

THE ENGINEERING PROFESSION'S POSITION

- Diversity in engineering means engaging the best minds in the profession, which includes women and Indigenous peoples.
- Engineers Canada believes that diversity is vital for the sustainability of the engineering profession.
- Increased diversity within the engineering workforce provides significant benefits to Canadians by delivering a solution to overcoming skills shortages, increasing innovation capacity and productivity.

The issue

Women make up more than half of the Canadian population but are significantly underrepresented in the engineering profession; 13 per cent of practicing engineers and 20 per cent of undergraduate engineering students are women. Indigenous participation in engineering is also low. Indigenous peoples make up less than one per cent of both the profession and undergraduate students in engineering studies. Although all Canadians should have the same opportunities to enter into engineering, accessibility and feasibility are not the same for all demographics; largely due to systemic barriers that disproportionately impact underrepresented groups. The engineering profession can better understand and, therefore, protect the public interest, if it is representative of the demographics of the Canadian public.

This means leveraging the best talent from all parts of society, which adds value to employers, increases the production of creative solutions, and provides a deeper understanding of clients' needs. Diverse teams and workplaces are more creative, cognitively flexible, collaborative, and productive. The profession requires diverse problem-solvers to address those challenges in the public's interest and to promote Canada's innovative capacity.

How Engineers Canada has contributed

Engineers Canada is committed to approaching systematic problems by finding key programs and

partners with which to align ourselves. Engineers Canada works to promote equity and diversity to attract and retain individuals in the engineering profession who reflect the demographics of Canadian society.

Some of Engineers Canada's initiatives that support diversity include:

- The creation of Engineers Canada's Equitable Participation in Engineering Committee, which consists of professionals with subject matter expertise and who advance Engineers Canada's work related to youth, women, and Indigenous peoples.
- [Reaching 30 by 30](#) - Engineers Canada's initiative to raise the percentage of newly licensed engineers who are women to 30 per cent by the year 2030, through the creation of a nationally representative network of stakeholders from regulators, associations, industry, and academia working to increase the number of women in engineering.
- Conducting a series of stakeholder consultations in 2019 to inform the design of a diversity strategy, with a focus on women and Indigenous peoples' participation in engineering.
- The creation of the planning resource guide [Managing Transitions: Before, During and After Leave](#), which outlines best practices for employees and employers managing maternity or parental leave in Canada's engineering and geoscience professions.

- The creation of [*Indigenous Peoples' Access to Post-Secondary Engineering Programs: A Review of Practice Consensus*](#), which supports the development of engineering access programs for Indigenous peoples across Canada. Engineers Canada has identified programs that increase Indigenous peoples' access to engineering and is working towards the expansion of these programs to raise the profile, as well as improve the image, of the engineering profession in Indigenous communities.
- Supported the creation of the Canadian Indigenous Advisory Council (CIAC) to the American Indian Science and Engineering Society (AISES). CIAC provides advice to improve AISES' program for delivery in Canada.
- Supported the creation of the new Canadian region of AISES, named .caISES, which works to provide support, mentorship, and networking opportunities for Indigenous peoples in STEM

Additionally, Engineers Canada supports newcomers in Canada by providing a [Roadmap to Engineering](#), which holds practical information about what's involved in becoming part of the Canadian engineering profession.

Engineers Canada also provides strategic advice and national best practices to provincial and territorial engineering regulators to support the overarching goal of a diverse, inclusive, and representative engineering profession. Through the Canadian Engineering Qualification Board and the Canadian Engineering Accreditation Board, Engineers Canada has supported the engineering regulators to ensure that standards for entry to the profession and requirements for continuing competence and ethics are applied fairly to all.

Recommendations to the federal government

To serve the economy as well as Canadian society at large, the federal government must support the profession's efforts to attract and retain talented individuals from Canada's diverse population. This includes funding outreach, access, bursaries,

mentorships, as well as work-integrated-learning opportunities that encourage members of underrepresented groups, specifically women and Indigenous peoples, to pursue and remain in careers related to engineering.

How Engineers Canada will contribute

Engineers Canada will continue to support the profession in attracting and retaining qualified individuals from underrepresented groups, specifically women and Indigenous peoples, into the profession. We will continue to collaborate with the provincial and territorial engineering regulators by providing strategic advice and best practices to inform local action.

Specifically, we will:

- Continue to promote and enhance 30 by 30 and other diversity initiatives. This includes working with the federal government and keeping the government and partners informed about what is needed.
- Consult with engineering stakeholders on the work that can be done to address the Truth and Reconciliation Commissions' 94 Calls to Action, as they might relate to the engineering profession.
- Support the increased participation of Indigenous peoples in the engineering profession.
- Support staffers at post-secondary institutions who are responsible for supporting Indigenous students in engineering programs.
- Continue to be a member of the CIAC to offer advice to AISES' programming in Canada.
- Continue supporting the gathering of AISES' and facilitate participation by Indigenous students.
- Work with industry and other stakeholders to provide leadership in creating a welcoming work environment for all engineers.