

Submission to the Standing Committee on Finance in Advance of Budget 2025

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Recommendation 1: As the Government of Canada invests in major infrastructure and national defence projects, ensure that engineers are properly involved in engineering-related procurement, design, and implementation decisions.

Recommendation 2: As the Government of Canada invests to streamline housing construction across the country, ensure that engineers are properly consulted and embed the foundational principles of resiliency, climate change mitigation and adaptation, energy efficiency, and accessibility.

Recommendation 3: Review the existing qualification standards for engineers in the public service to ensure the licensure of public servants where required by provincial or territorial legislation.

Recommendation 1: As the Government of Canada invests in major infrastructure and national defence projects, ensure that engineers are properly involved in engineering-related procurement, design, and implementation decisions.

All levels of government have a responsibility to provide predictable funding for the design, construction, and maintenance of safe and resilient public infrastructure throughout its full life cycle. This necessitates adopting a long-term perspective and conducting comprehensive life cycle analyses, recognizing that investing in infrastructure today will yield benefits for future generations. It also requires a strategic approach that prioritizes projects that are essential to Canada's economy and national security.

Engineers Canada therefore welcomes recent commitments by the new federal government to invest heavily in and streamline the regulatory approval process for major infrastructure projects in the national interest, particularly projects related to national defence. As the government implements these commitments, it is critical that it recognize the essential role engineers play in ensuring public safety and the public interest.

With the adoption of Bill C-5, the Free Trade and Labour Mobility in Canada Act and the Building Canada Act, alongside major fiscal commitments toward national defence equipment, personnel, and infrastructure, Canada has an opportunity to grow our economy and enhance our security. That said, it is critical that the government take a deliberate approach to these policy decisions and investments, never compromising public safety for the sake of speed. With that in mind, Engineers Canada offers the following recommendations:

- Ensure that all engineering decisions required by the Government of Canada during the
 identification, procurement, development, design, and implementation of major
 infrastructure projects are made by engineers who are licensed by the provincial or
 territorial regulator in the jurisdictions where the work is taking place.
- Work with provinces and territories to promote mutual recognition and national labour mobility while respecting the fundamental mandate of provincial and territorial engineering regulators to protect the public.
- Focus significant resources on modernizing Canada's ability to produce and transmit energy to support goals related to GHG emissions and to safeguard against risks to public health and safety.

By building professional accountability into all federal engineering decisions, advancing labour mobility for engineers, and investing in Canada's capacity to produce and transmit energy, the Government of Canada can lay the foundation for a stronger economy and strengthen our national security.

Recommendation 2: As the Government of Canada invests to streamline housing construction across the country, ensure that engineers are properly consulted and embed the foundational principles of resiliency, climate change mitigation and adaptation, energy efficiency, and accessibility.

As the government works to streamline housing construction across Canada, it is essential to recognize the important role engineers play in the building process. Engineers are responsible for developing and updating building codes. They also ensure that various development scenarios align with those codes, meet local infrastructure requirements, and accommodate user- and site-specific engineering needs.

Provincial and territorial engineering regulators hold engineers accountable in this work to keep Canadians safe. In areas that may fall outside of provincial jurisdiction, like federal housing initiatives, housing on federal lands, and conversion of federally owned buildings, engineers are equally important. With that in mind, Engineers Canada offers the following considerations for future infrastructure investment that will directly enable new housing construction:

- Work with provinces and territories to ensure the adoption of new resiliency and climate change adaptation objectives by <u>incorporating these objectives</u> into the National Building Code.
- Ensure that federal funding through the Canada Housing Infrastructure Fund enhances the resiliency of the built environment, including flood-proofing, protection against extreme heat and cold, air quality protection, wind-resistant design, storm protections, efficient water and wastewater systems, and other necessary factors for resiliency.

By encouraging the adoption of resiliency and climate change adaptation objectives into building codes and ensuring that federal infrastructure funding support resilient building practices, the federal government can help achieve a prosperous and sustainable future.

Recommendation 3: Review the existing qualification standards for engineers in the public service to ensure the licensure of public servants where required by provincial or territorial legislation.

For many years federal departments and agencies have filled engineering positions in the public service, particularly those categorized as EN-ENG, without requiring engineering licensure as a condition of employment. This lack of licensure requirement for performing engineering work poses potential risks to public safety. The guidelines issued by the Treasury Board of Canada Secretariat (TBS) do not universally mandate occupational certification for all EN-ENG positions across federal departments, leading to inconsistent criteria for EN-ENG job postings throughout the federal public service.

In cases where certification is required, the minimum standard merely refers to eligibility for professional engineering certification in Canada without specifying how eligibility is determined. Eligibility can only be determined by the provincial and territorial regulators. The current TBS guidelines do not mandate applicants to have applied for licensure or be registered with any of these engineering regulators.

Furthermore, all engineering regulators have provisions in their provincial and territorial acts that prohibit non-licensed individuals from using the title 'engineer.' When positions within the federal public service include the term 'engineer' in their titles, it is crucial that only licensed engineers fill these roles. Disregarding the regulated use of the title 'engineer' confuses the public perception of an individual's qualifications and undermines the high level of trust the public places in the engineering profession. Each engineering regulator strives to ensure that only licensed individuals can rightfully use the title 'engineer.'

Engineers Canada urges the TBS to undertake a swift review of the current qualification standards to ensure the licensure of engineers in the public service. This can be achieved by making "certification as a professional engineer in Canada" a mandatory occupational certification requirement for all new positions at EN-ENG-03 level and above.

It is vital that individuals practising engineering and using the title 'engineer' (or any similar variation) hold a licence from the engineering regulator in the province or territory where the title is being used. This minimizes risks to public safety and ensures that these activities are carried out by licensed engineers who are bound by stringent professional and ethical standards, working in the best interest of the public.

Engineers Canada's priorities beyond Budget 2025

Engineers Canada welcomes the new federal government's prioritization of policies and programs designed to build our national economy and protect the safety and wellbeing of Canadians during uncertain times. That said, we urge the federal government not to lose sight of important priorities that the engineering profession has been proud to support.

First, we ask the federal government to continue supporting measures to build an inclusive engineering profession. Engineers Canada spearheads a nationwide initiative aimed at fostering greater gender equity within the field of engineering. At the forefront of our efforts is the "30 by 30" initiative. Together with engineering regulators, post-secondary institutions and other engineering organizations, our goal is to ensure that by 2030, women represent 30 per cent of newly licensed engineers. In 2022, around 20.2 per cent of newly licensed engineers were women, and 21.7 per cent of engineers-in-training (EITs) were women.

Second, we strongly urge the federal government to continue the important work of truth and reconciliation with Indigenous peoples. In 2021, Engineers Canada commissioned <u>a report</u> that revealed that Indigenous representation in the engineering profession stands at a mere 0.73 per cent, while around 5 per cent of people in Canada identify as Indigenous. This severe underrepresentation of Indigenous engineers in the profession is, in part, a result of inadequate educational opportunities for Indigenous people in Canada.

With that in mind, we offer the following long-term considerations for the new federal government:

- Consult with Indigenous engineers, including <u>AISES in Canada</u>, to create and fully fund communities of Indigenous engineering training and practice in the post-secondary sector, including targeted initiatives to expand access to post-secondary engineering education for First Nations, Inuit, and Métis students.
- Support efforts by professions, including engineers, to catalyze culture change in workplaces
 by funding training and accountability initiatives, including by using federal regulatory tools,
 procurement practices, grant funding, and other policy levers.

About Engineers Canada

Engineers Canada is the national organization that represents the 12 provincial and territorial engineering regulators that license the more than 320,000 members of the engineering profession in Canada. As the only national voice for the engineering profession, our organization has a long-standing history of working and collaborating with the federal government to help inform and develop legislation, regulations, and policies. In making these recommendations for Budget 2025, Engineers Canada commits to this engagement to shape a positive future for engineering in Canada and is ready to work with the federal government to achieve this.