

# 30 BY 30 STRATEGY

Our goal is to increase the number of newly licensed engineers that are female to 30% by 2030

We will do this by:

- Increasing awareness of and attraction to the professions of engineering and geoscience
- Improving the retention of women in the professions of engineering and geoscience

We aim to encourage and support the recruitment and retention of women in engineering by:

#### 1. LEVERAGING OUR STRENGTHS

Our strength is our member support programs. By optimizing and leveraging our programs, we will strengthen our support for 30 by 30

We have an active **career outreach** program – By expanding the program, building key partnerships and providing training to volunteers, we can change the perception of engineering and inspire the next generation of professionals

We have a strong **mentoring** program – By enhancing the scope of the program and focusing a stream on diversity, we can create more peer-to-peer support mechanisms and guide members throughout their career

We have a comprehensive **professional development** program – By incorporating more diversity learning opportunities for members and employers, we can support the advancement of members and facilitate dialogue to better understand the issues

We have effective **member communication** vehicles – By creating key messages, profiling role models, highlighting organizational best practices, sharing resources and facilitating dialogue on the barriers that exist for women in the profession, we can be the catalyst for conversation and aim to advance a cultural shift

We have an active **student outreach** program – By working with students and universities, we can support students, work to increase retention at the post-secondary level and further support the transition from student to member in training.

We have engaged **branches and divisions** – By working with our volunteers, we can identify champions, and enhance our efforts by creating networking and professional development opportunities to further support members

#### 2. BUILDING RELATIONSHIPS TO MAXIMIZE COLLECTIVE EFFORTS

Our strength is our relationships. By building on our existing relationships and developing new partnerships, we can maximize our collective efforts in support of 30 by 30.

We have over **34,000 members** – Through this connection, we have the ability to engage members as champions for diversity and inclusion

We have relationships with **post-secondary institutions** – Through these relationships and the development of new connections, we can identify leaders and key influencers and work collectively in support of diversity and inclusion

We have relationships with other **regulators across the country and Engineers Canada** – Through these connections, we can share resources, and work collectively by collaborating on programs and initiatives

We have relationships with **organizations and employers** – Through setting an example at the association and supporting the development and sharing of strategies and tools for effective workplaces, we can encourage companies and organizations to improve their corporate diversity

### 3. SUPPORT GIRLS AND WOMEN ALONG THE FULL CAREER PATH

Fundamental to our strategy is to support girls and women along the full career pathway focusing on the issues unique to each stage.

**K-12 & University**: Changing perception of engineering and what engineers do, providing mentorship where possible

**EITs and Early Members**: Assisting in the development of peer and mentoring relationships that will support throughout her career

**Mid and Late Members**: Supporting members and companies to look at providing more onramps for members who take leave for family reasons, and engaging leaders, employers, key influences as ambassadors for diversity and inclusion

**All members**: Facilitating dialogue to better understand the barriers that exist for women in the profession with the goal of advancing cultural shift

For more information on current activities and new potential activities related to each of these stages, refer to our *Guide to Action* one-pagers. These activities are the basis from which the tactical plan will be developed to support our strategy.

General Public

K-12

Post-Secondary

Members in Training

Professional Members

**Audience** 

Public

**Important** 

Why this Group is Parents, teachers, career counsellors, coaches, and family will be the ones who first explain to kids "what an engineer does" and eventually encourage young men and women to consider engineering when they apply to post-secondary education. It's important that they be informed in the diverse options as much as the students who will be applying.

| What We Heard             | <ul> <li>Need to enhance public perception of engineering and address stereotypes</li> <li>Show how engineering is a helping profession</li> <li>Create more awareness of the diversity of professions within engineering</li> <li>In previous public opinion survey (2011), the perceived barriers to teens pursuing engineering were: requiring a high aptitude in mathematics, education tuition costs, profession is too academically challenging, lack of awareness, and difficulty to get into educational institutions</li> <li>2018 public opinion survey asked the likelihood of recommending engineering as a career choice for young women; 80% were either very likely or somewhat likely</li> </ul> |
|---------------------------|--|
| Current<br>Activities     | <ul> <li>National Engineering and Geoscience Month campaign promotes and highlights the engineering and geoscience professions by hosting public events around the province</li> <li>Celebration of International Women in Engineering Day to raise the profile of women in engineering and focus attention on the career options available</li> <li>New brand and marketing material showcasing diversity of profession and diversity of disciplines</li> </ul>   |
| Proposed<br>Activities    | <ul> <li>Enhance public perception of engineering and the diversity of disciplines within the profession (through media)</li> <li>Raise the profile of engineering as a career of choice (media)</li> <li>Create short videos of women in STEM (heroes)</li> <li>Target social media campaigns / videos at teenaged girls</li> <li>Partner with others</li> </ul>  |
| Potential<br>Partnerships | <ul><li>Engineers Canada</li><li>Sister Associations</li><li>Girl Guides</li></ul>   |



General Public

K-12

Post-Secondary

Members in Training

Professional Members

**Audience** 

Girls, Parents, Teachers, Counsellors, Public

Why this Group is Important

Our "target" 30 by 30 group for the year 2030 will be starting grade 8 in the fall of 2018, so we need to reach these kids as part of our strategy.

| What We Heard          | <ul> <li>Need more media to support outreach efforts</li> <li>Need formal training for career awareness volunteers</li> <li>Need to form partnerships with other organizations</li> <li>Need to educate teachers, parents and counsellors</li> <li>Need to work with school districts</li> <li>Work with the Ministry to adapt and change the curriculum</li> <li>What more could we do at the high school level?</li> <li>Increase scholarship opportunities</li> <li>Participate in Parent's Nights at schools</li> </ul>  |
|------------------------|--|
| Current Activities     | <ul> <li>Career outreach visits reach 8,000 kids each year</li> <li>Career Awareness resources &amp; tools include a presentation template, video, activity kits, promotional items, and a career brochure for high school students</li> <li>Hold an Annual Science Games targeting grades 1 - 6 for students to explore the principles and theories of science first hand</li> <li>Sponsor events and provide grants to science camps</li> <li>Coordinate participation at various community and special events throughout BC (Around the Dome, GUEST, Ranger Revolution, Science Literacy Week)</li> <li>New lesson plan development underway linking directly to new BC Curriculum</li> <li>New tracking tools in development to better assess impact of engagement</li> <li>opportunities</li> </ul> |
| Proposed Activities    | <ul> <li>Increase the total number of career awareness volunteers</li> <li>Increase the number of female career awareness volunteers</li> <li>Enhance career awareness resources and tools</li> <li>Increase high school level engagement</li> <li>Develop key messages for varying audiences</li> <li>Introduce a training program for career outreach volunteers</li> <li>Partner on a Train the Teacher Program (e.g. UBC)</li> </ul>   |
| Potential Partnerships | <ul> <li>Post Secondary Institutions</li> <li>Science World</li> <li>BC Teacher's Foundation</li> <li>YWCA</li> <li>Sister Associations</li> <li>Girl Guides</li> </ul>  |



General Public

K-12

Post-Secondary

Members in Training

Professional Members

**Audience** 

Students, Professors, Counsellors, Public

Why is this Group Important

With a noticeable drop between 1st and 4th year in the percentage of women studying engineering, we want to find out why and see if there are ways we can help these young women stay with engineering and find a meaningful career upon graduation.

| What We Heard          | <ul> <li>There is a drop off of female engineering students from 1st year to 4th year</li> <li>Student survey from Canadian Federation of Engineering Students revealed that female engineering students experienced a higher level of stress than males</li> <li>Are there opportunities for co-op programs to pair female students with female role models?</li> <li>Can we develop a career map to show young women the career progression and the different paths to engineering (consulting, industry, your own company)?</li> <li>Need to better support transition to EIT / how can we work with universities to do this?</li> <li>Need to better communicate the benefits of becoming a MIT</li> </ul> |
|------------------------|--|
| Current Activities     | <ul> <li>Student Membership category</li> <li>Host Student Industry Nights</li> <li>Presentations to University Students</li> <li>Student Advisory Group</li> </ul>  |
| Proposed Activities    | <ul> <li>Participate in university orientations</li> <li>Increase support for transition from Student Member to Member in Training</li> <li>Explore ways to simplify transition process from student to MIT</li> <li>Explore mentorship opportunities for students with young MIT's</li> <li>Consider student member volunteer incentives to build up networks</li> <li>Explore collaboration with career counsellors and universities</li> </ul>  |
| Potential Partnerships | <ul> <li>Post Secondary Institutions</li> <li>Industry</li> <li>Alumni groups</li> </ul>   |



General Public

K-12

Post-Secondary

Members in Training

Professional Members

**Audience** 

Students, Employers / Industry

**Important** 

Why is this Group Much of our feedback has shown that women thrive in a supportive environment with peer relationships and networks, many of which can be formed during this early stage in their careers.

| What We Heard          | <ul> <li>Develop resources to encourage women to apply for licensure</li> <li>Create peer meetups (ex. Coffee chats) to establish networking groups</li> <li>Work with other STEM groups to offer discounts for MITs so they can try out a range of groups and find peers that resonate with them</li> <li>Explore new mentoring relationship formats</li> <li>Incentivize volunteering to help MITs establish networks</li> </ul> |
|------------------------|--|
| Current Activities     | <ul> <li>Member in Training Program</li> <li>Accredited Employer Training Program</li> <li>Mentoring Program</li> <li>Professional Development Events</li> <li>Branch &amp; Division Events</li> <li>Annual Conference</li> </ul>  |
| Proposed Activities    | <ul> <li>Develop a female focused stream for the mentoring program</li> <li>Establish new mentoring formats such as one-to-many or many-to-many</li> <li>Explore opportunities to work with other STEM groups</li> <li>Offer more professional development opportunities targeted to MITs</li> <li>Explore ways branches or divisions can help support peer meetups</li> </ul>   |
| Potential Partnerships | <ul> <li>Branches</li> <li>Divisions</li> <li>30 by 30 Champions Group</li> <li>Women in STEM groups such as WWEST, CCWESTT, ACEC-BC, U40 groups, Women in Mining, Geeky Girls, iWIST, SCWIST etc.</li> </ul>  |



General Public

K-12

Post-Secondary

Members in Training

Professional Members

**Audience** 

Members, Employers / Industry

Why is This Group Important

These women will be the role models, mentors, outreach volunteers and inspiration for those following behind them. They will also face their own challenges whether related to workplace culture, or returning to the profession after a leave of absence and it is important to support them in their chosen career while also setting an example for future generations.

| What We Heard          | <ul> <li>Need to address workplace culture and communicate the importance of diversity</li> <li>Create a CEO pledge to support diverse and inclusive work places</li> <li>Advocate for gender equity in senior leadership and boards</li> <li>Address wage gap</li> <li>Enhance web presence</li> <li>Collaborate with other organizations</li> <li>Recognize organizations that support diversity</li> <li>How can corporate regulation be used as a conversation starter</li> <li>In OSPE's survey, mentoring, networking and professional development were the top resources sought by women in support of their career</li> <li>Research on why women leave the profession</li> <li>Learn from the experience and success of other professions</li> </ul>   |
|------------------------|---|
| Current Activities     | <ul> <li>Human Rights &amp; Diversity Guideline</li> <li>Mentoring Program and Professional Development Events</li> <li>Branch &amp; Division Events</li> <li>Annual Conference</li> <li>Women in Engineering and Geoscience Division</li> <li>30 by 30 Champions Group</li> <li>Engendering Success Research Project (7 year study with UBC and SFU)</li> </ul>  |
| Proposed Activities    | <ul> <li>Mentoring program for females</li> <li>Explore opportunities with WIEG division in providing support to members</li> <li>Expand professional development offerings related to diversity and inclusivity</li> <li>Strengthen communication on the importance of diversity and barriers</li> <li>Enhance web presence by sourcing and developing tools and resources for organizations to improve diversity and improve workplace culture</li> <li>Recognize organizations that support diversity</li> <li>Explore opportunities with OQM (best practices in diversity and inclusion)</li> <li>Raise the profile of women engineers</li> <li>Collaboration with others</li> <li>Improve "on ramps" to the profession (fee structure for maternity and parental leaves or extended leaves and return to practice provisions)</li> </ul> |
| Potential Partnerships | <ul> <li>Division</li> <li>Engineers Canada and Sister Associations</li> <li>ACEC-BC</li> <li>Employers</li> <li>Women in STEM groups</li> </ul>  |

