

AGENDA

ANNUAL MEETING OF MEMBERS

May 28, 2022 | 9:30 am – 11:00 am (ET)

Hybrid delivery

In-person: Sheraton Hotel, Toronto, ON

Virtual: Zoom details to follow

Please refer to the [Bylaw](#)

1.	Call to order and introductions – D. Chui, 2021-2022 President, Engineers Canada	
2.	Approval of agenda – D. Chui <i>THAT the agenda be approved and the chair be authorized to modify the order of discussion.</i>	
3.	Approval of minutes – D. Chui (page 2 to 6) <i>THAT the minutes of the Annual Meeting of Members held May 29, 2021 be approved.</i>	
4.	2021 Reports – G. McDonald and N. Hill (pages 7 to 72) 4.1 Engineers Canada Annual Report 4.2 Annual Strategic Performance Report 4.3 Audited financial statements	
5.	Appointment of auditors – N. Hill (pages 73 to 74) <i>THAT KPMG LLP be appointed as the public accountant to audit the accounts of Engineers Canada for the 2022 fiscal year.</i>	
6.	2024 Per Capita Assessment Fee – N. Hill (pages 75 to 76) <i>THAT the 2024 Per Capita Assessment Fee be set at \$8 per Registrant.</i>	
7.	Bylaw amendment – M. Wrinch (page 77 to 84) <i>THAT Article 1.1 of the Engineers Canada Bylaw be amended as follows:</i> “ Registrant ” means an individual registered with a Member at December 31, with the exception of applicants, and students, and those registered solely as a geoscientist or geoscientist in training.	
8.	Engineers Canada Board size – D. McLean (pages 85 to 102) <i>THAT the Engineers Canada Board of Directors be reduced in size to 16 members, in the manner proposed in the Governance Committee’s May 2020 Report on Board Size, with the reduction taking effect by May 2025.</i>	
9.	Election of Directors – D. Chui (pages 103 to 104) <i>THAT the following Directors be elected for the terms indicated below:</i>	
	Director name	Jurisdiction
	John Van der Put	Alberta
	Michael Wrinch	British Columbia
	Marlo Rose	New Brunswick
	Crysta Cumming	Nova Scotia
	Christian Bellini	Ontario
	Kathy Baig	Quebec
10.	Next Annual Meeting of Members • May 27, 2023 (Halifax, NS)	
11.	Closing	



Draft Minutes of the 186th Annual Meeting of Members (AMM)

May 29, 2021 10:00am-11:30am ET via zoom

The following Members were in attendance	
APEGA represented by B. Pearse, President APEGNB represented by M. Stothart, President APEGs represented by K. Darr, President Engineers & Geoscientists BC represented by L. Spence, President Engineers Geoscientists MB represented by J. Mann, President Engineers Nova Scotia represented by C. Cumming, President	Engineers PEI represented by E. Coles, President Engineers Yukon represented by K. Hogan, President NAPEG represented by J. Hazenberg, President OIQ represented by K. Baig, President PEGNL represented by N. Hallett, President PEO represented by C. Bellini, President
The following Directors were in attendance	
J. Boudreau, 2020-2021 President, APEGNB D. Chui, PEO, 2020-2021 President-Elect D. Lynch, 2020-2021 Past President, APEGA K. Baig, OIQ M. Belletête, OIQ C. Bellini, PEO V. Benz, APEGA J. Card, PEGNL J. Dunn, Engineers PEI	D. Gelowitz, APEGs N. Hill, PEO J. Holm, Engineers & Geoscientists BC S. Jha, NAPEG T. Joseph, APEGA D. Nedohin-Macek, Engineers Geoscientists MB K. Reid, PEO R. Trimble, Engineers Yukon C. Zinck, Engineers Nova Scotia
The following Director-nominees were in attendance	
A. Anderson, Engineers Yukon A. Arenja, PEO N. Avila, APEGA A. Baril, OIQ	S. Holmes, APEGs D. Spracklin-Reid, PEGNL M. Sterling, PEO
The following observers were in attendance	
J. Bradshaw, CEO & Registrar, PEGNL D. Chong, President, ABET L. Daborn, CEO, APEGNB B. Dony, Chair, CEAB A. English, CEO & Registrar, Engineers & Geoscientists BC M. Á. García, CACEI F. George, Vice-Chair, CEQB S. Grant, TD Insurance K. King, Executive Director, Engineers Yukon G. Koropatnick, CEO, Engineers Geoscientists MB P. Lafleur, Vice-Chair, CEAB J. Landrigan, Executive Director & Registrar, PEI T. Latt, Myanmar Engineering Council M. Mahmoud, Vice-Chair, CEQB P. Mann, CEO Engineers Nova Scotia	B. Martin, CEO, Engineers Without Borders Canada V. McCormack, Executive Director & Registrar, NAPEG B. McDonald, Executive Director, APEGs S. McKeown, CFES M. Milligan, ABET J. Nagendran, Registrar & CEO, APEGA W. O'Keefe, Chair-Elect, PEGNL M. Parkhill, President, Geoscientists Canada C. Sadr, Engineers Canada Director-resigned W. Schreuders, XL Insurance Company Limited M. Stiles, TD Insurance A. Waldie, Geoscientists Canada M. Williams, Vice President, NAPEG H. Yang, Incoming CEO & Registrar, Engineers & Geoscientists BC J. Zuccon, Registrar, PEO
The following staff were in attendance	
E. David, Planning, Event, and Change Practitioner R. Gauthier, Executive Assistant B. Gibson, Manager, Communications C. Mash, Governance Administrator G. McDonald, CEO R. Melsom, Manager, CEQB	D. Menard, Director of Finance S. Price, Executive Vice President, Regulatory Affairs L. Scott, Manager, Member Services E. Spence, Legal Counsel and Corporate Secretary J. Southwood, VP, Corporate Affairs & Strategic Partnerships M. Warken, Manager, CEAB

1. Call to order and introductions

J. Boudreau called the Annual Meeting of Members (AMM) to order at 10:08am (ET). Participants were welcomed and the land was acknowledged. Members, Board Directors, and staff-officers were introduced.

2. Approval of agenda

The agenda was pre-circulated.

Members' motion 2021-05-1D

Moved by M. Stothart, seconded by K. Baig

THAT the agenda be approved and the chair be authorized to modify the order of discussion.

Carried

3. Approval of minutes

The minutes were pre-circulated. No discussion or questions were brought forward.

Members' motion 2021-05-2D

Moved by J. Hazenberg, seconded by C. Bellini

THAT the minutes of the annual meeting of members held May 23, 2020 be approved.

Carried

4. Reports to the Members for information

G. McDonald presented the annual reports, both pre-circulated with the agenda book. The reports are intended to be reviewed together to provide a fulsome summary of the work completed in 2020, and both documents are aligned to the approved *2019-2021 Strategic Plan*. G. McDonald noted that while the 2020 year was unusual, the organization and volunteers responded admirably. A great number of objectives were achieved, with all strategic priorities being reported as on track for completion by December 2021.

a) Engineers Canada Annual Report

No discussion was had.

b) Annual Strategic Performance Report

G. McDonald reported on areas where objectives were disrupted as provided within the report, noting that all outcomes remain on track for completion by December 2021. No questions were received.

5. 2022-2024 Strategic Plan

J. Boudreau passed the chair duties to D. Lynch. J. Boudreau presented the Strategic Plan for approval, developed in consultation with the Regulator presidents and CEOs, the CEAB and CEQB, and Engineering Deans Canada. The plan reflects Engineers Canada's new vision, "Advancing Canadian engineering through national collaboration", and is designed to meet Regulators' needs. The following comments were captured:

- B. Pearse re-confirmed APEGA's encouragement and support for collaboration on the national campaign priority. APEGA will be sharing their established work in raising profile and informing the public of the profession in Alberta with Engineers Canada to grow and achieve more collectively. J. Boudreau noted that Engineers Canada is counting on input and collaboration from all Regulators as indicated within the plan and will be looking to learn from their experience with public campaigns.
- C. Bellini offered congratulations and support for the plan on behalf of PEO, noting that while the accreditation priority is scheduled to take at least three years to establish the direction forward, it is understood why this time is needed with the work required. J. Boudreau agreed, remarking that change can be awkward and that all aspects were taken into consideration to ensure that the priority does not

move too fast or too slow. D. Lynch further noted that the planning and implementation process was carefully considered to ensure priorities could be accomplished as quickly as possible.

Members' motion 2021-05-3D

Moved by C. Bellini, seconded by K. Baig

THAT the 2022-2024 Strategic Plan be approved.

Carried

6. Audited financial statements and appointment of auditors

D. Gelowitz, Chair of the Finance, Audit, and Risk (FAR) Committee presented the pre-circulated documents.

6.1. Audited financial statements

It was reported that KPMG was complimentary of Engineers Canada's oversight and preparation for the audit, in addition to the processes put in place to manage COVID-19. No discussion was had.

Members' motion 2021-05-4D

Moved by J. Hazenberg, seconded by M. Stothart

THAT the financial statements for the fiscal year ending December 31, 2020, as audited by KPMG LLP, be approved.

Carried

6.2. Appointment of auditors

No discussion was had.

Members' motion 2021-05-5D

Moved by K. Darr, seconded by L. Spence

THAT KPMG LLP be appointed as the public accountant to audit the accounts of Engineers Canada for the 2021 fiscal year, on recommendation of the FAR Committee.

Carried

7. 2023 Per Capita Assessment Fee

D. Gelowitz presented the Per Capita Assessment Fee (PCAF) recommendation. The following discussion was captured:

- C. Cumming, on behalf of Engineers Nova Scotia, noted that given the current circumstances, and since Engineers Canada has reported a significant surplus, the PCAF should be lowered. The uncertainties around this decision are understood, and C. Cumming raised a question around what would require further clarity to lower the fees moving forward. D. Gelowitz explained that some uncertainty was alleviated with the Strategic Plan having just been approved. Although PEO has not availed itself of the affinity revenue in the past, there is no guarantee that that practice will continue, and consideration also needs to be given to the revised revenue split for incoming affinity program policies which will further reduce revenues. With the Strategic Plan being approved this year, the Finance, Audit, and Risk (FAR) Committee recommended that Engineers Canada consider holding any changes to the PCAF for an additional year, so that the funds that need to be applied to the priorities can be further considered and solidified in the 2022 budget.
- C. Bellini, on behalf of PEO, reported that their council discussed the proposed PCAF recommendation. They continue to be in support of Member control of the PCAF and are also supportive of the logic provided by the FAR Committee to not change the amount this year, given that spending is now

committed through the approval of the 2022-2024 Strategic Plan. C. Bellini raised a question about the longer-term projection of how reserves will be affected over the years. This activity was planned and then postponed due to COVID-19, since it was felt that a study of this nature could not be relied upon to provide meaningful results. D. Gelowitz confirmed that the assessment of the long-term financial and operational viability of Engineers Canada will be re-visited in the next operational planning cycle.

- C. Bellini noted that PEO will not be able to confirm what actions will be taken with affinity revenue moving forward.
- D. Gelowitz concluded that it is likely that PCAF changes will be recommended in the future once there is more clarity around the strategic priority spending.

Members’ motion 2021-05-6D

Moved by K. Hogan, seconded by C. Bellini

THAT the 2023 Per Capita Assessment Fee remain at \$10.21 per Registrant.

Carried

8. By-law amendments

N. Hill presented the minor By-law amendments. No questions were received.

Members’ motion 2021-05-7D

Moved by M. Stothart, seconded by E. Coles

THAT the By-law be amended as follows:

1.1 “Per Capita Assessment” means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in Article 7-8.

5.8 “The Board shall submit recommendations to the Members on the following matters, by a vote passed by a majority of not less than two-thirds of the votes cast, provided that no decision in respect thereof shall have any force or effect until approved by the Members in accordance with section 3.4 of this By-law:

...

(b) ~~Amendments to The amount of the Per Capita Assessment~~

Carried

9. Election of Directors

J. Boudreau presented the slate of candidates as circulated in the agenda. It was noted that there will be a vacancy present on the Board for a Director to be nominated from Engineers & Geoscientists BC. The nominee’s name is expected to be provided in June, and the Members will be asked to elect the individual by written resolution circulated by email later in the summer.

Members’ motion 2021-05-8D

Moved by C. Cumming, seconded by B. Pearse

THAT the following Directors be approved for the terms indicated below:

Director name	Jurisdiction	Term
Natasha Avila	Alberta	2021-2024
Dawn Nedohin-Macek	Manitoba	2021-2024
Darlene Spracklin-Reid	Newfoundland and Labrador	2021-2024
Arjan Arenja	Ontario	2021-2024
Marisa Sterling	Ontario	2021-2024
Geoff Connolly	Prince Edward Island	2021-2024
Anne Baril	Quebec	2021-2024

<i>Director name</i>	<i>Jurisdiction</i>	<i>Term</i>
<i>Stormy Holmes</i>	<i>Saskatchewan</i>	<i>2021-2024</i>
<i>Alison Anderson</i>	<i>Yukon</i>	<i>2021-2024</i>

Carried

10. Other business

K. Baig, on behalf of OIQ, congratulated G. McDonald and the staff at Engineers Canada for their quality work over the last year through the pandemic. It was also noted that the virtual meeting deliveries have been as strong as possible, and that in-person meetings will be welcomed back as an important component of relationship building.

11. Next Annual Meeting of Members

The next AMM is scheduled for May 28, 2022, in Ontario.

12. Closing

With no further matters to come before the meeting, it was concluded at 11:05am ET.

Members' motion 2021-05-9D

Moved by M. Stothart, seconded by E. Coles

THAT the meeting be concluded.

Carried

BRIEFING NOTE: For information

Engineers Canada Annual Report and Annual Strategic Performance Report		4.1 and 4.2
Purpose:	To receive Engineers Canada’s Annual Report and the 2021 Strategic Performance Report	
Prepared by:	Evelyn Spence, General Counsel and Corporate Secretary	
Presented by:	Gerard McDonald, Chief Executive Officer	

Background

- It is typical for corporations to share with their members, at their annual meetings, copies of their annual reports, for information.

Status Update

- The Engineers Canada Annual Report (the “Annual Report”) is a report created for public audiences that shares achievements on operational and strategic work performed in 2021.
- The Annual Strategic Performance Report highlights how the Engineers Canada Board and its Direct Reports progressed towards achieving the outcomes and objectives set out in the 2019-2021 Strategic Plan. At its February 2022 meeting, the Engineers Canada Board approved the 2021 Annual Strategic Performance Report, for circulation to the Members for information at the 2022 AMM.

Next steps

- The Annual Report will be shared with Engineers Canada’s audiences through Engineering Matters and through promotion on social media.

Appendices

- **Appendix 1:** The Annual Report
- **Appendix 2:** Annual Strategic Performance Report



2021 Annual Report

President's message

In 2018, Engineers Canada embarked on a strategic planning process, characterized by an exceptional level of nation-wide collaboration, broad perspectives, and a focus on transparency. What resulted was a comprehensive strategic plan that has served as an important guide for our collective priorities and provided a framework for the last three years. Aimed at leading Engineers Canada in transformation to better serve regulators and promote and maintain the interests of the profession, the 2019-2021 strategic plan has helped Engineers Canada achieve significant progress. In the last three years, much of which has been like no other the world has experienced, I am particularly grateful for how Engineers Canada staff, volunteers, Board Directors, and our partners have responded given the constraints that a global pandemic have created. We saw a great deal of advancements over the past three years, culminating in us achieving our strategic plan objectives in 2021.

Over the past year, Engineers Canada's 30 by 30 initiative to increase the number of newly licensed female-identifying engineers gained greater momentum. Our 2021 National Membership Report revealed that we reached 20.6% of newly licensed engineers identifying as female as of the end of 2020; 20 by 20, so to speak.

In addition, Engineers Canada has made it a top priority to evolve the accreditation system to ensure clarity and transparency for stakeholders. Activities undertaken in 2021 displayed the active efforts that have taken place over the last few years to achieve this, including the release of the first Accountability in Accreditation report – a collection of recommendations informed by feedback from accreditation stakeholders to enhance accreditation.

Engineers Canada also continued its work to provide services and tools that enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners within Canada. The Competency-Based Assessment was fully operationalized and adopted by a number of regulators across the country. In addition, we launched the refined International Institutions and Degrees Database (IIDD), an upgraded tool to support regulators in assessing academic qualifications of international engineering graduates. These systems help regulators ensure that those seeking licensure are assessed fairly and consistently, regardless of where their qualifications are obtained.

Engineers Canada leads programs aimed at inspiring the next generation of talented and diverse engineers. In 2021, we launched the Future City Experience. The program, hosted virtually in 2021, is designed to introduce students to engineering in a fun and engaging way. We also launched the Engineers Canada Leadership Scholarship for undergraduate engineering students, while the 2021 National Engineering Month reached an audience of over two million people on social media, an 18 per cent increase from past years.

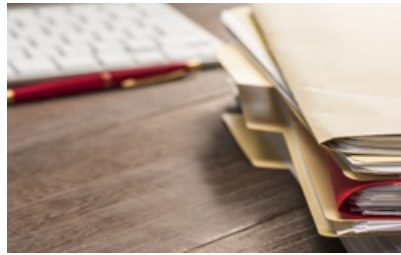
The Engineers Canada 2019-2021 Strategic Plan served as a pillar in our journey to advance Canadian engineering. Reflecting on the past few years, the world has changed significantly, and Engineers Canada has learned a great deal about ways to adapt to challenging situations and to improve our efforts going forward. As we conclude the final year of the plan, we are eagerly embarking on our 2022-2024 strategic plan. Woven throughout the new plan are areas where we will collaborate to strategically position our profession to address trends and risks, adapt to a changing regulatory landscape, select and adopt best practices, and remain relevant across Canada.

Sincerely,
 Danny Chui, FEC, P.Eng.
 President, Engineers Canada





Strategic priority 1: Accreditation Improvement Program



Strategic priority 2: Accountability in Accreditation



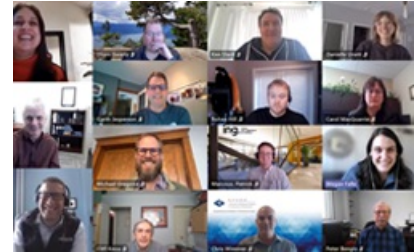
Strategic priority 3: Recruitment, Retention, and Professional Development of Women in the Profession



Strategic priority 4: Competency Based Assessment Project



Operational imperative 1: Accreditation



Operational imperative 2: Regulator relationships



Operational imperative 3: Services and tools



Operational imperative 4: National programs



Operational imperative 5: Advocating to the federal government



Operational imperative 6: Monitoring, researching, and advising



Operational imperative 7: International mobility



Operational imperative 8: Promotion and outreach



Operational imperative 9: Diversity Financial Statements



Operational imperative 10: Protecting official marks



Governance

Strategic priority 1: Accreditation Improvement Program

The Accreditation Improvement Program (AIP) is a coordinated effort to improve the delivery of accreditation for engineering programs and of the Enrolment and Degrees Awarded Survey. The program consists of four key elements, with the implementation of an improved data management system and continual improvement making notable advancements in 2021.



Recognizing the need to modernize how Engineers Canada collects and processes information as part of the accreditation process, we embarked on configuring Tandem, a web-based data management system. Since launching the first phase of the system in 2019 to support the collection of data for the Enrolment and Degrees Awarded Survey, Engineers Canada has made considerable progress in configuring the system for use in the accreditation process itself. The data management system continues to support data collection of the Enrolment and Degrees Awarded Survey, with improvements being made each year based on end-user feedback. As such, we anticipate implementing Tandem for accreditation in time for the 2023/2024 visit cycle.

As the full development of Tandem progresses, the project team is actively configuring the system to carry out the accreditation process. In 2021, the project team undertook multiple rounds of internal testing, developed an implementation plan, and continues to modify the system based on internal and external feedback.

In 2022, the project team has many activities expected to roll-out. This includes final configuration and internal end-to-end testing, data migration, the development of training materials, and planning for testing by external stakeholders. When it's ready, Tandem will be the central information hub for managing a program's accreditation process. From completing the Questionnaire to managing the visit team, Tandem is a singular platform for all aspects of the process, replacing the current Word and Excel documents.

In addition to our work related to Tandem, the Accreditation Improvement Program:

- » Improved stakeholder communication and consultations by applying Engineers Canada's five-step consultation process. In 2021, this process was applied to the Canadian Engineering Accreditation Board (CEAB) consultation on the Required Visit Materials Working Group Report and will inform the 2022 consultation on the CEAB Working Group to Respond to the Engineers Canada '30 by 30' Initiative report.
- » Continued the distribution of Accreditation Matters, a monthly newsletter which continues to keep stakeholders informed on the AIP, Accreditation Board meeting outcomes, consultations, and relevant issues affecting accreditation.
- » Provided a framework and methodology for developing training activities for individuals involved in the accreditation process. This methodology was applied throughout the summer of 2021 as the CEAB prepared nearly 100 volunteers and program representatives to undertake virtual accreditation visits. The training approach will be key to implementing Tandem for accreditation.
- » Refined the continual improvement process to intake, analyze, prioritize, and follow-up on suggestions for improvement to accreditation and to the Enrolment and Degrees Awarded Survey (EDAS).

The communication, training, and continual improvement methodologies and tools have all been operationalized by Engineers Canada staff. Ongoing evaluation and improvement of these areas will persist beyond the strategic plan and will be applied to future initiatives, including the implementation of Tandem for accreditation.

Strategic priority 2: Accountability in Accreditation

The Accountability in Accreditation program is just one of Engineers Canada's accreditation-related continual improvement processes. This particular program was named a strategic priority in the 2019-2021 strategic plan to ensure and measure the effectiveness, trustworthiness, transparency, and efficiency of the accreditation system.



As part of its Accountability in Accreditation Evaluation Strategy, the CEAB published its first Accountability in Accreditation report in 2021. The report is informed by feedback that was collected from regulators, general visitors, program visitors, visiting team chairs and vice-chairs, Engineers Canada Staff, deans, designated officials or program accreditation leads that received CEAB decisions in 2020 or hosted visits in the 2020/2021 accreditation cycle, as well as student leadership at Higher Education Institutions (HEIs) that were visited in 2020/2021. In its report, the Accountability in Accreditation Committee makes several recommendations to the CEAB, the Policies and

Procedures Committee, and the CEAB Secretariat regarding communication and training needs, messaging for accreditation system stakeholders to clarify intents and purposes, and workflow and scheduling of CEAB products and processes. The CEAB's Policies and Procedures Committee and CEAB Secretariat have evaluated the recommendations and have incorporated some recommendations into their 2022 workplans.

Data collection for the second measurement cycle is underway and the next Accountability in Accreditation report will be published in the Fall of 2022.

Strategic priority 3: Recruitment, Retention, and Professional Development of Women in the Profession

The journey to increase the representation of women in engineering through Strategic Priority 3 (SP3) continued to make progress in 2021. Engineers Canada deepened the analysis and understanding of gender equity in the profession, and continued to work collectively with the regulators and other engineering stakeholders to carry out the 30 by 30 initiative – a commitment to increasing the proportion of newly licensed engineers who are women to 30 per cent by 2030. In collaboration with the regulators, Engineers Canada has kept track of the number of newly licensed female-identifying engineers since 2014, as part of the 30 by 30 initiative. Data provided by the regulators in the 2021 National Membership Report, which covers the 2020 calendar year, indicates that the representation of female-identifying engineering members increased from 13.9 per cent in 2019, to 14.2 per cent in 2020. Although the number of female-identifying EITs decreased in 2020, the overall proportion increased slightly from 21.2 per cent in 2019 to 21.6 per cent in 2020. Overall, female-identifying engineers accounted for 20.6 per cent of newly licensed engineers.



Gender Based Analysis Plus (GBA+) analysis

2021 marked a year of many firsts for the 30 by 30 initiative, including the release of a GBA+ analysis of national engineering licensure assistance and employer awareness programs. Engineers Canada hired a consultant to analyze the current national licensure assistance programming and employer awareness programming provided by the 12 provincial and territorial engineering regulators using a GBA+ lens, which is the Government of Canada's analytical process for evaluating systemic inequalities in programs and initiatives. The report summarizes a number of challenges that underrepresented groups may face along their pathway to licensure, from being an undergraduate engineering student, to an engineer-in-training (EIT), to a newly licensed engineer. It also summarizes the challenges faced by demographic groups, including women, Indigenous persons, and foreign-trained engineers. The report gathered regulator perspectives on the 30 by 30 goal, and the ability to achieve 30 per cent female-identifying newly licensed engineers by 2030. Additionally, three recommendations are made for Engineers Canada in its efforts to achieve greater equity, diversity, and inclusion in the engineering profession. Regulator best practices were collected and shared as part of the development and publication of the GBA+ report on regulator EIT/MIT/engineering intern best practices, licensure assistance programs and employer awareness programs. In addition to the report, Engineers Canada's CEO and staff met with each regulator to review the report findings and discuss specific challenges faced in each jurisdiction. A voluntary 30 by 30 scorecard was distributed to the regulators to support tracking of additional gender-based metrics.

30 by 30 Conference

In 2021, Engineers Canada hosted the very first 30 by 30 Conference: a multi-day virtual gathering of 30 by 30 Champions, engineering leaders, and engineers. The conference was an opportunity to actively engage with stakeholders and raise awareness of activities and research that focus on addressing the culture of exclusion against women and underrepresented groups (i.e. Black, Indigenous, people of colour, LGBTQ2+, persons with disabilities) in the profession. Consisting of four sessions held throughout the month of June, the final session was held on International Women in Engineering Day (INWED).

Stakeholder training

Engineers Canada completed the roll-out of equity, diversity, and inclusion training for the Board and CEOs in partnership with Catalyst, a global nonprofit which develops solutions, research, and training to improve gender equity and inclusion in the workplace.

As part of SP3, Engineers Canada produced content and hired a consultant to create an online equity, diversity and inclusion training module. The course was developed with guidance from the Equity, Diversity, and Inclusion Training Task Force, made up of representatives from the 30 by 30 Champions network, including engineering regulators, the National

Society of Black Engineers (Canadian Chapters), Natural Sciences and Engineering Research Council (NSERC) Chairs for Women in Engineering, EngiQueers Canada, and in partnership with Engineers and Geoscientists British Columbia, and Geoscientists Canada.

This course is a foundational training on equity, diversity, and inclusion (EDI) to help individuals develop competencies in inclusive behaviours and emotional intelligence. It intends to empower all professionals to contribute to their full potential without barriers or discrimination. This includes people who are part of one or more equity-deserving groups that have been historically, persistently, and systemically marginalized in Canadian society, including but not limited to all genders, LGBTQ2S+ persons, Indigenous people, Black people, people of colour, and persons with disabilities. Through this course, engineers will gain knowledge and skills in cultural and emotional intelligence and other inclusive behaviours.

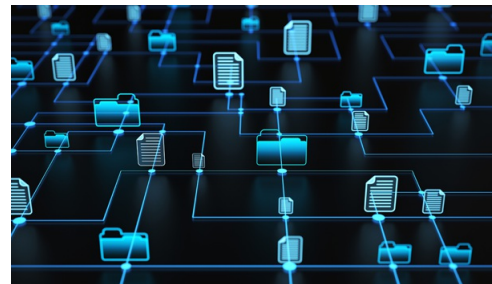
Engineers and Geoscientists British Columbia volunteered to host the course on their learning management system (LMS), which is scheduled to be launched in Q1 of 2022 and will be available to engineers across the country.

Stakeholder Engagement

In addition to facilitating stakeholder training sessions, Engineers Canada continued to engage stakeholders to advance the goals of SP3. This includes working with Engineering Deans Canada (EDC) to expand the 30 by 30 network to include all higher education institutions (HEIs). Currently, 65% of HEIs have appointed 30 by 30 Champions, including the 2021 addition of Thompson Rivers University. The year also comprised of quarterly meetings of the 30 by 30 working groups (i.e. K-12, Post-secondary, Early Career, Employer) and as well as sharing 30 by 30 network information and relevant research through the monthly distribution of the 30 by 30 newsletter.

Strategic priority 4: Competency-Based Assessment project

In partnership with Engineers and Geoscientists British Columbia, Engineers Canada's support of the multi-year Competency-Based Assessment project yielded significant outcomes in 2021. After a four-year effort to make the online system available to engineering regulators across Canada, 2021 saw the completion of all major deliverables. The result is a fully operational pan-Canadian tool. The competency-based assessment tool has been adopted by six regulators, with four other regulators using the same competencies with a different tool.



The competency-based assessment is an online system for recording, assessing, and validating engineering work experience, and allows applicants to identify how they meet the competency standards set for professional engineering or geoscience registration. Translation of the tool is ongoing, and the French version is set to launch in April 2022. In addition, the translation of the Working in Canada seminar, a 50-hour plus virtual course that can be assigned to applicants who do not have sufficient Canadian work experience, has also been completely translated and will be made available to French applicants in April 2022.

Given the completion of the main deliverables (other than the finalization of the French translation work), Engineers Canada has fully closed the project and handed all ongoing operations to Engineers and Geoscientists British Columbia. All ongoing developments and considerations to the tool will be discussed at the regular National Admissions Officials group meeting moving forward.

Operational imperative 1: Accreditation

Engineers Canada has many responsibilities under its mandate, one of which is to accredit undergraduate engineering programs. As part of this responsibility, Engineers Canada remains committed to making continual improvements to the program to ensure its effectiveness and continued to carry out this commitment in 2021.

With ongoing COVID-19 restrictions, all accreditation visits took place virtually in both the 2020/2021 visit cycle (which included five new programs only, with all other scheduled visits being deferred by one year) and the 2021/2022 visit cycle (which included 17 visits to 79 programs). To prepare stakeholders for the virtual visit environment, the CEAB struck a Virtual Visit Working Group which produced the Guide to Virtual Evaluation of an Engineering Program, outlining the expectations for virtual visits. A training plan also was executed, offering virtual facilitation training for all visiting team chairs, webinars for Higher Education Institutions (HEIs) and visiting team



members, and monthly virtual drop-in sessions for visiting team chairs to share their experiences and lessons learned.

The 2021/2022 virtual visit process was a significant pivot from our usual way of conducting and hosting accreditation visits requiring an enormous effort by 129 volunteers, 17 HEIs, and Engineers Canada staff to execute. The dedication of all involved to collaborate, innovate, and problem solve together in the face of a pandemic is a significant achievement in the history of our accreditation system. Planning for the 2022/2023 visit cycle is underway where 25 institutions will host in-person visiting teams across the country with contingency plans in place should health directives require a change in visit modality. Should this happen, the system will be ready to pivot once again.

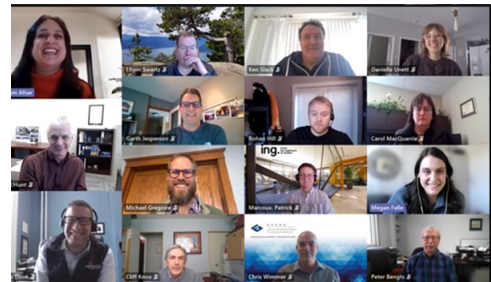
In addition to its operational work to accredit undergraduate engineering programs, the CEAB made significant progress on a number of other items:

- » Revised the definition of engineering design and interpretive statement to improve consistency of the application of accreditation criteria. This work included a 2020 consultation with external stakeholders, concluding in the Engineers Canada Board approving the definition and its application to accreditation criteria in October 2021. This change will be implemented in the 2023/2024 visit cycle.
- » Amended the Interpretive Statement on Licensure Expectations and Requirements to provide more flexibility in curriculum and ensure the Interpretive Statement reflects modern pedagogical practices when counting Accreditation Units. This work was undertaken in partnership with Engineering Deans Canada's Deans' Liaison Committee and informed by feedback from the 2020 consultation. The revised Interpretive Statement was approved by the CEAB in June 2021 for implementation in the 2022/2023 visit cycle.
- » Consulted on the Required Visit Materials Working Group Report which proposed changes to the materials that programs seeking accreditation submit to visiting teams for review. This work establishes a consistent set of required materials for CEAB visits based on best practices of audits while balancing the needs of CEAB visiting teams with the resource concerns expressed by HEIs. Maintaining the rigor of the accreditation system expected by the regulators was central in this work. The revised requirements were approved by the CEAB at their September 2021 meeting for implementation in the 2023/2024 visit cycle.
- » The pandemic has necessitated the CEAB to look at the utility of the Accreditation Units (AU) as curriculum content measurement. The AU relies on 'contact time' between the student and faculty. The pandemic has shifted the educational delivery methods and as a result, the concept of 'contact time' is difficult to reconcile and the AU may not be the best input measurement tool. The Policies and Procedures Committee began its work on examining the issue in 2021 and work will continue into 2022.

Operational imperative 2: Regulator relationships

Maintaining strong, healthy relationships with regulators is one of Engineers Canada's top priorities; and facilitating effective connections between regulators is of equal importance. A fundamental component of Engineers Canada's work is national collaboration. This involves the exchange of information and ideas and active participation of regulators on various programs and projects. To sustain this, we continued to create spaces and opportunities for regulators to build working relationships, collaborate, and share resources.

To facilitate discussions around Engineers Canada's different areas of focus, Engineers Canada organizes and encourages meetings for regulator representatives through various groups. In 2021, regulators remained active and collaborative throughout the year in groups for admissions officials, discipline & enforcement officials, and practice officials as well as at the leadership level with meetings of the CEO Group and the Presidents Group. They also participated in small working groups to support the development of the Competency-Based Assessment, International Institutions and Degrees Database, and National Membership Database projects. Additionally, regulators participated on the K-12 Career Awareness Working Group as well as the Post-Secondary and Early Career Professional. Through these working groups regulators coordinated their outreach and engagement efforts for shared target audiences and in the development of educational resources. Finally, Engineers Canada also hosted the annual Regulator Presentation at the Annual General Meeting. This session provides an opportunity for each president to highlight the achievements, challenges and lessons learned from their regulator in the past year.



Operational imperative 3: Services and tools

Canadian Engineering Qualifications Board

Through the Canadian Engineering Qualifications Board (CEQB) Engineers Canada develops and maintains work products that serve the needs of regulators and of practising engineers. This includes guidelines for regulators and the public, Engineers Canada papers, and examination syllabi. These resources enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners in Canada.



In keeping with previous years, 2021 saw the review, revision, and creation of a variety of resources by the CEQB. By the end of 2021:

- » Syllabi for computer engineering and software engineering were approved.
- » Syllabi on aeronautical and aerospace engineering and metallurgical/materials engineering were prepared for consideration by CEQB in January 2022.
- » Syllabi on agricultural/bioresource engineering and complementary studies were progressing.
- » Work on the new guidelines on diversity and inclusion, and indigenous consultation, the national feasibility study, and the revised paper on software engineering all made significant progress.

National Membership Database

The development of the new National Membership Database (NMDB) is underway and system requirements were finalized with regulators in 2021. The system underwent a privacy impact assessment and vulnerability penetration testing in 2021 and passed both with minimal updates required. Due to delays in the contracting phase, development is expected to be completed in April 2022 with full launch by June 2022. When completed, the refreshed system will improve the functionality of the database, strengthen data security, and improve the quality of the information in the system. The database is one of the tools regulators use to facilitate mobility within Canada.

Operational imperative 4: National Programs

Engineers Canada offers a number of programs that are intended to benefit regulators and engineers. This is done through sponsored initiatives and partnerships, also known as affinity programs.

At the beginning of 2021, we launched the third iteration of the social media awareness campaign for the Secondary Professional Liability Insurance Program (SPLIP). The program saw much success in increasing traffic to the SPLIP pages of the Engineers Canada website. Based on prior learnings, Facebook and LinkedIn were incorporated in the fall campaign roll-out.



Hub International, in collaboration with Engineers Canada completed a market exercise for the SPLIP. The exercise resulted in coverage enhancements and a rate reduction guaranteed for a three-year term (March 31, 2021-March 31, 2024) with AXA XL.

Geoscientists Nova Scotia joined the Engineers Canada sponsored home and auto insurance program. In addition, clients in the TD Insurance home and auto program will benefit from an increase in the number of TD Insurance Auto Centres, now totalling 22 Canada-wide. These centres are the only one-stop shops in Canada where clients can speak to a claims advisor, get their car repaired, and get a rental car.

With the support of TD Insurance, Engineers Canada launched the #EngineeringLife series in our newsletter, Engineering Matters. This occasional series explores the human side of engineering through stories and insights in the lives of engineers. This initiative is part of an integrated strategy to promote our partnership and the TD Insurance home and auto programs. The series garnered close to five million impressions on social media, while the related promotion of the TD Insurance home and auto programs received more than five million impressions as a result of the campaign.

In collaboration with Manulife, Engineers Canada secured a loyalty bonus for clients enrolled in the Engineers Canada sponsored term life program. This bonus comes in the form of premium refunds, which are applied as a credit and which result in a reduction in premiums for one year. Manulife and Engineers Canada continued to provide access to a Health

Care Online App (Akira by Telus Health) for the health and dental program insureds. Services include specialist referrals, lab test requisitions, diagnosis of health concerns, and prescriptions. The continuation of this service is to help insured members during the pandemic.

Engineers Canada signed a 3-year agreement with the Avis Budget Group for its car rental program, renegotiated with no increase in rental rates.

Finally, in consultation with Aon, our benefits consultant, and discussions with the participating regulators in the national employee group benefits program, Engineers Canada directed Manulife to implement a rate reduction to the Health and Dental Care benefits, as well as continuing to provide Health Care Online (Akira by Telus health). This was possible using monies from the Program's Unrestricted Deposit Account.

Operational imperative 5: Advocating to the federal government

Engineers Canada provides evidence-based views on matters of public policy that affect the engineering regulators and the profession, and influences government policy- and decision-making on issues of interest to the profession. Engineers Canada's public affairs and government relations work ensures that engineers are involved in the creation of public policy, and that engineering expertise is used in drafting and reviewing public policy.



National Position Statements:

Engineers Canada uses National Position Statements to outline the public policy priorities of the engineering profession in our conversations with government. These statements provide evidence-based perspectives on matters of public policy that affect the engineering profession.

In 2021, the Public Affairs and Government Relations team updated all National Position Statements to reflect the most up-to-date information available. Three new National Position Statements were also developed and approved by the Engineers Canada Board:

- » The role of engineers in Canada's long-term economic recovery
- » Building Canada's high-speed broadband through a sustainable digital infrastructure
- » Professional practice in biotechnology

In addition, we updated five existing National Position Statements relating to:

- » Research, development and innovation
- » Immigration and foreign qualifications recognition
- » Qualifications to provide engineering expertise to panels and boards under federal jurisdiction
- » Qualified Person vs Professional Engineer
- » Science, Technology, Engineering and Mathematics (STEM) Education

Issue statements:

Issue Statements are meant to quickly respond to government actions or emerging issues that affect the engineering regulators or the engineering profession. In 2021, the Public Affairs and Government Relations team developed two new Issue Statements in response to issues affecting the engineering profession:

- » Engineers' role in Canada's long-term economic recovery post-COVID-19
- » Air quality and building management: Reducing the airborne transmission of the COVID-19 virus

Government submissions

Engineers Canada's government relations team actively advocates for the engineering regulators and the engineering profession in front of the federal government on a range of issues that affect the engineering profession and its regulation. In 2021, Engineers Canada secured several opportunities to engage and provide written briefs to the federal government through multiple submissions that included:

- » Submission to the House of Commons Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities on the Review of the Employment Insurance program
- » Engineers Canada Federal Budget 2021 Highlights and Analysis
- » Engineers Canada's submission to the House of Commons Standing Committee on Finance in Advance of the 2022 Budget
- » Engineers Canada's comments to Natural Resources Canada regarding the People-Centred Just Transition Discussion Paper
- » Engineers Canada's Comments to Environment and Climate Change Canada regarding three offshore exploration drilling projects off the coast of Newfoundland and Labrador
- » Engineers Canada's comments on a possible Canada-Indonesia Comprehensive Economic Partnership Agreement (CEPA)
- » Engineers Canada's comments to Global Affairs Canada on the free trade agreement negotiations with the United Kingdom and its possible accession to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)
- » Engineers Canada's Comments to Natural Resources Canada's discussion paper regarding Canada's Approach to Offshore Renewable Energy Regulations.
- » Engineers Canada's comments on Canada's National Infrastructure Assessment: "Building the Canada We Want in 2050"

Engineers Canada also held numerous meetings with elected officials and senior public servants to discuss issues relating to the engineering regulators and to the engineering profession.

Operational imperative 6: Monitoring, researching, and advising

One of Engineers Canada's core purposes on behalf of the engineering regulators is to proactively identify, investigate, and explain trends and changes that are likely to have an impact on regulation and the future of the engineering profession. A key part of this work is communicating research findings to regulators on an ongoing basis, to support their own decision-making and direction-setting processes.

To this end, in 2021 we published multiple articles covering topics such as environmental, social, and governance (ESG) reporting in engineering, licensure examinations during COVID-19, the role of volunteers in self-regulation, engineering and the United Nations Sustainable Development Goals, big data in regulation, foreign credential recognition, regulators' role in building equity, diversity and inclusion, and changes and oversight in regulatory frameworks.

We also published papers about entity regulation and non-practising status – two topics that regulators had requested we examine in order to support their own transitions, improvements and decision-making in these areas.

Finally, 2021 also saw the release of a paper on the emerging engineering practice of Autonomous Systems engineering. This paper explains the practice of engineering relating to autonomous systems; it provides information and guidance for regulators to identify autonomous engineering; and ways for consideration on how to regulate effectively in conjunction with existing tools.



Operational imperative 7: International mobility

As the national body representing the engineering regulators, Engineers Canada is well positioned to define the risks and opportunities associated with the mobility of work and practitioners internationally. By recommending actions to the regulators that manage and respond to these impacts, Engineers Canada helps inform regulatory decisions around this area in each jurisdiction.



International Institutions and Degrees Database

Engineers Canada launched an upgraded tool to help engineering regulators assess the academic qualification of international engineering graduates. The International Institutions and Degrees Database (IIDD) provides up-to-date information about engineering programs from over 140 countries around the world. It includes background about a country's education system, the legitimacy of specific institutions and degrees, and whether a degree meets academic requirements for professional licensure in that country. The IIDD was launched in 2009, upgraded in 2014 and again in 2021. In this year's upgrade, the IIDD was expanded to provide more information to regulators about institutions and degrees, including information about quality assurance systems and the link between education and the licensing/registration system in each country, where applicable.

Engineerhere.ca

Becoming familiar with the licensure process to become an engineer in Canada can be challenging, especially for those seeking information from outside of Canada. In response to this need, Engineers Canada created the webpage engineerhere.ca in 2019. To support the global audience of engineerhere.ca, licensure information in a variety of languages was added in 2021. These pages provide core information about the licensure process in 11 different languages: Arabic, Bengali, Chinese (Traditional), Chinese (Simplified), English, Farsi, French, Hindi, Spanish, Tagalog, and Urdu.

International Engineering Alliance

Engineers Canada participated at the virtual meetings of the International Engineering Alliance (IEA). The meetings included reviews of new applicants to include in the agreements and accords, as well as reviews of existing signatories and members. Our International Mobility Advisory Group, comprised of a group of regulators, attended these meetings for the first time. This was a first step in evaluating IEA processes and providing recommendations to all regulators on use of the IEA agreements and accords as well as our level of engagement or leadership within the IEA.

APEC and IPEA Reviews

At a special January 2021 meeting of the International Engineering Alliance, our report to respond to the concerns of the review team looking at our international mobility register was accepted as demonstrating substantial equivalence with the international competency standard. As a result, we remain members of the Asia Pacific Economic Cooperation (APEC) Engineers Agreement and International Professional Engineers Agreement (IPEA) for another six years from the date of our original review.

Washington Accord

As part of our ongoing obligations as a Washington Accord signatory, we received a monitoring visit in November. Washington Accord signatories are subject to such a review at least every six years to maintain their signatory status. The objective of the monitoring review is to demonstrate that our accreditation system remains substantially equivalent to other Washington Accord signatories. As part of this process, we wrote a self-study report and hosted an international review team drawn from the United Kingdom, Turkey, and Japan who observed virtual CEAB accreditation visits to two institutions in November. The monitoring review team will also observe the June 2022 CEAB decision meeting. Similar to Engineers Canada's accreditation system, the Washington Accord review was impacted by pandemic-related travel restrictions and the review team meeting was hosted in a virtual format – a first for the Washington Accord system. Additionally, one of the two institutions whose accreditation visits were observed by the Washington Accord review team is a French-speaking institution requiring us to arrange virtual simultaneous interpretation for the non-French speaking review team. We are grateful to the institutions who granted permission for the review team to observe their visit, to the CEAB visiting teams who welcomed the review team as part of their own, and to the review team themselves who showed great flexibility and collaboration in planning and executing these milestone visits.

The monitoring team's findings and subsequent recommendation on our signatory status will be presented to other signatories in 2022.

Operational imperative 8: Promotion and outreach

Girl Guide Crest Program

The Engineering crest was created by Engineers Canada, in partnership with Girl Guides Canada, to be awarded to guides who complete engineering-related activities under the supervision of a member of the engineering community such as a professional engineer, engineer-in-training, engineering graduate, or engineering student. Throughout the year, 3,010 crests were distributed to Girl Guides across Canada. Due to the continued success of the program and after consultation with Engineers Canada's K-12 Career Awareness Working group, the decision was made to expand this program to include Scouts Canada. Work to expand the program to include Scouts will commence in 2022.



Future City Program

New in 2021, Engineers Canada launched the Future City Experience, an abbreviated version of the Future City Competition intended for educators and students who are new to Future City. The Future City Experience was designed to introduce students to engineering in the same fun and engaging way as the Future City Competition, but without the commitment of the full competition and with additional support from engineer mentors. The new version was entirely virtual and could be adapted to in-class or online learning models. Similar to the Future City Competition, it asked students in grades 6, 7, and 8 to use the engineering design process to imagine, research, design, and build cities 100 years into the future. The theme for Future City 2021 was Living on the Moon and asked students to design a futuristic lunar city.

National Engineering Month

National Engineering Month (NEM), Canada's largest celebration of engineering, kicked off virtually for another year in 2021. The month-long celebration spotlighted a different theme each week, encouraging engineering students, professionals, companies, and associations to take to social media (#NEM2021) and demonstrate their pride in the engineering profession and their work related to that week's theme. NEM 2021 saw 6,710 participants participate in the nation-wide initiatives. The social media campaign saw similar achievements, reaching over 2,765,130 users, an 18% increase from previous years.

Engineers Canada Awards

The Engineers Canada Awards recognize and celebrate the achievements of engineers and engineering students who are advancing the engineering profession and improving the lives of Canadians and others around the world. In replacement of the annual Awards Gala due to the impacts of COVID-19, Engineers Canada launched a social media campaign on Twitter, Facebook, and LinkedIn to showcase the work of award recipients. Recipients in 2021 were:

- » Samuel Pierre, PhD, FCAE, ing. – Gold Medal Award
- » Leslie Russell, PhD, FEC, P.Eng. - Meritorious Service Award for Professional Service Award
- » Claire Kennedy, FRCGS, P.Eng. - Meritorious Service Award for Community Service
- » William Cluett, PhD, P.Eng. - Medal for Distinction in Engineering Education
- » Catherine Mavriplis, PhD, FCAE, P.Eng. - Award for the Support of Women in the Engineering Profession
- » Matthew Tutty - Gold Medal Student Award

Learn more about our 2021 award recipients.

Engineers Canada Scholarships

The implementation of approved recommendations from the scholarship program review was completed, including the launch of a leadership scholarship for undergraduate engineering students. Similar to the awards program, scholarship recipients were celebrated through a series of promotional campaigns and a series of social media posts across Engineers Canada's social media platforms. The recipients of the 2021 scholarships were:

Engineers Canada-TD Insurance Scholarships (\$7,500)

- » Danielle Maitland, MASc, MSc, P.Eng.
- » Jeffrey Underhill, FEC, P.Eng.
- » Keenan Ngo, P.Eng.

Engineers Canada–Manulife Scholarships (\$12,500)

- » Colin Dreger, M.Eng., P.Eng.
- » Sheida Stephens, P.Eng.
- » Tia Shapka-Fels, P.Eng.

Engineers Canada Leadership Scholarship (\$4,000)

- » Coralie Tcheune
- » Dalena Vo
- » Daniel Wood
- » Kimberly Watada
- » Masooma Tahir
- » Sydney Wheatley
- » Yazan Zamel
- » Yudi Yang

Learn more about our 2021 scholarship recipients.

Fellows of Engineers Canada**Professional Engineers of Ontario**

Rod Young, P.Eng.
Ken Slack, P.Eng.

Engineers Nova Scotia

Crysta Cumming, P.Eng.
Christian Boudreau, P.Eng.
Dennis Fowler, P.Eng.
Peter Murray, P.Eng.
Rob Jamieson, P.Eng.

Association of Professional Engineers and Geoscientists

Sebastian P. Walrond, P.Eng.
Robert Cochran, P.Eng.
Catherine Griffith, P.Eng.
Jessica Theriault, P.Eng.
Ondiveerapan Thirunavukkarasu, P.Eng.
E. Kwei Quaye, P.Eng.

Ordre des ingénieurs du Québec (OIQ)

Samuel Pierre, ing.
Nicolas Turgeon, ing.

Engineers and Geoscientists BC

Dr. Rehan Sadiq
Ghassem Zarbi, P.Eng.
George Allan Barclay, P.Eng.
Vernon Lawrence Buchholz, P.Eng. (Retired)
Anthony Michael Horlor, P.Eng.
Robert Verne Hadden, P.Eng.
Maria Ewelina Holuszko, P.Eng.
Darryl John Hansen, P.Eng.
Inna Michalowski, P.Eng.
Dharam Pall Kajal, P.Eng.
Raymond Wai-Ming Chin, P.Eng.
Armando Abello, P.Eng.
David Yat-Fai Chan, P.Eng.
Albert Wing Kin Chow, P.Eng.
Dale William Goudie, P.Eng.

Derek Ken Sakamoto, P.Eng.
Thomas Fitzgerald Luc Whalen, P.Eng.
Weiguo Zhan, P.Eng. (Non-Practising)
Bernard Edmond Laval, P.Eng.
Gerald Charles O'Hara, P.Eng. (Retired)
Scott William Campbell, P.Eng.
Mark Tamer Alev, P.Eng.
Shi Ping Wu, P.Eng.
Gholam-Hossein Yavari, P.Eng.
Kemal Ozgur, P.Eng.
Wing-Wo Henry Wong, P.Eng.
Piotr Pawel Mazur, P.Eng.
Shamsul Alam Chowdhury, P.Eng.
Tomas Mojica, P.Eng.
Gregory Howard Martin Hatton, P.Eng.
Amr M. Fathalla, P.Eng.
Dieter Diedericks, P.Eng.
Thomas Camillo Stubens, P.Eng.
Scott Alexander Loptson, P.Eng.
Charles Joseph Michael Harrison, P.Eng.
Pulak Mukerjee, P.Eng. (Retired)
Jose M. Torrecampo III, P.Eng.
Jian Guo Chen, P.Eng.
Saqib Ahmed Khan, P.Eng.
Marius Mihai Ciornei, P.Eng.
Mohammadreza Jarollahi, P.Eng.
Xiaoqi Fang, P.Eng.
Lee David Rowley, P.Eng.
Reto Nicolao Corfu, P.Eng.
Denver Maharaj, P.Eng.
Jarrod Reed Koster, P.Eng.
Tarek Abbas Abdel-Sattar El-Amoury, P.Eng., Struct.Eng.
Stephen Karrer O'Leary, P.Eng.
Larry Bruce Spence, P.Eng.
Mihai G. D. Georgescu, P.Eng.
Wesley Gregg Narciso

Engineers and Geoscientists Manitoba

Nicholas Douville, P.Eng.
Hanns Till Freihammer, P.Eng.
Brian McIntosh, P.Eng.
Jeffrey Rempel, P.Eng.
James Watling, P.Eng.
Neil Klassen (not an engineer – FEC (Hon) recipient)

Engineers PEI

Wendy Weeks, P.Eng.

APEGA

Samer Adeeb, P.Eng.
Margaret Allen, P.Eng., P.GEO.
George Anderson, P.Eng.
Johnathan Assels, P.Eng.
John Doucette, P.Eng.
Sandeep Gupta, P.Eng.
Ralph Hildenbrant, P.Eng.
Tom Johnston, P.Eng.
Zoltan Koles, P.Eng.
Alan Newcombe, P.Eng.
Joel Nodelman, P.Eng.
Paul Ryzuk, P.Eng.
Spencer Torrie, P.Eng.
Claudia Villeneuve, P.Eng.

Professional Engineers Ontario

Mir Haris Ahmadzai, P.Eng.
Tarun Biju, P.Eng.
Shiva Bissoon, P.Eng.
Darla Campbell, P.Eng.
Kevin Hughes, P.Eng.
Samer Inchasi, P.Eng.
Christopher Tyler Ing, P.Eng.
Andrew Lawton, P.Eng.
Norbert Lee, P.Eng.
Gajananda Mailvaganam, P.Eng.
Jeffrey Neilson, P.Eng.
Iretomiwa Olukiyesi, P.Eng.
Stephen Quinlan, P.Eng.

Fridrich Lederer, P.Eng. (Non-Practising)
 Garry Wayne Stevenson, P.Eng./P.Geo., FGC
 Kenneth Wayne Newbert, P.Eng.
 Gregory Irving Smith, P.Eng., Struct.Eng.
 Mubashir Husain Siddiqui, P.Eng.
 Anthony Ka-Pong Lau, P.Eng.
 Micheal John O'Keeffe, P.Eng., Struct.Eng.
 Lane Ronald John Logan, P.Eng.
 Joseph Hayward Rousseau, P.Eng.

Melissa May Heidema
 Joseph Fritz Fernandez
 Maya Charnell
 Sze Tak Chiu
 Ron McOuat
 Craig Daniel Work
 Neil Cumming
 Brent Burton
 Keith Alexander Recsky
 Phillip Chow

Saif Rehman, P.Eng.
 Shailesshkumar Shah, P.Eng.
 Abdul Shaikh, P.Eng.
 David Uren, P.Eng.
 David Uren, P.Eng.
 Nicholas Vlachopoulos, P.Eng.
 Lija Ward, P.Eng.
 Zachary White, P.Eng.
 William Cluett, P.Eng.
 Claire Kennedy, P.Eng.
 Catherine Mavriplis, P.Eng.

National Outreach Working Group

Engineers Canada's Digital Engagement and Online Campaign Working Groups were combined to create the National Outreach Working Group. The group has created sub-working groups to focus on three key target audiences: K-12 students, post-secondary students, and engineers-in-training and early career professionals. All the engagement initiatives and activities that were developed through this group, specifically the Digital Scavenger Hunt (K to grade 6), Design Challenges (grades 6 to 8) and online game (grades 9 to 12) are live on our ExploreEngineering.ca website.

Operational imperative 9: Diversity and Inclusion

Diversity and inclusion are key enablers of progression in the engineering profession. Engineers Canada continued working to foster a collaborative profession, drive innovation, develop programs and resources, and guide business practices to establish and sustain equity, diversity and inclusion in engineering. Our areas of focus are primarily on increasing the recruitment, retention, and professional development of women and reducing barriers for Indigenous people to enter and thrive in the engineering profession. In 2021, we worked towards reconciliation through research, analysis, training, and stakeholder engagement.



Reconciliation in Engineering

In partnership with Engineers and Geoscientists British Columbia, Engineers Canada hosted a webinar on exploring the practice of acknowledging First Peoples and traditional land as a way to open meetings and also as part of a larger process towards reconciliation between non-Indigenous and Indigenous Peoples in Canada, with a panel of Indigenous engineers and geoscientists. In collaboration with the Indigenous Advisory Committee, Engineers Canada also updated the Land Acknowledgement Guide to lead our staff, volunteers, community members, and others in creating meaningful land acknowledgements in their day-to-day practices.

To undertake research and analysis of the experiences of Indigenous engineers and improve the reporting of Indigenous engineers and engineering students, we worked with Big River Analytics on two reports. Big River Analytics undertook a study to estimate Indigenous representation in the engineering workforce, and found that Indigenous people are underrepresented in engineering occupations, relative to Indigenous representation in the total population and in the labour force. Big River Analytics has also completed a pilot survey of Indigenous engineers with three regulators. This report is expected to be published in early 2022.

Engineers Canada also partnered with University of British Columbia researchers to conduct interviews with Indigenous students and engineers within HEIs on their experiences and insights on truth and reconciliation in engineering education. Findings of this research will be available in early 2022.

To further advance reconciliation, and ensure foundational knowledge of Indigenous peoples, histories, and communities remain accessible, the 4 Seasons for Reconciliation training was offered to the Engineers Canada Board, CEAB, CEQB, regulator CEOs and presidents, and Engineering Deans Canada. We are also pleased to see several regulators enter into agreements with the provider to offer further training to their stakeholders.

Throughout 2021, Engineers Canada continued to consult with our Indigenous Advisory Committee (IAC) on building relationships with Indigenous organizations and engineers. The IAC recommended that Engineers Canada become a member of the Canadian Council of Aboriginal Business (CCAB) and to apply for the CCAB's Progressing Aboriginal Relations certification, a process which will be undertaken throughout 2022.

Operational imperative 10: Protecting official marks

On behalf of the provincial engineering regulators, Engineers Canada holds and administers a portfolio of intellectual properties that include official marks and registered trademarks, including registered certification marks.

In



2021, as with previous years, we provided a presentation to the members of the National Discipline and Enforcement Officials group, providing insight into the trademark application process and Engineers Canada's strategy and approach to managing its opposition proceedings. In keeping with previous years, in 2021, we continued to review and evaluate Engineers Canada's trademark enforcement strategy to ensure trademarks and official marks continue to be adequately used and protected.

Engineers Canada is the owner of an official mark for each of the following professional engineering designations:

- » ENGINEER
- » ENGINEERING
- » CONSULTING ENGINEER
- » PROFESSIONAL ENGINEER
- » P.ENG.
- » GÉNIE
- » INGÉNIERIE
- » INGÉNIEUR CONSEIL
- » INGÉNIEUR
- » ING.

Governance

Under the 2019-2021 Strategic Plan, and according to Board policy, there are six Board responsibilities, each of which was met in 2021 with the support of Engineers Canada staff. The policy states that the Board shall:

- » Hold itself, its directors, and its direct reports accountable
- » Sustain a process to engage with regulators through regular communication that facilitates input, evaluation, and feedback
- » Provide ongoing and appropriate strategic direction
- » Ensure the development and periodic review of Board policies
- » Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board's risk tolerance level and directs Board-approved mitigation strategies
- » Provide orientation of new directors, and continuing development of directors and others who work closely with the Board



In meeting these responsibilities, the Board: approved revisions to forty policies and adopted two new policies and a new guideline; conducted the governance effectiveness survey and implemented the resulting recommendations and actions; approved the 2020 recommendations for CEO evaluation and the 2021 CEO objectives; secured a consultant to conduct the informal evaluation of the CEO's performance; and monitored performance against the Strategic Plan through interim reporting, among other things.

Financial Statements

Download the 2021 summary financial statements.



2021 Engineers Canada Annual performance report

Introduction

In 2018, Engineers Canada embarked on a strategic planning process, characterized by an exceptional level of nation-wide collaboration, broad perspectives, and a focus on transparency. What resulted was a comprehensive strategic plan that has served as an important guide for our collective priorities and provided a framework for the last three years. In the last three years, much of which has been like no other the world has experienced, I am particularly grateful for how Engineers Canada staff, volunteers, Board Directors, and our partners have responded given the constraints that a global pandemic have created.

Over the past year, Engineers Canada's 30 by 30 initiative to increase the number of newly licensed female-identifying engineers gained greater momentum. Our 2021 National Membership Report revealed that we reached 20.6% of newly licensed engineers identifying as female as of the end of 2020; 20 by 20, so to speak.

Engineers Canada also continued its work to provide services and tools that enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners within Canada. The Competency-Based Assessment was fully operationalized and adopted by a number of regulators across the country. These systems help Regulators ensure that those seeking licensure are assessed fairly and consistently, regardless of where their qualifications are obtained.

The Engineers Canada 2019-2021 Strategic Plan served as a pillar in our journey to advance Canadian engineering. As we conclude the final year of the plan, we are eagerly embarking on our 2022-2024 Strategic Plan.

Sincerely,

Danny Chui, FEC, P.Eng.
President
Engineers Canada
















“The Engineers Canada 2019-2021 Strategic Plan served as a pillar in our journey to advance Canadian engineering.”

Summary of 2021 performance

	Q1		Q2		Q3		2021	
	Objectives	Outcomes	Objectives	Outcomes	Objectives	Outcomes	Objectives	Outcomes
Strategic priorities								
SP1 Accreditation Improvement Program	████	████	████	████	████	████	████	████
SP2 Accountability in Accreditation	████	████	████	████	████	████	████	████
SP3 Recruitment, Retention, and Professional Development of Women in the Profession	████	████	████	████	████	████	████	████
SP4 Competency Based Assessment Project	████	████	████	████	████	████	████	████
Operational imperatives								
OP1 Accreditation	████	████	████	████	████	████	████	████
OP2 Regulator relationships	████	████	████	████	████	████	████	████
OP3 Services and tools (QB and NMDB)	████	████	████	████	████	████	████	████
OP4 National programs (affinity, devolving PIEVC and IRP)	████	████	████	████	████	████	████	████
OP5 Advocating to the federal government	████	████	████	████	████	████	████	████
OP6 Monitoring, researching, and advising	████	████	████	████	████	████	████	████
OP7 International mobility	████	████	████	████	████	████	████	████
OP8 Promotion and outreach	████	████	████	████	████	████	████	████
OP9 Diversity	████	████	████	████	████	████	████	████
OP10 Protecting official marks	████	████	████	████	████	████	████	████
Board responsibilities								
BR1 Hold itself, its Directors, and its Direct Reports accountable							████	████
BR2 Sustain a process to engage with Regulators through regular communication that facilitates input, evaluation, and feedback							████	████
BR3 Provide ongoing and appropriate strategic direction							████	████
BR4 Ensure the development and periodic review of Board policies							████	████
BR5 Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board’s risk tolerance level and directs Board-approved mitigation strategies							████	████
BR6 Provide orientation of new Directors, and continuing development of Directors and others who work closely with the Board							████	████

Legend

Scoring	
Assessment of the progress of the annual objectives:	Assessment of the probability of achieving the intended strategic outcomes by the end of the strategic plan period:
<p> 100% (i.e. all objectives have been achieved)</p>	<p> 100% (i.e. the outcomes have been achieved)</p>
<p> 90 to 100% of the initiatives are on track</p>	<p> 90 to 99% probability of achieving the intended outcomes</p>
<p> 70 to 89% of the initiatives are on track</p>	<p> 80 to 89% probability of achieving the intended outcomes</p>
<p> Some disruption; close monitoring required. 50 to 69% of the initiatives are on track</p>	<p> 70 to 79% probability of achieving the intended outcomes</p>
<p> Significant disruption; close monitoring required. The majority of the initiatives are not on track</p>	<p> 60 to 69% probability of achieving the intended outcomes</p>
<p> Obstacles being encountered that put progress and success at risk; corrective action required</p>	<p> Less than 60% probability of achieving the intended outcomes</p>

SP1: Accreditation Improvement Program*Accountability: CEO**Weight: 4 (highest)*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Improved performance of the accreditation management process.
- Improved performance of the Enrolment and Degrees Awarded Survey process.
- Improved stakeholder consultation process associated with accreditation management and Enrolment and Degrees Awarded Survey processes.
- Improved user experience(s) associated with accreditation management and the Enrolment and Degrees Awarded Survey. This includes both operationally and for those stakeholders directly involved in these processes.
- Improved reliability of accreditation and the Enrolment and Degrees Awarded Survey.
- Users are enabled to more quickly adopt changes to the accreditation management and Enrolment and Degrees Awarded Survey Processes.
- Sustainable methods are established to ensure ongoing operational continual improvement.

Probability of achieving the intended outcomes by December 2021

- Five (5) intended outcomes have been achieved: sustainable methods of ongoing continual improvement have been operationalized; the Enrolment and Degree Awarded (EDA) Survey process has improved reliability, user experience and performance; and the stakeholder consultation process for the EDAS work was also improved.
- We remain confident that the Tandem accreditation management process will offer improved reliability and performance and will enable users to more quickly adopt changes. Tandem is being developed with ongoing stakeholder consultation through an advisory team of users, and feedback to date has been positive.
- Tandem will launch for data collection in September 2022, and full achievement of all outcomes will be achieved once all higher education institutions (HEIs) have transitioned to the new system – a process that will take six years given our accreditation cycles.

2021 Objectives:

- Update the data management system based on lessons learned from the prior release.
- Training for all affected stakeholders.
- Capture and incorporate ongoing improvements.
- Implement accreditation management system (Tandem) considering the needs of HEIs and Engineers Canada. Plan the transition of the accreditation management system.
- Design, build, and plan implementation of improvements to Engineers Canada's accreditation volunteer management process, ensuring alignment to the Engineers Canada's volunteer management process.

Achievement of the objectives:

- Data management system was used for the Enrolment and Degrees Awarded Survey, with improvements based on previous years.
- While initial Tandem functionality has been delivered by the vendor and tested by Engineers Canada staff, four (4) enhancements are underway to reduce the data entry burden for programs and leverage new system functionality. As a result, Tandem will be implemented for accreditation in Q4 2022. This approach will involve end-to-end internal and external testing, mock accreditation reviews, and curriculum assessments to test the system in real-world application. Tandem activities related to training, implementation and change management are therefore deferred to Q1 2022.
- The continual improvement process has been operationalized and is being managed by the accreditation team.
- Work on the accreditation volunteer management process are now being developed and implemented by the organization-wide Volunteer Management Project.

Comments:


The Tandem accreditation system did not launch this year due to 2019 and 2020 delays associated with vendor resources, which have now all been resolved. Given disruption at HEIs due to COVID-19, a system launch in 2022 offers advantages in terms of minimizing CEAB-changes imposed on the HEIs. The system will launch for accreditation data collection in Q4 2022, with decisions for the 2022/2023 visit cycle all being supported by Tandem.

SP2 Accountability in accreditation

Accountability: CEAB

Weight: 4 (highest)

Annual Objectives: 

Strategic Outcomes: 

Intended outcomes:

- The criteria established by the Accreditation Board are data-driven, reflect the requirements of the Regulators, and support excellence in engineering education.
- Engineering Regulators are provided with annual, data-driven reporting that demonstrates that the CEAB measures transparency and effectiveness, enabling clarity of conversations around potential improvements and changes.
- Higher education institutions (HEIs):
 - Understand and recognize that the CEAB is taking them through a structured, rigorous, and fair process.
 - Feel supported in their efforts to incorporate educational innovation into their programs in a timely manner.
 - Report greater knowledge and predictability of accreditation visits and decisions, and satisfaction with the Accreditation Board's collaborative approach to change.

Probability of achieving the intended outcomes by December 2021

- The intended outcomes have been mostly achieved.
- The first report of the Accountability in Accreditation enables clarity of conversations around potential improvements and changes and provides evidence of Regulatory, CEAB and HEI perceptions of and trust in the CEAB.
- However, the demands on HEIs and their requests of the CEAB have greatly increased throughout the COVID-19 pandemic period. Despite the fact that the CEAB's work related to COVID-19 accommodations has demonstrated a collaborative approach to change, HEIs continue to request even more support and a faster rate of change in accreditation criteria and processes turn-arounds. Given the volunteer structure of the CEAB and the lengthy cycle of accreditation, this has not been achievable.

2021 Objectives:

- Complete first annual measurement, initiated in 2020.
- Report on the first measurement cycle.
- Review measures and measurement process based on lessons learned or feedback from stakeholders.
- Begin data collection for second measurement cycle.


Achievement of the objectives:

- The first report of the Accountability in Accreditation Committee was released in 2021 and presented to the CEAB. The Policies & Procedures Committee is now evaluating the recommendations and how to incorporate them into their work plan.
- Data collection for the second measurement cycle is underway.
- Due to the low response rate (only 4 programs were visited due to COVID-19), after a review of the measures and measurement process, the Committee elected to leave the system as is until it has been used by a larger number of HEIs.

Comments:

We will continue to work on outcomes related to the HEIs' perception of the timeliness, flexibility and support provided by the accreditation system as they incorporate education innovations into their programs through the 2022-2024 accreditation strategic priority, *Investigate and validate the purpose and scope of accreditation*.

SP3 Recruitment, retention, and professional development of women in the profession

Annual Objectives: Strategic Outcomes: *Accountability: CEO**Weight: 4 (highest)*

Intended outcomes:

- A national program with high visibility among targeted stakeholders.
- Engineering Regulators are provided the opportunity to fully participate in the program.
- Barriers to entry and retention for women in the profession are understood and mechanisms for addressing them are developed to be applied both nationally and with Regulators in their provinces and territories.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:


- Complete review and refinement of actions in action plans for recruitment, retention, and professional development.
- Complete roll-out of equity, diversity, and inclusion training for Board, CEOs, CEAB and CEQB.
- Make equity, diversity, and inclusion training module available to Regulators.
- Work with Engineering Deans Canada (EDC) to expand the 30 by 30 network to include all higher education institutions (HEIs).
- Distribute Engendering Success in STEM research results to Regulators and engineering stakeholders.
- Support 30 by 30 working groups.
- Promote DiscoverE Persist series, International Women in Engineering Day, and the memorial on December 6.
- Publish report on Regulator EIT/MIT best practices, licensure assistance programs and employer awareness programs on Engineers Canada's public website.
- Develop a national communication plan for 30 by 30.
- Publish, for the use of the Board and the Regulators, an aspirational scorecard for 30 by 30 with yearly targets.
- Collect and share Regulator best practices.

Achievement of the objectives:

- Completed review and refinement of actions in action plans for recruitment, retention, and professional development.
- Completed roll-out of equity, diversity, and inclusion training for Board and CEOs. Training for CEAB and CEQB was postponed due to COVID-19 and is being planned for 2022-2023.
- Developed content and hired consultant to create an online equity, diversity, and inclusion training module. Engineers Geoscientists BC volunteered to host course on their learning management system (LMS), which is scheduled to be launched in Q1 2022 and available to engineers across the country.
- Worked with Engineering Deans Canada (EDC) to expand the 30 by 30 network to include all higher education institutions (HEIs). Currently, 65% of HEIs have appointed 30 by 30 Champions.
- Distributed Engendering Success in STEM research results to Regulators and engineering stakeholders.
- Supported the 30 by 30 working groups.
- Promoted the DiscoverE Persist series, International Women in Engineering Day, and the December 6 memorial.
- In Q1 2021, presented and published GBA+ report on Regulator EIT/MIT/engineering intern best practices, licensure assistance programs and employer awareness programs to the Board.
- Hired consultant to refresh 30 by 30 branding and style guide.
- Developed communication plan for 2022 National 30 by 30 Conference.

-
- In Q1 2021, presented to the Board, for use by the Regulators, an aspirational scorecard for 30 by 30. Following the publication of the scorecard, the section for yearly targets was removed based on feedback from Regulators.
 - Regulator best practices were collected and shared as part of the development and publication of the GBA+ report on Regulator EIT/MIT/engineering intern best practices, licensure assistance programs and employer awareness programs to the Board.
-

Comments:

SP4 Competency Based Assessment (CBA) project*Accountability: CEO**Weight: 2*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- The administrative burden of processing applicants is reduced for Regulator staff.
- Applicants have greater clarity regarding the engineering work experience requirement and how to report their work experience.
- Applicants and validators report greater confidence in their own assessments.
- Application processing resources are refocused on only those applicants requiring additional assistance.

Probability of achieving the intended outcomes by December 2021

- Regulators already using the system report that the outcomes are achieved. We therefore remain extremely confident that the intended outcomes will be achieved by February 2022 for all participating Regulators, once the French system is fully operational.

2021 Objectives:

- The online competency-based assessment system and accompanying Working in Canada seminar are translated to French.
- Project completion and closeout.

Achievement of the objectives:

- Engineers and Geoscientists BC has completed work on all major deliverables, and the system is operational and in use by five (5) Regulators (four (4) other Regulators use the same competencies with a different tool).
- The French translation of the tool is complete, while translation of the Working in Canada seminar will be completed in January 2022.
- The project closeout and hand-off of operations to Engineers and Geoscientists BC is complete.


Comments:

The project was not completed in 2021 due to the scope of the translation work, which was larger than anticipated. All translation will be completed in January 2022 and the project will be completed and closed in February 2022.

OP1 Accreditation

Accountability: CEAB

Weight: 3

Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Ensure the Canadian accreditation process is credible in the eyes of Regulators, higher education institutions (HEIs), and engineering students to effectively and efficiently accredit Canadian undergraduate engineering programs.

Probability of achieving the intended outcomes by December 2021

- Despite challenges from the COVID-19 pandemic, we remain confident that the process remains credible in the eyes of Regulators, HEIs, and students and will continue to do so through December 2021.

2021 Objectives:

- Conduct accreditation business:
 - Visits to 79 programs (14 new programs) at 17 HEIs (11 English and 6 French).
 - Four (4) program decisions rendered for Canadian undergraduate engineering programs.
- Develop and maintain accreditation policies:
 - General visitor's report template - decision.
 - Definition of engineering design - decision.
 - Amendment to Appendix 3 Interpretive statement on licensure expectations and requirements - decision.
 - On-site materials documentation requirements – decision.
 - Revised Policies & Procedures Committee's terms of reference – decision.
 - Develop appropriate ways within the accreditation process to incorporate the goals of the 30 by 30 initiative – final recommendation.
 - Monitor the implementation plan of virtual CEAB visits to new programs.
 - Study how measures taken by programs to respond to the pandemic challenge are supported by the accreditation criteria.

Achievement of the objectives:

- All decisions and visits were completed as planned, with all visits taking place in a virtual modality.
- The on-site materials document requirements, the definition of engineering design, and the amendment to the *Interpretive statement on licensure expectations and requirements* were completed.
- Work is ongoing on the general visitor report template and incorporation of the 30 by 30 initiative. Both have been delayed due to priorities associated with pivoting to virtual visits.
- The working group charged with considering the terms of reference of the Policies & Procedures Committee also continues its work, with results expected in 2022.

Comments:

Annual objectives continued to be severely disrupted by COVID-19, and the CEAB successfully pivoted to virtual visits and responded to challenges related to the pandemic this year.

OP2 Regulator relationships*Accountability: CEO**Weight: 3*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Sustain a high level of trust, engagement, and commitment between and among the Regulators.
- Facilitate the information exchange necessary to support a well-informed federation of Regulators that is able to act proactively in the best interests of engineering regulation in Canada.
- Support and facilitate the work of the CEO Group and the National Officials Groups in the regulation of the profession.
- Make available training materials and content on ethics and professionalism for Regulators' use in the development of their continuing professional development programs.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

- Enable networking opportunities for the Regulator presidents within the context of regular Board meetings.
- Support an orientation program about Engineers Canada for the Regulator presidents, and other Engineers Canada and Regulator staff and volunteers.
- Support the CEO Group and their initiatives with four (4) meetings per year.
- Support the national officials' groups and their initiatives:
 - Two (2) National Admissions Officials Group (NAOG) meetings; one (1) National Discipline and Enforcement Officials (NDEOG) meeting; one (1) National Practice Officials Group (NPOG) meeting.
 - NAOG, NDEOG, NPOG: deliver current work plans, develop new work plans, participate in Consultations.
 - IT, Finance (NFOG), and Communications officials: host teleconferences and share information as requested.

Achievement of the objectives:

- Presidents Group meetings were facilitated in conjunction with the February, May and October Board meetings.
- First-timer orientation sessions were provided for new presidents and CEOs, with sessions provided in February and October.
- The CEO Group met virtually four (4) times and held additional single-topic calls for as-needed information exchange throughout the year.
- The NAOG met twice virtually and held additional single-topic calls as needed.
- The NPOG met once virtually, with five additional calls during the year.
- The NDEOG met once virtually, with two additional calls during the year.
- The NFOG met four times virtually.

Comments:

OP3 Services and tools for regulation, practice, and mobility

Accountability: CEO and CEQB

Weight: 3

Annual Objectives: 

Strategic Outcomes: 

Intended outcomes:

- Enable the assessment of engineering qualifications:
 - Through the Qualifications Board, develop work products that enable the assessment of engineering qualifications (i.e., papers, model guides, and guidelines) and maintain examination syllabi, ensuring that both are timely and serve the needs of the Regulators and applicants for licensure.
 - Provide research into emerging areas of practice in support of Regulators in their decision making.
- Foster excellence in engineering practice and regulation:
 - Through the Qualifications Board, develop work products that foster excellence in engineering practice and regulation (i.e. papers, model guides, and guidelines), ensuring that they are timely and serve the needs of the Regulators and of practicing engineers.
- Facilitate mobility of practitioners within Canada:
 - Maintain, within the constraints and preferences of the Regulators, a shared database of engineers in Canada for the purposes of processing inter-provincial/territorial applications.
 - Through the Qualifications Board, develop work products that facilitate mobility (i.e. papers, model guides, and guidelines), are timely, and serve the needs of the Regulators.

Probability of achieving the intended outcomes by December 2021

- The outcome related to the national database of engineers is currently being achieved, and it is expected that it will be sustained up to and beyond December 2021.
- The outcomes related to the Qualifications Board's work products fostering excellence in engineering practice and regulation, national mobility, and the assessment of engineering qualifications are all currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.
- The outcome related to emerging areas of engineering practice is being addressed through the regulatory research portfolio, and it is expected that it will be sustained up to and beyond December 2021.

2021 Objectives:

- CEQB: Maintain examination syllabi:
 - New "[aeronautical engineering and aerospace engineering syllabus](#)" (carried forward from 2019).
 - Review of the 2004 agricultural/biosystems/bioresource/food engineering syllabus (carried forward from 2020).
 - Review of the [2010 metallurgical engineering syllabus](#).
 - Review of the [2017 computer engineering syllabus](#).
 - Review of the [2019 software engineering syllabus](#).
- CEQB: Develop and maintain guidelines and papers:
 - New "public guideline for engineers and engineering firms on the topic of diversity and inclusion" (carried forward from 2020).
 - New "public guideline for engineers and engineering firms on the topic of Indigenous consultation and engagement".
 - New national feasibility study to identify alternative academic assessments for non-CEAB applicants.
 - Review of the 2016 [Engineers Canada Paper on software engineering](#) carried forward from 2020).
- CEO: Maintain the national membership database (NMDB) for those Regulators who choose to update and/or access it:
 - Develop the new NMDB.

Achievement of the objectives:CEQB

- Syllabi for computer engineering and software engineering were approved.
- Syllabi on aeronautical and aerospace engineering and metallurgical/materials engineering have been completed and are expected to be approved at the January 2022 CEQB meeting.
- Syllabi on agricultural/bioresource engineering and complementary studies are in progress.
- Work on the new guidelines on diversity and inclusion, and indigenous consultation, the national feasibility study, and the revised paper on software engineering are in progress.

CEO

- The development of the new NMDB is underway. Due to challenges in the contracting phase, development is expected to be completed in April 2022 with full launch by June 2022.
-

Comments:

The work of the Qualifications Board includes many multi-year items which remain on schedule. The development of the NMDB is being supported by Regulators and will be ready for their use in Q2 2022.

OP4 National programs*Accountability: CEO**Weight: 1 (lowest)*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Within the period of this plan, divest itself of programs which the Regulators consider are not within its mandate or which may be best served by other organizations. This includes the Public Infrastructure Engineering Vulnerability Committee (PIEVC) Protocol and Infrastructure Resilience Professional (IRP) training. In the future, it would be desirable if PIEVC and IRP were available to Canadian engineers but provided by more appropriate organizations.
- Affirm that Engineers Canada is not a designation body and stop offering IRP designations.
- Maintain sustainability in affinity products and services.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

- Market exercise and renewal process in collaboration with Hub (our broker) for the Secondary Professional Liability Insurance Program (SPLIP).
- Social media awareness campaign implemented for SPLIP.
- Monitor impact on Home/Auto insurance program in Alberta.
- Semi-annual reporting with Canada Life, Manulife, and TD Insurance. Results of reporting meetings shared.
- Review and negotiate Retention Agreement for the Term Life Program.
- Review and negotiate Retention Agreement for the Sickness & Accident Insurance Program.
- Determine feasibility of Travel Insurance as a product.
- Corporate insurance needs of the Regulators are met (i.e., D&O/E&O, Commercial Crime, Cyber).
- Experience review and pricing negotiations in collaboration with AON (our independent consultants) for the National Employee Benefits Group program.

Achievement of the objectives:

- The market exercise and renewal process in collaboration with Hub for the SPLIP was completed in Q1 2021. The SPLIP renewed on March 31, 2021, with the current insurer, AXA XL. The market exercise resulted in coverage enhancements and a 2% rate reduction (\$5.00 per member reduced to \$4.90 per member) guaranteed for a three-year term (March 31, 2021-March 31, 2024).
- The social media awareness campaign for SPLIP was implemented in Q2 2021. It was successful in driving an increase in traffic to the SPLIP pages (general SPLIP pages and whistleblower page) of the Engineers Canada website. Based on learnings, the fall campaign used Facebook and LinkedIn.
- The impact on the Home/Auto insurance program in Alberta was monitored monthly throughout 2021.
- Semi-annual reporting meetings with Canada Life, Manulife, and TD Insurance were held in Q2 and Q4. Results of the Q2 reporting meetings were shared. Results of the Q4 reporting meetings will be shared in Q1 2022.
- Key considerations for developing a Travel Insurance product were identified as part of determining feasibility.
- Corporate insurance needs of the Regulators were met (e.g. D&O/E&O, Commercial Crime, Cyber). All coverages were renewed in collaboration with Marsh (our broker) and the participating Regulators.
- An experience review and pricing negotiations have been completed in collaboration with Aon (our independent consultants) for the National Employee Benefits Group program.

Comments:

The objective to review and sign the negotiated Retention Agreement for the Accident & Sickness / Professional Retiree program and the Term Life program were not completed in 2021. Due to the significant increase in proposed expenses, Engineers Canada requested its consultant, Aon, to undertake a benchmarking exercise. This work is anticipated to be complete by the end of Q1 2022.

OP5 Advocating to the federal government

Accountability: CEO

Weight: 1 (lowest)

Annual Objectives: 

Strategic Outcomes: 

Intended outcomes:

- Advocate to the federal government to promote and advance the enactment of new demand-side legislation and prevent the erosion of existing federal legislation.
- Engage and educate parliamentarians, senior federal officials, and all relevant agencies within the federal government to gain their confidence and develop their awareness of:
 - The responsibility of engineers to safeguard the public.
 - The benefits of engineering input into federal policy.
 - The positions and concerns of the engineering profession.
- Inform Regulators of Engineers Canada's federal government advocacy activities and progress through a newly developed reporting mechanism.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:


- Provide Regulators with information about federal government proposals, actions, and policies that impact the profession.
- Review existing national position statements and develop new evidence-based National Position Statements (NPSs) that provide views on matters of public policy that affect the engineering profession.
- Submit pre-budget submission to the federal government as part of the federal budget process.
- Arrange virtual Hill Day with parliamentarians and public servants to promote the use of engineering expertise and the value of the engineering profession.
- Develop and submit the annual advocacy report to the Board.
- Provide input and reporting on the federal initiatives to help ensure the federal government and public servants consider the expertise of the engineering profession in policy making.
- Advise on any free trade agreements and ensure that Regulators' interests are represented and that they remain informed.

Achievement of the objectives:

- Provided Regulators with information about federal government proposals, actions, and policies that impact the profession through weekly CEO updates, and the annual advocacy report.
- Published three (3) new NPSs, seven (7) updated NPSs, and one new national issue statement.
- Submitted comments to the House of Commons Standing Committee on Finance regarding the pre-budget consultations in advance of the 2022 budget.
- Developed and submitted to the Board the annual advocacy report containing a summary of advocacy activities from June 2020 - June 2021.
- Provided input and reporting to help ensure the federal government and public servants consider the expertise of the engineering profession in policy making on issues affecting the engineering profession and the regulation of engineering.
- Provided input to Global Affairs Canada on potential free trade agreements between Canada and foreign nations to ensure that Regulators' interests are represented.

Comments:

While no Hill Day was held in 2021 due to the restrictions posed by COVID-19 and because it was an election year, investigation is underway to determine if a virtual or in-person Hill Day can be held in 2022.

OP6 Researching, monitoring, and advising*Accountability: CEO**Weight: 2*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Establish a lean and effective research-based monitoring and reporting capability that provides Regulators with foresight and early warning of potential changes and advances in the Canadian regulatory environment and the engineering profession. The information provided will help inform regulatory decision making.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.


2021 Objectives:

- Develop research paper on the topic of entity regulation.
- Develop research paper on the topic of non-practising status.
- Develop research paper on regulation of autonomous systems engineering.
- Publish regulatory research newsletter articles.
 - Determine research topics for 2022 papers

Achievement of the objectives:

- The research papers on entity regulation and non-practising status were completed.
- The paper on the regulation of autonomous systems engineering was completed.
- The topics of energy engineering and multidisciplinary engineering were selected for 2022/2023 papers.
- Regulatory research newsletter was published in May 2021 with seven (7) articles.

Comments:

OP7 International mobility*Accountability: CEO and CEAB**Weight: 1 (lowest)*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Provide Regulators with a timely and accurate assessment of the risks and opportunities associated with mobility of work and practitioners internationally.
- Maintain international mobility agreements and mutual recognition agreements in accordance with Regulator needs.
- Provide timely and accurate information to Regulators on the impact of international trade agreements.
- Provide online information for internationally trained engineers that describes the process for becoming an engineer in Canada.
- Maintain current information on international institutions and degrees for use by the Regulators.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.
- At the February 2020 workshop on the international mobility sub-strategy, Regulators agreed that assessment of the risks and opportunities associated with the mobility of work and practitioners internationally was work that they would prefer to undertake individually and on a case-by-case basis, instead of requesting a national overview from Engineers Canada. This outcome was therefore removed from the sub-strategy.

2021 Objectives:

- Maintain status in the Washington Accord, International Professional Engineers Agreement (IPEA), and Asia-Pacific Economic Cooperation (APEC) Engineers Agreement, including maintaining the mobility register and attending the International Engineering Alliance (IEA) meetings in June.
- Implement International Mobility Advisory Group of Regulator representatives to inform our participation in the International Engineering Alliance and improvements to the mobility register.
- Develop and implement improvements to the mobility register process and technology.
- Launch the new international institutions and degrees database (IIDD) tool, train users, and support its continued use.

Achievement of the objectives:

- Our Washington Accord monitoring visit took place in November, and a decision will be rendered at the June 2022 IEA meeting.
- The International Mobility Advisory Group was formed and participated in the June 2021 IEA meetings, as well as discussions re next steps in late 2021.
- An RFP was issued for improvements to the mobility register process, and a vendor was selected in late 2021. Work on the new tool will be completed in Q2 2022.
- The IIDD improvement project was completed and has been used by eleven (11) Regulators.

Comments:

OP8 Promotion and outreach*Accountability: CEO**Weight: 2*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Leverage existing opportunities to foster recognition of the value and contribution of the profession without embarking on cost-prohibitive endeavours.
- Leverage partnerships and joint ventures that can spark interest in the next generation of engineering professionals without developing or wholly sustaining such programs internally.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

- Work with the Digital Engagement and Online Campaign Working Groups to overcome the challenges of social distancing and maintain engagement with key stakeholders through the creation of four virtual products specifically the Digital Scavenger Hunt (K to grade 6), Design Challenges (grades 6 to 8) and online game (grades 9 to 12) and life-long learning (Post-secondary/EIT).
- Create and distribute a benchmark report to provide greater confidence in the impact and value of our outreach efforts and better understanding of our collective efforts and influence within the school system (the “benchmark report”).
- Expand our relationship with Girl Guides Canada and Scouts Canada and create a pilot project that connects Regulator volunteers and activities with local units.
- Complete the first cycle of the Engineers Canada-Canadian Federation of Engineers Students (CFES) mentorship program.
- Complete implementation of approved recommendations from awards and scholarship programs reviews.
- Recognize and support the exemplary accomplishments of engineers by administering effective award, fellowship, and scholarship programs.
- Lead and coordinate NEM throughout the month of March, to engage Regulators and foster recognition of the value of the profession to society, and to spark interest in the next generation of engineering professionals.

Achievement of the objectives:

- The Digital Engagement and Online Campaign Working Groups were combined to create the National Outreach Working Group. The group has created sub-working groups to focus on three (3) key target audiences: K-12 students, post-secondary students, and EIT/MIT early career professionals. All the engagement initiatives and activities that were developed through this group, specifically the Digital Scavenger Hunt (K to grade 6), Design Challenges (grades 6 to 8) and online game (grades 9 to 12) are live on our ExploreEngineering.ca website. Through National Engineering Month, we reached 2,765,130, an 18% increase from past years.
- The Girl Guides Crest Program was expanded to include Scouts Canada. After consultation with the National Outreach K-12 sub-working group, the program will be renamed to the National Engineering Crest Program. The group has agreed with proposed website and crest design changes to make the program more inclusive of Scouts and a draft MOU that outlines the transition of this program from an Engineers Canada project to a national program that is jointly administered and managed with participating regulators was distributed. Finalization of the MOU and official launch of the new program is expected in Q2 of 2022.
- The first cycle of the Engineers Canada-CFES mentorship program was completed, and the second cycle was started.
- The implementation of approved recommendations from awards and scholarship programs reviews was completed, including the launch of a leadership scholarship for undergraduate engineering students.

- The exemplary accomplishments of engineers and engineering students were recognized and supported by administering the 2021 award, scholarship, and fellowship programs. Due to COVID-19, changes were made to how engineers were recognized publicly.
 - NEM was led and coordinated throughout March to engage Regulators and foster recognition of the value of the profession to society, and to spark interest in the next generation of engineering professionals.
-

Comments:

The objective to create and distribute the benchmark report was delayed based on consultations with the National Outreach Working Group's request to add to the project's initial scope. This report will be complete and ready for distribution in Q2 of 2022.

OP9 Diversity and inclusion*Accountability: CEO**Weight: 2*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Demonstrate progress towards diversity and inclusion targets through consistent effort and innovative, highly-leveraged programs that increase the number of women and Indigenous people entering, thriving, and remaining in the profession.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

- Complete roll-out of 4 Seasons for Reconciliation training sessions for Board, CEOs, CEAB, and CEQB.
- Make Indigenous awareness training module available to Regulators.
- Complete research and analysis of the experiences of Indigenous engineers and recommend options for truth and reconciliation efforts to be incorporated into engineering undergraduate education in Canada, with appropriate Consultation.
- Complete Indigenous engagement plan on building relationships with Indigenous organizations and engineers.
- Regulators are made aware of the Canadian Region of the American Indian Science and Engineering Society (AISES in Canada) and the Canadian Indigenous Advisory Council (CIAC).
- Engineers Canada improves the reporting of Indigenous engineers and engineering students.

Achievement of the objectives:

- The roll-out of 4 Seasons for Reconciliation training sessions for the Board, CEOs, CEAB, CEQB, the Presidents Group, and EDC began in Q4 2020 and was completed in Q1 2021.
- 4 Seasons training promoted to Regulators, with APEGS, Engineers and Geoscientists BC, and APEGA entering agreements with the provider.
- To undertake research and analysis of the experiences of Indigenous engineers and improve the reporting of Indigenous engineers and engineering students, hired Big River Analytics to complete pilot survey of Indigenous engineers with three (3) Regulators: Engineers Geoscientists Manitoba, APEGS, and Engineers and Geoscientists BC. Report will be published in Q1 2022.
- Partnered with UBC researchers to conduct interviews with Indigenous students and engineers within HEIs on their experiences and insights on truth and reconciliation in engineering education. Report will be published in Q1 2022.
- In partnership with UBC researchers, applied for SSHRC Grant to support continued qualitative research on the experience of Indigenous students and engineers.
- Consulted with Indigenous Advisory Committee (IAC) on building relationships with Indigenous organizations and engineers. IAC recommended that Engineers Canada become a member of the Canadian Council of Aboriginal Business (CCAB) and to apply for the CCAB's Progressing Aboriginal Relations certification.
- Promoted AISES in Canada to Regulator staff and helped coordinate the CIAC planning sub-committee on the 2022 AISES in Canada gathering.

Comments:

OP10 Protect official marks*Accountability: CEO**Weight: 1 (lowest)*Annual Objectives: Strategic Outcomes: **Intended outcomes:**

- Protect the official marks from unauthorized or misleading use.
- Ensure that federally-incorporated companies respect provincial and territorial engineering legislative requirements.

Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

- Protect Engineers Canada's trademarks and the official marks from unauthorized use, responding as necessary.
- Ensure Engineers Canada's portfolio of trademarks is current and appropriate, as determined from time to time and based on projects and programs.
- Manage and administer the established process for the federal incorporation of companies wishing to use the official marks in their corporate name.

Achievement of the objectives:

- Reviewed and evaluated Engineers Canada's trademark enforcement strategy to ensure trademarks and official marks continue to be adequately used and protected.
- Provided an online presentation to the members of the National Discipline and Enforcement Officials group, providing background information / context around the trademark application process and the status and strategy surrounding Engineers Canada's oppositions proceedings.
- Managed oversight of eighteen (18) open and ongoing trademark opposition proceedings, with five (5) oppositions having concluded during this period:
 - The proceeding against INNOVATION ENGINEERING was successful, resulting in a decision to refuse registration of the trademark, which was not appealed to the Federal Court.
 - Two (2) matters ended in abandonment of the trademark by the Applicant.
 - Two (2) matters settled with consent of Engineers Canada.
- Eight (8) opposition proceedings were commenced in 2021.
- Three (3) summary expungement cases that had commenced in 2020 were still pending in 2021. All matters have now ended with the marks being expunged from the Trademarks Register.
- Requested issuance of Notices for summary expungement in respect of fourteen (14) trademarks identified for potential summary expungement proceedings.
- Three (3) infringement issues were identified, involving Engineers Canada's Maple Leaf Logo and ENGINEERS CANADA trademark, both of which were used without authorization on third party websites. Cease and desist letters were sent to the infringers and the logo and trademark were removed in all three cases.
- Issued 57 letters of consent to applicants in response to requests to incorporate federally using the official marks in their corporate name.

Comments:

Board responsibilities

BR1 Hold itself, its Directors, and its Direct Reports accountable

Annual Objectives: Strategic Outcomes: 

The Human Resources Committee shall:

- *Establish and use competency profiles for Directors and all committee chairs, as well as for the Board as a whole.*
- *Manage the CEO and committee chairs through competency profiles and performance measurement against the achievement of the operational and strategic plans.*
- *Be responsible for performance management of the CEO.*

Intended outcomes:

- Codify a more structured means of measuring and understanding the progress-against-plan of the organization.
- Take action to address gaps, weaknesses, and failings in any part of the plan, as measured through national, transparent performance measures.
- This Board responsibility will be achieved when the Board is confident that it has an accurate and complete awareness of its own performance as well as that of its Directors and committee chairs. With this information, the Board will act to recognize success and offer appropriate guidance when needed to achieve objectives.

Probability of achieving the intended outcomes by December 2021:

- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

Responsibilities from Board policy 6.12, *HR Committee Terms of Reference* to support these outcomes include:


- Establish, administer and annually review competency profiles for the Board, individual Directors, and chairs;
- Develop and recommend annual objectives for the CEO to the Board; and,
- Conduct regular CEO assessments, and make recommendations to the Board regarding CEO compensation.

Achievement of the objectives:

In the period January 1, 2021 to December 31, 2021, the HR Committee:

- Obtained Board approval for the 2020 recommendations for CEO evaluation, and the 2021 CEO objectives.
- Secured a consultant to begin work on the informal evaluation of the CEO's performance and reviewed the suggested objectives for 2022. Resulting recommendations will be presented to the Board in February 2022.
- Continued work on annual reviews of committee chairs, individual Directors, and Board:
 - Obtained Board approval for the Chair assessments, which were issued in December 2021.
 - Reviewed the Board and individual Director assessments for presentation to the Board in February 2022.
 - Reviewed and supported a recommendation from the Governance Committee to incorporate informal assessment of committee chairs into Board policy 6.2, *Board, Committee and Task Force Chair Assessment*.
 - Monitored progress on employee engagement improvement work plans. The next employee engagement survey to measure these efforts will take place in the fall of 2022.
- Additionally, the Board monitored performance against the Strategic Plan through interim reporting delivered quarterly, covering all four strategic priorities and the ten operational imperatives.

BR2 Sustain a process to engage with Regulators through regular communication that facilitates input, evaluation, and feedback

Annual Objectives: Strategic Outcomes: 

The President-Elect shall:

- *Provide oversight and guidance to the Engineers Canada consultation process with Regulators and other Key Stakeholders whose input is vital to the Board's work.*

Intended outcomes:

- Regulators and all Key Stakeholders will appreciate and value the engagement process which shall be cost-effective and make efficient use of the time of all those asked to engage in Engineers Canada's Consultations.
- This Board responsibility will be fulfilled when the Regulators and other Key Stakeholders are satisfied that their views and requirements are understood and considered before action is taken.

Probability of achieving the intended outcomes by December 2021:


- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

As per Board policy 7.11, *Consultation*, the President-Elect has an ongoing responsibility to oversee the development and approval of an Annual Consultation Plan.

Achievement of the objectives:

- The 2022 Consultation Plan, including both Board (strategic) Consultations as well as all operational Consultations, was approved at the December 2021 meeting.

BR3 Provide ongoing and appropriate strategic directionAnnual Objectives: Strategic Outcomes: *The Board shall:*

- *Develop an annually updated, three-year Strategic Plan that considers emerging trends and challenges.*
- *Ensure that Annual Operating Plans and budgets are developed that specify the actions and resources necessary to achieve the Strategic Plan.*
- *Ensure the use of a continual improvement process to track, report, and when necessary, correct, performance against set objectives of:*
 - *The Strategic Plan*
 - *The Annual Operating Plan*

Intended outcomes:

- Codify a more structured means of providing strategic direction, including ongoing and clear communications to all stakeholders as to the progress-against-plan, as well as mitigation strategies put in place to counter any areas of gaps or weaknesses.
- This Board responsibility will be achieved when the Regulators agree and have confidence that the Board's Strategic Plan meet their needs, and that the Annual Operating Plan delivers on those needs.

Probability of achieving the intended outcomes by December 2021:

- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

The Board has ongoing responsibilities to:


- Approve the annual budget;
- Monitor strategic performance reporting quarterly; and,
- Submit an annual strategic performance report to the Members.

In 2019, the Board stood up a Strategic Plan Task Force to guide the development of the 2022-2024 Strategic Plan and they provided oversight to:

- Conduct a foresight exercise with the Board, Regulators and CEAB and CEQB representatives;
- Conduct a workshop with the Board to develop the draft Strategic Plan;
- Consult with Regulators, the CEAB, the CEQB and EDC on the draft Strategic Plan; and,
- Approve a final draft of the 2022-2024 Strategic Plan for presentation to the Board in February 2021.

Achievement of the objectives:

- Quarterly performance reports were reviewed at the May, October, and December Board meetings.
- The 2022 budget was approved in December 2021.
- The 2020 Annual Strategic Performance Report was provided to the Members in May 2021.
- The Strategic Plan Task Force oversaw all aspects of the development of the 2022-2024 Strategic Plan, and the plan was approved by the Members at the May 2021 Meeting of Members.

BR4: Ensure the development and periodic review of Board policiesAnnual Objectives: *The Governance Committee shall:*Strategic Outcomes: 

- *Maintain effective governance principles and policies.*
 - *Perform ongoing governance improvements.*
-

Intended outcomes:

This responsibility will be fulfilled when the Board and Members are satisfied that:

- All Board policies are current and relevant to established requirements;
 - Board policies serve as the direction to all volunteers and staff on governance style;
 - Action plans with clear objectives are established based on the recommendations of any task force established by the Board; and,
 - Action plans to implement recommendations are integrated with the Board's plans.
-

Probability of achieving the intended outcomes by December 2021

- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.
-

2021 objectives:

Responsibilities from Board policy 6.8, *Governance Committee Terms of Reference* to support the outcomes include:


- The review of existing policies and the development of new policies;
 - Consideration of Board governance gaps and recommended training; and,
 - Implementation of recommendations and actions coming out of the governance effectiveness survey.
-

Achievement of the objectives:

In the period January 1, 2021 to December 31, 2021, the Governance Committee:

- Reviewed and received approval for forty (40) revised policies, two (2) new policies (policy 7.7, *Investments*, and policy 7.13, *Vaccination for In-Person Meetings*) and one (1) new guideline (*In-person Meetings During COVID*); and,
- Implemented improvements to the chair assessment process, in response to a recommendation coming out of the governance effectiveness survey.

BR5 Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board's risk tolerance level and directs Board-approved mitigation strategies

Annual Objectives: Strategic Outcomes: 

The Finance, Audit, and Risk (FAR) Committee shall:

- *Ensure the Board is wholly accountable for risk management and for directing the CEO through clear and timely mitigation strategies; and,*
- *Monitor the risk register and ensure the Board is aware and able to take timely action on all relevant risks.*

Intended outcomes:

- The Board and Regulators are fully aware of any relevant potential risks, have clearly established appropriate levels of risk tolerance, and are satisfied that any necessary risk mitigation strategies are defined and acted upon.

Probability of achieving the intended outcomes by December 2021

- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

Responsibilities from Board policy 6.4, *FAR Committee Terms of Reference*, to support the outcomes include:

- Developing a new Corporate Risk Profile;
- Quarterly monitoring strategic and operational risks;
- Quarterly reviewing the financial statements;
- Annually reviewing long-term procurement contracts and operational finance policies;
- Reviewing the annual budget; and,
- Reviewing the audit plan, letter of appointment and audit results.

Achievement of the objectives:

In the period January 1, 2021 to December 31, 2021, the FAR Committee:

- Presented a new Corporate Risk Profile to the Board for approval in April;
- Monitored strategic and operational risks quarterly; and,
- Reviewed and monitored all financial aspects as laid out in the work plan.

BR6 Provide orientation of new Directors, and continuing development of Directors and others who work closely with the Board

Annual Objectives: Strategic Outcomes: 

The Human Resources Committee shall:

- *Develop and deliver orientation materials and programs that facilitate the effectiveness of Directors.*
- *Ensure the Board's orientation program takes into account the challenges of onboarding individuals new to their function and provide opportunity for the ongoing development of those continuing in their term.*

Intended outcomes:

- The quality of orientation provided to new Directors will improve over the course of this Strategic Plan period, especially once the roles of Directors, Members, and presidents are clarified as a part ongoing governance work in the fall and winter of 2018-19.
- This responsibility will be fulfilled when Directors express their satisfaction with the effectiveness of the Board orientation program.

Probability of achieving the intended outcomes by December 2021:

- All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

2021 Objectives:

Responsibilities from Board policy 6.12, *HR Committee Terms of Reference*, to support these outcomes include:

- Nominate new Committee members and recommend chairs;
- Review policies for Engineers Canada's volunteers and staff;
- Provide oversight of the Director onboarding and development programs;
- Review succession planning for the CEO, the Board and its Committees; and,
- Confirm the succession plans for Direct Reports to the CEO.

Achievement of the objectives:

During the period from January 1, 2021 to December 31, 2021 the HR Committee:

- Established the membership for all 2021-2022 committees with recommendations for chairs, and named Director appointees to the CEAB, the CEQB, and the Board champion for the 30 by 30 network;
- Reviewed and improved orientation sessions that were provided to incoming Directors in May and June;
- Planned for and executed on Director development to support the needs identified in the 2021 governance effectiveness survey:
 - Launched online Director training with the Canadian Non-profit Academy's Board-on-Board course in January (ongoing access).
 - Provided virtual facilitation training for incoming committee chairs in July.
 - Delivered equity, diversity, and inclusion workshop focused on unconscious bias in June.
 - Continued 4 Seasons of Reconciliation Education to provide the Indigenous awareness online training (ongoing access).

BRIEFING NOTE: For information

Audited financial statements		4.3
Purpose:	To receive Engineers Canada's 2021 audited financial statements	
Prepared by:	Derek Menard, Director, Finance	
Presented by:	Nancy Hill, Director from Ontario, and Chair of the FAR Committee	

Background

- The *Canada Not-for-profit Corporations Act* (CNCA) requires that the corporation's financial statements be placed before the members at every annual meeting.

Status Update

- The 2021 audit was performed in February 2022, after the close of year-end.
- At its April 2022 meeting, the Engineers Canada Board approved the audited financial statements.

Next steps

- Engineers Canada shall keep at its office a copy of the financial statements for 2021.

Appendix

- **Appendix 1:** 2021 audited financial statements, including KPMG LLP's report



Financial Statements of

ENGINEERS CANADA

And Independent Auditors' Report thereon

Year ended December 31, 2021



KPMG LLP
150 Elgin Street, Suite 1800
Ottawa ON K2P 2P8
Canada
Tel 613-212-5764
Fax 613-212-2896

INDEPENDENT AUDITORS' REPORT

To the Members of Engineers Canada

Opinion

We have audited the financial statements of Engineers Canada, which comprise:

- the statement of financial position as at end of December 31, 2021
- the statement of operations for the year then ended
- the statement of changes in net assets for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements, present fairly, in all material respects, the financial position of Engineers Canada as at December 31, 2021, and its results of operations, changes in net assets and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "***Auditors' Responsibilities for the Audit of the Financial Statements***" section of our auditors' report.

We are independent of Engineers Canada in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these ethical requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



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Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Engineers Canada's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate Engineers Canada or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Engineers Canada's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.



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- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Engineers Canada's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Engineers Canada's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause Engineers Canada to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

Ottawa, Canada

April 13, 2022

ENGINEERS CANADA

Statement of Financial Position

December 31, 2021, with comparative information for 2020

	2021	2020
Assets		
Current assets:		
Cash (note 3)	\$ 3,037,065	\$ 2,296,701
Amounts receivable (note 4)	1,197,114	1,156,038
Prepaid expenses and deposits	222,338	122,009
	<u>4,456,517</u>	<u>3,574,748</u>
Investments (note 5)	16,638,837	12,717,703
Tangible capital assets (note 6)	662,447	644,899
	<u>\$ 21,757,801</u>	<u>\$ 16,937,350</u>
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued liabilities (note 7)	\$ 692,117	\$ 565,559
Deferred contributions	87,142	119,729
	<u>779,259</u>	<u>685,288</u>
Deferred lease inducement (note 8)	393,539	480,992
Net assets (note 9):		
Internally restricted:		
Contingency reserve	2,500,000	2,500,000
Legal contingency reserve	1,500,000	1,500,000
Strategic priorities reserve	2,000,000	2,000,000
Invested in tangible capital assets	470,366	410,134
Unrestricted	14,114,637	9,360,936
	<u>20,585,003</u>	<u>15,771,070</u>
Commitments (note 10)		
Impact of COVID-19 (note 11)		
	<u>\$ 21,757,801</u>	<u>\$ 16,937,350</u>

See accompanying notes to financial statements.

On behalf of the Board:

_____ Director _____ Director

ENGINEERS CANADA

Statement of Operations

Year ended December 31, 2021, with comparative information for 2020

	2021	2020
Revenue:		
National programs (note 12)	\$ 9,824,255	\$ 9,526,001
Corporate services	3,124,386	3,195,446
Unrealized gain in investments	1,179,903	507,902
Investment income	312,826	243,097
Outreach	17,600	100,667
	<u>14,458,970</u>	<u>13,573,113</u>
Expenses:		
Operating expenses:		
Accreditation	88,391	90,016
Fostering working relationships	1,938	3,760
Services and tools	123,500	13,875
National programs	884,668	1,438,491
Advocating to the Federal government	44,589	52,087
Research and regulatory changes	20,213	4,904
International mobility	58,216	31,479
Promotion and outreach	186,686	272,839
Diversity and inclusion	208,141	138,088
Protect official marks	132,996	111,043
Secretariat services	232,073	420,405
Corporate services (note 13)	6,982,816	6,654,889
	<u>8,964,227</u>	<u>9,231,876</u>
Excess of revenue over expenses before the undernoted	5,494,743	4,341,237
Projects spending:		
Accreditation improvement project	221,574	137,184
International mobility - IIDD one-time project	54,599	95,506
Services and tools - competency-based assessment	214,592	147,715
Service and tools - NMDB	173,110	1,810
Investigate and validate the purpose and scope of accreditation	12,360	-
Reinforce trust and the value of licensure	4,575	-
	<u>680,810</u>	<u>382,215</u>
Excess of revenue over expenses	<u>\$ 4,813,933</u>	<u>\$ 3,959,022</u>

See accompanying notes to financial statements.

ENGINEERS CANADA

Statement of Changes in Net Assets

Year ended December 31, 2021, with comparative information for 2020

	Contingency (note 9)	Legal contingency reserve (note 9)	Strategic priorities reserve (note 9)	Invested in tangible capital assets	Unrestricted	2021	2020
Balance, beginning of year	\$ 2,500,000	\$ 1,500,000	\$ 2,000,000	\$ 410,134	\$ 9,360,936	\$ 15,771,070	\$ 11,812,048
Excess of revenue over expenses	–	–	–	–	4,813,933	4,813,933	3,959,022
Amortization of tangible capital assets	–	–	–	(134,735)	134,735	–	–
Additions to tangible capital assets	–	–	–	152,283	(152,283)	–	–
Amortization of leasehold inducement	–	–	–	42,684	(42,684)	–	–
Balance, end of year	\$ 2,500,000	\$ 1,500,000	\$ 2,000,000	\$ 470,366	\$ 14,114,637	\$ 20,585,003	\$ 15,771,070

See accompanying notes to financial statements

ENGINEERS CANADA

Statement of Cash Flows

Year ended December 31, 2021, with comparative information for 2020

	2021	2020
Cash provided by (used in):		
Operating activities:		
Excess of revenue over expenses	\$ 4,813,933	\$ 3,959,022
Items not involving cash:		
Amortization of tangible capital assets	134,735	109,136
Amortization of lease inducement	(87,453)	(89,849)
Change in net unrealized gain on investments	(1,179,903)	(507,902)
Change in non-cash operating working capital:		
Increase in amounts receivable	(41,076)	(5,164)
Increase in prepaid expenses and deposits	(100,329)	(12,596)
Increase in accounts payable and accrued liabilities	126,558	156,309
Increase (decrease) in deferred contributions	(32,587)	109,195
	3,633,878	3,718,151
Investing activities:		
Net purchases of investments	(2,741,231)	(5,618,196)
Additions to tangible capital assets	(152,283)	(66,293)
	(2,893,514)	(5,684,489)
Increase (decrease) in cash	740,364	(1,966,338)
Cash, beginning of year	2,296,701	4,263,039
Cash, end of year	\$ 3,037,065	\$ 2,296,701

See accompanying notes to financial statements.

ENGINEERS CANADA

Notes to Financial Statements

Year ended December 31, 2021

1. Governing statutes and nature of operations:

Engineers Canada is a national federation of the twelve provincial and territorial associations authorized to license engineers and regulate the practice of the profession across Canada. Engineers Canada exists so that constituent associations have support for an advancing engineering profession and its self-regulation in the public interest at a cost that is justified by the results.

Engineers Canada was originally incorporated without share capital under Part II of the Canada Corporations Act. Effective October 31, 2013, Engineers Canada continued its articles of incorporation from Canada Corporations Act to the Canada Not-for-profit Corporations Act and changed its name to Engineers Canada from the Canadian Council of Professional Engineers. Engineers Canada is a not-for-profit organization and as such is exempt from income tax under Section 149(1)(I) of the Income Tax Act (Canada).

2. Significant accounting policies:

These financial statements have been prepared by management in accordance with Canadian accounting standards for not-for-profit organizations in Part III of the CPA Canada Handbook - Accounting and include the following significant accounting policies:

(a) Revenue recognition:

Engineers Canada follows the deferral method of accounting for contributions for not-for-profit organizations.

Engineers Canada's principal sources of revenue are provincial assessment fees from members, and amounts from affinity and insurance programs.

Revenues for provincial assessment and annual per capita fees are recognized when the constituent members have been invoiced and are included in corporate services revenue on the statement of operations. Revenues from affinity programs are recognized when the amount becomes collectible according to the terms of the arrangement. These amounts are included in national program revenues on the statement of operations.

Investment income is recognized based on the number of days the investment was held during the year. Dividends are recognized as of the ex-dividend date. Gains or losses on the disposal of investments are determined using the average cost method. All investment revenues including realized and unrealized gains and losses on investments are recognized in the statement of operations.

Externally funded project revenues, which include government funded project revenues, are recognized using the deferral method of accounting as the related eligible expenses are incurred in accordance with the terms of each contract. Amounts received in excess of eligible expenses are disclosed as a liability.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

2. Significant accounting policies (continued):

(b) Financial instruments :

Financial instruments are recorded at fair value on initial recognition. Equity instruments that are quoted in an active market are subsequently measured at fair value. All other financial instruments are subsequently recorded at cost or amortized cost, unless management has elected to carry the instruments at fair value. Engineers Canada has elected to carry investments at fair value.

Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred. All other financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using straight-line rate method.

Financial assets are assessed for impairment on an annual basis at the end of the fiscal year. Where an indicator of impairment is present, Engineers Canada determines if there is a significant adverse change in the expected amount or timing of future cash flows from the financial asset. If there is a significant adverse change in the expected cash flows, the carrying value of the financial asset is reduced to the highest of the present value of the expected cash flows, the amount that could be realized from selling the financial asset or the amount Engineers Canada expects to realize by exercising its right to any collateral. If events and circumstances reverse in a future period, an impairment loss will be reversed to the extent of the improvement, not exceeding the initial impairment charge.

(c) Tangible capital assets:

Tangible capital assets are recorded at cost less accumulated amortization. When a capital asset no longer contributes to Engineers Canada's ability to provide services, its carrying amount is written down to its residual value.

Amortization of tangible capital assets is provided on the straight-line basis as follows:

Asset	Terms
Furniture, fixtures and equipment	4 years
Computer hardware	4 years
Leasehold improvements	Remaining term of lease

(d) Deferred lease inducement:

Leasehold inducements are deferred and amortized over the term of the lease. Annual amortization is recorded as a credit to corporate services expense.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

2. Significant accounting policies (continued):

(e) Allocated expenses:

In the statement of operations, Engineers Canada presents its expenses by function.

Engineers Canada does not allocate expenses between functions subsequent to initial recognition.

(f) Foreign currency translation:

Foreign currency transactions are initially recorded at the rate of exchange prevailing at the date of translation. Thereafter, monetary assets and liabilities are translated at the exchange rate in effect at the statement of financial position date. Revenue and expenses in a foreign currency are translated at the average monthly rate in effect during the year. Gains and losses resulting from the translation are included in investment income in the statement of operations.

(g) Use of estimates:

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the year. Actual results could differ from these estimates. These estimates are reviewed annually and as adjustments become necessary, they are recognized in the financial statements in the period they become known.

3. Cash:

Engineers Canada's operating cash is held in Canadian chartered banks. Substantially all the accounts are Canadian dollar accounts and earn interest at variable rates established from time to time by the bank based on its prime rate less 2.75% (2020 - prime rate less 2.75%).

Line of credit

Engineers Canada has a line of credit allowing it to borrow up to \$500,000 (2020 - \$500,000) at an interest rate of prime plus 1%. This line of credit is subject to annual renewal. There was no outstanding balance as at December 31, 2021 or 2020.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

4. Amounts receivable:

	2021	2020
Affinity and insurance programs	\$ 1,134,700	\$ 1,122,700
Government remittances receivable	62,130	31,917
Due from others	–	1,421
Due from members	284	–
	\$ 1,197,114	\$ 1,156,038

5. Investments:

	2021 Fair value	2021 Cost	2020 Fair value	2020 Cost
Bond funds	\$ 7,232,321	\$ 7,388,184	\$ 6,751,823	\$ 6,620,175
Canadian equity funds	2,617,659	2,153,082	2,250,483	1,920,985
International equity funds	2,314,217	1,557,593	1,462,289	1,052,313
U.S. equity funds	3,983,039	3,413,355	2,253,108	1,468,107
Alternative – Global	491,601	491,601	–	–
	\$16,638,837	\$15,003,815	\$12,717,703	\$11,061,580

Investments are held by Engineers Canada to fund its internally restricted net assets for the purposes specified in note 9(a).

6. Tangible capital assets:

	Cost	Accumulated amortization	2021 Net book value	2020 Net book value
Furniture, fixtures and equipment	\$ 250,916	\$ 200,037	\$ 50,879	\$ 9,282
Computer hardware	408,130	345,783	62,347	72,689
Leasehold improvements	1,149,771	600,550	549,221	562,928
	\$ 1,808,817	\$ 1,146,370	\$ 662,447	\$ 644,899

Cost and accumulated amortization at December 31, 2020 amounted to \$1,656,534 and \$1,011,635, respectively.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

7. Accounts payable and accrued liabilities:

	2021	2020
Operating	\$ 277,915	\$ 161,519
Accrued liabilities	85,105	122,130
Payroll related accruals	288,853	240,850
Secondary Professional Liability insurance premiums repayable to members	40,244	41,060
	\$ 692,117	\$ 565,559

There are no amounts payable for government remittances such as sales or payroll-related taxes included in operating or accrued liabilities.

8. Deferred lease inducement:

In 2015, Engineers Canada entered into a lease agreement to rent premises for the next ten years. As part of this agreement, Engineers Canada received a tenant allowance to cover fit-up costs up to a maximum of \$30 per square foot of space rented, as well as a rent-free period for nine months.

	Rent-free leasehold inducements	Tenant allowance - fit-up costs	Total
Balance, beginning of year	\$ 246,227	\$ 234,765	\$ 480,992
Less: amortization	(44,769)	(42,684)	(87,453)
Balance, end of year	\$ 201,458	\$ 192,081	\$ 393,539

9. Net assets:

Engineers Canada's overall objective with regard to its net assets is to ensure stability for the delivery of on-going programs and services, to fund strategic initiatives and to mitigate the financial impact of risks to its operations and achievement of strategic objectives. Engineers Canada manages its net assets by establishing restricted funds and committing amounts in the internally restricted net assets for anticipated future strategic priorities, contingencies, legal defense, and other capital requirements. These allocations are presented in the statement of changes in net assets and disclosed in note 9(a).

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

9. Net assets (continued):

Engineers Canada's objective with respect to unrestricted net assets is to maintain a balance sufficient to meet the needs associated with ongoing operations. Engineers Canada's net assets invested in its capital assets is equal to their net book value less the corresponding lease inducement.

Engineers Canada is not subject to externally imposed capital requirements and it adopted a new overall strategy with respect to net assets that took affect in 2021.

(a) Internally restricted net assets:

Internally restricted net assets are funds committed for specific purposes, which reflect the application of Engineers Canada's Board policy as follows:

The Contingency Reserve is to mitigate the financial impact of the risk of future unexpected, negative events that could have a significant, adverse impact on the operations, revenues, and expenses of Engineers Canada. This reserve has a target level of \$2,500,000.

The Legal Reserve is to ensure that funds are available in case of legal challenge, to provide funds to cover deductibles for insurances, and to assist the Engineering Regulators where it is determined that they do not have the financial resources to defend an enforcement action and/or statutory obligation that has a clear and significant impact on the other Regulators. This reserve has a target level of \$1,500,000.

The Strategic Priorities Reserve is to provide funds for planned strategic initiatives, and to respond to future risks and investment needs in the performance, accessibility, and security of its information technology assets. This reserve has a target level of \$2,000,000.

Engineers Canada's Board of Directors will also create new reserves and/or discontinue existing reserves, if and when required.

10. Commitments:

Engineers Canada leases equipment and office space under operating leases which expire in April 2024 and June 2026. The future rental payments over the next five years including operating costs and taxes, are as follows:

2022	\$	674,827
2023		674,827
2024		672,656
2025		671,932
2026		335,716
	\$	3,029,958

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

11. Impact of COVID-19:

In March of 2020 the COVID-19 outbreak was declared a pandemic by the World Health Organization and has had a significant financial, market and social dislocating impact. The situation is fluid and the ultimate duration and magnitude of the impact on the economy and on all aspects of operations are unknown.

Management has been forthright in undertaking certain strategies and actions to respond to the COVID-19 outbreak. The health and safety of all staff has been reinforced as the priority for Engineers Canada, and management invoked a work-from-home regime, suspended domestic and international travel, and shifted all face-to-face meetings to digital methods. Management is confident that it will be effective in mitigating the effects of COVID-19 on operations.

Financial statements are required to be adjusted for events occurring between the date of the financial statements and the date of the auditors' report which provide additional evidence relating to conditions that existed at year-end. Management has assessed the financial impacts and there are no additional adjustments required to the financial statements at this time.

The ultimate duration and magnitude of COVID-19's impact on Engineers Canada's operations and financial operations is not known at this time. These impacts could include a decline in future cash flows, changes to the value of assets and liabilities and the use of accumulated net assets to sustain operations. An estimate of the financial effect of COVID-19 is not predictable at this time.

12. National programs:

Engineers Canada is a party to a number of agreements with financial services companies. Under these agreements Engineers Canada derives revenues, referred to in these financial statements as affinity program and secondary professional liability insurance based on the purchase of goods and services by the members of Engineers Canada's various provincial and territorial member associations.

These agreements have varying terms and conditions as well as varying termination dates and methods, some of which have fixed expiry dates with renewal options and some of which are on-going until terminated with notice by either party.

The two most significant agreements account for 92% (2020 - 92%) of the national program revenues and have the following terms:

- twelve-year term expiring December 2029 with automatic five-year renewals until terminated by either party with 180 days' notice prior to the end of any such period which accounts for 75% (2020 - 75%) of the national program revenues; and
- on-going with no fixed expiry date which accounts for 16% (2020 - 17%) of the national program revenues.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

13. Pension plan contributions:

Engineers Canada is the administrator of the Staff Pension Plan for Employees of Engineers Canada, which is a defined contribution plan registered with Financial Services Commission of Ontario. The contributions to the plan are \$214,494 (2020 - \$193,946), which are included in corporate services expense.

14. Financial risk management:

Engineers Canada is exposed to various financial risks resulting from both operational and investment activities. Engineers Canada's management addresses the situation by having different related policies such as the Reserves Policy, the Financial Commitments and Payment Policy, amongst others. Engineers Canada also outsources the management of its investment portfolio to an outside firm.

(a) Market risk:

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices due to currency, interest rate and other pricing risks. Engineers Canada is exposed to market risk with respect to its investments, as disclosed in note 5.

(b) Foreign currency risk:

Engineers Canada is not exposed to significant foreign currency risk as it does not hold significant cash or investments denominated in foreign currencies.

(c) Interest rate risk:

Engineers Canada is exposed to interest rate risk with respect to its interest-bearing investments. The bond mutual funds held by Engineers Canada are disclosed in note 5 and bear interest at fixed rates and Engineers Canada is therefore, exposed to the risk resulting from interest rate fluctuations. Engineers Canada's other financial assets and financial liabilities do not bear significant amounts of interest at fixed rates and therefore do not comprise any significant interest rate risk exposure to Engineers Canada. Engineers Canada does not use derivative financial instruments to reduce its interest rate risk exposure.

(d) Liquidity risk:

Liquidity risk is the risk that Engineers Canada will be unable to fulfill its obligations on a timely or cost-effective manner. Engineers Canada manages its liquidity risk by monitoring its operating requirements. Engineers Canada prepares budget and cash forecasts to ensure it has sufficient funds to fulfill its obligations.

ENGINEERS CANADA

Notes to Financial Statements (continued)

Year ended December 31, 2021

14. Financial risk management (continued):

(e) Credit risk:

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. Engineers Canada is exposed to credit risk in the event of non-payment by its counterparties in connection with its accounts receivable. In order to mitigate its credit risk, Engineers Canada has entered into long-term agreements for the majority of its receivables, employs credit policies and monitors collection. Refer to note 12 for further details of the significant counterparty agreements. An allowance for doubtful accounts is established based on factors surrounding the credit risk of specific members, historical trends and other information. At December 31, 2021, the allowance for doubtful accounts was \$Nil (2020 - \$Nil).

15. Comparative information:

Certain comparative information has been reclassified to conform to the financial statement presentation adopted in the current year.

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BRIEFING NOTE: For decision by the Members

Appointment of auditors		5
Purpose:	To appoint KPMG as Engineers Canada’s external auditors for 2022	
Motion(s) to consider:	<i>THAT KPMG LLP be appointed as the public accountant to audit the accounts of Engineers Canada for the 2022 fiscal year.</i>	
Votes required to pass:	2/3-60% majority (the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty per cent of represented Registrants)	
Prepared by:	Derek Menard, Director, Finance	
Presented by:	Nancy Hill, Director from Ontario, and Chair of the FAR Committee	

Problem/issue definition

- The Engineers Canada Bylaw requires that the Members, on an annual basis, appoint a chartered professional accountant (CPA) licensed to practice public accounting in Ontario as auditor of Engineers Canada.

Proposed action/recommendation

- That KPMG LLP be retained to provide continuing auditing services for the upcoming 2022 fiscal year, with the fee as set in the original 2018 proposal. If approved, this would be the fifth consecutive year that Engineers Canada will be retaining KPMG LLP to provide external accounting services.
 - In early 2018, the Audit Committee (as it was then) issued an RFP for auditing services. Five proposals were received. After evaluating all five proposals, with support from Engineers Canada staff, the Audit Committee recommended that KPMG be retained for a five-year term (2018-2022).
 - KPMG were professional and efficient in the conduct of the 2021 audit and provided excellent counsel to the Finance, Audit and Risk (FAR) Committee and staff throughout the audit.

Other options considered

- No other options were considered this year.

Risks

- N/A

Financial implications

- The engagement with KPMG to conduct the 2022 audit represents a financial commitment of approximately \$23,000 for the 2022 budget year.
- This fee is included in the 2022 Engineers Canada budget.

Benefits

- KPMG provides added value through access to training in various areas, and ad-hoc consultations and expertise as required, in addition to providing the core audit services required.

Consultation

- N/A

Next steps (if motion approved)

- Staff, together with KPMG, will develop an audit plan in the early fall of 2022, for approval by Engineers Canada's FAR Committee. Thereafter, KPMG will conduct the 2022 audit, and results (i.e. the audited financial statements and report) will be presented to the Members at the May 2023 meeting.
- At the end of 2022, a new RFP will be issued for the selection of an auditor for the next five years (2023-2027), subject to Member approval in May 2023.

Appendix

- None.

BRIEFING NOTE: For decision by the Members

2024 Per Capita Assessment Fee	6
Purpose:	To approve the 2024 Per Capita Assessment Fee
Motions to consider:	<i>THAT the 2024 Per Capita Assessment Fee be set at \$8 per Registrant.</i>
Vote required to pass:	2/3-60% majority (the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty per cent of represented Registrants)
Prepared by:	Derek Menard, Director, Finance
Presented by:	Nancy Hill, Director from Ontario, and Chair of the FAR Committee

Problem/issue definition

- The Per Capita Assessment Fee (PCAF) is defined in Article 1.1 of the Engineers Canada Bylaw, in part, as the “annual amount to be paid by each Member as determined by its number of Registrants.” Moreover, Article 7.2 of the Bylaw requires the Board, by January 1st of each year, to recommend to the Members the amount of the PCAF that will be in effect on the second following January 1st.
- On December 14, 2021, the Members received the Board’s recommendation for the 2024 PCAF in an email from Evelyn Spence, General Counsel and Corporate Secretary, wherein she stated:
 “At its December 13, 2021 meeting, the Engineers Canada Board agreed to recommend to the Members that the **2024 Per Capita Assessment Fee would be reduced to \$8 per Registrant**. As a result, this recommendation will be going to the Members for their approval at the meeting of Members in May, 2022.”

Proposed action/recommendation

- That the Members approve the 2024 PCAF.

Other options considered

- The Board noted that Engineers Canada’s unrestricted reserves were forecasted to close 2021 at \$13.1M and looked at two options: reducing the PCAF to \$8 or to \$9 per Registrant.

Risks

- The PCAF must support ongoing operations while being adjusted so as not to allow the unrestricted net assets of Engineers Canada to grow unconstrained and risk losing status as a not-for-profit.

Financial implications

- The suggested PCAF will reduce Engineers Canada’s revenue by \$674K in 2024.
- The Board anticipates that the PCAF of \$8 per Registrant can be maintained through the current Strategic Plan, and it estimates that this PCAF amount would still leave reserves available to fund the 2025-2027 Strategic Plan.

Benefits

- The proposed 2024 PCAF will maintain unrestricted net assets above their \$1M limit and support operational spending in 2024.

Consultation

- The recommended 2024 PCAF is based on projected revenue and expenses for 2022, 2023, and 2024. The Finance, Audit, and Risk (FAR) Committee recommended the PCAF and the Board approved the PCAF recommendation at its December 2021 meeting.

Next steps (if motion approved)

- The 2024 PCAF will be set at \$8 per Registrant.
- The FAR Committee will consider the PCAF for 2025 at their pre-budget meeting in August 2022.

Appendix

- None.

BRIEFING NOTE: For decision by the Members

Bylaw amendment		7
Purpose:	To approve an amendment to the Engineers Canada Bylaw	
Motion(s) to consider:	<p><i>THAT Article 1.1 of the Engineers Canada Bylaw be amended as follows:</i></p> <p>“Registrant” means an individual registered with a Member at December 31, with the exception of applicants, and students, and those registered solely as a geoscientist or geoscientist in training.</p>	
Vote required to pass:	2/3-60% majority (the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty per cent of represented Registrants)	
Prepared by:	Evelyn Spence, General Counsel and Corporate Secretary	
Presented by:	Mike Wrinch, Director from British Columbia, and Chair of the Governance Committee	

Problem/issue definition

- The Board reviewed the Engineers Canada Bylaw and is proposing an amendment to the definition of “Registrant” within Article 1.1.
- The reason for the proposed amendment is that the existing definition of “Registrant” captures all “individuals registered with a Member at December 31, with the exception of applicants and students.” The definition is important because it is used to determine the Per Capita Assessment Fee (PCAF) payable by each Member. However, the current definition’s failure to exclude geoscientists and geoscientists in training is problematic, as it implies that, for those associations that regulate both engineers and geoscientists, they would be subject to pay a higher PCAF (since geoscientists are not expressly excluded from the count). That is not the intention of the provision, nor is it how Engineers Canada determines the number of Registrants for assessment purposes.
- Consequently, the definition within the Bylaw should be adjusted so that it can better reflect existing practice. At the same time, the revised definition must take into consideration that some Registrants have two licenses: a P.Geo and P.Eng. As such, P.Geo.s who are also P.Eng.s should be included in the definition of “Registrants.”

Proposed action/recommendation

- That the Members approve the proposed Bylaw amendment.

Other options considered

- No other options were considered. The proposed amendment corrects or clarifies an existing Bylaw provision.

Risks

- Operating under Bylaws with errors or inconsistencies leads to confusion, inconsistent application of the rules, and in extreme cases, can invite legal challenges.

Financial implications

- The suggested Bylaw revision does not bring with it any financial implications.

Benefits

- Opportunity to correct errors and inconsistencies that exist in the Bylaw.

Consultation

- The Engineers Canada Board has agreed to recommend the proposed Bylaw amendment for Member approval.

Next steps (if motion approved)

- The revised Bylaw will take effect.

Appendix

- **Appendix 1:** Draft Bylaw, with proposed edits tracked into the document.

A Bylaw relating generally to the business and affairs of ENGINEERS CANADA

BE IT ENACTED as a Bylaw of Engineers Canada as follows:

1 INTERPRETATION

1.1 Definitions

All terms contained herein and which are defined in the Act or the Regulations shall have the meanings given to such terms in the Act or Regulations.

"Act" means the *Canada Not-For-Profit Corporations Act*, S.C. 2009, c.23, including Regulations made pursuant to the Act, and any statute or regulations that may be substituted, as amended from time to time.

"Advisor" means a person appointed by Board policy to make recommendations and/or provide key information to the Board.

"Board" means the Board of Engineers Canada comprised of Directors and Advisors.

"Board members" means the Directors and Advisors elected or appointed in accordance with this Bylaw.

"Chief Executive Officers Group" means the group comprised of the chief staff officer of each of the Members.

"Major Capital Project" means a capital project with a value of more than 10% of the annual operating budget.

"Member" means a Member as further defined in Article 2.

"Per Capita Assessment" means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in Article 7.

"Registrant" means an individual registered with a Member at December 31, with the exception of applicants, ~~and~~ students, ~~and those registered solely as a geoscientist or geoscientist in training.~~

"Secretary" is an office held by the Chief Executive Officer of Engineers Canada or such other person appointed by the Board.

"Special National Initiative" means any project or program which would require a special assessment of Members or an increase in Per Capita Assessment and any major capital project.

"Standards" means accreditation criteria.

"Strategic Plan" means the plan to achieve Engineers Canada's envisioned future.

"2/3-60% Majority" means a resolution passed by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.

1.2 Interpretation

In the interpretation of this Bylaw, words in the singular include the plural and *vice-versa*, words in one gender include both genders.

1.3 Language

Equal recognition shall be given to Canada's two official languages in the operation of Engineers Canada. In the event of any inconsistency between the English language text of a Bylaw or other document and the French language text of such Bylaw or other document, the English language text shall govern.

2 MEMBERSHIP

2.1 Membership

Each of the following shall be a Member until such time as its status as a Member is withdrawn or terminated as provided herein, namely:

- (a) Association of Professional Engineers and Geoscientists of Alberta (APEGA);
- (b) Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB);
- (c) Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS);
- (d) Association of Professional Engineers and Geoscientists of the Province of Manitoba (Engineers Geoscientists Manitoba);
- (e) Association of Professional Engineers of Nova Scotia (Engineers Nova Scotia);
- (f) Association of Professional Engineers of Ontario (PEO)
- (g) Association of Professional Engineers of Yukon (Engineers Yukon);
- (h) Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG);
- (i) Ordre des ingénieurs du Québec (OIQ);
- (j) The Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL);
- (k) The Association of Professional Engineers and Geoscientists of the Province of British Columbia (Engineers and Geoscientists British Columbia);
- (l) The Association of Professional Engineers of the Province of Prince Edward Island (Engineers PEI); and
- (m) Other provincial or territorial entities established for the purpose of regulating the practice of engineering in any province or territory of Canada as may be approved by a 2/3-60% majority resolution of the Members.

2.2 Resignation of Membership

A Member may resign from membership by notice in writing to the Secretary not less than twelve (12) months prior to the next following Annual Meeting of Members.

2.3 Termination of Membership

- (1) Membership may be terminated if, at a special meeting of the Members called for such purpose, a resolution is passed terminating such membership, provided that the Member shall be granted the opportunity to be heard at such meeting.
- (2) Notwithstanding a resignation or termination of membership, a Member shall remain liable for payment of outstanding and due Per Capita Assessment up to and including the effective date of the resignation or termination.

3 MEETINGS OF THE MEMBERS

3.1 Notice of Meeting of Members

- (1) Notice of the time and place of a Meeting of Members shall be given to each Member entitled to vote at the meeting and to each Director and the public accountant, if applicable, by telephonic, electronic, or other communication facility during a period of 21 to 35 days before the day on which the meeting is to be held. If a Member requests that the notice be given by non-electronic means, the notice will be sent by mail, courier, or personal delivery.
- (2) A special resolution of the Members is required to make any amendment to this Bylaw to change the manner of giving notice to Members entitled to vote at a Meeting of Members.

3.2 General and Special Meetings

Other meetings of the Members, whether special or general, may be convened at any time and place by order of the President or the President Elect or by the Board or on request by any Member.

3.3 Error or Omission in Notice

The non-receipt of any notice by any Member or Members shall not invalidate any resolution passed or any proceedings taken at any meeting of Members.

3.4 Votes to Govern at Members' Meetings

Each Member present at a meeting shall have the right to exercise one vote. This vote shall be exercised by the current Chair/President of a Member.

- (1) A Member may, by means of a written proxy, appoint a proxy holder to attend and act at a specific meeting of Members, in the manner and to the extent authorized by the proxy.
- (2) All questions arising at a meeting of the Members shall require a resolution passed by at least a 2/3-60% Majority.
- (3) The Chair of any meeting of Members shall not have the right to vote thereat and, in case of an equality of votes the Chair of the meeting shall have no casting vote and such motion before the Members shall be deemed to be defeated.

3.5 Quorum

- (1) A quorum at any meeting of the Members shall be at least two-thirds of the total number of Members, representing at least sixty percent of the total number of Registrants.
- (2) If a quorum is present at the opening of any meeting of Members, the Members present may proceed with the business of the meeting even if a quorum is not present throughout the meeting.

3.6 Electronic Voting

Meetings of Members may be held entirely by means of a telephonic, electronic or other communication facility.

3.7 Chair

Meetings of the Members shall be chaired by the President of Engineers Canada or a person chosen by the Members.

4 DIRECTORS AND ADVISORS**4.1 Nomination of Directors**

- (1) Each Member shall deliver a list of nominees, who are engineers in good standing, to the Secretary for consideration at the Annual Meeting of Members.
- (2) Only individuals nominated in accordance with this nominations policy are eligible to be a Director.

4.2 Composition and Election of Directors

- (a) The number of Directors shall not exceed twenty three (23).
- (b) Directors shall be elected on the basis of nominations received as follows:
 - Four (4) from the Association of Professional Engineers and Geoscientists of Alberta (APEGA);
 - One (1) from the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB);
 - One (1) from the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS);
 - One (1) from the Association of Professional Engineers and Geoscientists of the Province of Manitoba (Engineers Geoscientists Manitoba);
 - One (1) from the Association of Professional Engineers of Nova Scotia (Engineers Nova Scotia);
 - Five (5) from the Association of Professional Engineers of Ontario (PEO);

One (1) from the Association of Professional Engineers of Yukon (Engineers Yukon);
One (1) from the Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG);
Four (4) from l'Ordre des ingénieurs du Québec (OIQ);
One (1) from the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL);
Two (2) from the Association of Professional Engineers and Geoscientists of British Columbia (Engineers and Geoscientists British Columbia);
One (1) from the Association of Professional Engineers of the Province of Prince Edward Island (Engineers PEI).

4.3 **Advisors**

- (1) The Board may establish policy to appoint persons as Advisors.
- (2) Advisors shall, upon invitation by the Board, be entitled to attend and participate in discussions at meetings of the Board, in whole or in part (as determined by the Board), but shall not have the right to vote thereat.
- (3) Advisors may perform such other duties as shall from time to time be requested by the Board.

4.4 **Remuneration and Expenses**

- (1) Board members shall serve without remuneration.
- (2) Board members shall not receive any financial gain by virtue of serving as a Board member.
- (3) Board members may be reimbursed for reasonable expenses incurred in the performance of duties.

4.5 **Filling Vacancies**

A vacancy occurring in the Board shall be filled by the Members from a list of nominees from the Member that nominated the Director who has left the Board and the Director appointed to fill the vacancy shall hold office for the remainder of the term of the Director who left the Board.

4.6 **Term Limits**

- (1) Directors shall be elected to the Board for a term of three (3) years.
- (2) No Director may be elected to the Board for more than two (2) terms, or a lifetime maximum of six (6) years.
- (3) The foregoing term limits shall not apply to a Director who is elected or confirmed, as applicable, to hold office as President-Elect, President, or Past President prior to the expiration of their second term, in which case they may continue on the Board until they have finished serving as Past President.
- (4) The Members shall have the authority to extend a Director's term beyond those described above, in extenuating circumstances, in order to ensure effective governance.

5 MEETINGS OF THE BOARD

5.1 **Number of meetings**

The Board shall hold at least one meeting per fiscal year and as many additional meetings as are deemed necessary, for the purpose of transacting the business of Engineers Canada.

5.2 **Notice**

The President, the President-Elect, or any five (5) Directors may at any time convene a meeting of the Board.

5.3 Open meetings

- (1) Except as provided for in this section, all meetings shall be open to the Members, Advisors, and invited observers.
- (2) A meeting or part of a meeting may be closed to the Members, Advisors, or invited observers by the Chair of the meeting at his or her discretion if the subject matter being considered concerns:
 - (a) the security of Engineers Canada;
 - (b) personal matters about an identifiable individual;
 - (c) the proposed or pending acquisition of assets by Engineers Canada;
 - (d) litigation or potential litigation;
 - (e) the receiving of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
 - (f) any other matter which the Board determines.

5.4 Quorum

- (1) At any meeting of the Board, a majority of the total number of Directors shall constitute a quorum. Provided a quorum is present at the beginning of a meeting, the meeting may continue or adjourn even though Directors leaving reduce the number to less than a quorum.
- (2) Directors who have declared a conflict of interest on a particular question shall be counted in determining a quorum. Notwithstanding any vacancy among the Directors, a quorum of the Board may exercise all the powers of the Board.

5.5 Voting

- (1) Each Director shall have one vote at meetings of the Board.
- (2) Any question arising at a meeting of the Board shall be decided in accordance with *Robert's Rules of Order*, unless otherwise provided in this Bylaw.

5.6 Absentee Directors

If a Director is absent from a meeting of the Board, the Member that nominated that Director may send an observer. Such observer may participate in discussions.

5.7 Approvals Requiring Two-thirds Majority

A Board resolution passed by a majority of not less than two-thirds of the votes cast on that resolution is required to make a decision in respect of the following matters:

- (a) Board Recommendations required in section 5.8;
- (b) Approval of the Budget or any amendments thereto;
- (c) Adoption, amendment, or repeal of any Board policies or procedures;
- (d) Adoption, amendment, or repeal of Standards; and
- (e) Board decisions in respect of any litigious or potentially litigious matters that may endanger the organization's public image, credibility, or its ability to fulfill the purposes.

5.8 Board Recommendations

The Board shall submit recommendations to the Members on the following matters, by a vote passed by a majority of not less than two-thirds of the votes cast, provided that no decision in respect thereof shall have any force or effect until approved by the Members in accordance with section 3.4 of this Bylaw:

- (a) Approval of the Strategic Plan;
- (b) The amount of the Per Capita Assessment;
- (c) Approval of Special National Initiatives; and

- (d) Amendment or repeal of the Articles of Continuance (which includes changes to Engineers Canada's name and purposes) or Bylaw.

5.9 Minutes of Meetings

The minutes of all meetings of the Board shall be sent to all Board members and to all Members.

6 OFFICERS

- 6.1 The officers shall be the President, the President-Elect, the Past President, the Chief Executive Officer, the Secretary and such other officers as the Board may from time to time by resolution determine.
- 6.2 Any officer may be removed at any time by a two-thirds majority resolution of the Board.

7 PER CAPITA ASSESSMENT

- 7.1 Prior to January 31st of each year, each Member shall report the number of Registrants in its association.
- 7.2 No later than January 1st of each year, the Board shall recommend to the Members the amount of the Per Capita Assessment that will be in effect on the second following January 1st. The Members will consider the recommendation and finalize the amount of the Per Capita Assessment no later than July 1st of each year with the decision by the Members to take effect on the second following January 1st (18 months notice).
- 7.3 Each Member shall pay to Engineers Canada the Member-approved Per Capita Assessment per Registrant within two months of receipt of invoice for same or pursuant to payment schedule reflective of the Member's registrant payment schedule.
- 7.4 In the event that the Members are unable to finalize the amount of the Per Capita Assessment by July 1st, the Per Capita Assessment last determined by the Members shall remain in effect.

8 AUDITOR

- 8.1 The Members shall appoint a chartered professional accountant (CPA) licensed to practise public accounting in Ontario as auditor of Engineers Canada annually.
- 8.2 The auditor shall audit the accounts of Engineers Canada after the close of the fiscal year and make a report thereon, and on the financial statements of Engineers Canada, to the Members at the Annual Meeting of Members.

9 FISCAL YEAR

- 9.1 The financial year of Engineers Canada shall be the calendar year.

10 RULES OF ORDER

- 10.1 In all cases for which no specific provision is prescribed by law or made in the Bylaw, the rules and practice of the latest edition of *Robert's Rules of Order* shall govern as far as applicable, provided that no action shall be invalid by reason only of a failure to adhere to such rules.

11 AMENDMENT OF BYLAW

- 11.1 A proposal for the amendment or repeal of the Bylaw may be put forward by a Member.

BRIEFING NOTE: For decision by the Members

Engineers Canada Board size		8
Purpose:	To obtain Member support for the plan to reduce the size of the Engineers Canada Board, as presented in the Governance Committee’s Report on Board Size from May 2020.	
Motion(s) to consider:	<i>THAT the Engineers Canada Board of Directors be reduced in size to 16 members, in the manner proposed in the Governance Committee’s May 2020 Report on Board Size, with the reduction taking effect by May 2025.</i>	
Vote required to pass:	2/3-60% majority (the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty per cent of represented Registrants)	
Prepared by:	Pal Mann, P.Eng., CEO & Registrar, Engineers Nova Scotia	
Presented by:	Darrin McLean, FEC, MBA, P.Eng., President, Engineers Nova Scotia	

Problem/issue definition

Background

- At the May 26, 2018 annual meeting of members (AMM), the Engineers Canada Members passed two motions directing the Board’s activities regarding the scope of the Governance, Strategic Planning, and Consultation (GSPC) project, then entering its final Governance 2.0 phase. In particular, Motion 5665 asked that the project consider the issue of Board size. Also at that meeting, the Members restricted further growth of the Board, through a Bylaw change, until the Governance 2.0 issues were addressed to the satisfaction of the Members (“Motion 5666”).
- The final report of the GSPC project did not address the issue of Board size, and so, at its meeting on October 4, 2019, the Board of Engineers Canada “tasked the Governance Committee to develop a plan for a reduction in Board size pursuant to the Meeting of Members Motions 5665 and 5666, to be presented for decision at the May 2020 Board meeting”.
- In answer to the above direction, the Governance Committee brought forward its “Report on Board Size” (the “Board Size Report”) at the May 22, 2020 Board meeting. At the same time, it put forward the following two motions:
 1. *THAT the Board report out to the Members for their consideration (“Motion 1”)*
 2. *THAT the Board recommends the plan to reduce the size of the Board through attrition to the Members (“Motion 2”)*
- At the May 2020 Board meeting, the Board voted in favour of Motion 1 – to release the Board Size Report to the Members, but defeated Motion 2 – to affirm the plan to reduce the size of the Board.
- As a result of the Board’s decision with respect to Motion 1, on August 5, 2020, Engineers Canada distributed the Board Size Report to Members, for their information. From Engineers Canada staff perspective, there was no resulting obligation for the Members to do anything with this report.

Discussion

- Engineers Nova Scotia feels that the request from the Members stated in Motion 5665 to study the issue of Board size has not been closed appropriately, in keeping with Engineers Canada’s guiding principles, nor has it been closed appropriately with respect to Motion 5666, which states that the issue must be resolved to the satisfaction of the Members. The Members have not had the opportunity to declare their satisfaction or dissatisfaction with the Board’s actions.
- Based on how this issue has been managed through the Governance Committee to the Board and then to the Members, it appears that the relationship between the Board and the Members has strayed from the initial governance intent of the Federation. While Engineers Nova Scotia knows the Board is dedicated to the

responsible stewardship of Engineers Canada, the Members are still the owners of Engineers Canada. Though the Board has reported to the Members on the Governance Committee recommendations, Engineers Nova Scotia maintains that the Members should be the final decision-makers on such a fundamental issue.

- As stated in the Engineers Canada Board Policy Manual:
 - The Regulators are the owners of Engineers Canada, referred to as the Members in the Bylaws.
 - The Board of Directors governs on behalf of the Regulators, and oversees Engineers Canada operations.
- While the Board recorded that it had exercised due diligence and examined the matter fully, the Board did not adopt the Board Size Report (per Motion 2). The reasons for defeating Motion 2 were not explained to the Members in any formal correspondence. The minutes of the May 22, 2020 Board meeting simply state that the “Board has done the requested diligence and examined this issue in full.” The 2020 Annual Report has one line on page 26 under BR4: Ensure the development and periodic review of Board policies: “Brought forward a plan to reduce the size of the Board through attrition, which was defeated by a motion of the Board in May 2020.” The Governance Committee report on Board size in the Meeting Summary slide package (slide 15) simply states, “The Board approved a motion to provide the Governance Committee’s Report on Board Size to the Members for their consideration. A second motion to recommend a plan to the Members to reduce the size of the Board through attrition was defeated.”
- In the Engineers Canada Governance model, Board size is within the purview of the Members, as it is mandated through the Bylaw. The role of the Board, in respect of Motion 5665, should have been to provide an option for a reduced Board size and a plan to achieve that reduction, or in the interest of transparency and defensibility, justify why a change in Board size was not warranted.
- Though the Board defeated the motion to recommend the Governance Committee’s plan to reduce the size of the Board through attrition, no justification or rationale was provided, and Engineers Nova Scotia believes that it is the place of the Members, and not the Engineers Canada Board, to vote on the plan. Since it was the Members who passed a motion to review the Board size as part of the governance review, the Members must be the ones to officially close it.

Proposed action/recommendation

- That the Members be the ones to determine the size of the Engineers Canada Board, by voting to approve or defeat the plan that was proposed by the Governance Committee in May 2020, through the Board Size Report, to reduce the size of the Engineers Canada Board of Directors to 16 members over a three-year period.
 - In voting to approve the plan, it should be understood that the Board Size Report was drafted in 2020, and it contemplates a reduction from 23 directors to 16 Directors over a three-year period, ending 2023. If Engineers Nova Scotia’s motion is passed by the Members, the Governance Committee would need to review the attrition schedule, contained at the bottom of page 2 and page 3 of the Board Size Report, and propose a new schedule to reduce the size of the Board to 16, giving effect to the recommendations within the Board Size Report that no Directors would be required to resign an existing appointment.
 - If the Members vote to approve the plan, it is expected that all required reductions can be achieved within three years, by May 2025, as outlined in the Board Size Report.

Other options considered

- N/A

Risks

- Not responding to a direct request from the Members to consider the issue of Board size would demonstrate a lack of accountability to the Engineers Canada “owners” as well as incomplete communication between them. Both these issues would put the Board in contravention of two of its established responsibilities.

- A possible conflict of interest may exist in that the Board is making a final decision regarding its own size. This should be a Members' decision.

Financial implications

- As detailed in the Board Size Report, a Board of 16 directors could result in annual savings of approximately \$81,900 (2020 dollars, which assumed 5 in-person meetings) as compared to the current 23-Director Board.

Benefits

- Allowing Members to close the motion it raised (e.g. Motion 5665) respects the governance model and governance intent of Engineers Canada.
- The requirements of Motion 5666 are fully satisfied and the issue of Board size will be addressed to the satisfaction of Members.

Consultation

- This matter has been discussed in past Presidents' Group meetings, but there has not been a formal discussion to determine if the Members want this added as an agenda item at the AMM.

Next steps (if motion approved)

- If the Members approve the plan to reduce the size of the Engineers Canada Board to 16 Directors, the Governance Committee and in turn, the Board, would be required to plan and implement the reduction. Since Board size is expressly set out in the Engineers Canada Bylaw, this work would include recommending a revision to the Bylaw, for Members' approval.

Appendix

- **Appendix 1:** Briefing Note and Board Size Report, as reproduced from May 2020 Engineers Canada Board Meeting Agenda Package

BRIEFING NOTE: For decision

Governance Committee Report on Board Size		4.4
Purpose:	To receive the <i>Governance Committee's Report on Board Size</i> and decide on next steps	
Link to the strategic plan:	Board Responsibility 1: Hold itself, its directors and its direct reports accountable. Board responsibility 2: Sustain a process to engage with regulators through regular communication that facilitates input, evaluation, and feedback	
Motion(s) to consider:	It is recommended that the Board consider the following two motions separately:	
	1. <i>THAT the Board report out to the Members for their consideration.</i>	
Vote required to pass:	Simple majority	
	2. <i>THAT the Board recommends the plan to reduce the size of the Board through attrition to the Members.</i>	
Vote required to pass:	As per bylaw 5.7 "A Board resolution passed by a majority of not less than two-thirds of the votes cast on that resolution is required to make a decision in respect of the following matter: (a) Board recommendations required in Section 5.8"	
Transparency:	Open session	
Prepared by:	Stephanie Price, Executive Vice President Regulatory Affairs	
Presented by:	Jeff Holm, Director from British Columbia and Chair of the Governance committee	

Problem/issue definition

- At the May 26, 2018 Annual Meeting of Members, the Members passed two motions directing the Board's activities regarding the scope of the Governance, Strategic Planning, and Consultation (GSPC) project, then entering its final Governance 2.0 phase. In particular motion 5666 asked that the project consider the issue of Board size.
- At the same meeting, the Members also restricted further growth of the Board, through a bylaw change, until the issue of Board size was addressed to the satisfaction of the Members (Motion 5666).
- The final report of the GSPC project did not address the issue of Board size, and so, on October 4, 2019, the Board of Engineers Canada "tasked the Governance Committee to develop a plan for a reduction in Board size pursuant to the Meeting of Members motions 5665 and 5666, to be presented for decision at the May 2020 Board meeting".
- In response, the Governance Committee brings forward this report with a plan to reduce the number of directors on the Engineers Canada Board from 23 to 16 over a three-year period.

Proposed action/recommendation

- Approve the report and forward it to the Members.

- Note that the Board is not the body that will decide the number of directors. This is the purview of the Members, as it is mandated through the Bylaw. The role of the Board in this activity is to consider the issue of Board size, to provide an option for a reduced Board size, and to provide a plan to achieve that reduction.

Other options considered:

- The Governance Committee discussed a reduction to 12 directors, but rejected this option based on input received from the regulators in the fall of 2017.
- At that time, 10 regulators supported a board with 12 directors. However, both OIQ and PEO indicated that they could not support this option, and that their first preference was for the status quo of 23 directors. However, all regulators indicated that a board with 16 directors was an option that they would be willing to consider.

Risks

- Not responding to a direct request from the Members to consider the issue of Board size would demonstrate a lack of accountability to our owners as well as very poor communication with them. Both these issues would put the Board in contravention of two of its established responsibilities.

Financial implications

- As detailed in the report, a Board of 16 directors could result in annual savings of approximately \$81,900 as compared to the current 23-director Board.

Benefits

- Providing a report to the Members shows that we are responsive to their requests.

Consultation

- The Governance Committee relied on input from staff and other directors, as well as the results of the face-to-face fall 2017 consultation conducted as part of the GSPC project.

Next steps (if motions approved)

- Members will receive the report.
- Members will decide whether and or not to consider the issue of Board size through a bylaw revision.

Appendices

- Governance Committee report on Board size

Governance Committee report on Board size

Executive summary

On October 4, 2019, the Board of Engineers Canada “tasked the Governance Committee to develop a plan for a reduction in Board size pursuant to the Meeting of Members motions 5665 and 5666, to be presented for decision at the May 2020 Board meeting”.

In response, the Governance Committee brings forward this plan to reduce the Board of Engineers Canada from 23 to 16 Board members over a three-year period.

This document has been prepared by the Governance Committee for Board discussion and resolution.

Background

At the May 26, 2018 Annual Meeting of Members, the following motions were passed directing the Board regarding the scope of the Governance, Strategic Planning, and Consultation project, then entering its final Governance 2.0 phase:

Motion 5665: *THAT the Engineers Canada Board be directed to ensure future governance review and planning (‘Governance 2.0’) include review of Board and Committee governance, adoption of best practice, and mechanisms to improve the efficiency and performance of the Board and committees. Specifically, members ask that (‘Governance 2.0’) consultation and reporting make reference to Board and committee size, work plans and deliverables, membership, performance management, adoption of best practice in nominations (i.e. skills, experience & attributes matrix), independence, and diversity.*

Motion 5666: *THAT the Members restrict further growth to the Board of Engineers Canada until the work associated with Motion 1 is addressed to the satisfaction of the Members.*

In response to this motion, the scope of the project was expanded and the final Governance 2.0 report addressed all issues except board size. Details of how the issues were addressed are included in Appendix A. Board size is the one remaining issue to be addressed.

If the Board resolves to recommend a change in board size, the Members of Engineers Canada (the twelve engineering regulators) have the authority to change the Board size through amendment of Engineers Canada’s Bylaw.

Introduction

In fall 2017, the Board consulted with regulators on the issue of board size. Although opinions were wide-ranging, most regulators indicated their preference for a smaller board restricted to a maximum size. At that time, 10 regulators supported a board with 12 directors. However, both OIQ and PEO indicated that they could not support this option, and that their first preference was for the status quo of 23 directors.

However, all regulators indicated that a board with 16 directors was an option that they would be willing to consider. The Governance Committee resolved to use this as the basis for this report. This report provides a plan to reduce the Board size from 23 directors to 16 directors over a three-year period, using attrition only, and analyzes the impacts of change.

Information regarding the history of the issue of Board size is included in Appendix C.

Proposed Board size

The Governance Committee is proposing that the Board consist of 16 members, based on one member for each regulator plus an additional board member for each regulator at a 15% of membership total interval step function. Based on the current composition of the members, the Board of Engineers Canada would consist as follows:

<u>For those regulators representing:</u>	<u>The number of directors is:</u>
Less than 15% of all licences reported to Engineers Canada:	1 director
15-30% of all licences reported to Engineers Canada:	2 directors
More than 30% of licences reported to Engineers Canada:	3 directors

The resulting Board composition is:

3 directors:	Ontario	= 3
2 directors:	Quebec and Alberta	= 4
1 director:	all other jurisdictions	= 9
		= 16 total directors

Details of the number of registrants for each regulator, and their percentage of the overall number of registrants is provided in Appendix B.

Schedule to reduce to 16 directors

For most regulators (eight out of twelve), the change to 16 directors will not impact the number of directors that they nominate. They will continue with “business as usual”. For four regulators, the following reductions will be required:

- Engineers & Geoscientists British Columbia will reduce from two to one
- APEGA will reduce from four to two
- OIQ will reduce from four to two
- PEO will reduce from five to three

The plan starts with the number of known directors as at May 2020. If the Board approves this plan on May 23, 2020 and then puts a motion before the Members in the following year, the actions could start as early as at the May 2021 meeting of Members, with all required reductions being achieved by May 2023. Under this plan, no directors will be required to resign an existing appointment. Note that if the intent to reduce the board size is resolved, the schedule to achieve the outcome can be adjusted moving forward.

This current proposal does not preclude a future decision by the Board or the Members to further adjust Board size.

Director	Term Ends	Term length at that date	Action at 2021 AMM	Action at 2022 AMM	Action at 2023 AMM	Result
EGBC1	2021	6 years	Extend for two years or appoint new for two years	None required	Do not renew or re-appoint	Position eliminated
EGBC2	2022	3 years	None required	Business as usual (renew or re-appoint)	None required	Single director continues
APEGA1	2020/2023	3/6 years	Business as usual (renew or re-appoint)	None required	Do not renew or re-appoint	Position eliminated
APEGA2	2020/2023	3/6 years	Business as usual (renew or re-appoint)	None required	Do not renew or re-appoint	Position eliminated
APEGA3	2021	5 years	Appoint new member to 2023	None required	Business as usual (renew or re-appoint)	One of two directors to continue
APEGA4	2022	3 years	None required	Business as usual (renew or re-appoint)	None required	One of two directors to continue
PEO1	2020	6 years	Business as usual (appoint new to 2023)	None required	Do not renew or re-appoint	Position eliminated
PEO2	2020/2023	3/6 years	Business as usual (renew or re-appoint)	None required	Do not renew or re-appoint	Position eliminated
PEO3	2021	3 years	Business as usual (renew or re-appoint to 2023)	None required	Business as usual (renew or re-appoint)	One of three directors to continue
PEO4	2022	3 years	None required	Business as usual (renew or re-appoint)	None required	One of three directors to continue
PEO5	2022	3 years	None required	Business as usual (renew or re-appoint)	None required	One of three directors to continue
OIQ1	2020	9 years	Business as usual (appoint new to 2023)	None required	Do not renew	Position eliminated
OIQ2	2020/2023	3/6 years	Business as usual (renew or re-appoint)	None required	Do not renew	Position eliminated
OIQ3	2021	3 years	None required	Business as usual (renew or re-appoint)	None required	One of two directors to continue
OIQ4	2022	6 years	None required	None required	Business as usual (renew or re-appoint)	One of two directors to continue

Impacts of a smaller Board size

Impact on workload

The Board has three permanent committees and three appointments, with membership set in their terms of reference. Most committees meet bi-monthly, with monthly meetings sometimes required.

Committee	# of Directors
Accreditation Board appointments	2
Finance, Audit, and Risk Committee	5
Governance Committee	3
Human Resources Committee	5
Qualifications Board appointments	2
30 by 30 Champion	1
TOTAL	17

This means that only a single director would be required to serve on more than one committee. This will not overwhelm any director. In addition, some directors are required to participate on more than one committee due to their position (e.g. past-president sits on the Human Resources and Governance committees). It is important to note, however, that all directors will be required to sit on committees, including those in their first-term on the Board.

Since the workload varies between committees, strategic appointments can be made such that any double-appointed directors do not have the higher workload assignments (currently identified as higher workload assignments: Accreditation Board, Qualifications Board, and Finance, Audit and Risk Committee).

Impact on Board effectiveness

“In regards to whether the composition of the board of directors determines the performance of the firm ... the research is neither conclusive nor definitive.”¹

According to Deloitte², board effectiveness is influenced by eight key areas:

1. Board composition – The board has the right balance of skills, knowledge, and experience to govern the company effectively.
2. Board engagement – The board engages with its internal and external stakeholders on a timely basis.
3. Governance structure – The board’s committee structure is clear and provides members with assurance to discharge their duties effectively.
4. Board agenda and forward plan – The board’s meeting agenda and forward plan ensures that members are focusing on the right areas at the right time.
5. Board reporting – The information received by board members is comprehensive, accurate, easy to understand, timely, and appropriate.
6. Board dynamics – Board members operate effectively as a team, striking the right balance between trust and challenge.
7. Chair’s leadership – The chair is an effective leader of the board.
8. Performance evaluation – The board members are continually improving as a group and as individuals.

¹ C. José García Martín & Begoña Herrero (2018) Boards of directors: composition and effects on the performance of the firm, *Economic Research-Ekonomska Istraživanja*, 31:1, 1015-1041, DOI: [10.1080/1331677X.2018.1436454](https://doi.org/10.1080/1331677X.2018.1436454). Retrieved from: <https://www.tandfonline.com/doi/full/10.1080/1331677X.2018.1436454?src=recsys&>

²² “Corporate Governance: Board effectiveness review” published in 2017. Retrieved from: <https://www2.deloitte.com/content/dam/Deloitte/ru/Documents/risk/corporate-governance-board-effectiveness-reviews.pdf>

While some of these issues are directly impacted by the number of directors and their provenance, others are indirectly related as well.

Board composition is largely out of the control of the directors, as it is the Members who nominate and appoint directors. The Board can only influence composition by tracking its skills, competencies, and qualities and submitting a desired profile to the Members for their consideration during the nomination process.

Board engagement with the regulators could be positively or negatively impacted by the number of directors from each region. When there is only one director, it is clear who holds the responsibility to engage the regulator. When there are several directors, there is the potential that more engagement with the regulator occurs, but this may be hindered by a lack of clarity of roles and responsibilities of each director.

Board dynamics could be either negatively or positively impacted by the number of directors. More voices may lead to a greater diversity of viewpoints and a better end-solution, or it could lead to disengagement of some directors while others dominate the conversation at the Board table.

Performance evaluation requires more resources (time and effort) the higher the number of directors who are assessed and who engage in improvement activities, as does the *chair's performance* since managing the deliberations of a larger group is harder than managing those of a smaller group.

Governance structure, board agenda, and board reporting are largely unaffected by board size.

According to a 2011 report from the Council for Healthcare Regulatory Excellence³ on board size and effectiveness, the most effective size for a board is between eight and 12 members. They posit that larger boards can lead to communication and co-ordination problems, causing effectiveness and performance to suffer. They suggest that a reduction in board size will help ensure boards provide effective strategic decision making and oversight.

Impact on decision making

Board dynamics are a key factor that directly relates to the ability of a board to make good decisions. Good decisions are made by a reasonable number of independent directors. Too many directors can obfuscate discussion and may lead to poorer decisions. The optimal board size should be balanced to result in representative, robust, and engaged discussion from all members in a reasonable time frame.

It is important to note, that our Board operates with meeting rules that stipulate that each director shall speak once before any speaks for a second time, and that no director shall speak more than twice. If a question is being considered along regional lines, it is clear that a region with more directors on the Board will have more opportunity to voice their opinion and potential influence the outcome of any vote.

³ Council for Healthcare Regulatory Excellence (UK) "Board size and effectiveness: advice to the Department of Health regarding health professional regulators", published September 2011. Retrieved on January 8, 2020 from https://www.professionalstandards.org.uk/docs/default-source/publications/advice-to-ministers/board-size-and-effectiveness-2011.pdf?sfvrsn=d1c77f20_12

Condorcet was an intellectual leader during the French revolution.⁴ In 1785 he published *Essay on the Application of Analysis to the Probability of Majority Decisions*, outlining political mechanisms that rationalized the drafting of laws for the public good. He offered an argument for the wisdom of the multitude, known today as the “Condorcet Jury Theorem”. According to the argument, a group of people make the best decision when the following 3 conditions are met:

1. Individuals are fully informed by rational and reliable information
2. Everyone votes independently of others
3. Everyone votes in the best interest of the organization and not strategically for special interests.

To summarize, best decisions are made by the largest number of independent voters. However, adding more non-independent voters (already committed) decreases the probability of the correct decision.

Impact on the fairness of regulator representation

Engineers Canada is an incorporated Canada Not for Profit Corporation. Under 154 (5) of the act, each member is entitled to one vote at a meeting of members. This is consistent with a federated cooperative model of governance for a nonprofit that provides for one member, one vote.

Engineers Canada’s Bylaw provides for representation based on the size of the regulator at meetings of Members, regardless of the Board size. Per Bylaw section 3.4 (2) all questions raised at meetings of Members require a 2/3-60% Majority. For a motion to pass, a minimum of two-thirds of the Members voting (each Member having one vote) must vote in favour and those voting in favour must represent a minimum of sixty percent of represented registrants in Canada. The reduction in board size will have no impact on the number of members or the number of votes each one holds, and proportional representation would remain intact at a meeting of Members, as designed in the Bylaw.

The Members have the authority to approve the strategic plan and major projects, to amend the Per Capita Assessment, and the Bylaw or the Articles of Continuance. In this way, representative voting continues to apply to our highest-priority items, regardless of Board size.

At a Board meeting, each director may cast one vote. These votes are not meant to be representative of regulators or registrants and rely on each director’s independent fiduciary responsibility to Engineers Canada. Most Board votes require a simple majority, but those involving recommendations to the Members; approval of the budget; adoption, amendment, or repeal of policies, procedures, or standards; or regarding litigious matters, must be supported by a majority of two-thirds of the directors voting.

If Engineers Canada was to employ a purely representative democracy model at the board level, the Members would elect directors based on the size of each regulator to present their interests proportionally. Member regulators vary greatly in size, with the largest regulator (PEO) 126 times larger than the smallest (PEI). This level of representation is not achievable for Engineers Canada at the Board level, so we employ a cooperative board, responsible for voting in the best interest of Engineers Canada.

⁴ Information gleaned from Wikipedia article “Condorcet’s jury theorem”. Retrieved October 2019 from: https://en.wikipedia.org/wiki/Condorcet%27s_jury_theorem

Impact on diversity of the Board

Good board governance develops a needs and skills matrix to inform the members as to the desired attributes. The desired attributes may include diversity in genders, age, ethnicity or other factors. However, as the Board consists of appointees' from the various member regulators, it may be difficult to achieve a truly diverse board.

Alternatively, a stakeholder board may be considered where positions are reserved for token members to try and reflect the desired diversity make-up. These types of boards are often large.

While it may be argued that it could harder to achieve the Board's diversity goals with a smaller number of directors, since the Board does not determine its membership, this is never a factor that the board can control. Diversity on our Board may be improved by educating the Members to seriously consider the Board's competency profile and requested attributes when making individual appointments. This applies regardless of the size of the Board.

Impact on costs

The Board holds five face-to-face meetings per year, from one to three days in duration. While the overall meeting costs (e.g. room rental, audio visual set-up etc.) would be unaffected by a smaller Board size, the travel costs would be. Assuming 7 fewer directors, \$1200 per flight, and \$200 per room per night, the expected savings are:

	Feb	May *	June *	Sept	Dec
Flights	\$1200	\$1200	\$1200	\$1200	\$1200
Nights in the hotel	3	4	3	2	2
Cost / night	\$200	\$200	\$200	\$200	\$200
Incidentals	\$100	\$100	\$100	\$100	\$100
Cost per meeting, per person	\$1900	\$3300	\$3100	\$1700	\$1700
Annual savings per director	\$ 11,700				
Total savings (7 directors)	\$81,900				

* the cost of flights for these two meetings includes both the director and their spouse

Conclusion

The Governance Committee recommends that the Board of Engineers Canada be reduced from 23 to 16 directors over a three-year period. If the Board agrees, a motion should be passed, recommending this action to the Members, along with the proposed schedule for reduction. The Members could be asked to consider this issue at a single-issue, special meeting of Members in late 2020, so that the 2021 nominations process for new directors could reflect the requirements in the proposed schedule.

Appendix A – Governance, Strategic Planning, and Consultation Project improvements

Members' motion 5665 directed to Board to "ensure future governance review and planning ('Governance 2.0') include review of Board and committee governance, adoption of best practice, and mechanisms to improve the efficiency and performance of the Board and committees.

Specifically, members ask that ('Governance 2.0') consultation and reporting make reference to Board and committee size, work plans and deliverables, membership, performance management, adoption of best practice in nominations (i.e. skills, experience & attributes matrix), independence, and diversity."

All items except Board size were addressed through the Governance, Strategic Planning, and Consultation project. The following table explains the changes made to address each issue raised in Members motion 5665.

Members motion 5665 issue	Improvement
Review of Board governance	New board policy manual – 80 new or revised policies
Review of committee governance	New committee structure reduced number of committees from 5 to 3 (not including AB and QB)
Adoption of best practice	Governance benchmarking report Governance 2.0 report used 11 sources
Mechanisms to improve efficiency of Board	Board annual agenda established. Authority of committees and required board approvals delineated in Governance 2.0 report and terms of reference.
Mechanisms to improve efficiency of committees	Committee deliverables and meeting dates established annual.
Mechanism to improve performance of Board	Speaking rules at board meetings Competency profiles established and used as basis for assessment of directors and of board as a whole.
Mechanisms to improve performance of committees	Smaller committee size, defined purpose, authority and work plans.
Board size	-
Committee size	Set based on minimum required to accomplish the work.
Board work plans and deliverables	Performance assessment reports for all strategic priorities (4) and operational imperatives (10) at every board meeting.
Committee work plans and deliverables	Work plans (based on Governance 2.0 report, Board Responsibilities in the Strategic Plan, committee terms of reference and recommendations of former committee) approved and reported on annually.
Board membership	N/A - determined by the Members. Annual request for nominees is based on assessment of current and required board competencies
Committee membership	Set based on required competencies (in terms of reference) and representation

Members motion 5665 issue	Improvement
Board performance management	Competency profiles established and used as basis for assessment of directors and of board as a whole. Governance effectiveness survey (for Members to provide feedback to the Board) to be conducted regularly.
Committee performance management	Assessment of committee chairs required (to be implemented) Performance against work plan tracked.
Adoption of best practice in nominations	Nominations are the responsibility of the Members. Annual request for nominees is based on assessment of current and required board competencies.
Independence	Nominations are the responsibility of the Members.
Diversity	Nominations are the responsibility of the Members. Board diversity policy 8.2 established

Appendix B - Calculation of regulator representation

Regulator	Registrants (2018)	
Engineers Geoscientists BC	31,233	10.3%
Engineers Yukon	1,061	0.4%
APEGA	65,190	21.5%
NAPEG	1,947	0.6%
APEGS	12,618	4.2%
Engineers Geoscientists MB	8,101	2.7%
PEO	98,866	32.6%
OIQ	65,533	21.6%
Engineers Geoscientists NB	5,742	1.9%
Engineers Nova Scotia	6,937	2.3%
Engineers PEI	787	0.3%
PEGNL	4,861	1.6%
TOTAL	302,876	

Note: Under current bylaw 3.4(2); all questions arising at a meeting of the Members shall require a resolution passed by the members present of at least a two-thirds of the total number of Members and representing at least sixty percent of the total number of Registrants.

Under Roberts Rules, this bylaw may be changed by the Members in 3 ways:

1. By a simple majority vote of the members present at a regular meeting where proper notice has been given,
2. By a 2/3 majority vote of members present at any called meeting,
3. By an absolute majority of the total members (8/12) at any called meeting with quorum.

3.4 Votes to govern at Members' meetings

Each Member present at a meeting shall have the right to exercise one vote. This vote shall be exercised by the current chair/president of a Member.

(1) A Member may, by means of a written proxy, appoint a proxy holder to attend and act at a specific meeting of Members, in the manner and to the extent authorized by the proxy.

(2) All questions arising at a meeting of the Members shall require a resolution passed by at least a 2/3-60% Majority.

(3) The chair of any meeting of Members shall not have the right to vote thereat and, in case of an equality of votes, the chair of the meeting shall have no casting vote and such motion before the Members shall be deemed to be defeated.

3.5 Quorum

(1) A quorum at any meeting of the Members shall be at least two-thirds of the total number of Members, representing at least sixty percent of the total number of registrants.

(2) If a quorum is present at the opening of any meeting of Members, the Members present may proceed with the business of the meeting even if a quorum is not present throughout the meeting.

Appendix C – History of the Board size

The number of directors is currently determined based on the bylaw section 4.2, which was enacted in the summer of 2019 to restrict further growth of the Board.

Previously, from 2010 to 2019, the size of the Board was set with the following system:

- a) Each Member appoints at least one (1) Director to the Board.
- b) Every Member that has more than 20,000 registrants, may (but is not required to) appoint an additional director for every 20,000 of its additional registrants, as per the following.

Number of registrants of the Member as at December 31 st	Total number of directors that may be appointed by the Member
1 to 20,000	1
20,001 to 40,000	2
40,001 to 60,000	3
60,001 to 80,000	4
80,001 to 100,000	5

This system was put in place in 2010 as part of the Synergy Task Force. The resulting size is **23** directors.

During 2017, significant work was undertaken to address the issue of Board size, including consultation with all regulators. At the time, Ontario and Quebec were not supportive of a small Board size, while all other jurisdictions supported a Board of 12 directors, one per region. All regions agreed, however, that a board of 16 was a second choice that they could live with.

In May 2018, Engineers Nova Scotia brought a motion to the Meeting of Members to reduce the Board size to 12. The motion was defeated. In May 2019, the Members requested further work on Board and committee size. Committee size was addressed through the GSPC project work, and Board size is addressed in this report.

From 2002 to 2010, the Board was constituted in the following manner:

The number of Directors was fixed at **18**, to be reviewed every five years, consisting of:

- 1 from PEGNL
- 1 from Engineers Nova Scotia
- 1 from Engineers PEI
- 1 from Engineers and Geoscientists New Brunswick
- 3 from OIQ
- 3 from PEO
- 1 from Engineers and Geoscientists Manitoba
- 1 from APEGS
- 2 from APEGA
- 2 from Engineers and Geoscientists British Columbia
- 1 from Engineers Yukon
- 1 from the NAPEG

Prior to 2002, the Board was constituted in the following manner:

All Members contributing less than 10% of the Assessment shall have one (1) Director; all Members contributing 10% or more but less than 20% of the Assessment shall have two (2) Directors; all Members contributing 20% or more of the Assessment shall have three (3) Directors

Today, this would result in a board size of **19** directors.

To review the implementation of the 2010 Synergy Task Force recommendations, Past-President Jim Beckett wrote a report in May 2015 which included his observations, five years later. The report was presented to the Board, and it was noted that the results of this mandatory review of Synergy would “feed into the work of the Linkages Task Force and possibly recommendations to the Governance Committee”:

Composition of the Board of Directors

Recommendations of the Synergy Task Force

- *In order to ensure full and fair representation as well as to maintain a direct connection it is recommended that each Constituent Association appoints one director and an additional director for every 20,000 assessed engineers.*

<i>1 to 20,000</i>	<i>1 director</i>
<i>20,001 to 40,000</i>	<i>2 directors</i>
<i>40,001 to 60,000</i>	<i>3 directors</i>
<i>60,001 to 80,000</i>	<i>4 directors</i>
<i>80,001 to 100,000</i>	<i>5 directors</i>

The number of Directors is determined according to the previous years’ assessment number and sets the Board composition for the coming Board year. For example the 2009/2010 Board composition according to the December 31st 2008 assessment number.

- *This proposal would add 1 Director from Ontario and 1 Director from Alberta.*

Observation: *Originally, the proposal of the Task Force was to add an additional director for every 25,000 assessed engineers. However, this would have required APEGBC to reduce their representation from 2 directors down to 1. The proposal was modified to an additional director for every 20, 000 assessed engineers to eliminate this problem, however it added two new directors, and in the longer term will increase the size of the Board of Directors fairly quickly.*

The result of this recommendation is a current Board of Directors with 22 voting members for the 2014-2015 term. It is this author’s view that this size of Board (along with the observing members to be discussed later) is much too large for the business needs of Engineers Canada. During my terms as President-Elect, President, and Past-President, I have noticed that Directors easily and quickly become disengaged from discussions when so many directors offer their points of view. It also appears that most directors would prefer to participate in serving the interests of the Constituent

Associations and other stakeholders, rather than the ongoing monitoring of the Chief Executive Officer under the governance approach used by Engineers Canada.

For serving the interests of the Constituent Associations and other stakeholders of Engineers Canada, a large and inclusive Board would appear to be a very good solution. For the ongoing monitoring of the effectiveness of the Chief Executive Officer in implementing the Ends of Engineers Canada, a smaller board (of perhaps 7-8 directors) would appear to be optimum. Without some significant changes to the structure of the Board, these two very different objectives will be difficult to achieve.

One suggestion would be to restructure Engineers Canada to have a Board which is similar to the current Executive Committee. This Board would focus mainly on governance issues. A larger assembly, with perhaps 12-15 members (which would include the Executive Committee members) and several observers would focus on serving the interests of the Constituent Associations and other stakeholders.

BRIEFING NOTE: For decision by the Members

Election of Directors		9
Purpose:	To elect the Engineers Canada's Directors	
Motion(s) to consider:	<p><i>THAT the following Directors be elected for the terms indicated below:</i></p> <ul style="list-style-type: none"> • <i>John Van der Put, nominee from Alberta (2022-2025)</i> • <i>Michael Wrinch, nominee from British Columbia (2022-2025)</i> • <i>Marlo Rose, nominee from New Brunswick (2022-2025)</i> • <i>Crysta Cumming, nominee from Nova Scotia (2022-2025)</i> • <i>Christian Bellini, nominee from Ontario (2022-2025)</i> • <i>Kathy Baig, nominee from Quebec (2022-2024)</i> 	
Votes required to pass:	2/3-60% majority (the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty per cent of represented Registrants)	
Prepared by:	Evelyn Spence, General Counsel and Corporate Secretary	
Presented by:	Danny Chui, Engineers Canada President, and Director from Ontario	

Problem/issue definition

- The Engineers Canada Bylaw requires that each Member deliver a list of nominees, who are engineers in good standing, to the Engineers Canada Secretary, for consideration at the Annual Meeting of Members. Only individuals nominated in accordance with the nomination policy set out in the Bylaw are eligible to be a Director.
- In the call for Director nominees, Members are provided with Board policy 4.8, *Board Competency Profile*, which describes the Director skills, attitude and knowledge areas that are desired to serve the interests of Engineers Canada and the Regulators. The profile also contains information on the preferred experiences, including diverse lived experiences, that are desired in Director nominees.

Proposed action/recommendation

- That the Members approve the list of Director nominees, for the specified terms.

Other options considered

- N/A

Risks

- N/A

Financial implications

- Directors serve without remuneration but may be reimbursed for reasonable expenses incurred in the performance of duties.

Benefits

- The Board will benefit from having a sustained membership to support its work.

Consultation

- N/A

Next steps (if motion approved)

- Engineers Canada will update its corporate filings with the new Director information.
- New Directors will participate in a series of orientation sessions, delivered by the Past-President.

Appendix

- N/A