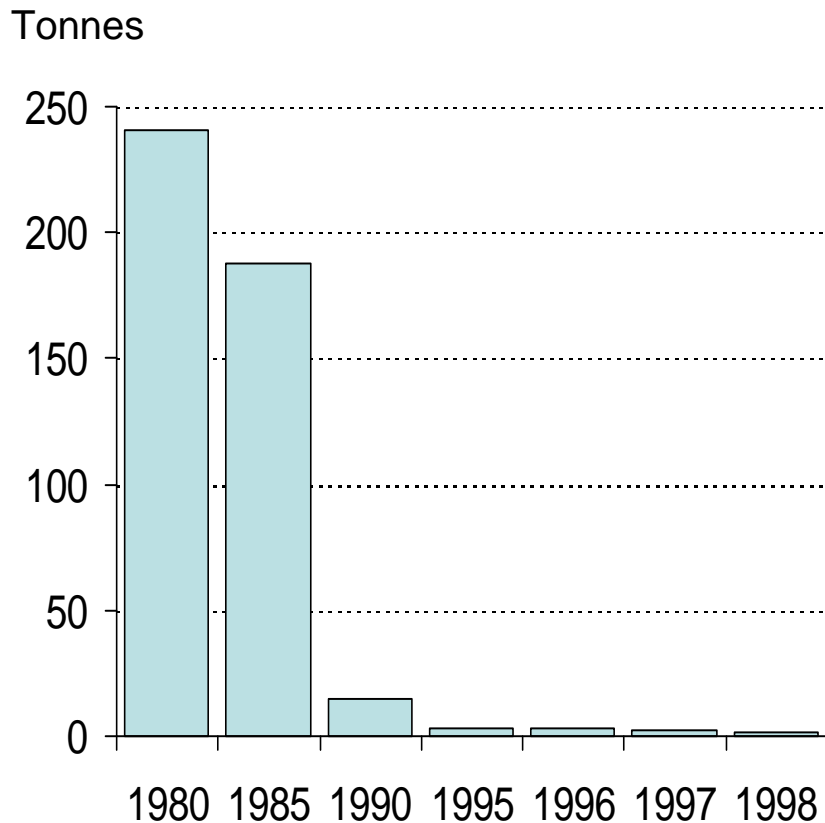


Occupational Accidents Lost Day Injury Frequency Rate 1980-2005 Swedish Mining and Mineral Industry (all employees)

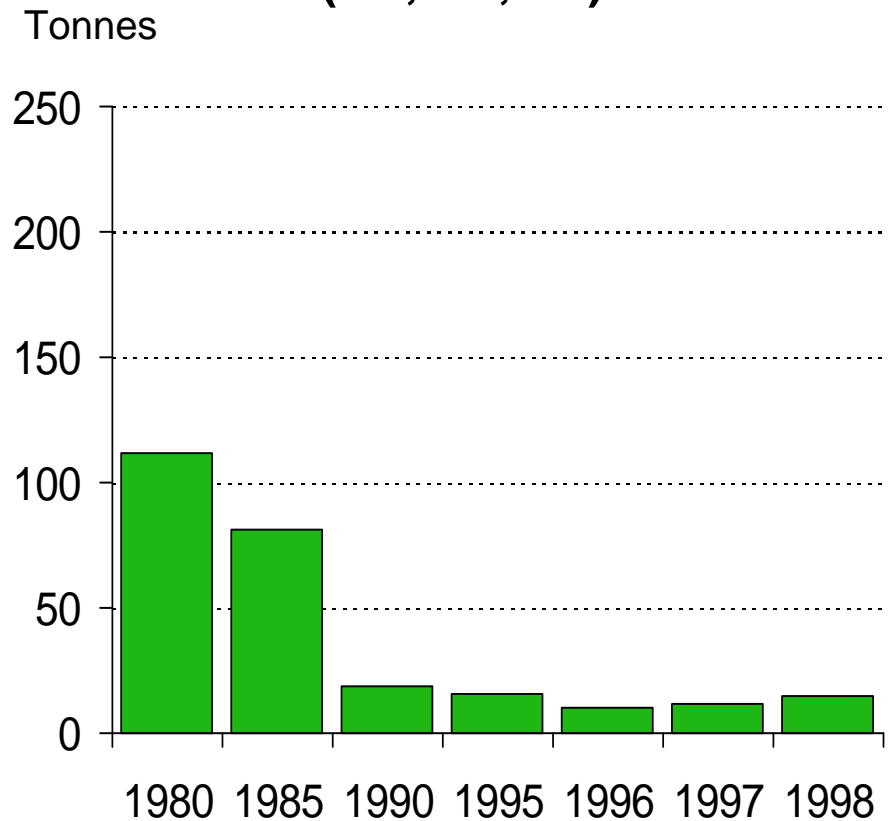


Emissions - Boliden's Swedish mining operations

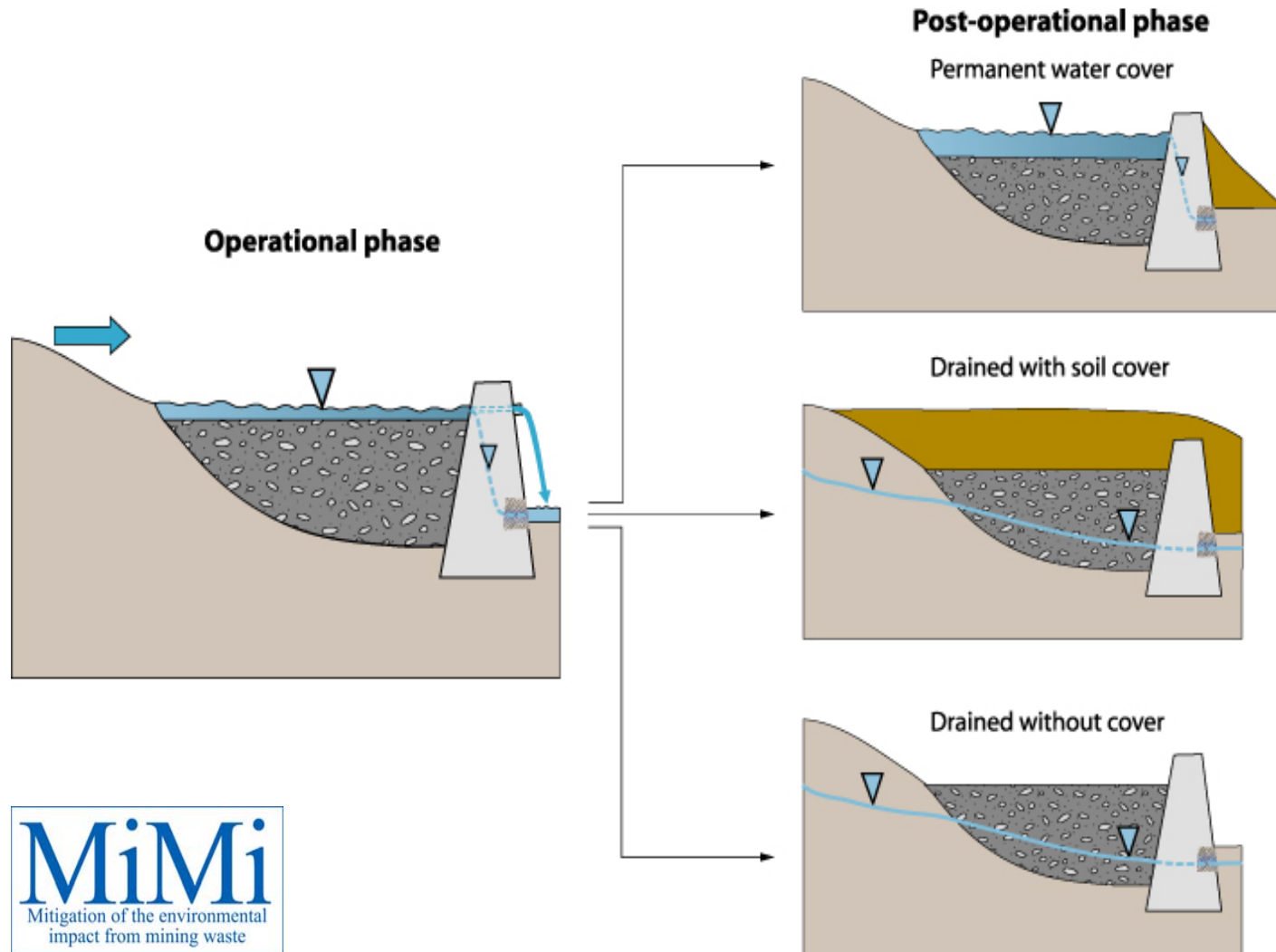
Particulates to air



Metals to water (Cu, Pb, Zn)



Principal closure options



The situation today

- Generally low emissions during operation
- Technologies exist for safe mine closure
- Main impact if something goes wrong

Aznacollar, Spain, 1998



... and Baia Mare, Romania, in 2000.

Political and Regulatory response

Initiative from the Commission and the European Parliament:

- Expansion of the Seveso Directive (Chemical accidents)
- New Mine Waste Directive
- BAT-document for mine waste management
- Classification of certain mine wastes as
"Hazardous Waste"

BREF - note

Reference Document on
Best Available Techniques for Management of
Tailings and Waste-Rock in Mining Activities

Published July 2004

<http://eippcb.jrc.es>

Mine Waste Directive

Approved in March 2006

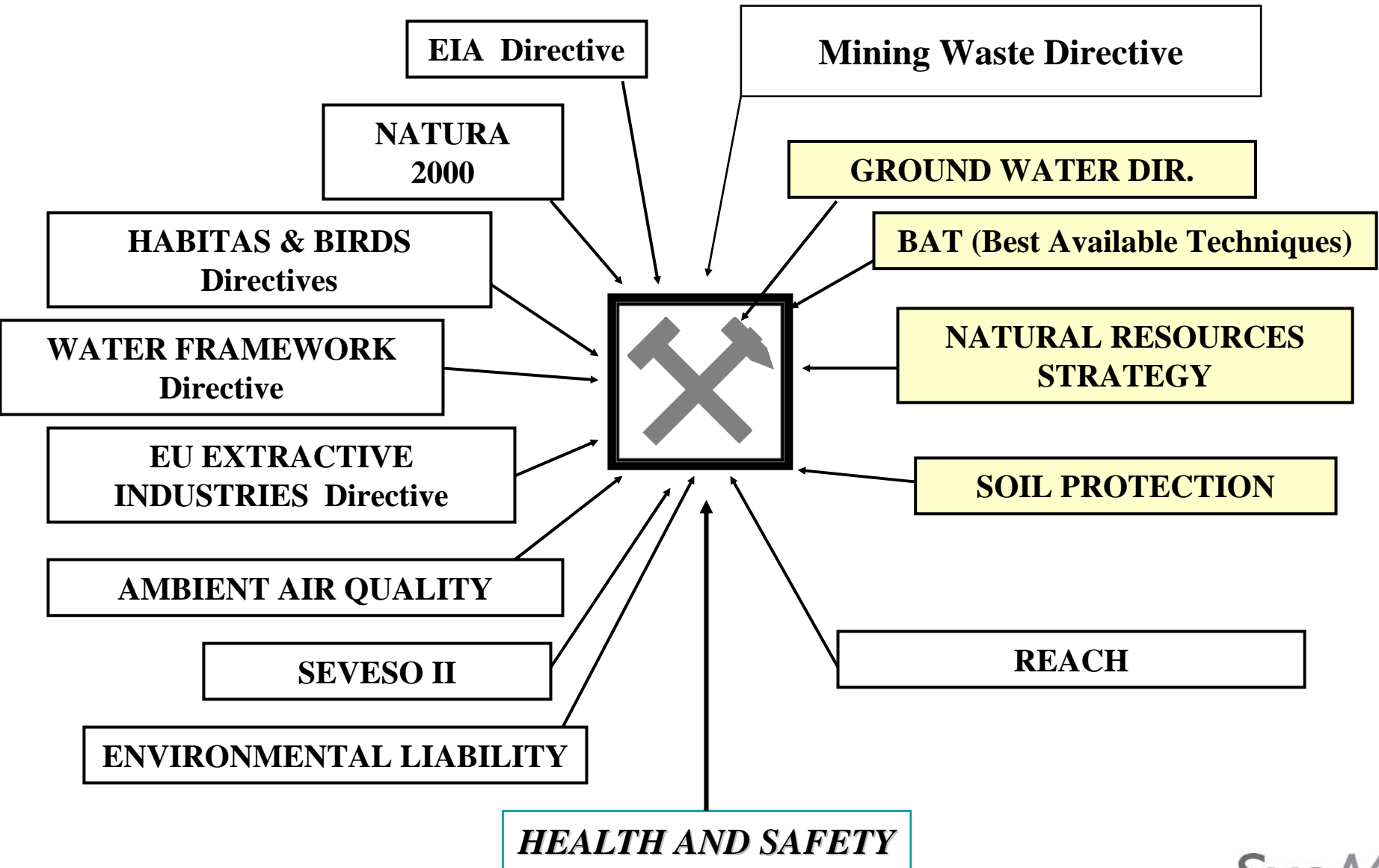
Include e.g.

- General requirements (Waste Management Plan)
- Accident prevention, information
- Content of application and permit, public participation
- Closure and after-closure
- Financial guarantees , environmental liability

<http://europa.eu.int/eur-lex/index.html> (Directive 2006/21/EC)

EUROPEAN EXTRACTIVE INDUSTRY DIRECTIVES

ENVIRONMENT



A new issue on the agenda

- Increasing global competition for resources
- Supply of raw materials may become a limiting factor for development
- European industry overregulated?

EU dependent on import

Iron ore/steel	83 %
Nickel/stainless steel	86%
Zinc ore/Zinc	80 %
Bauxite/Alumina	80 %
Copper ore/Copper	74%

(2003)

Reasons to act

- European manufacturing industry dependent on raw material supply
- Unexploited domestic potential
- Regional development, employment
- Contribute to global supply

Several initiatives

- The European Commission, “High Level Group”
- Regional bodies, ENMR (European Network for Mining Regions)
- Industry, NEEIP (Non-Energy Extractive Industries Panel)

Commission - High Level Group

Identification and analysis of the current, medium and long-term challenges for European industries to securing sustainable access to and use of natural resources;

identification of the factors affecting the supply and sustainable use of secondary raw materials and the flow of waste streams.

Challenges to domestic primary production

- Access to land, land use conflicts
- Regulatory framework (time for authorisation)
- Exploration, attractiveness for investment
- Costs (Investment, labour, energy)
- Availability of a skilled workforce

The other side of the equation

- More efficient use of resources (incl recycling)
- "Do more with less"

Recent initiatives

European Commission –

- January 2007, Action programme on the reduction of the administrative burden on enterprises. Target, 25% reduction.
- Preparations for a Communication on raw materials supply in spring 2008

Raw Materials Supply 1(2)

Build on four pillars –

- Domestic supply
- International supply (imports)
- Resource efficiency
- Capacity Building

Raw Materials Supply 2(2)

1. Guidance on land use planning/permitting
2. Improving national mineral planning policies
3. Facilitating exploration and extraction (review of legislation and implementation)
4. Securing mineral deposits (given higher priority)
5. Streamlining environmental legislation, eliminating unnecessary administrative burdens
6. Guidelines for implementation of EIA
7. Improving EU resource efficiency (Research, standards)
8. Promoting best practice in protected areas
9. Providing policy makers with more data/facts

Concluding remarks 1 (2)

- Minerals needed for development, global demand will continue to increase
- Extraction of mineral resources can contribute to local/regional wealth
- Extraction of minerals can also have significant negative impacts

Concluding remarks 2 (2)

- "Sustainable Development" dependent on all three "pillars" – Economical, social, environmental
- Holistic long term strategy needed
- The big challenge for policymakers and industry globally to find, and keep, the balance

Welcome to
"Securing the Future" and the 8th ICARD
Skellefteå, Sweden, 22 - 26 June 2009
www.securing.skelleftea.se

An aerial photograph showing a vast, green forested landscape. A winding river flows through the center of the image. In the lower right, there is an industrial or processing site with several buildings, a tall chimney, and a large pile of material. The text "Thank you for your attention!" is overlaid in white on the forested area.

Thank you for your attention!