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Electricity Human Resources Canada (EHRC) is a national, not-for-profit organization that conducts research focused on the human resource challenges and opportunities impacting the electricity and renewable energy sector, and develops tools to support industry in addressing these challenges and opportunities. We are a hub for research into human resources trends and sector-specific solutions to Canada’s skilled-labour shortage. EHRC is committed to developing industry appropriate tools to support a sufficient, safety-focused and skilled workforce. EHRC is governed by an industry-represented Board of Directors and managed by a staff team based in Ottawa. For more information please visit the EHRC website at www.electricityhr.ca.

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A project such as this requires the help and participation of numerous individuals and organizations. By generously giving their time and sharing their expertise and knowledge, they contributed significantly to the Bridging the Gap project, and this report would not have been possible without your participation. Thank you.

This Employment Ontario project is paid for in part by the Government of Ontario Payé en partie par le gouvernement de l’Ontario.

**Special thanks to our Gold and Silver Partners:**

- hydro one
- Ontario Power Generation
- engineers canada ingénieurs canada
A Note from the CEO

Since its inception, Electricity Human Resources Canada’s Board has sought to bring together employers, educational institutions, and other interested stakeholders to address the issue of lower representation of women in the electricity and renewable energy industry. Engaging this under-represented group is, and remains, a priority for our organization.

Within our industry, women represent only a quarter of the electricity workforce, compared to the national average of 48%. In the trades, that number is much lower, less than 5%.

While the proportion of women in the industry is rising, it remains well below the average for the Canadian workforce and reflects the general importance of attracting women to critical occupations such as engineers, engineering technicians, technologists and other skilled trades.

To proactively address this issue, EHRC reached out to industry for its support. And industry, in tandem with the Ontario and Alberta provincial governments, responded to the call to action.

During the research for this initiative we spoke to women currently working in the sector, and asked them what drove them to work, and stay, in our sector. We asked about the challenges they experienced, and the support they received along the way. Most importantly, we asked them what they loved about working their jobs and why we should be encouraging other women to consider a job “keeping the lights on” in Canada.

We also heard from young women still in high school and post-secondary education, and learned from their perceptions of the industry and the career opportunities available. We spoke to employers and educators, and came away encouraged by the overwhelming support for this challenge.

I trust you will find these stories illuminating and we look forward to continuing to partner with you as we act on the recommendations outlined in this report. Please take the time to explore our site dedicated to the Women of Power, and watch the videos of those women leading the way.

Finally, a sincere thank you to all the organizations and women who contributed to this initiative.

Sincerely,

Michelle Branigan
Chief Executive Officer,
Electricity Human Resources Canada
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EXECUTIVE SUMMARY

According to the 2011 labour market report, Power in Motion, the electricity and renewable energy sector in Canada is experiencing a major investment boom that will see much of the existing system replaced or upgraded. During the transition from “Legacy” to “Next Generation” infrastructure, it is estimated that Next Generation energy projects will involve two decades of construction and cost $295 billion or more. In addition to this growth, as much as one third of the current electrical generating capacity is expected to switch to renewable sources.

The Power in Motion report states that “Canada’s electricity and renewable energy sector will need to recruit over 45,000 new employees between 2011 and 2016 to meet the labour demand associated with Next Generation projects and the shift to renewable energy sources. This is more than twice the number of employees recruited in the last five years.” For energy industry employers, this recruitment challenge is unprecedented.
One of the key recommendations included in the Power in Motion report is for all stakeholders in the electricity and renewable energy sector to collaborate in the development of recruitment strategies that target groups currently under-represented across the industry’s workforce. “Bridging the Gap” is a program developed by EHRC that responds directly to this recommendation by producing resources that specifically target women who may be interested in working in this sector.

Women represent only one quarter of the electricity and renewable energy workforce across Canada, compared to the national average of 48 percent female workers in the industry sector. For an industry facing significant labour market demand, engaging this under-represented group is a priority. The goal of the Bridging the Gap program is to increase the attraction, recruitment and retention of skilled female workers to this sector. This will effectively bring about gains in both profit and productivity for small, medium and large employers in the energy industry.

What is the secret to recruiting women and girls to the electricity and renewables sector? Women and girls need to see female role models in the workplace – over and over again. They need to receive the message that women can work and be successful in engineering, technology, technician and trade careers.

Of these new employees, the industry will be looking to fill 19 critical occupations that are specific to the electricity industry and include trade-related occupations, engineering-related professions and management positions:

**TRADE-RELATED OCCUPATIONS:**
- Electricians (except Power Systems and Industrial)
- Industrial Electricians
- Power System Electricians
- Electrical Power Line and Cable Workers
- Power System and Power Station Operators
- Stationary Engineers and Auxiliary Equipment Operators
- Construction Millwrights and Industrial Mechanics

**ENGINEERING-RELATED PROFESSIONS:**
- Civil Engineers
- Mechanical Engineers
- Electrical and Electronics Engineers
- Civil Engineering Technicians and Technologists
- Mechanical Engineering Technicians and Technologists
- Electrical and Electronics Engineering Technicians and Technologists
- Engineering Managers

**MANAGEMENT POSITIONS:**
- Utility Managers
- Construction Managers
- Financial Auditors and Accountants
- Information Systems Analysts and Consultants
- Contractors and Supervisors, Electrical Trades and Telecommunications
Many will replace a wave of specialized and experienced retirees. All will be on the leading edge of Next Generation infrastructure. For many key occupations, the available workforce will not meet the labour requirements. Employers will need to look for new recruits – with new skills tied to a very different system of electricity generation, transmission and distribution. It should be noted that the need for new workers is not specific to hydro. Other sub-sectors, such as nuclear, wind, solar, etc. will require a larger workforce and, therefore, without additional workers entering the industry, sub sectors may begin poaching employees from each other.

For industry employers, the competition for a limited labour force is formidable. The *Power in Motion* report points to tight labour markets (both local and broader). Often employers are looking for the same workers – engineers, technicians and technologists, information technology (IT) specialists and skilled trades with five or more years of experience. Electricity sector employers looking for these candidates will face stiff competition among a limited labour supply.

One of the key recommendations included in the *Power in Motion* report is for all stakeholders in the electricity and renewable energy sector to collaborate in the development of recruitment strategies that target groups currently under-represented across the industry’s workforce. “Bridging the Gap” is a program developed by EHRC that responds directly to this recommendation by producing resources that specifically target women who may be interested in working in this sector.

According to the *Power in Motion* report, the percentage of women working in the electricity industry in Canada is 25% while the percentage of women working in all industries in Canada is 48%. 2011 Employer Survey results revealed the following percentages of women workers, per occupational group:

<table>
<thead>
<tr>
<th>OCCUPATIONAL GROUP</th>
<th>PERCENTAGE OF WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers/Supervisors</td>
<td>~14%</td>
</tr>
<tr>
<td>Engineers</td>
<td>~18%</td>
</tr>
<tr>
<td>Technicians/Technologists</td>
<td>~11%</td>
</tr>
<tr>
<td>Trades</td>
<td>~4%</td>
</tr>
<tr>
<td>Information Technology (IT) Occupations</td>
<td>~34%</td>
</tr>
</tbody>
</table>

*EHRC, Power In Motion: 2011 Labour Market Information (LMI) Study Full Report, p.28*
This low representation of women in the electricity sector illustrates the immediate need to attract, engage and recruit this largely untapped target group. In addition, the labour shortage is being experienced by various sectors within the Canadian economy, leading to increased competition for supply.

Some of the EHRC’s strongest research outlining the need for a most diverse workforce emerges from our 2009 Connectivity project, *Building an Integrated HR Strategy for the Electricity & Renewable Energy Industry*, which asked stakeholders to provide their insights into the current human resources barriers and gaps; the skills of the future that need to be developed; the suggested practices in recruitment and retention; the partnerships and collaborations that need to be formed or strengthened; and finally, the necessary tools and support that industry stakeholders would need in order to address these issues. One of the key recommendations that emerged was the need for “workforce diversity to be addressed, especially with regards to women and Aboriginals, and internationally-trained workers.” This message continues to resonate within the electricity sector, given the growing labour shortages being experienced by industry employers.

**‘BRIDGING THE GAP’ PROJECT**

As indicated above, women represent only one quarter of the electricity and renewable energy workforce. For an industry facing significant labour market challenges, engaging this under-represented group is a priority.

The *Bridging the Gap* project partners will work through Electricity Human Resources Canada (EHRC) as the point of contact for the electricity and renewable energy sector to strengthen existing initiatives and foster an environment for the development of practical and effective programs targeted towards women who are entering the workforce (at the high school, apprenticeship, college and university level) and women currently working within the sector.

The long term goal of this initiative is to reach the national average of women working in the Canadian workforce (48%) and develop a robust talent pool of highly skilled workers to meet the electricity industry’s human resources requirements in the years ahead.

Throughout the research process, we have been able to develop a set of concrete, strategic and practical recommendations for next steps. Presented in this report, these recommendations inform a practical approach for moving forward and focus on scalable and replicable activities that can be undertaken by industry, with the help of other stakeholders such as educators, labour/union groups and others. The immediate and long term objective is to actively augment the number of women moving into the sector. Mobilizing the industry, with the support of government, to take action and get stakeholders involved at all levels will contribute significantly to bridging the supply/demand gap.
PROJECT METHODOLOGY

To complete this project, a number of activities combining both primary and secondary research methodologies were undertaken. Throughout all project phases, consultation with project stakeholders was critical for the collection and validation of information. The research methodology for this project included the following key research activities.
ACTIVITY 1: COLLECTION OF SECONDARY RESEARCH DATA AND EXISTING PROGRAM INFORMATION

As an initial project activity, the research team conducted targeted Internet and database research to locate relevant information regarding: (a) challenges faced by women employed within/seeking employment in non-traditional occupations\(^2\) and (b) existing programs, services and initiatives aimed at enhancing the attraction, recruitment and retention of women in non-traditional occupations. A detailed database of relevant research findings and identified programs was developed. Key program findings are presented within this report.

ACTIVITY 2: VIDEO PRODUCTION

As part of the project EHRC developed a series of videos which were designed to act as an introduction to a sample of careers in the sector. Employers and members of the project steering committee were asked to identify priority occupations to be profiled in the video series.

Employers from the sector were given the list of priority occupations in the electricity sector and were invited to participate in the identification and recruitment of potential “on-camera talent”. The women who were chosen to be videoed also had to meet a second criterion: they had to reflect the age and ethnicity diversity of the national workforce.

Each video begins with an animated introduction and follows a prescribed storyboard. The videos profile women who are employed in specific electricity and renewal sector occupations, and show the following:

- The education and training required for the occupation;
- The types of tasks performed on a regular basis;
- Opportunities for growth and advancement in the industry;
- The impact of each job on work-life balance; and
- How the occupation affects the community.

Each woman was also encouraged to discuss her occupation in terms of her own unique perspective, life experiences and achievements.

These videos are hosted on the EHRC Bridging the Gap website and are a wonderful resource tool for employers, educations and career seekers. One challenge that was noted during this series was the lack of women working in some of the designated priority occupations, emphasizing the work still to be completed in broadening the inclusion of women in the sector.

\(^2\)For the purposes of this research ‘non-traditional occupations’ indicate jobs in which women have traditionally represented a small percentage (e.g., less than 30 percent) of the total workforce.
The video series will continue to play an integral role to encourage women to consider electricity as a career of choice. The videos will serve as valuable tools for various industry stakeholders looking to encourage young women to pursue careers in electricity including:

- Employers who can use the videos as part of their recruitment campaigns;
- Teachers looking to demonstrate careers that make real-world use of math and science and show that learning these subjects in school go beyond text books;
- Guidance counsellors looking to guide female students into exciting, stable, well-paying careers;
- Women’s support organizations and associations looking to get women thinking about careers in non-traditional sectors/roles; and
- Parents who want to get their daughters to consider an industry that can provide them with the foundation for a long, successful career in which they are valued and challenged.

We encourage you to share these videos with amongst your respective constituencies.

**ACTIVITY 3:**
**COLLECTION OF PRIMARY RESEARCH DATA**

Following the collection of secondary research data, the research team embarked upon direct consultation with project stakeholders to gather detailed information regarding the attraction, recruitment and retention of women within the electricity and renewable energy sector. For the purpose of the research, the following *key project stakeholder groups* were identified:

1. Women currently working within the electricity and renewable energy sector;

2. Women seeking employment within the electricity and renewable energy sector (e.g., high school students, apprentices, college/university students and/or women seeking career changes);

3. Employers, labour, educational and other organizations with programs/initiatives/strategies directed towards the attraction, recruitment and retention of women.
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Following the collection of secondary research data, the research team embarked upon direct consultation with project stakeholders to gather detailed information regarding the attraction, recruitment and retention of women within the electricity and renewable energy sector. For the purpose of the research, the following key project stakeholder groups were identified:

1. Women currently working within the electricity and renewable energy sector;
2. Women seeking employment within the electricity and renewable energy sector (e.g., high school students, apprentices, college/university students and/or women seeking career changes);
3. Employers, labour, educational and other organizations with programs/initiatives/strategies directed towards the attraction, recruitment and retention of women.

METHODOLOGY 1: KEY INFORMANT INTERVIEWS

Key informant interviews were conducted with each of the three (3) project stakeholder groups to collect first-hand information regarding the attraction, recruitment and retention of women in the sector. Prior to the interviewing process, three (3) interview guides were developed containing targeted questions specific to the perspectives of each stakeholder group.

Interviewees were recruited from data collected during the secondary research phase. In addition, contacts provided by Steering Committee members were also interviewed.

A total of 59 interviews were completed with the following stakeholders groups:

<table>
<thead>
<tr>
<th>STAKEHOLDER GROUP</th>
<th>NUMBER OF INTERVIEWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Women currently working within the electricity and renewable energy sector</td>
<td>23</td>
</tr>
<tr>
<td>2. Women seeking employment within the electricity and renewable energy sector</td>
<td>3</td>
</tr>
<tr>
<td>3. Employers, labour, educational and other organizations with programs, initiatives or strategies</td>
<td>33</td>
</tr>
</tbody>
</table>

Although the initial goal was to interview a total of 30 women seeking employment within the electricity and renewable energy sector, it became apparent throughout the interview process that these women are extremely difficult to connect with for discussion (based on their working status, etc.). Therefore, particular emphasis was placed on reaching out to this stakeholder group through focus group meetings and the online survey process.
METHODOLOGY 2: ONLINE SURVEYS
To gather additional insights and perspectives, three (3) online surveys were developed. Survey invitations were sent to upwards of 175 EHRC contacts as well as to key informant interviewees who were asked to send the link to peers and colleagues.

A total of 106 online surveys were completed with the following stakeholders:

<table>
<thead>
<tr>
<th>STAKEHOLDER GROUP</th>
<th>NUMBER OF SURVEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Women currently working within the electricity and renewable energy sector</td>
<td>49</td>
</tr>
<tr>
<td>2. Women seeking employment within the electricity and renewable energy sector</td>
<td>35</td>
</tr>
<tr>
<td>3. Employers, labour, educational and other organizations with programs, initiatives or strategies</td>
<td>22</td>
</tr>
</tbody>
</table>

METHODOLOGY 3: VALIDATION FOCUS GROUPS
In addition to key informant interviews and online surveys, focus groups were conducted to bring groups of stakeholders together to discuss the research findings and to provide additional insights about their experiences. A total of ten (10) focus groups were held with youth and women seeking employment in the electricity and renewable energy sector.

Focus Group 1: Women Building Futures
On June 11, 2013, EHRC met with 30 mid-career women currently participating in a 17 week pre-apprenticeship training program.

The Project Lead opened session with background information on EHRC as an organization, labour market data as outlined in the presentation document distributed in advance of the session, objectives and phases of the “Bridging the Gap” project, and expectations from this session. This introduction was brief as the primary purpose of the session was to listen to participants – not hear from the consultants.

During this focus group, participants were asked about their level of awareness of the industry. When asked about what occupations were available in the electricity and renewable energy, the answers reflected what we typically hear – Industrial Electricians, Industrial Mechanic/Millwright, and Engineers.

The women talked about factors they consider when seeking future employment and how employers might increase awareness of potential employment opportunities. Return on investment for education and training, a good work/life balance, and availability of jobs were of importance when consider careers. Increasing awareness can be accomplished by job fairs, career counselors, social media, and partnerships. One participant even suggested the need for multi-generational approaches.
Focus Group 2:
Northern Alberta Institute of Technology

A second focus group was held on June 11, 2013 with 7 instructors who had worked in trades and technology for 10-25 years.

In round table discussion, each participant was asked to share her personal journey that led her particular career choices as well as her experience in a traditionally male-dominated environment. 3 main themes seemed to emerge including familial influence, return on educational investment, and the desire for a well-paying job.

In order to recruit more women, integration of women and girls in non-traditional roles on television and advertisements, etc. was key to overcoming the perception of “man’s work” versus “women’s work”. Engaging parents and making them aware of the career potential was also important as they play a central role in steering career options. Messaging should be realistic and speak to the challenges, but also highlight successes and pathways to success.

Focus Group 3:
EPCOR

Nine women currently working in the industry were interviewed on June 12, 2013 using the same format as previous focus groups.

Personal stories from this group reflected those heard previously (and in subsequent groups). Familial influence, stability in employment, and guidance from school counselors played important roles. When asked about their experiences, some of the women indicated that they hadn’t really noticed the lack of women in either school or work nor did they encounter any physical constraints. Others felt a sense of loneliness or the need to prove themselves.

To attract and recruit more women, promotion of opportunities and encouraging younger girls to continue in STEM programs were seen as crucial, alongside working with education to develop and sustain more power-based curriculum.

Diversity of positions, opportunity for growth, and work/life balance were key messages that should be included in any campaign.

Focus Group 4:
Techsploration Conference

The fourth focus group took place on June 14, 2013 at the Techsploration Conference in Ontario. 24 young women aged 16-18 in high school trades programs and seeking apprenticeships participated.

This group of young women was asked about their perceptions of the barriers and challenges to working in the electricity industry. Inappropriate behaviours and attitudes on the job as well as the need to exceed expectations to prove one’s self were seen as the biggest barriers. Securing apprenticeship and the physical demands of the job were also seen as factors.

The group was asked about what they saw as opportunities by seeking employment in this industry. Secure and good paying employment, availability of jobs, and earning money while learning (through apprenticeships) were seen as benefits of working in electricity.
Focus Group 5: 
Algonquin College – WEET Program (Women into Electrical Engineering Technology)

On November 5, 2013, EHRC met with 20 women currently enrolled in the WEET program which began in August, 2013. Women within this program already hold a degree or advanced diploma in science, technology, engineering or math. The goal of the program is to prepare students for employment within various sectors, inclusive of electricity, and includes a four (4) month paid work placement within the utilities after their first year of school.

During this focus group, the women were asked to share their experiences and perceptions regarding benefits and challenges associated with employment in the electrical and renewable energy sector. In coming from such diverse backgrounds, these women provided excellent insights and viewpoints for our research. When asked what attracted them to the program and to the electricity sector in general, many women indicated that they had a passion for math and/or science and like to complete hands-on work. The all female cohort and condensed program were attractive and they all were hoping to be able to put their previous education to use in a way that they had not been able to do previously.

The women were asked about barriers that they perceive to gaining employment in the electricity sector. One woman candidly responded that she did not really know what to expect, which was a fear in itself. A woman wearing a hijab was worried that she would be judged by the way she looks. Another woman explained that her biggest fear was that she would be steered toward a desk job and be viewed as physically weak when what she really wants to do is work in the field.

The women were also asked what employers could do to attract more women into the electricity and renewable energy sector. A number of the women said that the work needs to be made more visible. As a society, we do not see images of “power workers” much less “women power workers.” The women explained that it is hard to imagine yourself in jobs that you do not know exist. Many people only know about the electrician trade and nothing else.
Focus Group 6:
Pathfinders (Girl Guides of Canada)

On February 17, 2014, the research team met with a group of 13 Pathfinders (aged 12-13) and two Pathfinder Leaders during a weekly unit meeting to discuss careers in electricity. The girls indicated that they feel a lot of pressure from their teachers to know what they want to be when they grow up. To start the discussion the girls were asked about their favourite subject in school and why, answers included:

- Science/mechanics
- Chemistry
- Biology
- Math (x5)
- English
- Health
- Art (x2)

The girls were also asked what jobs associated with the electricity sector they could name and answers included:

- Electrician
- Powerline technician
- Cable Technician

When asked what challenges they thought they might face when working in a ‘male dominated’ industry, the girls thought that it “could be awkward;” that they may “face stereotypes;” that “men might give them the easy work to do;” that “they might not be strong enough to do the work;” and that the men “might not show them respect and underestimate their capabilities.”

When asked what benefits they thought they would experience when working in the electricity, the girls thought that they would have “steady employment with a good salary.”

Focus Group 7:
National Webinar for Women Seeking Entry into the Industry

On February 20, 2014, the research team conducted a webinar with women seeking entry into the industry. Participants were recruited from online survey respondents who expressed interest in being involved in future project activities. Discussion was held regarding the participants’ experiences in seeking entry into the sector along with an opportunity to brainstorm how to better connect women to the industry. It was noted that work needs to be done to boost career awareness. While a participant noted that career fairs are a way to enlighten women regarding the opportunities in the sector, what job seekers often require is one-on-one communication with an employer representative to ask specific questions and obtain further information. Job and career fairs open the door, but opportunities for individual and personal communication was deemed as a necessity.

Participants were also asked what employers could do to demonstrate their commitment to supporting women in the workplace. The idea of flexible shifts and work models for all was reiterated (as was identified in the previous research activities). In addition, it was noted that employers should ensure that employee engagement activities and approaches are inclusive and appealing to both men and women. In particular, a participant noted that a common employee engagement activity is a golf tournament that typically draws significantly more men than women, resulting in female employees feeling isolated and left out.
**Focus Group 8:**
**Moncton High School Students**

On February 25, 2014, the research team conducted a focus group with 6, Grade 12 girls at Moncton High School. Out of this group, one student had been accepted into the Commercial Electrician program at New Brunswick Community College for the September intake. During the focus group, the girls explained that they would like to pursue careers that make them happy, but also provide them with stability and a good income. The girls explained that this is a stressful time for them as they are making decisions regarding what post-secondary studies to pursue after graduation. When asked about issues working within a male-dominated setting, a number of the girls noted that they already have some issues with their male counterparts making assumptions about them as females (e.g., they are over-emotional) and assuming that they are superior to girls in various classes (including math, sciences and technology).

**Focus Group 9:**
**Boys and Girls Club**

On March 12, 2014, a focus group was held at the Moncton Boys and Girls Club. Approximately 30 youth, aged 7-18 were present. In light of the nature of the programming delivered by the venue, both girls and boys participated in the focus group. The session included a number of activities to encourage the youth to think about their use of electricity throughout the day. The youth were first asked to brainstorm all of the ways that they use electricity; not surprisingly, the top usages listed were cell phones and videogames! Next, the group had a discussion about the various ways that power is generated – a discussion about nuclear, coal, gas, hydro, solar, wind, geothermal – and renewable versus non-renewable resources followed. The youth were then asked to identify careers in electricity – a number of youth identified electricians, as well as engineers, cable workers and powerline technicians.
The group was then shown the video series. Halfway through, the youth provided their opinions about 'male' versus 'female' jobs. While the majority of the girls said that they could do any job that a boy could do, it was the male youth who seemed hesitant that there were no ‘female’ and ‘male’ jobs. When asked if girls could be as good as boys in math and science, the girls responded with a resounding ‘yes;’ while a number of the boys yelled ‘no!’ While it is difficult to gauge if the responses of the boys were genuine or impacted by a group dynamic, this reaction validates the commentary collected throughout the project that gender norms and stereotypes must be challenged at an early age to remove unnecessary stigmas associated with female employment in non-traditional trades and occupations.

**Focus Group 10:**  
**Bernice MacNaughton High School Students**

On March 21, 2014, a focus group was conducted with 7 female high school students (in grades 11 and 12). In addition, a female vocational practice teacher – Red Seal Automotive Service Technician – also participated in the focus group. Of the girls in attendance, one explained that she was the only female in her Introduction to Applied Technology class, with another stated that she was one of two female students in her Introduction to Automotive Service Technology class. The girls explained that having a female teacher definitely improved their experience in the course. In addition, both girls cited that the males in their class were supportive of them being there and they did not feel as though they did not fit in.

The girls were also asked what they perceived would be challenges to working in a male-dominated environment. One young woman commented that she had just quit a part-time job as her male co-workers were disrespectful of her and she did not want to deal with it anymore. Other girls noted that it may be challenging at first to get respect and that it would be increasingly important to exhibit confidence and independence to prove themselves. Two of the grade 12 girls in attendance were attending community college in the fall – one for Electrical Engineering Technology and the other for Civil Engineering Technology. Both young women were very interested to hear in the career possibilities within the electricity sector.

**ACTIVITY 4:**  
**NETWORKING EVENTS**

EHRC participated in two networking events as part of the Bridging the Gap project. The first event, the Science, Engineering and Technology (SET) conference was held on November 23, 2013 with 215 high school students from the Greater Edmonton Area and many parents in attendance. Women in Scholarship, Engineering, Science and Technology (WISEST) at the University of Alberta has held an annual Science, Engineering and Technology (SET) conference since 1991. The SET Conference helps young women in their high school years explore science, engineering and technology career options during a one-day event at the University. Through hands-on activities and face-to-face conversations with role models, the young women gain insight into different careers.

At this networking event, EHRC was able to promote the Bridging the Gap project through various means, including speaking at the opening session, manning an information booth, and hosting small group sessions and a networking lunch. Seven women, four of whom were professionals employed in the electricity sector, were engaged to speak at this networking event as “mentors”. They shared their stories during the small group sessions and were available during the EHRC-sponsored lunch to answer any questions.
The second networking event was held in Toronto, Ontario at Centennial College as part of Skills Canada Ontario’s Skills Work! For Women networking dinners. This event was held in November 2013 and was similar to the SET Conference in that it offered the opportunity for young women to learn about different career options through hands-on activities and face-to-face conversations. The Skills Work! For Women dinner also offered EHRC an opportunity to speak about the Bridging the Gap project with an introduction from the project manager, Kevin Joseph, and participation from women in the industry during a classroom session with participants. This event focused on trades occupations.

These opportunities to work with SET and Skills Canada highlighted to gains to be made from developing partnerships with others who are focused on the same goal – introducing young women to careers in non-traditional sectors. The ability to accomplish the project’s long term objectives will be more successful with the continuation of these partnerships and the creation of new partnerships with similar organizations.

**ACTIVITY 5: DEVELOPMENT OF A DATABASE OF POTENTIAL MENTORS**

Throughout this project, EHRC prepared a database of women who are willing to act as mentors for future industry initiatives. This database will be held by EHRC but can be accessed by industry by contacting EHRC directly. These mentors come from across the country and the list will be updated when new volunteers express an interest.
RESULTS

The following section presents the key research findings. To highlight the findings in a logical sequence, the results are presented by stakeholder group.
1.0 WOMEN SEEKING ENTRY INTO THE INDUSTRY

As was referenced above in the project methodology, the majority of responses from women seeking entry into the industry were collected via the online survey and focus group methodologies. For the online survey, 40% of respondents were aged 20-25 and 54.8% were students. It should be noted, however, that the remainder of responses were received from older age cohorts and included those who were seeking career changes and those who identified themselves as being under- or un-employed.

1.1 OCCUPATIONS/TRADES OF INTEREST

When asked about their trade/occupation of interest, a number of women indicated that they were interested in the engineering profession (inclusive of electrical, mechanical, environmental, chemical and civil engineering). While engineering represented a significant proportion of the responses, occupations and trades of interest varied and included:

- Project/supply chain management; SAP Material Manager
- Geology
- Engineering management
- Environmental engineering
- Mechanical engineering or building science/architecture
- Accounting/finance
- Chemical engineering (i.e., environmental and geotechnical)
- Mechatronics
- Carpentry
- Construction and maintenance electrician
- Civil engineering (i.e., water resources engineering)
- Electrical engineering technology

It should be noted that the skilled trades were under-represented as occupations of interest within the respondent pool. While this finding cannot be considered as reflective of the interests of all women and is limited to our research sample, this was an interesting finding within the confines of study.
Career Awareness

Respondents were then asked to identify the trades/occupations they were aware of within the electricity and renewable energy sector. Once again, the responses were broad reaching and spanned across traditional and renewable business lines. Interestingly, more skilled trades were identified when related to ‘awareness’ in comparison to ‘interest.’ Responses included:

- Electricians
- Hydrothermal, dams, wind turbines
- Mechanical/civil engineering
- Environmental trades
- Photovoltaic and geothermal installers
- Installer
- Hydro design or process engineer
- Project manager
- Power line technician
- Electrical engineering technologist
- Outage investigator
- High tech enterprise resource planning (ERP), biotech health
- Mechanics
- Renewable energy designers
- Operations engineers
- Research scientists
- Solar panel installer
- Business planner/analyst
- Accountant
- Area distribution engineering technician
- Construction engineer
- Scheduler
- Field clerk

1.2 PERCEIVED BARRIERS/CHALLENGES TO FUTURE EMPLOYMENT WITHIN THE SECTOR

Women seeking employment were asked to identify what they perceived as potential barriers or challenges to future employment within the electricity and renewable energy sector. A number of factors were identified by respondents including:

Lack of training and experience in renewable energy

A number of online survey respondents were either students or graduates of engineering programs. These women explained that despite their education and training, they felt they did not have the specific knowledge and experience required to gain employment within the renewable energy sector (their field of choice) and that they were unaware of the training pathways required to gain this expertise.

Gender Stereotypes

Many women expressed serious concerns and doubt regarding how successful they would be when applying for jobs for which the majority of their competition is male. In essence, many women were worried that gender stereotypes and engrained norms (i.e., notion that women are physically weaker than males and unable to perform physical labour; perceived ‘male’ versus ‘female’ roles; perceived emotional rather than rational nature of women, etc.) would hinder their ability to gain employment within the sector for the jobs that they really want (e.g., field jobs versus administrative jobs).
Challenge to gain apprenticeships and work hours

A number of research participants expressed that women often face extreme difficulty finding apprenticeships and gaining work hours associated with their respective jobs. Many women felt that employers are reluctant to take on female apprentices within their worksites due to engrained stereotypes. The perceived lack of apprenticeship opportunities and employment opportunities to gain work hours has a direct bearing on the overall number of female apprentices and journeypersons within the sector.

1.3 PERCEIVED POTENTIAL OPPORTUNITIES AND/OR BENEFITS OF WORKING WITHIN THE SECTOR

On a more positive note, respondents were asked to identify what they perceived as potential opportunities and/or benefits of working within the electricity and renewable energy sector. Once again, responses varied and ranged from the economic benefits to having a positive impact on the environment and included:

- Stable work environment, cutting edge technology
- Live and work with a clean conscience; make a positive difference in the world’s resources
- Innovation and creativity
- High employment rate
- Opportunities for learning and growth
- High salaries
1.4 HOW EMPLOYERS CAN RAISE AWARENESS OF POTENTIAL OPPORTUNITIES

Drawing from their personal experiences, women provided their own insights about how employers could raise awareness of potential opportunities within the sector. Many of the responses centered on reaching out to women while in school to allow them to shift their learning paths in the right direction.

**Connecting with college/university students**

A number of the women who participated in this research were entering the electrical sector as their second careers. Many women indicated that to embark upon their new career paths, they were required to upgrade their skills and knowledge in various areas (such as math and the physical sciences). Many of these women had already attained college diplomas and university degrees; however, work within the electrical and renewable energy sector was not presented as an initial career option. These women suggested that learning more about the opportunities and associated skills requirements for careers within the sector during their initial training paths may have opened up their minds towards careers in electricity. As such, having more co-op programs with electricity employers, seminars on opportunities in the sector and recruitment initiatives geared toward college and university students may help to enhance the likelihood that women will choose electricity and renewable energy as their first and life-long careers.

**Hosting industry-specific career and job fairs**

Many research participants noted that they have a general lack of awareness of the variety of employers within the sector. Challenges in knowing what employers exist within one’s geographical area, learning about the protocols for hiring and obtaining information about available positions were noted. Women suggested that employers within the electricity and renewable energy sector should collaborate to host career and job fairs to provide women (and men) seeking employment with information about the opportunities available to them. Many women suggested that attending such a job fair in high school, university and/or college would have greatly assisted them in their employment journey.

**Developing and disseminating clear career awareness resources**

A number of research participants indicated that there is a lack of understanding of the many jobs available within the sector. In particular, women explained that it can be difficult to obtain an understanding of the duties, roles and responsibilities of various workers when one does not know someone who does the job. Participants indicated that it is extremely difficult to be interested in pursuing a career within a specific trade or occupation without knowing exactly what the job entails. In this vein, women suggested that enhancing the development and distribution of information (through various media) about the unique careers within the sector would be an effective tool for building awareness of and interest in careers within the electricity and renewable energy sector among men and women alike.
1.5 HOW EMPLOYERS CAN DEMONSTRATE THEIR COMMITMENT TO THE RECRUITMENT AND RETENTION OF WOMEN IN THE WORKPLACE

As a final question, women were asked how employers could demonstrate their commitment to attracting, recruiting and retaining women within the electrical and renewable energy sector. Responses included:

Implementing flexible work models

A significant number of women indicated that a work/life balance is a critical consideration for any career as many of the respondents were mothers with young children. As such, these women suggested that more flexible work models – inclusive of flexible shifts, providing on-site child care, job sharing opportunities – would be very beneficial and attractive for mothers who also want fulfilling careers.

Conducting internal needs assessments to identify areas for improvement

Many women suggested that to enhance the attraction, recruitment and retention of women, employers need to first look internally to identify areas for improvement, which may include:

- Examining the percentage of female workers (versus males) within various work groups;
- Identifying and examining the impact of benefits that are currently provided to women (particularly women with children under 16 years of age);
- Identifying target percentages of women versus men working within their organizations and timelines for achieving these percentages;
- Examining the number of women versus men in senior management/engineering/science/technology positions; and
- Comparing the salaries of women versus men for the same level of work.

The factors listed above were all identified as areas that could be assessed to identify key areas for improvement and spark thinking around effective and feasible remedial initiatives.

Implementing active engagement practices

While all women suggested that employment should be gained based on merit and skills, not by gender, a number of research participants suggested that initiatives targeting the recruitment of female apprentices, journeypersons and professionals may be needed to enhance female representation while the cultural mindset is in the process of shifting. Women suggested that having apprenticeships specifically for women would provide them with a foot in the door, while still requiring the female apprentices to earn their right (through effective learning and development) to remain in the program and obtain their certification.
**Supporting and celebrating diversity in the workplace**

Research participants emphasized the importance of developing and supporting an inclusive and diverse workforce that recognizes the value and skill of all employees (i.e., men and women of varying generations, internationally-trained workers, etc.). It has been suggested that it should not be just one worker group that must adapt to the workplace (i.e., women adapting to a male-dominated workplace; internationally-trained workers having to adapt to a Canadian workplace). Instead, employers should attempt to foster a culture of equal respect, adaptation and understanding to recognize the strengths that all cohorts bring to the workplace.

**Developing support networks for women**

Numerous women (both seeking employment and currently working within the sector) emphasized the significant role that mentors and sponsors play in the successful attraction and retention of female workers in the sector. Mentors who take new workers ‘under their wing’ provide support to gain familiarity with corporate processes and policies, provide guidance and reassurance when it is required and pass on their knowledge and expertise to the next generation of workers. Defined networking and mentoring processes (both within and among employers within the sector) help to ensure that female workers have extra support and guidance, particularly when transitioning into the sector.

**2.0 Women currently working within the sector**

Women currently working within the electrical and renewable sector provided insightful and meaningful perspectives about the challenges and successes experienced by women in the industry.
2.1 FACTORS THAT LED TO EMPLOYMENT WITHIN THE SECTOR

Women working within the sector were asked what led to their career choices and eventual employment within the electricity and renewable energy industry. While responses from the women varied, the following key themes emerged:

Familial influence

A number of women explained that their knowledge and interest in their given trade/occupation/profession can be attributed to family members who worked in the field and provided a realistic depiction of what the work was like. In many instances, women with family members in the sector received encouragement and support to follow in their footsteps, whereas females without a familial tie to the sector cited that they were often guided away from trades/technology and pushed towards more traditional female roles and careers.

Early interest in science/math/technology

A number of women indicated that they possessed an interest, and often a passion, for the physical sciences, mathematics and technology from a young age. Despite showing interest and strength in these subjects, many women indicated that they were encouraged to channel that interest into more traditional ‘female jobs’ – such as teaching, nursing, dietetics, etc. In many cases, a career in the electricity sector was neither encouraged, nor presented as an option for these women.

Love of nature/outdoors/physicality

Many of the women employed within trades/technology who work in field-based positions indicated that they love working with their hands, being outdoors and being physically active.

2.2 FEMALE EXPERIENCES WITHIN A TRADITIONALLY MALE-DOMINATED ENVIRONMENT

The research participants were asked to share their experiences as women working within male-dominated environments and in positions traditionally seen as ‘male’. The responses varied and ranged from positive to negative. Women often cited that it was hard at the beginning, but as they gained acceptance and confidence in their roles, their experiences improved. However, these women also explained that being one of few women in a male workforce can be incredibly mentally, physically and emotionally challenging.
**Becoming accepted and respected takes considerable time**

Women working within the sector indicated that it takes considerable time and extra effort to ‘prove’ themselves to their male counterparts. They explained that breaking down the barriers and stereotypes was challenging, but once acceptance was gained amongst their peer group, the dynamics improved. The women also emphasized that gaining acceptance as a peer often takes years, so one has to be persistent and at times stubborn, yet also accepting and calm. Many women (with a number of years of experience in the sector) referenced the fact that they continually have to prove themselves to new generations of male workers entering the workforce. In essence, gaining acceptance and respect can prove to be an ongoing, and often tiring, task.

Many respondents expressed frustration with the fact that women are still being forced to fit into the existing male-dominated culture rather than the culture changing to be more inclusive and equal. As one woman explained ‘the hole is still square, so I have to adapt as a round peg!’ In addition, respondents indicated it seems that society programs young males to believe that there is nothing more embarrassing than being ‘bested’ by a girl. This belief, when combined with the assumption that physical jobs are for men, makes it very challenging for some males to accept that women can do the same jobs as they can. For some males, this can be very intimidating and challenging to their personal senses of masculinity. Many women suggested that it is the younger males that they work with who struggle most with accepting them in the field, compared to their older male counterparts who only care about the job being done well and on time, regardless of gender.

**Breaking down assumptions about ‘women’s work’ is challenging**

A number of women indicated that there are stereotypes within the workplace in regards to ‘women’s work.’ Women working in the field commented that despite having the hands-on skills and expertise to perform technical work, they are often assigned administrative tasks as it is assumed that women have better organizational and clerical skills than men. Some women indicated that they have to remind their male counterparts that they are not on the team to take meeting minutes, go for coffee runs or do their paperwork. Many women referenced the challenges they faced when having to prove to their male counterparts that they were just as technically skilled as the men on their teams.

**Overcoming perceptions and misconceptions of the ‘Working Mom’ is on-going**

Working moms explained that having children created a whole new set of misconceptions and stereotypes that they were forced to address and overcome. Working moms cited challenges in receiving promotions, assumptions made about lack of mobility and ability to travel, and misconceptions about interest in continuous development and advancement after having children. For example, some women suggested that they have not been considered for advancement based on assumptions that management has made regarding their childbearing status. These women explained that after becoming mothers they have had to work increasingly hard to prove that they are still dedicated to their jobs and are able to effectively perform their work.

**Relating to the male counterparts can be challenging**

A number of women indicated that being the only female (or one of few) within the workplace can be isolating. These women asserted that men and women are quite different in the way that they interact and the topics that they discuss. As such, it can be challenging for female workers to relate to their male counterparts on a personal level. In addition, some women explained that male supervisors often engage more in social activities (such as going out for coffee or meeting up after work to socialize) with male employees than female employees, which can be alienating.
Breaking through the glass ceiling is a constant struggle

Women suggested that career advancement is particularly challenging within the sector and that women are grossly under-represented in middle and senior management and supervisory positions. Many women suggested that males in senior positions may find it easier to relate to males in junior positions and offer them more guidance and mentorship compared to their female counterparts. Several women explained that they have received mixed messages regarding being vocal and assertive in the workplace – women who are assertive and confident are often labeled as being ‘difficult’ or ‘feisty,’ which is then interpreted negatively. In addition, participants indicated that women are perceived as ‘overly emotional’ and unable to handle stressful situations. As such, many women felt that females are being pigeon-holed into certain departments, groups and positions.

A number of women also indicated that there are still pay differentiations between men and women for work of the same value and that women are often given administrative work tasks when men are assigned to hands on, technical activities.

Functioning in a workplace designed for males is a challenge

A number of the women explained that it can be challenging, as a female, to adapt to workplaces that have been designed for males. Many women described situations in which female washrooms and showers were not initially available for them; they explained the struggles associated with operating equipment and tools that are not ergonomically designed for women; and they expressed the difficulty in finding PPE (personal protective equipment) and work-wear (inclusive of coveralls and work boots) that fit properly. These women indicated that physical structures and equipment have been designed with men in mind and that modification and adaptation is often required.
2.3 **HOW EMPLOYERS CAN RECRUIT MORE WOMEN INTO THE SECTOR**

Research participants were asked to provide feedback regarding what employers can do to recruit and retain more women within the sector. Not surprisingly, many of the responses received by women seeking entry into the industry were echoed by women currently working within the industry. In particular, providing mentorship opportunities, reaching out to students early in their training paths and providing flexibility in schedules were cited as areas requiring improvement. Additional insights provided by women working in the industry included:

**Breaking down stereotypes at a young age**

Many research respondents indicated that stereotypes regarding the differences between men and women and what are considered to be 'male and female jobs' are engrained in our youth at a very young age. As such, it was suggested that the industry needs to work at breaking down the walls created by these stereotypes by increasing education in elementary and secondary schools about the opportunities for both males and females within the electricity sector. Many women felt that these barriers have been broken down for many occupations (e.g., law enforcement and firefighting) and that the same can be done for electricity. Women suggested that having more women present in advertisements and presenting at job fairs would illustrate that women can, and should, be interested in non-traditional roles. Many of the women who participated in this research suggested that if they had seen more females in these roles when they were younger, they may have chosen careers and training paths related to electricity much earlier in life.

**Highlighting successful women within organizations**

Women working within the industry suggested that organizations should capitalize on the female employees that they have to help recruit more women into the sector. It was suggested that successful women should play a role in the hiring process for similar positions. Many women noted that having fellow females involved in the interviewing and hiring process for similar positions may help to ensure that female applicants are reviewed and assessed based on their skills and knowledge and to help curb any bias in the interviewing process.

It was also suggested that successful women working within the industry can be critical members of their employers’ recruitment teams, serving as new faces of the industry and/or the organization at career days, presentations and seminars at elementary and secondary schools, colleges and universities.

**Supporting a work/life balance**

Many women suggested that the traditional scheduling associated with shift-work and overtime is engrained within the industry. However, encouraging more flexibility with time in the office (e.g., allowing employees to begin their shifts later, leave early when needed and make up hours on another work day, etc.) would better accommodate the needs of women with families. It was suggested that women tend to have more family responsibilities (whether from immediate or extended family) and having flexibility would be very attractive to many women. In addition, providing day-care services and allowing women to work from home (when their jobs permit) are also attractive perks to female workers with familial responsibilities.
RECOMMENDATIONS

Throughout the research, a continuum of required support to enhance the attraction, recruitment and retention of women within the electricity and renewable energy sector was identified. Specifically, this continuum includes four (4) critical steps that enhance the successful employment and retention of women in non-traditional occupations.
While not every woman will require additional supports and resources associated with each level of the continuum, our research indicates that all four (4) elements identified are key factors for success.

The following recommendations have been developed through an analysis of successful programming and initiatives currently working to enhance the attraction and retention of women in non-traditional roles and sectors. While each idea presented requires additional research and planning regarding feasibility and scalability, these recommendations are meant to spark discussion and brainstorming among various stakeholder groups. Please note that recommendations are not presented in order of importance/significance.

**RECOMMENDATIONS FOR ENHANCING CAREER AWARENESS**

Research indicates that more work needs to be done to increase the awareness of the multitude of career options and opportunities for women within the electrical and renewable energy sector. Many of the trades and occupations within the sector are performed ‘behind the scenes’ and the general public, by and large, does not have an idea of what these various jobs entail. As one focus group participant suggested, when you think of a ‘carpenter,’ one can picture what this worker does; however, when you think of an ‘electrical engineering technologist,’ the typical person will draw a blank. As such, it is very challenging for a woman to develop an interest or curiosity for careers that she does not know about.

Women surveyed indicated that additional career awareness (in the form of advertising and marketing) would also help to challenge misconceptions and stereotypes of many occupations and trades as being ‘men’s work.’ Women cited that highlighting women in advertising and marketing strategies will help to break down gender stereotypes and to shift society’s view that women should not consider the trades, technology and electricity as a first career option.

**What can EHRC do?**

EHRC could take a leadership role in **coordinating and delivering career/job fairs for the industry** that target women. Considering the current funding climate, we recommend that EHRC explores the possibility of organizing career/job fairs with industry employers, educational institutions and labour groups. This will bridge the identified gap of students needing to connect with employers.
Using a sponsorship-based model, along with fees for booth space, this type of event could address the need to increase career awareness through a cost recovery and/or revenue generating model. Partnering with like-minded organizations (such as the Canadian Apprenticeship Forum, ECO Canada and others) could be very beneficial and attract interest across sectors and industries that employ similar occupations and trades.

RECOMMENDATIONS FOR ENHANCING SKILLS ASSESSMENT AND TRAINING

Research indicates that skills assessment and targeted training are critical factors in job readiness and workplace preparedness for all workers. Career decision making processes and skills assessment programming assists women to discover trades and occupations that would best suit their personal interests, aptitudes and strengths. By identifying strengths and areas for improvement, a development and training plan can be mapped out for each trainee to ensure that they follow the learning path that will best prepare them for their career of choice.

What can EHRC do?

Using the previous National Occupational Standard (NOS) work as a base, develop targeted ‘skills profiles’ for key occupations, based on the new and previously drafted NOS. These ‘skills profiles’ can then be made available to the organizations on the front-lines of providing career counseling, thus better communicating to women the skills and training required for key occupations within the industry.
There is also work to be done in the area of pre-apprenticeship. By working with colleges, governments, and employers, the industry should promote pre-apprenticeship programs directly to women. The research suggests that many females are in fact interested in trade-related occupations; however, they are unsure of where to start and how to pursue such opportunities. A focus on pre-apprenticeship will support targeted skills assessments, help to identify skill development needs early in the process, and assist in clearly defining a training pathway from the start. It is also recommended that any focus on pre-apprenticeship be specific to key occupations in demand (based on EHRC labour market research). This focus will ensure that women have greater opportunities for placement and employment success.

To support and enhance pre-apprenticeship opportunities for women, EHRC will need to work with provincial counterparts to get traction in this area, as apprenticeship is regulated at the provincial governmental level. It is also recommended that EHRC work with groups like the Canadian Apprenticeship Forum, labour groups and educational institutions (who have a vested interest in apprenticeship) to identify funding opportunities and partnership opportunities.

**RECOMMENDATIONS FOR ENHANCING EMPLOYMENT SUPPORT**

Research has indicated that once a woman receives her specific training, the support continuum must continue to ensure that meaningful employment is gained. Many women interviewed throughout the research process indicated that preparing for interviews, developing resumes, approaching employers, marketing their talents and other steps associated with attaining a position in their field can be very challenging and stressful without additional support. In this scenario, efforts need to be made to prepare both new workers and employers for the on-boarding process.

*What can EHRC do?*

EHRC could *develop and launch an Employer Awareness Campaign* that highlights the various programs that are available and to educate employers about labour shortages. Research conducted for the Renewing Futures project indicated that many employers see labour shortages as 'not their problem.' However, employers need to understand that labour shortages are in fact their problem and that augmenting their workforce with women can help to solve the problem.

EHRC could *conduct a comprehensive research study into alternative work models and approaches* across industries to identify promising practices that could be adapted by the electricity and renewable energy sector to accommodate the needs of all workers. In particular, key barriers associated with female employment within the sector should be identified (such as overtime shifts, current scheduling practices, etc.) through key informant interviews with women currently working within the industry and each barrier should be researched in-depth to identify ways in which other industries and sectors are addressing similar issues to enhance the female experience. The resulting research would include examples of promising practices and recommendations for consideration within the industry. It would be imperative to include employers and labour/union groups throughout the research process and on the project steering committee to gauge feasibility and applicability of potential approaches throughout the development process.
EHRC could develop a ‘Women in Electricity’ Seminar Series that could be delivered to industry organizations. Interested employers could engage EHRC to deliver on-site seminars or webinars on one of a series of topics which may include:

- Developing and maintaining an inclusive workplace;
- Coaching and mentoring;
- HR practice to support women in the workplace;
- Community engagement – i.e., what employers can do to encourage more women to pursue careers in electricity (going for high school, for example).

The seminars could be led by EHRC representatives with organizational representatives who already have related programs in place as guest speakers. Personally facilitating the workshops would keep the delivery costs for EHRC low. In addition, engaging organizational representatives as guest speakers would help to foster industry partnerships. Each seminar could also feature a key-note speaker/presentation – such as a women working within the industry who expressed interest in serving as a mentor during the research phase.

**RECOMMENDATIONS FOR ENHANCING MENTORING**

Throughout the research, women indicated that mentorship and sponsorship is critical for the successful recruitment and retention of women in the sector. Many women noted that it was the support and interest that key individuals serving as mentors (both male and female) showed to them during their initiation into the sector that allowed them to adapt and gain confidence in their new roles. These women suggested that without the help of mentors, they would not have stayed within the sector. The primary research conducted suggests that all mentoring (both formal and informal) greatly impacts the experiences of women within the sector and promotes positive outcomes in terms of retention. There are a number of successful mentoring programs within the industry that could be modeled and adapted to meet this need on a more national, sector-wide scale.
What can EHRC do?

EHRC could **develop a series of coaching and mentoring materials** that support employers in providing mentorship to female workers in their workplaces. Generic material that already exists on the topic of coaching and mentoring could be easily adapted and branded for the electricity and renewable energy workforce and could be sold by the EHRC at a nominal fee.

EHRC could **develop a national ‘women in electricity’ networking forum**. Current research has identified organizations and associations that have implemented and/or recently developed networking forums and initiatives as a means to provide mentorship, guidance and support for female workers within the industry. Building upon these networks, EHRC should develop partnerships with these organizations to create a national forum which would reach out to women across the country at a sector-wide, rather than organizational or jurisdictional, level. Through a collaborative partnership, all sponsoring organizations (with EHRC as the program champion) would strengthen the potential of the networks and promote the development and dissemination of resources and supports related to mentorship to the sector as a whole.

**ADDITIONAL PROJECT RECOMMENDATIONS:**

- Over 25 percent of those who participated in the market testing identified an interest in learning more about career opportunities in the renewable energy sector. Should additional funding be acquired, EHRC could consider producing videos profiling women working in renewable energy occupations.

- Continue to develop existing partnerships and develop new partnerships with organizations and associations who share similar goals and objectives. This could involve continuing relationships with Skills Canada and the regional Skills Canada organizations as well as the relationship with Women in Scholarship, Engineering, Science and Technology. EHRC could also look at building partnerships with similar organizations offering conferences and events aimed at introducing young women to different career possibilities.

- The Alberta Forest Products Association has developed a successful partnership with Inside Education, which is a not-for-profit organization that supports teachers and inspires students. The partnership provides professional development (primarily for teachers) via a series of presentations in the classroom, field trips and demonstrations that explains non-traditional occupations in the forestry sector. EHRC could investigate the feasibility of building a similar partnership with Inside Education for the electricity and renewable energy sector.
CONCLUSION

The research conducted for the Bridging the Gap project has shed interesting light on the challenges and successes associated with the attraction, recruitment and retention of women in the electricity and renewable energy sector.

Throughout the research process, consultation with various project stakeholders – inclusive of women seeking entry into the sector, women currently working within the sector, and organizations with programs and initiatives that support female employment in the sector – has led to a deeper understanding of the realities of women seeking employment and working within the sector (both positives and negatives) and more importantly, has resulted in the development of practical recommendations for strategic action that will further enhance the experiences of women and increase female representation within the dynamic and innovative electricity and renewable energy sector.
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