



Reaching 30 by 30 Promising Practices for Increasing Diversity & Inclusion in Engineering



The 30 by 30 goal is Engineers Canada's commitment to raising the percentage of newly licensed engineers that are women to 30 per cent by the year 2030. Engineers Canada is pleased that 30 by 30 has received unanimous endorsement across Canada. The 30 per cent figure is widely accepted as the threshold for self-sustaining change and the engineering profession can achieve 30 by 30 through working together towards the same goal.

The Engineers Canada's Women in Engineering Committee has created a living document of promising practices for increasing diversity and inclusion in engineering, with particular emphasis on reaching 30 by 30. Engineering regulators and other engineering stakeholders may wish to use it as a starting point in developing their own strategies. The guide is not meant to be a comprehensive list but rather a collection of practices that have delivered positive results in various parts of the country. Engineers Canada invites anyone working towards 30 by 30 to share initiatives that are delivering positive outcomes. This guide will be updated as new best practices are identified.



INTERNAL ACTIVITIES

Appoint a Women in Engineering champion

Assign a dedicated staff person or a portion of staff's time to the support of Women in Engineering activities such as sponsoring or partnering with other organizations, organizing outreach events, and conducting research that builds community and supports retention.

Create and support a Women in Engineering or Diversity and Inclusion Committee to support staff efforts

A relevant committee can provide advice and guidance on Women in Engineering initiatives. It is complemented by a dedicated budget to help support staff with their work. The committee will track progress toward the 30 by 30 goal in the regulatory body's province or territory. Committees may report to the CEO or to Council.

Track progress toward 30 by 30 in your jurisdiction

Track numbers and percentages of female and male members achieving licensure each year. Consider tracking those statistics at various career stages, for example, at the EIT registration stage and at the five, 10, or 20 year mark after licensure. Note trends to identify and foster successful initiatives as well as to identify areas to be addressed (for example – are there points where women appear to leave at a higher rate than men?).

Create and/or support an award for employers who support and promote Women in Engineering

Engineers Canada is currently developing a program, Welcoming Workplace, to increase retention in the engineering profession. It includes, among other elements, national publication of APEGA's "Managing Transitions" document and the Engendering Engineering Success study. Regulators could participate in Welcoming Workplace by recognizing employers that adopt the resulting recommendations.

Create and/or support scholarships for female engineering students who act as role models to female students in middle and high schools

Work with the Canadian Engineering Memorial Foundation (CEMF) to promote existing scholarships or create additional ones. Create a provincial scholarship that encourages female engineering students to act as role models to girls in middle and high school.

Women in Engineering magazine, newsletter, or articles

Increase the amount of attention that is given to women in the media work that is done. This can include:

- Showcasing a Welcoming Workplace Profile
- Celebrating women engineers in articles (Institute of Electric and Electronics Engineers (IEEE) Women in Engineering & Women Engineer Publications are good examples)
- Re-printing articles written by others such as the Canadian Centre for Women in Science, Engineering, Trades and Technology (WinSETT Centre)
- Publishing & adapting Canada-wide initiatives
- Including a diversity column

Women in Engineering webpage section

Create a dedicated section for your website that is focused on diversity or Women in Engineering. Encourage employers and stakeholders to share success stories, promising practices, diversity efforts, and other applicable initiatives that can be posted. Include profiles of successful members who are women, share your action plan for the 30 by 30 goal, and promote other entities in your province or territory that are working towards the same outcomes, such as the Canadian Science & Technology Museum's Women in Innovation project.

Visibility in the community

Encourage women to volunteer to be role models for the profession. Provide them with opportunities to share their talents and participate in activities that are of interest to them by:

- Encouraging women to participate as volunteers or judges at science fairs, robotics competitions, career symposiums, math competitions, etc.
- Nominating women to positions on the board
- Promoting WISE and NSERC Chairs work and activities
- Sponsoring appropriate industry events and sending representatives that are women
- Leveraging National Engineering Month activities by organizing activities that demonstrate unexpected aspects of engineering, i.e. more than the usual popsicle stick bridges
- Hosting socials/fundraisers to support CEMF; ticket sales could be split between covering costs & donating to CEMF
- Consider women members or staff when nominating for awards and honours

Support members by celebrating diversity and inclusion

Improving retention of existing members, including women and other under-represented groups, positively influences the image of the profession for the purpose of attracting new, diverse members. Some activities that celebrate diversity and inclusion to consider:

- Hosting networking events that celebrate diversity and inclusion, for example, speed networking or trivia nights such as organized by Women in Science and Engineering (WISE) Sudbury
- Supporting family activities and encourage members to bring along someone who could become interested in engineering
- Promoting LinkedIn accounts, networks and groups that celebrate diversity and inclusion
- Encouraging women and under-represented groups to volunteer on committees or to run for council/board positions (track volunteer numbers & ratio of female to male, etc.)

- Supporting member attendance at bi-annual Canadian Coalition of Women in Engineering, Science, Trades and Technology (CCWESTT) conference
- Sponsoring regional conferences in non-CCWESTT years (participate, support members' attendance, sponsor)
- Assisting with communication of guidelines for return to work from leave
- Promoting the activities of groups such as Engineers without Borders (EWB), WISE, etc. in addition to those of the regional NSERC Chairs for Women in Science and Engineering. For more information on the Chairs, visit: www.nserc-crsng.gc.ca/Women-Femmes/Index_eng.asp

ACTIVITIES IN PARTNERSHIP WITH EXTERNAL ORGANIZATIONS

Host a WinSETT Women in SETT Leadership Program Workshop

Module 1: Becoming Leaders: An Introduction to Leadership Skills and Strategies

Module 2: Effective Communication for Women in Science, Engineering, Trades and Technology (SETT)

Module 3: Negotiating for Success

Module 4: WinSETT Leaders in Networks and Mentorship

Module 5: WinSETT Leadership and Change

Module 6: Leadership and 21st Century Challenges

Module 7: Women in SETT Leadership

Employers' Modules: Towards a Respectful and Inclusive Workplace

More Information: www.winsett.ca/programs/leadership-program/leadership-program-promo-final-oct-2014-pdf

Partner with WinSETT on other initiatives

Evaluate feasibility of getting involved in other ongoing initiatives developed by WinSETT and its partners:

- Retaining and Advancing Women Scientists and Engineering in the Oil and Gas Sector in AB
- Gender Diversity and Inclusion - WinSETT/ WorleyParsons Partnership
- Recruitment, Retention and Advancement of Women - WinSETT/ Suncor Partnership
- Developing Women's Leadership in Engineering - WinSETT/ APEGA Partnership
- Diversity Awareness and Career Development in the Mining Sector - WinSETT/ BC Mining HR Task Force Partnership
- Engendering Engineering Success - WinSETT/ NSERC Partnership Research Project
- Welcoming Women into Science, Engineering, Trades and Technology Workplaces: A Checklist of Strategies

More Information: www.winsett.ca/programs/other-initiatives

Host diversity workshops for members and employers

Provide information on practices that are conducive to a diverse and inclusive workplace. This includes evaluation of own practices, showcasing proven actions, and a call to action for employers.

See the above WinSETT Employer's Modules as an example.

Partner with other organizations on outreach efforts

Partner with local groups with similar outreach goals - Science Centres, Girl Guides, Go Eng Girl, etc.

Examples:

www.onwie.ca/programs/badge-day

www.onwie.ca/programs/go-eng-girl

Collaborate with post-secondary institutions

Engage in activities that will increase the attractiveness of the engineering profession. This can include:

- Presenting a salary survey seminar similar to the one developed by Dr. Elizabeth Croft (UBC)
- Supporting post-secondary institutions with outreach efforts
- Encouraging adoption of Go Eng Girl and backing Girl Guides' Engineering Badge Day
- Promoting engineering to teachers and guidance counsellors (ex. at conferences and through professional publications)
- Supporting university based Women in Engineering/ WISE groups & holding joint networking events
- Facilitating an Engineering Day with activities for parents and children with promotion by regulators

**For any questions about 30 by 30, please contact
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