

Closing the Talent Gap

Mobilizing STEM Trained Women to Strengthen Critical Industries

Why this matters for technology leaders

Canada's critical infrastructure sectors—energy, transportation, construction, utilities, natural resources, and the digital systems that support them—face growing labour shortages as demand for advanced STEM and technology skills rises. STEM trained women represent a large, underused talent pool. Increasing their participation can strengthen workforce stability, boost productivity, and increase innovation.

Women show strong interest in STEM roles. Structural and cultural barriers—not a lack of motivation—drive their underrepresentation and limit advancement.

Key findings

1. Women want impact, but systems block them

Women in our study pursue STEM roles because they offer meaningful impact, competitive pay, stability, and opportunities to use technical skills. Women value purposeful work and visible societal contribution more than men do.

“As someone who's been trained in science and technology, I think I should use my expertise and my skill sets to help people out there.”

Woman, utilities sector



However, women report less stable employment and leave these sectors at higher rates. Only about one quarter of women surveyed reported stable employment, compared with more than one third of men.

2. Informal networks shape advancement and exclude women

Career progression in men dominated, STEM intensive sectors often depends on informal sponsorship, personal networks, and visibility with decision-makers. These pathways remain unclear and largely inaccessible for many women.

Women cite limited access to influential networks, unclear promotion criteria, and a lack of guidance on how to advance. Mentorship from women leaders helps women navigate culture, gain sponsorship, and stay in the sector. Yet the low share of women in leadership restricts access to these mentors and reinforces perceptions of a ceiling.

3. Work-life pressures drive disproportionate exits

Work-life balance remains a major retention challenge. Women leave these sectors due to these pressures at nearly twice the rate of men. The risk rises to three times more likely for women caregivers.

Women caregivers experience fewer uninterrupted employment periods and leave the labour force more often. Rigid schedules, site based expectations, and inflexible role designs intensify these pressures, even in technology enabled roles that could support hybrid or flexible work.

“Having a kid is a death sentence for a woman in STEM.”
 Woman, utilities sector

4. Normalized harassment imposes real costs

Nearly one in four women surveyed reported workplace sexual harassment—more than double the rate among men. Many women described harassment as normalized, under-reported, and largely unaddressed by leadership.

These conditions undermine recruitment investments, accelerate attrition, and weaken employer reputation in a competitive technology labour market where psychological safety remains a baseline expectation.



Actionable insights to advance women's participation

1. Reframe recruitment around impact and visibility

- Highlight women leaders and technical experts across product, infrastructure, and platform roles.
- Connect technology work to tangible societal outcomes, such as sustainability, mobility, housing, and energy reliability.
- Invest in early stage STEM pathways—K-12 outreach, internships, and co ops—and ensure girls and young women see visible role models.

2. Redesign work for flexibility and retention

- Normalize hybrid work, remote options, and flexible schedules when technically feasible.
- Ensure hiring and promotion practices do not penalize non-linear careers or caregiving related interruptions.
- Support access to childcare and family resources to protect productivity and retention.

3. Make advancement transparent and accountable

- Create formal criteria for promotions, high value project assignments, and leadership pathways.
- Audit advancement outcomes for gender disparities and correct them proactively.
- Build structured mentorship and sponsorship programs and distribute responsibility across leaders rather than concentrating it on the few women at the top.

4. Treat workplace safety and culture a core infrastructure

- Implement confidential reporting systems with clear consequences for harassment.
- Hold leaders accountable for culture by linking performance metrics and incentives to progress.
- Communicate zero tolerance policies clearly and consistently across the organization.

For the full research, see our impact paper [*Act Now or Fall Behind: Mobilizing STEM Trained Women to Strengthen Critical Industries.*](#)

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