

Engineers Canada 30 by 30 Initiative: Action Plan for PEO

INTRODUCTION

Resolving the under representation of women in the engineering profession is in the public's interest because it draws from the entire engineering talent pool in Ontario. Unlike other diversity groups, women comprise over 50% of the population. Other professions, such as law, medicine and business have already recognized their responsibilities in closing this gap and have already achieved, or are making greater strides in achieving, gender equity.

The following action plan therefore identifies activities that PEO needs to undertake, per its regulatory mandate and complementary to OSPE's advocacy efforts, to ensure that the engineering profession in Ontario reaches the milestone that 30% of newly licensed engineers in Canada are women by 2030. In addition to this shared commitment between OSPE and PEO, it is also critical that the unacceptably low number of women in the profession be regarded as not just a women-in-engineering issue, but an issue of concern for the entire engineering profession, both women and men. The action plan has been developed with this dual ownership in mind.

BACKGROUND

In 2011, Engineers Canada launched a bold mission, the 30 by 30 initiative, a commitment to raising the percentage of newly licensed engineers in Canada that are women to 30 percent by 2030. The 30 percent figure is widely accepted as the threshold for self-sustaining change¹.

PEO did not initially endorse the initiative because, unlike the other regulators, Ontario has a separate advocacy arm of the profession, OSPE. When the initiative was first launched, it was therefore agreed that OSPE should take on the champion role for the 30 by 30 initiative, appropriate for its mandate of advancing issues of importance to the profession. However, upon further examination, it was clear that PEO, in its regulatory capacity and as the official constituent association of Engineers Canada, also has a critical role in ensuring that this licensure goal is realized. On September 29, 2017 PEO Council formally sanctioned the 30 by 30 initiative and established a Task Force to develop an action plan that is appropriate to PEO's regulatory mandate.

More specifically, the following action plan has been developed based on Engineers Canada's 30 by 30 nine promising practices: <https://engineerscanada.ca/sites/default/files/30by30-en.pdf>.

¹ Engineers Canada "Reaching 30 by 30 - Promising Practices for Increasing Diversity & Inclusion in Engineering" (<https://engineerscanada.ca/sites/default/files/30by30-en.pdf>), 2015

These promising practices focus on the original intention of increasing the percentage of women newly licensed in the profession and do not deal directly with two new strategic objectives of the 30 by 30 initiative. The new goals focus on the retention and professional development of women engineers as identified in the Engineers Canada's 2019 to 2021 strategic plan. Anticipating the eventual need to address the expanded mandate in the 30 by 30 action plan, a few suggestions for activities related to retention are included in this version (e.g. tracking post-licensure representation of women in the profession at specific intervals, in addition to newly licensed professionals). As well, if employers adopt many of the actions identified in this plan, they will be laying a foundation for professionally developing and advancing women engineers throughout their careers and, ultimately, their retention in the profession.

INTERNAL ACTIVITIES

ENGINEERS CANADA PROMISING PRACTICE NO. 1: APPOINT A WOMEN-IN-ENGINEERING CHAMPION

PEO ACTION

- PEO, as the association member of Engineers Canada, has appointed a champion to Engineers Canada, the Chair of PEO's 30 by 30 Task Force, in conjunction with OSPE, to speak for its commitment and actions in advancing this licensing goal as Ontario's regulator.
- PEO has also established a 30 by 30 Task Force that has been assigned dedicated staff, volunteers and budget to develop an action plan for Council approval and facilitate its launch internally and with key stakeholders.

ENGINEERS CANADA PROMISING PRACTICE NO. 2: CREATE AND SUPPORT A WOMEN-IN-ENGINEERING OR DIVERSITY AND INCLUSION COMMITTEE TO SUPPORT STAFF EFFORTS

PEO ACTION

- PEO has established a 30 by 30 Task Force that reports directly to PEO Council to facilitate the engagement, ownership and uptake in implementing this action plan.
- PEO also has an Equity and Diversity Committee to ensure this mandate is put into practice within PEO's internal organization in terms of staff and volunteers; some of their efforts can support the 30 by 30 initiative.
- Other committees, such as the Central and Regional Election Search Committee, Human Resource Committee and Regional Congress Committee (RCC), also play a role in ensuring that gender equity is formally incorporated into their mandates and being tracked for progress because women engineers in volunteer leadership roles with the regulator encourages other women to pursue licensure.

- PEO can also collaborate with OSPE’s Women in Engineering Advocacy Champions Task Force (WEACT) on issues and activities of mutual benefit.

ENGINEERS CANADA PROMISING PRACTICE NO. 3: TRACK PROGRESS TOWARD 30 BY 30 IN YOUR JURISDICTION

PEO ACTION

- PEO needs to track and report progress towards the 30 by 30 milestone at a provincial level using licensure data that PEO reports to Engineers Canada (i.e. gender-based data for newly licensed and licensed engineers in Ontario). Post-licensure participation of women in the Ontario engineering profession should also be analysed for retention tracking (e.g. at the five, 10, 20- year mark). Annual reports on the milestone metrics should be provided by the Registrar to PEO Council, with initial support from the 30 by 30 Task Force, to assess progress in Ontario compared to the national average (based on Engineers Canada annual data) on newly licensed women engineers and women engineers who have reached the five, 10, and 20-year mark. These results are to be shared with OSPE and the Engineers Canada Equitable Participation in the Profession Committee.
- Other metrics such as the percentage of women running for PEO council elections; serving on and in leadership positions on PEO council; and serving on and in leadership positions on PEO committees, chapters, task forces and other volunteer initiatives should also be tracked and reported annually by the Registrar to PEO council, and the results shared with OSPE. Increasing the number of women in volunteer leadership positions will not only showcase roles models to young girls and women that engineering is a welcoming and inclusive profession, but also support leadership and professional development opportunities for women engineers.
- PEO’s current initiatives to help domestic and international engineering graduates obtain their licenses can be further targeted at women to facilitate their licensure and tracked to measure the progress being made in reaching the 30% goal. These programs include:
 - Chapter information sessions and the Licensing Assistance Program (LAP), a mentorship program to help Engineering Interns (EIT) navigate the licensing process;
 - EIT annual work experience reviews;
 - PEO’s Engineering Intern and Student Program to promote the EIT program to students and other groups;
 - PEO’s International Engineering Graduate (IEG) bridging programs.
- PEO can also collaborate further with faculties of engineering to promote the value of the engineering license to engineering graduates, especially women, and track how many women engineering graduates are pursuing licensure.

Focusing on women who graduated in engineering who otherwise would not pursue licensure bolsters PEO’s overall licence uptake.

ENGINEERS CANADA PROMISING PRACTICE NO. 4: CREATE AND/OR SUPPORT AN AWARD FOR EMPLOYERS WHO SUPPORT AND PROMOTE WOMEN IN ENGINEERING

PEO ACTION

- PEO could establish an award for employers who support and promote women in engineering, such as sponsoring and publicizing the Engineers Canada Welcoming Workplace initiative; however, PEO should also develop a program to both educate and recognize progressive employers who implement the initiative's recommendations and other measures to ensure women engineering graduates and foreign trained women engineers are given relevant EIT experience and mentored towards licensure in Ontario. These entry-level programs can then be further evolved into professional development and mentorship programs to foster the retention and career progression of women engineers in their organizations. Showcasing progressive employers could take place through PEO Communications, the OPEA Gala, if applicable, and at the AGM. PEO partners, such as Consulting Engineers Ontario (CEO), could also highlight consulting engineering firms who are demonstrably committed to the 30 by 30 initiative in their awards program and promotional efforts.
- The PEO AWC also strives for female representation in the Awards Program, including the jointly administered OPEA program, and the External Honours Program where leading women engineers are identified and nominated for Ontario Women's Directorate Leading Women, Leading Communities Awards. These nominations are raising both the profile of women engineers, as well as the engineering profession as a whole, to MPPs.

ENGINEERS CANADA PROMISING PRACTICE NO. 5: CREATE AND/OR SUPPORT SCHOLARSHIPS FOR FEMALE ENGINEERING STUDENTS WHO ACT AS ROLE MODELS TO FEMALE STUDENTS IN MIDDLE AND HIGH SCHOOLS

PEO ACTION

- PEO currently encourages its members to support the Canadian Engineering Memorial Foundation (CEMF) Scholarship when they pay their annual licensing fees. Scholarships are awarded to young women who demonstrate exceptional leadership and are volunteers in their communities. Recipients are asked to be Ambassadors to the profession and mentors to those who follow.
- In its support of the Ontario Professional Engineers Foundation for Education, PEO should also encourage that the program's entrance and undergraduate scholarships continue to be bestowed on a 50:50 basis to young women.
- PEO chapters should also ensure that there is equitable representation of women being considered and selected for their scholarships for engineering students and EITs, and that recipients go on to pursue their licensure.

ENGINEERS CANADA PROMISING PRACTICE NO. 6: WOMEN IN ENGINEERING MAGAZINE, NEWSLETTER, OR ARTICLES AND ENGINEERS CANADA; and PROMISING PRACTICE NO. 7: WOMEN IN ENGINEERING WEBPAGE SECTION

PEO ACTION

- PEO needs to educate the membership on the expanded 30 by 30 mandate of recruitment, retention and professional development/advancement of women engineers and annually publish the joint declaration of both OSPE and PEO Presidents' commitment to the initiative, highlighting the progress being made in recruiting and retaining women in the engineering profession in Ontario.
- PEO's website should publish its complementary role in the 30 by 30 initiative as the regulator and feature its activities related to the 30 by 30 initiative with a link to the WEACTION page on OSPE's website for more information on advocacy efforts.
- PEO should ensure that women engineers are equitably featured and promoted in their publications.
- PEO could also highlight progressive engineering leaders, both male and female, and industries and employers committed to increasing the representation of women licensed in engineering in both their recruitment and retention efforts. An "employer of the year" award or some other type of recognition for the organization and/or industry making the biggest strides towards increasing women's licensure and participation in the engineering profession could also be established and publicized.
- To enable progressive employers in cultivating a more inclusive work environment for women engineers and support the 30% recruitment, retention and professional development goals, a Gender Audit to uncover specific opportunities for improvement in their organizations could be recommended.

ENGINEERS CANADA PROMISING PRACTICE NO. 8: VISIBILITY IN THE COMMUNITY

PEO ACTION

- PEO needs to ensure women engineers are represented in PEO regulatory activities, leadership and volunteer opportunities and awards programs, such as the OPEA, Order of Honour, G. Gordon M. Sterling, External Honours, and Chapter recognition initiatives.
- Formally encourage, recruit and nominate women to run for PEO Council through Central Election Search (CESC) and Regional Election Search Committee (RESC) policy, and for leadership

and volunteer positions in chapters, task forces and other initiatives. Actively search and reach out to women through expressions of interest to run for PEO-designated positions on boards, professional societies, or other organizations.

- Encourage chapters to promote engineering licensure to female engineering students and new graduates; highlight licensed women practicing in engineering to act as role models; and support and mentor women engineers in various stages of their careers to help retain them in the profession. PEO Chapter Women-in-Engineering committees, with participation from both women and men, should be part of OSPE's WEACT network, and can play a role at the chapter level in facilitating the mentorship and support of women engineering graduates and foreign trained engineers in pursuing licensure and progressing in their careers.
- The Registrar also needs to track progress on recruitment and retention efforts (numbers, female-to-male ratios) and report to Council on an annual basis. Results should also be shared with OSPE.

ENGINEERS CANADA PROMISING PRACTICE NO. 9: SUPPORT MEMBERS BY CELEBRATING DIVERSITY AND INCLUSION

PEO ACTION:

- The activities identified in the above promising practices will work towards fostering and celebrating gender equity and inclusion in the engineering profession. Where appropriate, PEO can also collaborate with or support other women-in-engineering groups, such as the Society of Women Engineers (SWE) in encouraging more women to pursue licensure.

ACTIVITIES IN PARTNERSHIP WITH EXTERNAL ORGANIZATIONS

Programs such as the OSPE-PEO joint Engineering Professional Success Pilot Mentorship Program for Women, a two-year pilot program that supported women who are recent engineering graduates and in the early stages of their careers, and has involved both men and women mentors, highlights opportunities for partnership with external organizations (Status of Women Canada) and how both the advocacy and regulatory arm of the profession can work collaboratively towards achieving the 30 by 30 goal.

CONCLUSION

The actions outlined in this plan may appear, at least initially, as a sizeable commitment from PEO. However, PEO is already doing many of these activities, just not with a gender-focused approach. As well, without formally tracking the percentage of women obtaining – and retaining – their licenses, effective solutions to address the problem will not be put into practice, and the underrepresentation of women in the profession will persist.

Unless we, as a profession, resolve this inequity, our image in society will remain unfavourable when it comes to women's participation in our profession, and we will be not serving the public's interest fully, given over half the population is women. And without women's full participation in the practice of engineering, we are not tapping into the entire engineering talent pool in Ontario.

The time to address this inequity is now!