

Engineers Canada Strategic Plan strengths, weaknesses, opportunities and threats (SWOT) and Board risks analysis 2025-2029

This document presents the Strengths, weaknesses, opportunities and threats (SWOT) and Board risks analysis that were drawn from the Environmental scan as well as from consultations held with the Chief Executive Officers Group, the Canadian Engineering Accreditation Board, the Canadian Engineering Qualifications Board, and Engineering Deans Canada. Although the Environmental scan identifies trends that impact the regulators and the profession, the SWOT analysis and Board risks focusses on Engineers Canada's mandate and the ten core purposes:

1. Accrediting undergraduate engineering programs.
2. Facilitating and fostering working relationships between and among the regulators.
3. 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.
8. Fostering recognition of the value and contribution of the profession to society and sparking interest in the next generation of professionals.
9. Promoting diversity and inclusivity 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.

Strengths, weaknesses, opportunities and threats analysis (SWOT)

This section highlights:

- Strengths and weaknesses, which are internal, operational factors that might impact Engineers Canada's ability to deliver on its operational or strategic priorities.
- Opportunities and threats, which are external factors that are not realized yet but that could be leveraged or could derail Engineers Canada's ability to meet its strategic priorities.

An in-depth SWOT analysis was conducted by staff, by purpose. A higher-level synthesis for the Board follows:

	Favourable	Unfavourable
Internal	<p style="text-align: center;">Strengths</p> <p><u>Under Purposes:</u></p> <ul style="list-style-type: none"> Well known and stable accreditation system with established partnerships Established officials committees that share information and best practices Provide services and tools that level the playing field for smaller jurisdictions Solid and predictable affinity revenues Recognized as the national voice of the regulators and the profession Provide additional research that supports regulators' admission, practice and enforcement work in emerging and multidisciplinary engineering disciplines Established international accords and relationships with other countries Regulators' support for the national marketing campaign Strong network and support to increase representation of marginalized groups <p><u>Organizational excellence:</u></p> <ul style="list-style-type: none"> Engaged, knowledgeable volunteers Documented consultation requirements 	<p style="text-align: center;">Weaknesses</p> <p><u>Under Purposes:</u></p> <ul style="list-style-type: none"> Dissatisfaction of Higher Education Institutions of accreditation Lack of capacity to monitor all regulatory issues across 12 jurisdictions Policy impact of national positions on federal issues very difficult to measure Lack of uptake by regulators of national research Uneven commitment to implementation of international accords and agreements Limited resources to reach broad spectrum of audience across the country <p><u>Organizational excellence:</u></p> <ul style="list-style-type: none"> Lack of volunteer management program Consultation program is too cumbersome for regulators and staff
External	<p style="text-align: center;">Opportunities</p> <p><u>Under Purposes:</u></p> <ul style="list-style-type: none"> Adapt accreditation system to a changed reality Identify one or more areas for collaboration in 2024 Increasing interest of regulators in collaborating and harmonizing New federal government funding opportunities Identify and provide information on emerging disciplines Analyze where foreign-trained applicants come from to inform the development of new accords Involve industry, students, public and partnerships to inform and execute the marketing strategy Broaden the scope of the upcoming strategic focus to other marginalized groups <p><u>Organizational excellence:</u></p> <ul style="list-style-type: none"> Develop and implement a volunteer management program Streamline consultation process, using regulators' input 	<p style="text-align: center;">Threats</p> <p><u>Under Purposes:</u></p> <ul style="list-style-type: none"> Inability to reach national consensus on the purpose of accreditation in 2024 Lack of interest or ability of regulators to collaborate on one or more areas Provincial and territorial governments imposing regulatory requirements that significantly differs from other engineering regulators Other organizations competing for federal government's attention or taking contradictory stances Lack of knowledge about unknown emerging disciplines (Black swans) Regulators not implementing international accords Lack of direct channels to engineers and industry Perception the Equity, Diversity and Inclusion (EDI) is outside regulators' regulatory mandates <p><u>Organizational excellence:</u></p> <ul style="list-style-type: none"> Volunteers that do not respect policies and procedures Regulators not responding in consultations, or consultation fatigue

Engineers Canada risks

This section highlights Engineers Canada risks. Risks are potentialities that if realized, become issues that should be addressed. Risk management is the process of identifying, categorizing, prioritizing, and planning for risks before they become issues. There are two types of risks:

- **Board risks** are external risks that might lead to a change in priorities. Identifying and monitoring these risks is the responsibility of the Board, (who delegate their in-depth review to its Finance, Audit and Risk (FAR) Committee), and monitor strategic risks regularly.
- **Operational risks:** are external and internal risks that might impact the organization's ability to achieve the current strategic plan. The Board provides oversight to the CEO who is responsible for managing these risks.

Board risks

The following heat map provides an overview of the risks managed by the Board. The matrix identifies risks that are part of the ongoing responsibilities of the Board as well as risks that were identified as part of the development of the current Strategic Plan. No changes were made to Board risk scores since April 2021.

LIKELIHOOD	IMPACT				
	1 Insignificant If occurs, will have little or no impact on delivering strategic priority(ies) or purpose(s)	2 Minor If occurs, will have an impact on delivering 1 strategic priority or 1 purpose; Engineers Canada would recover with existing controls	3 Moderate If occurs, will have an impact on delivering 2 + strategic priorities or 2+ purposes; Engineers Canada would recover with existing controls	4 Major If occurs, will have an impact on delivering on 2+ strategic priorities or 2+ purposes; Engineers Canada could only recover with additional controls	5 Severe If occurs, will require a restructuring of the purposes, governance, finances or operations of Engineers Canada in order to recover
5 Extremely Likely - Almost certain to occur					
4 Likely - More likely to occur than not	Decreased confidence in the governance functions (BR)		Diminished scope and value of engineering regulation (BR) Insufficient representation or marginalized people in engineering (BR)		
3 Moderate - Fairly likely to occur				Reduced long term financial viability (BR)	Decline in the value of accreditation (BR)
2 Unlikely - Unlikely but not unforeseeable					Diminished national collaboration (BR)
1 Low -Unlikely to occur					