AGENDA

Annual Meeting of the Members

May 23, 2020 | 9:30 am – 11:00 am (Central time)

Teleconference/Webinar joining details (line opens at 8:30am CT):

https://attendee.gotowebinar.com/register/3787775083018561551

Please refer to the Bylaw

1.	Call to order and introductions – D. Lynch, President, Engineers Canada
2.	Approval of the chair for the 2020 Annual Meeting of Members (AMM) (attachment page 3 to 4) *THAT Jonathan Epp, Past-President, Engineers Geoscientists Manitoba, be approved to serve as chair for the remainder of the 2020 AMM.*
3.	Approval of agenda *THAT the agenda be approved and the chair be authorized to modify the order of discussion.*
4.	Approval of minutes (attachment page 5 to 10) *THAT the minutes of the annual meeting of members held May 25, 2019 be approved.*
5.	Reports to the Members for information – D. Lynch (attachment page 11 to 54) a) Engineers Canada annual report b) Annual strategic performance report
6.	Audited financial statements and appointment of auditors – L. Doig (attachment page 55 to 75) 6.1. Audited financial statements *THAT the Members approve the Engineers Canada financial statements for the year ending December 31, 2019, as audited by KPMG LLP.* 6.2. Appointment of auditors *THAT KPMG LLP be appointed as the public accountant to audit the accounts of Engineers Canada for the 2020 fiscal year, as recommended by the FAR Committee.*
7.	Bylaw amendments – D. Lynch (attachment page 76 to 84) *THAT the Bylaw be updated as follows:* *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).* *~~7.2.~~ 7.3. Each Member shall pay to Engineers Canada the Member-approved Per Capita Assessment ~~of $10.21~~ per Registrant within two months of receipt of invoice for same or pursuant to payment schedule reflective of the Members 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.	Election of directors *THAT the following directors be approved for the terms indicated below:*

	Director name	***Jurisdiction***	***Term***
	Victor Benz	*Alberta*	*2020-2023*
	Tim Joseph	*Alberta*	*2020-2023*
	Jeff Card	*Newfoundland and Labrador*	*2020-2023*
	Sudhir Jha	*Northwest Territories and Nunavut*	*2020-2023*
	Danny Chui	*Ontario*	*2020-2023*
	Nancy Hill	*Ontario*	*2020-2023*
	Justin Dunn	*Prince Edward Island*	*2020-2023*
	Maxime Belletête	*Quebec*	*2020-2023*
	Nicolas Tourgeon	*Quebec*	*2020-2023*

9.	Other business (if any)
10.	Next Annual Meeting of Members • May 29, 2021 in Halifax, NS
11.	Closing

Back to agenda

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BRIEFING NOTE: For decision by the Members

Approval of the chair for the 2020 Annual Meeting of Members (AMM)	**2**
Purpose:	To approve the appointment of an individual other than the president of Engineers Canada to chair the May 23, 2020 AMM
Motion(s) to consider:	*THAT Jonathan Epp, Past-President, Engineers Geoscientists Manitoba, be approved to serve as chair for the remainder of the 2020 AMM*
Vote required to pass:	**2/3 – 60% majority**: meaning that the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.
Prepared by:	Evelyn Spence, Legal Counsel and Secretary Christina Mash, Governance Administrator
Presented by:	Jitendra Paliwal, chair of the Presidents Group

Problem/issue definition

- Section 3.7 of the Engineers Canada Bylaw provides that the "meetings of Members shall be chaired by the president of Engineers Canada or by a person chosen by the Members."
- In the reports provided by the Presidents Group at both the October 4, 2019 and February 26, 2020 Board meetings, the group indicated that they would like to have someone other than the president of Engineers Canada chair the 2020 AMM. The group suggested that a designate from the hosting regulator (Engineers Geoscientists Manitoba) be appointed to serve as the 2020 AMM meeting chair.
- In March 2020, Engineers Canada staff were informed by the current chair of the Presidents' Group, Jitendra Paliwal, and past chair of the Presidents' Group, George Eynon, that the Presidents were proposing Jonathan Epp, past president of Engineers Geoscientists Manitoba, as the AMM meeting chair.
- Jonathan Epp has agreed to chair the meeting and has become familiar with the virtual meeting technology being used to run the AMM.

Proposed action/recommendation

- The Presidents Group recommends that the Members approve the appointment of Jonathan Epp to serve as the meeting chair for the 2020 Engineers Canada AMM.

Other options considered

- The 2020 Engineers Canada AMM could be chaired by the current Engineers Canada president, David Lynch. This practice of having the current president chair the AMM has long been in place and is common practice for not-for-profit and for-profit organizations.
- One of the Members could chair the 2020 AMM; however, section 3.4 (3) of the Bylaw states that "[t]he chair of any meeting of Members shall not have the right to vote thereat …", which means that the chairing Member would lose its vote.

Risks

- None

Back to agenda

Financial implications

- None

Benefits

- Jonathan Epp is not a Member of Engineers Canada and therefore does not have any voting rights at the Engineers Canada AMM.
- Members of the Presidents Group have indicated their belief that appointing an individual other than the Engineers Canada president to chair the AMM will mitigate any perceived conflict of interest arising from the fact that the chairperson, as the president of the Board, also reports to the Members.

Consultation

- The members of Presidents Group discussed this issue at their October and February meetings, and Engineers Canada staff understand that the members of the Presidents Group are in agreement regarding the appointment of Jonathan Epp.

Next steps (if motion approved)

- President David Lynch will turn over the floor to Jonathan Epp to chair the continuation of the 2020 AMM (agenda items 3 – 11), following motion approval from the Members.

Appendix

- None

Back to agenda

DRAFT MINUTES OF THE
184th ANNUAL MEETING OF MEMBERS
May 25, 2019
Séminaire de Québec, Québec, QC
Salle des Promotions

The following Members were in attendance:		
Engineers & Geoscientists BC represented by K. Tarnai-Lokhorst	OIQ represented by K. Baig	PEO represented by N. Hill
Engineers PEI represented by J. Landrigan on behalf of G. Connolly	NAPEG represented by K. Costello	APEGA represented by G. Eynon
PEGNL represented by D. Spracklin-Reid	Engineers Geoscientists Manitoba represented by G. Koropatnik on behalf of R. Eden	APEGS represented by T. Fonstad
Engineers Nova Scotia represented by M. Miles	Engineers Yukon represented by C. Dixon	APEGNB represented by S. Dupuis

The following directors were in attendance:		
A. Bergeron, President	D. Lynch, President-Elect	R. Kinghorn, Past-President
K. Baig	C. Bellini	J. Boudreau
T. Brookes	D. Brown	J. Card
L. Champagne	D. Chui	L. Doig
J. Dunn	D. Gelowitz	S. Gwozdz
J. Holm	C. Lamothe	D. Nedohin-Macek
C. Parenteau	R. Shreewastav	R. Trimble

The following observers were in attendance		
M. Aitken	L. Benedicenti	T. Chong
L. Golding	J. Hazenberg	K. King
R. LeBlanc	D. Lake	K. MacLeod
B. McDonald	J. Nagendran	S. Perruzza
K. Reid	M. Rose	C. Sadr
M. Snow	J. Tink	T. Turi
J. Van der Put	L. White	M. L. Wolfe
M. Wrinch	C. Zinck	J. Zuccon

The following staff were in attendance		
W. Guy	G. McDonald	J. Monterrosa
M. Ouellette	S. Price	L. Scott
J. Southwood	L. Tremblay	L. Villeneuve

Back to agenda

1. CALL TO ORDER AND INTRODUCTION OF MEMBERS

The meeting was called to order at 9:32. President Bergeron welcomed delegates, sponsors, and guests, and invited all attendees to introduce themselves.

Signed proxies were received from the Presidents from Engineers PEI and Engineers Geoscientists Manitoba.

2. APPROVAL OF AGENDA

Moved by S. Dupuis, seconded by K. Tarnai-Lokhorst

5667 ***THAT the agenda be approved and the President be authorized to modify the order of discussion.***
Carried unanimously

3. APPROVAL OF MINUTES

Moved by K. Tarnai-Lokhorst, seconded by T. Fonstad

5668 ***THAT the minutes of the annual meeting of members held May 26, 2018 be approved.***
Carried unanimously

4. ANNUAL REPORT FROM THE PRESIDENT TO THE MEMBERS

A. Bergeron noted that her report is included in the agenda package.

K. Tarnai-Lokhorst expressed appreciation for receiving the report in advance and acknowledged that we have worked very well together over the past year on initiatives that serve the profession well.

5. AUDIT COMMITTEE REPORT

D. Chui, on behalf of the Audit Committee, directed members to the report included in the agenda package.

5.1 2018 AUDITED FINANCIAL STATEMENTS

Moved by K. Tarnai-Lokhorst, Seconded by G. Eynon

5669 ***THAT the members approve the 2018 Audited Financial Statements***
Carried unanimously

5.2 APPOINTMENT OF AUDITORS

Moved by K. Costello, Seconded by K. Tarnai-Lokhorst

5670 ***THAT KPMG be appointed as the 2019 auditors as recommended by the Audit Committee***
Carried

It was asked if a new team would be appointed to the file for a fresh perspective. J. Monterrosa, Controller, Engineers Canada, responded that the partner on the file would remain the same, but the manager on the file was new for 2018 and 2019 would be her second year on the file.

6. UPDATES TO BYLAW

Moved by G. Eynon, seconded by S. Dupuis

5671 *THAT By-law be updated as follows:*

Back to agenda

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) The Minister of Industry may deliver a list of nominees as per section 10.1(b) of this By-law.~~

(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 ~~four~~ three (243).

(b) Directors shall be elected on the basis of nominations received as follows:

One (1) from the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador;

One (1) from the Association of Professional Engineers of Nova Scotia;

One (1) from the Association of Professional Engineers of the Province of Prince Edward Island;

One (1) from the Association of Professional Engineers and Geoscientists of New Brunswick;

Four (4) from l'Ordre des ingénieurs du Québec;

Five (5) from the Association of Professional Engineers of Ontario;

One (1) from the Association of Professional Engineers and Geoscientists of the Province of Manitoba;

One (1) from the Association of Professional Engineers and Geoscientists of Saskatchewan;

Four (4) from the Association of Professional Engineers and Geoscientists of Alberta;

Two (2) from the Association of Professional Engineers and Geoscientists of British Columbia;

One (1) from the Association of Professional Engineers of Yukon;

One (1) from the Northwest Territories Association of Professional Engineers and Geoscientists;~~ and~~

~~One (1) from the list of nominees put forward by the Minister of Industry.~~

5.2 Notice

The President, the President-elect, ~~the Executive Committee~~ or any five directors may at any time convene a meeting of the Board.

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;

(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 ~~accomplish Ends.~~ fulfill purposes.

~~6 EXECUTIVE COMMITTEE~~

~~6.1 Composition~~

Back to agenda

~~*The Executive Committee shall be comprised of:*~~
~~*(a) The President, the President-elect and the Past President;*~~
~~*(b) One Director put forward by each Member that has a minimum of 60,000 Registrants;*~~
~~*(c) One Director from PEGNL, APENS, APEPEI or APEGNB;*~~
~~*(d) One Director from APEGM or APEGS;*~~
~~*(e) One Director from APEGBC, APEY or NAPEG; and*~~
~~*(f) One Director from any Member.*~~

~~***7.2 All persons appointed as officers must be a Registrant, in good standing, with one of the Members***~~

9 AUDITOR

9.1 The Members ~~at each Meeting of Members~~ shall appoint a chartered professional accountant (CPA) licensed to practise public accounting in Ontario as auditor of Engineers Canada annually.
9.2 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 Annual Members at the Meeting of Members ~~next following their appointment~~.

~~***10 RIGHTS OF MINISTER OF INDUSTRY***~~
~~*10.1 The Minister of Industry may, in his or her sole discretion:*~~
~~*(a) review the activities of Engineers Canada and request that Engineers Canada undertake reasonable activities that, in the Minister's opinion, are necessary and desirable to fulfil the purposes of Engineers Canada; and*~~
~~*(b) in accordance with section 4.1(2) of this By-law, deliver a list of nominees to the Secretary for consideration at a Meeting of Members, such list to include a suggested term of 3 years.*~~

Recorded vote: (11 in favour)

- K. Tarnai-Lokhorst for Engineers & Geoscientists BC abstains
- S. Dupuis for APEGNB in favour
- K. Costello for NAPEG in favour
- C. Dixon for Engineers Yukon in favour
- G. Koropatnik for Engineers Geoscientists Manitoba in favour
- T. Fonstad for APEGS in favour
- J. Landrigan for Engineers PEI in favour
- G. Eynon for APEGA in favour
- D. Spracklin-Reid for PEGNL in favour
- M. Miles for Engineers Nova Scotia in favour
- K. Baig for OIQ in favour
- N. Hill for PEO in favour

Carried unanimously with one abstention

A friendly amendment to section 5.7 of the bylaw was proposed by T. Fonstad for APEGS. The current section of the bylaw under Meetings of the Board reads:

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:

Back to agenda

The friendly amendment suggests it should read:
5.7 Approvals requiring two-thirds majority
A Board resolution passed by a majority of not less than two-thirds of the members present on that resolution is required to make a decision in respect of the following matters:

The friendly amendment was accepted by the mover and seconder, and a discussion ensued. It was clarified that this refers to Meetings of the Board as opposed to Meetings of the Members, and a motion was put forward to defer.

Moved by J. Landrigan, seconded by G. Eynon
5672 ***THAT the friendly amendment to the wording change in 5.7 be deferred.***
Carried

With the original motion on the table, K. Tarnai-Lokhorst for Engineers & Geoscientists BC proposed a friendly amendment to section 7.2 replacing the word "must" with "preferred" or "recommended" as opposed to striking the section entirely.

Understanding that the Corporate Secretary may not need to be a registrant in good standing as the skills required may be from a legal or governance background, but that it is desired that the CEO is a registrant in good standing, with one of the Members.

Current wording:
7.2 All persons appointed as officers *must be a Registrant*, in good standing, with one of the Members.

Friendly amendment:
All persons appointed as CEO *are recommended to be a Registrant,* in good standing, with one of the Members.

The mover and the seconder did not accept the amendment and the motion was called to question where is was carried with one abstention.

7. ELECTION OF DIRECTORS

Moved by T. Fonstad, seconded by M. Miles
5673 ***THAT the following directors be approved for the terms indicated below:***

Director	Jurisdiction	Term
Kathy Baig	QC	2019 – 2022
David Lynch	AB	2019 - 2021
Kelly Reid	ON	2019 – 2022
Changiz Sadr	ON	2019 – 2022
Jane Tink	AB	2019 – 2022
Michael Wrinch	BC	2019 – 2022
Chris Zinck	NS	2019 – 2022

Carried unanimously with one abstention

K. Baig declared a conflict, and abstained from voting.

Back to agenda

8. OTHER BUSINESS (if any)
No other business.

9. NEXT ANNUAL MEETING OF MEMBERS
The next Annual Meeting of Members will be held on May 23, 2020, in Winnipeg MB.

10. CLOSING
The agenda having been completed, the meeting was adjourned at 10:09am.

Minutes prepared by W. Guy for:

A. Bergeron, MBA, FEC, P.Eng.
President

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2019 Annual Report

President's message

2019 was a pivotal year for Engineers Canada. After a period of significant changes and reorientation over the previous several years, 2019 saw the critical first phase of work towards the execution of the *Engineers Canada 2019-2021 Strategic plan*. In addition to consultations and regular operational work, a huge amount of work was being done behind the scenes to plan and approve sub-strategies for key portfolios, complete the final steps of the transformative Governance, Strategic Planning and Consultation Project, and more generally lay the groundwork for big things in the years to come.

The development and Board approval of sub-strategies on diversity, Indigenous access to engineering, and government relations in 2019 mean that Engineers Canada will now be able to move forward in a clear, strategic way in these key areas. Indeed, much has already been accomplished. Notably, the approval of our sub-strategy on women in engineering under Strategic priority 3 has done a great deal in helping align the resources of regulators, educational institutions, and industry nationwide. As a corollary, it has helped clarify and solidify Engineers Canada's role as a backbone organization. Alongside our sub-strategy on Indigenous access to engineering, also approved last year, this work on women in engineering will go a long way towards a state we all desire: a profession that becomes increasingly reflective of the makeup of Canadian society.

Last year also had its fair share of immediately visible accomplishments. Online Competency-Based Assessment was rolled out in Saskatchewan and Prince Edward Island, with plans established for more provinces and territories to follow. We also saw the first-phase delivery of our new data management system for accreditation, Tandem, under the Accreditation Improvement Program. For the first time, higher education institutions with accredited engineering programs successfully used Tandem to complete our annual Enrolment and Degrees Awarded Survey. According to their feedback, the system was well planned out and easy-to-use, providing a strong basis for improvements and deliverables still to come. In other accreditation news, in the fall, the CEAB's Accountability in Accreditation Committee started work on our measurement framework to measure the ongoing effectiveness, trustworthiness, transparency, and efficiency of the accreditation system. By developing this much-needed program evaluation tool, we will ensure that the Accreditation Board's work continues to become more effective, trustworthy, transparent, and efficient.

When I look at where Engineers Canada is today compared to where it was at in the beginning of 2019, I see an organization that is increasingly strategically minded, and whose resources are fundamentally aligned with the concerns and needs of the engineering profession in Canada. The provincial and territorial engineering regulators are better able to draw on the collective thinking of one another and of engineering stakeholders across the country, and the voice that Engineers Canada provides at the national level is well-positioned to advocate on behalf of the profession's interests. All in all, it is with considerable enthusiasm that I look forward to what comes next—a pivotal year implies, all at once, a plan, a foundation, and a launching point!

Sincerely,
David T. Lynch, PhD, FCAE, FEC, FEIC, FCIC, 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

Operational imperative 10: Protecting official marks

Governance

Financial Statements

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. Initiated in 2017, the program saw several key advances in 2019.

For the first time ever, we completed the annual Enrolment and Degrees Awarded Survey using our new data management system, Tandem. As a part of this roll-out, users received training via a series of webinars, training materials, and on-demand support. Following completion of the survey, we sent out a feedback questionnaire, where higher education institutions generally indicated that they were able to complete the survey with minimal difficulty. They also suggested some key areas for improvement in future surveys. Working with this data and Engineering Deans Canada (EDC), we were able to identify and prioritize 17 suggested improvements for the 2020 Enrolment and Degrees Awarded Survey.

The Accreditation Improvement Project team

Another key element of the AIP is continual improvement. In 2019, we operationalized a continual improvement process that identifies, analyzes, and prioritizes suggested improvements to accreditation processes, and provides a process to measure the impact of improvements. This continual improvement process ensures that all accreditation-specific feedback sent to Engineers Canada is recorded and prioritized for follow-up.

In 2020, our focus will be on continued preparations of Tandem for accreditation data collection.

Strategic priority 2: Accountability in accreditation

Canadian Engineering Accreditation Board

Transparency and accountability ensure that the hard work of our staff and volunteers is received by our clients and stakeholders as it is intended. When consulting for the *2019-2021 Strategic plan* Engineers Canada learned of a perception among accreditation stakeholders that the work of the Canadian Engineering Accreditation Board (CEAB) was a complicated, unknowable "black box" process, characterized by surprises and autonomous decisions. This issue was considered significant enough by the Board to warrant positioning as a strategic priority —a strategic change considered of the utmost importance, requiring appropriate resource allocation.

2019 saw substantial progress made towards addressing this issue. Early in the year, the CEAB struck the Accountability in Accreditation committee, consisting of six members: five CEAB members, and one regulator representative. Over the summer, the committee sent out a request for proposals for a consultant to assist in developing program evaluation for the CEAB, and subsequently we hired Higher Education and Beyond, an experienced team specializing in program evaluation.

With this new partnership in place, collaboration began in the fall on a consultation survey on accountability in accreditation, which was subsequently sent to the Engineers Canada Board, CEO Group, CEAB, higher education institutions (Deans and recent designated officials of undergraduate Canadian engineering education programs), and current and past members of CEAB accreditation visiting teams. This survey asked a series of questions, including: what are the qualities of a well-functioning accreditation system, what are the intended benefits and purposes of accreditation, and whose perspectives should be used by the Accountability in Accreditation Committee to assess the CEAB accreditation system?

Responses to the survey, along with several expert interviews, will now feed into an evaluation tool that is concise, focused, and meaningful, providing an assessment framework that measures the effectiveness, trustworthiness, transparency, and efficiency of the accreditation system. Work on the evaluation framework continues in 2020, with the aim of taking the first measurement in the 2020/2021 accreditation cycle.

Alongside work done by the Accountability in Accreditation committee, Engineers Canada also completed a consultation on an Engineers Canada paper entitled *Curriculum content measurement: Beyond the AU*, which closed on November 15, 2019. This has ultimately led to a CEAB recommendation that the minimum number of accreditation units, the units used to quantify curriculum content of an engineering program, be reduced from 1,950 to 1,850. This proposal will be voted on at the 2020 May Board meeting.

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

Ingenium and Engineers Canada hosted a Wikipedia Edit-a-thon on International Women in Engineering Day. The event focused on creating and editing profiles of women engineers in Canada.

At the end of 2018, the national proportion of newly licensed engineers who were women was 18.1 per cent—well below the 30 per cent that we aim to reach by 2030. With this in mind, the Engineers Canada Board proposed to expand the scope of its efforts to promote engineering to women in the *2019-2021 Strategic plan*, to include intervention at several key stages of career development —recruitment, retention, and professional development.

The resulting mandate from the regulators led to several key steps in 2019 aimed at accelerating change in this area. Early in the year, we completed an environmental scan which provided sections on the history of the 30 by 30 initiative; a summary of Champions' activities pertaining to the recruitment, retention, and professional development of women; and the role of Engineers Canada as a national backbone organization. We also published baseline data based on the current number of women on the engineering pathway, projecting figures out to 2030. Building on this groundwork, we established four working groups to look at issues specific to key areas in the engineering pathway: K-12 education, post-secondary, early career, and industry. Through consultation with regulators, 30 by 30 Champions, and the Equitable Participation in Engineering Committee we developed action plans for the three key stages.

As was the case in many areas of our organization this year, much of this work took place behind the scenes and will cascade down to concrete actions in 2020 and beyond. Notably, however, there were still plenty of visible accomplishments throughout the year, including a collaboration with Ingenium to hold a Wikipedia Edit-a-thon on International Women in Engineering day, which focused on creating and editing profiles, and shining a light on the achievements of women engineers in Canada. The number of

post-secondary Champions increased from 19 to 26, and Engineers Canada representatives presented at conferences and meetings on 30 by 30 for ABET (US), Ontario Women in Engineering Summit (ONWiE), Atlantic Connections Conference, Society of Women Engineers (US), DiscoverE (US), and IEEE Toronto.

Strategic priority 4: Competency-Based Assessment project

The fourth strategic priority laid out in the *2019-2021 Strategic plan* is the creation of a national, online competency-based assessment system for candidates seeking licensure as engineers. Rather than having applicants describe their experience, as many assessment systems in the country have required in the past, competency-based assessment instead asks candidates to justify their competence by explaining how their past actions demonstrate their achievement of the required competencies. The implementation of this system has the potential to benefit numerous areas: transparency, consistency, staff time and resource costs, and more.

Since 2018, Engineers Canada has been funding and providing in-kind support for such a pan-Canadian system able to assess engineering experience. The system, which is adapted from one already in use by Engineers and Geoscientists British Columbia, promises a more transparent, consistent, and efficient way of measuring a candidate's readiness for licensure as an engineer. We saw several advances on this priority this year, with the operationalization of systems in PEI and Saskatchewan, and commitments from New Brunswick, Manitoba, and Newfoundland & Labrador to begin using the system in 2020. Additionally, several other regulators across Canada are using the competencies from the national system for their own competency assessments.

Operational imperative 1: Accreditation

According to the *2019-2021 Strategic plan*, accreditation of undergraduate engineering programs is currently the most efficient path for ensuring that Canadian engineering graduates meet the academic requirements necessary for licensure as engineers. Given this, the accreditation process must remain useful and relevant.

In 2019, our accreditation program saw numerous benefits coming out of the Accreditation Improvement Program. Based on a successful pilot rolled out in 2018, we made improvements to accreditation visiting team training. We also rolled out improvements to the way that we communicate with higher education institutions (HEIs).

The Canadian Engineering Accreditation Board

As a part of our ongoing accreditation work, the Accreditation Board (CEAB) completed 13 accreditation visits and made decisions for 70 programs at 16 HEIs. Additionally, the CEAB implemented new criteria, processes, and tools:

- Added Criteria 3.4.4.1 and 3.4.4.4 to the *Policy and procedures manual*, which moved requirements related to specific accreditation units from an interpretive statement into the criteria
- Added a new clause to Appendix 1: Regulations for granting transfer credits from CEGEPs
- Added a Complaints Policy
- Published the 2020/2021 accreditation cycle Questionnaire, Exhibit 1, and rubrics for the evaluation of the Graduate Attributes and Continual Improvement criteria which focusses *less* on data and *more* on process.

Finally, the Engineers Canada Board revised Board policy 6.9, which provides the terms of reference for the CEAB.

Operational imperative 2: Regulator relationships

One of the core reasons Engineers Canada was created was to ensure the efficient sharing of ideas and best practices between and among the regulators. This impetus characterizes all of our programs from diversity and outreach, to advocacy, to affinity programs, to engineering program accreditation. We also offer direct supports to facilitate communication among regulators and ensure the greatest degree of alignment possible—even given the varying regional mandates and resources.

One of the major ways we accomplish Operational imperative 2 is through the facilitation of meetings for the officials representing different areas of support provided by the regulators. Among the most active of these were the National Admissions Officials Group, the National Discipline and Enforcement Officials Group, and the National Practice Officials Group, each of whom met several times throughout the year.

Additionally, in conjunction with Engineers Canada's in-person Board meetings in March, May, October, and December, we continued support of meetings for the Presidents and CEO groups. These meetings, which happen in parallel with key Board meetings, provide valuable exchanges of information, and, ultimately, stronger alignment when it comes to the work of the Board in service of the profession. At the May 2019 meetings, we introduced a new regulator presentation roundtable, which is dedicated to informing all participants about the work of each regulator and helping them see shared challenges and solutions that have worked for others.

To improve the onboarding process for newcomers to our Board and committees, at the March Board meetings, we provided an orientation session through the "First Timers Lunch." We also developed an orientation webinar program explaining the work of Engineers Canada for new regulator presidents and council members.

Operational imperative 3: Services and tools

The Canadian Engineering Qualifications Board

By maintaining and updating examination syllabi, the Canadian Engineering Qualifications Board (CEQB) provides areas of knowledge in engineering disciplines that regulators use to confirm non-CEAB applicants' academic content and knowledge. Through regulator and public guidelines, CEQB supports regulators by providing information on admission, practice and environmental issues to foster consistency in processes, mobility of practionners across jurisdictions and excellence in the practice of engineering.

In keeping with previous years, 2019 saw the review, revision, and creation of a variety of syllabi, Engineers Canada papers, and guidelines:

- New Regulator guideline on the use of syllabi
- New Engineers Canada paper on environmental engineering
- Review of the Regulator guideline for assessment of engineering work experience
- Review of the Regulator guideline for the engineer-in-training program
- Review of the Basic studies syllabus
- Revised Software engineering syllabus
- Review of the Biomedical/biochemical engineering syllabus
- Revised Structural engineering syllabus
- Review of the Building engineering syllabus

Among the list above, one notable accomplishment was the creation of the Engineers Canada paper on environmental engineering. The culmination of several years' work, this paper describes the scope of environmental engineering practice and distinguishes between three categories of work: environmental engineering, work that can be performed by engineers and other persons, and work that is performed by non-engineers. It also details the elements that define environmental engineering—safeguarding of the environment and the use of engineering principles.

In support of excellence in engineering practice, Engineers Canada also ran two more installments of its *Sustainability in Practice*

course in partnership with Polytechnique Montréal in 2019. The spring edition saw 1,735 participants take the course, while the fall edition had 1,300 more people register to learn about the practical application of Engineers Canada's 10 principles of sustainable development and environmental stewardship for engineers. Participants came from every province and territory in Canada, and from around the world, and were representative of a range of economic sectors including consulting engineering, government, manufacturing, education, construction, resources, oil and gas, utilities, mining, and NGOs.

Engineers Canada also maintains a national database of practitioners to assist in mobility, known as the National Membership Database. In 2019 we explored alternatives to replace the existing tool and reached agreement with regulators to maintain the same type of tool, with the same functionality, using a simpler format and clearer presentation. Project planning for this improvement begins in 2020 and the project will launch in 2021.

Operational imperative 4: National programs

Under Operational imperative 4, Engineers Canada uses the collective power of the regulators to deliver programs that benefit the engineering regulators and their members. As a national body, Engineers Canada is in a unique position to deliver these programs, because they benefit from the economies of scale.

In 2019, Engineers Canada continued to deliver Operational imperative 4 in several ways. First, we re-signed agreements with participating regulators in the Engineers Canada sponsored home and auto insurance program. Additionally, Extended Water Damage coverage was added as an endorsement to the program. This endorsement covers sudden and accidental water damage from ground and surface water entering into a home below ground. Clients in the program will also now benefit from an increase in the number of TD Insurance Auto Centres, now totalling 19 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.

In collaboration with Manulife, Engineers Canada also 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.

Finally, Engineers Canada selected Avis Budget Group as our supplier for rental cars. Individuals have access to both Avis and Budget, with the program offering corporate rates, including unlimited kilometres and a best-rate guarantee.

Additionally, as required by the *2019-2021 Strategic plan*, Engineers Canada began the process of divesting itself of the PIEVC and Infrastructure Resilience Professional programs. An RFP process was completed with prospective bidders for each program, and these garnered sufficient interest to secure several viable bids. Announcements on the successful bids will be made in 2020.

Operational imperative 5: Advocating to the federal government

From left to right: Engineers Canada Vice President Stephanie Price, Senator Rosa Galvez, Engineers Canada Vice President Jeanette Southwood, and Engineers Canada Manager, Public Affairs, Joey Taylor, meet in Senator Galvez' office in March 2019 to discuss the crucial role engineers play on a global scale.

Between a federal election in October and the completion of a government relations sub-strategy mandated under the *2019-2021 Strategic plan*, 2019 was a year of major planning and transition for Engineers Canada's government relations program. Even with the substantial amount of work done to address these unique shifts, regular program work advocating to, and maintaining positive relations with, the federal government proceeded apace.

With the election of a Liberal minority government in October, Engineers Canada focused its efforts on establishing and maintaining relationships with key players, including the five engineers across all parties, who were elected:

- Sukh Dhaliwal, Surrey-Newton, British Columbia, Liberal Party of Canada
- Omar Alghabra, Mississauga Centre, Ontario, Liberal Party of Canada
- Marilyn Gladu, Sarnia-Lambton, Ontario, Conservative Party of Canada
- Steven Blaney, Bellechasse-Les Etchemins-Lévis, Quebec, Conservative Party of Canada
- Marc Garneau, Notre-Dame-de-Grâce-Westmount, Quebec, Liberal Party of Canada

Both prior to and following the election, the public affairs and government relations team engaged in in-person meetings with Members of Parliament, Senators, and senior federal officials to discuss issues pertinent to the engineering profession in Canada.

In addition to this ongoing advocacy work, the public affairs and government relations team drafted and received approval for three

national position statements: “Regulation of coastal, ocean, and related subsurface engineering”, “Artificial intelligence engineering technology in autonomous and connected vehicles”, and “Indigenous peoples’ access to post-secondary engineering education”.

Finally, the public affairs and government relations team made nine submissions to the federal government on issues or concerns for the engineering regulators and the engineering profession. Notably, this work led to some of our recommendations being included in the House of Commons Standing Committee on Indigenous and Northern Affairs committee’s report, A path to growth: Investing in the North.

Operational imperative 6: Monitoring, researching, and advising

Under the *2019-2021 Strategic plan*, Engineers Canada has a role to play in proactively identifying, investigating, and explaining trends and changes that are likely to have an impact on the engineering regulators and on 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. The intention is to inform and advise the regulators on changes and advances that impact the Canadian regulatory environment and the engineering profession.

Given that 2019 was a year of planning, as mandated under the current strategic plan, our focus was on completing background work and regulator consultation on a new research sub-strategy. During the November 2019 consultation with regulators, key topics to help regulators make informed decisions were identified. The plan is to select two to three subjects each year and strike subject matter expert working groups to guide the development of detailed papers. The sub-strategy consultation also included a review of Engineers Canada’s current research activities and proposed changes to improve the relevancy for regulators. There was agreement to transition from a general Emerging Areas report to delivering national papers that target specific emerging disciplines in greater detail.

This sub-strategy will be presented to the Board in May 2020 and implementation will begin immediately following.

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, as this impacts all regulators. 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 In 2019, Engineers Canada began planning its new sub-strategy for this operational imperative and completed background work to support a consultation with regulators early in 2020.

In addition to maintaining existing international agreements as in years past, Engineers Canada attended the International Engineering Alliance meetings in Hong Kong.

Engineers Canada continued updating and research for the International Institutions and Degrees Database, whose mandate is to help regulators make informed decisions about international academic qualifications. A total of 1234 institutions were researched and updated as needed. Work also began on a new international mobility sub-strategy, which will go to the Board in September 2020.

Additionally, in consultation with admissions officials, we launched our improved web resource for international engineering graduates, EngineerHere.ca, on October 24, 2019. Besides improvements to layout and appearance,

EngineerHere.ca features simplified, updated information created with the needs of international engineering graduates at front of mind. By the end of the year, the site had 72,787 pageviews, and a total of 22,228 users. The top two countries by proportion of visitors were India (46%) and Canada (11%), and another key highlight was the sheer diversity of countries that the site's visits came from: Mexico, Pakistan, Nigeria, Bangladesh, Philippines, United States, Colombia, Brazil, and United Arab Emirates, to name a few.

Graphic from EngineerHere.ca

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. By participating in the program, which involves activities like exploring how vehicles work or an introduction to the concept of simple machines, girls gain a better understanding of how the world around them works. In 2019, we sent 4,410 crests to Girl Guide Units across Canada, and the program continued to grow without any additional promotion from Engineers Canada —word of mouth through the Girl Guides network is driving program growth!

The Engineers Canada Girl Guides crest

Future City Program

Future City is an annual competition for students in Grades 6 through 8, aimed at getting students to imagine, research, design and build cities of the future that showcase their solutions to a sustainability issue. In 2019, teachers in Ontario, New Brunswick, British Columbia, and Prince Edward Island (PEI) participated in the Future City challenge. A total of 1,376 students from 63 schools participated in the program, and over 100 teachers across the country have integrated the Future City program into their class curricula. Notably, the Future City program boasts a 50-60 per cent proportion of girls, a key differentiator of the program from other comparable programs.

Students from the Durham Catholic District School Board in Ontario display their model at the Future City Competition at Ontario Tech University in May 2019.

National Engineering Month

Engineers Canada provides a range of support for National Engineering Month, a country-wide celebration of the engineering profession that saw over 600 events from coast-to-coast-to-coast in 2019. As in previous years, we went with the theme “There’s a Place for You” and supported the regulators by sourcing and distributing swag for their local events. Engineers Canada’s social media campaign during the month was an enormous success, reaching over 500,000 social media users, and our outreach website—ExploreEngineering.ca—was visited more than 17,000 times. Finally, we were pleased to receive a signed greeting from the Right Honourable Justin Trudeau and a video message from Kirsty Duncan, Minister of Science and Sport.

National Engineering Month 2019 included a social media campaign to drive traffic to Engineers Canada’s ExploreEngineering.ca website, where visitors could use the interactive “Chart Your Course” feature to discover the possibilities of engineering.

Engineers Canada Awards

Each year, Engineers Canada honours outstanding Canadian engineers, teams of engineers, engineering projects, engineering achievements, and engineering students through the annual Engineers Canada Awards program. Recipients in 2019 were:

- **Catherine Karakatsanis, M.E.Sc., P.Eng., FCAE, FEC:** Gold Medal Award
- **Dennis K. Paddock, P.Eng., FEC, FCSSE, FCAE, FGC (Hon.):** Meritorious Service Award for Professional Service
- **Dr. Bradley Jason Buckham, PhD, P.Eng.:** Medal for Distinction in Engineering Education
- **Jennifer Drake, PhD, P.Eng.:** Young Engineer Achievement Award
- **Mae L. Seto, PhD, P.Eng., FEC:** Award for the Support of Women in the Engineering Profession
- **Helen Wojcinski, MBA, P.Eng., FEC, FCAE, CMC:** Meritorious Service Award for Community Service
- **Zenon Kripki:** Gold Medal Student Award
- **Inuvik Tuktoyaktuk Highway Project:** National Award for an Engineering Project or Achievement

Engineers Canada Scholarships

In partnership with Manulife and TD Insurance, Engineers Canada awards six cash prizes totalling $60,000 each year to professional engineers returning to university to further their studies. The recipients of the 2018 scholarships were, in the front row from left to right:

Gregory Bak, P.Eng., is completing his master’s degree with the aim of developing his business acumen and ability to think strategically. He seeks to enhance his leadership skills so that he can better develop solutions to business problems and provide insights through quickly and accurately analyzing large amounts of data.

Kiki Chan, M.A.Sc., P.Eng., is researching the feasibility of using stock (or bouillon) cubes as a way to deliver micronutrients to people everywhere. Beyond improving our understanding of the way processing affects the stability of micronutrients, she hopes that her work will contribute to the idea that engineering and scientific principles can be used as a force for social change.

Jacky Chow, PhD, MBA, P.Eng., believes being a good engineer means being a lifelong learner and exploring other disciplines to improve one’s own designs and solutions. His research focuses on clinical medicine, including patient-centric care, the diagnosis of diseases, disease prevention, and pharmacological and surgical interventions. In time, he hopes this work will advance radiation technologies for the diagnosis, treatment, and management of cancer.

John Desnoyers-Stewart, MFA, P.Eng., is combining his backgrounds in art and engineering to develop mixed-reality experiences that allow for personal expression, social connection, and collaborative creativity. In the long-term, he hopes to continue critically engaging with emerging technology, simultaneously seeking to push the boundaries of what is possible while remaining vigilant in exposing its dangers and ensuring it benefits society.

Amalia Gil, P.Eng., wants to improve the safety of patients, physicians, and indeed all users of the healthcare delivery systems that her work will ultimately support. She says that her current studies in health science and clinical engineering have taught her much about innovating when it comes to addressing clinical challenges, improving patient safety, and

optimizing the application, implementation, and management of healthcare technology.

Kevin Wallin, P.Eng., is completing his current master's program with an eye towards his next phase: doctoral research on the mechanical behavior of clay shale. He hopes this work will advance current constitutive modelling capabilities, allowing engineers to one day model the long-term behavior of clay shale as it pertains to the design and construction of deep geological nuclear waste repositories.

Fellows of Engineers Canada

Association of Professional Engineers and Geoscientists of Alberta (APEGA)

- Ahmed Ali , FEC, P.Eng.
- John Byron , FEC, P.Eng.
- Mark Ewanishin , FEC, P.Eng.
- Paul Kavanagh, FEC, P.Geo.
- Ronald Mah, FEC, P.Eng.
- Justin McCrea, FEC, P.Eng.
- Samuel Proskin, FEC, P.Eng., PhD
- Cameron Sterling, FEC, P.Eng.
- Roy Sudipto, FEC, P.Eng.
- Charles Welsh, FEC, P.Geo.

Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS)

- Connie M. Barsness, FEC, P.Eng
- Tonia D. Batten, FEC, P.Eng.
- Glenn C. Hussey, FEC, P.Eng
- Akindele G. Odeshi, FEC, P.Eng.
- Cheryl A. Robertson, FEC, P.Eng.
- Deborah Rolfes, FEC (Hon.)
- Rajeshkumar R. Shah, FEC, P.Eng

Engineers and Geoscientists British Columbia

- Hugh Robert Alley, FEC, P.Eng.
- Slobodan Andic, FEC, P.Eng.
- Caroline Janet Elizabeth Andrewes, FEC, P.Eng.
- Gordon Douglas Apperley, FEC, P.Eng.

Engineers and Geoscientists British Columbia (con't)

- Kun-Yu Ezra Kwok, FEC, P.Eng., PhD
- Robert Christopher Kwong, FEC, P.Eng.
- Brian David LaCas, FEC, P.Eng.
- James Wai Wing Lau, FEC, P.Eng.
- Kyoungsik Lee, FEC, P.Eng.
- John Hsiang Yuan Lee, FEC, P.Eng.
- Simon Xiang Guang Li, FEC, P.Eng.
- Vincent Wai-Sing Li, FEC, P.Eng.
- Thomas William Lively, FEC, P.Eng.
- Kwang Victor Lo, FEC, P.Eng., PhD
- Susan Kim MacDougall, FEC, P.Eng.
- Shailendra Mahanti, FEC, P.Eng. (Retired)
- Adam Ludwik Majorkiewicz, FEC, P.Eng.
- David Peter Marriott, FEC, P.Eng.
- Colin Bruce Meldrum, FEC, P.Eng.
- Robert Dale Merritt, FEC, P.Eng.
- Sidney Mindess, FEC, P.Eng., PhD
- Ronald Edward Mitchell, FEC, P.Eng.
- Roy D. Mitton, FEC, P.Eng. (Non-Practising)
- Thomas Alexander Morrison, FEC, P.Eng.
- James Neill, FEC, P.Eng.

Engineers and Geoscientists British Columbia (con't)

- Gary Edwin Vlieg, FEC, P.Eng.
- Walter Henry Wardrop, FEC, P.Eng.
- Long Xiu Wen, FEC, P.Eng.
- Dennis Harvey West, FEC, P.Eng.
- Kenneth Wright, FEC, P.Eng.
- David Ngaw Eng Hoe Wu, FEC, P.Eng.
- Ming Wo Wu, FEC, P.Eng.
- Henry Wulkan, FEC, P.Eng.
- Gregory James Wylie, FEC, P.Eng., Struct.Eng.
- Qing Hua Xu, FEC, P.Eng.
- Gholam-Hossein Yavari, FEC, P.Eng.
- Sani Ramzi Zein, FEC, P.Eng.

Engineers Geoscientists Manitoba

- Chantelle Cabral, FEC (Hon.)
- Kyle Cumming, FEC, P.Eng.
- Lorraine Dupas, FEC (Hon.)
- Ruth Eden, FEC, P.Eng.
- Angela Moore, FEC (Hon.)
- Robert Okabe, FEC (Hon.)
- Marlene Polson, FEC (Hon.)
- Athula Rajapakse, FEC, P.Eng.
- Claudia Shymko, FEC (Hon.)
- Jennifer St. Laurent, FEC, P.Eng.
- Stirling Walkes, FEC, P.Eng.

Engineers Nova Scotia

- J.R. (Bob) Chouinard, FEC, P.Eng.
- Kent D. Lane, FEC, P.Eng.

» James Wesley Atwater, FEC, P.Eng.

» Belwinder Singh Barn, FEC, P.Eng.

» Douglas Wilfred Barry, FEC, P.Eng.

» Leon Alexander Bell, FEC, P.Eng.

» Michael Scott Belter, FEC, P.Eng.

» Xiaotao Bi, FEC, P.Eng., PhD

» Robin Brice Brown, FEC, P.Eng.

» Lili Bu, FEC, P.Eng.

» Calum James Buchan, FEC, P.Eng.

» Robert Campbell, FEC, P.Eng.

» Shiloh Marie Carlson, FEC, P.Eng.

» Fei Chen, FEC, P.Eng.

» Phoebe Man-Kuan Cheung, FEC, P.Eng.

» Jennifer Cho, FEC (Hon.)

» Tony Ming Yue Chong, FEC, P.Eng.

» Gabriel Cojocaru, FEC, P.Eng.

» Robert James Cowan, FEC, P.Eng. (Non-Practising)

» Marcus Dell, FEC, P.Eng.

» Bruce Der, FEC, P.Eng.

» Emmanuel Alberto Asuncion Domingo, FEC, P.Eng.

» David Bruce Dreisinger, FEC, P.Eng., PhD

» Clifford Park Hon Eng, FEC, P.Eng.

» Ann Jean English, FEC, P.Eng.

» Martin Edward Fandrich, FEC, P.Eng., PhD

» Livio Richard Gambone, FEC, P.Eng.

» Paolo Giorgio Luigi Gazzarrini, FEC, P.Eng.

» Dana Grecov, FEC, P.Eng., PhD

» Brian Joseph Griffin, FEC, P.Eng.

» Robert William Neville, FEC, P.Eng., Struct.Eng.

» Bruce C. Nicholson, FEC, P.Eng. (Non-Practising)

» John Owen Haystead Nunn, FEC, P.Eng.

» Dirk Nyland, FEC, P.Eng.

» Gerald Charles O'Hara, FEC, P.Eng.

» Christopher Hurst Page, FEC, P.Eng.

» Scott Peter William Pellow, FEC, P.Eng.

» Jude Rohan Pillainayagam, FEC, P.Eng.

» George Eugene Plant, FEC, P.Eng.

» Stefan Popovici, FEC, P.Eng., PhD

» Mark Ian Porter, FEC, P.Eng., Struct.Eng.

» Alen Postolka, FEC, P.Eng.

» Robert Eric Quiring, FEC, P.Eng., Struct.Eng.

» Clarence Mark Rebagliati, FEC, P.Eng.

» Irfan Taherali Rehmanji, FEC, P.Eng.

» Conor Charles Obrien Reynolds, FEC, P.Eng.

» Kevin Allen Riederer, FEC, P.Eng.

» Thomas Charles Ries, FEC, P.Eng.

» Alexander Harold Rivers-Bowerman, FEC, P.Eng.

» Ricardo Jesus Rojas, FEC, P.Eng.

» Bernard Henry Roy, FEC, P.Eng.

» Hamid Samani, FEC, P.Eng.

» Farrokh Sassani, FEC, P.Eng., PhD

» Johannes W. Scholte, FEC, P.Eng. (Retired)

» Kevin Hugh Schroder, FEC, P.Eng.

» Ronald Hermann Schroeder, FEC, P.Eng.

» Katherine Risley, FEC (Hon.)

» Colleen E. Rollings, FEC, P.Eng.

» Christopher R.P. Shortall, FEC, P.Eng.

Engineers PEI

» Joshua Collins, FEC, P.Eng.

» Amy Hsiao, FEC, P.Eng.

» Jim Landrigan, FEC, P.Eng.

Ordre des ingénieurs du Québec (OIQ)

» Louise Audy, ing., FIC

» Rosa Galvez, FIC, ing

» Mohamed Ghazi Aissaoui, FIC, ing

» Gilbert Nkurunziza, FIC, ing

Professional Engineers Ontario (PEO)

» Vivender Adunuri, FEC, P.Eng.

» Magdy Attia, FEC, P.Eng.

» Roger Barker, FEC, P.Eng.

» David W. Brown, FEC, P.Eng.

» Karen Chan, FEC, P.Eng.

» Amir Fam, FEC, P.Eng.

» Jerry Fridrich, FEC, P.Eng.

» Ed Fung, FEC, P.Eng.

» Nilima Gandhi, FEC, P.Eng.

» Ranjit Gill, FEC, P.Eng.

» John Hazel, FEC, P.Eng.

» Jeganaesan Jeganathan, FEC, P.Eng.

» Artemy Kirnichansky, FEC, P.Eng.

» Lin (Victor) Lan, FEC, P.Eng.

» Annabelle Lee, FEC, P.Eng.

» John Lill, FEC, P.Eng.

» Murray MacDonald, FEC, P.Eng.

» Parisa Mahdian, FEC, P.Eng.

» Magdi Mohareb, FEC, P.Eng.

» Sohail Naseer, FEC, P.Eng.

» Alexander Ng, FEC, P.Eng.

» William Sanabria Nunez, FEC, P.Eng.

- Steven Eric Arthur Gustavson, FEC, P.Eng.
- Thomas Arne Haksi, FEC, P.Eng. (Non-Practising)
- Bruce Alan Hamersley, FEC, P.Eng.
- John Sorensen Hansen, FEC, P.Eng.
- Richard Greg Harms, FEC, P.Eng.
- Desmond Niall Digby Hartford, FEC, P.Eng., PhD
- Paul Jeremy Emile Hatton, FEC, P.Eng.
- Andrew William Hind, FEC, P.Eng.
- Wing Keung Patrick Ho, FEC, P.Eng.
- Jonathan Francis Holzman, FEC, P.Eng.
- Paul Francis Hoo, FEC, P.Eng.
- Thomas John Hunt, FEC, Eng.L.
- Jian Jun Jiao, FEC, P.Eng.
- Lynn Merideth Johnson, FEC, P.Eng.
- Vladimir Kahle, FEC, P.Eng.
- Foad Kasiri, FEC, P.Eng.
- Randa Khalil, FEC, P.Eng.
- Akbar Ali Khan, FEC, P.Eng., PhD
- Matthew John Kokan, FEC, P.Eng.
- Charles Josef Kotzo, FEC, P.Eng.
- Anil Kumar, FEC, P.Eng.
- Daniel Gene Kunimoto, FEC, P.Eng.
- Gary Edward Schubak, FEC, P.Eng.
- Walter Thomas Segsworth, FEC, P.Eng.
- Ramin Seifi, FEC, P.Eng.
- Robert G. Sexsmith, FEC, P.Eng. (Non-Practising)
- Douglas Stanley Sinclair, FEC, P.Eng.
- Markus Rolf Sirges, FEC, P.Eng.
- Peter Frederick Stacey, FEC, P.Eng.
- Edwin William Steele, FEC, P.Eng.
- Siegfried Fritz Stiemer, FEC, P.Eng., PhD
- Gregory Charles Stuart, FEC, P.Eng., PhD
- Alady Padmanabhan Sukumar, FEC , P.Eng., PhD
- Jude Talbot, FEC, P.Eng.
- Desikan Thomas, FEC, P.Eng.
- Willoughby Agar Trythall, FEC, P.Eng.
- Raymond Joseph Turenne, FEC, P.Eng.
- Ruben Ugarte, FEC, P.Eng.
- Victor Charles Uloth, FEC, P.Eng.
- Venkatarama Krishnan Vinnakota, FEC, P.Eng.
- Nicholas Pfeiffer, FEC, P.Eng.
- Zlatko Joseph Podrebarac, FEC, P.Eng.
- Steven Poste, FEC, P.Eng.
- Mario Ramirez-Roldan, FEC, P.Eng.
- Phil Riegle, FEC, P.Eng.
- Uditha Senaratne, FEC, P.Eng.
- Rohan Service, FEC, P.Eng.
- Imtiaz Shah, FEC, P.Eng.
- Steven Stang, FEC, P.Eng.
- Philip Sullivan, FEC, P.Eng.
- Elmer Ting, FEC, P.Eng.
- Cesar Trillo, FEC, P.Eng.
- Jianguo Wang, FEC, P.Eng.

Operational imperative 9: Diversity

Canada's engineering regulators consider the promotion of diversity and inclusion within the profession to be the highest non-regulatory priority. As such, considerable efforts were put into this area in 2019.

In addition to developing a sub-strategy on women in engineering delivered under Strategic priority 3, this year we continued work on increasing Indigenous peoples' access to engineering. Among our activities, we consulted with regulators and with the Indigenous Peoples' Participation in Engineering sub-committee to develop a sub-strategy on Indigenous Access to Engineering. This sub-strategy was ultimately approved by the Board, a significant step towards future action in this area.

In addition to sub-strategy development, we continued to support Indigenous access to engineering in direct ways. This included sponsoring student travel and attendance at the annual Canadian Indigenous Science and Engineering Society (.caISES) gathering, which was held at McGill University this year. We also supported the Canadian Indigenous Advisory Council (CIAC) to the American Indian Science and Engineering Society (AISES), by promoting events and communications for activities for Indigenous engineers and engineering students, and continuing our role as a member of CIAC in contributing to the development of communications and membership engagement strategies. Engineers Canada also established a monthly working group to support educators and administrators working on Indigenous student services and Indigenization in engineering programs across Canada under the name Indigenous Student Services in Engineering working group. The working group grew to include representation from eleven post-secondary institutions.

To commemorate the École Polytechnique tragedy, Engineers Canada partnered with Engineering Deans Canada to launch 30yearslater.ca, a website featuring the career accomplishments of women who graduated within three years of the massacre. In addition, Engineers Canada hosted a panel discussion on the impact of the massacre on the engineering profession, featuring Sandra Gwozdz (Board member and Board 30 by 30 Champion), David Lynch (President), Julie Lassonde (President of the Canadian Engineering Memorial Foundation), and Ved Proag (Professional Engineers Ontario- Ottawa Chapter).

We were also active in celebrating diversity at the local level, participating in diversity related events throughout the year. We celebrated Indigenous Peoples Day by volunteering at the Summer Solstice Indigenous Festival, and we also celebrated diversity, equity, and inclusion by walking in Ottawa's Pride parade.

To commemorate the École Polytechnique tragedy, Engineers Canada partnered with Engineering Deans Canada to launch 30yearslater.ca, a website featuring the career accomplishments of women who graduated within three years of the massacre.

In June 2019, Engineers Canada staff celebrated Indigenous Peoples Day by volunteering at the Summer Solstice Indigenous Festival in Ottawa, ON.

In August 2019, Engineers Canada staff celebrated Pride by walking in the Ottawa Pride Parade through downtown Ottawa, ON.

Operational imperative 10: Protecting official marks

On behalf of the provincial engineering regulators, Engineers Canada holds and administers a portfolio of intellectual properties that includes official marks and registered trademarks, including registered certification marks. In 2019, we reviewed and evaluated Engineers Canada's trademark enforcement strategy to ensure trademarks and official marks continue to be adequately

used and protected. We also filed an application with the Trademarks office for the 30 by 30 mark and logo.

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.

Working with the provincial and territorial regulators, Engineers Canada provided its consent to 44 requests in 2019 from engineers looking to register a federally incorporated company containing “engineering” or related terms in their names. Additionally, we closed six trademark opposition files (three abandoned, three settled) and commenced searches and investigations of potential marks for summary expungement (non-use), with 20 marks identified for potential proceedings.

Governance

Under the *2019-2021 Strategic plan*, and according to board policy, there are six “Board responsibilities,” each of which was met in 2019, with the support of Engineers Canada Staff. The Board shall:

1. Hold itself, its directors, and its direct reports accountable
2. Sustain a process to engage with regulators through regular communication that facilitates input, evaluation, and feedback
3. Provide ongoing and appropriate strategic direction
4. Ensure the development and periodic review of Board policies
5. 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

The Engineers Canada Board meets in Quebec City in May.

6. Provide orientation of new directors, and continuing development of directors and others who work closely with the Board

Highlights from this work included the formation of the Human Resources Committee and the Finance, Audit, and Risk Committee in May 2019; the kick-off of strategic planning activities for the 2022-2024 plan in the fall; the approval of several sub-strategies defined under the strategic plan; the review and revision of 30 Board policies; and the delivery of orientation sessions for new directors.

2019 also marked the official closure of the Governance, Strategic Planning, and Consultation project, a multi-year endeavour that drew together hundreds of perspectives from across Canada to greatly clarify the purpose and strategic direction for Engineers Canada.

Financial Statements

Download the 2019 summary financial statements.
Also included on page 55 of this agenda book.

Back to agenda

2019 Engineers Canada Annual strategic performance report

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Back to agenda

Introduction

Dear Members,

2019 was a pivotal year for Engineers Canada. We began delivery of the *2019-2021 Strategic plan* and took significant steps forward in laying the groundwork for future successes. Even given significant unplanned events, we were able to stay on track, meeting—as you will see in the following pages—virtually all of our 2019 objectives laid out in the strategic plan.

Notably, this report is the first of its kind for Engineers Canada. In June 2018, the Board began work on a performance reporting template that could help measure whether we were meeting objectives laid out in our strategic plan. During the report's development, we made several key decisions, including interim reporting for the CEO and chairs of the CEAB and CEQB. As these interim reports came in throughout 2019 and the first part of 2020, the report format and reporting process were refined in response to comments and feedback we received. The aim in all of this was, and has always been, to have a reporting approach that is transparent, consistent, and useful in the greatest possible degree.

"2019 was a pivotal year for Engineers Canada. We began delivery of the *2019-2021 Strategic plan* and took significant steps forward in laying the groundwork for future successes."

In keeping with these themes, one notable achievement among the many outlined in this document was that the Board conducted its own self-assessment for the first time this year. This was completed as part of the Board responsibilities laid out in the strategic plan. The Board also, as part of its responsibilities, approved several operational sub-strategies that will help ensure the effective delivery of key Engineers Canada programs over the next two years.

The scorecard-style pages that follow offer a point-by-point overview of where Engineers Canada is at in terms of its delivery of the *2019-2021 Strategic plan.* In short, progress has been good. This report will, I hope, demonstrate to the engineering regulators that the Board members consider accountability to be of the utmost importance. As always, Engineers Canada remains fully committed to delivering value to the regulators.

Sincerely,
David T. Lynch, PhD, FCAE, FEC, FEIC, FCIC, P.Eng.
President
Engineers Canada

Back to agenda

Summary of 2019 performance

Strategic priorities	Q1		Q2		Q3		2019	
	Annual Objectives	Strategic Outcomes	Annual Objectives	Strategic Outcomes	Annual Objectives	Strategic Outcomes	Annual Objectives	Strategic Outcomes
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 **outcomes** by the end of the strategic plan period:
On track	100% (i.e. the outcomes have been achieved)
Some disruption; close monitoring required	90 to 99%
Obstacles being encountered that put progress and success at risk; corrective action required	70 to 89%
	Less than 70%

Strategic priorities

SP1: Accreditation Improvement Program

Accountability: CEO
Weight: 4 (highest)

Objectives:

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

- A preliminary evaluation indicates that all outcomes related to the Enrolment and Degrees Awarded survey have been achieved, except for users' adoption of change. Ongoing evaluation will ensure this is sustained.
- We remain on track to achieve all remaining outcomes by the end of the strategic plan period.

2019 objectives:

- Release of the new data management system for the collection of enrolment and degrees awarded data.
- Training for all stakeholders involved was provided via webinar (with 37 out of a possible 45 higher education institutions participating) and through one-on-one support for 60 individuals from 41 institutions (21% of the one-on-one support was related to system functionality, with the rest requesting interpretation of the survey questions).

Achievement of the objectives

- The 2019 objectives were fully met with Tandem used for the Enrolment and Degrees Awarded Survey, and training on this use being provided to all HEIs via live webinars in Q2 2019, and training materials and on-demand support.

SP2 Accountability in accreditation

Accountability: CEAB
Weight: 4 (highest)

Objectives:

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 accreditation system measures transparency and effectiveness, enabling clarity of conversations around potential improvements and changes.
- Higher education institutions:
  - Understand and recognize that the Accreditation Board 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 assessment process being developed will provide the basis for greater understanding and accountability as expressed in the outcomes. We believe that the probably of achieving these outcomes by December 2021 remains high.

2019 objectives:

- Assessment process to assess transparency and effectiveness of accreditation system to be designed collaboratively with stakeholders.
- A new permanent committee to be struck that is responsible for this assessment process and the continual improvement of the accreditation system.
- The issue of the required number of AUs is addressed to the satisfaction of all stakeholders, based on data and collaboration with all stakeholders.

Achievement of the objectives

- Although the permanent committee was struck, the resulting assessment process is not yet complete. It will be completed in Q1 2020 with first measurements that year, and findings reported in 2021.
- The issue of the required number of AUs is also carried over into 2020 to give the Engineering Deans of Canada more time to respond to the consultation. The issue will be resolved by May 2020.

Back to agenda

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

Objectives:

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

- High

2019 Objectives:

- Publish baseline data—out to 2030—that accurately models our current understanding of the percentage of women on the engineering pathway.
- Establish new goals for each aspect of the expanded mandate.
- Develop new action plans for each aspect of the expanded mandate.
- Face-to-face consultations in Q1 with regulators, 30 by 30 Champions, and Equitable Participation in Engineering (EPiE) Committee members, including consultations on action plans.
- Obtain support of the regulators for the new program.
- Early wins achieved on SP3 by May 2019. Provide semi-annual progress reports at the September and May Board meetings thereafter.

Achievement of the objectives

- All of the 2019 objectives were achieved.

SP4 Competency Based Assessment project

Accountability: CEO
Weight: 2

Objectives:

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

- The project is on track, with the scope and budget having been recently expanded to include the Canadian competencies.
- With an expected project completion date of December 2020, we anticipate that the probably of achieving the intended outcome by December 2021 is high.

2019 Objectives:

- The online competency-based assessment system is available in English.
    - Operational agreements finalized and signed by users
    - Psychometrician initiates inter-association testing
    - EIT, change, and communication plan templates are finalized
    - Application programming interfaces (APIs) are developed
    - Learning management system (LMS) is developed
    - Educational informational transfer is implemented
- French capability is enabled

Achievement of the objectives

- The project is on track. The online competency-based assessment system is available online in English, with three jurisdictions participating: BC, Saskatchewan, and PEI.
- New Brunswick, Manitoba, and Newfoundland & Labrador have also all committed to joining in 2020; work on their APIs will not be completed until 2020.
- Due to the expansion of the project scope to include the Canadian competencies, and the lack of any francophone participants at this time, some objectives were not met in 2019. This includes French capability and the conclusion of all APIs for the new regulators.

Operational imperatives

OP1 Accreditation

Accountability: CEAB
Weight: 3

Objectives:

Outcomes:

Intended outcomes:

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

Probability of achieving the intended outcomes by December 2021

- The probability of achieving this outcome is high.
- Higher education institutions (HEIs), continue to request accreditation visits and the regulators continue to accept graduates of accredited programs as having satisfied the academic requirements for licensure. It is therefore concluded that the accreditation process has been and will continue to maintain its credibility.

2019 Objectives:

- Conduct accreditation business:
  - Visits to 2 higher education institutions (HEIs) from the 2018/2019 cycle and 11 HEIs from the 2019/2020 cycle (the accreditation visit cycle runs from September to February)
  - 78 program decisions rendered for Canadian undergraduate engineering programs (67 visits + 2 notice of significant change + 8 reports)
- Develop and maintain accreditation policies
  - Provide clarification and improvement of the current A/M/U rating scale
  - Develop a course information sheet prototype to link graduate attributes (GAs) to accreditation units (AUs)
  - Redefine the general visitor mandate
  - Develop a complaints policy
  - Modify the interpretive statement on GAs (Appendix 9 of the *Accreditation Criteria and Procedures*)
  - Propose changes to Criterion 3.1.5 regarding documented assessment tools used to obtain data on student learning with respect to all twelve graduate attributes
  - Finalize changes to the interpretive statement on licensure expectations and requirements
  - Develop guidance regarding unforeseen events and AUs
  - Respond to NCDEAS request regarding international exchanges and CEAB accreditation requirements
  - Suggested interview questions for HEI Registrar (or equivalent)
  - Review and update visit questionnaire and rubrics to provide a great focus on the graduate attribute / continual improvement process
  - Complete the work of the AU Task Force
- Implement new policy 6.9 terms of reference for the CEAB, including a new process to appoint members to the CEAB Executive Committee

Achievement of the objectives

- The 2019 objectives are mostly completed: all visits and decision were completed, and the new Board policy 6.9 regarding the CEAB was implemented.

- In regards to the accreditation policies, ten out of twelve are completed. The remaining objectives are in still progress, including:
    - Develop a course information sheet prototype to link graduate attributes (GAs) to accreditation units (AUs)
    - Respond to NCDEAS request regarding international exchanges and CEAB accreditation requirements

OP2 Regulator relationships

Accountability: CEO
Weight: 3

Objectives:

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

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

2019 Objectives:

- Enable networking opportunities for the regulator presidents within the context of regular Board meetings.
    - Deliver orientation through "First Timers Lunch" at February and May Board meetings
    - Organize meetings at February, May, and September Board meetings
- Develop an orientation program about Engineers Canada for the regulator presidents, and other Engineers Canada and regulator staff and volunteers.
- Support the CEO Group and the National Officials Groups and their initiatives.

Achievement of the objectives

- Objectives regarding the support of the officials groups (including CEOs) and the presidents were fully met.
- The objective to develop an orientation program was deferred due to lack of human resources staff in 2019, and will be completed in 2020.

OP3 Services and tools for regulation, practice, and mobility

Accountability: CEO
Weight: 3

Objectives:

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., white 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. white papers, model guides, and guidelines), ensuring that they are timely and serve the needs of the regulators and of practicing engineers.
  - Recognize and support the exemplary accomplishments of engineers by administering effective fellowship and scholarship programs.
- 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 processing inter-provincial/territorial applications.
- Through the Qualifications Board, develop work products that facilitate mobility (i.e. white papers, model guides, and guidelines), are timely, and serve the needs of the regulators.

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.

2019 Objectives:

- CEQB: Maintain examination syllabi
  - Develop new syllabus for aerospace / aeronautical engineering (for CEQB approval in January 2020)
  - Review syllabi for basic studies, biomedical, software, and structural (all approved by January 2020)
- CEQB: Develop and maintain guidelines and white papers
  - New guideline on use of syllabi (for Board approval in Fall 2019)
  - New guideline on enabling entrepreneurship (for Board approval in 2020)
  - New white paper on environmental engineering (for Board approval in Fall 2019)
  - Review guideline on assessment of engr work experience, risk management (Board approval Spring 2020)
- CEO: Maintain the National Membership Database for those regulators who choose to update and/or access it.
  - Feasibility of other means of sharing information is explored
  - Decisions and planning for any changes to how information is shared are completed

Achievement of the objectives

- All objectives were met:
  - A decision was made to renew the National Membership Database and project planning begins in 2020.
  - The CEQB guidelines were produced and approved in 2019, as noted, or are on track for 2020 approval.
  - The new and revised syllabi are all on track for 2020 approval.

OP4 National programs

Accountability: CEO
Weight: 1 (lowest)

Objectives:

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

- High

2019 Objectives:

PIEVC: develop and execute a plan to divest EC of the responsibility to maintain the PIEVC Protocol by 2021.

- Q1 - Develop request for expressions of interest.
- Q2 - Issue request for expressions of interest. Receive expressions of interest and select proponents for RFP.
- Q3 - Complete and issue RFP to selected proponents. Receive proposals from proponents.
- Q4 - Evaluate proposals and recommend a preferred interested party for CEO approval.

IRP: Develop and execute a plan to divest EC of the responsibility to offer Infrastructure Resilience Program (IRP) training by 2021.

- Q1 - Identify interested parties who are willing and capable to offer IRP courses and designation. Develop RFP.
- Q2 - Issue the RFP to interested parties.
- Q3 - Receive and evaluate proposals and make a recommendation to the CEO.
- Q4 - Conduct negotiations and finalize the details of the transfer agreement.

Affinity programs

- Q1 - Engage with Marsh Canada regarding marketing the D&O, E&O, and Commercial Crime Insurance Coverages. Engage with Marsh Canada to set up a webinar on cyber insurance.
- Q2 - Semi-annual reporting with GWL, Manulife, and TD Insurance. Results of reporting meetings shared.
- Q3 - Transparency mechanisms implemented using tactics to meet the needs of individual regulators.
- Q4 - Semi-annual reporting with GWL, Manulife, and TD Insurance. Results of reporting meetings shared.

Achievement of the objectives

- All of the 2019 objectives were achieved, except:
    - IRP: Negotiations will begin in Q1 2020 instead of Q4 2019.
    - Affinity programs: The outcome listed above for the affinity programs is “Maintain sustainability in affinity products and services”. Work related to APEGA leaving the TD insurance home and auto program in Q3 has resulted in increased focus on the maintenance of sustainability in affinity products and services, and has delayed other work.

  For these reasons, OP4 has been categorized as yellow.

OP5 Advocating to the federal government

Accountability: CEO
Weight: 1 (lowest)

Objectives:

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

- High

2019 Objectives:

- Q1 through Q4
  - Face-to-face meetings with parliamentarians and public servants; providing information on federal government proposals, actions and policies; advocating for the role of engineers in the development of public policy; providing advice to regulators on policies affecting provincial regulation; providing updates in the newsletter.
- Q1
  - Face-to-face consultation on the new sub-strategy.
  - Board approval of NPS on regulation of coastal, ocean, and related subsurface engineering.
- Q2
  - Submission of draft analysis, rationale, and sub-strategy to regulators.
  - Submit for Board approval two NPSs: "Artificial Intelligence Engineering Technology in Autonomous and Connected Vehicles" and "Indigenous People's Access to Post-Secondary Engineering Education".
  - Public Affairs Advisory Committee (PAAC) decide on upcoming NPS topics for next fiscal year. Research and environmental scan on new issues for NPSs.
- Q3
  - Submission of final analysis, rationale, and sub-strategy to the Board on federal government advocacy.
  - Create list of existing NPSs needing updates.
  - Submit pre-budget submission to federal government. Request to be added to the House of Commons Standing Committee on Finance for possible testimony.
- Q4
  - Implement advocacy strategy outcomes as needed.
- Circulate draft NPSs to PAAC members.

Achievement of the objectives

- All of the 2019 objectives were achieved.

OP6 Regulatory research, monitoring, and advising

Accountability: CEO
Weight: 2

Objectives:

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

- It is expected that these outcomes will be achieved after the new sub-strategy has been launched in 2020.

2019 Objectives:

- Background work and workshop for a new research sub-strategy that will provide research that informs and advises the regulators on changes and advances that impact the Canadian regulatory environment and the engineering profession, including a possible task force on the future of the engineering profession.
- Conduct research into emerging areas of practice and advise regulators on the impacts.
- Conduct research and issue the *Enrolment and Degrees Awarded Report*

Achievement of the objectives

- All 2019 objectives were achieved, and the proposed sub-strategy for this portfolio will be presented to the Board for approval in May 2020.

OP7 International mobility

Accountability: CEO and CEAB
Weight: 1 (lowest)

Objectives:

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

- It is expected that all outcomes will be met once the international institutions and degrees database update project is completed in 2021, and after the new sub-strategy is approved in late 2020 and launched in 2021.
- The outcome regarding online information for internationally trained engineers is currently being achieved, and it is expected that this will be sustained up to and beyond December 2021.

2019 Objectives:

- CEAB: Represent regulators' interests with respect to international agreements and timely reporting to the Board on developments.
  - Provide advice to Engineers Canada delegates to the Washington Accord meeting regarding votes on governance, admission of new members, review of signatories, and fulfilment of reporting obligations.
- CEO: commence work on the new international mobility sub-strategy (to be submitted to the Board by September 2020) on how best to manage risks and opportunities associated with mobility of work and practitioners internationally.
  - Until the new strategy is approved, continue with existing activities:
    - Maintain the mobility registers
    - Attend the International Engineering Alliance meetings, and vote regarding governance and membership
    - Maintain mutual recognition agreements (MRAs).
    - Update Engineers Australia MRA
- CEO: Maintain the Roadmap to Engineering website.
- CEO: Maintain the International Institutions and Degrees Database (IIDD) while implementing the recommendations of the National Admissions Officials Group.
  - Complete a feasibility study regarding the IIDD's continued use and improvement
  - Research institutions and add information to the IIDD
- CEO: Maintain website content and respond to questions regarding foreign credential recognition and licensure

Achievement of the objectives

- All objectives were fully met in 2019 with the exception of the renewal of the Engineers Australia MRA. This was due to a change in staffing at Engineers Australia and a subsequent lack of follow-up on their end.

OP8 Promotion and outreach

Accountability: CEO
Weight: 2

Objectives:

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

- High

2019 Objectives:

- Submit an analysis, rationale, and recommended strategies to the Board by February 2020 on how best to:
  - Foster recognition of the value and contribution of the profession to society.
  - Spark interest in the next generation of engineering professionals.
- Until the new strategy is approved, continue with existing activities including: FEC program; scholarships program; awards program; and current outreach programs including Canadian Federation of Engineering Students, Girl Guides, National Engineering Month; NSERC Science Odyssey; and DiscoverE, including the Global Marathon and Future City.
- Initiate and implement Scouts program.
- Conduct a review of the scholarships program and update and maintain it thereafter.
- Conduct a review of the current Engineers Canada Awards program and bring this information back to the Board for discussion.

Achievement of the objectives

- All of the 2019 objectives were achieved in 2019 except for: initiate and implement Scouts program; and conduct a review of the scholarships program. The work regarding the Scouts program has begun and will be continuing into 2020. The review of the scholarships program is carrying over to 2020 and is on track for changes to be implemented with the 2020-2021 scholarship cycle. This was not deemed to be sufficiently significant to categorize OP8 as yellow.

OP9 Diversity and inclusion

Accountability: CEO
Weight: 2

Objectives:

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

- High

2019 Objectives:

OP9 Sub-strategy

- Q1 - The EPiE Committee is consulted on OP9 sub-strategy.
- Q2 - The Indigenous Peoples' Participation in Engineering (IPPiE) working group is consulted on OP9 sub-strategy.
- Q3 - The OP9 sub-strategy is presented at the Fall Board meeting.
- Until the new sub-strategy is approved, continue with existing activities.

Truth and Reconciliation Commission (TRC): Actively monitor and advise regulators on the work of EGBC and Engineers Geoscientists Manitoba with respect to the TRC report.

- Q1 to Q4 – Each quarter, consult with EGBC and APEGM on their work regarding the TRC.

EngScape: Maintain EngScape pending its evaluation in relation to sub-strategies development.

- Q2 - Review continued utility of EngScape and make appropriate recommendations.

National Membership Survey: Maintain up-to-date information for 30 by 30 as well as accurate reporting, charging dues, affinity programs, and other purposes.

- Q1 - Complete collection of 2018 membership data.
- Q2 - Data verification. Write website content. Develop 30 by 30 infographics (i.e. map and table).
- Q3 - Send report/website content to translation. Post on website. Share 30 by 30 infographic widely.
- Q4 - Improvements on survey form. Begin process of collecting 2019 data.

Achievement of the objectives

- All of the 2019 objectives were achieved.

Back to agenda

OP10 Protect official marks

Objectives:

Outcomes:

Accountability: CEO
Weight: 1 (lowest)

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

- High

2019 Objectives:

- Protect 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

All objectives were met. In the period January 1, 2019 to December 31, 2019, Engineers Canada:

- Managed oversight of 6 trademark opposition proceedings (open, ongoing)
- Closed 6 trademark opposition files (3 abandoned, 3 settled)
- Commenced searches and investigations of potential marks for summary expungement (non-use), with 20 marks identified for potential s. 45 proceedings (s. 45 Notices for Summary Expungement to be issued in Q1 2020)
- Reviewed and evaluated Engineers Canada's trademark enforcement strategy to ensure trademarks and official marks continue to be adequately used and protected
- Filed application with the Trademarks office for the 30 by 30 mark and logo
- Issued 44 letters of consent to applicants in response to requests to incorporate federally using the official marks in their corporate name

Board responsibilities

BR1 Hold itself, its directors, and its direct reports accountable

Objectives:

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 the use of 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.

Objectives:

From the June 2018 – June 2019 Compensation and Executive committees' work plans:

- Establish and use competency profiles for all directors, committee chairs and for the Board as a whole
- Track, report and when necessary correct, performance against set objectives of the strategic plan and the annual operating plan
- Establish CEO objectives and assess CEO performance, including conducting interviews

From the June 2019 – June 2020 Human Resources committee's work plan:

- 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
- Conduct regular CEO assessments, and make recommendations to the Board regarding CEO compensation

Annual achievements

The Human Resources Committee was formed in May 2019, taking on the responsibilities of the former Executive and Compensation committees. In the period January 1 2019 to December 31 2019, the committees:

- Obtained Board approval for the CEO's performance for 2018, and objectives for 2019; conducted interviews regarding the CEO's 2019 performance and reviewed his suggested objectives for 2020.
- Obtained Board approval for the competency and assessment policies and worked on processes to enable the annual reviews of directors, committee chairs, and the board as a whole. The first assessments will take place in 2020.
- In addition, the Board monitored performance against the strategic plan through quarterly reviews of the Board-approved performance report, covering all four strategic priorities and the ten operational imperatives.

Back to agenda

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

Objectives:

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.

Objectives:

- Approve and publish the first annual consultation plan, for 2020

Annual achievements

- The 2020 consultation plan, including both board (strategic) consultations, as well as all operational consultations was approved at the December 2019 meeting.

Back to agenda

BR3 Provide ongoing and appropriate strategic direction

Objectives:

Outcomes:

The Executive Committee 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 plans meet their needs, and that the annual operating plan delivers on those needs.

Objectives:

- Launch the 2019-2021 strategic plan
- Develop and approve two sub-strategies within that plan
- Begin work on the 2022-2024 strategic plan

Annual achievements

- The following sub-strategies were approved, in support of the *2019-2021 Strategic plan*:
  - Strategic Priority #3: recruitment, retention, and professional development of women in the engineering profession, in October 2019
  - Operational Imperative #5: advocating to the federal government, in October 2019
- The strategic planning task force was struck at the October 2019 meeting and has initiated planning, with an environmental scan and SWOT analysis consulted on with key stakeholders

Back to agenda

BR4 Ensure the development and periodic review of Board policies

Objectives:

Outcomes:

The Governance Committee shall:

- *Implement the Funding Task Force recommendations (this initiative was transferred to the Finance, Audit, and Risk Committee).*
- *Maintain effective governance principles and policies.*
- *Perform ongoing governance improvements.*
- *Implement Nominations Task Force recommendations.*

The Finance Committee shall:

- *Ensure external and direct inspection and monitoring of fiscal policy and responsibilities.*

Intended outcomes:

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

- All Board policies are current and relevant to established requirements.
- Action plans with clear objectives are established based on the recommendations of any task force established by the Board.
- Action plans to implement recommendations are integrated with the Board's plans.

Objectives:

The June 2018 – June 2019 Governance Committee work plan included

- The review of policies
- Finalize and implement Governance 2.0 work through the GSPC project
- Implement the Nominations Task Force work

The June 2019 – June 2020 Governance Committee work plan includes:

- The review of policies
- Consider Board governance gaps and recommend training
- Develop first governance effectiveness survey
- Consideration of assignment of new directors to committees
- Review of CEO's operational committee report and recommendations for alignment with governance
- Consideration of Board size

The June 2019 – July 2020 Finance, Audit, and Risk Committee work plan included two items related to this responsibility:

- Development of a Net Asset Policy
- Development of an Investment Policy
- Overseeing the audit

Annual achievements:

In the period from January 1, 2019 to December 31, 2019 the Governance Committee:

- Finalized and implemented the Board's portion of the Governance 2.0 work, and closed the GSPC project
- Implemented the governance items from Nominations Task Force, including new policies for the CEAB and CEQB
- Worked on, and received approval for 30 revised policies and rescinded six policies
- Initiated work on the governance effectiveness survey, and the issue of Board size

During this same time period, the Finance, Audit, and Risk Committee:

- Oversaw the results of the 2018 audit
- Approved the 2019 audit plan
- Initiated work on the net asset and investment policies
- Initiated work on addressing the Funding Task Force recommendations.

Back to agenda

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

Objectives:

Outcomes:

The Audit Committee shall:

- *Ensure the Board is wholly accountable for risk management and for directing the CEO through clear and timely mitigation strategies.*
- *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.

Objectives:

The June 2018 – June 2019 Finance Committee work plan included:

- Review and update Board on current risks and related mitigation strategies

The June 2019 – June 2020 Finance, Audit, and Risk Committee work plan included:

- Review the risk register and make recommendations to the Board
- Conduct a triennial strategic risk review

Annual achievements

The Finance, Audit, and Risk Committee was formed in May 2019, taking on the responsibilities of the former Audit and Finance committees. In the period January 1, 2019 to December 31, 2019, the committee:

- Reviewed the risk register quarterly, and provided updates at each Board meeting
- Conducted a triennial review of strategic risks as an input for the 2022-2024 strategic plan
- Initiated work to update and improve the presentation of the risk register and the treatment of any risk rated "red"

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

Objectives:

Outcomes:

Develop and deliver orientation materials and programs that facilitate the effectiveness of directors. The Board's orientation program will take into account the challenges of onboarding individuals new to their function and provide opportunity for the ongoing of 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.

Objectives:

The June 2019 – June 2020 Human Resources Committee work plan included:

- 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

Annual achievements

During the period from January 1, 2019 to December 31, 2019 the committee:

- Established the membership for all 2019-2020 committees and recommended chairs, and named director appointees to the CEAB, the CEQB, and the 30 by 30 champions network

Back to agenda

BRIEFING NOTE: For decision by the Members

Approval of audited financial statements	6.1
Purpose:	Inform the members of auditor's determination and findings from the audit of 2019 financial statements.
Motion(s) to consider:	THAT the Members approve the Engineers Canada financial statements for the year ending December 31, 2019, as audited by KPMG LLP.
Votes required to pass:	**2/3 – 60% majority**: meaning that the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.
Prepared by:	Jorge Monterrosa, Controller
Presented by:	Lisa Doig, FAR Committee Chair and Director, APEGA

Problem/issue definition

- Annual audited financial statements prepared by a public accountant are required to comply with the requirements of the *Canada Not-for-profit Corporations Act* (NFP Act).

Proposed action/recommendation

- The audit process was completed by KPMG LLP after the close of year-end. The Board recommends that the Members approve the audited financial statements as presented.

Appendices

- Engineers Canada 2019 financial statements

Back to agenda

DRAFT Financial Statements of

ENGINEERS CANADA

Year ended December 31, 2019

Back to agenda

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, 2019
- 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, 2019, and its results of operations 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 ethical responsibilities in accordance with these requirements.

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

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.

- 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.

Chartered Professional Accountants, Licensed Public Accountants

Ottawa, Canada

date

Back to agenda

ENGINEERS CANADA

Statement of Financial Position

DRAFT

December 31, 2019, with comparative information for 2018

	2019	2018
Assets		
Current assets:		
Cash (note 4)	$ 4,263,039	$ 1,829,187
Amounts receivable (note 5)	1,150,874	1,132,944
Prepaid expenses and deposits	109,413	361,161
	5,523,326	3,323,292
Investments (note 6)	6,591,605	5,759,124
Tangible capital and intangible assets (note 7)	687,742	887,220
	$ 12,802,673	$ 9,969,636
Liabilities and Net Assets		
Current liabilities:		
Accounts payable and accrued liabilities (note 8)	$ 409,250	$ 2,859,032
Deferred contributions	10,534	33,000
	419,784	2,892,032
Deferred lease inducement (note 9)	570,841	658,294
Net assets (note 10):		
Internally restricted:		
Four-year rolling operational reserve	4,000,000	4,000,000
General contingency reserve	1,325,000	1,325,000
Capital reserve for the purchase of assets	-	250,000
Other internally restricted	-	211,400
Invested in tangible capital and intangible assets	407,896	564,690
Unrestricted	6,079,152	68,220
	11,812,048	6,419,310
Commitments (note 11)		
	$ 12,802,673	$ 9,969,636

See accompanying notes to financial statements.

On behalf of the Board:

_____ Director

_____ Director

Back to agenda

ENGINEERS CANADA

Statement of Operations

DRAFT

Year ended December 31, 2019, with comparative information for 2018

	2019	2018
Revenue:		
National programs (note 12)	$ 11,361,095	$ 7,028,983
Corporate services (note 13)	3,152,276	3,062,967
Unrealized gain (loss) in investments	651,071	(218,340)
Investment income	192,583	168,068
Outreach	104,667	158,166
	15,461,692	10,199,844
Expenses:		
Operating expenses:		
Accreditation	255,243	338,642
Fostering working relationships	96,314	143,489
Services and tools	47,007	384,043
National programs	921,663	1,110,222
Advocating to the Federal government	37,807	54,648
Research and regulatory changes	11,024	1,430
International mobility	43,530	89,889
Promotion and outreach	350,585	330,529
Diversity and inclusion	212,651	204,141
Protect official marks	115,598	61,181
Secretariat services	808,219	1,588,756
Corporate services	6,759,072	7,072,459
	9,658,713	11,379,429
Excess (deficiency) of revenue over expenses before the undernoted	5,802,979	(1,179,585)
Projects spending:		
Accreditation improvement project	113,482	285,091
Corporate services - space program	9,819	-
Secretariat services - GSPC project	69,161	16,756
Services and tools - competency-based assessment	217,779	-
International mobility - IIDD one-time project	-	3,119
	410,241	304,966
Excess (deficiency) of revenue over expenses	$ 5,392,738	$ (1,484,551)

See accompanying notes to financial statements.

Return to agenda

ENGINEERS CANADA

Statement of Changes in Net Assets

DRAFT

Year ended December 31, 2019, with comparative information for 2018

	Four-year rolling operational reserve (note 10)	General contingency reserve (note 10)	Capital reserve for the purchase of assets (note 10)	Other internally restricted (note 10)	Invested in tangible capital and intangible assets (note 10)	Unrestricted	2019	2018
Balance, beginning of year	$ 4,000,000	$ 1,325,000	$ 250,000	$ 211,400	$ 564,690	$ 68,220	$ 6,419,310	$ 7,903,861
Excess (deficiency) of revenue over expenses	-	-	-	-	-	5,392,738	5,392,738	(1,484,551)
Amortization of tangible capital and intangible assets	-	-	-	-	(223,174)	223,174	-	-
Additions to tangible capital and intangible assets	-	-	-	-	23,696	(23,696)	-	-
Amortization of leasehold inducement	-	-	-	-	42,684	(42,684)	-	-
Transfers from internally restricted	-	-	(250,000)	(211,400)	-	461,400	-	-
Balance, end of year	$ 4,000,000	$ 1,325,000	$ -	$ -	$ 407,896	$ 6,079,152	$ 11,812,048	$ 6,419,310

See accompanying notes to financial statements.

Back to agenda

ENGINEERS CANADA

Statement of Cash Flows

DRAFT

Year ended December 31, 2019, with comparative information for 2018

	2019	2018
Cash provided by (used in):		
Operating activities:		
Excess (deficiency) of revenue over expenses	$ 5,392,738	$ (1,484,551)
Items not involving cash:		
Amortization of tangible capital and intangible assets	223,174	291,948
Amortization of lease inducement	(87,453)	(87,453)
Change in net unrealized loss (gain) on investments (note 6)	(651,071)	218,340
Change in non-cash operating working capital:		
Decrease (increase) in amounts receivable	(17,930)	128,147
Decrease (increase) in prepaid expenses and deposits	251,748	(40,952)
Increase (decrease) in accounts payable and accrued liabilities	(2,449,782)	2,020,242
Decrease in deferred contributions	(22,466)	(93,171)
	2,638,958	952,550
Investing activities:		
Net sales (purchases) of investments	(181,410)	58,821
Additions to tangible capital and intangible assets	(23,696)	(49,492)
	(205,106)	9,329
Increase in cash	2,433,852	961,879
Cash, beginning of year	1,829,187	867,308
Cash, end of year	$ 4,263,039	$ 1,829,187

See accompanying notes to financial statements.

ENGINEERS CANADA

Notes to Financial Statements

DRAFT

Year ended December 31, 2019

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)(l) of the Income Tax Act (Canada).

2. Adoption of new accounting policies:

Engineers Canada has adopted the following Canadian not-for-profit accounting standards effective on January 1, 2019:

- Section 4433, to replace Section 4431, Tangible Capital Assets Held by Not-for-Profit Organizations
- Section 4434, to replace Section 4432, Intangible Assets Held by Not-for-Profit Organizations
- Section 4441, to replace Section 4440, Collections Held by Not-for-Profit Organizations

Engineers Canada has adopted these standards on a prospective basis and will apply the componentization approach to significant tangible capital asset acquisitions (and related amortization).

Engineers Canada does not have assets that meet the intangibles or collections definition set out by the revised standards and as such there is no impact to the prior period or current period financial statements.

The adoption of these standards did not result in any adjustments to the financial statements as at January 1, 2019.

ENGINEERS CANADA

Notes to Financial Statements (continued)

DRAFT

Year ended December 31, 2019

3. 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, amounts from affinity and insurance programs, and government project funding.

Revenues for provincial assessment 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.

Government funding that is externally restricted for specific projects are deferred and recognized as revenue in the period in which the related expenses are incurred. Funding received for tangible capital and intangible assets is deferred and amortized over the same term and on the same basis as the related asset.

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.

(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.

ENGINEERS CANADA

Notes to Financial Statements (continued)

DRAFT

Year ended December 31, 2019

3. Significant accounting policies (continued):

(b) Financial instruments (continued):

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 and intangible assets:

Tangible capital and intangible assets are recorded at cost less accumulated amortization. When a tangible capital or intangible 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 and intangible assets is provided on the straight-line basis as follows:

Asset	Terms
Tangible capital:	
Furniture, fixtures and equipment	4 years
Computer hardware	4 years
Leasehold improvements	Remaining term of lease
Intangible:	
Computer software	4 years
Engineering Talent project	4 years

(d) Deferred lease inducement:

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

3. Significant accounting policies (continued):

(e) Allocated expenses:

In the statement of operations, Engineers Canada presents it 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.

4. 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% (2018 - prime rate less 2.75%).

Line of credit

Engineers Canada has a line of credit allowing it to borrow up to $500,000 (2018 - $500,000) at an interest rate of prime plus 1%. That line of credit is subject to annual renewal. There was no outstanding balance as at December 31, 2019 (2018 - $Nil).

ENGINEERS CANADA

Notes to Financial Statements (continued)

DRAFT

Year ended December 31, 2019

5. Amounts receivable:

	2019	2018
Affinity and insurance programs	$ 1,066,930	$ 1,058,956
Due from members	40,402	17,022
Government remittances receivable	43,542	56,966
	$ 1,150,874	$ 1,132,944

6. Investments:

	2019		2018	
	Fair value	Cost	Fair value	Cost
Bond funds	$ 2,808,348	$ 2,782,805	$ 2,668,838	$ 2,681,008
Canadian equity funds	1,227,674	867,151	1,184,624	911,080
U.S. equity funds	1,666,037	1,078,764	1,203,589	855,917
International equity funds	889,546	664,741	702,073	566,710
	$ 6,591,605	$ 5,393,461	$ 5,759,124	$ 5,014,715

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

ENGINEERS CANADA

Notes to Financial Statements (continued)

DRAFT

Year ended December 31, 2019

7. Tangible capital and intangible assets:

	Cost	Accumulated amortization	2019 Net book value	2018 Net book value
Tangible capital:				
Furniture, fixtures and equipment	$ 203,098	$ 193,627	$ 9,471	$ 42,449
Computer hardware	516,471	477,584	38,887	49,970
Leasehold improvements	1,045,996	406,612	639,384	737,401
Intangible assets:				
Computer software	-	-	-	23,085
Engineering Talent project	-	-	-	34,315
	$ 1,765,565	$ 1,077,823	$ 687,742	$ 887,220

Cost and accumulated amortization at December 31, 2018 amounted to $2,436,092 and $1,548,872, respectively. During the year, Engineers Canada disposed of software intangible assets with a cost and accumulated amortization of $692,222.

8. Accounts payable and accrued liabilities:

	2019	2018
Operating	$ 235,880	$ 289,964
Payroll related accruals	126,889	264,025
Accrued liabilities	5,595	2,264,966
Secondary Professional Liability insurance premiums repayable to members	40,886	40,077
	$ 409,250	$ 2,859,032

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

ENGINEERS CANADA

Notes to Financial Statements (continued)

DRAFT

Year ended December 31, 2019

9. 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	$ 335,764	$ 322,530	$ 658,294
Less amortization	(44,769)	(42,684)	(87,453)
Balance, end of year	$ 290,995	$ 279,846	$ 570,841

10. Net assets:

Engineers Canada's overall objective with regard to its net assets is to fund future projects, ongoing operations and tangible capital and intangible assets. Engineers Canada manages its net assets by establishing restricted funds and committing amounts in the internally restricted net assets for anticipated future projects, contingencies and other capital requirements. These allocations are presented in the statement of changes in net assets and disclosed in note 10(a).

Engineers Canada's objective with respect to unrestricted net assets is to maintain a balance sufficient to meet the needs associated with ongoing operations and to finance any unrealized losses on Engineers Canada's investments. Engineers Canada's net assets invested in its tangible capital and intangible assets is equal to their net book value less the corresponding lease inducement.

Engineers Canada is not subject to externally imposed capital requirements and its overall strategy with respect to net assets remains unchanged from the year ended December 31, 2018.

(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 Four Year Rolling Operational Reserve is to provide Engineers Canada with sufficient resources to identify other sources of revenue in the eventuality that significant sources of revenues are no longer available, or in the event of a severe disruption of operations to downsize activities in a rational manner. This reserve is being maintained at a target level of $4,000,000.

10. Net assets (continued):

(a) Internally restricted net assets (continued):

The General Contingency Reserve ensures that funds are available in case of legal challenge, to provide funds to cover the deductibles for insurances, and to assist the constituent members where it is demonstrated 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 members. This reserve has a target level of $1,325,000.

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

11. Commitments:

Engineers Canada leases office space under an operating lease which expires on June 30, 2026. The future minimum rental payments required over the next five years and thereafter are as follows:

2020	$ 376,618
2021	341,003
2022	360,161
2023	360,161
2024	300,134
Thereafter	600,267
	$ 2,338,344

12. Affinity and insurance programs:

The 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.

12. Affinity and insurance programs (continued):

The two most significant agreements account for 99% (2018 - 89%) of the affinity and insurance 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 85% (2018 - 64%) of the affinity program revenues; and

- on-going with no fixed expiry date which accounts for 14% (2018 - 25%) of the insurance program revenues.

13. Corporate services:

This revenue line includes the annual per capita assessment fees.

14. 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 $194,370 (2018 - $193,938), which are included in salaries and benefits expense.

15. 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. Engineers Canada is exposed to market risk with respect to its investments, as disclosed in note 6.

15. Financial risk management (continued):

(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) Credit and interest rate risk:

Engineers Canada is exposed to credit and interest rate risk with respect to its interest-bearing investments. The bond mutual funds held by Engineers Canada are disclosed in note 6 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.

There has been no change to the risk exposures from 2018.

16. Comparative information:

Certain 2018 comparative information has been reclassified to conform to the financial statement presentation adopted for 2019.

Back to agenda

BRIEFING NOTE: For decision by the Members

Appointment of external auditors	6.2
Purpose:	To appoint KPMG as external auditors for 2020.
Motion(s) to consider:	THAT KPMG LLP be appointed as the public accountant to audit the accounts of Engineers Canada for the 2020 fiscal year, as recommended by the FAR Committee.
Votes required to pass:	**2/3 – 60% majority**: meaning that the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.
Prepared by:	Jorge Monterrosa, Controller
Presented by:	Lisa Doig, FAR Committee Chair and Director, APEGA

Problem/issue definition

- The Bylaw requires that the members appoint a chartered professional accountant (CPA) licensed to practice public accounting in Ontario as auditor of Engineers Canada annually.

Proposed action/recommendation

- For KPMG LLP to continue as the accounting firm to provide external auditing services for the upcoming 2020 fiscal year with the fee as set in the original 2018 proposal. This is the third year of the five-year engagement.
- KPMG were professional and efficient in the conduct of the audit and provided excellent counsel to the FAR Committee throughout.

Other options considered:

- No other options were considered this year.
- In early 2018, the Audit Committee 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).
- In May 2018, the members approved that KPMG be appointed as the 2018 auditors, based up on this recommendation.

Risks

- N/A

Financial implications

- The engagement with KPMG represents a financial commitment of $20,000 with nominal increases per year.
- The appropriate fee will be included in the 2020 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

Back to agenda

Next steps (if motion approved)

- Confirm cost of 2021 audit services and include them in the 2021 budget
- Develop an audit plan in early 2021 for approval by the Finance, Audit, and Risk Committee
- Conduct 2020 audit and provide results to members at the May 2021 meeting

Back to agenda

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BRIEFING NOTE: For decision by the Members

Amendment to By-law dealing with the Per Capita Assessment fee	**7**
Purpose:	To provide a rationale for the Board's recommendation to the Members that the By-law be amended to allow for the per capita assessment fee to be set annually by the Members to provide them with control over the size of Engineers Canada's budget and a mechanism to temper any growth in reserves.
Motion(s) to consider:	*THAT the By-law be updated as follows:* *a. Modify By-law 7.2 to state:* *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 later).* *b. Renumber existing By-law 7.2 to be By-law 7.3, remove the $10.21 Per Capita Assessment amount and change the wording to:* *Each Member shall pay to Engineers Canada the Member-approved ~~a~~ Per Capita Assessment per Registrant ~~of $10.21~~ within two months of receipt of invoice for same or pursuant to payment schedule reflective of the Members registrant payment schedule.* *c. Add a new By-law 7.4 to state:* *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*
Vote required to pass:	**2/3 – 60% majority**: meaning that the motion must be supported by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.
Prepared by:	Stephanie Price, Executive Vice President Regulatory Affairs Evelyn Spence, Legal Counsel and Secretary
Presented by:	David Lynch, President Engineers Canada

Problem/issue definition

- In January of 2018 the Board struck a Funding Task Force (FTF) to review Engineers Canada's funding model.
- The creation of the FTF was due in part to concerns from some regulators about the transparency of the contract and revenues generated and distributed through the TD affinity program.
- In May of 2019 the FTF submitted a recommendation to the Engineers Canada Board, and the Finance, Audit, and Risk Committee (FAR) was directed to consider ways to limit the growth of the operational budget (excluding major projects) as well as to develop a policy that would cap Engineers Canada's unrestricted reserves at $2M (subject to periodic review) and propose options for the disposition of any amount above the $2M.

Back to agenda

- When the FAR met subsequently, they agreed that it would be imprudent to consider these motions absent a better understanding of the potential impacts (both immediate and long-term) of APEGA's recent decision to leave the TD Home and Auto insurance program on the Engineers Canada budget and reserves.
- In response to the FTF's direction for FAR to develop an official net asset policy, FAR worked with KPMG to develop an appropriate structure for the net assets that the Board adopted at the February 26, 2020 meeting (attached as an appendix). During the development of this structure, KPMG and FAR collaborated to determine the appropriate level of net assets required to mitigate identified risks, fund future anticipated major projects, and maintain organizational sustainability.
- The recommended changes to the By-law (as proposed) would be the most efficient manner to achieve the intended outcomes of the original FTF recommendations, namely, to ensure that growth of the operational budget and the reserves are kept in check and any changes resulting from these actions to be shared by all Member-regulators.
- At its meeting of February 26, 2020, the Board approved the proposed recommendation to submit parts a) and b) of the motion to the Members and subsequently approved the addition of part c) by electronic ballot which closed March 18, 2020.

Proposed action/recommendation

- It is recommended that the Members approve the Board's recommendation to amend the By-law, as proposed.
- The recently adopted net asset structure requires Engineers Canada to have a mechanism/process to actively manage the unrestricted reserves. It will provide guidance in understanding the level of revenues required to be a sustainable organization and needs to be considered in conjunction with the By-law.
- By actively managing the per capita assessment revenue, Engineers Canada will be able to manage its annual financial results and, given that the annual surplus/deficit flows directly into the unrestricted reserves, ultimately manage the levels of the reserves.
- The determination of the amount of the annual Per Capita Assessment fee will be part of Engineers Canada's annual budgeting process. During the budgeting process, multi-year projections will be developed to estimate the future balance of all reserves (restricted and unrestricted). Once the impact of all factors affecting reserves are projected, the future annual Per Capita Assessment fee revenues can be estimated such that unrestricted reserves remain in the required range.

Other options considered

- A range of options were considered by FAR:
    - Implement the original motions calling for an annual increase of assessment fees by 2% annually and a capping of the unrestricted reserve, with any excess being distributed back to regulators. This was felt to be too restrictive and, not knowing the future, might have unintended consequences. In addition, Engineers Canada's external auditor, KPMG, advised that the Canada Revenue Agency (CRA) is of the opinion that reserves are to be used to carry out the purposes of the organization – both strategic and operational. Further, to comply with the CRA in the disposition of a surplus, providing refunds of past assessment fees paid is not recommended and issuing cheques to the Member-regulators to rebate assessment fees paid at earlier dates can also lead to serious concerns.
    - Increase the cost-sharing ratio in the existing affinity agreements with the Member-regulators to reduce the inflow of revenues. Unfortunately, not all regulators participate in the affinity program, so any benefits would not be realized by all and could be perceived as preferential treatment for some.

Back to agenda

- Use any excess reserves to set up a granting program which could be accessed by the Member-regulators for priority projects which contribute to the strategic priorities of Engineers Canada. Some regulators indicated they would not support such a proposal, and there is (again) the risk that this could be perceived as preferential treatment for some. However, KPMG did advise that this option would be acceptable for CRA compliance.

Risks

- As a result of the proposed By-law amendment, the annual assessment fee could vary year-over-year, resulting in a fiscal unpredictability for Members in their own budgeting process. To mitigate this risk, Engineers Canada could publish a three-year range aligned with the three-year forecast for the per capita assessment fee, for the use of regulators. Annually, the Board would set the assessment fee within this range, to account for current realities.
- There is the risk that the Members will be unable to agree on the amount of the assessment fee. This would result in confusion regarding future fees, for both regulators and for Engineers Canada. The proposed addition of By-law 7.4 is directly intended to address this risk, so that if the Members do not reach agreement, the per capita assessment fee last determined would remain in effect (currently, $10.21).

Financial implications

- If properly implemented, the By-law amendment should result in stability for the operational budget, and the ability to actively manage reserves in keeping with the net asset structure.

Benefits

- Members will have increased control over the size of Engineers Canada's budget and a mechanism to temper any growth in reserves.
- Members will have an increased role in the governance of Engineers Canada through annual participation in setting the assessment fees.
- Any changes in the annual assessment fee will be equally shared by all regulators (on a per-capita basis).

Consultation

- A representative from KPMG (who are auditors and consultants to Engineers Canada) reviewed this proposal with the FAR on November 13, 2019 and advised this proposal meets the CRA's test in the terms of appropriate assessment fee management.
- Regulators were provided with a draft of the proposed By-law change and directors should have had the chance to discuss it with their councils.

Next steps (if motion approved)

- The By-law will be updated by staff and published on the website.
- The following implementation schedule will then launch:
  - **December 2020** the Board will approve the 2021 budget (with three-year projections) and recommend the Per Capita Assessment fee for 2023 to the Members
  - **May 2021** the Members will consider the recommendation and set the 2023 Per Capita Assessment Fee.
  - **January 2023** the new Per Capita Assessment Fee will be in place.
- For January 2021 and January 2022, the existing $10.21 per capita assessment fee will remain in effect.

Back to agenda

Appendix

- Net asset structure

Back to agenda

Net asset structure

Overview

Please find attached the revised net assets paper which has been revised to reflect the comments of the Finance, Audit and Risk Committee at the November meeting.

This paper is meant to be a standalone document evidencing the categories and balance of internally restricted net assets and unrestricted net assets as approved by Board, as at December 31, 2019. This paper would be maintained by management.

This paper will be provided to the external auditors in support of the note disclosure in the financial statements. In addition, if the CRA were to audit Engineers Canada, this paper would be evidence of the rationale for Engineers Canada's net assets and of governance oversight by the Board and its committees.

Net Asset Policy

Based on discussion at the November Committee meeting, there will also be a general policy prepared for net assets which will document the roles and responsibilities for net assets and for the annual review of the amounts and purposes of the internally restricted net asset funds.

As such, the references to roles and responsibilities have been removed from this paper.

Comparison to Prior Year

Members of the Committee requested a comparison to the prior year's reserves. This has been provided in the table below.

December 31, 2018 (Actual)		**December 31, 2019 (proposed)**	
Internally Restricted:		Internally Restricted:	
4-year rolling operational	$4,000,000	Strategic Priorities Fund	$2,000,000
General contingency reserve	$1,325,000	Legal Defence Fund	$1,500,000
Capital res. for purchase of assets	$250,000	Contingency Reserve Fund	$2,500,000
Other	$211,400		
Total Internally Restricted	*$5,786,400*	*Total Internally Restricted*	*$6,000,000*
Invested in TCA and Int. Assets	$564,690	Invested in TCA and Int. Assets	To be calculated
Unrestricted Net Assets	$68,220	Unrestricted Net Assets	$1,000,000 (not less than)

Back to agenda

Net assets

Date of approval:	Effective Date: Year Ended December 31, 2019

1.1 NET ASSETS OVERVIEW

Engineers Canada aims to effectively use its net assets to maximize its ability to achieve its objectives. The accumulation of net assets in and of itself is not a goal of Engineers Canada. However, prudent financial management dictates that Engineers Canada maintain the necessary net assets 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.

As a best practice of Canadian not-for-profit organizations, Engineers Canada should explicitly establish internally restricted net assets (often called “reserves” or “reserve funds”) to demonstrate the intent and purpose for its net assets to its members and stakeholders. This practice is in accordance with Canadian Accounting Standards and is supported by the Canada Revenue Agency in demonstrating Engineers Canada’s not-for-profit status under the Income Tax Act (Canada).

Changes in internally restricted net assets should be consistent with Engineers Canada’s overall strategy, priority initiatives, and risk assessment. Annually, Engineers Canada should generally review the use and the adequacy of the balances in the internally restricted funds. Engineers Canada should also do a more in-depth assessment of its internally restricted net assets during its three-year strategic planning process, including a comprehensive risk assessment.

This paper uses standard definitions of net assets, which are provided in the Appendix.

1.2 SUMMARY OF NET ASSETS

Below is a summary of the internally restricted funds, unrestricted net assets and the investment in capital assets and intangible assets of Engineers Canada. Further rational is provided later in this paper.

Internally Restricted Net Assets

Internal restriction	Purpose	Amount
Legal defense fund	The legal defense fund is established by the Board 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.	$1,500,000
Strategic priorities fund	The strategic priorities fund is established by the Board to provide funds: • For planned strategic initiatives • For information technology projects consistent with the approved strategic plan; • To respond to future risks and investment needs in the performance, accessibility, and security of its information technology assets.	$2,000,000
Contingency reserve fund	The contingency reserve fund is established by the Board 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.	$2,500,000
	Total internally restricted net assets	**$6,000,000**

Back to agenda

Unrestricted net assets and investment in capital assets and intangible assets

Asset category	Purpose	Amount
Investment in capital assets and intangible assets	The investment in capital assets and intangible assets is a calculated amount consisting of the net book value of capital and intangible assets less any debt relating to them.	$564,690 (2018 FS amount)
Unrestricted net assets	Unrestricted net assets are maintained to fund the appropriate level of liquid working capital needed to maintain regular operations. Unrestricted net assets are the residual of total net assets less internally restricted and investment in capital and intangible assets.	No less than $1,000,000

1.3 INTERNALLY RESTRICTED NET ASSETS

Engineers Canada will establish internally restricted net assets (commonly referred to as 'reserves' or 'reserve funds') for specific operating or capital purposes as allowed under Canadian accounting standards for not-for-profit organizations. Internally restricted net assets are supported by a clear statement of purpose, specific level of funding required, and as needed, a projected time frame for the accumulation or draw down of the balance. The purpose of internally restricted net assets will be consistent with the objectives of Engineers Canada's strategic initiatives and operating plans, as well as identified risks to the achievement of these objectives.

Engineers Canada has identified three categories of internally restricted net assets that are required, as follows:

a) Legal defense fund

Engineers Canada requires a legal defense fund to be available to use to fund legal expenses related to issues concerning the engineering profession, including protecting the sovereignty of the term "engineer" and other terms, and to intervene with respect to legal cases that have a significant national interest, or to assist engineering regulators that do not have the financial resources to defend an enforcement action and/or statutory obligation that has a clear and significant impact on other members.

In 2008, Engineers Canada commissioned an actuarial study related to its reserves, which recommended setting up a Legal Defense Fund of $1,000,000 with an annual increase of $40,000. Based on this study, Engineers Canada has established a legal defense fund of $1,500,000.

b) Strategic priorities fund

Engineers Canada is entering a period of significant transition with its *2019-21 Strategic Plan*, which is calling for specific initiatives to enable the plan, investments in competency-based assessment, and improvements to technology-enabled services.

For technology-enabled services, in addition to the planned projects to improve operations and services to members, Engineers Canada is operating in an environment of rapid technological change and accelerating risks (such as cyber security). Engineers Canada expects that it will need to make a substantial investment in its information technology and systems over the next five years in order to implement standard/best practices in performance, accessibility, and security. This Fund is intended to provide funding for both the current planned projects and future projects.

Based on the *2019-21 Strategic Plan* and future technology risks, Engineers Canada has established a strategic priorities fund of $2,000,000.

c) Contingency reserve fund

Engineers Canada will maintain a contingency reserve fund to mitigate the financial impact of the risk of a significant, negative event caused by changes in their political, economic, and regulatory environment that are outside of its control.

Back to agenda

The current, more significant risk factors that could impact significantly and adversely impact revenues include:

- Membership demographics: Regulator assessment revenues are based on the number of members. As with many professional organizations, Engineers Canada's membership is aging, so there is a significant risk of a sustained decline in assessment revenues, with a corollary impact on affinity revenues.

- Affinity programs: Engineers Canada largest revenue stream is affinity and insurance revenues. These revenues would be impacted by either a departure of a province from an affinity program, or a cancellation or non-renewal of a program by the service provider.

- Provincial regulators: With all national membership organizations, there is a risk that a province could exit the national organization.

Based on these and other risks identified in Engineers Canada's assessment of risks, Engineers Canada has established a contingency reserve fund of $2,500,000.

This amount is equivalent to approximately three-months of operating costs of Engineers Canada, which is a consistent benchmark used by not-for-profit organizations for general contingency reserves.

1.4 INVESTMENT IN CAPITAL ASSETS AND INTANGIBLE ASSETS

The investment in capital assets and intangible assets is a calculated amount, in accordance with Canadian Accounting Standards, as defined in the appendix below. Engineers Canada's historical practice is to fund its capital assets and intangible assets with its net assets, other than deferred lease inducements related to its leased premises. This policy supports the creation of separate reserves to fund the acquisition of capital assets and/or information technology (as with the strategic priorities fund above) to provide appropriate funds for future acquisitions.

1.5 UNRESTRICTED NET ASSETS

Unrestricted net assets are maintained to fund the appropriate level of liquid working capital needed to maintain regular operations. Engineer Canada's target unrestricted net asset balance will be determined annually, with consideration for immediate liquidity needs and Engineers Canada's cash flow requirements beyond those addressed in existing internally restricted balances. The target unrestricted net asset balance will be consistent with recommendations made by management to the Board of Directors as part of the annual budgeting process.

Based on an analysis of monthly and annual expenditures and cash flows, Engineers Canada plans to maintain an unrestricted net asset balance of no less than $1,000,000 on an on-going basis.

1.6 Appendix: Definitions

This paper references the following definitions:

- **Net assets**: Total net assets represent a not-for-profit organization's residual interest in its assets after deducting its liabilities.

- **Investment in tangible capital and intangible assets**: The amount of net assets that are funding Engineers Canada's tangible capital and intangible assets. This amount is calculated as:

  Net book value of tangible capital and intangible assets
  Less: long-term debt related to the tangible capital and intangible assets
  Less: deferred lease inducements related to capital assets
  Less: deferred contributions used to acquire tangible capital and intangible assets
  Investment in tangible capital and intangible assets

Back to agenda

- **Internally restricted net assets ('reserves'):** Net asset amounts that have been set aside by Engineers Canada for a specified future purpose or specified future contingencies. The two general categories of internally restricted net assets that are commonly used by not-for-profit organizations are:

  Strategic reserves provide funding for, typically one-time, projects, investments or events that support the achievement of the organization's strategic priorities to allow for regular operations to continue in the year of these strategic initiatives. Strategic reserves should be aligned with the not-for-profit organization's strategic plan.

  Contingency reserves mitigate the financial risk of a significant uncontrollable/unexpected negative event that would have an adverse impact on the financial position of a not-for-profit organization. These events typically cause an immediate and/or sustained decline in annual revenues or increase in expenses. A contingency reserve is held to provide funds to cover the cost of the contingency to allow the not-for-profit organization to maintain regular operations while responding to the negative event. The contingency reserve is normally supported by an official risk assessment performed by the not-for-profit organization.

- **Unrestricted net assets**: Net assets amounts that are not internally restricted and are not investments in capital assets and intangible assets. Unrestricted net assets are commonly viewed as the amount of liquid working capital needed for regular operations.