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Mining in Canada

HR Challenges and Opportunities

September 7, 2006



Overview of Presentation

- Human Resources Challenges in the Minerals and Metals Industry
- Sector Study - Key Findings
- Recommendations
- Conclusions
- MiHR's role



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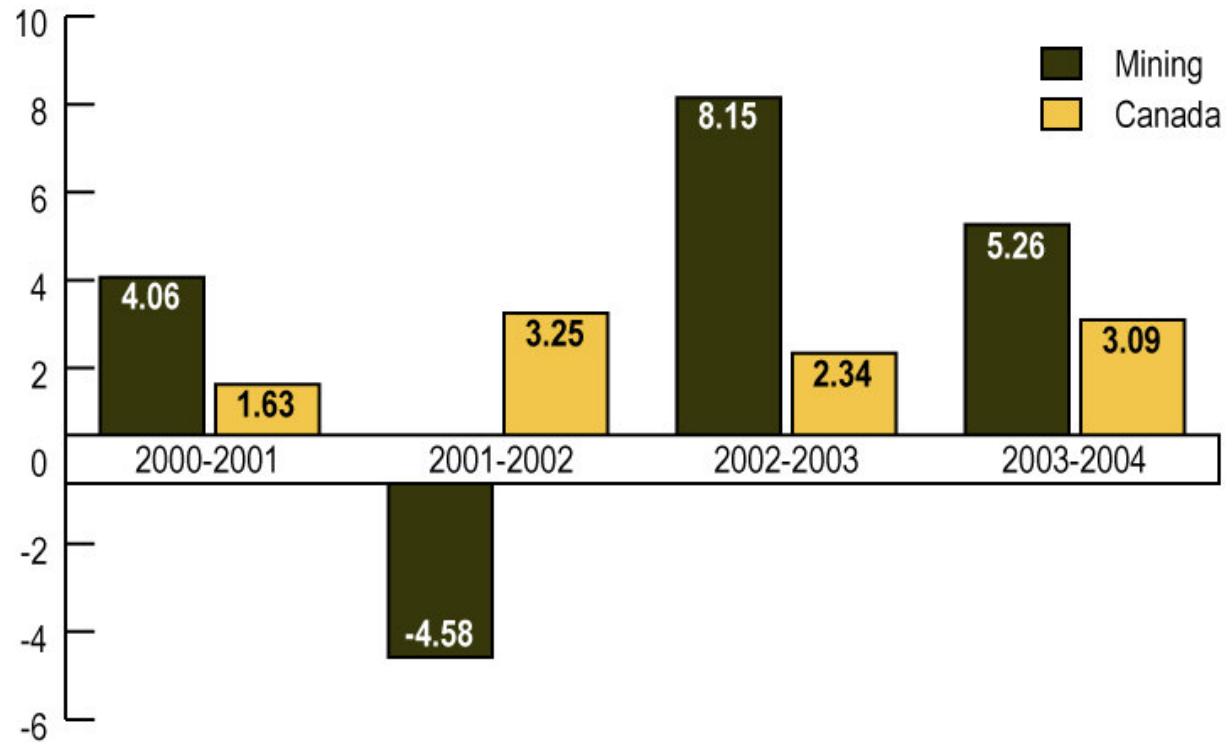
HR Challenges in the Minerals and Metals Industry

- The minerals and metals industry is one of Canada's most productive industrial sectors
- However, much of the current workforce is planning to retire
- Fewer and fewer young people are entering mining careers
- The industry suffers from an image problem, hampering recruitment efforts



Industry Growth

Change in GDP – Mining (Stage I) and the Canadian Economy (2000-2004)

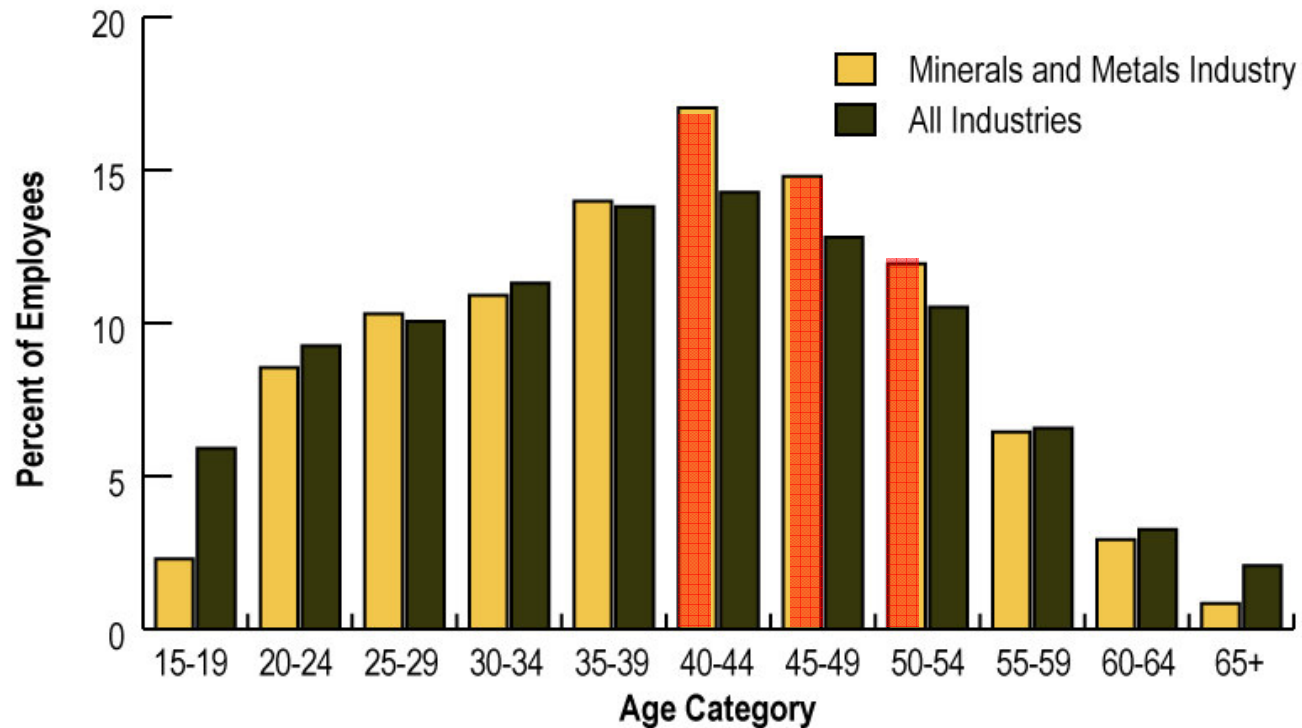


Source: Statistics Canada CANSIM table 379-0017



An Aging Workforce

Age Composition of the Canadian Minerals and Metals Industry (2001)



Source: Statistics Canada, 2001 Census



Retirement Projections

Estimated Retirement Trends for the Industry – Employer and Employee Forecasts (2005)

Time Period	Employer Estimate % Retiring	Employee Estimate* % Retiring
Five Years (2005-2009)	14.5%	16.9% ¹
10 years – cumulative (2005-2014)	24.5%	40.0%

Based on 2004 labour force baseline of 78,184 workers

1 Includes employees planning to take early retirement



Supply & Demand Gap

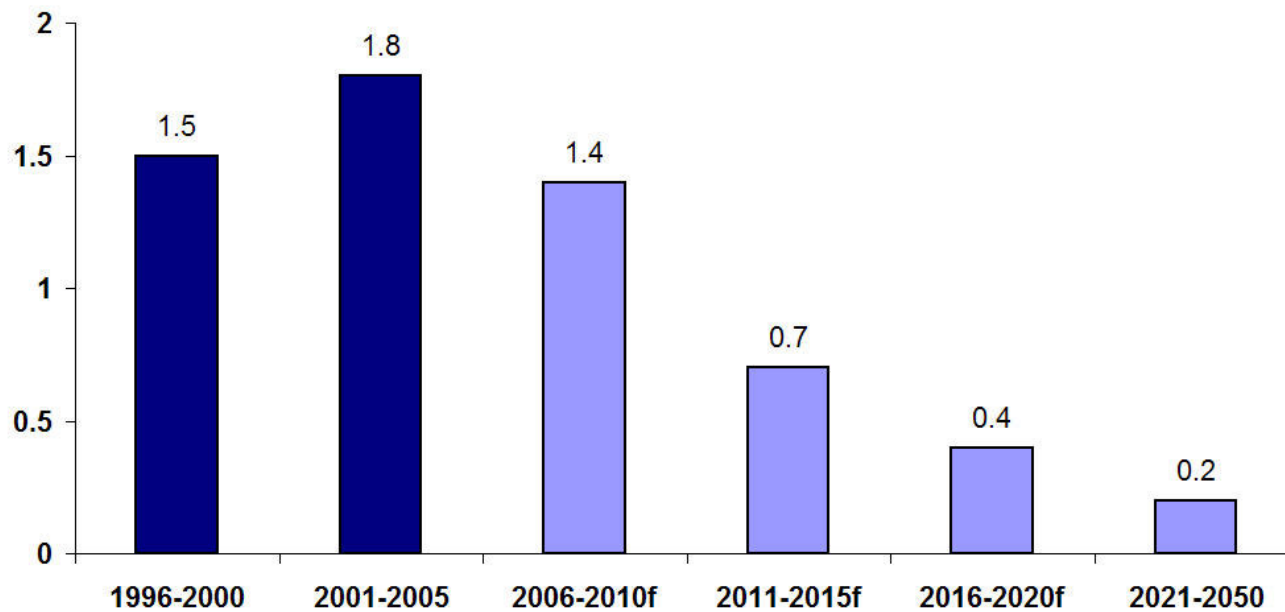
Estimated Supply and Demand Gap – Summary

Scenario	Cumulative Ten-Year Gap (2005 – 2014)		
	No Growth	Low Growth	High Growth
Estimated Total Workforce (based on a total 2004 workforce of 78,184)	82,712	90,343	93,672
Total Cumulative Demand	36,470	57,150	81,970
Total Cumulative Supply	8,910	9,800	11,160
“Gap” to be filled by other sources	27,560	47,350	70,810



Canadian Labour Force Growth

Labour Force Growth
Percent, average annual compound growth rate



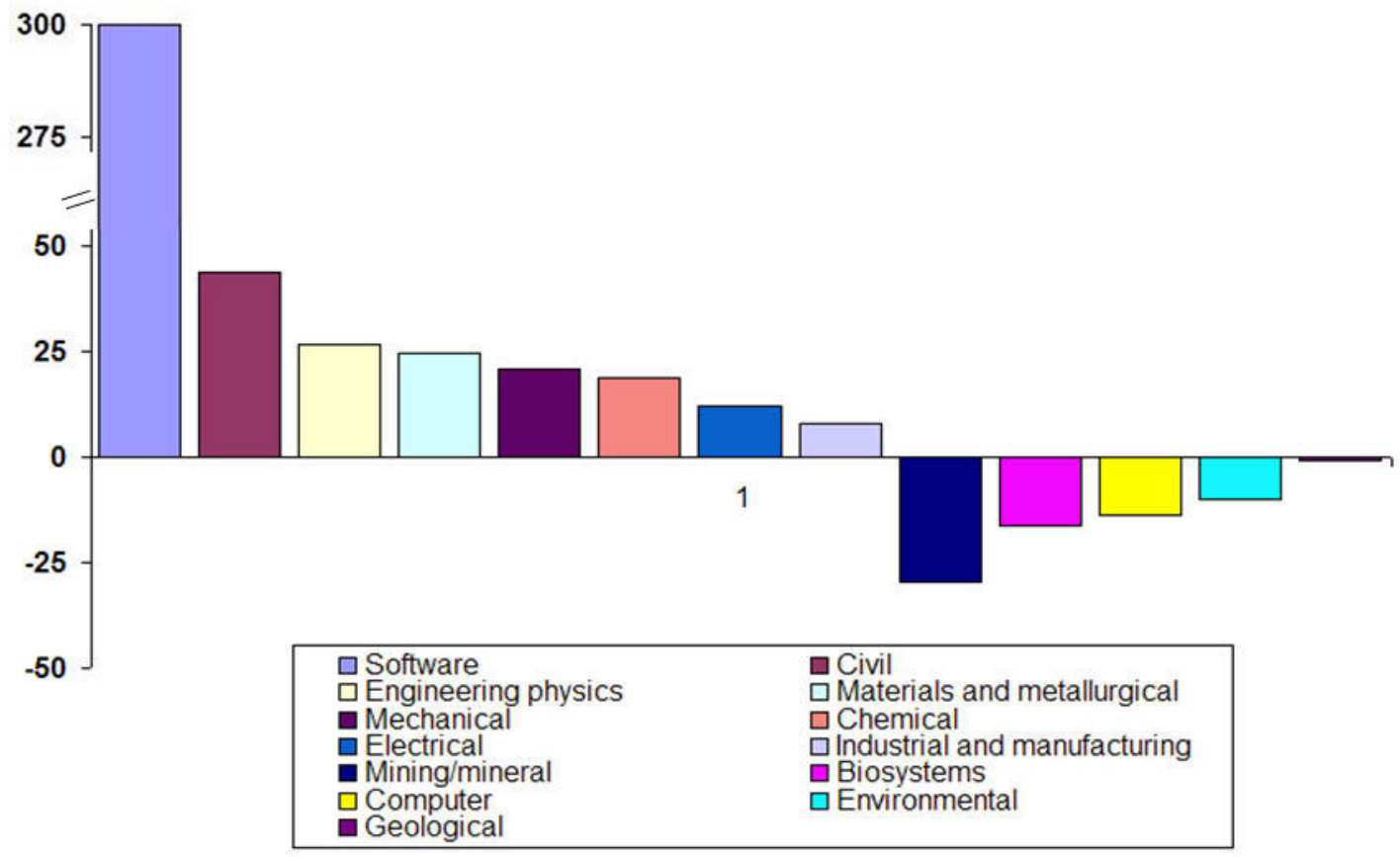
f=forecast

Source: The Conference Board of Canada; Statistics Canada



Engineering Enrollment

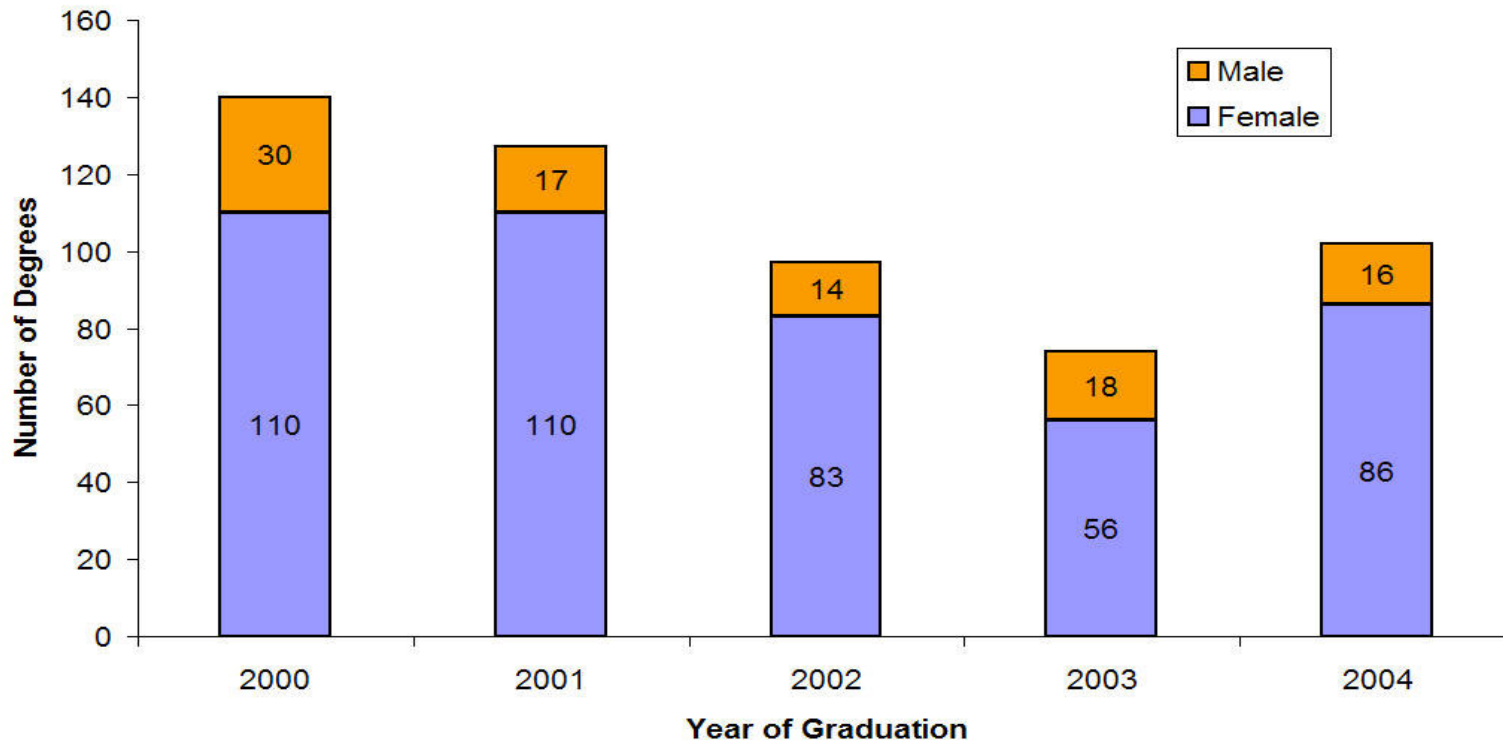
Trends in Engineering Undergraduate Enrolment by Discipline (2000-2004)





Mining Engineering Graduates

Total Mining Engineering Degrees Awarded



Source: Canadian Council of Professional Engineers



Recruitment & Retention Challenges

- Competition for skilled labour
- Awareness and perception of the industry
- Commuter operations
- Delayed retirement



Meeting Skills Requirements

- Education and training
- Skills requirements and the northern workforce
- Impact of technological change
- Certification requirements
- Skills gap provided by post-secondary mining programs



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Opportunities

- Youth
- Women
- Aboriginal Community
- New Canadians



Call to Action - Objectives

- A. Increase and make best use of all potential sources of supply
- B. Address existing and expected skill gaps in the industry
- C. Ensure standardization of skills and consistency of training delivery
- D. Ensure that all stakeholders are aware of and understand the critical human resources issues



Objective A - Increase/Make Best Use of All Supply Sources

- Promote the industry to youth
- Develop national strategy focused on Canada's Aboriginal workforce
- Actively target non-traditional groups



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Impressions of the mining industry?

Total (n=474)



Age

16-17 (n=42*)



18-24 (n=120)



25-35 (n=312)



Location

Urban (n=180)



Rural (n=294)



Gender

Male (n=232)



Female (n=242)



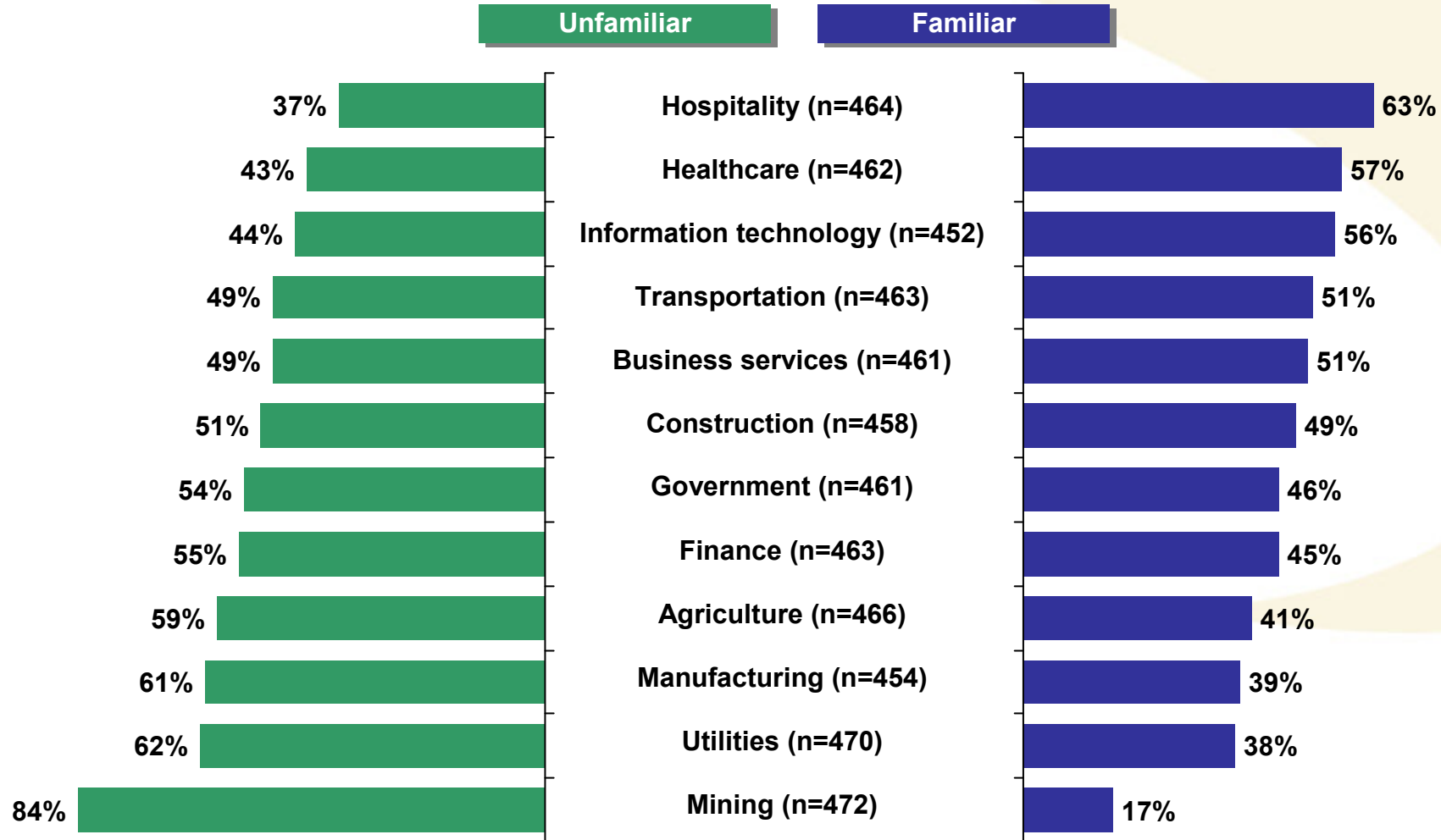
Source: Ipsos Reid Survey



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Canadian Youth Familiarity with the Following Industries.



Source: IPSOS REID Survey, MiHR Council



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Be part of one of the fastest growing industries in the world today.

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If you answer "yes" to any of these questions, consider a career as a (an)...

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- Carpenter
- Chemical Engineer
- Computer Programmer
- Construction Millwright
- Conveyor Operator
- Electrical Engineer
- Electrician
- Environmental Scientist
- Excavator Operator
- Explosives Handler and Packer
- Extraction Worker
- Financial Analyst
- Geological Technician
- Geologist
- Geophysical Technician
- Industrial Designer
- Heavy-Duty Equipment Mechanic
- Heavy Equipment Operator
- Health and Safety Specialist
- Human Resource Manager
- Instrument Technician
- Investor Relations
- Laboratory Technician
- Lawyer
- Marketing Manager
- Mechanical Engineer
- Metallurgical Engineer
- Metallurgical Technician
- Mill Operator
- Millwright
- Miner
- Mining Engineer
- Process Engineer
- Prospector
- Public Affairs Director
- Purchasing Agent
- Registered Nurse
- Surveyor
- Truck Driver
- Welder
- ...and many, many more!

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phosphate, nitrogen, sulphur and potash for fertilizers.

nickel for batteries.

barite, lead, indium for entertainment products.

iron and calcium for daily vitamins.

clay, gypsum, limestone, sand and gravel for our homes.

cobalt for turbine engines.

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- Mining is one of the highest paying industrial sectors in Canada.
- Almost 300,000 Canadians work in the mining industry.
- There are over 120 different careers available in mining.
- Canada's mining industry has a safety record that meets or beats that of most other industries.
- The Mining Industry Association of Canada was recognized in 2005 with the Global Foundation's "Industry Association Award for Environmental Performance".

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CAREER PROFILE

ASSAY LAB TECHNICIAN

Name: Frank Kwisiwa
Employer: Placer Dome, Musselwhite Mine
Education: Marathon High School
Compensation: \$18-\$29/hour



Frank Kwisiwa works as an assay lab technician at the Musselwhite goldmine, 480 km north of Thunder Bay. He plays a very important role within the mine since he prepares rock samples to test them for gold content. Information gained from assay results helps define the ore body - or the amount of gold in the ore - providing clues to geologists and mine planners where to drill and blast.

The quality of life is one of the best perks of the job. Musselwhite is a fly-in, fly-out operation located on the south shore of Opapimiskan Lake surrounded by pristine wilderness. The two weeks in, two weeks out rotation allows Frank to spend quality time with family and friends at his home. "Accommodations at the mine are excellent," Frank says. "They really treat us well." He has his own room in the mine's bunkhouse and can go fishing, sailing, or kayaking in the evenings. There's also a full size gymnasium, a weight room, saunas, pool tables and a TV lounge.

Frank's job allows him to make a meaningful contribution to his company as well as have an active personal lifestyle spending time with his daughter and pursuing his hobbies playing hockey, baseball, and camping.



www.mca.ca/mining



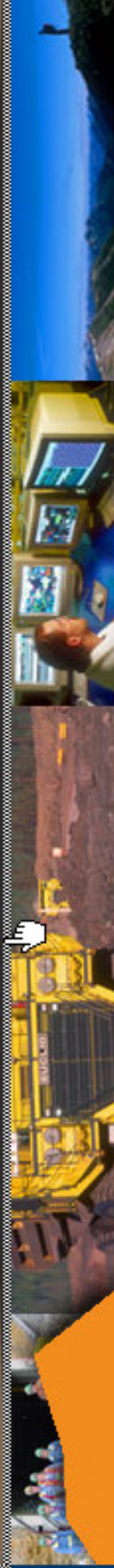
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High salaries, exciting opportunities, career advancement ... will be your rewards.

Team environment, professionalism, trust and leadership ... will be your motivation.

Challenge. Adventure. Travel. Good Pay. Great Opportunity.



Objective B - Address Industry Skills Gaps

- Undertake proactive HR practices and workforce planning
- Develop programs to attract retired workers and retain older workers
- Encourage mentoring programs
- Develop collaborative, cross-industry education and training strategy



Retention Strategies for Retirees

Recent Retirees Would Have Continued to do Paid Work if:



Source: Statistics Canada, Schellenberg (2004)

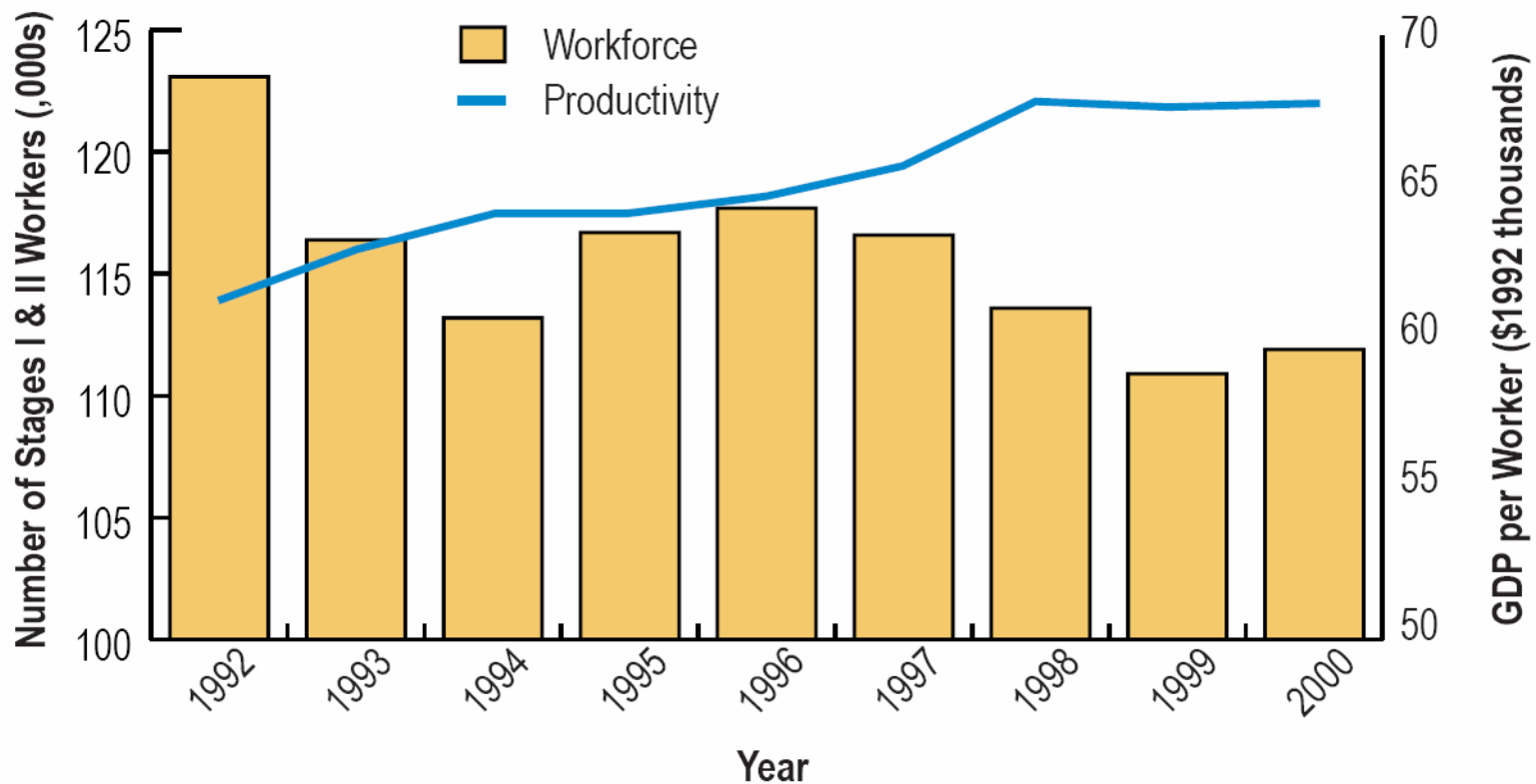


Objective C - Standardized Skills & Consistent Training Delivery

- Present a clear case for the potential benefits of occupational standards, certification and program accreditation to employers and other industry stakeholders
- Develop and implement national occupational standards
- Standardize credentials for professional occupations



Employment vs. Productivity – Stages 1 & 2)



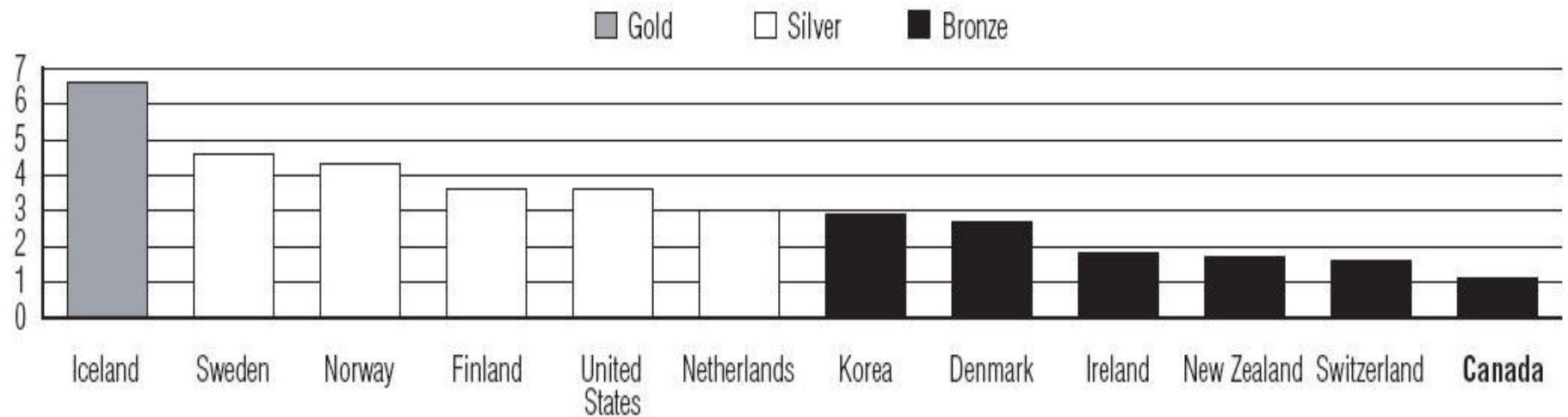
Source: Statistics Canada; Labour Force Survey



Growth in Labour Productivity

Chart 1

Growth in Labour Productivity, 2004
(per cent)



Sources: The Conference Board of Canada; OECD.



Objective D - Awareness

- Develop and implement a communications strategy
 - Raise awareness and understanding of the issues
 - Promote collaboration



Conclusions

- The Canadian Minerals and Metals Industry will be facing a human resources crisis within ten years
- To mitigate risk, the industry will work collaboratively with education and governments to attract, recruit and retain skilled workers
- No single solution will address the problem



MiHR's Role

- Expanded governance structure
- Strategic Priorities 2005-2008
 1. Career Awareness
 2. Aboriginal inclusion
 3. Occupational standards
 4. Inclusion of women
 5. Retention of older workers
 6. Better practices in workforce planning



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Thank you for your attention

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