



Professional Engineers  
Ontario



# Engineers Canada 30 by 30 Initiative

PEO's Role in Engineers Canada's 30 by 30  
Initiative and How Municipalities as Engineering  
Employers Can Address the Gender Gap

November 16, 2022



# Overview

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- Equity in Engineering
- Engineers Canada 30 by 30 Initiative
- PEO and Stakeholder Proposed 30 by 30 Actions
- PEO 30 by 30 Action Plan – Update on Stakeholder Engagement and Metrics
- Q&A

# Equity in Engineering





# Why is equity important?

- Outcome of engineering is beneficial for all
- Women are **not a diversity group**, but instead comprise over 50% of the population
- Not tapping into the **full talent pool** in serving the public's best interest
- Chronic underrepresentation portrays our profession unfavourably to the public
- **Other licensed professions** such as law and medicine have already attained gender parity
- Progress toward gender parity in engineering remains slow

# Women in Engineering

## **Engineer's Canada (Initiative started in 2011):**

- In 2011, 13% of newly licensed engineers who identify as women

## **PEO Baseline (from 2018):**

- Nationally, 18.1% of newly licensed engineers who identify as women
- In Ontario, 17.8% of newly licensed engineers who identify as women

**The Challenge:** This percentage stagnated between 2014 and 2019

**The Good News:** For the first time, 20% was exceeded in 2020 both nationally (20.6%) and in Ontario (20.7%)

**What can we do to push this number higher?**

# Engineers Canada 30 by 30 Initiative





# Canada – Moving the Needle

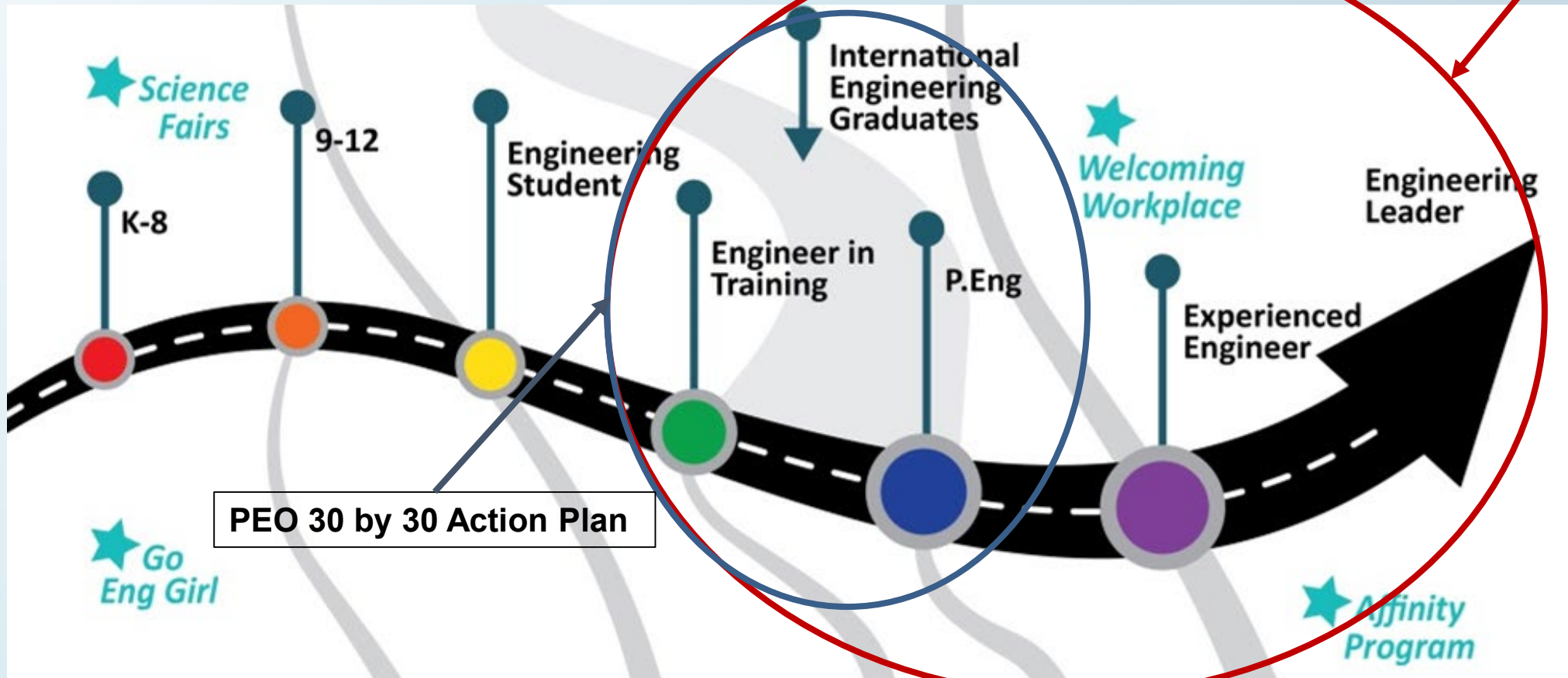
- Engineers Canada launches 30 by 30 Initiative (2011)
- 30 by 30 seeks to increase the number of newly licensed engineers, who identify as women, to **30% by the year 2030**
- Engineers Canada’s Strategic Priority (2018):
  - 2019-2021: SP3, **Recruitment, Retention and Professional Development of women in the engineering profession**
- Engineers Canada’s 2022-2024 Strategic Plan:
  - **“Accelerate 30 by 30”**





# Engineering continuum

Engineers Canada  
Strategic Priority





# Engineers Canada 30 by 30 Update

- Engineers Canada's resources for engineering employers -  
<https://engineerscanada.ca/diversity/women-in-engineering/engineering-employers>
- 30 by 30 Champions across Canada -  
<https://engineerscanada.ca/diversity/women-in-engineering/30-by-30>
- Keep up to date with the 30 by 30 network with the Monthly 30 by 30 Newsletter -  
<http://eepurl.com/hL1YDf>

# PEO and Stakeholder Proposed 30 by 30 Actions



# Activity by PEO

- PEO Council unanimously endorsed the 30 by 30 Initiative (2017)
- PEO established a **Task Force (2018-2021) & Action Plan (2018)**
- Action Plan outlines specific actions for key stakeholders:
  - PEO, as the Regulator (2018)
  - Universities (2019)
  - PEO Chapters, for local engagement (2020)
  - **Employers of engineers (2020)**



# PEO's Actions

In keeping with PEO's mandate, PEO must also examine their own internal operations. Actions in the plan are primarily centred on:

Review	Reviewing licensing process for <b>unconscious bias</b> towards women applicants
Support	Supporting women graduates to pursue licensure through PEO programs and assistance
Feature	Featuring practising women engineers in PEO publications
Encourage	Encouraging women to join & assume leadership roles in PEO <b>committees</b>
Recruit	Actively recruiting women engineers to run for <b>PEO Council</b>
Track	Tracking <b>30 by 30 progress within PEO</b> & providing <b>annual reports</b> to PEO Council





# Current Update on PEO's Actions

2020 Metrics were shared at PEO Council's November 2021 meeting

30 by 30 Task Force was stood down at the end of their term (Dec. 2021)

PEO continues to follow up with interested employers on their willingness to support and/or become, formally, PEO Employer 30 by 30 Champions

PEO continues to collect 30 by 30 metrics and will present these at the Annual Check-in each September, and to Council each November

PEO is currently undergoing an independent gender audit research study of its licensing process and internal operations conducted by U of T's Rotman School of Management



# Employers' Actions

Possible Employer Actions could include:

## Recruitment

- Strive for **30% of new recruits** who identify as female (Canadian & International)
- Be aware of unconscious biases in any selection process

## Professional Development

- Develop in-house Engineering Development Program to facilitate pathway to licensure
- Establish a mentorship (formal/informal) to cultivate a welcoming environment
- Be mindful in assignment selection; provide women opportunities in both engineering and leadership skills, which will position them for licensure and advancement



# Employers' Actions

## Retention Objectives

- Showcase women engineers as role models (in engineering and leadership positions); Demonstrate possible career paths
- Conduct a Gender Audit of HR and Engineering practices
- Incorporate D&I education to all employees; address common inclusivity roadblocks (microaggression, biases, pay equity, etc.).
- Interrupt backlash and debunk myths (e.g. candidate only got the job because they are a woman)

## PEO Relations

- Establish and track 30 by 30 metrics; Report them annually to your company's senior management
- Invite PEO to your workplace! PEO can help setup programs, hold workshops on the pathway to licensure, and offer mentorship guidance to P.Engs.





# 30 by 30 Challenge to Employers

- Willingness to consider becoming/become a **PEO 30 by 30 Champion** for your organization
- As a **PEO 30 by 30 Champion**:
  - Develop an action plan/actions based on the **Action Planning Framework** and shared **best practices** from peers
  - **Develop metrics** (three key indicators) to measure and report progress (anonymously and unattributed) on an annual basis, as recommended by PEO
  - Agree to being part of the larger, collective effort to track and commit to the progress being made on achieving the 30% goal as a profession

# PEO Action Plan Update: Stakeholder Metrics 2018 – 2021



# 30 by 30 Metrics

- Data is based on year-end results for 2018, 2019, 2020 & 2021
- It is anticipated that this will be a yearly reporting to Council on the previous year's results
- 2022 data will be available at the 2023 Annual Check-in



EMPLOYER  
METRICS

Proposed



# Employer Metrics

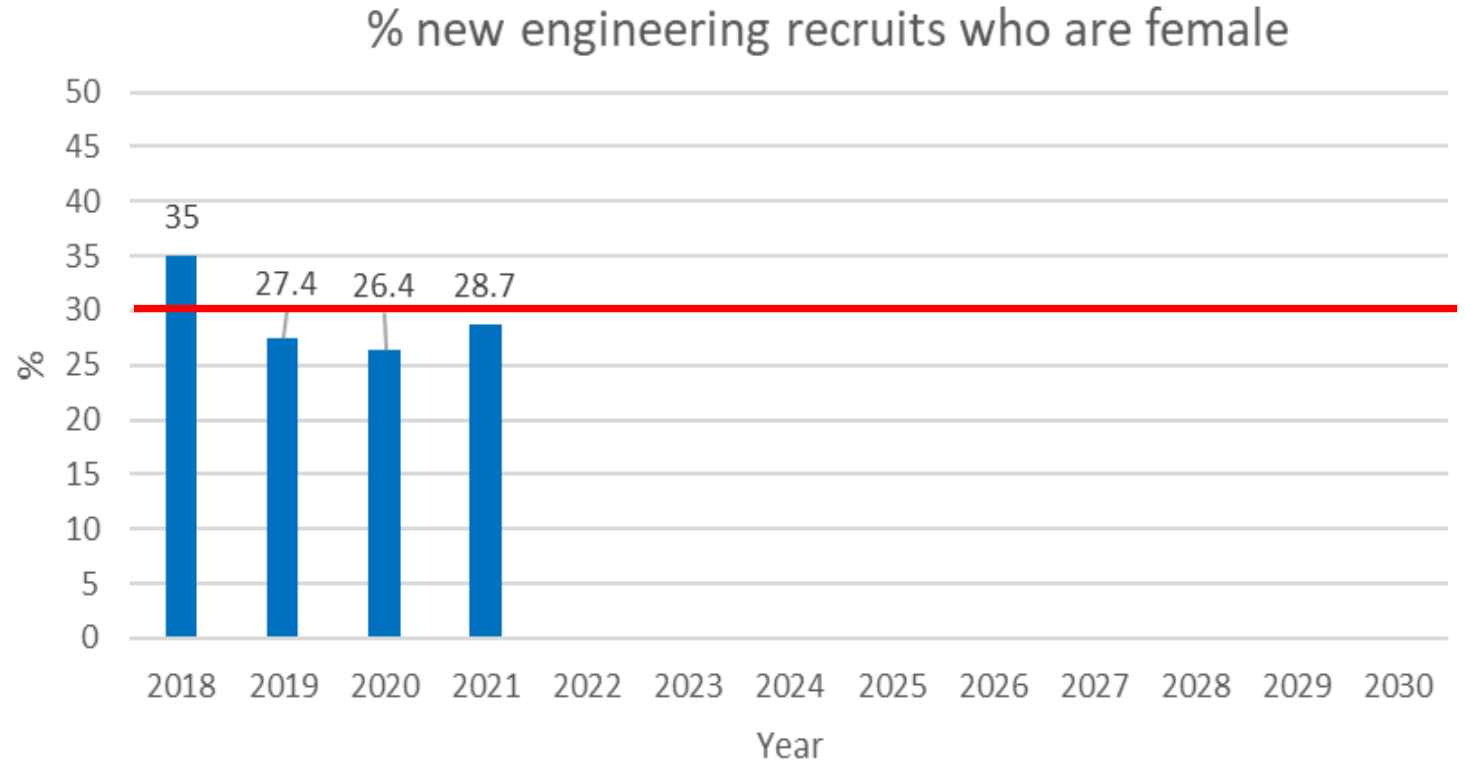
## **METRICS TO BE OBTAINED FROM EMPLOYERS WHO AGREE TO TRACK:**

- % new engineering recruits who are female
- % of female engineering recruits who obtain their licence
- % female engineers in leadership positions (C-suite; management)



## Employer Metrics

Percentage **new  
engineering recruits**  
who are female

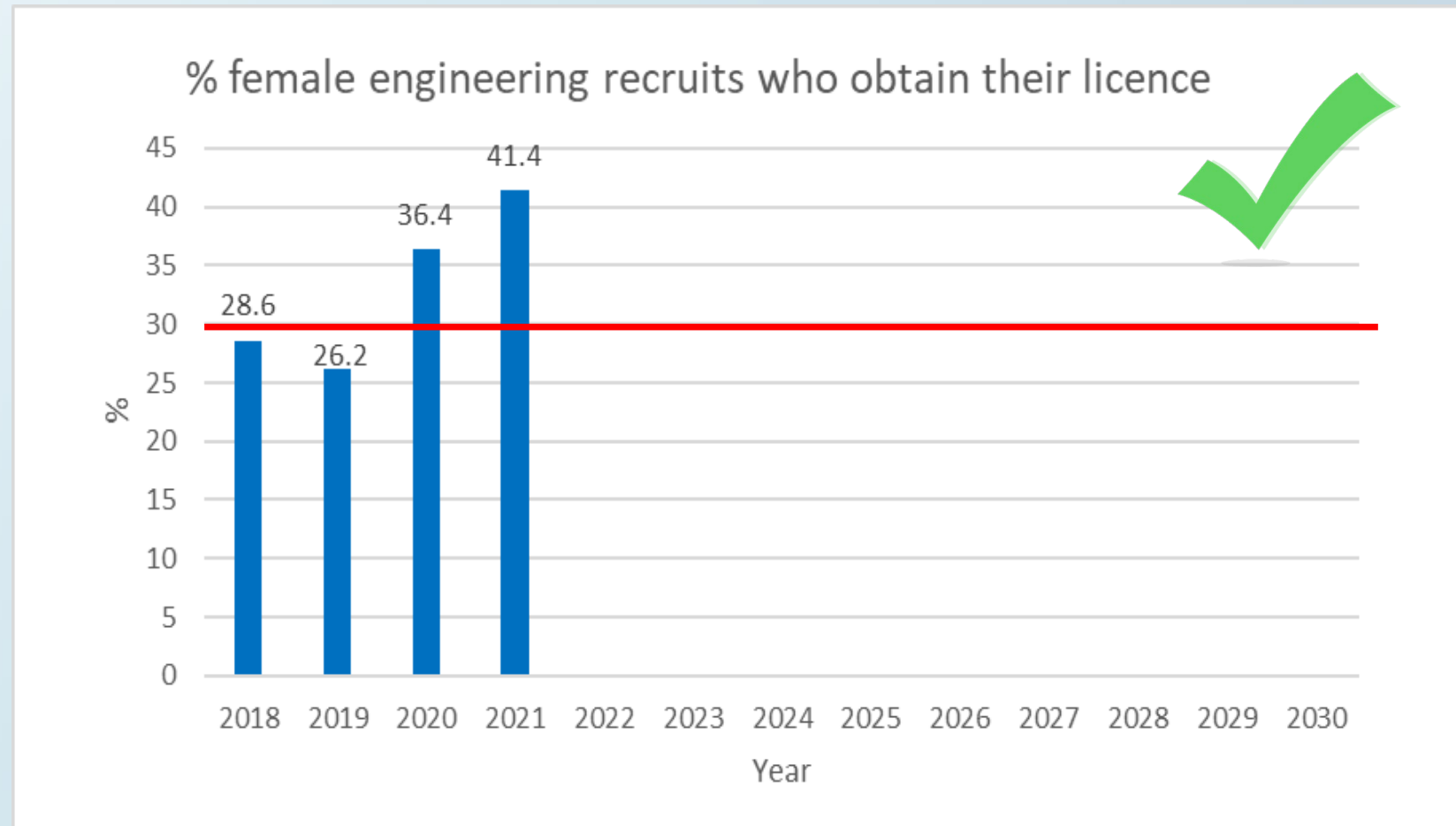


Note: this percentage includes three employers as of 2021; other employers have expressed an interest in the 30 by 30 and may become champions in the future.



## Employer Metrics

Percentage  
**engineering recruits  
obtaining licensure  
who are female**



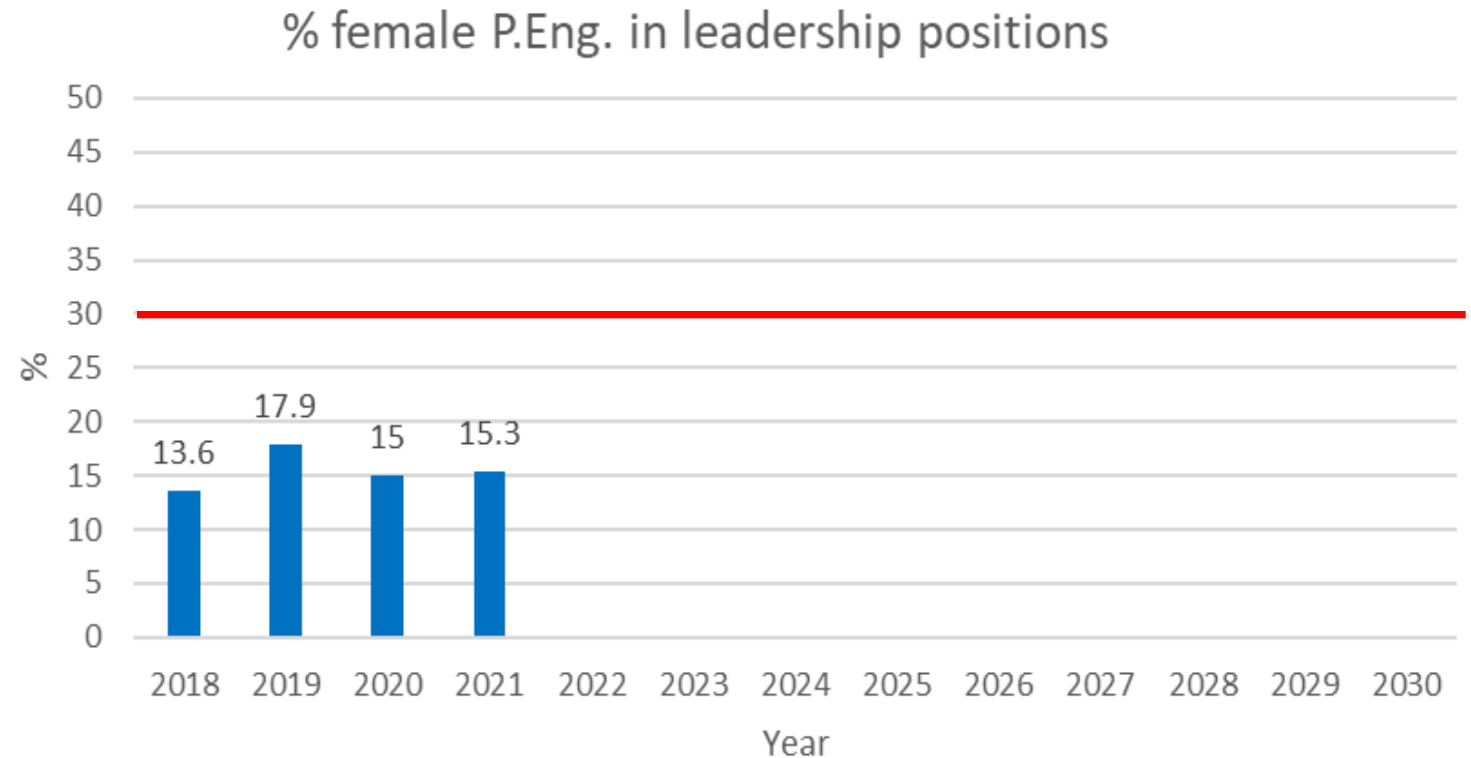
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## Employer Metrics

Percentage **Engineers**  
**in leadership positions**  
who are female



Note: this percentage includes three employers as of 2021; other employers have expressed an interest in the 30 by 30 and may become champions in the future.



# 30 by 30 Metrics - Conclusion

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- Still work in progress
- Lots of work still to be done
- 8 year commitment and reporting

# Thoughts and Feedback





# Thoughts/Feedback



Thoughts on the 30 by 30 initiative and actions?



What do you need to participate in the initiative and become a 30 by 30 Champion?



# Resources – Employer Examples

## Ministry of Transportation Ontario (MTO):

- **Engineering Development Program:**
  - 4-year guided program, Competency Model, Weighted Selection Criteria, Mentoring
  - [www.mto.gov.on.ca/english/about/opportunities/edp.shtml](http://www.mto.gov.on.ca/english/about/opportunities/edp.shtml)
  - <https://www.peo.on.ca/sites/default/files/2019-12/MTO-Engineering-Development-Program.pdf>

## Dr. Sonia Kang:

- Associate Professor of Organizational Behaviour and HR Management and Canada Research Chair in Identity, Diversity, and Inclusion at the University of Toronto, Faculty Research Fellow, Rotman Institute for Gender and the Economy
  - the "business case" for gender diversity
  - her research
  - recommendations for implementation



# Resources – Best Practices

Dr. Sonia Kang's research/recommendations for implementation:

- Myths & Solutions Paper: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(18\)33138-6.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)33138-6.pdf)
- Business Case for Gender Equality: <http://successinstem.ca/wp-content/uploads/2017/02/Business-Case-for-Gender-Diversity.pdf>
- ESS Resources: <http://successinstem.ca/resources/>
- GATE Explainers: <https://www.gendereconomy.org/explainers/>
- Why Diversity Programs Fail: <https://hbr.org/2016/07/why-diversity-programs-fail>
- Paper on Opt-Out Framing and Competition: <https://www.nber.org/papers/w26484>





# Stay in Touch

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- For more information on Engineers Canada 30 by 30:  
<https://engineerscanada.ca/diversity/women-in-engineering/30-by-30>  
<https://engineerscanada.ca/sites/default/files/30by30-en.pdf>

- For more information on PEO 30 by 30 Action Plan:  
[https://www.peo.on.ca/sites/default/files/2019-08/30by30\\_ActionPlan.pdf](https://www.peo.on.ca/sites/default/files/2019-08/30by30_ActionPlan.pdf)

- For more information on PEO's 30 by 30 Action Plan or becoming a Champion:

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# Questions?