



A vision for collaboration

Engineers Canada 2022-2024 strategic plan

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Message on behalf of the Engineers Canada Board



We are proud to present to you Engineer's Canada's 2022-2024 strategic plan. To us, this is more than a document; it is a roadmap that points to areas where we will collaborate to strategically position our profession to adapt to a changing regulatory landscape, select and adopt best practices, and remain relevant across Canada.

The groundwork for this plan was laid through the commitment to transparency and collaboration that marked the development and execution of our 2019-2021 strategic plan. Engineers Canada is now bearing the fruit of this deep focus on renewal and it is why we are proud to formally introduce the vision for Engineers Canada:

Advancing Canadian engineering through national collaboration

It is with this vision at the forefront of our minds that we present to you our six strategic priorities for the next three years.

In this time, we will take action to foster **collaboration** and **consistency** of requirements, practices, and processes across the engineering regulators, and to ensure that our profession remains **trusted** by the public and **attracts** future engineers. We will continue our work to increase the **equity, diversity, and inclusion** of our profession and support our target of achieving the goal that by 2030, 30 per cent of all newly licensed engineers are women. We will seek direction to implement a national academic requirement for licensure and investigate the impact on our **accreditation** system to ensure that it continues to meet the needs of regulators, students, and higher education institutions.

The strength of our outcomes can only be as strong as the foundation that we place under it. And that is why we recognize **organizational excellence** as a prime enabler of our success. Engineers Canada is on a journey to excellence, and our continued commitment supports the effective delivery of our products and services to regulators and stakeholders.

This strategic plan lays out our transformative work. While we pursue these goals with determination, we also remain focussed on sustaining our ongoing operational initiatives, laid out each year in our annual operating plan.

Canada's engineering profession is strong. Together, we're reinforcing this vision and embarking on a path that addresses some of the most important issues facing the profession. And we do this together, on behalf of 12 regulators, to strengthen a profession of over 300,000 members, and contribute to a better place to live for 38 million Canadians.

Sincerely,

Jun Doudreau

Jean Boudreau, FEC, P.Eng President

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Danny Chui, FEC, P.Eng President-elect

David T. Lynch

David T. Lynch, FEC, P.Eng Past President

Our areas of focus



This plan is built in response to some of the major trends and risks that have been identified throughout the strategic planning process. In particular:

- Our regulatory landscape is evolving rapidly. Governments are increasingly demanding that provincial and territorial engineering regulators demonstrate how the regulatory framework and associated processes are necessary to protect the public.
- Technological innovation drives the creation of new engineering disciplines and practices, increases the potential for overlap with other professions, and challenges regulators to provide support and enforcement in these areas.
- An increasing proportion of graduates from accredited programs do not seek licensure. Younger generations have different career paths, which might not necessarily be compatible with the traditional licensure path.
- COVID-19 has disproportionately affected the career paths of under-represented groups such as women, Indigenous and racialized persons, as well as younger segments of the population, requiring even greater sustained efforts to build a more equitable, inclusive and diverse profession.

It is with these factors in mind, and after extensive consultation with the Engineers Canada Board, provincial and territorial engineering regulators, Engineering Deans Canada, our staff, the Canadian Engineering Accreditation Board, and the Canadian Engineering Qualifications Board that we identified three areas of focus for the next three years:



1. Advance the engineering regulatory framework



2. Champion an equitable, diverse, inclusive, and trustworthy engineering profession



3. Uphold our commitment to excellence



1. Advance the engineering regulatory framework



Our work supports engineering regulators in fulfilling their mandates of protecting the public. Key to our success is our ability to foster collaboration and support pan-Canadian implementation of consistent requirements and practices. We will investigate a national academic requirement for licensure, re-examine the purpose of accreditation, identify areas for national collaboration, and support adaptation to emerging areas of engineering practice. **Our priorities are to:**

- 1.1 Investigate and validate the purpose and scope of accreditation
- **1.2 Strengthen collaboration and harmonization**
- 1.3 Support regulation of emerging areas

1.1 Investigate and validate the purpose and scope of accreditation

WHAT WE WILL DO

Major regulatory and educational changes have taken place since the creation of the Canadian engineering accreditation system in 1965. We will conduct a fundamental review of the accreditation process, investigate the best practices in engineering education, and collectively work with regulators and stakeholders to understand if there is a desire to adopt a new, national academic requirement for licensure as well as an updated purpose of accreditation. If there is, we will reconsider accreditation criteria and procedures.

HOW

- Benchmark the Canadian engineering accreditation system
- Investigate a minimum academic requirement for licensure
- Re-examine the purpose of accreditation in the context of the overall licensure system
- Hire external expertise and convene pan-Canadian, multi-stakeholder advisory groups to inform all recommendations

- All stakeholders understand the purpose of accreditation
- Regulators have an academic requirement for licensure, applicable to all
- Engineers Canada, including the CEAB and CEQB, have direction to implement systems aligned with the purpose and the academic requirement for licensure

1.2 Strengthen collaboration and harmonization

WHAT WE WILL DO

Fostering collaboration and consistency of requirements, practices, and processes across jurisdictions is at the heart of our mandate. We will work with regulators to understand barriers and success factors leading to harmonization and facilitate the adoption of a national agreement that will establish the principles and areas where pan-Canadian harmonization will be sought.

HOW

- Collaborate with regulator staff to identify barriers and opportunities
- Develop a national statement of collaboration with all jurisdictions
- Identify specific areas of harmonization for collaboration

WHAT DOES SUCCESS LOOK LIKE?

- Engineers Canada has a clear mandate and key focus areas for harmonization
- Regulators benefit from collaboration and resource sharing, supporting improved practice

1.3 Support regulation of emerging areas

WHAT WE WILL DO

Technological advances move much faster than legislative change and engineers who work in emerging areas of practice may not fully understand or consider the long-term professional and ethical impacts and obligations. We will provide information to regulators on the long-term impacts of engineering practice in emerging areas and a framework for the evaluation of professional and ethical obligations. This will enable regulators to educate license holders in these emerging areas of practice and regulate more effectively.

HOW

- Identify and investigate new and overlapping areas of engineering practice that will have a long-term impact on the public
- Continue to work with the federal government to promote the role of engineers in emerging areas

- Regulators receive information that helps them adapt their admission, enforcement, and practicerelated processes and uphold the framework for ethical practice
- The federal government is made aware of the importance of the work of engineers in emerging areas





2. Champion an equitable, diverse, inclusive, and trustworthy engineering profession



We are the national voice of the profession and we are committed to a more equitable, diverse and inclusive profession of women, Indigenous, racialized and LGBTQ2+ persons. Our success is tied to our ability to foster public trust and demonstrate the relevance of our profession with younger generations and employers. We will amplify our 30 by 30 initiative in order to increase the percentage of newly licensed engineers who are women, reinforce trust in the profession among Canadians, and demonstrate the value of licensure among engineering graduates. **Our priorities are to:**

2.1 Accelerate 30 by 30

2.2 Reinforce trust and the value of licensure

2.1 Accelerate 30 by 30

WHAT WE WILL DO

As the engineering profession is at risk of not meeting its national goal of having 30 per cent of newly licensed engineers being women by 2030, there is a need to sustain momentum, augment our efforts, and strengthen our support of regulators while not duplicating efforts. We will continue accelerating 30 by 30 through collecting and sharing information on best practices, supporting regulators in their work, and organizing a national 30 by 30 conference.

HOW

- Hire external expertise to conduct research on the perceptions of women who graduate from engineering programs and/or are eligible for licensure and the barriers that they encounter, including in the workplace
- Share the results of research with regulators and employers
- Provide a 30 by 30 report card and needs assessment to interested regulators and continue to convene groups to facilitate sharing of best practices
- Organize an annual national 30 by 30 conference that focuses on sharing innovative ideas and practices

- Regulators have information and support that enables them to increase inclusion and the number of engineering graduates who proceed through the licensure processes
- Representation of women is increasing within every step of the pipeline: students at higher education institutions (HEIs), graduates, engineers-in-training (EITs), newly licensed engineers, and engineers
- Employers have information that enables them to make their workplaces more equitable, diverse and inclusive
- Lessons learned from the 30 by 30 work inform initiatives in support of increasing representation of under-represented groups including but not restricted to Indigenous, racialized and LGBTQ2+ persons

2.2 Reinforce trust and the value of licensure

WHAT WE WILL DO

There is a lack of information on the profile and licensure motivators of engineers, engineering students, engineering graduates, and EITs. More research is needed to understand the perceptions of engineering employers on the requirement and value of licensure. Relative to other professions, the public has only moderate familiarity and trust with engineers. We will bridge this gap by creating and promoting a consistent, national message that will showcase the diversity of the profession, the breadth of engineering in both traditional and new disciplines, and the value of engineering licensure to the public, engineering graduates, EITs, and employers.

HOW

- Conduct market research to identify and understand appropriate target audience
- Develop national value-of-licensure messaging in collaboration with regulators
- Launch a multi-year, multi-million-dollar, national marketing campaign, co-branded and delivered in partnership with regulators

- Targeted public audiences perceive engineers as trustworthy and recognize engineering as a licensed profession
- Engineering graduates and EITs recognize value in licensure
- Regulators have a valuable national framework and marketing support tools









We are committed to continually measure ourselves against best practices and hold ourselves accountable to enhance our products and service delivery for the benefit of regulators, staff, and stakeholders. **Our priority is to:**

3.1 Uphold our commitment to excellence

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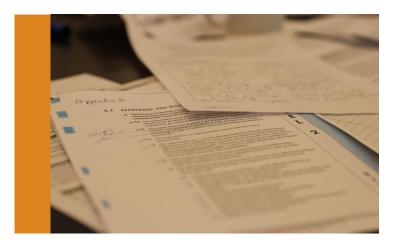
WHAT WE WILL DO

The demand for change continues and we are facing pressure to deliver on the diverse and changing needs of engineering regulators, higher education institutions, and the engineering community. To continually adapt, we need an effective and sustainable approach that ensures that we are a high performing organization. By 2024, we will achieve Platinum level certification from Excellence Canada by demonstrating measurable, sustained, and improving performance over at least a three-year period as measured against the Excellence, Innovation and Wellness Standard.

HOW

Achieve Platinum level certification from Excellence Canada

- Regulators, HEIs, and the engineering community benefit from effective delivery of products and services
- Staff benefit from increased engagement and retention, working in motivated teams, and improved health
- Engineers Canada benefits from sustainment of a high level of performance



About us



Engineers Canada serves the regulators, upholds the honour, integrity, and interests of Canadian engineering by supporting consistent high standards in regulation, encouraging the growth of the profession in Canada, and inspiring public confidence. Our work is focussed on ten core purposes, as established by Engineers Canada's members, the engineering regulators:

- 1. Accrediting undergraduate engineering programs.
- 2. Facilitating and fostering working relationships between and among the regulators.
- Providing services and tools that enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners within Canada.
- 4. Offering national programs.
- 5. Advocating to the federal government.
- 6. Actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession.

- 7. Managing risks and opportunities associated with mobility of work and practitioners internationally.
- Fostering recognition of the value and contribution of the profession to society and sparking interest in the next generation of professionals.
- 9. Promoting equity, diversity, and inclusion in the profession that reflects Canadian society.
- 10. Protecting any word(s), mark, design, slogan, or logo, or any literary, or other work, as the case may be, pertaining to the engineering profession or to its objects.

We are successful when we convene, facilitate, and support our partners to come together and make evidence-based decisions for the benefit of the public. We recognize that our profession is facing challenges and are confident that we can confront them together. The sum of our efforts will be stronger than all of our individual parts. Our vision is:

Advancing Canadian engineering through national collaboration

Our work is guided by our staff values and Board guiding principles:

Our staff:

- Take pride in creating a culture of teamwork and wellness
- Earn credibility through high-quality work
- Foster new ideas and embrace creative approaches
- Are transparent and accountable
- Create and sustain trusting relationships
- Rely on diverse people and perspectives to enrich our work

Our Board commits to:

- Serve the needs of the regulators
- Ensure transparency and accountability in the decision-making process
- Encourage commitment and engagement of regulators
- Promote equity, diversity and inclusion in the Canadian engineering profession