

# The Role of Engineers in Protecting and Advancing the Public Interest (Demand-side legislation)

## The engineering profession's position:

- The public interest demands that engineers take responsibility for any necessary engineering work. Where engineering work is performed, industry and governments must involve engineers who are licensed in the jurisdiction where they work.
- Legislation that speaks to engineering work, regardless of whether it is a federal or provincial statute, should require the involvement of an engineer.
- Where engineering considerations are relevant to public policy, governments must ensure the involvement of engineers.
- Engineers are often called upon to assist the government in addressing societal issues. Governments should ensure that engineers are fully consulted where necessary to the public interest.
- Incorporating engineers' accountability into federal and provincial legislation and regulation weaves the engineering regulatory process into the fabric of government and keeps Canadians safe.

## The challenge(s)

A wide range of legislation requires the application of engineering principles. In these cases, public safety requires the involvement of engineers. Although governments often seek the involvement of engineers in the development of legislation and regulations governing infrastructure, transportation, resource development, and manufacturing, there are other areas where the need for the involvement of engineers is no less critical, such as research and development, emerging technologies like artificial intelligence, and other changes to policies that impact the built environment.

## How Engineers Canada has contributed

Engineers Canada recognizes the importance of actively engaging with the federal government regarding public consultations on acts and regulations that impact the work that engineers do, and address activities that could involve engineering work. We have built strong and open working relationships with the federal government, both with parliamentarians and senior federal officials.

Engineers Canada's efforts have raised awareness within the federal government about the importance of engineering licensure as a requirement for engineering work. Routinely, Engineers Canada engages with federal ministers, especially through pre-budget consultations, to ensure that budgetary measures that require engineering work utilize demand-side measures to ensure the professional involvement of engineers. Because of these efforts, Engineers Canada, with our members, have proposed successful changes to existing legislation, and influenced the trajectory of future legislation.

For example, Engineers Canada and Professional Engineers of Ontario proposed changes to Section 11 of the [Railway Safety Act](#)<sup>1</sup> that would continue to protect public safety by requiring a professional engineer to approve all engineering work. As a result, the section was changed and now reads “All Engineering work relating to railway works must be approved by a professional engineer.”

The federal government has also introduced several new Investment Tax Credits (ITCs) aimed at accelerating Canada’s net-zero goals by catalyzing private investment in clean technologies. These ITCs are targeted at five critical areas of investment: clean technology, carbon capture utilization and storage, clean hydrogen, clean electricity, and clean technology manufacturing.

These tax credits will fund projects that require significant engineering work. While the government has not provided implementation details for all five ITCs, the ITCs for carbon capture utilization and storage as well as for clean hydrogen require front-end engineering design studies conducted by qualified engineers.<sup>2</sup> Similarly, the federal government has also introduced a tax credit for critical minerals exploration, which requires up-front engineering and geoscience assessments conducted by a qualified engineer or geoscientist, thereby ensuring that licensed professionals take personal responsibility for these assessments.<sup>3</sup>

Engineers Canada will continue to build working relationships with key federal departments, both with elected officials and senior public servants, to provide an experienced regulatory perspective on federal legislation and policy.

## Recommendations to the federal government

The federal government should:

- Ensure that any legislation or regulations that refer to engineering work require the involvement of an engineer, licensed in accordance with provincial and territorial engineering acts.
- Ensure that federal public policy initiatives aimed at accelerating Canada’s net-zero transition require firms to utilize the expertise of engineers in the design and implementation of projects.
- Adopt a government wide policy to ensure that engineering work is performed by individuals who are licensed to do so, including engineers in the federal public service, thereby encouraging compliance with engineering regulatory legislation.

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<sup>1</sup> Government of Canada (2019). “Railway Safety Act.” Retrieved August 12, 2019 from: <https://laws-lois.justice.gc.ca/eng/acts/r-4.2/>.

<sup>2</sup> Government of Canada. Bil C-69: An Act to implement certain provisions of the budget tabled in Parliament on April 16, 2024. (<https://www.parl.ca/DocumentViewer/en/44-1/bill/C-69/first-reading>)

<sup>3</sup> Government of Canada. Bill C-32: An Act to implement certain provisions of the fall economic statement tabled in Parliament on November 3, 2022 and certain provisions of the budget tabled in Parliament on April 7, 2022. (<https://www.parl.ca/DocumentViewer/en/44-1/bill/C-32/royal-assent>)

## How Engineers Canada will contribute

Engineers Canada will continue to:

- Actively identify opportunities to provide input from engineers within federal legislation and regulations where such involvement would be in the public interest.
- Urge that decision-makers ensure that demand-side legislation retains explicit references to engineers and engineering in the interest of public safety across Canada.
- Monitor the federal government's agenda, legislative initiatives, and proposed regulations, and maintain positive working relationships with federal officials, to bring recommendations on demand-side legislation to the attention of government.

In addition, provincial and territorial regulators will continue to:

- Hold all engineers publicly accountable for their work.
- Work collaboratively with provincial and local governments to ensure engineering professionals are appropriately referenced in demand-side legislation.