

Mining: An Important Industry Contributing to All Regions of Canada

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Mining and exploration are a key part of the Canadian economy



Mining and exploration occur in every province and territory



Generate economic/social opportunities for Aboriginal and other communities (e.g., the North)



Provide domestic and international opportunities for Canadian SMEs and larger companies



Backed up by a well-developed S&T infrastructure in Canada



Have a strong international presence offering expanded trade and investment opportunities

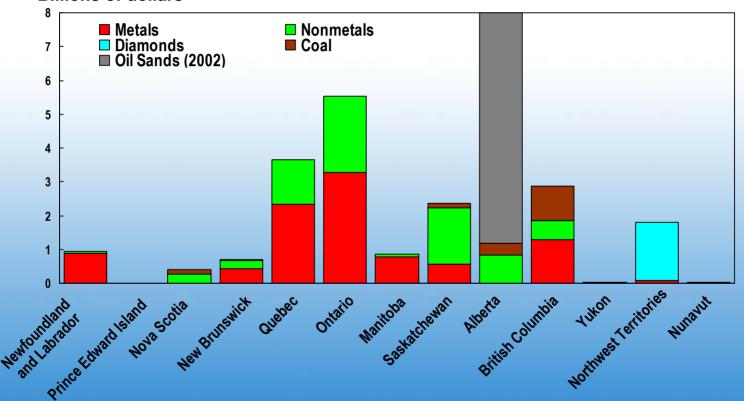




Mine production is found in every province and territory in Canada

Canada's Mine Production, By Region, 2003

Billions of dollars



Notes: Preliminary estimates. Due to confidentiality issues, data have been rounded. P.E.I. produces around \$3.5 million of sand and gravel, and peat.

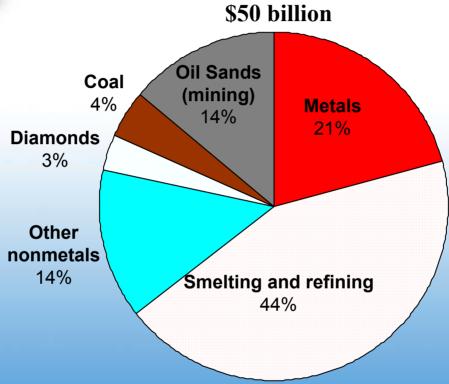
Sources: Natural Resources Canada; Statistics Canada.







Value of Production, Canadian Mining, Mineral Processing and Metal Producing Industries, 2003



Notes: In 2003, the overall value of production of the Canadian mining, mineral processing and metal producing industries totaled approximately \$50 billion. This figure includes the "traditional" value of production from Canadian mined ores, concentrates and aggregates (\$19 billion). The balance includes the value of production realized from the smelting and refining of domestic and imported ores, concentrates and recyclables as well as steel, aluminum, coal and oil sands mining, which were excluded in the traditional value of production. Sources: Natural Resources Canada: Statistics Canada.

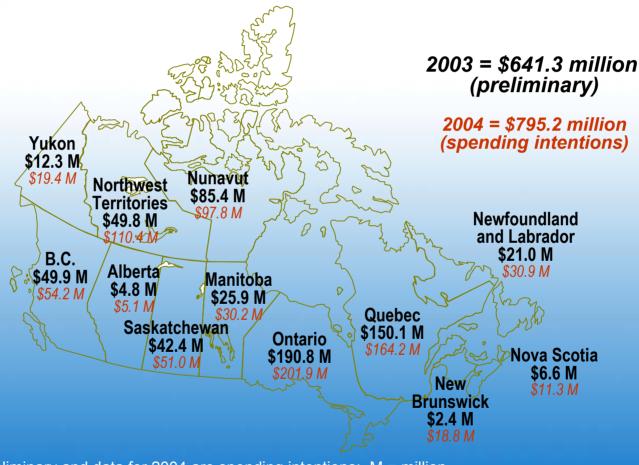


Natural Resources



Higher commodity prices have led to higher exploration levels across Canada

Exploration and Deposit Appraisal Expenditures in Canada



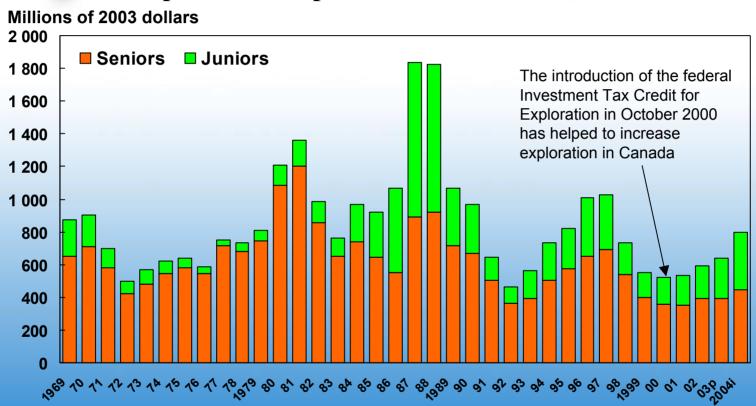
Note: Data for 2003 are preliminary and data for 2004 are spending intentions; M = million. Source: Natural Resources Canada, from a federal-provincial-territorial survey of mining and exploration companies.





Exploration levels over the years have varied greatly

Exploration Expenditures in Canada, 1969-2004



Notes: Total expenditures for 1975-81 are overstated by an average of about 17% relative to earlier and later years because of changes to the methodology used by Statistics Canada during the period. Data for 2003 are preliminary and data for 2004 are company spending intentions. Starting in 1997, the data include field and overhead expenditures plus engineering, economic and feasibility studies, environment and land access costs

Source: Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures.







Mineral development is key to the economic prosperity of many Aboriginals

- In many instances, the mining industry offers the only opportunity for economic development in remote areas (100+ communities, including Aboriginal)
- More than 1200 (75%) Aboriginal communities located within 200 km of producing mines
- Mining companies look to Aboriginal communities for skilled labour and supplies; 30%+ of work force in many cases
- Industry provides significant Aboriginal business opportunities
 - Diavik: \$600 million goods/services from Aboriginal firms
 - Syncrude: \$50 million per year to Aboriginal businesses
- Future opportunities also exist





Canadian mining companies support a strong associated industry sector

- Exploration financing
- Investment analysis
- Due diligence
- Legal services
- Geophysics
- Geology
- Geochemistry
- Mapping
- Remote sensing
- Drilling
- Communications
- Community relations

- Analytical laboratories
- Feasibility studies
- Engineering
- Project management
- Mine construction
- Parts and equipment
- Mineral processing
- Refining
- Smelting
- Automation and software
- Environmental management
- Transportation

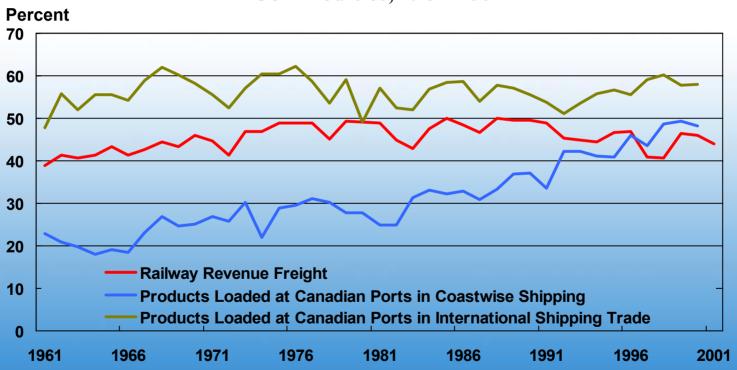


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Canada's transportation system depends on the performance of the industry

Crude Minerals as a Percentage of Total of All Commodities, 1961-2001



Notes: Crude minerals include metallic and nonmetallic minerals and coal. Revenue freight refers to a local or interline shipment from which earnings accrue to a carrier.

Source: Statistics Canada.

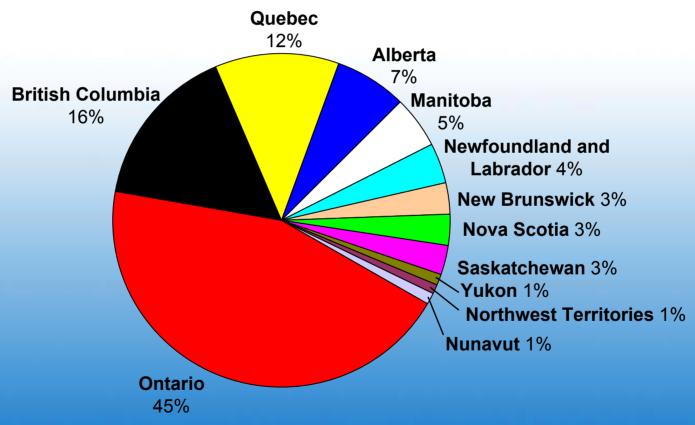
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Canada's 2200+ associated firms support domestic and global mining activities

Distribution of Canadian Suppliers of Specialized Mining Goods and Services Across Canada¹



¹ Based on head office location of 2195 companies advertising in trade publications. Numbers do not add to 100 due to rounding.



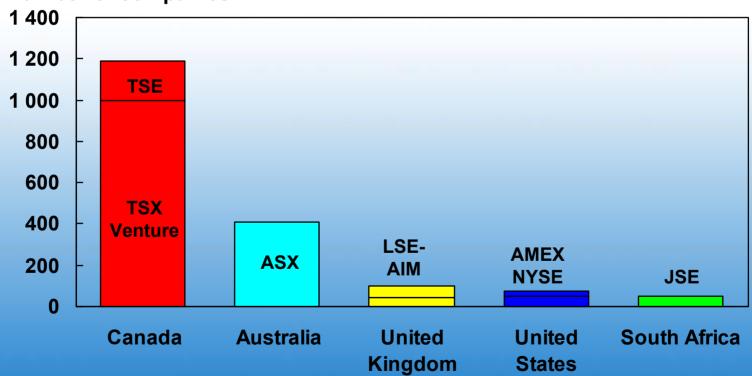




Over 65% of the world's mining companies are listed in Canada

Mining Companies Listed on Selected Worldwide Exchanges, 2003

Number of companies¹



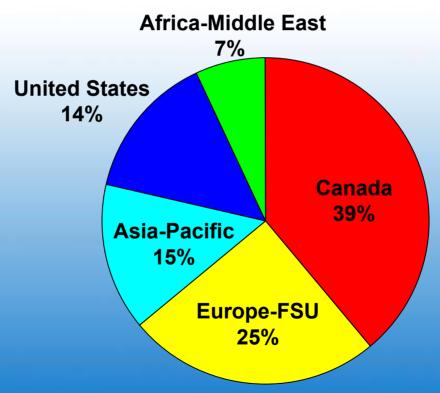
¹ Discounting interlistings, December 2003. Sources: AMEX, ASX, CDNX, JSE, LSE, NASDAQ, NYSE, TSE.





Canada's financial community has made Canada a major source of exploration and mining equity

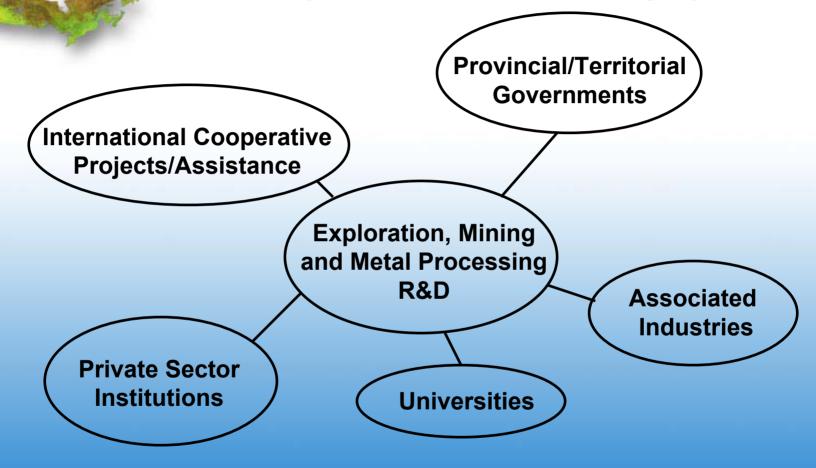
Equity Financing for Exploration and Mining Companies, Selected Regions of the World, January 1998 – September 2003 = \$37 billion



Source: Natural Resources Canada, based on Gamah International Limited and company reports.



Canada's mining-related S&T infrastructure is one of the world's most significant





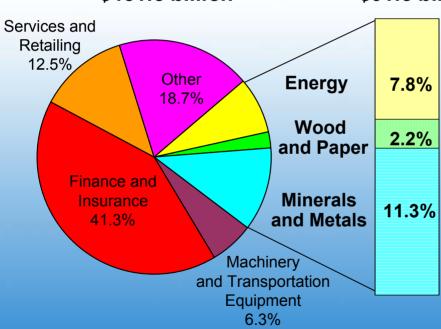
Mining is Canada's largest foreign investor among goods producers

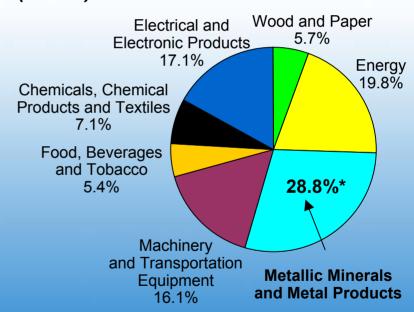
Canadian Direct Investment Abroad, 2002

All Industries \$431.8 billion Natural Resource Industries \$91.8 billion (21.3%)

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Goods-Producing Industries \$168.8 billion





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Canada



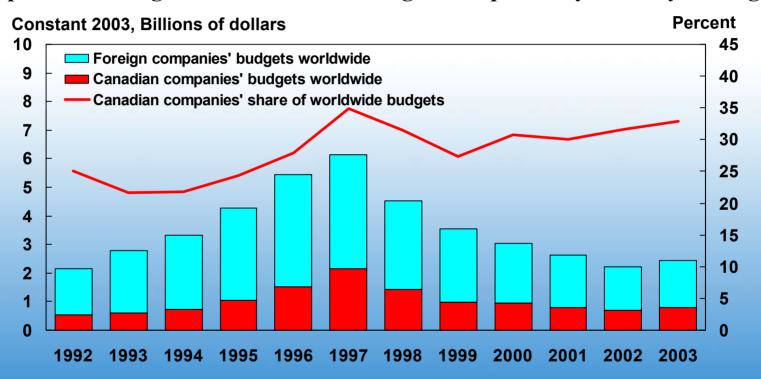


^{*} Excludes nonmetals. Source: Statistics Canada.



Canadian mining companies have a strong domestic and international presence

Exploration Budgets* of the World's Larger Companies by Country of Origin



Base metals, precious metals and diamonds. Companies that intended to spend less than \$4.3 million (US\$3 million) annually are excluded.

Source: Natural Resources Canada, based on Metals Economics Group's Corporate Exploration Strategies: A Worldwide Analysis.

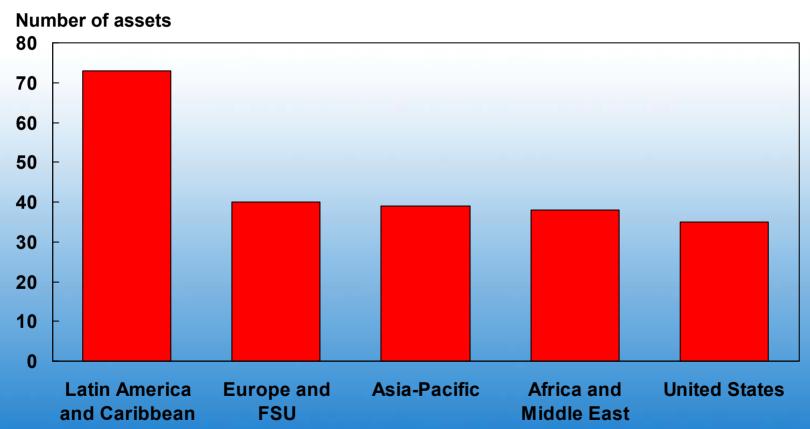






Canadian mining operations can be used as a platform for trade and investment

Mines, Refineries, Smelters and Advanced Projects Abroad With a Canadian Interest



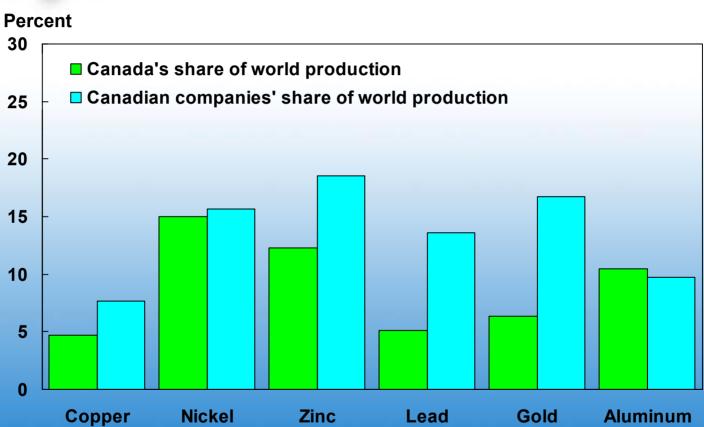
Source: Natural Resources Canada, based on company reports available in June 2000.



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Canada's share of selected world metal production, 2002



Source: Natural Resources Canada, based on data from Raw Materials Group.

Note: Companies' share based on equity ownership; mine production for all metals except aluminum.

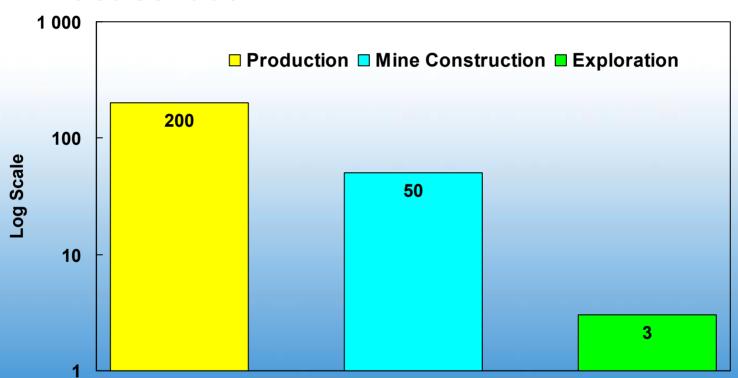


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Worldwide market for specialized mining goods and services

Billions of U.S. Dollars



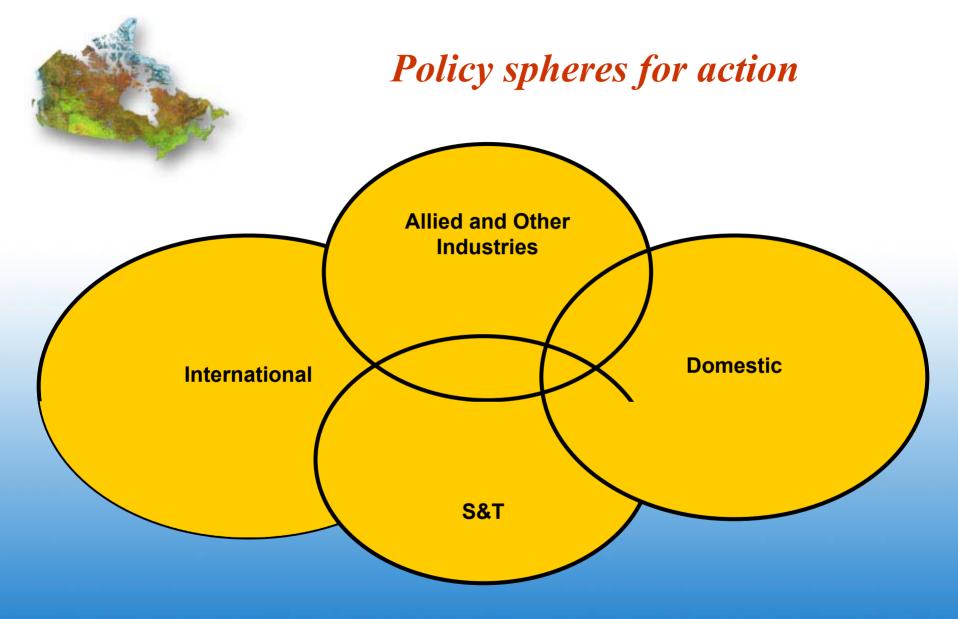
Source: Natural Resources Canada, based on *The Globe and Mail*, *Engineering & Mining Journal*, and Metals Economics Group.





Well-established mining, allied industry and R&D centres have created a significant national industry cluster in Canada **Athabasca** (uranium) **Thompson** (nickel, copper) Rouyn-Noranda Yellowknife (copper) (gold, diamonds) Val-d'Or 3 Labrador City/ **Fort McMurray** (gold, copper, Sept-Îles (oil sands) zinc) **Kitimat** (iron) (aluminum) 🔨 **Kamloops Alma** (copper, molybdenum, (aluminum) gold) **Bathurst** Vancouver (zinc, lead) (allied industries, junior exploration/ **Cape Breton/Amherst Timmins** mine financing) **Red Deer** (gypsum) (zinc, copper, (coal) Trail lead, gold) **Thetford Mines** (lead, zinc) Sudbury **Esterhazy** (asbestos) Flin Flon (potash, salt) (nickel, copper, **Toronto** cobalt, gold, pgm. (gold, copper, zinc) (allied industries, + allied industries) senior exploration/mine financing)







Concluding remarks

- Mineral and metal resources have led to:
 - The generation of a competitive national industrial cluster of exploration, mining and associated industries (e.g., financial/equipment) backed up by an extensive S&T infrastructure
 - The provision of international trade and investment opportunities, notably with developing countries (exploration/mining is largely the face of Canada)
- Manufacturing is increasingly shifting to China, India, Brazil and other low-wage countries, suggesting that increasing priority should be considered for Canada's natural resource-based industries





Key messages

- The mining and metals industry is:
 - the face of Canada through its investments in many developing countries
 - a market for many associated industries (e.g., services, supplies, equipment, finance, transportation, high-tech sector)
 - a major generator of business development and employment opportunities for Aboriginal communities
- Canada has an opportunity to maintain and or increase its position as a global leader in the minerals sector generating benefits both domestically and internationally

