



Mining and Sustainability

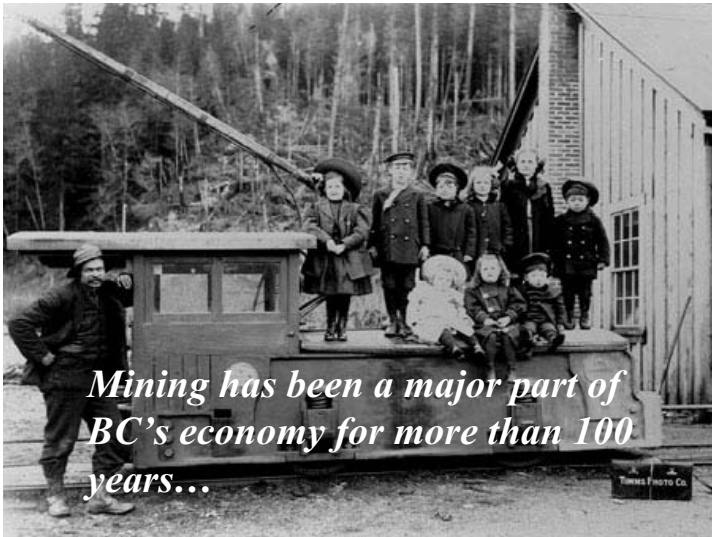
Michael R. McPhie

President and CEO, Mining Association of British Columbia

October 13 2006

KEY AREAS OF DISCUSSION

1. Profile of the mining and minerals industry in British Columbia
2. Sustainability, mining and the non-renewable character of minerals
3. Review of several major initiatives of the industry with respect to sustainability.



Who is the MABC and what do we do?

- Established through an act of parliament in 1901.
- Represents the interests of mining "producers" who make up the majority of BC's \$10 + billion mining industry.

➢ Five key areas of work:

1. Policy Development
2. Environment and Sustainability
3. Public Affairs and Community Relations
4. Disability Management, Health and Safety
5. Mineral Resources Education Program

Quick Facts on Mining in BC

| | |
|--|--|
| Gross Mining Revenues (2005) | \$6.4 billion |
| Industry Spending (2005) | \$5.5 billion |
| Percentage of Regional Port Traffic | 65 % |
| Percentage (National in 2004) of Rail Freight that is Mining-Related | 42 % |
| Major minerals produced in BC | Coal (66%), Copper (40%), Silver (50%), Gold, Lead, Molybdenum, and Zinc |
| Number of Operating Mines in 2005 | 18 |
| Total area disturbed by mining in the province of BC | 0.03 percent of the land base |
| Percentage of area reclaimed | 98.5% |

EMPLOYMENT

- ✓ Highest paid resource jobs -- \$94,500/yr
- ✓ 7,800 direct jobs (2005)
- ✓ More than 15,000 indirect jobs
- ✓ Major educational and research network
- ✓ Vancouver is noted as the 5th largest mining centre in the world



Sustainability, Mining and the Non-Renewable Character of Minerals

Value Set: parallel care and respect for the ecosystem and people within

Goal: to achieve human and ecosystem well being together

Test: there is demonstrable evidence of a positive contribution to both human and ecosystem well being

Sustainability, Mining and the Non-Renewable Character of Minerals *cont'd...*

- Sustainability is more than environmental protection in another guise

- It builds from traditional environmental, social, and economic impact approaches

- However, it is a positive concept that has as much to do with achieving wellbeing for people and ecosystems as it has to do with reducing stress or impacts.

Sustainability, Mining and the Non-Renewable Character of Minerals *cont'd...*

- Mining needs to achieve a net human and environmental benefit if it is to be considered as contributing to sustainability

- Dual "design criteria" of human and ecosystem well being veers away from trade-off thinking: human vs. ecosystem wellbeing

- Double edged sword:

1. Fuller treatment of the positive
2. Sets the assessment bar higher

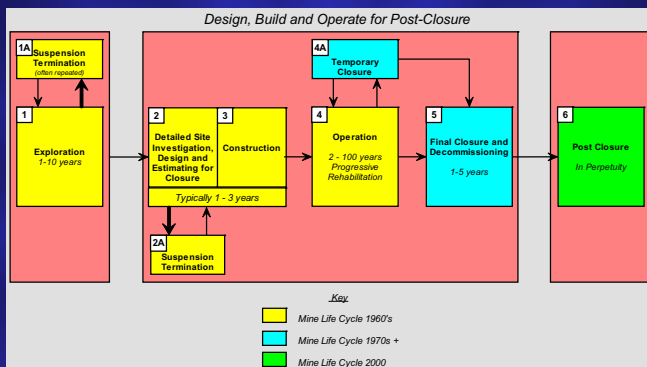
Sustainability, Mining and the Non-Renewable Character of Minerals *cont'd...*

- Non-renewable character of minerals relatively unimportant

- Mine/mineral activities have beginning and end but implications are perpetual

- Key is to focus on bridging from the present to the future

Life Cycle of a Mineral Project



Major Initiatives of the Industry

1. Global Mining Initiative (GMI)/Mining Minerals and Sustainable Development (MMSD) Project

Led by: World Business Council on Sustainable Development, International Institute for Environment and Development, International Institute for Sustainable Development (North America)

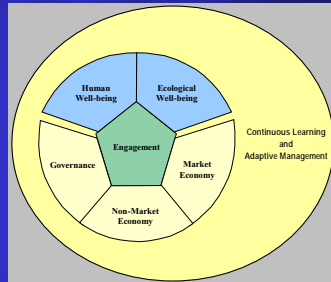
Scope: Global, based on 4 major regions

"MMSD was an independent two-year process of consultation and research with the objective of understanding how to maximise the contribution of the mining and minerals sector to sustainable development at the global, national, regional and local levels."

Major Initiatives of the Industry

2. Seven Questions to Sustainability

- A practical tool to assess the contribution of mining to sustainability
- Being applied in Canada, South America and Asia
- Used by companies, governments and international development agencies



Modified from Hodge 2005

Major Initiatives of the Industry

3. Towards Sustainable Mining (TSM)

Led by: Mining Association of Canada with prov. partners including MABC



- TSM is a strategy for improving the mining industry's performance by aligning its actions with the priorities and values of Canadians
- a process for finding common ground with our communities of interest, to build a better mining industry today and in the future

Major Initiatives of the Industry

4. Aboriginal and Community Relations Handbook

5. Sustainability Charter (Mining Association of BC)

Major Initiatives of the Industry

6. The Britannia Project

"The Britannia Project will transform an historic mining site into one of Canada's pre-eminent sustainability focused research, education and entertainment destinations."



For Further Information:

Contact: **Michael McPhie**
President and CEO
Mining Association of BC
604-681-4321
(mmcphie@mining.bc.ca)

Web Site: www.mining.bc.ca