Untapped Potential

Attracting and engaging women in Canadian manufacturing
Who We Are

About Canadian Manufacturers & Exporters
Since 1871, Canadian Manufacturers & Exporters has been helping manufacturers grow at home and thrive around the world. In 2016, CME released Industrie 2030 – a roadmap for doubling Canadian manufacturing activity by 2030. Our focus is to ensure the sector is dynamic, profitable, productive, innovative and growing. We aim to do this by strengthening the labour force, accelerating the adoption of advanced technology, supporting product commercialization, expanding marketplaces and, most importantly, ensuring a globally-competitive business environment. CME is a member-driven association that directly represents more than 2,500 leading companies who account for an estimated 82 per cent of manufacturing output and 90 per cent of Canada’s exports.

CME National Board of Directors Chair Rhonda Barnet, President & COO of Steelworks Design Inc. launched CME's national Women in Manufacturing Working Group in March 2017 as a result of the association’s Industrie 2030 initiative. Chaired by Elise Maheu, Director, Government Affairs, 3M Canada the member-driven working group, which includes women and men representing all sizes of CME member manufacturing firms from across Canada, is dedicated to supporting, promoting and inspiring women to pursue careers in manufacturing.

cme-mec.ca

CME Lead Team:

Mike Holden
Chief Economist
mike.holden@cme-mec.ca

Marie Morden
Director, Partnerships & Stakeholder Relations
marie.morden@cme-mec.ca

© 2017 Canadian Manufacturers & Exporters
Welcome Message

The growth of Canada’s working age population will be almost zero by 2020. For Canadian businesses, this means that recruiting and retaining qualified employees is going to become harder than it is already. In a context where skills and labour shortages already rank as the single biggest concern for Canadian manufacturers, taking action to ensure they have the workforce they need to expand is a vital necessity.

As this report makes clear, women make up less than 10 per cent of skilled production workers across Canada and less than one quarter of science, technology, engineering and math (STEM) workers. There is no larger, more relatively untapped group of talent to work in manufacturing in this country.

As Canada’s development bank, it is our job at BDC to ensure Canadian entrepreneurs have the resources they need to thrive. This is why we are collaborating with CME as the National partner of their “Women in Manufacturing” initiative.

As a member of the Women in Manufacturing Working Group, the goal of this joint initiative will be to attract more women into manufacturing professions so that companies can grow and replace the existing and aging workforce. To do this, we need better information about careers in manufacturing, clearer career progression and opportunities, and stronger education in STEM fields. It also involves changing the perception of manufacturing. Many Canadians still believe that a job in manufacturing is monotonous assembly-line tasks, or work that is done in a dirty, dangerous environment. These preconceptions bear little resemblance to the modern, innovative and technologically advanced manufacturing operations.

Understanding the current realities of women in Canadian industry is a first step to improving female representation in manufacturing. This report is a good start. It provides an overview of the current situation and identifies key issues that need addressing to move forward. We will continue to work with partners and Canadian business owners to find solutions to these problems in the coming months and years.

Our hope is that in a few years, the participation of women in manufacturing will not be a challenge, but rather as a strength, that is powering the competitiveness and growth of Canadian manufacturers internationally.

Lesley Lawrence
Senior Vice President, Ontario
Business Development Bank of Canada
The Need for Increased Female Participation in Manufacturing

A healthy manufacturing sector is critical to Canada’s long-term economic prosperity. However, chronic labour and skills shortages are impeding the sector’s ability to grow and remain globally competitive.

In Canadian Manufacturers & Exporters’ (CME) 2016 Management Issues Survey, businesses stated that attracting and retaining skilled labour was their top challenge. Nearly 40 per cent of respondents reported that they currently face labour and/or skills shortages, and nearly 60 per cent anticipated such shortages within the next five years.

DOES YOUR COMPANY FACE IMMEDIATE LABOUR AND/OR SKILLS SHORTAGES TODAY? DO YOU ANTICIPATE SUCH SHORTAGES TO ARISE WITHIN THE NEXT FIVE YEARS?

<table>
<thead>
<tr>
<th></th>
<th>Today</th>
<th>Within 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>39%</td>
<td>59%</td>
</tr>
<tr>
<td>No</td>
<td>58%</td>
<td>25%</td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td>16%</td>
</tr>
</tbody>
</table>

These shortages are having a major impact on Canadian manufacturers. Nearly 20 per cent of businesses said that a lack of workers is curbing business growth and new product development. They are also foregoing production opportunities as a result. More concerning still, if these issues are left unaddressed, 16 per cent of businesses stated that they will shift production and investment outside of Canada.

IN WHAT OCCUPATIONS DOES YOUR COMPANY FACE THE MOST URGENT LABOUR/SKILLS SHORTAGES TODAY? FIVE YEARS FROM NOW?

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Today</th>
<th>5 years from now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled production workers (welders, machinists, etc.)</td>
<td>63%</td>
<td>75%</td>
</tr>
<tr>
<td>Management</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>Administration and office functions (accounting, human resources, health services, etc.)</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Scientists, engineers, researchers, etc.</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Production support (IT, maintenance, etc.)</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>General labour</td>
<td>45%</td>
<td>38%</td>
</tr>
<tr>
<td>Sales, marketing and customer services</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Women represent a vast and relatively untapped resource that offers a solution to this problem. There are 8.6 million women working in Canada. They make up about 48 per cent of the Canadian workforce, but only 28 per cent of jobs in manufacturing. They hold less than five per cent of jobs in some production-related occupations.
Attracting more women is critical to helping manufacturing companies grow, fill job vacancies, and replace their existing aging workforce. For this reason, CME National Board of Directors Chair, Rhonda Barnet, established a Women in Manufacturing Working Group tasked with identifying how best to improve female representation in manufacturing. The member Working Group, chaired by Elise Maheu, identified three pillars that must support any female engagement strategy:

**Engage and Inspire** – introduce young girls to education in science, technology, engineering and mathematics (STEM) fields, as well as the skilled trades.

**Attract and Retain** – increase the number of women entering and staying in the manufacturing workforce.

**Empower, Support and Accelerate** – help women achieve success in the workplace by breaking down barriers to their personal and professional growth.

To advance this goal, CME and the Women in Manufacturing Working Group built partnerships with the Business Development Bank of Canada, KPMG LLP, Rockwell Automation, 3M Canada, Tenaris, TD and People Corporation to conduct a survey of women currently employed in the sector. Our goal was to learn about how women feel about their experience to date; and to hear their perspectives on how female representation in the manufacturing workforce could be improved.

From those survey results, as well as extensive one-on-one consultations with female business leaders, CME has identified a path forward to improving female representation in manufacturing. This summary paper highlights the main findings from the survey and identifies the key issues and challenges that need to be addressed in order to close the gender gap in manufacturing.

**Tenaris**

As a leader in advanced manufacturing, Tenaris is committed to a diverse workforce. In 2008, we implemented a gender diversity program that later expanded to include all types of diversity. Its intent is to raise awareness, share experiences and increase education of diversity issues. It also includes a flexible work program and ambassador program to support the recruitment and retention of a more diverse workforce. These initiatives have led to infrastructure upgrades in production centres and offices to improve working conditions for female employees as well as courses on how to manage and lead culturally diverse teams available through Tenaris University.

Tenaris is also committed to improving the level of technical education in the communities where we operate to expand access to a more diverse talent pool. In Canada, we provide long-term investments in educational opportunities for local youth to prepare them for technical careers in advanced manufacturing. Our ongoing investments include support for science fairs, robotics programs and post-secondary scholarships as well as the technical education centre and Tenaris Robotics Lab at Sault College. Included in our post-secondary scholarships is the sponsorship of the Tenaris Female Athletic Awards in Sault Ste. Marie.

In 2017 we are proud of the impact our investments are having in the community. Female students from Sault Ste. Marie achieved national recognition in science fair and robotics competitions, and we awarded post-secondary scholarships to 30 females (>50 per cent of the total awarded). Our employees volunteer in the community, and serve as role models and mentors for young females to encourage their interest in STEM fields.
Women in Manufacturing Today

Women are significantly under-represented in the manufacturing workforce. There are about 1.7 million people employed in manufacturing today. Of that total, only 28 per cent of those jobs (about 476,000 positions) are held by women.

FEMALE SHARE OF THE CANADIAN WORKFORCE (in %)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>40</td>
<td>45</td>
<td>46</td>
<td>48</td>
</tr>
<tr>
<td>1987</td>
<td>43</td>
<td>43</td>
<td>44</td>
<td>45</td>
</tr>
</tbody>
</table>

More concerning is that the situation is not improving. Over the last 30 years, the share of total jobs held by women across all industries rose from 43 per cent to 48 per cent. In manufacturing, however, there has been no improvement at all. The share of manufacturing jobs held by women has remained essentially flat, fluctuating between 27 and 29 per cent since the mid-1980s, with no clear trend in any direction.

Female under-representation is especially a problem in certain key production-related occupations. Women hold less than 4.5 per cent of all skilled trades jobs across Canada. They also account for just 8.3 per cent of all jobs in transportation and heavy machinery operation, as well as 7.2 per cent of jobs in supervisory and central control operation positions. Finally, women account for fewer than one in four jobs in STEM fields.

Unless direct action is taken, the share of manufacturing jobs held by women is more likely to decline than it is to increase; fewer and fewer young women are choosing to work in manufacturing. In the early 1980s, women accounted for 34 per cent of all manufacturing workers under the age of 25. That share has since fallen to about 25 per cent. In 2016, there were fewer than 36,000 young women working in manufacturing – one quarter the number from 40 years earlier.

WOMEN AGED 15-24 WORKING IN MANUFACTURING (in 000s)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>60</td>
<td>90</td>
<td>70</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>1986</td>
<td>80</td>
<td>120</td>
<td>90</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>1996</td>
<td>100</td>
<td>150</td>
<td>120</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>2006</td>
<td>120</td>
<td>180</td>
<td>150</td>
<td>120</td>
<td>90</td>
</tr>
<tr>
<td>2016</td>
<td>140</td>
<td>210</td>
<td>160</td>
<td>140</td>
<td>100</td>
</tr>
</tbody>
</table>
WOMEN ARE UNDER-REPRESENTED IN KEY MANUFACTURING OCCUPATIONS:

4.4% of jobs in industrial, electrical and construction trades

4.5% of jobs in maintenance and equipment operation trades

8.3% of jobs in transportation and heavy equipment operation

15.7% of jobs in machine operation
Survey of Women in Manufacturing

Attracting more women into manufacturing professions is critical to helping companies grow and to replace the existing and aging workforce. To do this, we must better understand the current realities of women in Canadian industry.

To capture that information, CME, in partnership with the Business Development Bank of Canada, KPMG LLP, Rockwell Automation, 3M Canada, Tenaris, TD and People Corporation conducted a survey of women currently employed in manufacturing. The survey consisted of 30-35 questions and asked women about themselves, their current jobs, and their views (and those of their female friends and family) about manufacturing in general. The survey took place from August 30th to September 28th, 2017 and received 826 responses. Of those, 77.5 per cent (640 individuals) were women.

KEY SURVEY RESULTS

- Women in manufacturing are generally happy with their career choice
- Manufacturing has much to offer female workers
- Obstacles to increasing female representation can be overcome

Main Finding: Women in manufacturing are happy with their career choice

If they could restart their careers all over again, 80 per cent of women would consider remaining in manufacturing. The share is even higher for women under 35 years of age.

Because women in manufacturing tend to like their jobs, they are also confident that more women would choose to work in the sector if they had a better understanding of what manufacturing work was like. Only 9 per cent of female respondents thought that exposing more women to manufacturing work would dissuade them from considering a job in that sector. Younger women and those in production-related jobs were even more convinced that other women would pursue manufacturing work if they had more information about it.

DO YOU THINK THAT IF WOMEN HAD MORE EXPOSURE TO MANUFACTURING WORK, THEY WOULD BE MORE LIKELY TO CONSIDER A CAREER IN THAT SECTOR? (female respondents, in %)

[Chart showing survey results]
More than half (59 per cent) of female respondents said they would encourage their daughters or female family members to consider a career in manufacturing. About 30 per cent chose to remain neutral and allow the individual to make their own decisions. Only 10 per cent said they would try to discourage such a choice.

**WOULD YOU ENCOURAGE A DAUGHTER OR FEMALE FAMILY MEMBER TO PURSUE A CAREER IN MANUFACTURING?**
(female respondents, in %)

What is it about manufacturing work that women enjoy? They like the fact that manufacturing provides them with opportunities to learn, grow and challenge themselves, while earning good wages and salaries in the process.

---

**Rockwell Automation**

Rockwell Automation is the world’s largest company dedicated to industrial automation and information. Headquartered in Milwaukee, Wisconsin, Rockwell Automation employs approximately 22,000 people serving customers in more than 80 countries.

Built on a culture of innovation, we deliver technology and solutions that make our customers more productive, our world more sustainable, and our employees proud. We are committed to supporting smart, safe and sustainable manufacturing around the world while honouring our social responsibility and sustainability principles. At our core, we pledge a corporate responsibility of driving a culture shift that advances diversity and inclusion in the workplace. One example of our dedication is being selected as the winner of the 2017 Catalyst Award for the transformation and results of our Culture of Inclusion journey. The Catalyst Award honors innovative organizational approaches that address the recruitment, development and advancement of women and have led to proven, measurable results. Founded in 1962, Catalyst is the leading nonprofit organization committed to accelerating progress for women through workplace inclusion. For more information, we encourage you to visit their website.

Visit the Rockwell Automation website to learn how we are building on our legacy of technology leadership. Discover why our brands are recognized globally for quality, innovation and performance – created in a workplace where all employees can and want to do their best work every day.
In fact, one of the main benefits to production-related manufacturing work is that the pay gap between men and women is significantly lower than it is for other industries. On average, women earn about 76 cents on the dollar compared to men. That figure rises to over 80 cents for most production-related jobs in manufacturing, and in STEM-related fields is more than 85 cents.

**MALE-FEMALE PAY GAP IS NARROWER IN PRODUCTION-RELATED MANUFACTURING JOBS**

(female average weekly earnings per dollar of male earnings, 2016)

**Breanne Curran’s Story**

People are our only business. People Corporation helps organizations prosper by enabling their employees to grow and succeed at every stage of their career. We are a national provider of group benefits, group retirement and human resource services. People Corporation is honored to share Breanne Curran’s story, a woman in manufacturing...

Since I was young, I knew that I wanted to be a machinist. I never imagined how difficult it would be! When I graduated high school I applied to over 20 companies looking to enter the manufacturing industry. I was turned down by all 20 companies. I finally was hired as an apprentice for machining. For 1.5 years I was not allowed to learn or operate machinery, I was cleaning and emptying garbage cans. My male counterparts, however, were given the opportunity. I was at the point of giving up!

To my surprise I was approached by my current employer, ABS Machining Inc. They offered me a “paid” three-year apprenticeship. My research showed that ABS Machining Inc. had state-of-the-art facilities (six in total). They specialized in the machining and fabrication of large, complex components for a number of industries. I won the jackpot!

Myself and three other students/apprentices received one-on-one training for two years. I am in my third year currently, now on the shop floor being mentored by highly-skilled CNC machinists. I am now proficient in a number of CNC controls (Fanuc, Tosmuc, Siemens 840D).

My message to other females looking to enter the trade is to never give up, no matter what obstacles get in the way! Work hard and you will succeed!
Workplace challenges facing women

1. Sexism and a male-centric workplace culture

The biggest challenge facing women in manufacturing is the male-centric work culture – a direct result of the fact that women make up less than 30 per cent of the manufacturing workforce.

**WORKPLACE CULTURE CHALLENGES**

32% of women say that a male-centric workplace culture is what they like least about working in manufacturing

28% think that steps are needed to make the workplace culture more welcoming to women

28% have quit a manufacturing job in part because of sexism/discrimination

30% think that women avoid manufacturing because of the current gender imbalance

Women also pointed to a number of more specific problems. When asked if they were treated fairly and equally in the workplace, close to half (about 46 per cent) felt that women need to work harder than men to prove themselves. Although only a small number of men filled in the survey, the vast majority believed that there was no workplace discrimination between the sexes.

The fact that men do not see a problem is itself part of the problem. Women need their male colleagues to understand their concerns and be part of the solution.

**DO YOU BELIEVE THAT MEN AND WOMEN ARE TREATED FAIRLY AND EQUALLY IN YOUR WORKPLACE?**

(\% of respondents)

On a related note, a significant share of women sees a persistent wage gap between themselves and their male colleagues. While nearly 70 per cent thought that wages were comparable for men and women working at similar jobs with similar degrees of experience, about 31 per cent disagreed.

**WHO SEES A WAGE GAP IN MANUFACTURING?**

38% of women in office jobs

28% of women in production-related jobs

4% of men
Opportunities for promotion and advancement

Women in manufacturing are ambitious and strive to advance their careers within the sector. More than three quarters of women surveyed either aspired to a management role within their company or were in such a position already. However, they also see a lack of promotion opportunities as being a drawback to working in a manufacturing field. In fact, this is a major reason why women leave manufacturing jobs.

WHY DO WOMEN QUIT MANUFACTURING?

- 41% Found a job with better pay/benefits
- 38% A lack of promotion/advancement opportunities at the previous job
- 41% Found a job with better work-life balance

WORKPLACE CULTURE CHALLENGES

- Two thirds of women aspire to management/leadership positions BUT
- one in five thinks the company is not supporting their efforts
- 37% see a promotion bias favouring men
- 61% say that women are under-represented in management positions
Work-life balance challenges

Many women working in manufacturing struggle to find an appropriate work-life balance. In fact, for women who would not explicitly encourage their daughters to pursue a career in the sector, work-life balance issues topped the list of reasons why.

Work-life balance issues keep women from considering manufacturing jobs

- **27%** of women in manufacturing say that a lack of work-life balance is a problem today.
- **41%** of women have quit a manufacturing job for this reason.
- **26%** believe that they cannot meet family obligations without damaging their career.

A related issue is flexibility to meet family commitments. More than a quarter of women said that they are unable to meet those commitments without affecting their future career advancement. A similar share said that they would not encourage their daughters to pursue a manufacturing career for that same reason.

These parallel issues are also a problem when it comes to female worker retention. More than 40 per cent of women say that they, or other women they know, have quit a manufacturing job over work-life balance problems and 30 per cent quit because they were seeking greater flexibility.

Work-life balance is especially a concern for younger workers. Women under 35 were more likely than others to see unavoidable family commitments as potentially hurting their career advancement opportunities.

3M

At 3M, the “I’m in. Accelerating Women’s Leadership” initiative has accelerated progress for women leaders in business and STEM (science, technology, engineering and math) in the past five years with global results that include increasing the percentage of women at the director level from 18.2 per cent to 23 per cent; the percentage of women at the vice president level and above grew from 16.7 per cent to 24.2 per cent; the representation of women in technical and lab manager roles jumped from 19.1 per cent to 23.9 per cent; and, the percentage of women manufacturing facility managers grew from 11.4 per cent to 17.4 per cent.

Around the world, women leading 3M subsidiaries increased nearly 10-fold from 2.4 per cent to 22.7 per cent, and women’s representation on the executive team - those reporting to the CEO - increased from 12.5 per cent to 20.0 per cent.

While 3M’s initiative focuses on women in the management pipeline and across the company, it is part of a broader “I’m in.” organizational approach to engage and develop all 3M people worldwide. Programs to support overall inclusion, like the network of 84 women’s leadership chapters that align activities with global priorities championed by the executive steering team, and the formal leadership development programs like, 3M Leadership Way emphasizes continuous learning.

Encouraging everyone to have a formal development plan that includes stretch projects and opportunities to take on different roles, training and coaching as well as the FlexAbility program that supports a flexible workplace culture, all contribute to 3M’s culture where all individuals can succeed.
General perception of manufacturing

Manufacturing has a lingering and outdated reputation for being dark, dirty, and dangerous. This stigma — no matter how inaccurate it may be — was reinforced by our survey findings. Only about 39 per cent of women said that their female friends and family had a very positive or somewhat positive view of manufacturing work. By contrast, 53 per cent had a neutral or negative view.

MANUFACTURING HAS AN IMAGE PROBLEM

Only 39% of women say that their female friends have a good impression of manufacturing.

43% think other women avoid manufacturing because of its poor reputation.

40% think that improving the image of manufacturing would attract more women.
Education in STEM and the skilled trades

A major reason why there are so few women in manufacturing is that the supply of qualified workers is relatively small. Enrolment and credential statistics show clearly that women are heavily under-represented in the education and training programs that typically lead to production-related manufacturing employment. Survey respondents highlighted this as a major factor behind the lack of women in manufacturing today.

A full half of those surveyed stated that one of the main reasons there are relatively few women in the manufacturing workplace is that school-aged girls are not encouraged to consider manufacturing as a career option. Moreover, when asked how to attract more women to manufacturing, the top response by a considerable margin was to improve efforts to encourage girls to enroll in STEM fields and skilled trades programs.

FEMALE ENROLMENT IN STEM AND SKILLED TRADES NEEDS TO INCREASE

50% of women say that school-aged girls are not encouraged to consider manufacturing as a career option

43% say that more effort is needed to recruit girls to STEM and skilled trades programs

Only 14% say that girls are encouraged to pursue a career in the skilled trades
The Path Forward – Attracting more women to manufacturing occupations

Survey results point to a clear path forward for improving female representation in manufacturing-related occupations. Respondents identified four action areas and five Strategic Imperatives within those areas. Making progress on these imperatives is the key to closing the gender gap in manufacturing.

1. Women need to see other women succeed
   In the same way that Olympic champions inspire children and young adults to work hard and achieve their goals, female leaders in manufacturing inspire other women to follow in their footsteps. Nearly 37 per cent of survey respondents said that one of the most effective ways to attract more women to manufacturing was for businesses to have more visible female role models.

   Young women in particular are looking for inspiration and leadership. Women under 35 were considerably more likely to say that female role models would help attract more girls to manufacturing professions.

   STRATEGIC IMPERATIVE: More high-profile female role models are needed to inspire and encourage young women to pursue a career in manufacturing.

2. Stubborn misconceptions about manufacturing need to be addressed
   Close to 40 per cent of women believe that addressing the negative perception of manufacturing would have a major impact on improving female representation in the sector.

   Nearly 61 per cent of women surveyed believe that other women would be more likely to consider a job in manufacturing if they had a better idea of what manufacturing work was like. At the same time, however, people seldom choose a profession based on an industry; they choose it based on a certain skill set. An individual studies welding in order to become a welder, not because they want to work in a specific metal fabrication business.

   As such, efforts to raise awareness about the benefits of a manufacturing career need to focus on what women find attractive: interesting and challenging work. Efforts to recruit women into manufacturing need to focus on the jobs within manufacturing – especially the skilled trades and STEM professions.

   STRATEGIC IMPERATIVE: Young women need more exposure to modern manufacturing facilities to gain a more accurate perspective on the career opportunities available to them. Those efforts need to focus on occupations within manufacturing rather than on the sector itself.

3. Girls need to be encouraged to enter skilled trades and STEM-related education programs
   Efforts to recruit women into production-related manufacturing jobs have, at best, limited success because there are too few women with the right training and education. Businesses are actively looking to recruit more women, but they find that few ever even apply. The labour pool is simply too small.

   What is needed, rather, is to boost efforts to improve female enrolment in relevant education and training programs. Only by first increasing the labour supply can recruitment efforts be successful. This requires doing more to encourage young girls to pursue their studies in STEM fields and in the skilled trades. Nearly 43 per cent of women surveyed think that improving efforts to recruit girls to STEM and skilled trades programs is critical to closing the gender gap in production-related occupations.

   STRATEGIC IMPERATIVE: Efforts to encourage young girls to pursue an education in STEM fields and/or the skilled trades need to be improved.
4. Businesses need to create a more inclusive workplace culture

Women enjoy working in manufacturing, but point to challenges in two specific areas. These need to be addressed if the gender gap is to be closed.

The first of these is the gender gap itself. There is a chicken-and-egg problem in manufacturing. Survey results are clear: The existing gender imbalance discourages women from considering a career in manufacturing. That creates a self-perpetuating cycle whereby women avoid manufacturing jobs because there are not enough women in manufacturing.

This, in turn, contributes to a number of workplace challenges highlighted above:

- A male-centric workplace culture;
- Issues of sexism and discrimination;
- The sense that women must work harder to prove themselves; and
- A lack of recognition by men of the scope of the challenges facing women.

**STRATEGIC IMPERATIVE:** Businesses need to hear the concerns of women and take steps to make their workplace culture more inclusive.

One of the main factors underpinning these results is the shift work associated with many manufacturing plants. Many women in a caregiving role have a difficult time working shifts outside of regular daytime hours because of their family obligations. According to one large manufacturer, women are 80 per cent more likely to self-select themselves out of applying for a job as soon as they realize that shift work is required.

There is no easy solution to the shift work problem, or to the overarching issue of the competing demands that women face in balancing their career aspirations with their personal responsibilities. However, businesses need to explore options and best practices to find a way to address these concerns while also remaining competitive and profitable.

**STRATEGIC IMPERATIVE:** Businesses need to find creative ways to improve work-life balance for their employees and to accommodate both women and men who have unavoidable family obligations.

Second, to attract more women to manufacturing, businesses need to explore ways to improve working conditions. In particular, many women struggle with finding an appropriate balance between work and their personal lives, including their unavoidable family commitments.
Conclusion and Next Steps

Women are under-represented in the manufacturing workforce. They account for just 28 per cent of manufacturing jobs and their representation in some production-related fields is in the single digits. Moreover, the problem is getting worse, not better. Youth employment trends indicate that fewer and fewer young women are choosing a career in manufacturing.

This is a problem both for women and for manufacturing businesses. Women are losing out on rewarding career opportunities, while businesses continue to struggle with chronic labour and skills shortages.

This report offers the first step towards a long-term solution to those related problems. Through our survey of women in manufacturing, Canadian Manufacturers & Exporters has identified five Strategic Imperatives – areas where action is needed in order to improve female representation in manufacturing. These are:

1. More high-profile female role models are needed to inspire and encourage young women to pursue a career in manufacturing.

2. Young women need more exposure to modern manufacturing facilities to gain a more accurate perspective on the career opportunities available to them. Those efforts need to focus on occupations within manufacturing rather than on the sector itself.

3. Efforts to encourage young girls to pursue an education in STEM fields and/or the skilled trades need to be improved.

4. Businesses need to hear the concerns of women and take steps to make their workplace culture more inclusive.

5. Businesses need to find creative ways to improve work-life balance for their employees and to accommodate both women and men who have unavoidable family obligations.

The next, and far more important, step is to develop solutions around these strategic directions. In the coming months, CME will be actively engaging with businesses, governments and other stakeholders to do just that.

However, progress in many of these areas will not come from policy solutions, but from business action. What, then, can businesses do in the short term to attract more women?

First, they can start by considering their own workplace culture and asking hard questions about inclusivity. Women in manufacturing have clear opinions on the frustrations and challenges associated with working in a male-dominated environment. Their perspectives need to be heard, considered and acted upon. For their part, men need to become more involved in these issues and become part of the solution.

Second, businesses can share their success stories. Whether promoting the accomplishments of their female employees, or their successes in recruiting women, these best practices need to be communicated.

Third, research suggests that women are attracted to organizations with a positive reputation or a mission that aligns with their personal values. Top-performing young women (and men) are more likely to want to work for companies they believe are focusing on societal or mission-driven problems. If companies can better communicate their values and how their products are impacting peoples’ lives in a positive way, they will attract more top female talent.

Finally, businesses can look for opportunities to become more involved in “open doors” events and school programs that bring young girls and boys into a manufacturing facility. Exposure to the kinds of work available can be the most effective recruitment tool of all.

These short-term steps will complement our longer-term efforts. CME looks forward to working with our partners to improve female representation in manufacturing and the widespread benefits to all Canadians that will result.
Thank you to our Partners

CME’s Women in Manufacturing Working Group members and national partners share our vision to support, promote and inspire women in manufacturing in Canada, and have helped us throughout this process by defining our areas of focus and contributing to the research. Like CME, they believe that a strong Canada can and must have a strong manufacturing sector at its heart that includes diversity in the workplace. These individuals and companies have been instrumental in creating this action plan to improve female representation in manufacturing. A special thanks to:

Women in Manufacturing Working Group Members:
Elise Maheu, Director, Government Affairs, 3M Canada and Chair of CME’s Women in Manufacturing Working Group
Rhonda Barnet, President & COO, Steelworks Design and Chair of CME’s National Board of Directors
Sylvie Bergeron, Country HR Manager, ABB inc. in Canada
Gillian Briscoe, Human Resources Manager, Ford Motor Company of Canada
Tammy Brown, National Industry Leader, Industrial Markets, KPMG LLP
Peng-Sang Cau, President & CEO, Transformix Engineering Inc.
Cathy Gillespie, Chief Financial Officer, Palliser Furniture Upholstery Ltd
Lesley Lawrence, Senior Vice President, Ontario, Business Development Bank of Canada
Myriam Levasseur, VP Operations & Logistics, Suncor Energy
David McHattie, VP Institutional Relations, Canada, Tenaris
Chris McLean, Manager – Human Resources (Workforce Planning, Recruitment, Training and Development), Toyota Motor Manufacturing Canada, Inc.
Tessa Myers, Vice President, North America Sales, Services and Solutions, Rockwell Automation
Rosalind O’Brien, Quality & Logistics Manager, Pratt & Whitney Canada
Catherine O’Reilly, Director, Human Resources, Bombardier
Angela Pappin, Vice President, Technology, ArcelorMittal Dofasco
Kim Westenskow, Managing Director, Boeing Canada Operations Ltd.

Women in Manufacturing National Partners

Women in Manufacturing Industry Partners

Canadian Manufacturers & Exporters
Untapped Potential

Attracting and engaging women in Canadian manufacturing