WOMEN: An Unmined Resource

A Report on Female Participation within BC’s Mineral Exploration and Mining Industry
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SUMMARY

The Case for Understanding Female Participation in the BC Mineral Exploration and Mining Industry

This study on female participation in BC’s Mineral Exploration and Mining Industry (the Industry) extends the knowledge shared in three existing Industry reports:

- Report on BC Labour Market Demand Project conducted by the national Mining Industry Human Resources Council (MiHR) (2008 and updated in 2011);
- BC Mineral Exploration and Mining Industry Human Resources Strategy; and
- National Women in Mining study on the status of women in Canada’s Exploration and Mining Sector (Ramp-Up study).

This study adds value to current knowledge about increasing female participation in the Industry by focusing on the BC landscape in several ways. Findings from surveys with employers, career advisors, and women employed in the Industry across BC have:

- Supplied data on the female participation rate in BC, particularly for non-traditional occupations, to help build the case for and capability for change within the Industry;
- Engaged career advisors to understand their readiness to support, and solicit their expert opinion on the success factors and barriers to helping females explore careers in the Industry;
- Identified the recruitment and retention levers relevant to three occupational categories – Science Careers, Operations Positions and Traditional Roles – for women in BC;
- Established that more work remains to be done to bring more BC Mining and Exploration employers on board; and
- Emphasized that a province-wide coordinated approach to implementing recommendations is critical.

Current State of Female Participation in BC’s Exploration and Mining Workforce

A current state analysis of female participation in BC’s Mining and Mineral Exploration workforce produced the following key facts:

- BC is home to more than 20 major operating coal, metal and aggregate mines, and smelters;
- Under a neutral forecast, BC’s mining Industry will require approximately 5,910 additional workers by 2016 and the majority of these are expected to be in ‘Mining Operations Positions’;
- The current female labour force participation, across all industries, has increased to one of its highest (61.7%) recorded in BC;
- However, female participation in BC’s Exploration and Mining Industry is estimated to be 16%; and
- In the fastest growing occupations – Heavy Equipment Operators, Tradespersons and Labourers – female participation is estimated to be around 5% or less.

1 See Chapter 1 for references for statistics.
SUMMARY

Despite the opportunity and recommendations to better utilize women to fill labour shortages, this study reveals that a minority of BC employers:

- Believe that recruitment and retention is currently or will be a challenge in the next three years;
- Monitor female participation in their workforce;
- Prioritize either recruitment or retention of women; and
- Actively recruit women to non-traditional roles in the Industry.

Recruitment Challenges and Opportunities

Although women in BC represent a significant and diverse source of potential employees, they are currently under-represented. It is imperative that the Industry practices purposeful female recruitment.

Women revealed their unique motivations for and paths towards a career in the Industry:

- Women in Science Careers entered into the Industry for the love of rocks and/or for the love of science; and
- Women in Operations Positions and Traditional Roles respond to the income potential and profile of Mining/Exploration employers in their communities.

Career advisors from across BC clearly indicated they need more support to help females discover and consider Exploration and Mining careers:

- The majority (64%) of high school career advisors rated their own knowledge of the Industry’s Science Careers and Operations Positions as little to none;
- University career advisors were somewhat more knowledgeable about Science Careers; and
- Trades/technical school career advisors were most knowledgeable about careers within the Industry.

Retention Challenges and Opportunities

Retention efforts are essential to sustaining gains made through recruitment efforts and ultimately for the growth of the Industry:

- The Industry’s pay and benefits generally meets women’s needs and expectations (a driver to stay);
- Travel, while enjoyed by many women, is a barrier to remaining in the Industry as it often competes (and loses) with family responsibilities;
- Balancing family with work is the number one issue driving women to leave the Industry. The critical point in time at which this happens is when women are in their mid-thirties;
- As females have a higher salience for being concerned about the environment than males, companies who do not ‘go green’ influences a women’s desire to ‘go do something else’;
- The Industry has become more gender respectful but not to the extent that is necessary to balance the male-dominated culture. Improvements are needed to establish a more female-friendly culture;
- Opportunities for career growth leave significant room for improvement. Mentorship and apprenticeship opportunities can improve both recruitment and retention; and
- Women are increasingly aware of their market value – if they are not being valued they have no qualms in looking elsewhere for employment.
SUMMARY

Conclusion

Opportunities suggested throughout this report align with three distinct areas:

- **Getting Employers on Board**
  Raising the importance of female participation among employers

- **Improving Recruitment**
  Targeting the right women at the right time with the right messages

- **Improving Retention**
  Using evidence to guide purposeful strategies to retain women in the Industry

The Women in Mining Sub-Committee and Task Force members provided input into three recommendations:

1. Focus on engaging champions, both internal and external to the Industry, to persuade senior leaders within Mining and Exploration companies of the need and benefits of greater female participation in the workforce;

2. Develop and launch an integrated marketing plan for increasing public awareness of employment opportunities in the Industry; and

3. Develop pilots that allow women to better balance family and work responsibilities. A “getting started toolkit” and cost/benefit evaluations of pilots, as key deliverables, will help to support employers in their endeavors, ideally benefitting all employees, irrespective of gender.

This report concludes with Idea Boxes, a collection of ideas and initiatives that emerged from the combined wisdom of members of the BC Exploration and Mining Sector Labour Shortage Task Force and Women in Mining Sub-Committee. With appropriate research and analysis, these ideas and initiatives could forward an HR Strategy and help the Industry realize the benefits of greater female participation.
ACKNOWLEDGEMENTS

The Howegroup gratefully acknowledges the work of the following members of the Women in Mining Sub-Committee throughout this project. Their insights and guidance were invaluable. The Howegroup also acknowledges the leadership provided by Lisa Blackham, Sub-Committee Chair, throughout this project.

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Manager, Human Resources | Hunter Dickinson Inc.

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Chair | BC Mineral Exploration and Mining Sector Labour Shortage Task Force

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Chairman | Past Business Representative International Union of Operating Engineers Local 115

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Manager, Data & Information, Mineral Titles | Ministry of Energy and Mines

Tracey Sexton
Executive Assistant / Office Administrator | Association for Mineral Exploration BC (AMEBC)

The Howegroup also recognizes with appreciation the input from the BC Mineral Exploration and Mining Labour Shortage Task Force and wishes to express its sincere gratitude to the Career Advisors and Employed Women in the Industry who volunteered their time to complete the surveys that formed the basis for the findings in this report. The Howegroup also gratefully acknowledges all HR decision-makers from mining/exploration employers across BC that provided insight into female participation rates within their company or operation.
INTRODUCTION

Background

Over the past decade BC’s Mineral Exploration and Mining Industry (the Industry) has risen to the forefront of labour market attention. Mineral exploration expenditures in BC have exceeded $400 million and the Industry share is nearly one fifth of the national market. This growth is expected to be sustained well into the future with world demand for commodities at unprecedented levels. The Industry directly and indirectly impacts over 100,000 jobs in the province, or approximately 4.5% of total employment – almost 1 in every 20 jobs. A lack of skilled workers threatens the significant economic contributions from this Industry.

The shortage of skilled workers in the Industry is further intensified by the province’s strong economic growth, competition from other sectors for workers with similar skills and the under-utilization in the workforce of women, Aboriginals, persons with disabilities, and immigrants. At a national rate of 14%, the participation of women in the Industry falls well behind Canada’s labour force average of 47%. While women are continuing to pursue varied and fulfilling roles in the Industry, a vast number are unaware of the opportunities available or leave the Industry after a period of time.

About the BC Mineral Exploration and Mining Labour Shortage Task Force

The BC Mineral Exploration and Mining Labour Shortage Task Force was established under the provincial Labour Market Partnership Program in 2007. The Task Force is a broad sector partnership involving Industry, labour unions, career information and employment service providers, educators/training providers, and government agencies. The intent of the Task Force was to develop a business plan and an HR strategy to address skills shortages, recruitment and retention challenges to meet the significant economic growth in BC’s mining Industry. In the HR strategy – British Columbia Mineral Exploration and Mining Industry Human Resources Strategy: 2008-2012 – five long term strategic HR goals were developed in image and career promotion, attraction and recruitment, retention and turnover, education and training, and sustainability.

2 Mineral exploration expenditures in BC have skyrocketed 1,300% from $29 million in 2001 to $416 million in 2007. BC represents an increasing proportion of Canadian mineral exploration, with the BC industry share nationally rising from 5.7% to 18.3% of total mineral exploration in Canada over the same seven-year period. From British Columbia Mineral Exploration and Mining Industry Human Resources Strategy: 2008-2012. Available at: http://www.mining.bc.ca/sites/miningassociation/files/LabourMarketTaskForceReport_2008.pdf
INTRODUCTION

The Task Force is supported by the Aggregate Producers Association British Columbia, the
Association for Mineral Exploration of British Columbia and the Mining Association of British
Columbia:

**Aggregate Producers Association of British Columbia**

The Aggregate Producers Association of British Columbia (APABC) is a not-for-profit association representing members comprised of aggregate producers, suppliers, and associates throughout the province of British Columbia. The APABC was registered as an Association in 1988 and has grown to be an important entity serving the people of British Columbia.

**Association for Mineral Exploration British Columbia**

The Association for Mineral Exploration British Columbia (AME BC) is the predominant voice of mineral exploration and development in British Columbia. Established in 1912, AME BC represents thousands of members including geoscientists, prospectors, engineers, entrepreneurs, exploration companies, suppliers, mineral producers, and associations who are engaged in mineral exploration and development in BC and throughout the world. Through leadership, advocacy, and partnerships, AME BC promotes a healthy environment and business climate for the mineral exploration Industry.

**The Mining Association of British Columbia**

The Mining Association of British Columbia (MABC) represents companies involved in the exploration and development, mining and smelting of minerals, metals, coal and industrial minerals in British Columbia. In doing so, it has come to be regarded as the predominant voice of mining in BC. MABC also provides member companies with a wide variety of services such as: participation in key government/Industry committees, updates on regulatory change, access to meetings that provide the opportunity to exchange information among members, joint Industry action on issues of common concern, and the availability of staff expertise on areas of greatest interest.
About the Women in Mining Sub-Committee

In addition to the five goals identified in the HR Strategy, key strategic deliverables for increasing the participation of and partnerships with women were highlighted. As a result, the Task Force established the Women in Mining Sub-Committee in 2010. The Sub-Committee’s mandate is to lead initiatives concerning women in the Mineral Exploration and Mining Industry in BC. Members of the Women in Mining Sub-Committee come from public and private sector organizations, and work in both corporate and operational (mine site) roles throughout BC. The first initiative of the Sub-Committee is the Women in Mining: BC Survey project.

Purpose

The Howegroup was engaged by the Women in Mining Sub-Committee in January 2011 with the purpose to:

» Obtain accurate baseline data to identify women working in the Industry in BC (specifically in mine site operational, field based and corporate roles), including those studying to enter into the field;
» Identify enablers and blockers to women within the Industry that impact recruitment and retention; and
» Develop recommendations for strengthening the recruitment and retention landscape across Industry partners.

While a multitude of national data exists about the human resources landscape in the Industry, particularly from the Mining Industry Human Resources (MiHR) Council, the scope of this project differed in several ways:

» Findings and recommendations are specific to BC;
» Data has been gathered on women in operational and field based roles (i.e. non-traditional roles) in addition to the more traditional (corporate and administrative) roles;
» Career advisors have been included in the consultation, in addition to employers and employees to provide insights, specifically about attracting females to the Mineral Exploration and Mining Industry; and
» It was essential to understand female recruitment and retention challenges on a provincial level in order to support possible future initiatives to increase the attraction, recruitment and retention of women to the Industry in BC.
INTRODUCTION

Methodology

Primary research was gathered through three surveys (described below) and complemented by secondary research:

**Workforce Survey**

The Workforce Survey was targeted toward individuals with a Human Resources capability within their organization (referred to as HR decision-makers in this report). The intent of the survey was to determine the current picture of women employed in non-traditional roles and to understand why women are attracted to and choose to stay, or leave the BC Mineral Exploration and Mining Industry.

This on-line survey was pre-tested with three human resource leaders from across the province to ensure the line of questioning was feasible. A link to the survey was emailed to HR leaders and CEOs. Responses were received from 47 HR decision-makers from May 9 to June 30. This included 14 from mineral exploration, 13 from mining, 1 aggregate, and 19 unidentified organizations. Data on the current workforces reported by these respondents represents 19% of employment in BC’s Industry.³

**Employed Women Survey**

This survey was targeted to women employed in the Mineral Exploration and Mining Industry in BC. The objective was to validate existing national secondary research on recruitment and retention challenges and develop recommendations for increased female participation within the BC context. Women were asked how they were attracted to and why they chose to stay or leave the Industry.

This online survey was announced in a multitude of mining-related on-line resources, including, but not limited to the Association of Professional Engineers and Geoscientists of BC (APEGBC), the Canadian Institute of Mining Metallurgy and Petroleum (CIM), MABC, MiHR, Mining Association of Canada (MAC), Prospectors and Developers Association of Canada (PDAC), and Women in Science and Engineering (WISE). Sub-Committee members also promoted the survey at the Women in Mining Vancouver Chapter meetings and at the Women in Mining Gala at the BC Mining Week. HR decision-makers were also asked to forward the link to employed women. Responses were received from 618 employed women between May 9 to June 30, 2011. This included representation from women employed by a cross-section of Industry employers.

³The 2008 Mining Industry Workforce Information Network report forecasted 2011 employment to be 18,504 and the sample of respondents in this Study reported employment of 3,576
INTRODUCTION

Student Career Advisor Survey

This survey was targeted toward student career advisors from secondary and post-secondary institutions across BC. The objectives of the survey were:

- To understand how well equipped career advisors and other career influencers were to create awareness and promote interest in mining related careers to their female students; and
- To capture the expert opinion of career advisors on the barriers to and success factors for increasing awareness and interest of female students in Industry careers.

A link to this online survey was emailed to career advisors by Sub-Committee members. The survey ran from March 28 to April 21, 2011 and yielded 68 responses from career advisors across the province. Respondents included 35 career advisors from BC high schools, 5 from trades/technical schools, 14 from BC universities, 3 for adult learners and 15 that did not provide their specialization.
Of the women who responded to the survey, one third (34%) were from Science Careers, one quarter (26%) worked in mine and mill/maintenance and trades (Operations Positions), and the remainder held administration and corporate roles. Data reported by these respondents represents 22% of the female workforce in the Industry in BC.4

The following table details the breakdown of female respondents employed in the Industry.

<table>
<thead>
<tr>
<th>Table 1: Female Respondent Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NON-TRADITIONAL ROLES</strong></td>
</tr>
<tr>
<td><strong>Mine and Mill /Maintenance and Trades (Operations Careers)</strong></td>
</tr>
<tr>
<td>Mine supervisor ................................................................. 1%</td>
</tr>
<tr>
<td>Heavy equip operator/truck driver ........ 9%</td>
</tr>
<tr>
<td>Mill process operator ............................... 2%</td>
</tr>
<tr>
<td>Labourer/entry level ................................ 3%</td>
</tr>
<tr>
<td>Analyst ................................................................. 4%</td>
</tr>
<tr>
<td>Health/safety/security ................................. 3%</td>
</tr>
<tr>
<td>Apprentice ............................................................ 1%</td>
</tr>
<tr>
<td>Certified tradesperson ............................... 2%</td>
</tr>
<tr>
<td><strong>Science Professionals (Science Careers)</strong></td>
</tr>
<tr>
<td>Geologist/Geochemist/Geophysicist/GIS Specialist ........................ 10%</td>
</tr>
<tr>
<td>Geologist in Training (GIT) ......................... 2%</td>
</tr>
<tr>
<td>Engineer (all disciplines) ......................... 8%</td>
</tr>
<tr>
<td>Engineer in Training (EIT) ............................... 6%</td>
</tr>
<tr>
<td>Engineer/Geologist/Environmental Technologist or Technician ........ 7%</td>
</tr>
<tr>
<td><strong>TRADITIONAL ROLES</strong></td>
</tr>
<tr>
<td><strong>Administration and Corporate Services</strong></td>
</tr>
<tr>
<td>Senior management .................................................. 5%</td>
</tr>
<tr>
<td>Mid-level management ........................................ 16%</td>
</tr>
<tr>
<td>Administrative, clerical and support staff ........ 19%</td>
</tr>
</tbody>
</table>

*Applying a female participation rate of 16% to the 2008 Mining Industry Workforce Information Network report forecasted Industry employment results in a denominator of 2,961. Percentage may not add up to 100% due to rounding.
INTRODUCTION

At the time the Women in Mining: BC Survey project was initiated, one of BC’s largest employers, Teck Resources Limited (Teck), was about to conduct their own HR research. To streamline processes, the Howegroup worked with Teck to include additional questions to the Employed Women Survey to accommodate Teck’s needs. Teck is gratefully acknowledged for their direction and input into the provincial Employed Women Survey as a significant number of questions that Teck developed were incorporated into the provincial survey. For the purpose of this provincial project, responses from all employed women in the province have been collectively analyzed.

For all surveys, pre-notification communication was developed by the Howegroup and sent to target stakeholders via members of the Sub-Committee, including union organization channels. Questions for all three surveys were developed by the Howegroup with input and approval from the Sub-Committee. Quantitative and qualitative data was collected through open and closed ended questions. An on-line methodology was chosen to minimize implementation costs, facilitate the timely and easy access to the survey for women in remote regions as well as to support referral sampling. A referral sampling method was used as stakeholders were encouraged to forward the survey link to their respective colleagues.

The instructions emphasized both the voluntary and anonymous nature of the surveys, as well as indicated the time required to complete the survey.

While all surveys were anonymous, stakeholders had the opportunity to self-identify for the purposes of:

- Receiving additional information – for career advisors and HR decision-makers;
- Being entered into a draw for one of five $50 VISA cards – for employed women. Five winners were randomly selected upon the survey closing; and
- Anonymous data for each completed survey was automatically entered into a database hosted on a secure server in Ottawa. Password protection was in place to ensure only authorized users from the Howegroup could access the anonymous data and survey results.

Secondary research was gathered with the purpose of guiding the survey development process, including understanding preliminary barriers and enablers to recruitment and retention within the sector as well as to identify best practices applicable in a provincial context. Best practices have been included throughout the report and have also been used to shape the development of recommendations.

A working session was held on August 16, 2011 with representation from the Task Force and Sub-Committee Members to develop recommendations, building on a draft set of opportunities put forward by the Howegroup. Members participated in break-out sessions to examine how to improve employer engagement and the current recruitment and retention picture. This was done by focusing on how improvements could be achieved, required resources, leadership, challenges to implementation and success indicators. The recommendations in this report reflect the input from the Task Force and Sub-Committee Members.
Limitations

As with all surveys, there are limitations.

» Respondents self selected to participate in the three surveys. It may be that the perceptions of the convenience samples (those who chose to complete the surveys) are different from those who chose not to participate. For example, those who responded to the surveys may be more interested in issues pertaining to women in mining (respondent self selection bias).

About this Report

This report represents the culmination of findings and recommendations from primary and secondary research geared toward increasing the participation of women in non-traditional roles in BC’s Mineral Exploration and Mining Industry. The report is organized into the following chapters:

» **Chapter 1**: describes the current state of female participation in BC’s Mineral Exploration and Mining Industry.

» **Chapter 2**: details the critical pathways and barriers to attracting women to BC’s Exploration and Mining Industry.

» **Chapter 3**: explains what keeps women employed in the Industry and how to ensure they stay.

» **Chapter 4**: provides an overview of opportunities for improvement to successfully enhance the participation of women in BC’s Mineral Exploration and Mining Industry.
CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

Key Facts about the Labour Shortage

Provincial labour market forecasts demonstrated that while the Industry is poised for growth, it may be held back by insufficient labour supply.

- BC is home to more than 20 major operating coal, metal and aggregate mines and smelters;
- Under a neutral forecast, BC’s mining Industry will require approximately 5,910 additional workers by 2016; and
- A significant portion of these positions are expected to be in Mining Operations Positions, such as Heavy Equipment Operators, Tradespersons and Labourers. This job category is further discussed on page 23 in this chapter.

Hiring forecasts indicate that the number of vacancies in Mining Operations Positions will more than double over the next five years. Finding additional labour force participants, notwithstanding competition from other sectors, will be an important challenge for the Exploration and Mining Industry.

![Figure 2: Estimated vacancies in BC, for years 2013, 2016 and 2021 - Neutral Forecast](image-url)

Source: Mining Industry Workforce Information Network. 2011 Canadian Mining Industry Employment and Hiring Forecasts
CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

Women: Part of the Solution

Economists across the globe have pulled the concept of “femonomics” or “womenomics” into sharp focus, recognizing that the active participation of women in the workforce as a very important source of income and consumption growth.5,6 Just as it is pursued as a solution to countries’ shrinking economic growth, womenomics has the potential to help BC’s Mineral Exploration and Mining Industry achieve sustainable growth.

The number of women choosing to enter into Exploration and Mining remains low. Few women are entering new careers in the sector.

- Ramp-Up: A Study of the Status of Women in Canada’s Exploration and Mining

The Industry’s most under utilized resource – its women – is an unmistakable part of the solution to the labour shortage.

» Current female labour force participation, across all industries, has increased to one of its highest (61.7%) recorded in BC (male participation is 71%).7

» However, female participation in the BC Mineral Exploration and Mining Industry is estimated to be much less (16%).8

» In the fastest growing occupations – heavy equipment operators, tradespersons and labourers – female participation within BC’s Industry is estimated to be around 5%.9

Employer Readiness to Undertake Purposeful Recruitment of Women

This study included a survey that sought to understand the proportion of the Industry’s workforce that is occupied by women. Industry contacts responsible for the Human Resource capability (“HR decision-makers”) in their company/operation were asked to respond. Forty-seven employers provided overall perspectives and 37 of those provided data on the participation of women in the Exploration and Mining sector. It is, however, estimated that over 100 respondents opened the survey link. The number of active non-respondents (choosing not to respond) and survey terminations before providing data on female participation rates in this study suggest that a minority of employers in BC are monitoring the representation of women in their workforce, or have the data management tools which easily enable this, and/or are making female labour force participation a priority.


8 BC Work Futures. In 2011, HR decision-makers that responded to the BC survey and monitor female participation in their workforces collectively reported that 612 of their 3576 employees are women, representing a 17% participation rate.

9 Estimated by applying provincial and national participation rates to the 2008 total employment for these three occupations.
It was indicated in the research that a minority of Industry employers prioritize either recruitment or retention of women. As indicated in Figure 3, recognition of the importance of purposeful recruitment and retention for women was stronger, but still represents the minority of responses.

It is worth noting that perceived importance and corporate prioritization are not always aligned. There may be several possible explanations as to why attracting/retaining women in the Industry may not have become a priority:

- Competing company priorities;
- Shorter-term planning taking precedence over long-range planning;
- Disconnect between senior leadership and HR decision-makers; and
- Limited internal infrastructure to actively pursue attraction, recruitment and retention.

**Figure 3: Prioritization of Recruitment and Retention of Women**

<table>
<thead>
<tr>
<th>Category</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to my company to develop strategy to <strong>retain</strong> women employed in non-traditional roles (n=44)</td>
<td>45%</td>
<td>34%</td>
<td>20%</td>
</tr>
<tr>
<td>Important to my company to develop a strategy to <strong>attract</strong> women employees to non-traditional roles (n=46)</td>
<td>43%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Company has made it a priority to focus on <strong>retaining</strong> women employees (n=43)</td>
<td>26%</td>
<td>28%</td>
<td>47%</td>
</tr>
<tr>
<td>Company has made it a priority to focus on <strong>recruiting</strong> women employees (n=45)</td>
<td>22%</td>
<td>29%</td>
<td>49%</td>
</tr>
</tbody>
</table>

(Figures may not add up to 100% due to rounding)
The following table demonstrates that although workforce shortages loom, not all employers have yet felt the impact.

HR decision-makers provided their perceptions of the past, current and expected recruitment and retention challenges for non-traditional occupational categories. A strong majority still indicate that recruitment and retention has remained the same and believe it will not worsen in the next three years. These perspectives stand in sharp contrast to the forecasted additional workers required for the Industry.

<table>
<thead>
<tr>
<th></th>
<th>Operations Positions</th>
<th>Science Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RECRUITMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR decision-makers that indicate recruitment has become more difficult since 2008</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>HR decision-makers rating of recruitment challenge in 2011 (1=No problem to 5=Major problem)</td>
<td>3.24</td>
<td>2</td>
</tr>
<tr>
<td>HR decision-makers that expect recruitment to become more difficult by 2014</td>
<td>23%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>RETENTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR decision-makers that indicate retention has become more difficult since 2008</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>HR decision-makers rating of retention challenge in 2011 (1=No problem to 5=Major problem)</td>
<td>3.09</td>
<td>3.58</td>
</tr>
<tr>
<td>HR decision-makers that expect retention to become more difficult by 2014</td>
<td>21%</td>
<td>18%</td>
</tr>
</tbody>
</table>

It follows that those who have not yet appreciated that the Industry’s growth would be hampered without women may also be less attuned to the need to proactively retain women. However, women employed in the Industry make it clear that this should be a focus. Close to 1 out of every 5 women (19%) in the workforce represent a retention risk, as they are either thinking about leaving their employer a few times a week or daily, planning to stay with their employer for less than a year, and/or plan to start looking for a new job within the next 12 months. This proportion was slightly higher among women in Science Careers (26%). There were no significant differences between those in rural and urban regions of BC. Levers for improving retention are discussed in Chapter 3.
CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

The figure below suggests a minority of employers are actively recruiting women to non-traditional roles in the Industry.

A thematic analyses of responses to the question of what their company is doing to recruit women to non-traditional roles reveals several positions illustrated below with comments from hiring decision-makers. Although most of the companies that were doing ‘nothing at all’ to recruit women to non-traditional roles or were simply ensuring no gender bias had less than 50 employees, these positions cannot be regarded as symptomatic of smaller, mineral exploration companies. A few medium-size enterprises from both the Exploration and Mining sub-industries also provided these specific responses.

**Figure 4: Employer Efforts to Recruit and Retain Women**

*What is your company doing to recruit women to non-traditional roles?*

- **Nothing at all**
  - (n=14)
  - 41%
  - Mineral exploration employer

- **Moving towards purposeful recruitment**
  - Flexible work policies, diverse approach to recruitment.
  - (n=5)
  - 15%
  - Large mineral exploration employer

- **Well-established recruitment efforts**
  - Aggressively seeking opportunities to train women and educate them on the benefits of working in the industry.
  - (n=7)
  - 21%
  - HR decision-maker

- **Ensure ‘fair’ hiring without gender bias**
  - Not biased against women; however, it is not a priority to hire an equal portion of men and women. It comes down to the best candidate getting the job.
  - (n=8)
  - 23%
  - Mineral exploration employer

Not sensing the importance of women for the Industry’s growth, a few HR decision-makers (both male and female) were concerned that focusing on women might lead to preferential treatment rather than seeing this as a proactive response to Industry workforce projections. It is important to remember that actively recruiting females is not akin to selection based on gender. Low female participation results in fewer females in the talent pipeline; hence, the need to recruit females. Some HR decision-makers intimated their hope that women would ‘earn their stripes’ in the Industry, just as they had.

“Maybe [increased female participation] will just never happen and is that a big problem? I want to be hired due to my abilities not gender. It is a tough business but that is what it is.”

- Female at mineral exploration employer

“There are more and more women in this Industry which is a great thing. However, I feel that surveys like this bring old past issues to surface. We are all equals, and there is no need to pick your employees based on gender. I’ve been in this Industry for almost 10 years and have never felt discriminated against, threatened, or pushed aside. I would recommend this Industry to any strong minded individual that loves the outdoors.”

- Female at mineral exploration employer
CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

By and large, many employers - whether senior leaders, owners or HR professionals - remain to be convinced of the importance of labour forecasts and female participation in the industry. A minority of companies - some large enterprises and some owned by women - provide an exception. Their leadership within the industry is critical to catalyze change.

Understanding Female Participation in Exploration/Mining Occupation Categories

This study sought to understand female participation primarily in non-traditional job categories. Traditional careers are those that have been associated with one gender over another. For example, careers that traditionally were associated with women may include roles in administration, catering/cleaning and professional support roles such as HR or public relations. Careers in this category are often industry-transferable. Non-traditional careers for women, on the other hand, are those that have historically been associated with men, such as electricians, mechanics, welders, and truck drivers. These careers can be separated into two categories: Mining/Exploration Operations Positions and Science Careers.

The figure below presents three occupational categories with distinct career preparation pathways, locations, and work environments.

These occupational categories vary both in their appeal and attraction to women.

<table>
<thead>
<tr>
<th>Career Preparation</th>
<th>Operations Positions</th>
<th>Science Careers</th>
<th>Industry Transferable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High school, trades/technical training and/or apprenticeship</td>
<td>University degree or college diploma</td>
<td>High school, diploma or university degree</td>
</tr>
<tr>
<td>Work Environment</td>
<td>Surface and underground operations</td>
<td>Office and outdoor fieldwork</td>
<td>Office</td>
</tr>
<tr>
<td>Location</td>
<td>Often at job sites in remote areas, commonly in the Interior and Northern BC</td>
<td>6 out of 10 are based in Lower Mainland area</td>
<td>Urban headquarters or rural mine site office</td>
</tr>
</tbody>
</table>
Women in Operations Positions

According to the data from 11 Exploration and Mining employers, those non-traditional roles with rapidly growing vacancies – heavy equipment operators, tradespersons and labourers – also have the lowest female participation rates. The national Explore for More Career Outreach Strategy noted that women perceive the Industry as¹⁰:

» Physically demanding;
» Male dominated;
» Solitary;
» Isolated; and
» Not family friendly.

The nature of the work and work environment of Operations Positions are more prone to these perceptions than other occupational categories. Overall, it is estimated that female participation in this category is less than 5%.

CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

The table below provides a breakdown of the female participation rate in Operations Positions.

In 2007, BC employers were concerned about recruitment and retention of Science Careers, whereas forecasts and perceptions of employers in 2011 have shifted the priority to Operations Positions. This is also the category with participation rates that are in the single digits for each occupation, comparable to those in provincial and national occupational profiles. The Ramp-Up study established that the low appeal of the work environments within the Industry was an important reason that students do not pursue careers in the Industry. Operational positions in particular are prone to this barrier.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of companies that reported data</th>
<th>Reported Female participation Rate</th>
<th>Valuable Reference Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy equipment/crane operator and truck driver</td>
<td>8</td>
<td>7%</td>
<td>2006: National average participation rate of 4% for heavy equipment and crane operators</td>
</tr>
<tr>
<td>Entry-level / labourer</td>
<td>8</td>
<td>7%</td>
<td>2006: Provincial average female participation rate of 13%.</td>
</tr>
<tr>
<td>Mill/process operator</td>
<td>7</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Mine supervisor/foreman</td>
<td>10</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Certified tradesperson</td>
<td>11</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>(including electricians, plumbers, carpenters, welders, pipefitters, machinists and mechanics, industrial and heavy equipment mechanic/ millwright, drillers, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice</td>
<td>7</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Maintenance/support</td>
<td>5</td>
<td>4%</td>
<td>2006: Provincial average female participation rate of 5% for mine service/support workers.</td>
</tr>
<tr>
<td>(including service attendants and boom truck operators, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underground support and miners</td>
<td>1</td>
<td>Insufficient data</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce

Women in Science Careers

This occupational category offers both office and field work environments. Science careers are a natural fit for women with analytical skills and more easily rise above common misperceptions that the Industry is build on dirt and sweat rather than smarts.

Female participation in Mineral Exploration and Mining science careers - including jobs as geoscientists, engineers, and technologists and technicians – tends to be in the double digits. Although a limited number of BC HR decision-makers provided data, the female participation rate for this Science Careers overall is believed to be similar to the average Industry-wide female participation rate (16%).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of companies that reported data</th>
<th>Reported Female participation Rate</th>
<th>Valuable Reference Points</th>
</tr>
</thead>
</table>
| Geoscientists         | 31                                     | 27%                               | 2006: Provincial average female participation rate of 21%.  
                          |                                        |                                   | 2006: National average female participation rate of 16% for natural, geological, and earth sciences professionals |
| Engineers             | 18                                     | 12%                               | 2006: Provincial average female participation rate of 14% for Mining Engineers. |
| Technologists and Technicians | 15                             | 30%                               | 2006: Provincial average female participation rate of 23% for geological and environmental technologists and technicians.  
                          |                                        |                                   | 2006: National average female participation rate of 15% for geological and environmental technologists and technicians. |

Source: BC Work Futures.

11 National reference points within these tables are gleaned from the Ramp-Up study. Provincial reference points within these tables are gleaned from 2006 census data reported in BC Work Futures occupational profiles.
HR decision-makers also reported that females are continuing to enter the field. Data reported by 16 employers indicates that 44% of their Geoscientists in Training (GIT) were women. Twelve employers report that one fifth (20%) of their Engineers in Training (EIT) were female. This is a match to the 80:20 ratio of males to females reported by University of British Columbia engineering programs.12

Women in Industry-Transferable and/or Traditional Roles

Female participation rises when considering more traditional roles. For example, nearly three-quarters of administrative, clerical and support staff in the Industry are women. Women in this occupation category tend to work in more traditional, office-based work environments compared to women in other Industry occupations. Thus, there are fewer barriers for women transferring skills to this work environment. Senior Corporate/Administrative management may transfer from both other industries as well as from within the Industry. In the latter case, low female participation in the Industry translates to fewer females in the talent pipeline for these roles.

The table below provides a breakdown of the female participation rate in more Traditional Roles or environments.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of companies that reported data</th>
<th>Reported Female participation Rate</th>
<th>Valuable Reference Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Corporate/ Administrative management</td>
<td>22</td>
<td>17%</td>
<td>2006: National average female participation rate of 44% in management positions within administration and corporate services</td>
</tr>
<tr>
<td>Mid-level management</td>
<td>26</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Health/safety/security</td>
<td>8</td>
<td>38%</td>
<td>2006: National average female participation rate of 39.5% in health occupations.</td>
</tr>
<tr>
<td>Administrative, clerical and support staff</td>
<td>26</td>
<td>76%</td>
<td>2006: national average female participation rate of 73% in administration and corporate services occupations.</td>
</tr>
</tbody>
</table>

**CHAPTER 1: Current State of Female Participation in BC’s Mineral Exploration and Mining Workforce**

**Chapter Summary**

The BC study concludes that:

- A minority of employers are monitoring female participation in their workforce;
- A minority of employers have prioritized either recruitment or retention of women; and
- A minority of employers are actively recruiting women to non-traditional roles in the Industry.

In some cases, HR decision-makers saw the importance of a female-focused recruitment and retention strategy even though their organization’s leadership had not prioritized this. These findings demonstrate the need for increased employer awareness of: (1) the forecasted labour shortage and (2) the possibility of drawing on women as a solution to the forecasted labour shortage. Increased female participation cannot only fulfill a need for the Industry but provide a significant benefit, especially when they are included in decision-making. There are a number of studies that show a link between gender distribution in a company’s management and its profitability. A United Kingdom study of 100 large companies found a consistent and growing correlation between share price and women in management.13

A 19-year study of 215 Fortune 500 companies in the US showed a strong correlation between a good record of promoting women into the executive suite and high profitability.14 A McKinsey & Company study of 101 private, public and non-profit organizations demonstrated that organizations with 3 or more women in senior management functions performed better on a number of organizational performance dimensions:15

- Work environment and values
- Direction
- Coordination and control
- Leadership
- External orientation
- Motivation
- Capability
- Accountability
- Innovation
- Financial performance (most notable)

Female participation in BC’s Mineral Exploration and Mining Industry is estimated to be approximately 16%, while the 2006 national female participation rate was reported to be 14%. Female participation is noticeably lower (in the single digits) for non-traditional Mining Operations roles. Generally, it is apparent that female participation in BC’s Industry tracks with the rates reported nationally.

This study establishes that many of the findings and recommendations from the national Ramp-Up study are applicable for the BC context. At the same time, this study shines new light on the work remaining to be done within BC, before employers perceive the need for change. A province-wide coordinated approach is critical to ensure the Industry as a whole moves forward with these recommendations.

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CHAPTER 2: Recruitment Challenges and Opportunities

Recruitment is an integral part of growth in every Industry. Recruitment efforts are essential not only to the growth but also to the stability of BC’s Mineral Exploration and Mining Sector. As women are currently under-represented and as women in BC represent a significant and diverse source of potential employees, it’s imperative that the Industry practices the purposeful recruitment of women. Women in BC are, quite literally, an untapped natural resource. In this chapter we learn from both women employed in the Industry and career advisors as to how the appeal of the Industry can be rewritten in a way that aligns with and appeals to women’s priorities.

Learning from Women Employed in the Industry

Purposeful recruitment begins with the identification of women that are the right fit for the Exploration and Mining Industry. Women employed in Mineral Exploration and Mining from across BC shared how they became interested in a career in the Industry. An in-depth analysis of their rich, open-ended comments shed light on how and why the Industry became the right fit for them.

The figure below reflects the unique motivations for and paths towards three occupational categories.

Whether the respondent grew up in a mining community, was drawn to rocks and minerals at a young age, or was inspired by an influential university professor, a direct personal experience with the Industry served as her primary motivation to pursue a career in mining. Women from three occupation categories revealed their unique motivations for and paths towards a career in the Industry.

<table>
<thead>
<tr>
<th>Operations</th>
<th>Science Professionals</th>
<th>Traditional Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Operator, Tradesperson, etc.</td>
<td>Geoscientists, Engineers, Technicians</td>
<td>Administrative, Management, etc.</td>
</tr>
<tr>
<td>Likely to have grown up or moved to a rural and/or natural resource community.</td>
<td>Motivated by a genuine passion for the sciences, including earth sciences</td>
<td>Motivated by the income potential and career opportunities</td>
</tr>
<tr>
<td>Motivated by the income potential within the Industry</td>
<td>Commonly entered the Industry after completing college or university science program</td>
<td>Transferred their skills to the Industry after gaining experience in another sector</td>
</tr>
<tr>
<td>Entered the field either directly after completing their highest level of education or during a career change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: Motivations and Pathways
CHAPTER 2: Recruitment Challenges and Opportunities

Women in Mining Operations Positions as well as more ‘Traditional’ work areas are likely to possess Industry-transferable skills. In the case of the latter category, these skills may also be in work areas that are more female-friendly.

Two key insights have been uncovered:

1. Mining Operations Positions and Industry-Transferable Traditional Roles respond to the income potential and profile of Mining/Exploration employers in their communities; and
2. Mining Science Careers entered the Industry for the love of rocks and/or for the love of science.

Key Insight: Mining Operations Positions and Traditional Roles respond to the income potential with and profile of employers in their communities

Whereas many science professionals began preparing for their careers in their mid-20s, women in mining operations positions and Industry-transferable, traditional roles may have entered the field directly after completing their highest level of education (whether by high school, a trades program, or university). However, because most of the roles in both these categories are Industry-transferable, they are also very likely to have entered the Industry during a career change. If so, they (35% of respondents) were likely to have left behind a career in the forestry or oil and gas industries. Either way, many of the women in these careers grew up in (34%) or moved to a natural resource community in BC, or had first-hand experience with the Industry. They are more likely to choose a career in mining when alternative local employment options are more limited. They often (36%) learn about Exploration and Mining from people they trust and respect. These women are more likely to be familiar with the demands and benefits of a career in the Industry. Both women in non-traditional mining operations careers and Industry-transferable careers were more likely to mention pay as a reason for becoming interested in the Industry.

“In a small community, this is one of the only places to find work.”
- Female health/safety/security position in rural BC

These women described themselves as:

» Women that lived in a natural resource community and were attracted to the low entry barriers (i.e. educational requirements) and high income potential of mining operations careers.

“It is the largest employer in the area, and this was our chosen area to live in.”
- Female mill processor in rural BC

» Women that lived in a natural resource community, had earned transferable skills for traditional roles or a trade, and were attracted to the high income potential within the Industry.

“It was a good opportunity that happened to be in the mining Industry.”
- Female mid-level management in rural BC
Ultimately, these women responded to an attractive invitation from the Industry:

- Employer profile within community
- Attractive pay and benefits (relative to other industries)
- Low barriers to entry (e.g. minimal educational requirements and/or transferability of skills)
- Manageable working hours

Attraction to the Industry

A supply of women for the highest demand occupations exists outside of educational institutions – women that are unemployed or employed in other sectors, often within natural resource communities. These women are influenced by family and friends and drawn to the income potential within the Industry.

**Key Insight: Mining Science Professionals - for the love of rocks, for the love of science**

Women in science careers – including geoscientists, engineers and technicians – were almost as likely to have grown up in a natural resource community as women from other occupational groups. When asked how they became interested in a career in the Industry, pay was notably absent. Rather, these professionals became interested in their career for different reasons. Women who had entered the field described themselves as:

- Young girls that ‘liked rocks’ became post-secondary bound and pursued a career as a geoscientist.
  
  “I loved rocks as a child.”
  
  - Female geologist

- Females that were post-secondary bound, enjoyed the sciences, and/or a post-secondary geology course and pursued a career in the sciences.
  
  “I did a few geology classes in university and fell in love with the Industry.”
  
  - Female geologist-in-training

  “I worked on a mining project in school”
  
  - Female engineer
CHAPTER 2: Recruitment Challenges and Opportunities

Learning from Career Advisors

Career advisors can play a pivotal role in the recruitment of women to the mining Industry, especially in urban areas of BC where first-hand experiences with mining are more likely to be limited. In post-secondary institutions, they have access to target participants at a ratio of 1.4 females to each male. Career advisors are best positioned to increase student awareness of careers in the Industry and attract women to Science Careers (particularly because of the direct link between the educational pathway and career in this category). Career advisors from across BC identified a number of opportunities for improving attraction of women to the Industry.

Most striking in the analysis of their responses is their need for more support to help females explore careers in the Industry:

» The majority (64%) of high school career advisors rated their own knowledge of Science Careers and Operations Positions as little to none;

» University career advisors had adequate knowledge of Science Careers but there room for improvement with respect to Operations Positions;

» Five career advisors from a mix of trades and technical schools reported that they were knowledgeable about careers within the Industry; and

» Three out of five career advisors across BC indicated a desire for the Industry to provide them with more information.

It is no surprise that career advisors also relayed this low sense of self-efficacy in their ratings of the effectiveness of one-on-one career planning (rating the effectiveness 3.4 out of 5). They tended to rely most heavily (71%) on websites with occupational profiles (e.g. BC Work Futures) and their personal experience (59%). Both the Industry’s online presence and its interface with career advisors (especially to increase personal experiences of career advisors in urban areas of BC) could be better optimized to support them.

“I think that promoting the mining Industry in high schools will be highly beneficial, particularly to young woman who are beginning to think about possible career paths. Students need to be informed of the opportunities in this business and realize that there are so many different departments and areas that make up mining companies.”

- Female administrative/clerical support in Industry

“If our coordinators knew more about the Industry, our office might be able to provide more specific advice to students interested in these positions.”

- University career advisor
The figure below reflects the career exploration tools career advisors believe are most effective.

Career advisors readily acknowledged that they were not using the most effective career exploration tools. For example, social media (e.g. blogs, social networks) was the most frequently used tool to help students explore careers. However, it was rated as the second least effective. Rather, career advisors emphasized the effectiveness of experiential learning.

“Seeing and hearing is believing.”
- Rural trades/technical school career advisor

“The approaches need to be hands on, physical with smaller group tours and real women, especially young women who can relate to our youth, in the mining field talking about their jobs.”
- Rural high school career advisor
An in-depth analyses of their open-ended comments explained that many of the career advisors were not using the tools they knew to be most effective because they were limited by the available resources within their schools and communities. For example:

» A few career advisors indicated that organizing a tour of a mine site would be overwhelming;
» Eight specifically mentioned the cost of transporting students to a site as a barrier, even if they were located in a community with a mine site; and
» Five career advisors indicated that they could be supported with contact lists of Mining/Exploration companies that are:
  › Open for tours;
  › Willing to release women in non-traditional roles to participate in their institution’s career fairs; and
  › Have women in non-traditional roles that are available as guest speakers.

While career advisors reported gaps in both their knowledge of and resources for exploration of Industry careers, they believed income potential, followed closely by a female-friendly workplace and variety of career opportunities, were the characteristics to emphasize when attracting women to the Industry. Future career outreach resources, whether new materials, or better promoted materials, may provide career advisors with guidance on effective messaging. When considering attraction and recruitment efforts within educational institutions, messaging about income potential is effective for two streams of students:

» Females in high-school that are not post-secondary bound that are looking for a career with low educational requirements; and
» Females in high-school or post-secondary institutions that are pursuing Industry-transferable skills.

Females that are science-oriented and post-secondary bound, on the other hand, are more likely to respond to other job characteristics. Additionally, this latter group’s interest in the Industry can develop at a much younger age. It is estimated that nearly one-third of the science professionals within the Industry make up their mind about their educational path before leaving high school. This also underlines the importance of career advisors and Industry representatives in the community in increasing the awareness of elementary, junior high, and high school aged females of careers and opportunities to care for the environment within the Industry.

Best Practice: Alcoa (USA) has targeted the issue of attracting more women into operating management roles. Through its Women in Line Roles initiative, the company is offering high-potential women who might be interested in production or technical roles the chance to try them out through temporary assignments as well as helping them stay on track through carefully crafted career development plans.
CHAPTER 2: Recruitment Challenges and Opportunities

Chapter Summary

This chapter establishes that women in the Industry were drawn to their careers for different reasons and at different life stages. It identifies opportunities to reach:

- Children in the community;
- High-school youth through career advisors;
- Women in BC’s post-secondary institutions through career advisors; and
- Women employed in other sectors and/or in natural resource communities.

The following figure identifies potential messaging and channels for reaching target audiences.

![Figure 8: Effectiveness of Career Exploration Tools](image-url)

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Messaging – Industry Attributes to Emphasize</th>
<th>Potential Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (especially in urban areas)</td>
<td>Variety of Career Opportunities&lt;br&gt;Care for the Environment</td>
<td>Community&lt;br&gt;&lt;strong&gt;Example:&lt;/strong&gt; Provide opportunities for females in the form of &lt;em&gt;educational summer camps&lt;/em&gt;. This establishes an early, positive, personal experience with geology, sparking a love for the subject matter in some and encouraging others to parlay their existing passion into a future career.</td>
</tr>
<tr>
<td>Science-Oriented High School Students</td>
<td>Spotlight on Science Careers&lt;br&gt;Variety of Career Opportunities&lt;br&gt;Female-Friendly Workplace&lt;br&gt;Care for the Environment</td>
<td>Educational Institutions&lt;br&gt;&lt;strong&gt;Example:&lt;/strong&gt; Connect Career Advisors with &lt;strong&gt;female guest speakers&lt;/strong&gt; from Science Careers and resources from the MiHR Explore for More campaign</td>
</tr>
<tr>
<td>University Earth Sciences and Engineer Students&lt;br&gt;Trades and University Students earning transferable skills</td>
<td>Spotlight on Science Careers&lt;br&gt;Income Potential&lt;br&gt;Female-Friendly Workplace&lt;br&gt;Care for the Environment</td>
<td>Educational Institutions&lt;br&gt;&lt;strong&gt;Example:&lt;/strong&gt; Actively support &lt;strong&gt;internships&lt;/strong&gt; for secondary and post-secondary female students to provide positive, personal experiences with mineral exploration and mining influencing vocational decisions.</td>
</tr>
<tr>
<td>Women Employed in Other Industries and/or Living within Natural Resource Communities</td>
<td>Spotlight on Non-Traditional Operations Roles&lt;br&gt;Income Potential&lt;br&gt;Female-Friendly Workplace</td>
<td>Community&lt;br&gt;&lt;strong&gt;Example:&lt;/strong&gt; Host and participate in &lt;strong&gt;Community Career Fairs&lt;/strong&gt;.</td>
</tr>
</tbody>
</table>

MIHR also noted that target groups will place different value/weight on work attributes, even the difference between compensation versus benefits.
CHAPTER 2: Recruitment Challenges and Opportunities

Existing efforts such as the Explore for More campaign and the “Love Rocks” advertisement show evidence of targeted messaging for some careers. However, there remains an opportunity for further target marketing within educational institutions and an increased focus on increasing awareness of girls and women within the community of career opportunities within the Industry.

MiHR’s Explore for More campaign also supports outreach into the community (at schools, community and recreation centres, Industry organizations, career fairs, etc.) through speaker presentations. Speakers are people who have experience in the mining Industry, are passionate about the Industry, and are willing to share their enthusiasm and insights with career seekers. The campaign includes a Speakers Bureau that allow users to:

» Arrange to have a speaker from the Industry make a presentation at a school, organization or special event;
» Sign up to become a speaker;
» Download presentations; and
» Order career attraction resources (free!)

Even with these resources are in place, this study revealed that many career advisors know little about opportunities within the Industry and most often rely on websites with occupational profiles (e.g. BC Work Futures). It is believed that awareness of existing tools for attraction and recruitment to the Industry can be improved.
CHAPTER 3: Retention Challenges and Opportunities

Retention is an integral part of the sustainability of every Industry. Retention efforts are essential not only to the sustainability of the Industry’s labour force but also to support growth through recruitment efforts. This chapter examines what encourages women to remain in the Industry and what drives them to leave. It details two strengths of the Industry:

1. Positive perceptions of the Industry; and
2. Compensation/benefits within the Industry.

This chapter also discusses two important levers for better retention within the Industry:

1. Work and travel schedules that enable women to balance family life; and
2. Positive environmental and sustainability reputation.

Employed Women have Positive Perceptions of the Industry

It is well known that a multitude of negative connotations of the Exploration and Mining Industry exists among women (see page 23). Interestingly though, once women become employed in the Industry, their perceptions change. These perceptions quite often change for the better. In fact, a survey of over 600 women employed in BC’s Exploration and Mining Industry, revealed that perceptions had improved in over half (56%) of women since they have become employed in the Industry. A further third said their perceptions stayed the same, while only 11% said their perceptions had become less positive.

Accordingly, employed women report overall satisfaction with their jobs, stating that they enjoy their work, find the work challenging, are motivated and committed, take pride in their work, and believe they are making a difference.
The following table presents mean job satisfaction scores for a number of work attributes.

**Table 6: Mean Job Satisfaction Scores**

<table>
<thead>
<tr>
<th>JOB ROLE</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy the work I do</td>
<td>4.2</td>
</tr>
<tr>
<td>I find the work challenging</td>
<td>3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TEAMWORK</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy working with my co-workers</td>
<td>4.2</td>
</tr>
<tr>
<td>I feel like part of the team</td>
<td>3.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNICATION AND FEEDBACK</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel comfortable expressing my opinion to my co-workers</td>
<td>4.0</td>
</tr>
<tr>
<td>I feel that my opinions are respected</td>
<td>3.7</td>
</tr>
<tr>
<td>I receive regular feedback from my supervisor on my performance</td>
<td>3.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES FOR GROWTH AND DEVELOPMENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I have equal opportunities to advance at my employer</td>
<td>3.5</td>
</tr>
<tr>
<td>I have access to training and development opportunities to advance my career</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIDE AND MOTIVATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel motivated in my current job</td>
<td>3.8</td>
</tr>
<tr>
<td>I am proud of the work I do</td>
<td>4.4</td>
</tr>
<tr>
<td>I believe that what I do at work makes a difference</td>
<td>4.0</td>
</tr>
<tr>
<td>I am committed to doing what is required to perform well in my job</td>
<td>4.6</td>
</tr>
<tr>
<td>I speak highly of my employer and what we do as a company</td>
<td>4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERALL SATISFACTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I am satisfied with my current job</td>
<td>3.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WILLINGNESS TO RECOMMEND WORKPLACE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend my employer to my friends and colleagues as a great place to work</td>
<td>4.1</td>
</tr>
</tbody>
</table>
CHAPTER 3: Retention Challenges and Opportunities

When asked whether they would recommend the Exploration and Mining Industry to their friends and family the majority were likely to do so.\(^\text{17}\) Employed women also reported speaking highly of their employer and what the company does. The main reasons cited for recommending the Industry are because of the:

» Interesting, rewarding and challenging work with endless opportunities, including travel and career advancement;
» Opportunity to be part of a growing Industry and to make a difference;
» Continuous learning environment; and
» Excellent pay and benefits.

Not surprisingly, these are some of the same reasons why employed women choose to remain in the Industry. This is heard directly from women employed in the Industry.

“It’s a growing Industry. They way it operates is changing for the better. There are lots of opportunities for a variety of different expertise in this Industry.”
- Women employed in the Geology field

“Great pay, excellent hours, excellent opportunities for advancement, and awesome people to work with.”
- Female Heavy Equipment Operator/Truck Driver

“Great place to work, good atmosphere, close to home and good compensation.”
- Anonymous female

“It’s an excellent Industry. There are many opportunities and great challenges. It’s an Industry where you can make a difference.”
- Women employed in the Geology field

Not all Job Satisfaction Characteristics are Created Equal: What Really Impacts Retention

Using Herzberg’s motivational theory, job satisfaction characteristics are considered to be dissatisfaction factors or motivators.\(^\text{18}\)

» **Dissatisfaction Factors** are considered to be essential job characteristics; the absence of these characteristics – such as adequate compensation, personal life balance, reasonable workload, good workplace relationships and teamwork – are believed to result in dissatisfaction. These factors are extrinsic to the work itself and are needed to ensure an employee is not dissatisfied and hence, is not looking to leave their employment.

» **Motivators** look at factors arising from intrinsic conditions of the job itself, such as recognition, achievement, or personal growth. While the presence of motivators is known to encourage employee satisfaction and promote productivity, their absence does not cause dissatisfaction, or the desire to leave.

\(^\text{17}\) Mean = 4.1 on a 5-point Likert scale.
\(^\text{18}\) Dissatisfaction factors are formally referred to as hygiene factors in Herzberg’s two-factor theory.
The table below details whether women believed work attributes were a reason to stay or leave.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Stay</th>
<th>Leave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>Benefits</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Proximity of job to my home</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Opportunities to apply my skills and training in my job</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>How well my job fits with my desired lifestyle</td>
<td>87%</td>
<td>15%</td>
</tr>
<tr>
<td>Opportunities for my spouse/partner in my community</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Working hours (e.g. shifts)</td>
<td>85%</td>
<td>13%</td>
</tr>
<tr>
<td>Relationships with my supervisor(s)/manager(s)</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Sense that I am contributing to the community</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Workload</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Amenities and services in my community</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Prospects for career progression</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>My concern for the environment / sustainability</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>Ease of balancing job with my family responsibilities</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>My ability to find better employment (understanding of own market value)</td>
<td>67%</td>
<td>33%</td>
</tr>
</tbody>
</table>

To understand the critical reasons why women leave the Industry, the focus of the following discussion is on dissatisfaction factors. Each are discussed in detail throughout the remainder of this chapter.

Key Insight: The Industry Scores High on Compensation and Benefits

Drivers to LEAVE
- Balancing work and home
- Concern for the environment

Drivers to STAY
- Compensation and benefits
- Proximity of job to home
CHAPTER 3: Retention Challenges and Opportunities

Employees are often dissatisfied with the compensation and benefits their employers offer and state this as a main reason to leave. The Industry, on the other hand, measures high on this dimension of job satisfaction. The fact that the average salary (including benefits) in the Industry has surpassed $100,000 no doubt plays a key role. Women report compensation and benefits, as two of the top reasons to stay in their employment.

- 91% of employed women report compensation as a top reason to stay; and
- 89% of employed women comment that benefits are a top reason to stay. Science Professionals, though, score this significantly lower, with 83% stating this as a reason to stay.

Employers are aware that compensation is a reason why female employees are retained in the Industry as only 6% cite female employees as leaving due to inadequate salaries (see Figure 9).

“I love my job. It pays me well. I have the opportunity to travel and advance my career. It gives me an immense amount of satisfaction.”

- Female employed in the geology field

“Good benefits and excellent pay.”

- Female labourer

At the same time, Herzberg’s two-factory theory and a host of other human resource development theories establish what we practically know to be true: pay on its own is not an effective or sustainable approach to retention. The following sections discuss the other complementary approaches that are needed to retain women in the Industry.

Key Insight: Balance with Family Life is Critical

Every human resources report reviewed about the Industry discussed the implications of balancing work and family. In one article, entitled Regendering the Mining Industry the authors comment that “women don’t want special treatment; [they] just want practical solutions to balancing [work and family]”. Clearly this issue is not unique to the Industry, but it may have more significant implications due, in part, to the extensive travel and need to work in remote locations, often required for the job. Numerous women commented on the magnitude of the implication - some commenting positively on the opportunities and others commenting with concern on the impact on their personal lives.

“Being away from home is challenging and not for everyone. I believe it will be hard to have a family in my future and still be a geologist.”

- Anonymous female

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19 Average salary and benefits was $99,000 in 2006. From the British Columbia Mineral Exploration and Mining Industry Human Resources Strategy: 2008-2012

The importance of work-life balance will continue to increase as Generation Y and the Millennial Generation compose a larger proportion of the workforce. Across sectors, progressive employers are putting work-life balance on their corporate agenda, recognizing that this issue is one that impacts many men as well as women.21,22

In terms of looking at the specific work location, a key driver for women to remain in the Industry, (based on research conducted in the UK), finds that the ideal location for a home is close to work. In fact, findings show that home movers would be willing to pay a premium if it meant living closer to work.23 BC’s women support these findings:

- The majority (88%) of women consider proximity of the job to their home as a top reason to stay;
- This is particularly salient for women in Mining Operations roles, where amenities in the community are an important consideration for raising a family. Proximity to home is also more important for women employed in Mining Operations roles and is more of an issue for women whose jobs required a great deal of travel; and
- Interestingly, slightly fewer (84%) of Science Professionals, report proximity to home as a reason to stay.

Not surprisingly, a significant percentage of women employed in the Industry cite the ease of balancing their job with family responsibilities as the top reason to leave their employment. In an article published in the Harvard Business Review, ‘Stopping the Exodus of Women in Science’, the authors found that the most common point of attrition of female scientists, engineers, and technologists is in their mid to late thirties, during the time that women are balancing career and family most critically.24

- Just over a quarter (29%) of employed women state that the ease of balancing their job with family responsibilities is the top reason to leave their employment;
- This is even more salient for Science Professionals, with over a third (38%) stating the same; and
- When asked about the impact of child care, employed women cited child care issues outside the home as the number one reason for considering leaving their employment. Specifically, the issues are that child care hours are not long enough and that child care is not adequately available for night shifts or year round.

Before starting a family, make sure to discuss provisions for childcare and the effect it will have on your career.
- Anonymous female engineer


23 Renshaw R. (2011). Location? It’s all about being close to work. Available at: http://www.estateagenttoday.co.uk/news_features/Location-Its-all-about-being-close-to-work

CHAPTER 3: Retention Challenges and Opportunities

The following bar graph demonstrates work-life conflicts as the most significant barrier to retaining women in non-traditional roles from the perspectives of HR decision-makers.

HR decision-makers are also on the same page that balancing work and family life is critical. Eighty-five percent of HR decision-makers also cite work-life conflicts as the number one reason why female employees leave their employment in the Industry. Related to balancing family life is the need to work in remote locations. This was reported by over half (55%) of HR decision-makers as a top reason to leave. A third (32%) of HR decision-makers commented that inflexibility of work schedules was a top reason to leave.

Flexible work schedules and less demands on travel improves retention of women. Benefits for part-time women helped us to retain them. There is still a problem with perceived and real barriers to advancement of women especially in flex schedules.

- Mineral Exploration HR decision maker
CHAPTER 3: Retention Challenges and Opportunities

Key Insight: Environmental and Sustainability Considerations

As growing concern for the environment is a reality, more and more employees are putting their beliefs into practice. In fact, females have a higher salience for being concerned about the environment than their male colleagues. According to sociological researchers, reasons for this are because women are: (1) socialized to value the need of others and (2) aware of and feel responsible for harmful consequences and of their actions, and feel responsible for those consequences.25

» A quarter (26%) of women employed in the Industry cite concern for the environment and sustainability as a top reason to leave their employment.

» Interestingly, Science Professionals (19%) and women working in non-traditionals roles (16%) are less likely to state concern for the environment/sustainability as a reason to leave than other employed females.

“IT can lead to a sense of self-disgust as far as the environmental side of things.”
- Female engineer

“[This Industry is] often environmentally and socially damaging.”
- Female in administration

“IT’s exciting work, and as change continues with respect to the environment, sustainability and corporate responsibility the Industry offers careers that we can take pride in.”
- Female engineer

Improvements are Recognized but the Culture is Still Male-Dominated

Just over half (52%) of employed women reported that they have seen or experienced women being treated differently in the workplace than their male counterparts. Of these, one fifth (20%) report seeing or experiencing women being treated differently frequently (every day, a few times/week or a few times/month) and one third (32%) report this rarely (a few times per year) even though several women report this having improved over time there is still improvement needed. The remaining half (48%) indicate this never happens.

The Industry continues to be male-dominated and naturally so is its culture. Women report the continued existence of a culture that precludes women from joining in social activities. They also comment on a lack of respect for women through doubting women’s abilities and the existence of inappropriate female images placed around the worksite. In addition women also cite the lack of women in senior roles as a way of perpetuating the notion that women are not equal to men. HR decision-makers are also aware of the lack of women in senior positions and the impact this has on retention as nearly a quarter (23%) report a lack of senior women leaders and role models as an issue with respect to retaining women in the Industry.

“Because it is still an old school mentality up here! A lot of people still believe that women belong in offices or cleaning toilets! It makes the environment up here tense all the time. You are never truly part of the team no matter how hard you try!”
- Female labourer

“The attitude of most of the men illustrates that they believe that women do not belong at a mine. Our local union president, hourly and staff are condescending and treat women with contempt.”
- Anonymous female employee

“A fishing trip organized by a service provider included invites to all male geoscience staff but no women were invited.”
- Anonymous female employee

“I work with some companies/consultancies in the Industry who simply don’t have professional women employed in their mining sectors. They may claim that they are non discriminatory but the presence or rather lack thereof of women speaks louder than words.”
- Anonymous female employee

Finally, the majority of employed women indicate sufficient washroom and locker facilities and equipment for women at their site. One fifth of women (22%) did however, note a lack of availability of appropriate sized and shaped personal protective equipment for women. The perceived suitability of washroom, locker facilities and equipment were not related to retention risk. However, these remain a very important part of creating and maintaining a female-friendly Industry.

Opportunities for Career Growth and Development is Lagging

When asked about their satisfaction regarding their ability to apply their skills and training and career progression, including training development opportunities, women reported lower satisfaction with the Industry. Lower satisfaction seemed to be particularly the case when women were speaking of their opportunities in relation to their male counterparts and points to a lack of mentorship and apprenticeship opportunities available throughout the Industry.

“Women do not get the recognition we deserve. We do not follow the lines of progression the men do and we just can’t fit in to the boys club that permits advancement through relationships [even though] many of us have so much more experience.”
- Heavy Equipment Operator

“While the environment has changed considerably, this conservative Industry continues to hire women but not promote them at the rate or to the level of responsibility that men make it to. If a woman is very career-focused, it is far less likely that she will advance than a man will.”
- Female Senior Manager

Best Practice: For over 10 years, Canadian Pacific has made a conscious effort to advance women’s careers – requiring each department to have diversity goals, establishing mentoring programs, and holding forums where senior female leaders talk about their experiences. A “Women on Track” group offers networking opportunities. Now, a quarter of its board of directors and a third of the company’s top executives are women.
CHAPTER 3: Retention Challenges and Opportunities

Key Insight: Mentorship is Valued but Under-Utilized

Mentoring, whether through a formally developed program or via an informal relationship, is a personal enhancement strategy whereby one individual facilitates the development of another by sharing known resources, expertise, values, skills, perspectives, attitudes and proficiencies.27 Mentoring provides benefits not only for the individual mentee (opportunity for support) and mentor (opportunity to ‘give back’) but also for the organization. Several direct, quantifiable benefits include improvements in employee retention, managing organizational change, bridging competency gaps, rejuvenating mid-career employees, developing managers, helping employees obtain formal certification and increasing the representation of minority interests.28 Additionally, experienced women also feel a “profound sense of wanting to give back to the community, to educate others about their work and help out in some tangible way.”

Both of my mentors were women and both were the reason I stayed in this position. They were both instrumental in my learning and in developing lab practices. I owe very much to both of them and respect the knowledge they have and still use them as valuable resources.”
- Anonymous female

Best Practice: Johnson & Johnson and Microsoft implemented a Crossing the Finish Line initiative. Leadership is provided to develop young, high potential multicultural women and strengthen their connections with senior managers who can act as their sponsors down the road.

While half of the female workforce reported being involved in a mentoring relationship during their career, only 9% indicated having a formal mentorship relationship that their employer had initiated. A further 42% reported having an informal mentor. Those with informal mentors noted their appreciation for being able to bounce ideas and receiving support for questions. While there appeared to be an even split of male and female mentors and respondents noted being equally happy with either a male or female mentor, comments were made around the lack of female mentors in senior positions.

If there were any females around at a more senior level than myself, that would be great. I would love to understand things from their perspective and talk to them about challenges and how to overcome them.
- Anonymous female

Best Practice: Microsoft has created a group of interlocking “mentoring rings” with an eye to giving female talent better access to mentoring from senior managers – especially at career stages when support is most needed.


The following figure describes the prevalence of mentoring relationships for women within the Industry.

**Figure 10: Prevalence of Mentoring**

- **YES** Employer found a mentor for me (9%)
- **YES** I have had an informal mentor (42%)
- **NO** I have not had a mentor (49%)

Key Insight: Employed Women Seek Apprenticeship Opportunities

Apprenticeship programs are beneficial to employees (or potential employees) and employers. An agreement is made between an individual who wants to learn a skill and an employer who needs a skilled worker. Employees who have taken an apprenticeship have been shown to be more productive, have higher morale and produce higher quality work than similar employees. Employers gain motivated, skilled workers who are very familiar with the particular issues of their sectors and are highly productive.

The British Columbia Mineral Exploration and Mining Industry Human Resources Strategy: 2008-2012 found that the mining Industry is not apprenticing new workers to the extent required to “replace and enhance the Industry’s skilled trades’ workforce”. Only 5% of employed women across BC’s Mineral Exploration and Mining Industry reported participating in an apprenticeship program. Women reported completing apprenticeships in assaying (3), warehouse (4), instrumentation (3), electrician (1), engineering (1), mechanic(1), PGeo(1), Pipe and steam fitting(1) and welding (1). When asked what area(s) women would be interested in taking an apprenticeship, responses include warehouse person (18 mentions) and electrician (16 mentions) accounting for almost half of the responses. These were followed by apprenticeships in mechanics (10 mentions), carpentry (6 mentions) and welding (6 mentions).

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Women are Increasingly Aware of their Market Value

A third (33%) of employed women appear to have a good understanding of their own market value, i.e. their confidence in their ability to find better employment. This is even higher for women employed in non-traditional roles (40%) and for Science Professionals (50%). What this means in terms of retention is that women are aware of their worth and they aren’t afraid to look for alternative employment to suit their needs.

Chapter Summary

This chapter established that women in the Industry are encouraged to stay due to:

» Compensation and benefits;
» Proximity of the job to home, particularly for women where their roles require travel; and
» Community amenities are more important particularly to women in Mining Operations roles.

Conversely, women are most commonly driven to leave the Industry due to:

» A lack of ease of balancing job with family responsibilities; and
» Concern of the environment and sustainability not being met.

This chapter also established key findings from BC Mineral Exploration and Mining Industry:

» Employed women have positive perceptions of the Industry once they are employed;
» The Industry’s pay and benefits generally meets women’s needs and expectations (a driver to stay);
» Travel, while enjoyed by many women, is a barrier to remain in the Industry as it often competes (and loses) with family responsibilities;
» Balancing family with work is the number one issue for driving women to leave the Industry. The critical point in time at which this happens is when women are in their mid-thirties;
» As environmental concerns are of higher salience to females than males, companies who don’t go green influence a woman’s desire to go to something else;
» The Industry has certainly been made to be more gender respectful but remains male-dominated and so does the culture. Improvements in organizational culture are needed; and
» Women are increasingly aware of their market value – if they are not being valued they have no qualms about looking elsewhere for employment. This presents a significant attrition risk to employers.
CHAPTER 4: Conclusion

Several opportunities for improvement have been suggested throughout this report that focus on three distinct areas:

**Getting Employers on Board**
Raising the importance of female participation among employers

**Improving Recruitment**
Targeting the right women at the right time with the right messages

**Improving Retention**
Using evidence to guide purposeful strategies to retain women in the Industry

The Women in Mining Sub-Committee and Task Force members provided insight on these three areas, and preliminary recommendations were developed emphasizing the importance of:

» Champions to lead change within the Industry;
» A provincially coordinated approach to improving the attraction of women to the Industry; and
» Pilots that demonstrate the benefit of initiatives that set women up for success in the Industry.

These recommendations:

1. Focus on engaging champions, both internal and external to the Industry, to persuade senior leaders within Mining and Exploration companies of the need and benefits of female participation in the workforce;
2. Develop and launch an integrated marketing plan for increasing public awareness of opportunities in the Industry for women; and
3. Develop pilots that allow women to better balance family and work responsibilities, make a “getting started toolkit” and cost/benefit evaluation of these pilots.

This chapter also includes Idea Boxes, a collection of ideas and initiatives that emerged from the combined wisdom of members of the BC Exploration and Mining Sector Labour Shortage Task Force and Women in Mining Sub-Committee during a working session on August 16, 2011. With appropriate research and analysis, these ideas and initiatives could propel an HR Strategy and help the Industry realize the benefits of greater female participation.
Chapter 1 identified an opportunity for an Industry-led province-wide employer awareness campaign, targeting senior leaders about the shortage of women in the Industry. Creating a widespread sense of urgency with respect to the importance of female participation among the employer community is needed. Task Force and Sub-Committee members remarked that Industry labour shortage projections may not have an impact on employers unless they themselves are experiencing recruitment challenges and noted that senior leaders would likely respond to a business case for female representation in the Industry. The Ramp-Up study also recommended demonstrating the ‘business case’ for higher female representation (e.g. sustainable growth, reduced turnover and engaged staff from retention efforts).

Additionally, the Ramp-Up study recommended reporting diversity measures in organizations’ sustainability/annual reports. This would also benefit BC. Task Force and Sub-Committee members, however, noted that reporting might be a by-product of cultural change. They believed diversity measures would signal success, and that it is most important to focus on building the conditions for this change first.

Prospects for career advancement for women in the Industry leave significant room for improvement. Greater advantage can be taken of mentorship and apprenticeship opportunities. Mentorship, in particular, will help to profile senior female leaders in the Industry – impacting both recruitment and retention. Task Force and Sub-Committee members agreed that there were opportunities to develop Industry-led mentoring programs and networking opportunities for women in the Industry. This includes opportunities for women to become mentors in operations roles. Providing ‘go to’ mentors to women newly employed in operations positions would be of significant benefit. Mentorship will also help to increase perceptions of BC’s Mineral Exploration and Mining Industry. The BC Mineral Exploration and Mining Industry Human Resources Strategy also recommended employers increase the number of apprentices in high demand trades and to recruit mid-career trades people as mentors.

Task Force and Sub-Committee members also recognized the importance of developing partnerships with stakeholders within and external to the Industry. Other Women in Mining initiatives were an unmistakable fit and partnerships with external groups, such as the Minerva Foundation for BC Women, may also be beneficial. Women in Mining Sub-Committee and Task Force members identified the following ideas for raising the profile of female participation among those that can influence change in the Industry:

**IDEAS**

- Disseminate findings from this report to key stakeholders within BC, including senior leaders and HR decision-makers within Industry, Women in Mining chapters, and non-profit partners.
CHAPTER 4: Conclusion

IDEAS

→ Lead the development of a business case for greater female participation that is specific to BC mining and exploration employers.

→ Engage Industry leaders, beginning with members of the Task Force, to openly share with senior leaders and the public:

  » The importance of female participation to their organization’s current and future performance;
  » That they regularly monitor female participation in their organization; and
  » What they are doing to increase female participation (i.e. mentorship opportunities, entry, mid-career and leadership initiatives for women).

→ Encourage Union leaders to work with employers to promote female participation in non-traditional roles.

Improving Recruitment

Targeting the right women at the right time with the right messages

Recommendation 2: Develop and launch an integrated marketing plan for increasing public awareness of opportunities in the Industry.

This recommendation is a response to the opportunity to target the right women at the right time with the right messages. There is an opportunity for Industry-led recruitment efforts using targeted marketing to youth, students and women residing within natural resources communities and women employed in other sectors. Task Force and Sub-Committee members recognized there would be competition for labour force entrants in the coming years and that candidates for the most-in-demand positions may come from other industries. Specifically, they believed more focus should be placed on recruitment from within BC communities, especially those in rural areas near mining and exploration sites. Additionally, Task Force and Sub-Committee members noted the opportunity for an increased focus on women who are looking for a career change, have been out of the work force as well an encouraging aboriginal women to enter the Industry. The following question sequence can be used to ensure attraction and recruitment efforts identify and reach target segments:

<table>
<thead>
<tr>
<th>Who is the target audience?</th>
<th>What message will they respond to best?</th>
<th>What channel/style will best suit this audience?</th>
<th>Who has access to this target market?</th>
</tr>
</thead>
</table>
CHAPTER 4: Conclusion

Examples of this type of targeting are included in Figure 8. Chapter 2 also establishes that awareness of existing tools for attraction and recruitment to the Industry can be improved. It is essential that a provincial approach includes the coordination and integration of all Industry attraction tools, avenues, functions and sources within the Industry into a seamless program that maximizes the impact on labour force entrants and participants at a minimal cost.

It is recommended that a provincial Women in Mining Coordinator be hired to:

1. Reach out to both career advisors and HR representatives in the Industry – supporting employers in their Recruitment endeavours; and
2. Liaise with MiHR to build content on Explore for More British Columbia and most importantly, promote the use of existing Explore for More resources.

Women in Mining Sub-Committee and Task Force members identified the following ideas that could be part of an integrated attraction/recruitment communications plan:

**IDEAS**

→ Develop and carry out a strategic communications plan for dissemination of the findings from this report as well as examples of Industry leadership in advancing female participation (Recommendation 1). Channels may include conferences and Industry publications.

→ Further develop and promote **Explore for More BC resources** with a focus on women. Examples:

  » Include targeted messaging in “A Career in Mining is More than You Think” packages;
  » Develop presentations with targeted messaging for women at various life stages; and
  » Expand the Speaker’s Bureau to include more BC-based women in non-traditional roles that are willing to speak to female students and women in the community about opportunities in the Industry.
    » Collaborate with Industry leaders, beginning with Task Force members, to extend an invitation to women in non-traditional roles within their organizations; and
    » Invite survey respondents that indicated interest in participating in further WIM research to share their experience and insights with career seekers.

→ Seek existing and new co-investment from employers and/or the public sector to sponsor community events (e.g. day camps for children and youth, community career fairs, tours to mine sites, etc.) to further increase the awareness of and interest in Industry careers. Examples:

  » “YES 2 IT” offers funding and resources to schools, Industry associations and other community organizations to host an activity that increase awareness of trades amongst younger students, those in grades 6 to 9.
IDEAS

→ Reach out to HR decision-makers individually during expansionary phases of their business cycle and introduce them to a “one stop shop” for Industry recruitment resources. Examples:

- MiHR’s “Mining for Diversity” toolkit;
- Explore for More BC resources;
- Inventory of attraction and recruitment ideas and case studies specific to the Industry, such as “YES 2 IT” activities, site tours and ride-alongs;
- Corporate Best Practice Guide (see Recommendation 3); and
- “Getting Started Kits” for female-friendly workplace initiatives (see Recommendation 3).

→ Develop and promote a “one stop” shop for BC Career Advisors including:

- Explore for More BC resources, especially the Speakers Bureau;
- Existing school curriculum;
- Tips and hints for targeted messaging; and
- Case studies of how Career Advisors have partnered with others to establish experiential learning opportunities for female students.

→ Reach out to Career Advisors from BC high schools, trades/technical schools, and universities on a regular basis and facilitate introductions with Industry representatives.

**Improving Retention**
Using evidence to guide purposeful strategies to retain women in the Industry

*Recommendation 3: Develop pilots that allow women to better balance family and work responsibilities.* A “getting started toolkit” and cost/benefits evaluations of pilots, as key deliverables, will help to support employers in their endeavours.

An opportunity exists to make improvements to the workplace culture across the Industry. A positive and friendly atmosphere, constructive employee-supervisor relations, and involvement, inclusion and care from senior management are important factors in retaining employees. This culture change would be of significant benefit for BC and is aligned with the first recommendation. In fact, enhancing and encouraging an inclusive culture stands to be the foundation of success for the majority of recommendations set out in this report.
Chapter 3 established that the most significant opportunity for improving attraction, recruitment and retention to the Industry would be through work arrangements that enable women to better balance work and family responsibilities. Members of the Women in Mining Sub-Committee, together with a few Task Force members, suggested evidence-based pilots may help employers launch female-friendly work arrangements. Examples include developing part-time opportunities, shorter shifts, floater roles, on-site childcare or offering flexibility and time for employees to make arrangements that will support their family. One way to facilitate change towards these more flexible work arrangements would be through pilot projects that can be evaluated and shared across the Industry. Task Force and Sub-Committee members believed case studies and toolkits could be used to spread practices that have been proven as successful. Best practices would help to demonstrate success – the impetus for employers to invest in the long-term success of its employees. Task Force and Sub-Committee members emphasized the benefits this recommendation would be Industry-wide, not ‘just’ for the female employees.

Women in Mining Sub-Committee and Task Force members identified the following ideas that could be part of an integrated attraction/recruitment communications plan:

### IDEAS

- **Develop and enhance an inclusive culture**:
  - Develop respectful workplace training sessions;
  - Ensure locker and washroom facilities are female appropriate; and
  - Engage in succession planning that stands to benefit the entire workforce.

- **Develop a Corporate Best Practice Guide**, an extensive review of successful female-friendly workplace initiatives both abroad (e.g. Australia and South Africa) and within natural resource industries in BC. This guide, aimed at HR Decision-Makers, should include:
  - Scheduling initiatives that allow women to balance work and family initiatives;
  - Mentorship and apprenticeship opportunities for women; and
  - Workplace culture and environment initiatives.

- **Toolkits** may include brochures, videos, video-clips (to be disseminated electronically), conferences and workshops (attended by HR leaders as well as senior leaders and operational employees).
CHAPTER 4: Conclusion

**IDEAS**

→ Design several **pilot projects**, based on the best practice review, that support employers to initiate and produce deliverables for dissemination across the Industry (e.g. evaluations and “Getting Started Toolkits”). Getting Started Toolkits would include details on how employers would develop and enhance a culture that supports women in non-traditional roles. Examples include:

  » The development of an on-site or community based day care facility sponsored by the Industry or co-sponsored by the Industry and the local community;

  » How to implement flexible schedules, including at the operations levels (i.e. engaging with unions, developing schedules, handling staff concerns, communicating what is entailed in a pilot to all employees so the process is fair and transparent, etc.); and

  » How to involve women in mentorship opportunities – both mentors and mentees (linked with Recommendation 1).

→ Evaluate pilots to demonstrate success and spread knowledge across the Industry. It is essential to evaluate pilots against success criteria (i.e. employee retention and satisfaction, Industry satisfaction, productivity, cost, etc.). Once pilots are deemed ‘successful’, share tips on implementing and sustaining the benefits with benefit with employers across the Industry (i.e. included in the “Getting Started Toolkits”).

**Concluding Thoughts**

Extensive findings have expanded on existing National research and provided the current picture of BC’s workforce landscape. The provincial foundation from which the Industry may move forward to further female participation has been developed. It is clear where the issues are and what needs to be done to improve the appeal of the Industry to attract and retain women and provide a culture that is conducive to promoting the Industry to the entire workforce.
This report has been prepared by the Howegroup Public Sector Consultants Inc.

The BC Exploration and Mining Sector Labour Shortage Task Force is funded in whole or part through the Canada-British Columbia Labour Market Development Agreement

The design and graphics for this report has been prepared in kind by Hunter Dickinson Inc. (HDI).