Presentation Overview

1. Overview of Mining Industry Human Resources Council (MiHR)
2. Trends and Profile of the Canadian Mining Workforce
3. Mining Industry Forecast of Hiring Requirements
4. Industry Solutions to Address the Challenges
Mining Industry Human Resources Council

Who we are:
• National Council for the minerals and metals sector
• Not For Profit
• Board of
• Over 250+ industry volunteers

What we do:
• Identify national HR challenges and opportunities for the minerals and metals industry
• Create national solutions through collaboration, partnerships and synergy
By Industry, For Industry
Stakeholder Representation

- Companies
- Governments
- Mining Industry HR Council
- Educational
- Labour
- Associations
Trends and Profile of the Canadian Mining Workforce

3.5% of GDP

9.7 B in capital spending

3.3 B in Royalty/Tax payments

Canada: Global Leader
The global skills shortage retained second spot on the risk rankings this year. This risk is more acute in more locations now than it was 12 months ago, highlighting the supply capacity constraints that have hampered the sector for some time. Significant risks associated with skills shortage include impact to production, project delays, and increasing labor costs.”

Ernst & Young: Annual Business Risks Facing Mining and Metals 2012-2013
Age Group Distribution in the Canadian Mining Industry, in 2006

Source: Mining Industry Human Resources Council; Statistics Canada, 2006 Census.
Proportion of Mining Workforce Eligible to Retire

- Currently eligible: 6%
- Eligible in the next 12 months: 8%
- Eligible in the next 1 to 2 years: 14%
- Eligible in the next 3 to 5 years: 12%

Employers Preparedness to Fill Retirement Vacancies

- Your company already has a plan in place: 10%
- You are starting to think about planning: 40%
- You have given little or no thought to making a plan to fill your retirement-related vacancies: 20%
- You are not expecting any retirements in the next five years: 10%

Source: kisquared, MiHR, Summer 2011.
Youths’ Perceptions of Careers in Mining

<table>
<thead>
<tr>
<th>Industry</th>
<th>Familiar (%)</th>
<th>Unfamiliar (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality (n=464)</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>Healthcare (n=462)</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Information technology (n=452)</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Transportation (n=463)</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Business services (n=461)</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Construction (n=458)</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>Government (n=461)</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Finance (n=463)</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Agriculture (n=466)</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Manufacturing (n=454)</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Utilities (n=470)</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>Mining (n=472)</td>
<td>17%</td>
<td>84%</td>
</tr>
</tbody>
</table>
Proportion of Women in Natural Resource Industries

Proportion of Women in Select Mining Occupations

Aboriginal and New Canadians Participation in Mining

• 7% of the mining workforce self-identified as being Aboriginal decent

• New Canadians represent 12% of the mining workforce
Aboriginal Communities and Active Mining and Exploration Sites
Educational Attainment

Canadian Mining Workforce Educational Attainment

- Highschool or equivalent: 29%
- Trades training: 20%
- College/cegep: 17%
- University degree: 11%
- University (non-degree): 3%
- Did not complete H/S: 20%

Source: Statistics Canada Census 2006 National Data
Forecasting Labour Supply and Demand in the Canadian Mining Sector
Mining Sector Employment, Canada – 1960 to 2008

[Diagram showing the employment in Total Mining, Metallic, Non-metallic, and Coal sectors from 1960 to 2008.]
Mining Employment and the Minerals Price Index (MPI)

### National Hiring Requirements Forecasts - Canada By Scenario - 2021

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Change in Employment</th>
<th>Replacement Requirements</th>
<th>Cumulative Hiring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractionary</td>
<td>-28,200</td>
<td>61,550</td>
<td>41,930</td>
</tr>
<tr>
<td>Baseline</td>
<td>-1,000</td>
<td>67,080</td>
<td>45,940</td>
</tr>
<tr>
<td>Expansionary</td>
<td>20,500</td>
<td>71,740</td>
<td>49,300</td>
</tr>
</tbody>
</table>

Source: Mining Industry Human Resources Council, Summer 2011.
Factors Affecting Decision to Leave the Mining Sector, by Gender (per cent agree N=214)

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>OVERALL</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle/work-life balance</td>
<td>70</td>
<td>68</td>
<td>81</td>
</tr>
<tr>
<td>Want a change</td>
<td>53</td>
<td>52</td>
<td>58</td>
</tr>
<tr>
<td>Non-competitive compensation, salary and/or benefits*</td>
<td>51</td>
<td>47</td>
<td>69</td>
</tr>
<tr>
<td>Job volatility and uncertainty</td>
<td>50</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Stress**</td>
<td>48</td>
<td>43</td>
<td>72</td>
</tr>
<tr>
<td>Raising a family**</td>
<td>41</td>
<td>34</td>
<td>75</td>
</tr>
<tr>
<td>Age</td>
<td>37</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td>Interprofessional conflicts</td>
<td>34</td>
<td>32</td>
<td>47</td>
</tr>
<tr>
<td>Paperwork/administrative burdens</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Occupational health and safety concerns</td>
<td>29</td>
<td>27</td>
<td>42</td>
</tr>
<tr>
<td>Union/labour relations*</td>
<td>28</td>
<td>25</td>
<td>44</td>
</tr>
<tr>
<td>Legal/regulatory concerns</td>
<td>24</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Environmental Impacts</td>
<td>21</td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>

*Denotes a significant gender difference (p<.05).
**Denotes a significant gender difference (p<.01).
Source: MiHR KnowledgeWorker Survey, 2011.
Labour Market Challenges - Summary

112,000 new workers needed by 2021

40% of the industry are 50 years >

Youth are unfamiliar or hold negative perceptions of mining

1/3 of the workforce eligible to retire by 2016

Immigrants / women not choosing careers in mining

Labour mobility is a challenge
Industry Solutions to Address the Challenges
Through industry collaboration, and under direction from the MiHR Board of Directors who represent employers, organized labour and education, MiHR has developed four programming areas that meet previously identified HR priorities.

**Career Awareness:**
A long-term strategy to promote mining as a career of choice

**Mining Essentials:**
A mining pre-employment, work-readiness training program for Aboriginal peoples

**Labour Market Intelligence (LMI):**
producing and disseminating forecasts of the supply and demand of labour

**Worker Certification:**
Canadian Mining Certification Program to promote attraction, recruitment, retention and mobility
Labour Market Intelligence in Mining

• Mining Industry Workforce Information Network (MIWIN)
  o LMI Forecasts (National & Provincial)
  o [www.mininghrforecasts.ca](http://www.mininghrforecasts.ca)
  o Custom regional LMI on-demand

• Sector studies / Labour market trend reports
  o Mineral Exploration Study
  o Highly Qualified People Study
  o Multigenerational Workforce Study
  o Impact of Technology Study
Career Awareness

• Explore for More Brand, career toolkits and career paths in mining (over 100,000 career resources distributed)

• Career Video Library

• Careers website for industry acareerinmining.ca and EFM Facebook page and YouTube channels

• EFM Licensing agreements signed with regional providers
Mining Essentials Program

• Help companies and communities meet their employment and training agreements by increasing work readiness skills, career awareness and confidence. *Training to Employment*

• Co-owned by MiHR and the Assembly of First Nations (AFN), developed with industry, education and Aboriginal experts

• Based on essential skills / work readiness skills defined and validated by industry

• 11 module curriculum, using industry and cultural context.

• Three-way partnership between education, industry and local Aboriginal community/ies.
Canadian Mining Certification Program (CMCP)


- Vision - Increase recognition of skills and competencies, support worker mobility and create consistent, quality training for the mining and minerals exploration industry in Canada

- CMCP recognizes skills and experience that workers have, which supports:
  - Attraction of new workers to the sector
  - Retaining skilled employees
  - Transferability of skills / worker mobility between operations
  - Facilitates recruiting of skilled workers
  - Better use of training resources
  - More efficient labour market
CMCP Designated Sites/Employers

- Rio Tinto - Diavik Diamond Mine, (U/G Miners, MPO)
- Cementation Canada (U/G Miners)
- Teck - Highland Valley Copper (MPO)
- Teck - Greenhills (MPO)
- New Gold – New Afton Mine, (U/G Miners)
- Mt. Polley (Surface Miners)*
- Imperial Oil/EssO Kearl Oil Sands (Surface Miners)
- Huckleberry Mine (Surface Miners)*
- Xstrata Zinc - Brunswick Mine (U/G Miners, MPO)
- Imperial Oil/EssO Kearl Oil Sands (Surface Miners)
- Teck - Duck Pond Mine (U/G Miners, MPO)

Diamond Drilling Companies
- Boart Longyear
- Foraco Drilling
- Bryson Drilling
- Hy-Tech Drilling
- Driftwood Diamond Drilling
Thank-you
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