

## THE 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, increased innovation capacity, and a greater return on resource investment.

### The issue

The engineering profession believes that it should be reflective of the diversity in Canadian society. Currently however, several groups are underrepresented in engineering, notably women and Indigenous peoples. Females make up more than half of the Canadian population but comprise less than 14 per cent of practising licensed engineers and 20 per cent of undergraduate engineering students. It is believed that Indigenous peoples make up less than one per cent of both the profession and undergraduate students in engineering studies. Although all Canadians 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. The engineering profession will be best situated to solve the engineering challenges of the future if it is representative of Canada's diversity.

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.

Engineers will play a key role in solving Canada's future challenges—from integrating emerging technologies, to mitigating the effects of climate

change on infrastructure and protecting our water resources. The profession will require diverse problem-solvers to tackle those problems in the public interest.

### How Engineers Canada has contributed

The engineering profession 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 in order to attract and retain individuals in the engineering profession who reflect the demographics of Canadian society.

### Some of Engineers Canada's initiatives to support diversity include:

- Reaching 30 by 30, Engineers Canada commitment to raising the percentage of newly licensed engineers who are women to 30 per cent by the year 2030.
- 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.

- Being a critical voice in 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.
- 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.

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 in order 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 entrance to the profession and requirements for continuing competence and ethics are applied fairly to all.

## Recommendations to the federal government

In order to serve the economy as well as Canadian society at large, governments must support the profession's efforts to attract and retain talented individuals from Canada's diverse population. This includes taking the initiative to fund 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 persist 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 champion 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.
- Set a goal for the 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.
- Work with industry and other stakeholders to provide leadership in creating a welcoming work environment for all engineers.