



Women in Engineering Standing Technical Committee *of the* World Federation of Engineering Organizations Committee Member Progress Report

This report is a compilation of WIE Committee member report on addressing the goals and objectives for each of the WIE Committee's four themes as submitted from the following countries.

| NO. | ORGANISATION / COUNTRY | REGION | SUBMITTED BY | DATE SUBMITTED |
|-----|---|--------------|---|-------------------------------|
| 1. | Order of Engineers of Angola | Africa | Ariana Silva | 13/02/2025 |
| 2. | Chinese Institute of Engineers, Taiwan ROC | Asia/Pacific | Hsiao-Wen Zan | February 10 and October, 2025 |
| 3. | Institution of Civil Engineers, UK | Europe | Dawn Bonfield | February 2025 |
| 4. | Association of Professional Women Engineers of Nigeria (APWEN)/ Nigerian Society of Engineers (NSE) | Africa | Engr. Dr Atinuke Wuraola Owolabi FNSE, FNIEEE | 4th February, 2025 |
| 5. | Society of Women Engineers of Liberia | Africa | Winnie Mameni Siakor Dilah | January 29, 2025 |
| 6. | Zimbabwe (ZIE WIE) | Africa | Eng Berverly Nyakutsikwa | February 13, 2025 |
| 7. | Ghana Institution of Engineering (GhIE), Ghana | Africa | Ing. Dr. Enyonam Kpekpena | February 14, 2025 |
| 8. | Rwanda | Africa | Naila Umubyeyi | March 5, 2025 |
| 9. | Institution Of Engineers Tanzania - Women Chapter | Africa | Mkufu Tindi, Alice Isibika | March 6, 2025 |
| 10. | Zambia Women in Engineering Section (ZWES) | Africa | Agness Mofya Mwansa | February 28, 2025 |
| 11. | Namibian Women In Engineering | Africa | Smita Francis | March 11, 2025 |

| | | | | |
|-----|--|--------------|-----------------------|-------------------------------|
| 12. | Engineers Canada | Americas | Jeanette M. Southwood | September, 2025 |
| 13. | Ethiopian Association of Civil Engineers | Africa | Jitu Kebede | October, 2025 |
| 14. | Malaysia | Asia/Pacific | Leong Wai Yie | 8 th October, 2025 |



Women in Engineering Standing Technical Committee
of the
World Federation of Engineering Organizations
Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Ariana Silva |
| Organization or Country | Order of Engineers of Angola |
| Date Submitted | 13/02/2025 |
| Committee Member Email Address | arianacea@hotmail.com |

1 Summary

The purpose of this report is to monitor the progress of the Women in Engineering Committee initiatives, ensuring that actions are aligned with the established strategic objectives, promoting sustainable development and excellence in global engineering.

2 Accomplishments

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Diversity and inclusion in engineering are essential for innovation, creativity and problem-solving. To ensure a strong and diverse skills pipeline, we outlined strategies to empower the female workforce in January, ensuring equal educational opportunities through the following guidelines:

- Strategies for empowerment and inclusion
- Impact of Diversity and Inclusion on the Skills Pipeline
- Challenges in Diversity and Inclusion in Engineering

2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

In order to ensure the retention and advancement of women in engineering, it is essential to implement training programs, provide support, and create a favorable environment for professional growth through inclusive policies and leadership opportunities. In January, an action plan was prepared, taking into account the following three aspects:

- A workshop on key challenges in retention and female leadership in engineering
- Training and development strategies for women in engineering
- The impact of female retention and leadership in engineering

2.3 Theme 3: Engineering Strategic Indicators

The implementation of strategic indicators within our organisation enables us to exercise greater precision in the oversight of our operations and projects. However, given the early stage of development, it is premature to provide a comprehensive report on this subject, as our strategic indicators are still in the process of being refined.

2.4 Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

For 2025, we have defined partnerships with organisations such as OEP (Order of Engineers of Portugal), resulting from an existing collaboration with OEA, as well as companies and national organisations, with the aim of promoting gender equality.

2.5 Other Accomplishments

In September 2024, the Women in Engineering Committee of Angola organised the 7th Women Engineers Forum. This major event was in alliance with the WIE-FAEO committee and took place during the 10th UNESCO Africa Engineering Week and the 8th Africa Engineering Conference. The Committee was motivated to ensure the continuation of its work in Angola, inspired by the experiences shared by female engineers from other African countries.



3 Announcements

At the beginning of 2025, we will conduct lectures and seminars in secondary schools across our country on 'Gender Equality' as well as 'Mentorship Programs' to influence the choice of higher education paths.

4 Resources

www.ordemengenheiros.ao



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| | |
|--------------------------------|--|
| Committee Member Name | Hsiao-Wen Zan |
| Organization or Country | Chinese Institute of Engineers, Taiwan ROC |
| Date Submitted | February 10, 2025 |
| Committee Member Email Address | hsiaowen@nycu.edu.tw |

Summary

In 2024 CIE together with the Society of Taiwan Women in Science and Technology (TWiST), Taiwan Photonics Society, IEEE Taipei Section, and altogether 52 STEM NPOs continued to organize the “Women in Science & Technology Symposium, Taiwan – *Equity, Diversity, Inclusion and Well Being*” (WiST2024) in the National Cheng Kung University in Tainan on March 9th. The President of Taiwan, ROC, Dr. Ing-Wen Tsai gave a video opening remark, and the Minister of Science & Technology attended the opening in person. 9 leaders from around the country across various industrial and academic sectors were invited as speakers, of which 3 of them were male. A round-table world café session with 5 hosts was conducted and resulted in fruitful discussions and ideas exchange. More than 300 people registered in person to attend the event. We are currently planning WiST2025 “Equity, Inclusion and Greener Future - AI Empowering Diversity” in Taichung on International Women’s Day on March 8th, 2025.

WiE Committee of CIE has made possible for CIE to make the first on-line manifest of “Diversity, Equity, and Inclusion” of all the professional engineering NPOs in the nation, and keep being present in the Gender Equality Committee of Executive Yuan, the highest government entity of the nation, and therefore opinions from women scientists and engineers can be heard and integrated into government policies of all levels more directly and quickly. Moreover, after the Chinese Institute of Engineers inducted the first female Fellow in 2022, one each was inducted in 2023 and 2024. Many of the 52 NPOs started their own WiE committees and have been following CIE’s footsteps to make SDG-5 an important issue for the development of the organizations.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Ensuing the theme of WiST2022 *“Toward a Work-Life Integrated Workforce,”* a survey of STEM private sectors was conducted in 2023-2024 to collect best practices and challenges in addressing SDG-5 and the diversity, equity, and inclusion issues for ESG. A report of 5 companies was published in Chinese in 2024, and circulated in the nation.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

A casual, relaxed but serious route was taken in 2024 to gather female presidents/vice presidents of universities in a more fashionable, fun, and friendly atmosphere. The casual exchange of experiences and knowledge was widely welcomed by participants, feeling motivated to contribute and to support others. A casual group setting is natural in demonstrating people skills and leadership, and to learn from each other.

Theme 3: Engineering Strategic Indicators

| Women Engineers | Percentage of Total (%) |
|--|--|
| Professionally Registered | 23.7% ¹ (thru official examinations) in 2023 8.2% at work 2025 ² |
| Working in Engineering Establishments | 13 ³ (2019) |
| Undergraduates (2021-2022) | 23.40 ⁴ (Engineering, Manufacturing, and Construction) 26.43 ⁴ (STEM) |
| References for above data: | |
| 1. Ministry of Examination, Taiwan ROC, 2023. | |
| 2. Public Construction Commission, Taiwan ROC, Feb 2025. | |
| 3. Chinese Institute of Engineers, 2019 survey result. | |
| 4. Ministry of Education, Taiwan ROC, 2023 | |

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

In 2024 CIE together with the Society of Taiwan Women in Science and Technology (TWiST), Taiwan Photonics Society, IEEE Taipei Section, and altogether 52 STEM NPOs continued to organize the “Women in Science & Technology Convention, Taiwan – *Equity, Diversity, Inclusion and Well Being*” (WiST2024) in the National Cheng Kung University in Tainan on March 9th. The President of Taiwan, ROC, Dr. Ing-Wen Tsai gave a video opening remark, and the Minister of Science & Technology attended the opening in person. 9 leaders from around the country across various industrial and academic sectors were invited as speakers, of which 3 of them were male. A round-table world café session with 5 hosts was conducted and resulted in fruitful discussions and idea exchange. More than 250 people registered in person to attend the event. We are currently planning WiST2025 “Equity, Inclusion and Greener Future - AI Empowering Diversity” in Taichung on International Women’s Day on March 8th, 2025.

Other Accomplishments

WiE Committee of CIE has made possible for CIE to make the first on-line manifest of “Diversity, Equity, and Inclusion” of all the professional engineering NPOs in the nation, and keep being present in the Gender Equality Committee of Executive Yuan, the highest government entity of the nation, and therefore opinions from women scientists and engineers can be heard and integrated into government policies of all levels more directly and quickly. Moreover, after the Chinese Institute of Engineers inducted the first female Fellow in 2022, two more were inducted in 2023 and 2024. Many of the 52 NPOs started their own WiE committees and have been following CIE’s footsteps to make SDG-5 an important issue for the development of the organizations.

Announcements

N/A

Resources

性別化創新 Gendered Innovation Website

<https://genderedinnovations.taiwan-gist.net>

女科技人的美麗心世界Taiwan Women e Press (in Chinese, partially English)

<http://www.twepress.net>

2024女科技人大會 – 多元共融 共榮互好

“Women in Science & Technology Convention, Taiwan - *Equity, Diversity, Inclusion and Well Being*” (WiST2024) March 9th, 2024 (in Chinese)

<http://wist2024.twist.org.tw>

2023女科技人大會 – 科技女力國際進行式-前導

“Women in Science & Technology Convention, Taiwan - *International Chapter on STEM Women Empowerment*” (WiST2023) October 27th, 2023 (in Chinese)

<http://wist2023.twist.org.tw>

2022女科技人大會 – 邁向工作與生活共榮的新職場

“Women in Science & Technology Convention, Taiwan - *Toward a Work-Life Integrated Workforce*” (WiST2022) December 9th, 2022 (in Chinese)

<http://wist2022.twist.org.tw>

2021女科技人大會 – 科技女力進行式

“Women in Science & Technology Convention, Taiwan - *Advancing Towards a Bright Future*” (WiST2021) December 11th, 2021 (in Chinese)

<http://wist2021.twist.org.tw/>

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| | |
|--------------------------------|--|
| Committee Member Name | Hsiao-Wen Zan |
| Organization or Country | Chinese Institute of Engineers, Taiwan ROC |
| Date Submitted | |
| Committee Member Email Address | hsiaowen@nycu.edu.tw |

Summary

In 2025 CIE together with the Society of Taiwan Women in Science and Technology (TWiST) and National Chung Hsing University (NCHU) to organize the “Women in Science & Technology Symposium, Taiwan – *Equity, Inclusion and Greener Future: AI Empowering Diversity and Sustainability*” (WiST2025) in NCHU in Taichung on March 8th. The Vice President of Taiwan, ROC, Bi-khim Hsiao delivered her remarks via video, while Deputy Director-General Hui-Min Huang of the Taichung City Government Digital Development Bureau attended in person. The symposium gathered experts from government, academia, and industry to discuss topics such as gender perspectives in AI education, sustainable AI, the 2050 net-zero transition, AI in finance, emotional AI, and health digital twins. A roundtable session on “*Women × AI × Green Energy*” further facilitated dialogue. The event attracted more than 260 participants, with women accounting for 85% of attendees, reflecting strong female engagement in STEM.

In addition, on May 29, 2025, CIE WiE collaborated with the National Science and Technology Council (NSTC) and NCHU to host the *Spring Workshop on “Balancing Multiple Roles – Practical Advice for Women in Research”*. The workshop featured keynote speeches and panel discussions by university leaders and senior female scientists, sharing practical strategies on research leadership, career planning, and work-life balance. The event emphasized the importance of institutional support and community networking in fostering female retention and leadership in engineering.

Through these flagship activities in 2025, the CIE WiE Committee continued to promote gender equality (SDG-5) in conjunction with AI, sustainability, and professional development. By working in partnership with over 50 STEM organizations nationwide, CIE WiE strengthened the ecosystem of inclusiveness, equity, and empowerment for women in engineering and technology.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The 2025 WiST Symposium, held under the theme “Equity, Inclusion and Greener Future: AI Empowering Diversity and Sustainability,” highlighted initiatives to broaden the STEM talent pipeline. For the first time, high school students were invited to visit research laboratories, while a “Super Baby One-Day Care” service was offered to support participants with young children. These measures underscored ongoing efforts to foster a more diverse and inclusive future workforce.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

The 2025 Spring Workshop focused on practical strategies for sustaining women in research careers. Through keynote talks and peer discussions, participants shared insights on leadership, work-life balance, and career development. The event demonstrated how institutional support and community networking can empower women researchers to remain in the field and take on leadership roles.

Theme 3: Engineering Strategic Indicators

Attendance Statistics of WiST 2025 Symposium :

| | Percentage or Number |
|-----------------------------|---------------------------------|
| General Registration | 149 total (117 female, 32 male) |
| High School Students | 112 total (106 female, 6 male) |
| Super Baby Childcare | 17 (childcare program) |
| Total Attendance | 261 participants, 85% female |

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

In 2025 CIE together with the Society of Taiwan Women in Science and Technology (TWiST) and National Chung Hsing University (NCHU) to organize the “Women in Science & Technology Symposium, Taiwan – Equity, Inclusion and Greener Future: AI Empowering Diversity and Sustainability” (WiST2025) in NCHU in Taichung on March 8th. The Vice President of Taiwan, ROC, Bi-khim Hsiao delivered her remarks via video, while Deputy Director-General Hui-Min Huang of the Taichung City Government Digital Development Bureau attended in person. The symposium gathered experts from government, academia, and industry to discuss topics such as gender perspectives in AI education, sustainable AI, the 2050 net-zero transition, AI in finance, emotional AI, and health digital twins. A roundtable session on “Women × AI × Green Energy” further facilitated dialogue. The event attracted more than 260

participants, with women accounting for 85% of attendees, reflecting strong female engagement in STEM.

Other Accomplishments

In 2025, CIE WiE further advanced its initiatives by introducing family-friendly and youth-oriented programs at WiST2025, including the “Super Baby One-Day Care” and a laboratory visit for high school students, which fostered a more inclusive research environment and inspired the next generation of STEM talent. The Spring Workshop on “Balancing Multiple Roles” also created a cross-generational platform for women researchers to exchange practical strategies and strengthen community support. CIE WiE continued to encourage partner associations to establish their own WiE committees, extending the impact of SDG-5 across the professional engineering community. These efforts enhanced both institutional change and member-driven networks, while also raising the international visibility of women engineers from Taiwan in linking gender equality with AI and sustainability.

Announcements

N/A

Resources

性別化創新 Gendered Innovation Website

<https://genderedinnovations.taiwan-gist.net>

女科技人的美麗心世界Taiwan Women e Press (in Chinese, partially English)

<http://www.twepress.net>

2025 春季工作坊 — 多工平衡：科研人才的實戰建議

<https://www2.nchu.edu.tw/news-detail/id/59714>

2025女科技人大會 – 公平包容 綠動未來：AI 賦能多元永續

“Women in Science & Technology Symposium, Taiwan – *Equity, Inclusion and Greener Future: AI Empowering Diversity and Sustainability*” (WiST2025) March 8th, 2025 (in Chinese)

<https://www.twist.org.tw/2025wist>

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This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|------------------------------------|
| Committee Member Name | Dawn Bonfield |
| Organization or Country | Institution of Civil Engineers, UK |
| Date Submitted | February 2025 |
| Committee Member Email Address | dawnbonfield@btinternet.com |

Summary

This document gives an overview of the state progress on increasing gender diversity in Engineering in the UK in general, as well as some specific achievements linked to Theme 4 in particular of the Committee's action plan.

In general, the headline statistics for women in engineering in the UK can be seen below:

Women in Engineering Education (2025)

- 11% of girls **aspired to engineering careers**, compared to 44% of boys
- Engineering and technology-related **vocational qualifications** (not including T-Levels) - 10.7% females 2022/23 (10.2% in 2021/22)
- Engineering and technology-related **T-Levels** in England – 9% females in 2024 (consistent in 2023)
- Engineering and technology-related **apprenticeships** in England – 16% females in 2022/23 (14% in 2020/21)
- Engineering and technology **degrees** across the UK – 19% females in 2024 (20% in 2018/19)
- Women in the **Engineering Workplace** – 15.7% in 2024 (16.5% in 2023)

The significant data point here is that **the number of women in engineering in the UK has fallen for the first time in many year, from 16.5% in 2023 to 15.7% in 2024** and the reason for this is that many women are leaving the engineering sector between the ages of 35-45, because of poor culture. This fall in women in the engineering and tech workforce is driven by a fall of 66,000 between the ages of 35 to 64, indicating that women are not staying in the industry.

There has been a **10% decline in 11-14 year old girls saying that they are interested in science compared with a 1% decline in boys between 2019 and 2023**, which is another serious indicator of declining numbers and a gender gap opening up in schools with respect to STEM subjects.

Engineering culture continues to be a problem within UK engineering, and efforts to address this are not well received by engineering companies, nor our Professional Engineering Institutions.

The Institution of Civil Engineers, for example, continues to refuse to let members for a Gender Network, which has never existed at ICE – despite members wanting and asking for this to be established.

A survey was carried out in 2024 at ICE which asked ICE members about sexual harassment and bullying at work, and the results were shocking, and showed a very level

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

From the Institution of Civil Engineers (ICE) Data, we have a much better picture than for UK engineering as a whole, and the data is shown below:

- Our QUEST Scholars 51% of 312 currently sponsored (by industry and ICE) undergraduate students are women
- Currently 25% of ICE student members are women (0.2% non-binary/transgender in line with population estimates)
- Retention of women at ICE is good. 24% of graduate members <40 years are women. 23% of Chartered members <40 years are women
- As a comparator in 2017, 12.3% of members (all ages) were women and 7.3% were registrants. In 2025, 16.8% of members (all ages) are women and 12.5% are registrants
- The Women into Fellowship initiative has been very successful. Our youngest ever female Fellow at 30 years old is Georgia Thompson
- ICE Fellows: UK Fellows who are registrants = 9% female: 45-55 yrs Women Fellows at ICE = 16.5%; 40-45 yrs Women Fellows at ICE = 18.6%

Theme 3: Engineering Strategic Indicators

See Data reported in 'Resource' Section.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

My own WFEO WIE committee work on behalf of ICE, UK is linked to the co-leadership role of this Theme 4, and ensuring that the WFEO WIE committee complete its action plan to achieve progress in this area.

For 2024 our Activity Plan can be seen below.

| Activity | Timeline | Performance Indicator | Baseline (As Jan 2024) | Cum. Target (Dec 2027) | Target Year 1 (2024) |
|--|----------|--|--|--|--|
| Working in partnership, identify ways that engineering and technology could contribute to addressing the targets identified under Goal 5, Gender Equality. | | Produce document which map goal 5 target with potential technological solutions, and identify any missing technologies | | Document which explains how engineering and technology is addressing the targets of Goal 5, and possible project identified to address one of the identified gaps | Mapping exercise of engtech as it relates to SDG5 targets and also as it relates to WFEO |
| Examine the gender perspective and relate it to engineering globally, looking at ways that engineering can address disproportionate disadvantage faced by women | | Creation of full suite of 17 pop up banners explaining this issue, for use in outreach activities. | 7 banners | Full suite of 17 banners, showing the gender perspective in engineering | 2 more banners produced in 2024 (total 9) |
| In partnership, deliver against the WFEO Climate Change Declaration established in Melbourne in 2019 , in particular 'Use our global influence and connections to gather evidence to illuminate the effect of climate change on women and disadvantaged groups worldwide, and seek to use this information to ensure that no one is left behind.' | | In addition to the pop up banner on SDG13, create a body of knowledge around women and climate change, and represent this perspective at WFEO and other meetings where | Banner for SDG13 already produced | Stories and case studies identified, looking to identify appropriate engineering and technology interventions to support women and climate change agenda. | Potential competition rolled out to encourage young people to identify how climate change is affecting them, and what engineering can do to address this problem, aimed at young girls (boys also able to enter) |
| Map the work of the WIE membership to the relevant SDGs on which they work, and which other WFEO committees they serve on, and use this expertise as and when required to make progress against particular goals | | Create growing database of female members (of WFEO and wider) and other experts and how their work relates to particular SDGs | Details held of theme leads and theme members only. | Fully completed database of WIE membership to include their biographies, photographs, and how their work relates to SDGs, and which other WFEO committees they | Addition of data to database |
| Work with WFEO partners, including other WFEO committees, to help them bring the gender perspective to their work. | | Contact points on each of the WFEO committees and contact made with each of the WFEO committee chairs | No real engagement currently | Have made contact with the chairs of each of the working groups by the end of the term and had continuing conversations about how to bring the gender perspective to their work, with some evidence that this has been achieved. | Work toward this cumulative target through engagement with WFEO committees and WFEO partners. |
| Organisation of the Virtual Art Competition for the engagement of young girls in Africa to combine engineering and art. | | Successful completion of Art Competition | Three of these competitions have previously been delivered successfully. | Continue with the delivery of this STEAM competition where possible and where sponsorship can be | Delivery of 2024 version of STEM Virtual Art Competition. |
| Organise an annual webinar | | | | | |

8 DECENT WORK AND ECONOMIC GROWTH

The Gender Perspective

Promote sustained, inclusive & sustainable economic growth, full & productive employment and decent work for all

Sustainable Development Goal 8 aspires to foster inclusive and sustainable economic growth, employment, and decent work for all by targeting equal opportunities for productive employment in a safe, secure and inclusive working environment.

Our goal is to build a diverse and inclusive engineering sector for economic and sustainable growth in which women are well represented, have equal opportunities for decent work and career progression, accessible, flexible, and equal pay for equal work. Engineering has historically been a predominantly male profession, and this remains the case in many parts of the world, where women often make up less than 20% of the workforce. But we know that without a gender diverse engineering sector, we will not create solutions to the world's problems that are fair, inclusive and accessible to all. Moreover, we know that by denying equal opportunities to women to enter the engineering workforce, we are denying them access to a rewarding and well paid career, and to influence technological opportunities. If women were to participate in the labour market at the same rate as men, it could add up to \$28 trillion, or 24%, to the global annual GDP by 2025.

We know too that where women are employed, children and families benefit disproportionately, as studies have shown that women reinvest about 90% of their earnings into their households, compared with the 30% reinvested by men, leading to better health and education outcomes for their families.

But many issues remain that prevent women getting full and equal access to decent work, including the persistent gender pay gap where women are consistently paid less for equal work, lack of career development and leadership opportunities, poor maternity pay and rights, lack of female onsite facilities and protective workwear, unchecked sexual harassment and bullying, non-inclusive workplace culture, and poor understanding of the impact of the menopause on women in the workplace.

What Can We Do in Engineering?

- Set and enforce gender diversity targets, taking positive action to recruit women
- Enable equal access to leadership positions
- Ensure inclusive workplaces, including workplace culture, facilities for women, and appropriate Personal Protective Equipment
- Enforce Inclusive Policies and Practices
- Create Mentorship and Sponsorship programs for women
- Build Networks and Communities
- Promote Gender-Responsive Technology and Innovation
- Encourage more female engineers and scientists to participate in the development of Artificial Intelligence which is currently male-dominated and perpetuates bias
- Create equitable pathways to engineering careers for girls and boys

This project has been carried out by the Women in Engineering Committee of the World Federation of Engineering Organisations (WFEO).

SUSTAINABLE DEVELOPMENT GOALS

#Engineering4All

The Committee on Women in Engineering

Our main achievements during 2024 were:

- The creation of an additional SDG banner (SDG8) to add to the series, and the start of another two banners to be launched in 2025
- The mapping exercise to link SDG5 to engineering solutions
- The engagement in the STEAM competition to encourage young women in Africa to consider Engineering through Art
- The celebration of INWED 2024 (its 10th anniversary) through a webinar themed 'The Lives of Women: Enhanced by Engineering'.







WFEO WIE WEBINAR TO CELEBRATE INTERNATIONAL WOMEN IN ENGINEERING DAY (INWED)

Title:
The Lives of Women: Enhanced by Engineering

 Friday, 21st June 2024
 11:00AM - 12:15PM GMT
 7:00AM - 8:15AM EST
 Online (zoom)

Join our webinar to explore how diverse and inclusive engineering can enhance the lives of women and all people, featuring speakers dedicated to making a positive impact through technology and engineering.

Don't miss out on this important discussion! Click below to join
<https://shorturl.at/HK96C>



MAIN HOST AND FOUNDER - INWED
Dawn Bonfield, UK
INWED Founder, Commonwealth Engineers Council President, Royal Society Entrepreneur in Residence, King's College London, WFED roles.



CO-HOST
Ing. Dr Enyonam Kpekpena, Ghana
Dist. Women in Engineering Committee (WIEC) & President, Ghanaian Engineering Inst., Ghana's Manager ICT, Royal Society, Quality Company of Ghana.



SPEAKER
Janet Zehnder, Peru
Chemical Engineer, MBA, Operations Manager, Tin Refinery, Promoting Women's Empowerment in Engineering.



SPEAKER
Ir. Heng Lee Sun, Malaysia
Director, H&S Pro Construction Sdn. Bhd, Malaysia Engineering Women Through Engineering Leadership and Advocacy.



SPEAKER
Ken Dunn, UK
Founder & Champion of Africa Gals (Ghana), and Founder & Managing Director of Diverse Force Worldwide Limited.



SPEAKER
Samukhele Mwase, Zambia
Clean Energy and Sustainability Specialist & Consultant, Fertiliser Engineer LTD, Lusaka Zambia.







INWED WEBINAR - THE LIVES OF WOMEN: ENHANCED BY ENGINEERING

 Date : 21 June 2024
 Venue: ONLINE WEBINAR
 Time: 11:00 to 12:15 GMT

| Time | Activity | Resource Person |
|---------------|------------------------------------|------------------|
| 11:00 - 11:07 | Welcome Address | Enyonam Kpekpena |
| 11:07 - 11:15 | Purpose of Gathering | Dawn Bonfield |
| 11:15 - 11:25 | Speaker 1 | Sammy Mwase |
| 11:27 - 11:37 | Speaker 2 | Heng Lee Sun |
| 11:39 - 11:49 | Speaker 3 | Ken Dunn |
| 11:51 - 12:00 | Speaker 4 | Janet Zehnder |
| 12:00 - 12:15 | Questions and Discussion | Enyonam Kpekpena |
| 12:15 - 12:20 | Final comments and closing remarks | Agnes Mofya |

Other Accomplishments

Announcements

Resources

- **EngineeringUK Diversity Data 2024** <https://www.engineeringuk.com/research-and-insights/industry-and-workforce/diversity-challenges-in-engineering-and-technology/>
- **ICE Survey of Sexual Harassment in the Workplace** <https://www.ice.org.uk/download-centre/sexual-harassment-in-the-workplace>

UK Context

Engineering and technology underpin areas of great national and global need – including improving sustainability and decarbonisation - and jobs are expected to grow faster than other occupations in all areas of the UK between now and 2030, but there is a lack of skilled people to meet this need. For instance, the Climate Change Committee (A Net Zero Workforce) identified that up to 725K new jobs will be needed by 2030 to support the transition to net zero, and we know a significant proportion of these are jobs in engineering related areas. If we are to ensure effective and innovative solutions for all, it is imperative for the workforce to be diverse and representative.

Unfortunately, we know that there is already a workforce challenge as employers are reporting skills shortages and recruitment challenges. **In addition, only 15.7% of the engineering and technology workforce is now made up of women, down from 16.5% last year** and contrasting with the 56% of women that make up the rest of the UK workforce (EngineeringUK, 2024). The overall fall of women in engineering and technology is despite a slight increase in the numbers entering and results from an increase in women leaving between the ages of 35 and 44. The overall representation of women is still an increase, albeit a modest one, from 10.5% of women in 2010. Ultimately, we need more people and more diversity in engineering and technology and part of this is a need to ensure more young people are on educational pathways into these areas. Those from UK minority ethnic groups are also underrepresented (13% vs 15% in overall workforce), as well as disabled people (11% vs 13%) (EngineeringUK, 2022) and people from a lower socio-economic background (21% vs 29% in overall workforce) (Sutton Trust, 2022). However, the under-representation is much greater for women in the workforce, as stated above, and also in routes into engineering and technology as described below. Women are therefore the focus of this work. However, we appreciate that gender is not an isolated variable. For instance, the ASPIRES research underlines how gender does not operate in isolation but interacts closely with other axes of inequality, such as social class and ethnicity with middle-class girls and girls from white or South Asian backgrounds being much more likely to aspire to STEM careers.

There is a gender imbalance in almost all of the routes typically taken into engineering and technology. It is important to note that although these routes are typical, these qualifications are not always precursors to engineering / tech qualifications or employment¹ :

- Physics A-level - 23% females in 2024 (22% in 2018) in England, Northern Ireland and Wales
- Physics Scottish Higher - 27% females in 2024 (20% in 2018)

- Maths A-level - 37% females in 2024 (39% in 2018) in England, Northern Ireland and Wales
- Maths Scottish Higher - 46% females in 2024 (39% in 2018)
- Computing A-Level – 18% females in 2024 (12% in 2018) in England, Northern Ireland and Wales
- Computer science Scottish Higher - 21% females in 2024 (14% in 2018)
- Design and technology A-Level – 32% females in 2024 (37% in 2018) in England, Northern Ireland and Wales
- Design and manufacturing Scottish Higher – 33% females in 2024 (48% in 2018)
- Physics GCSE - 49% females 2024 (remained the same since 2018) in England, Northern Ireland and Wales
- Physics National 5 - 29% females in 2024 (28% in 2018)
- Computing GCSE - 22% females in 2024 (20% in 2018) in England, Northern Ireland and Wales
- Computer Science National 5 - 23% females in 2024 (20% in 2018)
- Engineering and technology-related vocational qualifications (not including T-Levels) - 10.7% females 2022/23 (10.2% in 2021/22) Engineering and technology-related T-Levels in England – 9% females in 2024 (consistent in 2023)
- Engineering and technology-related apprenticeships in England – 16% females in 2022/23 (14% in 2020/21)
- Engineering and technology degrees across the UK – 19% females in 2024 (20% in 2018/19)

Gender has a very large effect on career aspirations evident from at least the age of 10 at which only 11% of girls aspired to engineering careers, compared to 44% of boys (Aspires, 2020).

EngineeringUK's Science Education Tracker, in conjunction with The Royal Society, highlighted that girls are switching off from science, and a gender gap has opened up. There has been a 10%p decline in 11-14 year old girls saying that they are interested in science compared with a 1%p decline in boys between 2019 and 2023. This brings urgency to better understanding and addressing the gender differences in progression through STEM subjects and into engineering and technology careers.

UK statistics from EngineeringUK report:

- In 2022, women represented 16.5% of those working in engineering and technology roles dropping to 15.7% in 2023
- In 2022, there were 1,034,000 women working in engineering and technology occupations compared to 996,000 in 2023
- In 2023 there were more women in engineering and technology occupations between the ages of 16 to 34 – indicating that more women are entering the workforce straight from education, but are not being retained

- Compared to 2022, there were fewer women working in engineering and technology between the ages of 35 and 64 years
- Women make up 56.1% of the workforce of all other occupations but just 7% in the engineering and technology workforce

The decline of women in engineering and tech aged 35 to 64 is not seen in non-engineering and tech sectors, where retention levels have remained largely static.

<https://www.engineeringuk.com/latest-news/press-releases/spike-in-women-aged-35-to-44-leaving-engineering/>



Women in Engineering Standing Technical Committee
of the
 World Federation of Engineering Organizations
 Committee Member Progress Report



<https://www.apwen.org>

| | |
|---|---|
| Committee Member (Country Representative) | Engr.Dr Atinuke Wuraola Owolabi FNSE, FNIEEE |
| Organization or Country | Association of Professional Women Engineers of Nigeria (APWEN)/ Nigerian Society of Engineers (NSE) |
| Date Submitted | 4th February, 2025 |
| Committee Member Email Address | atinukewuraolaowolabi76@gmail.com |

1. Summary

The Association of Professional Women Engineers of Nigeria (APWEN) serves as a catalyst for advancing women in engineering, driving national and global technological development. This progress translates into increased job creation, leadership opportunities, and an overall improvement in the quality of life.



Figure 1: APWEN Community

Our mission is to continuously raise awareness that engineering is a career path for girls, ultimately strengthening the representation of female engineers in the profession. For over four decades, APWEN has championed various initiatives and programs to promote engineering education and practice among female students. Additionally, the

association provides a collaborative platform for women engineers to engage with professionals across diverse fields both within Nigeria and internationally.

Through strategic outreach programs, APWEN brings this mission to life, inspiring and empowering the next generation of female engineers while fostering innovation and professional growth.

2. Accomplishments

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The **Association of Professional Women Engineers of Nigeria (APWEN)** continues to champion diversity and inclusion in the engineering workforce, marking significant strides in advancing female leadership in the profession. A historic achievement was recorded with the election of **Engr. Margaret Aina Oguntala, FNSE**, as the **first female President of the Nigerian Society of Engineers (NSE)** in its over 60-year history.

This landmark victory underscores APWEN's relentless efforts in empowering women engineers, breaking barriers, and fostering gender inclusivity in engineering leadership. As we celebrate this milestone, APWEN remains committed to inspiring the next generation of female engineers and driving meaningful change in the profession.

APWEN remains committed to inspiring young minds to pursue careers in engineering. Through initiatives like **"Invent It, Build It"**, **FunSTEM**, **STEM4ALL**, **STEMUP Community**, mentorship programs, and STEM outreach in schools, APWEN provides young girls with hands-on learning experiences, scholarships, and role models.

By showcasing successful female engineers and breaking gender stereotypes, APWEN encourages more young women to see engineering as a viable and rewarding career. The association continues to advocate for inclusive policies and create opportunities that empower the next generation to innovate and lead in engineering.



Figure 2: Female Leadership from APWEN

2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and Leadership

The Association of Professional Women Engineers in Nigeria (APWEN) successfully organised the Mayen Adetiba Technical Bootcamp, focusing on Emerging Technologies in Green Buildings and Efficiency for Sustainable Development. Experts shared insights on sustainable materials, renewable energy, and smart building systems. The event empowered female engineers with skills to drive eco-friendly innovations, fostered networking, and aligned with global sustainability efforts, reinforcing APWEN's commitment to engineering excellence.

On 24th August, APWEN hosted a workshop on **Strategies for Successful Grant Applications**, equipping participants with essential skills to secure funding for engineering projects. Experts provided insights on proposal writing, aligning objectives with donor priorities, and budgeting. Practical examples of winning grants were analysed, offering valuable lessons. The event empowered female engineers with tools to access funding for impactful innovations and research.

APWEN also hosted a **Town & Gown** event themed "**Empowering Young Female Engineers: Bridging the Gap between Industry and Academia.**" The event connected students with industry leaders, offering mentorship, career insights, and discussions on industry expectations. It provided a platform for knowledge exchange, equipping young female engineers with the skills needed to transition successfully from academia to the workforce.

STEM FOR ALL PROGRAMS was another set of APWEN-themed events, held at two different locations, the North Central and North East zones, Ilorin and Kaduna, to commemorate 2024 Children's Day and International Women in Engineering Day (INWED) 2024 tagged Enhanced by Engineering respectively.





Figure 3: APWEN's various Capacity Building programmes

2.3 Theme 3: Engineering Strategic Indicators

APWEN is actively working on developing a comprehensive database of women in engineering across various disciplines and areas of practice. Currently, the available data does not fully represent the true state of women's participation in the engineering profession in Nigeria. To bridge this gap, APWEN is implementing a plan to capture accurate statistics during the registration process.

The database will provide key insights, including the percentage of registered female engineers, those actively working in the field, and undergraduate students pursuing engineering degrees. This initiative will enable better policymaking, targeted mentorship programs, and strategic workforce planning to support women in engineering.

APWEN remains committed to ensuring that women are well-represented, supported, and empowered within the profession. The association encourages all female engineers and engineering students to register and contribute to shaping the future of women in engineering. Presently, the total number of Engineers in Nigeria is about 70,000. The percentage of registered female Engineers is stated below:

| Women Engineers | Percentage of Total (%) |
|---------------------------------------|-------------------------|
| Professionally Registered | 8% |
| Working in Engineering Establishments | 6% |
| Undergraduates | 4% |

2.4 Theme 4: Other Accomplishments

The Association of Professional Women Engineers of Nigeria (APWEN) collaborates with government agencies, private organisations, and industry leaders to promote gender diversity in engineering and contribute to national development. These partnerships support the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 5 (Gender Equality).

APWEN works with Federal and State Governments to influence policies that encourage female participation in STEM and create opportunities for women in engineering. Initiatives like "Invent It, Build It", launched with NNPC's support, have provided scholarships and mentorship for young girls, inspiring them to pursue engineering careers.

Industry collaborations help advocate for gender-friendly workplace policies, leadership training, and career advancement for female engineers. These efforts aim to retain women in engineering and ensure equal opportunities for leadership roles.



Figure 4: Collaborations with various industries and state governments

3. Announcements

Follow APWEN online activities.



@apwennational



@apwen_ng



apwen hq



APWEN HQ TV

4. Resources

Here are the links to some of APWEN's activities in 2024:

<https://thenationonlineng.net/apwen-drives-innovation-creativity/>

<https://newsrescent.com/apwen-restates-commitment-to-supporting-girls-in-stem/>
<https://blacktalker.com.ng/2024-wed-apwen-lagos-calls-for-collaboration-to-combat-climate-change/>
<https://guardian.ng/property/apwen-urges-engineers-to-embrace-sustainableinnovations/>
<https://championnews.com.ng/?p=317705>
<https://championnews.com.ng/?p=322614>
<https://www.vanguardngr.com/2024/05/step-out-innovate-apwen-tells-women-engineers/>
<https://admin.thisdaylive.com/index.php/2024/04/03/owolabi-why-female-engineering-students-should-be-positioned-for-global-impact-before-graduation/>
<https://blacktalker.com.ng/apwen-lagos-commemorates-2024-international-day-of-girls-in-ict/>
<https://championnews.com.ng/unveiling-idiat-amusu-mentorship-scheme-in-commemoration-of-world-creativity-innovation-day-organises-by-apwen-in-lagos/>
<https://championnews.com.ng/unveiling-idiat-amusu-mentorship-scheme-in-commemoration-of-world-creativity-innovation-day-organises-by-apwen-in-lagos/>
<https://championnews.com.ng/nse-nga-forge-strategic-partnership-for-engineering-gas-sector-development/>
<https://www.thisdaylive.com/index.php/2024/05/01/unilag-lasu-students-emerge-winners-of-apwen-lagos-innovation-challenge>
<https://championnews.com.ng/?p=315593> <https://guardian.ng/news/apwen-seeks-tax-holiday-for-innovative-engineers/>
https://youtu.be/h8rVkv4q_9U <https://blacktalker.com.ng/female-engineers-mobilize-for-environmental-advocacy-in-lagos-communities/>
<https://blacktalker.com.ng/apwenlagos-partners-wateraid-on-fight-againstcholera-in-makoko/>
<https://pmnewsnigeria.com/2024/08/18/cholera-prevention-women-engineers-wateraid-partner-to-clean-makoko-waterways-environment/>
<https://www.thisdaylive.com/index.php/2024/08/19/cholera-apwen-calls-for-sanitation-action-in-lagos-communities/>
<https://blacktalker.com.ng/apwenlagos-partners-wateraid-on-fight-againstcholera-in-makoko/>
<https://youtu.be/7iNKjyrgUaw?si=Wa2QuGvwW944rzsy>
<https://nannews.ng/2024/03/31/women-engineers-clean-up-lagos-markets-drains/>

<https://theinvestigatornews.com.ng/childrens-day-children-hold-the-key-to-a-more-advanced-and-equitable-society-hon-wuruola-owolabi/>

<https://quicknews-africa.net/women-engineers-unveil-lagos-home-gardening-initiative/>

<https://www.vanguardngr.com/2024/12/women-engineers-launch-generational-mentorship-scheme/>

<https://www.vanguardngr.com/2024/12/women-engineers-launch-generational-mentorship-scheme/>

<https://gazettengr.com/lagos-female-engineers-present-2024-scorecard/>

<https://guardian.ng/news/apwen-urges-stakeholders-to-promote-stem-education-innovation/>

<https://guardian.ng/news/apwen-urges-stakeholders-to-promote-stem-education-innovation/>



Women in Engineering Standing Technical Committee of the Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Winnie Mameni Siakor Dilah |
| Organization or Country | Society of Women Engineers of Liberia |
| Date Submitted | January 29, 2025 |
| Committee Member Email Address | siakorwinnie27@gmail.com |

Summary

Provide a brief summary of your report.

The initiatives undertaken by the Society of Women Engineers of Liberia (SWEL) reflect a strong commitment to empowering young women in engineering and promoting gender equity in the field of STEM. Key activities included conducting STEM awareness sessions in selected schools to inspire and educate approximately 100 young women about the significance of STEM education and entrepreneurship. Additionally, a collaborative effort with Mandala Fellowship alumni led to the implementation of a four-day STEM Justice Project in Bong and Montserrado counties, which further raised awareness and provided valuable resources for aspiring female engineers.

Moreover, SWEL has successfully engaged with national government entities to secure employment opportunities for women in engineering, resulting in the placement of two senior-level and two middle-level positions in critical ministries, including the Ministry of Public Works and the Ministry of Mines and Energy. This effort aims to create a pipeline for female leadership and retention in engineering roles.

The partnership with GIZ facilitated a Program Development Training focused on cost estimation and the preparation of Bills of Materials (BOM) for young professional female engineers. By enhancing their technical skills, this training empowers participants to contribute more effectively to project planning and implementation.

Collectively, these activities contribute to building a supportive and inclusive environment for women in engineering, fostering their growth and representation in leadership roles within the sector. Through ongoing collaboration and targeted training, SWEL is poised to cultivate a new generation of confident, skilled, and influential women in STEM.

Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the FAEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Established a partnership with GIZ to conduct Program Development Training for young professional female engineers, focusing on cost estimation and the preparation of Bills of Quantities (BOQ). This training is designed to enhance participants' technical skills, empowering them to create accurate cost assessments and effectively contribute to project planning and implementation. By equipping these women with essential knowledge, the program aims to bolster their confidence and competence in the engineering field, fostering their career advancement and involvement in significant infrastructure projects.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

Team members engaged with national government representatives to secure employment opportunities for women in engineering, successfully obtaining two senior-level and two middle-level positions aimed at promoting female retention and leadership in the field. This advocacy included securing roles such as the Deputy Minister of Rural Development at the Ministry of Rural Development, the Assistant Minister of Operations at the Ministry of Public Works, the Director of Research and Planning at the Ministry of Public Works, and the Director of Precious Minerals at the Ministry of Mines and Energy in Liberia. This collaboration represents a significant step toward increasing female representation in leadership roles within governmental ministries.

Theme 3: Engineering Strategic Indicators

Membership Increased By 25%

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Collaborated with a Mandala Fellowship alumnus to implement a four-day STEM Justice Project in Bong and Montserrado counties, Liberia. This initiative successfully benefited approximately 100 young women by raising awareness about the importance of STEM education and entrepreneurship. The project included workshops, hands-on activities, and discussions aimed at empowering participants to pursue careers in STEM and develop their entrepreneurial skills.

Other Accomplishments

- Conduct STEM Awareness Sessions: Organize engaging STEM awareness sessions in two selected schools to inspire and educate students about the importance of STEM fields.
- Joint Celebration of World Engineering Day: Collaborate with the Engineering Society of Liberia (ESOL) to celebrate World Engineering Day by conducting career awareness sessions for selected high school students, highlighting various engineering career paths and opportunities.

Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the FAEO WiE Committee.

2025 Activities Plan

1. Antecedents of the Engineering Society of Liberia Conference
2. Book Launch Event : A member of the Engineering Society of Liberia is set to launch an insightful book that contributes to the discourse on engineering practices in the country.
3. STEM Club Activities: Engaged in various initiatives at two local high schools to cultivate interest in STEM subjects among students.
4. World Engineering Day Celebration: Hosted activities to commemorate World Engineering Day, highlighting the importance of engineering in society.
5. International Women's Day Celebration: Organized events to celebrate the achievements of women and promote gender equality in engineering.
6. Women in Engineering Day Celebration: Recognized the contributions of female engineers and advocated for increased representation in the field.
7. Professional Development Activities: Host hands-on workshops, training focusing on essential technical and basic skills, project management practices, and innovative engineering methodologies.
8. Additional Collaborations: Collaborated with other organizations and stakeholders to enhance the impact of the conference and related activities.

Resources

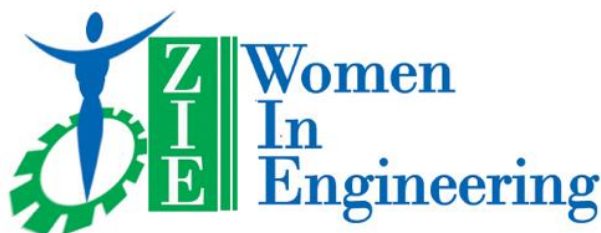
Please provide links to any publications, statistics, videos or other resources to be shared with the FAEO WiE Committee.

Website: <https://www.swelib.org/about-us/>

Facebook: Society of Women Engineers of Liberia - SWEL



Women in Engineering Standing Technical Committee
of the
 World Federation of Engineering Organizations
 Committee Member Progress Report



| | |
|--------------------------------|--|
| Committee Member Name | Eng Berverly Nyakutsikwa |
| Organization or Country | Zimbabwe (ZIE WIE) |
| Date Submitted | 13 February 2025 |
| Committee Member Email Address | bevlyfn@gmail.com |

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SUMMARY

Our Women in Engineering Division under the Zimbabwe Institution of Engineers has slowly been gaining momentum in re-activating activities which had stopped due to the travel and physical meeting restrictions from the Covid era. A new WIE committee was constituted in 2024 and the committee member profiles were published in the Zimbabwe Institution of Engineers monthly newsletter Vol1 Issue 3 (May-Jun 2024). The organogram is as shown below.



Though activities have been recorded, the numbers of women actively engaging in these activities is still low, especially when compared against the number of participants registered on the membership WhatsApp group. This number is also lower than the numbers of women registered in their various capacities with the ZIE. It is usually a small number of the same participants who are most active and the challenge is on us to get more of our members to be active.

It is our hope that we can keep the activities going as well as garner up more support in terms of resources and funding to make the activities more wholesome, and to cover more regions in the country.

We have noted through the year's activities that

- a. Career guidance is a very necessary activity that makes impact and creates visibility of different careers and career paths for students. It also serves as a platform to engage students and offer advice as "older" brothers and sisters, especially in a day and age where the youth in Zimbabwe are increasingly indulging in drugs and substance abuse. It has also

been seen as crucial in enlightening students on possible subject combinations and their possible implications on career choices.

- b. Social media is a powerful advertising tool that brings together stakeholders from within and beyond the country's borders.
- c. Networking is a powerful tool, especially for the women in engineering as she looks for support, strength and structures to keep her going in her journey.
- d. There is still a long way to go regards the registration of women in engineering professionals with the professional engineering institution.

ACCOMPLISHMENTS

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

To address theme 1, we hosted a mix of activities to increase inclusivity and diversity in the future skills pipelines. These are outlined as follows:

1. Webinars

- a. **9 June.** Our members also joined in on the FAEO Theme 1 WIE *Webinar on Engineering Excellence: Insights from male champions*. Our ZIE WIE Whatsapp group was a hive of activity after the webinar as member discussed their key takeaways from the webinar. Some of the points of note was the need for mentoring, visible celebration of achievements and to work in an excellent manner. It was also noted that career guidance should be started early in schools and that the roles of technicians, technologists and artisans should not be overlooked in the engineering conversation.
- b. **19 July.** We held a webinar titled “*ZIE, WIE and the role of partners (WIBTE)*” with the aim of enlightening members on what the role of ZIE is for engineering professionals in the country as well as how it relates to WIE. Additionally, it was also providing exposure to our work with partners and introducing women in the built environment to the engineering community of women in Zimbabwe.

2. Social Media and Communication

- a. Our primary source of communication and connectivity remain the ZIE WIE **WhatsApp** group with a membership of 500 ladies
- b. We have an active WIE **email** address which we use for communication (to send and receive (wie.zimbabwe@gmail.com))
- c. We revived our **Facebook** page ([ZIE – Women In Engineering](#)) in celebrating International Women's Day in March and our engagements are slowly increasing. We are primarily using the platform as a reporting and feedback channel from activities carried out by members around the country.
- d. We created an **Instagram** page ([@wiezimbabwe](#)) in July 2024 in a bid to have presence on various social media platforms that appeal to the diverse membership of our organization.

3. Career guidance and schools outreach

- a. **4 March.** In Celebrating World Engineering Day, ZIE WIE was invited to participate in the career guidance fair hosted at Kotwa High School in Kotwa, Mudzi District, Mashonaland East Province (approximately 218 km from Harare). 7 schools attended the fair including Kotwa High School (the hosts), Mutoko Central High School, Chingwena Secondary School, Shinga Secondary School, Muzezuru Secondary School, Hiltop Private School and Greatminds Group of Schools totaling 479 students. ZIE WIE members created career videos detailing what they do, what they studied and a word of advice to the young students and these videos were flighted during the sessions.
- b. **On 13 July** ZIE Women in Engineering (WIE) Zimbabwe teamed up with Catholic Friends for Charity (CF4C) for a schools outreach at St Boniface High School. The school is located in Hurungwe District in Mashonaland West Province, about 261 km from Harare. Other organisations also present for the day included NMCZ, YALI, and Opportunities For Zimbabweans. St Boniface is a small school with about 250 Students, 11 of whom were A level students and 90 were domiciled in the boarding facilities. The school has 12 staff members, including the headmaster.



Banners of participating organisations in the schools outreach

In brief the program of the day started at 930 am and included a talk on spirituality after high school by CF4C and personal leadership by YALI and Young leaders. A third talk entitled Girl Child Boy Child was presented by Usawa and lastly an introduction to engineering by ZIE WIE. A question-and-answer session was also held and prizes given out to students who answered questions based on the presentations that had been made. At 1130 career guidance sessions commenced with the visiting guests splitting into discipline oriented teams and meeting with the different student classes to share more information about career prospects and career guidance.



St Boniface learners following proceedings of the day

The professionals present were divided into groups comprising humanities, legal, finance and accounting, entrepreneurship, engineering, ICT and applied sciences, medical, education and vocational studies, opportunities for Zimbabweans and lastly leadership. The different groups addressed the different student groups about their disciplines and possible career pathways.



The engineering professionals group during the career guidance sessions

ZIE WIE Chairperson, Eng B Nyakutsikwa and Chipso Mataka represented ZIE WIE. WIE chairperson on behalf of WIE donated 20 Scientific calculators, 55 Math sets and these donations were made possible by the generous contributions of WIE members as well as support from colleagues in ***Sistahs in Construction*** and ***Women in the Built Environment***. A donation of personal planners and pens was made by ***Nurturing Water*** for the staff members at the school. Furthermore, a personal donation towards their library was made by the chairperson of 3 copies of the book *Personal Finance Gameplan* by Shalom Govero.



ZIE WIE Chairperson hands over donations to St Boniface Headmaster

- c. **On 21 September**, ZIE WIE teamed up again with CF4C, YALI, Young Leaders, Alcoholic Anonymous and Opportunities for Zimbabweans to take career guidance to students of Gokomere High School in Masvingo, Masvingo Province and (approximately 281km from Harare). The high school is a boarding school and enrolls up to 1 300 students and has over 60 teachers.



Gokomere students following proceedings of the career guidance day

A similar program from the previous outreach was followed starting with a talk on *whats next after high school* then *personal leadership and entrepreneurship* followed by substance and alcohol abuse. After the talks, the students were grouped according to levels and the visiting team split into the categories according to the professions, and these groups addressed the different student separately.



Part of the engineering delegation addressing students in classroom

4. **On 27 September** Engineer Shelta Majowa attended the career day at Stapplehood primary school, Stapleford. The school comprises students from ECD up to grade 7 and enrolls about 180 students. The young learners got to interact and ask questions about engineering, as well as appreciated that young girls can aspire to become engineers as well.



Eng Majowa with some of the primary school children at the career day

The children made hats typically worn by different professionals including engineering helmets.



Figure 2 different professionals' tools hats made by the children

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

1. A celebration of women in leadership luncheon was held in Harare on 16 March in which the WIE members celebrated the appointment of the first black female president for the ZIE, Dr Eng Farai Mavhiya.



Our guest speaker on the occasion was Dr Eng Gloria Magombo. Some of the take home points from the discussions over lunch were that hard work gets you to the next stage. Additionally, one requires some kind of a work life balance and its might be unique to you. We were urged to keep reading, keep learning and upskilling and upgrading ourselves. Our guest speaker emphasized the importance of networking while our guest of honor highlighted the fact that everyone has their own strengths, importance of soft skills and the need to document achievements.



2. INWED 2024 was celebrated in style in by two chapters of WIE in Zimbabwe, through a high tea by Mash Area WIE in Harare while Matebeleland Area hosted a CSR event in Bulawayo. INWED is an international awareness campaign that raises the profile of women in engineering and celebrates their achievements in the field. It inspires women to pursue careers in engineering, showcase the accomplishments of WIE and promote diversity and inclusion within the engineering profession.



- a. About 50 engineering professionals i.e. engineers, technicians and technologists met up for a high tea in Harare on 21 June to celebrate INWED, an annual event that takes place annually on June 23rd. The event was also listed on the INWED website of events. The Permanent Secretary in the Ministry of Transport and Infrastructural Development Eng. Joy Makumbe was the guest of honor while Eng. Mary Chikuruwo, Dr. Loice Gudukeya, Lindiwe Mtamzeli, Eng. Shelta Majowa and Chiedza Nkomazana were panelists who inspired through their journey stories. We also had in attendance the Zimbabwe Institution of Engineers President Dr. Eng. Farai Mavhiya, inspiring young ladies as the First female Black President of ZIE. Special mention to **Netone** and **Fossil Contracting** for sponsoring their female engineering professionals and **Arup Zimbabwe**, **Chisipo Consultants**, **Techold** and **ProFin** for event sponsorship.



- b. WIE Matebeleland celebrated INWED 2024 by dedicating their day to corporate social responsibility (CSR) having adopted Ingutsheni Hospital in 2023. Their INWED aspirations are to improve water supply to the farm; carry out tree planting for the orchard; sewer rehabilitation, execute Khumalo Ward Renovations and renovate staff ablutions.



In 2024, WIE Matebeleland partnered with **Saltaway** to carry out work to relieve the sewer system as part of their CSR. In addition to the sewer rehabilitation, from their INWED wish list they have also managed to plant fruit trees, to enable hospital patients can have a continuous supply of healthy foods. Furthermore, they donated some basics goods to the hospital. The rest of the items on the scope are still on the agenda and are on going one step at a time in due time.



3. **Increased** collaboration with other women centric organizations both within Zimbabwe and beyond the borders with organizations such as
 - c. FAEO WIE
 - d. SAFEOWIE
 - e. WFEO WIE
 - f. PROWEB
 - g. ELEVATE TRUST
 - h. OWSD Zimbabwe
 - i. WiBT (women in block chain talks)
 - j. WITBE (women in the built environment)

Theme 3: Engineering Strategic Indicators

1. Through the office of the ZIE and its Secretariat, we are tracking the registration of female members at ZIE in their various grades. As of June 2024, the membership statistics were as follows:

| Grade | Number |
|-----------------------|------------|
| Technician | 75 |
| Technologist | 11 |
| Corporate Member | 165 |
| Graduate Technologist | 1 |
| Graduate technician | 37 |
| Graduate member | 66 |
| Total | 355 |

2. In a bid to increase visibility of the women in engineering as well as to get to know the members better, we have started a dedicated WIE database. It is work in progress getting the ladies to register and work is yet to be done to compare with that from the institution.

One thing that's been seen so far though is some of the women in engineering in industry are not registered with ZIE hence we must find ways to encourage the women to register with the institution.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Our women in engineering are making progress in their various spheres of influence as evidenced by the recognition they are getting be it through awards, or appointments into positions of influence.

3. Women in committee, boards and leading positions

- a. Eng Beauty Kanjunda was appointed as acting Provincial Public Works Deputy Director.
- b. Eng Jennifer Chigerwe, a lecturer in Fuels and Eneergy at Midlands State University (MSU) was appointed board member on the Association of Energy Engineer Zimbabwe chapter.
- c. Dr Eng Loice Gudukeya was appointed as the new Deputy Dean in the Faculty of Engineering and the Built Environment at the University of Zimbabwe.
- d. Eng Berverly Nyakutsikwa in her role as Chair for ZIE WIE represents Zimbabwe on the WFEO WIE committee, FAEO WIE committee as theme 1 deputy Chair and SAFEO WIE Theme as chair on Engineering workforce diversity theme.
- e. Eng Muchaneta Mavambe was selected as the country representative for Women in the Built Environment in Zimbabwe.
- f. Dr Eng Tammy Stevenson is the Global Chapter chair for Zimbabwe in Women in Block Chain Talks.

4. Financial inclusion

WIE members came together to raise funds to assist three Kwekwe Polytech Students with funds to allow them to continue their studies and write exams. It is on our wishlist for us to establish a scholarship fund that can allow us to sponsor at least 5 primary school children, 5 high school children and 2 university or polytechnic scholars as they embark in their education journeys.

Other Accomplishments

1. Awards

Some of our members were recognized by various organizations and received accolades as follows:

- a. Dr Eng Farai Mavhiya
 - i. 1st Runner Up Chairpersons of State Owned Enterprises (HIT)
 - ii. Outstanding Engineering Professional Super Platinum Winner (Zimbabwe CEO's Network)
 - iii. 50 Most Influential Women in Zimbabwe 2024 by Women Corporate Directors Network
- b. Dr Eng Tammy Stevenson Outstanding Engineering Professional Platinum Winner (Zimbabwe CEO's Network)
- c. Eng Berverly Nyakutsikwa Presidium Recognition Award 2024 (PROWEB)

- d. Eng Prudence Kadebu Recognition for Outstanding Contribution in ScienceTechnology and Innovation (Women in Science Conference)
- e. Eng Loice Gudukeya Recognition for Outstanding Contribution in ScienceTechnology and Innovation (Women in Science Conference)

2. PhD graduates

- a. Dr Eng Farai Mavhiya attained her Professional Doctrate in Engineering from the European International University.
- b. Dr Plaxcedes Sigauke attained a PhD in Chemical Engineering from

3. Features and articles

- a. ZIE president Dr Eng Farai Mavhiya was featured in a special edition by the Daily News newspaper in January 2024.
- b. WIE Chair Eng Berverly Nyakutsikwa was featured in the 2024 October edition of the ZiMining Magazine. [Read more here](#)
- c. Mining Engineer Nyaradzo Mutake was featured in the September issue of ZiMining. [Read it here](#)
- d. Mining engineer Rejoice Moyo was featuredin the December issue of ZiMining. [Read it here](#)
- e. Eng Lodrina MAsiyazi Was a guest speaker at the launch workshop of the book Soft Skills Training and Book launch , a book by graduate engineer Nyasha Manyika
- f. Dr Phylis Makurenje serves as a role model for our young profesisonals. She is currently involved in nuclear energy for space trips in Wales , UK. She started her engineeirng journey with the National University of Science and Technology in Zimbabwe.

4. Conference proceedings

W extend our congratulations to our members who participated in conferences as speakers, presenters, moderators or panelists.

ANNOUNCEMENTS

End of April – ZIE WIE quarterly newsletter

April – Girls in ICT celebration

Mar – IWD celebrations

June – INWED celebrations

RESOURCES

Zimbabwe Institution of Engineers monthly newsletter Vol1 Issue 3 (May-Jun 2024)

Ziming magazine (sept, oct, dec)

<https://www.inwed.org.uk/events/#> INWED High Tea

https://www.linkedin.com/posts/joy-makumbe-pr-eng-a6919132_womensmonth-motivation-inspiration-activity-7180241213021691904-07uY



Women in Engineering Standing Technical Committee of the Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Ing Dr. Enyonam Kpekpena |
| Organization or Country | Ghana Institution of Engineering (GhIE), Ghana |
| Date Submitted | 14 th February 2025 |
| Committee Member Email Address | efkpekpena@yahoo.com |

Summary

2025 marked WinE-Gh's 25th Anniversary which was launched on 18th March 2024, at the 14th WinE-Gh Forum during the 54th AGM and Conference of Ghana Institution of Engineering (GhIE). The celebrations with a pre-launch event to mark, International day of Women and Girls in Science 2024. On the 30th April 2024, which was our 25th Anniversary Day, we celebrated it with members donning WinE-Gh branded attire and using #WinE-Gh@25 to create awareness of the day. The "Wednesday Woman Crush" was initiative to highlighted key members, including Ing. Dr. Enyonam Kpekpena, who was appointed Chair of the Women in Engineering Committee of WFEO and FAEO in May 2024.

Mentoring efforts targeted schools in Ghana, while community projects included renovations at Abume DA Primary School, toilet construction at Kokote Kpordzi (a flood-affected community), and donations to students. A health trip to Dodi Island took place in July, with our celebrations culminating in a Gala dinner and thanksgiving service.

Additional highlights included participating in the 7th Africa Women Engineers Forum in Angola, hosting the WIE-WFEO Conference in October, and celebrating male allies at the "Engineering Excellence" event in June.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The 14th WinE Forum was organized during the Annual conference of GhIE 2024 under the theme: ***“Mentorship: the catalyst to engineering a resilient and sustainable future”*** on 18th March 2024 at the Engineering Centre. This year’s focus was on WinE members where our Resource Person spoke on Mentoring. Ing. Carlien Bou-Chedid was the Chairperson for the program.

Two WinE members, nominated by GhIE, received awards at the 9th Ghana Women in Excellence Award held on 8th March 2024 at the Coconut Grove Regency Hotel.

We held our first Engineering Excellence program ‘Engineering Excellence: Insight from our Male Champions’ was held on the 9th of June 2024 to tap into the expertise and insight from our male allies.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

WinE-Gh formed a Strategy Development group for the development of our strategy and action plan. This was achieved by attending workshops to equip participants in developing the Strategy and Action Plan. We focused on what we needed WinE-Gh to do for us, as well as what we could do for the society as a whole.

This involved restructuring the whole organogram of WinE-Gh to have effective participation of all members.

WinE-Gh introduced an approach where the various executives had to mentor the younger ones by assigning mentees to every position in the executive body to build capacity for members to seamlessly transition into executive roles.

Theme 3: Engineering Strategic Indicators

In celebrations of our 25th Anniversary, various mentoring programs were organised with a pre-launch activity at Twedee Junior High School for Tema Metro Schools. This was followed by the Obuasi Chapter organizing their mentoring program to support girls in STEM in Obuasi and its environs. The initiative was extended to Abume DA Primary School, Akosombo, Eastern Region, Christ The King Senior High School, Obuasi in the Ashanti Region, Mawuli EP Junior High School, Ho, Volta Region and Twene Amanfo Senior Technical School, Sunyani, Bono Region. These programs aim at demystifying Engineering to our female students.

WinE Ghana, in collaboration with WinE All Students Chapters, hosted the 3rd edition of WinE Affair from the 18th to 19th October 2024. The event was organized in partnership with the WinE Students, patrons, Engineering faculties and university councils from the ten (10) universities namely: University of Energy

and Natural Resources (UNER), University of Mines and Technology (UMaT), Kwame Nkrumah University of Science and Technology (KNUST), Kumasi Technical University (KsTU), University of Ghana, Legon (UG), University of Development Studies (UDS), Ashesi University, Central University, Takoradi Technical University and Ho Technical University. The students devised ten innovative solutions, each representing their respective institutions. Kumasi Technical University secured first place, followed by the University of Mines and Technology in second place, and the University of Ghana, Legon in third place. The remaining universities were ranked accordingly.

In addition, WinE-Gh honored its members aged 60 years and above who have demonstrated excellence in their respective fields of expertise.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

The Mentoring and Education Committee, a working committee of WinE-Gh, in collaboration with the WinE Students Chapter, organized the 2024 WinE Affair at the University of Ghana from 18th to 19th October 2024. WinE-Gh served as the primary sponsor for this event.

Other Accomplishments

WinE-Gh continues to sponsor a female student in need of assistance, covering both tuition and hostel accommodation.

WinE-Gh presented an award to the best graduating female Engineering student from one of our technical universities.

Facelift of Abume D/A School's computer lab with computers and desk.

Five members attended the World Engineering Day for Sustainable Development in Lisbon, Portugal.

There was substantial representation from WinE-Gh at the 10th UNESCO African Engineering Week and the 8th Africa Engineering Conference held in Luanda, Angola.

Six members participated in the Global Engineering Conference on Sustainable Development and the World Federation of Engineering Organizations Executive Committee meetings (GECO 2025) held in Kigali, Rwanda.

WinE-Gh has constructed toilet facilities for the residents of Kokote Kpordzi, a community affected by flooding in the Eastern Region of Ghana, within Akosombo.

Announcements

Ghana Institution of Engineering, the mother body of Women in Engineering Ghana (WinE-Gh) is hosting the Women in Engineering (WiE) Standing Technical Committee of FAEO and WFEO from 2024 to 2027.

Election of new WinE-Gh President as current President takes on international role.

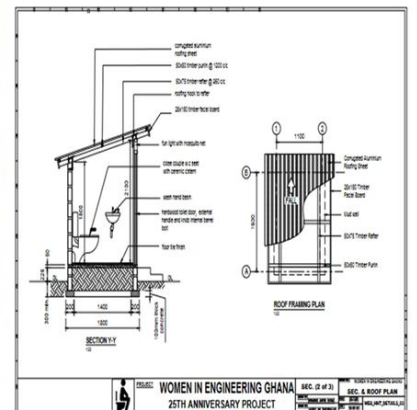
Resources

WinE- Gh's 25th Anniversary celebrations got featured in WFEO-WIE STC Newsletter for December 2024.

Events in Pictures



Furnishing the Computer lab with tables and chairs as well as Computers

[illegible]



WinE celebrates

International day of
**Women and Girls
in Science 2024**

Theme: Women and Girls in Science Leadership,
A New Era for Sustainability

Date: 16th February, 2024
Time: 9:00am
Venue: Twedaase JHS, Tema

Speakers:
Ing Jane Naki
Tetteh-Anowie
Ing Miriam
Amponsah

GhE
GHANA INSTITUTE OF ENGINEERING

WinE
WOMEN IN ENGINEERING
GHANA





President of Women in Engineering Ghana gets international role

News Desk Report

1988 women in Engineering (WIGE), a group under the Ghana Association of Engineering (GAE), has extended women's representation in the Ghanaian engineering sector to the Chair of the Council of Ministers in Engineering (WICE), a position of the World Federation of Engineering Organizations (WFEO) for the first time.


Dr. Elizabeth Kwameye, who is currently the Chair of the Council of Ministers in Engineering (WICE), a position of the World Federation of Engineering Organizations (WFEO) for the first time, has been elected to the position of President of the Ghana Association of Engineering (GAE) for the first time.

Dr. Kwameye, who is currently the Chair of the Council of Ministers in Engineering (WICE), a position of the World Federation of Engineering Organizations (WFEO) for the first time, has been elected to the position of President of the Ghana Association of Engineering (GAE) for the first time.


Profile

Dr. Elizabeth Kwameye is a Manager in Information and Communications Technology (ICT) at the Ghana Association of Engineering (GAE). She is also a member of the Ghana Association of Engineering (GAE) and a member of the Ghana Association of Engineering (GAE).


Dr. Kwameye is a Manager in Information and Communications Technology (ICT) at the Ghana Association of Engineering (GAE). She is also a member of the Ghana Association of Engineering (GAE) and a member of the Ghana Association of Engineering (GAE).




GhIE
GHANA INSTITUTE OF ENGINEERING



WIN E
WOMEN IN ENGINEERING
GHANA




FAEO
FEDERATION OF AFRICAN
ENGINEERS' ORGANIZATION




1st Edition

Engineering Excellence:


Insights from Male Champions




Ing. Kwabena Bempah, FRIAG
President, Ghana Institute of Engineering



Mr. Anthony Amegbete
Global Vice President Mineral Processing & OY Africa, Amara Global



Ing. Frederick Kwadena Bedada
General Manager EGS Addis Ababa South Region



Lazzer Kwame Jamshah
CEO, African Energy Consultancy Ltd.


Date: Sunday, 9th June, 2024

Time: 4:30pm

Venue: Online

Organizer: FAEO • WIE
Powered by WinE Ghana

Scan QR code to join



Link:
www.bit.ly/3Kon5Z6

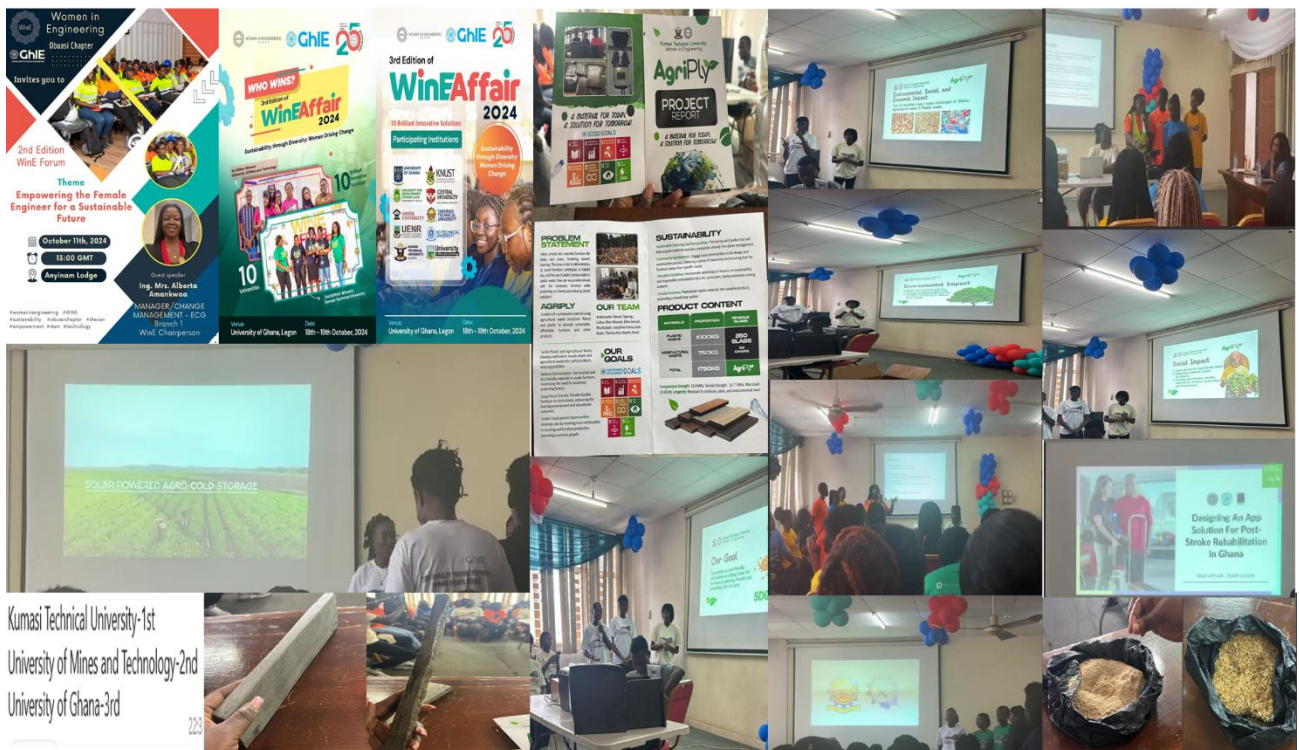
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424934

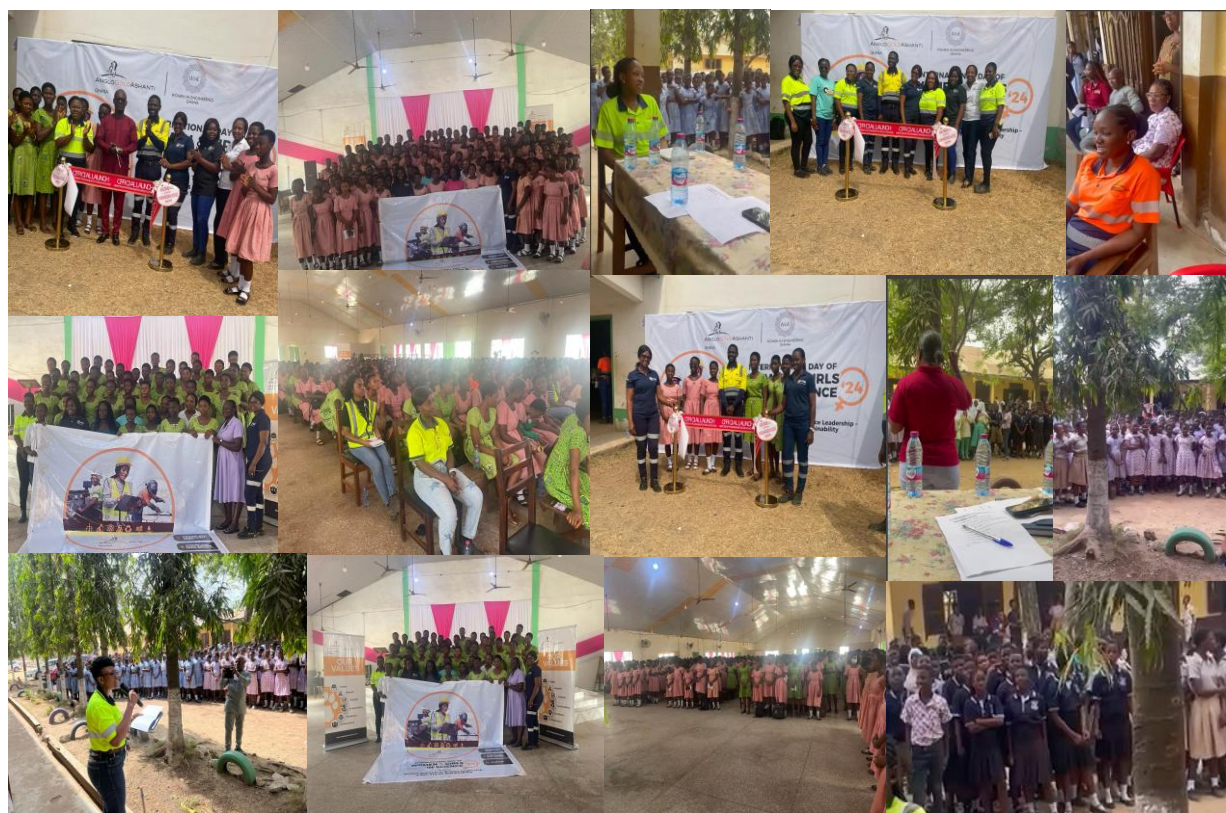
Chair of WIE- WFEO and FAEO and the 1st Edition of the Engineering Excellence program organised by FAEO theme 1 Vice Chair



International conferences attended by the Chair of WIE-WFEO and FAEO and some WinE – Gh representatives



3rd Edition of WinE Affairs held at the University of Ghana, Legon



Obuasi – WinE – Gh Chapter Mentoring sessions to mark International Day of Women and Girls in Science 2024



Women in Engineering Standing Technical Committee of the Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|-----------------------------|
| Committee Member Name | Naila Umubyeyi |
| Organization or Country | Rwanda |
| Date Submitted | 05 th March 2025 |
| Committee Member Email Address | naila.umubyeyi7@gmail.com |

Summary

Provide a brief summary of your report.

This report contains activities, achievements, events where the chapter members participated during the year 2024 and plans of the Women in Engineering Chapter of the Institution of Engineers Rwanda for the year 2025.

Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the FAEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

On October 08th 2024, 18 female engineers from the Women in Engineering (WiE) Chapter of the Institution of Engineers Rwanda (IER) visited Nyabarongo II Hydropower Project, a significant ongoing megaproject in Rwanda, set to play a crucial role in meeting Rwanda's growing energy needs through sustainable development. The field visit, supported by IER and Rwanda Energy Group (REG) allowed the women engineers (Civil, Structural, Mechanical and Electrical Engineers) to gain first-hand insights into large-scale infrastructure development.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

Through the Africa Catalyst Program of the Royal Academy of Engineering which aims to build the capacity of Engineering Institutions in Africa, 42 female engineers participated in a five-days training program on "Empowering Engineering Professionals with essential soft skills for career success" that was organized in three sessions (May, August and December 2024).

The training program aimed at empowering engineering professionals for career success benchmarked on competency profiles of responsibilities, management and leadership with communication and interpersonal skills. It enabled participants for job interviews, equipping them with essential soft skills and providing the knowledge needed to navigate and navigate in their chosen disciplines.

They covered the following topics:

- Introduction to professionalism in Engineering
- Professional branding for engineering graduates
- Effective oral and written communication and negotiation skill

Theme 3: Engineering Strategic Indicators

The WiE Chapter is planning to develop a proposal to raise funds for collecting data on Women in Engineering (from higher learning institutions, the Ministry of Public Service and Labor, private companies employing engineers, women engineers' owned companies).

Among IER registered engineers, only 10% are females. There is a need to quantify their presence in different sectors. This will enable the educators, policy makers and industry leaders to better understand the distribution of impact of women engineers in Rwanda, fostering more informed decision-making and targeted initiatives to support gender diversity in the engineering sector.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

On 28th August 2024, the chapter visited Isomo Academy (an initiative of Bridge2Rwanda, aiming at providing an intense English training and college preparatory program designed to equip Rwanda's top high school students with the skills they need to compete and win university scholarships inside and outside Rwanda).

The objective of the visit was to introduce young girls to engineering concepts and choose engineering at the university level. Senior women engineers shared their experience and journey of education and career.

After the session with students, a meeting was held with the management of Bridge2Rwanda and an opportunity for partnering with the WiE Chapter latter was discussed.

Other Accomplishments

Members of the WiE Chapter/Rwanda actively participated in the following events:

- The “2024 Women in Engineering Conference” organized by the Zambia Women in Engineering Section (ZWES) held on 19th April 2024.
- The “First East Africa Community (EAC) Multi-Stakeholders Forum for Effective Mutual Recognition Agreements” held on 20th -22nd November 2024 in Entebbe, Uganda; and presented on “Cross Border Mobility-Experience Sharing”.
- The “14th International Conference & Exhibition and AGM” organized by the Institution of Engineers Tanzania in collaboration with the Engineers Registration Board; from 05th to 07th December 2024, Arusha, Tanzania.
- Breakfast Meeting with the EAC Secretary General on 09th December 2024, Nairobi, Kenya.

Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the FAEO WiE Committee.

- WiE Chapter / Rwanda General Assembly in May 2025
- Visit to “ Rugando School ” for awareness raising on engineering in May 2025
- Webinars on different topics during the second quarter of 2025
- Site visits to different Mega projects (Bugesera International Airport) during the third quarter of 2025

Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the FAEO WiE Committee.



Women in Engineering Standing Technical Committee of the Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Mkufu Tindi, Alice Isibika |
| Organization or Country | INSTITUTION OF ENGINEERS TANZANIA WOMEN CHAPTER |
| Date Submitted | 06/03/2025 |
| Committee Member Email Address | mkufus.tindi@yahoo.com ; aisibika@yahoo.com |

Summary

This report outlines key accomplishments, events, and initiatives undertaken by the Institution of Engineers Tanzania Women Chapter (IET-WC) in alignment with the FAEO WiE themes, drawn from the 2024-chapter activities which includes School visits, Capacity Building, IET-WC annual conference (TAWECE), Mama Mhandisi Awards, and the participation of schools and universities in the annual conference/STEM fair.

Accomplishments

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

- i. The Institution of Engineers Women Chapter (IET-WC) in collaboration with the Engineers Registration Body conducted capacity-building programs for women who are mid-career and graduate engineers, trained through the SEAP program.
- ii. The Tanzania Women Engineers Convection and Exhibition (TAWECE) which is the annual conference also gathered more than 1000 participants which includes women engineers, secondary school students and university and colleges which major in engineering educations. Women engineers were from various sectors — government, private organizations, Higher Learning Institutions and entrepreneurs discussed diverse topics, exchanged ideas and experiences, and strengthened their professional capacities. Additionally, female engineering students actively participated, fostering mentorship and knowledge-sharing.
- iii. Further, the annual conference, promote STEM education through participation of young girls. The 2024 event brought together over 24 secondary schools, 3 primary schools, and 11 universities, directly engaged in the projects or innovation exhibitions.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

- i. IET-WC, in collaboration with the Engineers Registration Body (ERB), has actively supported women engineers to be trained in the Female Future Programme conducted by Association of Employers Tanzania (ATE). This program aims to strengthen gender equality in the workplace, improve women's representation in management decision-making processes, and draw women into top positions in both private and public sectors. Participants strategically enhance their performance, achieve personal and organizational growth, and build leadership and decisionmaking skills.
- ii. Additionally, IET-WC collaborates with organizations like TANESCO to encourage and train women graduate engineers to register as Professional Engineers and to further enroll with other engineering organizations like Institution of Engineers. This effort aims to boost their career progression and ensure they are well-prepared for leadership roles within their organizations.
- iii. The Mama Mhandisi Awards 2024 recognized outstanding women engineers across five categories, celebrating their leadership, innovation, and mentorship roles. Award categories included "Woman Engineer Achiever of the Year," "Woman Engineer Leader of the Year", "Woman Engineer Innovator of the Year" and "Young Engineer of the Year,". The awards recognize and reinforcing the importance of career growth and leadership development in the

engineering field. Further the awards recognize and acknowledge Organizations which support the advancement of women engineers to grow in their career and attain leadership positions.

Theme 3: Engineering Strategic Indicators

- i. TAWECE 2024 highlighted measurable impacts, such as the participation of over 1000 women engineers, engineering students and secondary schools' students, along with tangible outputs like project/innovations showcases and awards.
- ii. The Mama Mhandisi Awards followed a rigorous selection process, ensuring transparency and credibility in recognizing women engineers' contributions in aspects such as Leadership, Innovation and Entrepreneurship.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

- i. The collaboration between the Institution of Engineers Tanzania Women Chapter (IET-WC), ERB and various universities fostered partnerships to advance gender equality (SDG 5). In programmes such as school visit and youth expo.

Other Accomplishments

- i. Active media engagement during TAWECE 2024 amplified the visibility of women engineers through coverage by National Media and various online platforms.
- ii. Media Tours that are normally planned before and during the events also adds to the visibility of the chapter and provide awareness to engineering and STEM education.
- iii. The Mama Mhandisi Awards dinner gala gathered influential leaders and engineers, showcasing collective efforts to bridge gender gaps in the engineering sector.
- iv. Participation of the International engineering conferences and events also add to the visibility of the chapter within the EAC region and other countries

Announcements

Plans are underway for the next TAWECE event (2025), with a stronger focus on expanding student participation and strengthening partnerships with educational institutions and other stakeholders.

IET-WC in collaboration with ERB and Higher Learning Institutions preparing to launch a second phase of school visit, youth expo and innovation challenges young girls in STEM, aligning with FAEO WiE's goals.

Resources

TAWECE 2024 Event Report

https://www.instagram.com/iet_women_chapter/?hl=en

<https://www.facebook.com/womeniet/>

<https://tukiio.com/event/tawece9th> <https://www.ietwomenchapter.or.tz/>

This report captures the collective efforts and outcomes from recent events, reinforcing the IET-WC commitment to empowering women engineers and driving gender inclusivity in the engineering sector.



Women in Engineering Standing Technical Committee *of the* Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Agness Mofya Mwansa |
| Organization or Country | Zambia Women in Engineering Section (ZWES) |
| Date Submitted | 28 th February, 2025 |
| Committee Member Email Address | amofya@gmail.com |

Summary

Provide a brief summary of your report.

The Zambia Women in Engineering Section (ZWES) of the Engineering Institution of Zambia (EIZ) continues to actively promote diversity, leadership, and capacity building among female engineers. This report outlines key ZWES initiatives from 2024 to 2025, including outreach programs, professional development, technical tours, and strategic collaborations. The activities align with the FAEO WiE themes, particularly increasing the participation and retention of women in engineering and supporting Sustainable Development Goals (SDG 5).

Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the FAEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

1. CBU ZWES Student Chapter Conference (February 24, 2024) – Motivational careers talk to inspire young female engineering students.
2. International Women's Day Education Empowerment Initiative (March 8, 2024) – Outreach at Chimusanya Girls Secondary School (Rufunsa) and Lumanto Boarding Secondary School, encouraging girls to pursue STEM careers.
3. INWED Siavonga Secondary School Careers Talk (June 20, 2024) – Engaged students to create awareness of opportunities for women in engineering.
4. Kasisi Girls Secondary School Careers Talk (June 23, 2024) – Included sanitation improvement assessment and STEM motivation.
5. INWED Children's Workshop at Nchanga Trust School (June 25, 2024) – Career exposure for young students, reinforcing the importance of engineering education.
6. ZWES CBU-Student Chapter Orientation (February 7, 2025) – Theme: Campus to Career: Empowering Girls in Engineering, aimed at bridging the gap between academic training and professional careers.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

1. Mulungushi University in collaboration with LaunchHer Hub Interactive Brunch (April 6, 2024) – Career talk and mentorship for female engineering students.
2. 6th Zambia Women in Engineering Conference (April 19, 2024) – Theme: Resilience and Innovation – Women Engineering the Future. Keynote presentations focused on leadership, innovation, and gender equality in engineering.
3. ZWES High Tea Event (September 7, 2024) – Theme: Promoting Leadership among Female Engineering Professionals. The event emphasized personal growth, career advancement, and financial management for women in engineering.

Theme 3: Engineering Strategic Indicators

1. ZWES Technical Tour to Trade Kings Plant (September 6, 2024) – Provided female engineers with exposure to manufacturing processes and technical advancements in industry.
2. Webinar on Energy Solutions and Breast Cancer Awareness (October 25, 2024) – Theme: Thrive 365: Strong Women, Strong Communities – Enhancing Well-being and Energy Solutions. Featured Mr. Ken Dunn and Dr. Christabel Mbiiza discussing sustainable energy innovations and women's health.

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

1. ZWES Engagement in National Events – Actively participated in workshops, training sessions, and collaborations with industry partners to promote gender equity in engineering and sustainability.
2. Capacity Building Workshops – Reached an estimated 2,000 students and 400+ female engineering professionals through skill development programs in engineering, entrepreneurship, and leadership.
3. 16 Days of Activism Against Gender-Based Violence (November 25 – December 10, 2024) – Awareness campaign on the ZWES WhatsApp group, reinforcing commitment to SDG 5 (Gender Equality).
4. Webinar on 16 Days of Activism Against Gender-Based Violence (December 10, 2024) – Theme: Unite to End Violence Against Women. Featured speakers Sharon Chisanga (YWCA) and Insp. Michael Monde (Zambia Police Service Victim Support Unit).
5. ZWES 9th Anniversary Celebration (January 30, 2025) – Theme: Forging Partnerships for Shared Success. Focused on strengthening collaborations to advance gender inclusivity and women's leadership in engineering.

Other Accomplishments

1. Increased ZWES visibility and outreach – Expanded engagement with schools, universities, and industry partners to enhance participation of women in STEM.
2. Strategic collaborations with APWEN and LaunchHer Hub – Strengthened regional and international partnerships to support female engineers' career growth.
3. Continued mentorship and career guidance – Through webinars, career talks, and networking events, ZWES has provided opportunities for young women to connect with professionals in engineering.
4. Increased number of women in engineering being appointed in strategic leadership positions, committees and Boards within EIZ and Government
5. Increased number of women participating in EIZ elections- Two women contested for the position of President of the Engineering Institution of Zambia in the 2024 elections.

Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the FAEO WiE Committee.

1. **On 8th March 2025, ZWES will be commemorating International Women's Day themed "Accelerate Action" by hosting two fitness training activities and career talks in Lusaka and Kitwe.**
2. **ZWES will soon be hosting the 7th Zambia Women in Engineering Conference – April 8, 2025, in Livingstone, Zambia.**

Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the FAEO WiE Committee.

1. <https://iodzambia.org.zm/newsroom/empowering-women-in-engineering-mirriam-chiyabas-inspiring-address-at-the-zwes-high-tea>
2. <https://eiz.org.zm/zambia-women-in-engineering-section-zwes/>
3. <https://womenvai.org/wp-content/uploads/2024/05/ZWES-WOMENVAI-WORKSHOP-20-June-2024.pdf>
4. https://web.facebook.com/groups/382382558531117/?_rdc=1&_rdr#
5. <https://www.zambiamonitor.com/female-engineers-lament-male-dominance-of-tech-sector-call-for-gender-balance/>
6. <https://www.zanaco.co.zm/2024/09/08/zambia-women-in-engineering-section-high-tea/>
7. <https://x.com/CECinvestor/status/1805938705141526905>
8. https://www.instagram.com/engineering_institution_of_zam/p/C_nCyhSulOP/



Women in Engineering Standing Technical Committee *of the* Federation of African Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Smita Francis |
| Organization or Country | Namibian Women In Engineering |
| Date Submitted | 11 th March, 2025 |
| Committee Member Email Address | sfrancis@gmail.com |

1 Summary

Provide a brief summary of your report.

In 2024, NAMWIE actively contributed to the advancement of women in engineering by organizing career guidance events, mentorship programs, academic award ceremonies, and industry collaborations. These initiatives focused on increasing diversity in engineering, supporting female engineers' retention and leadership, and strengthening partnerships to promote gender equality in STEM. Through these efforts, NAMWIE engaged students, professionals, and stakeholders to foster an inclusive engineering community.

2 Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the FAEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

2.1 Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

NUST Career Fair (April 17-18, 2024)

- NAMWIE participated in the **NUST Career Fair**, engaging with students interested in engineering.
- Provided **career guidance and mentorship**, highlighting opportunities in STEM fields.



Delta Secondary School Career Fair (August 5, 2024)

- NAMWIE attended the **Delta Secondary School Career Fair**, focusing on guiding and inspiring young learners, particularly girls, to pursue careers in Science, Technology, Engineering, Arts, and Mathematics (STEAM).
- Provided insights into engineering career paths and academic requirements.
- Hosted a **quiz competition with awards** to encourage student participation.

Namibian Engineering Week (September 17-18, 2024)

- Hosted in the margins of the **10th UNESCO Africa Engineering Week (AEW)** and supported by **UNESCO**.
- Brought together national stakeholders, including **NUST, UNAM, NCRST, FAWENA, and NCAA**, to provide career guidance to approximately **40 female learners** from various Windhoek schools.
- Organized an interactive **quiz competition**, where winning students received prizes.

- Arranged a **site visit to Eros Airport with NCAA**, allowing learners to gain hands-on exposure to engineering work environments.





2.2 Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

NAMWIE Academic Award Ceremony (October 18, 2024)

- Recognized and celebrated the **academic achievements of NAMWIE members**, with sponsorship from **NAMDIA**.
- Awardees, who maintained a **70%+ academic average**, shared their experiences and study strategies to inspire other students.
- Strengthened **motivation and leadership** among female engineering students by showcasing role models.



2.3 Theme 3: Engineering Strategic Indicators

Conducted **informal data collection** through mentorship programs, career fairs, and industry events to better understand the challenges and opportunities for women in engineering.

Strengthened **collaborations with national institutions** and industry stakeholders to align initiatives with strategic workforce development goals.

2.4 Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

SDG 5 (Gender Equality) Advocacy

- NAMWIE worked to **bridge gender gaps in STEM** through initiatives that provided networking, mentorship, and industry exposure to female engineering students.
- Engaged with **UNESCO, NUST, UNAM, NCRST, FAWENA, NCAA, and NAMDIA** to create opportunities and resources for women in engineering.
- Encouraged inclusive policies and highlighted the importance of gender representation in engineering.

2.5 Other Accomplishments

NAMWIE member selected for the Loreal UNESCO Award

NAMWIE Student Branch member Ms Rosalia Haufiku bagged Second place in the Africa Innovation Tourism award

Founder and CEO of NAMWIE Dr Smita Francis was awarded the MasterCard Lifetime Achievement Award.

3 Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the FAEO WiE Committee.

NAMWIE Conference

The event will feature **keynote speakers**, discussions on engineering innovations, and an **award ceremony** recognizing outstanding female engineering students.

- Provides networking opportunities for students, professionals, and industry leaders.

Essay Competition for High School Girls

- NAMWIE will launch an **essay competition** to encourage high school girls to explore careers in engineering.

Mentorship Programs

- NAMWIE is developing **mentorship programs** to support university students in navigating their academic and professional journeys.

4 Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the FAEO WiE Committee.

1. NAMDIA academic awards ceremony

https://www.linkedin.com/posts/namwie_friday-18th-october-we-gathered-to-celebrate-activity-7255156048221585409-9-EZ?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JW WxP64

2. Namibian Engineering week celebration

https://www.linkedin.com/posts/namwie_engineeringforsustainability-womeninengineering-activity-7245110646831210496-ugz?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64

3. Delta High School Career fair

https://www.linkedin.com/posts/namwie_namwie-stem-steam-activity-7227036303106666497-Fz_u?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64

4. NUST career fair

https://www.linkedin.com/posts/namwie_namwie-nust-nustcarereerfair-activity-7189062472291516416-LwzU?utm_source=share&utm_medium=member_ios&rcm=ACoAADAf4bYBqG7_AbEVGE1B8bq0MpL2JWWxP64



Women in Engineering Standing Technical Committee of the World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--|
| Committee Member Name | Jeanette M. Southwood, FCAE, FEC, LL.D. (honoris causa), P.Eng., IntPE Executive Vice President, Corporate Affairs and Strategic Partnerships |
| Organization or Country | Engineers Canada |
| Date Submitted | September 2025 |
| Committee Member Email Address | Jeanette.Southwood@engineerscanada.ca |

Summary

Provide a brief summary of your report.

This report provides an overview of [Engineers Canada](#)'s work from the date of the last country report in September 2023 to the present. Engineers Canada is the national organization of the 12 engineering regulators that license the country's more than 320,000 members of the engineering profession. Together, we work to advance the profession in the public interest. Engineers Canada has fulfilled its commitment to all themes. References and supporting material have been linked directly to the associated sections. This report has been prepared by: Committee Member, Jeanette Southwood, FCAE, FEC, LL.D. (honoris causa), P.Eng.; Kim Bouffard, BEd, Manager, Belonging and Engagement; and Eileen Sowunmi, BA, Associate, Outreach and Belonging.

Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the WFEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

The following are selected examples of Engineers Canada's work under Theme 1:

- At the start of 2024, Engineers Canada, as part of its goal to champion an equitable, diverse, inclusive, and trustworthy engineering profession, launched a new platform — [Pathway to Engineering](#). This new platform was developed to better support students and early career professionals throughout their path to licensure. Pathway to Engineering serves post-secondary students and early career professionals by improving clarity of the licensure process and addressing key barriers, including barriers for women and equity-deserving groups. In March 2024, the first webinar of the ongoing Exchanges webinar series (under Pathway to Engineering), was organized, discussing the topic: "[You have your engineering degree... now what?](#)" The second webinar of the series, "[Prepare for the career ahead: regulator programs to help graduates gain licensure](#)" was held in October 2024.
- The Building Tomorrows Campaign launched for a second year in 2024, calling on Canadians to think differently about the value of engineers. Conceived in collaboration with Canada's engineering regulators, the "[Building Tomorrows](#)" campaign challenged Canadians to expand their perceptions of engineers—not just as builders of bridges and buildings—but as builders of solutions that make our world a better place. It also challenged the stereotypes of who is an engineer ensuring diverse representation was prioritized throughout the campaign.
- In March 2024, together with Engineers Canada, Polytechnique Montréal, and the Canada Green Building Council, the Climate Risk Institute (CRI) collaborated with a diverse team of low-carbon building experts to develop a [Low-Carbon Buildings Training](#) course specifically designed to support engineers with the transition to a low carbon economy. Engineers Canada worked with knowledge experts to incorporate an equity, diversity, and inclusion lens, as well as Truth and Reconciliation, within the curriculum. In collaboration with Climate Risk Institute (CRI), Engineers Canada organized a webinar: [Synergizing Sustainability and Equity: A Blueprint for Exceptional Low Carbon Buildings](#), to discuss the Low-Carbon Training for Engineering Professionals course, drawing connections between sustainability and equity, diversity, and inclusion.
- In January 2025, Engineers Canada kicked off its Board-approved 2025-2029 Strategic Plan: '[Realizing Tomorrows](#).' This plan includes a strategic direction called '[Realizing an inclusive](#)

[profession](#)' which includes: embracing inclusion, diversity, equity, and accessibility (IDEA), and partnering with organizations and regulators to establish Engineers Canada's role in moving IDEA forward in engineering. Additionally, "Realizing an inclusive profession" includes providing national support and leadership to advance truth and reconciliation in the engineering profession.

- In July 2025, proposals were solicited for the [Development of a Business Model and Strategic Growth Plan for the Forward Engineering Collective](#). [The Forward Engineering Collective](#) is a national initiative co-founded in 2024 by six partner organizations, including Engineers Canada. Its core mission is to ensure that all children and youth across Canada have equitable, meaningful access to engineering education and awareness of engineering as a career - a crucial step towards achieving gender balance in engineering.
- In July 2025, a request for proposals was published to seek a consultant to create compelling, equity-informed visual collateral and campaign materials for the [Forward Engineering Collective](#) (focused on K-12 outreach and public education) and [Pathway to Engineering](#) (focused on licensure awareness and navigation).
- As the national voice of the engineering profession, one of Engineers Canada's core purposes is to promote equity, diversity, and inclusion in the profession that reflects Canadian society. Engineers Canada celebrated Pride Month in June 2024 with a virtual conversation about building inclusive workplaces that are safe and welcoming for 2SLGBTQ+ people. The recording of the webinar is available [here](#). Pride Month in June 2025 was also celebrated with a webinar, Allyship in Engineering. More information including the recorded webinar is at [this link](#).

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

The following are selected examples of Engineers Canada's work under Theme 2.

- April and May 2024 saw Engineers Canada host its national annual 30 by 30 Conference. Each annual conference has been and will be held in collaboration with one of Engineers Canada's provincial or territorial regulators. The conference, with the overall theme of "30 by 30: Turning Knowledge into Action for Gender Equity in Engineering", consisted of:
 - a 3-hour virtual session focused on "Creating equitable engineering workplaces"; and
 - a full-day in-person Summit in Winnipeg, Manitoba.
- The conference was held in collaboration with Engineers Geoscientists Manitoba. Engineering regulators, higher education institutions, industry leaders, and gender equity champions were brought together to discuss lessons learned and explore how our work and approaches to achieving gender equity within engineering has evolved, the current state, and what strategies and opportunities for a more diverse, inclusive, and trustworthy engineering profession. The in-person summit was not recorded; however, the agenda is at <https://site.phedloop.com/event/30by30conference/Summit>.
- In advance of INWED 2024, Engineers Canada moderated a virtual panel on "[Achieving Parity in Governance](#)" at the virtual Canadian Consulting Engineer (CCE) ADVANCE Women in Engineering summit.
- As we celebrated INWED 2024, we reflected [on our work](#) to advance gender equity in engineering, including the work that still needs to be done. Engineers Canada released an [article](#) that recaps the keynote presentation by Prairie Research Associates (PRA) Inc. at the 2024 30 by 30 Conference. The presentation summarizes the findings of the environmental scan, formative evaluation and recommendations for the first decade of 30 by 30 initiative.
- September 22 to 28, 2024, was Gender Equality Week in Canada. With its theme, "Unlocking Potential: Economic Power Through Gender Equality," the week underscored that gender equality is essential for a thriving and equitable society. Engineers Canada reflected on what actions can be taken to advance gender equity in engineering, and shared resources for engineers and engineering employers to use. More information is in this article: <https://engineerscanada.ca/news-and-events/news/engineers-canada-celebrates-gender-equality-week-2024>
- In January 2025, Registration for the 2025 30 by 30 Conference, themed "Solutions and accountability towards an inclusive engineering profession", was announced. Organised in collaboration with Engineers and Geoscientists British Columbia, the conference was held on Wednesday, May 21, 2025, in Vancouver, BC. The conference brought together leaders from engineering regulators, employers, and education to address barriers within their control and influence, collaborate on innovative solutions, and promote accountability for fostering the success of women and marginalized groups in the profession. The conference also provided networking opportunities to emphasize collective action and drive meaningful change. More information is here: <https://site.phedloop.com/event/202530by30/home>.

- To further engage the 30 by 30 network, Engineers Canada sought responses to Requests for Information (RFIs) for the following sessions of the 2025 30 by 30 conference in Vancouver, British Columbia: Re-imagining Engineering - Amplifying Early Career Voices for Inclusive Change ([at this link](#)), and a breakout session on Navigating Intersectionality in Engineering ([at this link](#)). Members of the 30 by 30 network were also invited to participate in a [community showcase](#) at the conference. The community showcase was an opportunity to explore the work that members of the 30 by 30 network are undertaking to advance gender equity and foster an inclusive and trustworthy engineering profession. It also facilitated networking among members and conference attendees.
- Every year, Engineers Canada invites engineers and engineering students from all career stages, disciplines, and parts of Canada to nominate an individual or self-nominate to be honoured for helping to improve Canada and our world. The [Award for the Support of Women in the Engineering Profession](#) recognizes engineers who have demonstrated exceptional achievements in advancing the recruitment, retention, and professional development of women in engineering.

Theme 3: Engineering Strategic Indicators

| Women Engineers | Percentage of Total (%) |
|---------------------------------------|-------------------------|
| Professionally Registered | 15.4% (2024)* |
| Working in Engineering Establishments | -** |
| Undergraduates (graduated in 2022) | 23.3%*** |

This data will be used for global benchmarking, so please include references for your data.

References for above data:

* <https://engineerscanada.ca/reports/national-membership-report/2024-national-membership-information#-sex-representation-in-engineering>

** Data on Women Engineers Working in Engineering Establishments are not collected in Canada

*** <https://engineerscanada.ca/reports/enrolment-and-degrees-awarded-report/2022-canadian-engineers-for-tomorrow#undergraduate-degrees-awarded-to-femaleidentified-students>

In addition to the statistics listed above, please include any other statistics you feel are appropriate and any relevant notes to your statistics in the body of this section. Likewise, include any historical data or relevant statistical reports.

In addition to the statistics listed above, Engineers Canada collected the following quantitative data from each regulator for the period from January 1 to December 31, 2022.

- % Newly licensed (female-identifying)
- % Applying for licensure (female-identifying)
- % Engineers-in-Training (EITs) (female-identifying)
- % Newly registered EITs (female-identifying)
- % Student members (female-identifying)

Engineers Canada reports annually on national and regional metrics in the National Membership Report (<https://engineerscanada.ca/reports/national-membership-report>).

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Engineers Canada worked in partnership with a number of other organizations from September 2023 to the present. Some examples are:

- Engineers Canada is a member of the **Canadian Coalition of Women in Engineering, Science, Trades and Technology (CCWESTT)** board. In addition, Engineers Canada supported CCWESTT in the creation of their three-year Gender Equality Strategy: <https://ccwestt-ccfsimt.org/gender-equality-strategy-2022-2025/>. In 2026, Engineers Canada plans to collaborate with CCWESTT on the 30 by 30 conference.



- From November 2023 to the present, Engineers Canada partnered on several Canadian Federation of Engineering Students (CFES) meetings and events including the Canadian Engineering Leadership Conference (CELC), the Canadian Engineering Competition (CEC), the Conference on Diversity in Engineering (CDE), and the Conference on Sustainability in Engineering (CSE). In addition, the two organizations collaborate on a joint mentorship program and Engineers Canada hosts the CFES' annual leadership transition meeting. More information is at www.cfes.ca.
- Engineers Canada enabled knowledge exchange by participating in conferences and projects in support of gender equity in engineering. These included:
 - In October 2023, Engineers Canada participated in meetings of the World Federation of Engineering Organizations (WFEO) Women in Engineering (WiE) Committee and moderated a panel on "Engineering for life".
 - In November 2023, Engineers Canada participated in the Ontario Network of Women in Engineering (ONWiE) Summit. Engineers Canada, along with Engineers of Tomorrow, presented on a collective impact project to address the issue of "Where is the 'E' in STEM?", including a strategic focus on promoting engineering in the K-12 education system to encourage equity, diversity, inclusion belonging and reconciliation in relation to pursuing an engineering career. More information can be found [here](#).

- In November 2023, Engineers Canada attended the capstone knowledge-sharing conference, Breaking Barriers and Building Bridges (BBBB), of the Engendering Success in STEM (ESS) Research Consortium. Engineers Canada is a member of the ESS Research consortium, and Engineers Canada's Belonging and Engagement team participated in group meetings that focused on identifying the key interventions that most effectively target the largest obstacles at each step along the continuum from early education to early career for girls and women in engineering.
- In December 2023, Engineers Canada partnered with ChatterHigh to create a gamified engineering course that is freely available for both students and teachers. The course allows students to explore the exciting and diverse range of opportunities in engineering, what it means to be an engineer, and how engineering impacts society. The gamified course also features a breadth of topics, including equity, diversity and inclusion (EDI) within engineering.
- Engineers Canada participated in an Electricity Human Resources Canada (EHRC) Advisory Committee webinar on Building a Sexual Harassment-Free Workplace for Women in Electricity. Tools and resources developed were published in January 2024 at [this link](#).
- Engineers Canada participated in the 2024 American Indian Science and Engineering Society (AISES) conference in Vancouver, BC in March. A presentation was prepared by members of Engineers Canada's Indigenous Advisory Committee (IAC). The Chair of the IAC, presented with Engineers Canada on its work to date and plan to move forward truth and reconciliation within the profession. A recap of the AISES 2024 gathering can be found here: https://read.nxtbook.com/aíses/winds_of_change/summer_2024/aíses_in_canada.html
- The 2025 AISES in Canada National Gathering, themed "Innovation Rooted in Culture" was held in Toronto on March 6-8, 2025. Engineers Canada had the opportunity to connect in-person with members of its Indigenous Advisory Committee (IAC). The IAC and Engineers Canada team plan to align their annual in-person meeting with the AISES in Canada national gathering going forward. Lastly, the Engineers Canada team also participated in a Canadian Indigenous Advisory Council (CIAC) meeting.
- Engineers Canada is a member of the Engendering Success in STEM (ESS) research consortium which has a focus on identifying the key interventions that most effectively target the largest obstacles at each step along the continuum from early education to early career for girls and women in engineering. More information about ESS is at <https://successinstem.ca/>.
- Engineers Canada collaborates with the Society of Women Engineers (SWE), based out the United States, as well as with the SWE in Canada chapters. With more than 40,000 members around the world, SWE describes itself as the world's largest advocate and catalyst for change for women in engineering. Engineers Canada promotes SWE events that are available to Canadian participants and speaks at SWE in Canada workshops and events on the topics of

gender equity, best practices for workplace diversity, equity, and inclusion, and on our 30 by 30 initiative.

- Engineers Canada, in partnership with Girl Guides Canada, created the Engineering crest (<https://exploreengineering.ca/programs/girl-guides>). The crest program is ongoing.



Other Accomplishments

Annual

Every year, Canada's federal government invites submissions to the House of Commons Standing Committee on Finance regarding the pre-budget consultations in advance of the next budget. Engineers Canada's most recent submission includes: that the government provide ongoing support for equity, diversity, and inclusion initiatives across Canada, including measures to address discrimination, harassment, and enhance workplace inclusivity for women. Our 2025 submission is at [this link](#).

Every March, National Engineering Month (NEM) celebrates engineers and the significant impact that they make in society. In 2024, NEM was celebrated under the theme "There's a place for you in engineering", and various events were featured in NEM [national calendar](#).

2023

In October 2023, Engineers Canada hosted a webinar to showcase and discuss its [Guideline on Indigenous Consultation and Engagement](#). The guideline intends to empower the user to practice engagement with humility and empathy, and promote meaningful engagement between engineers and Indigenous communities when it comes to engineering work.

2024

In 2021, Engineers Canada set out to examine the current Canadian engineering accreditation system, understand how it is serving contemporary needs, and consider how it can better serve the future of engineering. The [Futures of Engineering Accreditation \(FEA\) Path Forward Report](#) (October 2024) sets a foundation for one of Engineers Canada's 2025-2029 strategic directions, [Realizing Accreditation and Academic Assessments](#). Such work is important towards ensuring that the engineering profession is reflective of ever-changing times, meeting diverse and important needs. Learn more about Engineers Canada's ongoing work in the FEA project by reading [this article](#).

Engineers Canada marked International Women's Day 2024 on March 8, 2024, by looking back at the first decade of 30 by 30: <https://engineerscanada.ca/news-and-events/news/international-womens-day-accelerating-progress-towards-gender-equity-in-engineering>.

2025

In 2025, a new NEM theme "Engineers open doors" was announced to highlight how engineers drive innovation and progress, bring people together and inspire. To celebrate this spirit, during NEM, the engineering profession opened its doors to the community, demonstrating how engineers open doors. A national [NEM calendar](#) featured events taking place across the country. A national kick-off event was also organized, celebrating the centennial of the Iron Ring and the unveiling of the newly modernized Calling of an Engineer. The virtual event honored the legacy of this cherished tradition while exploring how recent updates to the Obligation Ceremony reflect a more inclusive and forward-thinking engineering profession. The recording can be accessed [here](#).

Every year in June, Engineers Canada joins engineering organizations around the world in observing International Women in Engineering Day (INWED), including participating in the World Federation of Engineering Organizations (WFEO) [INWED webinar](#). [In 2025, Engineers Canada reaffirmed its commitment to advancing gender equity](#) in the profession, and shared some calls to action for decision makers and all engineers to contribute towards long lasting positive change. In celebration of INWED, Engineers Canada also participated in Canadian Consulting Engineer's virtual event, [ADVANCE: Women in Engineering 2025](#) on two panels —Engendering Success and Making Allyship Work.

In July 2025, Engineers Canada released Requests for Proposals (RFPs) for several projects. This included soliciting proposals for work towards truth and reconciliation in the engineering profession. This project will see the creation of an environmental scan and a National Truth and Reconciliation Framework and Action Plan. More information can be found here: [Request for proposals: Creation of a Truth and Reconciliation Framework for the engineering profession](#).

Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.

- Engineers Canada's 2025 national 30 by 30 Conference was held on Wednesday, May 21, 2025, in Vancouver, British Columbia (see <https://site.phedloop.com/event/202530by30/home> and <https://engineerscanada.ca/diversity/women-in-engineering/30-by-30-conference>). Every year, Engineers Canada collaborates with a different Canadian provincial or territorial engineering regulator to organize the conference. The 2026 conference will be organized in collaboration with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) on Sunday, May 24, in Calgary, Alberta.
- As of May 2025, Engineers Canada has increased the number of 30 by 30 Board Champions from one to two (see <https://engineerscanada.ca/diversity/women-in-engineering/30-by-30>).
- Facilitating collaboration and information exchange among Canada's 12 provincial and territorial engineering regulators: One example of Engineers Canada's work in this stream is the monthly 30 by 30 newsletter. All are welcome to subscribe to the newsletter at <https://mailchi.mp/engineerscanada/subscribe-to-30-by-30-newsletter>.

Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

<https://engineerscanada.ca/>

<https://engineerscanada.ca/sites/default/files/2022-02/engineers-canada-strategic-plan-2019-2021.pdf>

<https://engineerscanada.ca/diversity/women-in-engineering/recruitment>

[Changing the culture for engineering employers](#)

<https://engineerscanada.ca/sites/default/files/2021-05/2022-2024%20%20-%20A%20vision%20for%20collaboration.pdf>

<https://engineerscanada.ca/about/governance/a-vision-for-collaboration#2x1>

[K-12-Guidelines-EN.pdf \(engineerscanada.ca\)](#)

<https://exploreengineering.ca/programs/future-city-canada>

[Registration now open for educators to sign up for Future City Experience | Engineers Canada](#)

<https://engineerscanada.ca/news-and-events/news/engineers-canada-issues-rfp-for-review-of-k-12-stem-education-in-canada>.

<https://engineerscanada.ca/news-and-events/news/register-today-for-the-emerging-professionals-summit>

[Engineering employers and 30 by 30 | Engineers Canada](#)

<https://engineerscanada.ca/news-and-events/news/30-by-30-virtual-conference-2021-sessions-are-now-available>

[Reconciliation in engineering | Engineers Canada](#)

<https://engineerscanada.ca/diversity/women-in-engineering>

<https://engineerscanada.ca/diversity/about-diversity-in-engineering>

<https://successinstem.ca/>

<https://engineerscanada.ca/reports/2021-national-membership-information#sex-representation-in-engineering>

<https://engineerscanada.ca/publications/canadian-engineers-for-tomorrow-2019#undergraduate-degrees-awarded-to-female-students>

<https://electricityhr.ca/2021/08/12/electricity-human-resources-canada-project-addresses-sexual-harassment-in-sector-workplaces/>

<https://ilead.engineering.utoronto.ca/research/about/#research-labs>

<http://dev.discovere.org/our-programs/persist-series>; <https://engineerscanada.ca/news-and-events/news/the-importance-of-storytelling-in-edi-persist-series-episode-8>

<https://exploreengineering.ca/programs/future-city-canada>

<https://exploreengineering.ca/programs/girl-guides>

<https://www.apega.ca/members/mentoring>

<https://engineerscanada.ca/news-and-events/news/engineers-canada-issues-rfp-for-development-of-employer-engagement-strategy-for-gender-equity-diversity-and-inclusion-in-engineering>

<https://engineerscanada.ca/news-and-events/news/engineers-canada-issues-rfp-to-update-guideline-on-parental-leave-for-engineers-and-geoscientists>

<https://www.newswire.ca/news-releases/kathy-baig-ing-will-preside-over-the-engineers-canada-board-in-2022-2023-844261924.html>

<https://engineerscanada.ca/news-and-events/news/call-for-nominations-edi-leaders-in-engineering-workplaces>

<https://engineerscanada.ca/news-and-events/news/call-for-events-national-engineering-month>

<https://engineerscanada.ca/news-and-events/news/future-city-join-a-live-qa-as-you-design-your-city-on-the-moon>



Women in Engineering Standing Technical Committee *of the* World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|---|
| Committee Member Name | Jitu kebede |
| Organization or Country | Ethiopia, Ethiopia Association of Civil Engineering |
| Date Submitted | October 7,2025 |
| Committee Member Email Address | jitukebede@gmail.com |

Summary

The Ethiopian Association of civil Engineers (EACE) demonstrated an unwavering commitment to gender equality commitment to gender equality and women's empowerment in engineering throughout 2025, directly supporting the United Nations Sustainable Development Goals (SDGs 5, 9, and 11). EACE's initiatives successfully ignited passion and fostered inclusivity among young girls and women

engineers in Ethiopia. Key activities included interactive, all-women-led webinars on cutting-edge topics like Building Information Modeling (BIM); a highly impactful STEM empowerment program for high school girls at Nazareth School; and a dual celebration of World Engineering Day and International Women's Day. These efforts highlighted women's pivotal roles, addressed industry challenges like gender bias, and promoted sustainable, inclusive engineering solutions, thereby strengthening Ethiopia engineering landscape and inspiring global collaboration.

Accomplishments

- *Amplify Women's Voices in Engineering:*
- **Webinar Series:** Hosted all-women-led webinars on experience-sharing, tackling industry challenges, gender biases, work-life balance, and providing solutions.
- **All-Women BIM Webinar:** Successfully conducted a webinar on Building Information Modeling (BIM) exclusively presented by women experts, showcasing female-led innovation in Ethiopia's construction sector.
- *Empowering Girls in STEM:*
- **Nazareth School STEM Empowerment Program:** Held an event on March 4, 2025, titled "Empowering Girls – Engineering for a Sustainable Future" for high school girls (grades 9–12).
- *Attracted over 100 students and generated newfound excitement for engineering careers.*
- *Featured an inspiring guest speaker who shared her journey of overcoming obstacles in a male-dominated field.*
- *Organized a thrilling quiz competition on engineering principles and women's contributions to STEM.*
- *Global Day Celebrations and Women's Leadership:*
- *Dual Celebration of World Engineering Day and International Women's Day:* Hosted a major event on March 8, 2025, with over 400 participants.
- **Female Dominance:** Nearly all presenters were women, and the stage was moderated by a young woman engineer, symbolizing the rise of female leadership.
- **UNOPS Keynote:** Featured a compelling keynote by Sonja Varga, Head of Program at UNOPS, on inclusive engineering, focusing on gender equality and sustainable urban development.

- **Architect Eyerusalem's 'Map of Africa' Installation:** A symbolic art installation where participants inscribed messages of unity and aspiration, representing African engineering solidarity.

Engineering Workforce Diversity Theme

The goal of this theme is to increase the representation and visibility of women across all levels and sectors of the engineering workforce.

| Accomplishment | Initiative | Impact/Outcome |
|---|--|---|
| Increased Visibility of Women Engineers | Experience-Sharing Webinar (all-women-led) and BIM Webinar (exclusively presented by women experts). | Showcased women leading major infrastructure projects and technical innovation, directly countering the stereotype of engineering as a male-only field. |
| Early Career STEM Promotion | Nazareth School STEM Empowerment Program ("Empowering Girls – Engineering for a Sustainable Future"). | Engaged over 100 high school girls in grades 9–12, sparking interest in engineering careers and dismantling stereotypes about women in STEM. |
| Celebrating Achievements and Role Models | Dual World Engineering Day and International Women's Day Celebration. | Nearly all presenters were women , and the stage was moderated by a young woman engineer, making female leadership the central focus for over 400 attendees. |



Figure 3 EACE Webinar -Empowering women in STEM

Leadership and Empowerment Theme

The goal of this theme is to support the advancement of women into leadership roles and empower them to overcome professional barriers.

| Accomplishment | Initiative | Impact/Outcome |
|---|--|--|
| Mentorship and Practical Guidance | Experience-Sharing Webinar. | Accomplished women engineers candidly shared their journeys, addressing challenges like gender biases and work-life balance . They provided actionable insights and practical solutions, building the confidence of participants. |
| Demonstrating Technical Leadership | BIM Webinar Led by Women Engineers. | The all-women panel demonstrated female-led innovation in transforming Ethiopia's construction sector through digital modeling and sustainable practices, positioning them as technical experts and leaders . |
| Inspiring Future Leaders | Nazareth School STEM Empowerment Program (Guest Speaker). | The guest speaker's story of perseverance, resilience, and professional impact deeply resonated with students, reinforcing the power of women role models in breaking barriers and pursuing ambitious goals. |



Figure 4 EACE Webinar - BIM Integration



Figure 5 EACE Webinar BIM Implementation

Engineering Strategic Indicators Theme

The goal of this theme is to integrate gender perspectives into engineering policy, standards, and sustainable development goals (SDGs).

| Accomplishment | Initiative | Impact/Outcome |
|--|--|---|
| Direct SDG Alignment and Promotion | Executive Summary and Event Thematic. | Explicitly aligned all initiatives with SDG 5 (Gender Equality) , SDG 9 (Industry, Innovation, and Infrastructure) , and SDG 11 (Sustainable Cities and Communities) . |
| Promoting Inclusive and Sustainable Practices | Nazareth School Event and Dual Day Celebration. | Emphasized engineering's transformative role in solving global issues like climate change and urban development , promoting inclusive engineering through a keynote from UNOPS (Sonja Vargas). |
| Regional and Global Solidarity | Dual Day Celebration (Architect Eyerusalem's Map of Africa Installation). | Participants inscribed messages of unity and aspiration, symbolizing African engineering solidarity and broadening the scope of EACE's commitment beyond national borders. |



Figure 6 EACE field trip to Girls school to promote Women in engineering

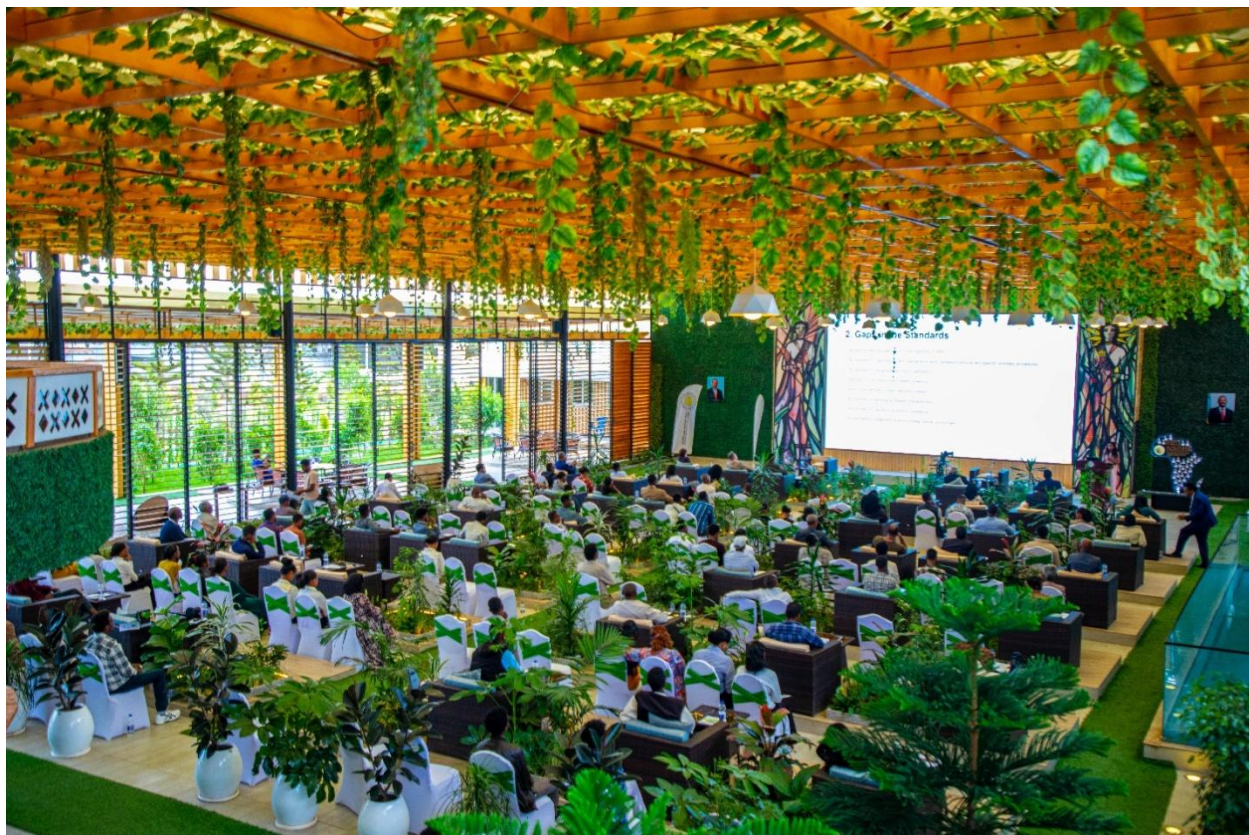


Figure 7 EACE Celebration - Women's international day March 08, 2025

Other Accomplishments

| Accomplishment | Initiative | Impact/Outcome |
|---|---|--|
| Broader Reach and Global Amplification | Overall Initiative Design and Reporting. | By tying events to global standards (SDGs) and sharing through international channels (WFEO), EACE amplified Ethiopia's voice in global engineering conversations, promoting inclusivity and innovation. |
| Interactive and Engaging Learning | Quiz Competition at Nazareth School. | The thrilling, interactive format transformed learning about engineering principles and women's contributions to STEM into an exhilarating experience , proving the success of an inclusive learning environment. |

Announcements

EACE is pleased to announce the following upcoming programs and news:

Lunch of the EACE Women in BIM (WiBIM) Network: Following the high-impact BIM webinar, EACE will establish a dedicated network to provide advanced training, mentorship, and project collaboration opportunities for women specializing in digital construction technologies.

National Infrastructure Project Field Trip Series: EACE is planning a series of on-site visits to major Ethiopia infrastructure projects, exclusively for women engineers and female university students, to provide real-world exposure and networking with project leaders. This aims to convert theoretical knowledge into practical aspiration.

Call for Papers for EACE's 2026 Annual conference: The 2026 conference theme will be "Engineering Resilient Futures: Women at the Forefront of Climate- Smart Infrastructures," with a dedicated track and guaranteed speaking slots for emerging women engineers.

Resources

Please find the following links to resources that can be shared with the WFEO WiE Committee

EACE Official Website: www.eacecivil.org



Women in Engineering Standing Technical Committee *of the* World Federation of Engineering Organizations Committee Member Progress Report

This report is submitted by each WiE Committee Member to report on progress in addressing the goals and objectives for each of the WiE Committee's three themes

| | |
|--------------------------------|--------------------------|
| Committee Member Name | LEONG WAI YIE |
| Organization or Country | MALAYSIA |
| Date Submitted | 8 th OCT 2025 |
| Committee Member Email Address | waiyie@gmail.com |

Summary

Provide a brief summary of your report.

In Malaysia, the four WFEO Women in Engineering (WIE) Themes provide a holistic framework for advancing gender equality and strengthening women's roles in the engineering profession.

Theme 1 focuses on building workforce capacity and inclusiveness, addressing the gap between women's strong representation in engineering education and their lower participation in professional practice.

Programmes such as gender-responsive TVET, industry-based licensure residencies, and re-entry schemes aim to create equitable career pathways for women engineers.

Theme 2 highlights retention and leadership development, ensuring women not only enter but also thrive in engineering careers. National policies promoting flexible work arrangements, safe site standards, mentorship networks, and leadership rotations enable women to balance work–life needs and access senior technical or board-level roles.

Theme 3 strengthens engineering strategic indicators, integrating gender-disaggregated data into national monitoring systems. Through DOSM's Women Empowerment in Selected Domains and BEM–MBOT databases, Malaysia tracks women's progression across education, licensure, and leadership to guide evidence-based policy interventions.

Theme 4 aligns engineering partnerships with the Sustainable Development Goals (SDGs)—especially SDG 5 (Gender Equality)—linking it to clean energy, innovation, resilient cities, and climate action. By embedding gender targets into the National Energy Transition Roadmap and urban planning projects, Malaysia exemplifies inclusive, sustainable engineering leadership.

Accomplishments

*Please list accomplishments in addressing the goals and objectives of each theme.
Please see the WFEO WiE Themes document or the WiE website for the list of goals
and objectives for each theme.*

Theme 1: Engineering Workforce Capacity Building to increase diversity and inclusiveness in the future skills pipeline

Malaysia has a comparatively strong upstream pipeline (women comprise ~37–40% of higher-ed enrolments in engineering/manufacturing/construction) but still faces conversion and progression gaps at entry to employment and at professional licensure. Women account for ~8% of Professional Engineers (PE) (BEM) and ~20% of MBOT professional members, with hiring and advancement rates lagging men despite women forming a majority of local STEM graduates in recent years. Targeted capacity-building can close these leaks through licensure pathways, gender-responsive TVET, industry returnships, and data-driven accountability.

1) Current landscape & indicators (Malaysia)

STEM & engineering pipeline (tertiary): Women formed ~37–40% of higher-ed enrolments in engineering/manufacturing/construction (2014–2016); women's share is higher at public universities (~46%).

STEM graduates overall: MOHE Graduate Tracer Study analysis shows women were 53.2% of STEM graduates in 2021, yet men were hired at higher rates. This signals transition frictions from degree to job.

Professional registration (BEM): Women were ~8% of Professional Engineers (PE) and ~7% of PE with Practising Certificate (2019). Overall, only about 8% of registrants are PEs today, showing a broader progression bottleneck that disproportionately affects women.

Technologists/technicians (MBOT): MBOT notes ~20% women among professional members and has launched a Women Technologist Chapter to raise participation.

Women-owned establishments: Women owned 20.1% of establishments (2022); only 1.8% are in construction, signalling scope to grow women-led engineering SMEs.

Labour force context: Female labour participation was ~56% in 2022 (vs ~82% men), with national goals to lift it to 60% under the MADANI agenda.

2) WFEO framing (Theme 1) — relevance to Malaysia

WFEO-WiE Theme 1 emphasises building a diverse future skills pipeline, closing the gender digital divide, and designing capacity-building programs with partners. This maps directly to Malaysia's challenges at transition (graduate to job) and progression (GE to PE/PC; technician to technologist), and to national TVET reforms.

3) Barriers diagnosed

Transition frictions: Despite strong female graduation shares, hiring rates for women STEM grads are lower; work-based learning and employer bias remain issues.

Licensure & advancement gap: Women's share drops steeply at PE/PC level (~7–8%); barriers include supervised practice access, mentoring, site-hours accumulation (civil/energy), and career breaks.

TVET gendering: National TVET policy signals inclusion, but women remain under-represented in engineering-heavy tracks; clarity on female-friendly pathways and safe training/hostel standards varies by provider.

SME/entrepreneurship pipeline: Low female presence in construction/engineering firm ownership curbs leadership visibility and mentoring capacity.

4) Capacity-building actions (12-month starter plan)

A. University & early-career

Industry-embedded licensure residencies (IELR): 12–18-month programmes co-badged by **BEM–MBOT–industry**, guaranteeing supervised experience and logbook completion aligned to PE/PC requirements; reserve **≥40% places for women**. KPIs: completion, PE exam pass rate, retention at 24 months.

Returnships & accelerated re-entry for career breaks (6–9 months, paid), with structured upskilling (BIM, AI/ML for engineers, safety codes) and childcare stipends. Benchmarked to APEC best practices on women in STEM.

Bias-safe hiring pilots with 20 anchor employers: anonymised screening + skills trials; public dashboarding of gender-disaggregated shortlist→offer ratios. (Addresses hiring gap highlighted by KRI).

B. TVET & applied pathways

Gender-responsive TVET clusters (mechatronics, renewables, precision manufacturing): women-only intake cohorts where needed, female trainers, secure housing/transport, and industry mentors; align to **National TVET Policy 2030**. KPIs: female enrolment + completion + job placement in NOSS-coded roles.

School-to-shopfloor bridges: dual-training MOUs with SMEs; micro-internships for **Form 6/polytechnics/community college** students to experience engineering workplaces early.

C. Professional progression & leadership

PE-Lift for Women (BEM/IEM): cohort-based exam prep, structured mentorship (1:3 mentor ratio), site-hours brokerage (rotate women across projects to build breadth), and fee waivers for first PE sitting. Target:

| | | | | | | |
|--------|-----|-------|-----|----|---|--------|
| +1,000 | new | women | PEs | in | 3 | years. |
|--------|-----|-------|-----|----|---|--------|

Women-led engineering SMEs accelerator (with SME Corp/MTDC): procurement readiness (CIDB grades), safety/quality certification, and bid-writing clinics; goal: +500 women-led contractors/consultancies over 3 years, especially in green/public works.

D. Inclusion

enablers

Safe & flexible workplaces: model policies for site PPE fit, flexible rosters, lactation rooms, and safe commuting; require sign-off to participate in government-linked projects.

Data & transparency: mandate annual gender-disaggregated reporting to DOSM/ministries on STEM hiring, promotions, attrition, pay; integrate into DOSM's Women Empowerment series and Science Outlook.

Theme 2: Engineering Workforce Capacity Building to encourage female engineering retention and leadership

Malaysia's upstream pipeline is comparatively healthy (women are ~37–40% of engineering/manufacturing/construction enrolments; women form a slight majority of STEM graduates), but retention and leadership progression remain the pain points: women are hired at lower rates than men despite graduating more, and they remain severely under-represented at licensure (PE/PC) and in senior leadership/boards. New legal enablers (98-day maternity leave; statutory right to request flexible work) and rising board gender diversity create momentum, but require targeted engineering-sector programmes to convert into measurable retention and leadership gains.

1) Current indicators (Malaysia)

Transition to work: Women were 53.2% of Malaysia's STEM graduates (2021), yet men were hired at higher rates—evidence of a persistent transition gap.

Licensure/profession: Women comprised ~8% of Professional Engineers and ~7% of PE with Practising Certificate (BEM, 2019)—a sharp drop from the tertiary pipeline.

Workforce context: Female labour force participation rose to 56.2% in 2023 (vs 82.3% men). Care burdens and return-to-work frictions remain key headwinds.

Leadership & boards: Among Malaysia's Top-100 PLCs, women now hold 31.4% of board seats (2024); Bursa/SC expect ≥30% women directors, yet many PLCs still fall short outside the Top-100.

Legal/policy enablers: Maternity leave = 98 days; paternity leave = 7 days; statutory right to request Flexible Work Arrangements (FWAs) under Employment Act (2023), with government/industry guidelines issued in 2024–2025.

2) Barrier map (why women exit or stall)

Early-career drop-off: lower hiring and slower conversion to supervised roles/log-book completion (civil/energy/site work).

Mid-career “break penalty”: limited re-entry pathways post-caregiving; sporadic flexible options despite new EA provisions.

Site safety & dignity gaps: poor availability of women-fit PPE undermines safety and belonging in field roles.

Leadership bottleneck: gains on boards coexist with weak senior executive representation and low PE/PC attainment among women.

3) Retention programmes (12-month starter pack)

A. Keep talented women through life stages

Engineer-Return (Re-entry Fellowships): 6–9-month paid returnships (BEM/MBOT/IEM + GLC/contractors) tied to competency logs; guaranteed rotations (office→site→design) and mentor matching. KPI: 12-month retention ≥80%; PE/EIT progression rate vs control.

FWAs by default for technical roles: Use EA Sections 60P/60Q to normalise flex hours/locations and field-friendly rostering; publish approval rates by gender.

Women-fit PPE & site facilities standard: Client/GLC contracts to require certified women-fit PPE availability, sanitary facilities and lighting/commute safety clauses. KPI: safety incidents & PPE non-fit complaints decreasing.

B. Skills & mobility that prevent plateauing

BIM–AI upskilling sprints (TVET+CPD): short modules in BIM, data/AI for engineering, safety codes; stack into MBOT/IEM CPD credits. KPI: promotions/role-changes within 12 months.

Cross-discipline secondments: 3–6-month stints (design↔site, consultancy↔client, EPC↔O&M) to build the project-finance/safety/commercial breadth needed for leadership.

Leadership pipeline & sponsorship

C. PE & Practice Certificate acceleration

PE-Lift Women Cohorts: exam prep, supervised practice brokerage, fee waivers for first sitting; goal +1,000 women eligible for PE/PC over 3 years.

D. Executive & board readiness

GLC & Tier-1 contractor sponsorships: identify high-potential women engineers (5–12 YOE); assign executive sponsors; deliver P&L rotations and client-facing leadership. KPI: % women in Grade-N leadership bands, shortlist→offer ratios for Head-of-Dept roles.

Board-readiness academy (with ICDM/30% Club): governance, risk, audit, sustainability; place 50 women engineers on PLC subsidiary boards/Board Committees as a stepping stone. 30% Club

4) Policy & procurement levers

Public-works DEI clauses: require bidders to disclose gender-disaggregated engineering headcount by level, women-fit PPE compliance, FWA policy, and year-on-year targets; weight in tender scoring.

Parity in project leadership slates: at least one qualified woman on every shortlist for Project Director/Resident Engineer roles on government-linked projects.

Transparent metrics: DOSM/IEM/MBOT publish annual engineering retention & leadership dashboards (hiring, promotion, attrition, PE/PC by gender; leadership bands; board seats).

Theme 3: Engineering Strategic Indicators

Malaysia's upstream pipeline is comparatively healthy, but conversion to employment, licensure, and senior leadership remains the drag. To manage what matters, stakeholders need a compact, repeatable indicator set with clear owners (DOSM/MOHE/BEM/MBOT/IEM/SC–Bursa) and annual public reporting. Recent evidence shows: women are a large share of STEM graduates yet hired at lower rates; women comprise ~8% of Professional Engineers; and board diversity is improving but uneven outside top PLCs. sseinitiative.org+3krinstitute.org+new.krinstitute.org+3

1) Core Indicator Set (with Malaysia baselines & sources)

A. Pipeline & transition

Women in engineering higher-ed (E/M/C fields) = female share of enrolments in engineering/manufacturing/construction.

Baseline: ~37–40% (2014–2016); higher at public universities (~46%). Source: DOSM via SWE.

STEM graduate hiring gap = (employment rate of women STEM grads – men) at ~6–12 months post-graduation.

Baseline: Women 53.2% of STEM grads (2021) but hired at lower rates than men (negative gap). Source: KRI analysis of MOHE GTS.

B. Profession & licensure

Women Professional Engineers (PE) share = % of PEs who are women.
Baseline: ~8% PE; ~7% PE with Practising Certificate (2019). Owner: BEM.

Women technologists/technicians share (MBOT) = % of MBOT professional members who are women;
track Women Technologist Chapter participation.

Current: MBOT is actively running WTC programmes (events/mentoring).

C. Workforce participation & retention (context)

Female Labour Force Participation Rate (LFPR) and gender LFPR gap.
Baseline: 56.2% (women) vs 82.3% (men) in 2023; national target 60%. Owner: DOSM/KRI.

Flexible Work Arrangements (FWA) uptake and approval rates in engineering firms under EA s.60P/60Q
(right-to-request).

Baseline: legal provisions in force; publish sectoral approval/refusal rates.

D. Leadership & governance

Women on boards (PLC, Bursa) = % seats held by women (overall; Top-100; Top-200).
Baseline: ~29–31% (recent analyses show Malaysia leading SE Asia; Top-100 ~31.4%).

E. Research & innovation

Women among researchers (R&D) = % women researchers (UIS).
Baseline: Malaysia is near/at parity (various UIS cites place Malaysia ≈49–53%).

Theme 4: Working in Partnership to address the Sustainable Development Goals, with a particular emphasis on Goal 5 and its relationship with the other Goals

Malaysia has a strong policy spine for the SDGs (SDG Roadmap Phase II, 2021–2025) and a maturing evidence base on women's status (DOSM's annual Women Empowerment in Selected Domains). To accelerate impact, engineering institutions should partner with government, industry, and civil society on programmes that simultaneously advance SDG 5 and engineering-intensive Goals (SDG 7, 9, 11, 13, 4, 8, 16, 17). Priority opportunities include embedding gender indicators and women's participation in the National Energy Transition Roadmap (NETR) projects, procurement rules for public works, city resilience initiatives, and STEM education pipelines.

1) WFEO Theme 4 framing

WFEO's Women in Engineering (WIE) Theme 4 calls for partnerships that use engineering to empower women, mainstream gender in climate and infrastructure programmes, and connect Goal 5 to the wider SDG fabric. Malaysia's existing multi-stakeholder SDG architecture and active professional bodies (BEM/MBOT/IEM) are well-placed to operationalise this.

2) Malaysia context — anchor policies & signals

SDG Roadmap Phase II (2021–2025): affirms whole-of-nation SDG delivery; Goal 5 is explicit on equality of opportunity and ending discrimination.

Evidence base: DOSM's 2024/2025 Women Empowerment series provides repeatable gender indicators to track outcomes and design interventions.

Corporate governance leverage: SC/Bursa position expects ≥30% women directors, with enforcement signals to reduce all-male boards—useful for infrastructure/utility PLCs and their supply chains.

Energy transition window: NETR lays out national investments across efficiency, RE, hydrogen, bioenergy, green mobility and CCUS—yet most energy policies in ASEAN still under-specify gender; Malaysia can lead by embedding gender KPIs into NETR delivery.

3) Where SDG 5 meets other Goals (engineering levers & partnership actions)

SDG 5 × SDG 7 (Affordable & Clean Energy) and SDG 13 (Climate Action)

Partnership action: Attach gender-responsive requirements to NETR pilot projects (solar, energy efficiency retrofits, EV charging, grid upgrades).

Set minimum women's participation thresholds for technical roles and apprenticeships; require women-fit PPE and safe site facilities.

Co-design just transition indicators: women's jobs created, training hours, entrepreneurship in RE supply chains, and energy-poverty reductions for female-headed households.

ASEAN guidance urges mainstreaming gender in energy policy; regional evidence shows gender is often missing in transition plans—Malaysia can be the regional exemplar.

SDG 5 × SDG 9 (Industry, Innovation & Infrastructure)

Partnership action: Use public procurement and GLC contracts to reward inclusive engineering teams and women-led SMEs (design, EPC, O&M).

Add tender scoring for: gender-diverse project leadership slates, paid returnships, PE exam support for women, and transparent promotion rates.
Governance hook: Bursa/SC's 30% board guidance cascades through PLCs' contractor policies; align with CIDB and IEM good-practice notes.

SDG 5 × SDG 11 (Sustainable Cities & Communities)

Partnership action: In city resilience (flood, heat, transport), mandate gender audits in project design (lighting, safe commuting, sanitary facilities) and female end-user engagement for housing, transit, and public space upgrades.

Measure % women engaged in participatory design, complaints on safety/PPE, and accessibility score improvements (gender-disaggregated).

Policy tie-in: SDG Roadmap II emphasises inclusive urbanisation; municipal SDG centres (e.g., KL SDG Centre) have Goal 5 targets that can be engineered into city works.

SDG 5 × SDG 4 (Quality Education) and SDG 8 (Decent Work & Growth)

Partnership action: Scale work-integrated learning for women in engineering and gender-responsive TVET, with supervision aligned to licensure (BEM/MBOT).

12–18-month supervised residencies, paid micro-internships, and returnships; publish offer→hire and retention by gender through DOSM/MOHE datasets.

The national tracer data show women are a majority of STEM grads but are hired at lower rates; partnerships can directly close this friction.

SDG 5 × SDG 16 (Institutions) and SDG 17 (Partnerships)

Partnership action: Institutionalise an Engineering & Gender Open Data Dashboard (DOSM + BEM/MBOT/IEM + SC/Bursa) publishing annual gender-disaggregated metrics: licensure progression, project leadership, FWA approvals, board seats, attrition.

Transparent, repeated metrics create accountability and enable WFEO comparative learning. Malaysia already runs annual gender series—extend it with engineering-specific tables.

Other Accomplishments

Malaysia's other accomplishments related to the four WFEO Women in Engineering (WIE) Themes, showing concrete progress across policy, institutional, and partnership fronts.

Theme 1: Workforce Capacity Building for Diversity and Inclusiveness

Higher Education Achievements: Women now make up over 40% of engineering and technology enrolments at public universities such as UTM, UM, and USM.

National TVET Transformation: The National TVET Policy 2030 includes gender-responsive modules and safe training environments for women in mechanical, electrical, and renewable energy tracks.

Professional Registration Support: The Institution of Engineers Malaysia (IEM) Women Engineers Section (WES) and MBOT Women Technologist Chapter organise mentorship, career guidance, and skill bootcamps to support young female engineers.

STEM Promotion: Programmes like Girls in STEM by MOSTI and IET Malaysia WIE outreach encourage schoolgirls to pursue engineering and digital careers.

Theme 2: Retention and Leadership Development

Legislative Reforms: The Employment Act (Amendment) 2023 introduced 98 days of maternity leave and the right to request Flexible Work Arrangements (FWAs), enabling work-life balance.

Leadership Representation: Women now hold 31% of board seats in Malaysia's top 100 public-listed companies, exceeding many ASEAN peers.

Professional Recognition: The Board of Engineers Malaysia (BEM) and MBOT highlight women leaders in their annual excellence awards and conferences.

Mentorship Networks: Programmes like Women in Science, Engineering and Technology (WiSET) and IEM's WIE mentorship series develop mid-career engineers into technical managers and project leaders.

Theme 3: Engineering Strategic Indicators

Gender Data Integration: The Department of Statistics Malaysia (DOSM) annually publishes Women Empowerment in Selected Domains, featuring gendered data on STEM education, workforce, and leadership.

Licensure Statistics: BEM now reports gender-disaggregated figures for Professional Engineers (PE), Graduate Engineers (GE), and Practising Certificates.

Research and Innovation Indicators: According to UNESCO UIS, Malaysia has near gender parity (≈50%) among researchers, reflecting balanced R&D participation.

Institutional Alignment: Universities and professional bodies are aligning their KPIs to the Malaysia Gender Gap Index (MGGI) for STEM and technical sectors.

Theme 4: Partnerships toward the SDGs (with focus on SDG 5)

Policy Integration: The SDG Roadmap Phase II (2021–2025) embeds gender equality into national projects in energy, infrastructure, and urban resilience.

Energy Transition Inclusion: The National Energy Transition Roadmap (NETR) includes initiatives encouraging women's participation in solar, hydrogen, and green technology sectors.

Smart City and Resilience Projects: Kuala Lumpur, Penang, and Iskandar Malaysia apply gender-sensitive design standards in lighting, transport safety, and flood management.

Regional and Global Partnerships: Malaysia actively collaborates with ASEAN Committee on Women in Science and Engineering, UN Women, and WFEO WIE, sharing best practices on inclusive engineering education and leadership.

Malaysia's accomplishments reflect a maturing national ecosystem for women in engineering — built on inclusive education, supportive legislation, data transparency, and cross-sector partnerships. These milestones demonstrate Malaysia's leadership in operationalising WFEO's vision of diversity, equity, and sustainability within the engineering profession and the broader SDG framework.

Announcements

Please list any announcements of upcoming programs, news from your organization, or other information valuable to the WFEO WiE Committee.



The poster is for the MBOT WTC RedLIPS Women Negotiating Change event. It features a blue and purple color scheme with a background of flowing fabric. At the top, there are logos for MBOT (Malaysia Board of Technologists), the 10th anniversary (2015-2025), and the Woman Technologist Chapter. The main title 'RedLIPS' is in large, bold, pink letters, with 'MBOT WTC' above it. Below the title, event details are listed in pink boxes: Date: 8th October 2025, Venue: Collection Ballroom, Level 2, Park Royal Collection Kuala Lumpur, Time: 2.00 p.m. - 5.00 p.m., and Dress Code: Cloud Blue. To the right, the subtitle 'Grace in the Deal' is in a cursive font, followed by 'Women Negotiating Change' in large, bold, purple letters. Below the event details, there are two sections for speakers. The first section, 'Welcoming Speech', features a photo of Ts. Sharifah Zaida Nurlisha Syed Ibrahim, Chairperson of MBOT Woman Technologist Chapter. The second section, 'Opening Speech', features a photo of Prof. Emeritus Datuk Ts. Ir. Dr. Siti Hamisah Tapsir, FASc, President of Malaysia Board of Technologists. Below these, there is a 'Forum Session with...' section featuring three speakers: a placeholder for the 2025 Woman Technologist Award recipient, Dato' Ts. Tengku Intan Nargiah Tengku Othman, Chief Technology Officer of Syarikat Takasul Keluarga Malaysia Berhad, and Ts. Myrzela binti Sabtu, Independent and Non-Executive Director of Southern Catalyst Sdn. Bhd., Former Chief Real Estate Officer of Tabung Haji, and Former Director of Property Bank Negara Berhad. On the right side, there is a 'JOIN US NOW!' section with a QR code and text encouraging registration for just RM30, noting that seats are limited. At the bottom, there are social media icons and contact information for the Malaysia Board of Technologists, including the website www.mbot.org.my.

MBOT WTC RedLIPS

Date: 8th October 2025

Venue: Collection Ballroom, Level 2, Park Royal Collection Kuala Lumpur

Time: 2.00 p.m. - 5.00 p.m.

Dress Code: Cloud Blue

Grace in the Deal

Women Negotiating Change

Welcoming Speech
Ts. Sharifah Zaida Nurlisha Syed Ibrahim
Chairperson of MBOT Woman Technologist Chapter

Opening Speech
Prof. Emeritus Datuk Ts. Ir. Dr. Siti Hamisah Tapsir, FASc.
President of Malaysia Board of Technologists

JOIN US NOW!
Secure your seat now for just RM30!
Seats are limited, please register only if you're committed to attending this exciting event. Don't miss out!

Forum Session with...

2025 Woman Technologist Award
The recipient will be announced during the MBOT Entice 2025 program

Dato' Ts. Tengku Intan Nargiah Tengku Othman
Chief Technology Officer, Syarikat Takasul Keluarga Malaysia Berhad

Ts. Myrzela binti Sabtu
Independent and Non-Executive Director, Southern Catalyst Sdn. Bhd., Former Chief Real Estate Officer, Tabung Haji, Former Director Property Bank Negara Berhad

QR Code

Malaysia Board of Technologists mbot.my mbot_my www.mbot.org.my

6th National Conference on Contribution to National Development by Malaysian Women Scientists and Inventors 2025 - Webinar

8 March 2025



CHAIRPERSON
CONFERENCE
ORGANIZING
COMMITTEE



YBHG. DATUK DR. CHOO YUEN MAY, FASC
Vice President, MINDS
MODULE 1 CHAIR

(UTC +8)9am - 12.50pm



WELCOME ADDRESS
ACADEMICIAN EMERITUS PROF. TAN SRI
DATUK DR. AUGUSTINE S. H. ONG
PRESIDENT, MINDS

Conference Objectives:

- **Inspire Young Women:** We aim to inspire and encourage young women to explore and thrive in science, technology, and social sciences.
- **Celebrate Contributions:** Our goal is to share the amazing contributions of Malaysian women scientists with the public and highlight their achievements.
- **Honour Lifetime Achievements:** We will recognize a remarkable Malaysian woman scientist who has made significant contributions throughout her career with the Lifetime Scientific Research Achievement Award.
- **Support Young Innovators:** We aim to promote and celebrate the achievements of a talented young Malaysian woman scientist under 40 through the prestigious Young Woman Scientist Award.

Who should attend?

The conference welcomes a diverse audience, including academics, scientists, technologists, engineers, professionals, and students ranging from upper secondary and pre-university to undergraduates, and postgraduates.

Speakers:

Join us, as a team of outstanding women scientists and inventors discusses pivotal topics, including Cancer Research, Climate Change, Microplastic Pollution, Environmental Sustainability and Clean Energy, the Malaysian Rubber Industry and Innovative Water Filtration.

Keynote Address

Recipient: MINDS Outstanding Woman
Scientist Lifetime Scientific Research
Achievement Award



Datin Paduka Prof Dr. Teo Soo Hwang,
OBE, FASC
Universiti Malaya
Founder of Malaysia Cancer Research
Organisation



Prof Dr Joy Jacqueline Pereira,
FASc., FIGM, PGeol
SEADPRI-Universiti Kebangsaan
Malaysia



Assoc Prof Dr Sarva Mangala
Praveena
Universiti Putra Malaysia



IR. PROF. DR. LEONG WAI YIE
HONORARY SECRETARY,
MINDS
Module II Chair



Ir. Ts. Dr. Serene Lock Sow Mun
Universiti Teknologi PETRONAS (UTP)
Recipient : MINDS Young Woman Scientist
Award



Dr Fatimah Rubaizah Mohd Rasdi
Malaysian Rubber Board



Madam Teng Yu-Mein
Efinity Social Enterprise

Registration Fees:
MINDS Members and Students: Free
Non-Members: RM 20
Deadline: 5 March 2025



Registration Link:

<https://forms.gle/GfpCP2AmqhQbXUPw9>

Scan to Register

For Enquires kindly contact:
Ms Crystal Ann Bastin

+60129032312
minds.secretariat@gmail.com

43rd Conference of the ASEAN Federation of Engineering Organizations



*"ASEAN Engineers: Beacons of Prosperity, Inclusivity,
Equity, Resilience, and Sustainability"*

October 28-30, 2025
SMX Convention Center Clark, Pampanga, Philippines





Resources

Please provide links to any publications, statistics, videos or other resources to be shared with the WFEO WiE Committee.

BEM Registration Statistics

REGISTERED PERSONS

[View Directory](#)

| | |
|--|--------|
| Professional Engineer with Practising Certificate (PEPC) | 8965 |
| Professional Engineer (PE) | 9165 |
| Accredited Checker (Structural) | 13 |
| Accredited Checker (Geotechnical) | 15 |
| Graduate Engineer (GE) | 219268 |
| Engineering Technologist (ET) | 18223 |
| Inspector of Works (IoW) | |

6403
Feedback

| Membership Grade | Male | Female |
|-----------------------------------|--------------|-------------|
| AFFILIATE | 21 | 6 |
| ASSOCIATE MEMBER | 56 | 1 |
| DISTINGUISHED HONORARY FELLOW | 2 | 0 |
| DISTINGUISHED MEMBER | 1 | 0 |
| ENGINEERING TECHNICIAN GRADUATE | 7 | 11 |
| ENGINEERING TECHNICIAN MEMBER | 1 | 0 |
| ENGINEERING TECHNOLOGIST GRADUATE | 57 | 0 |
| ENGINEERING TECHNOLOGIST MEMBER | 2 | 0 |
| FELLOW | 779 | 20 |
| GRADUATE | 4738 | 1192 |
| HONORARY FELLOW | 22 | 0 |
| INCORPORATED MEMBER | 61 | 4 |
| MEMBER | 9183 | 915 |
| SENIOR GRADUATE | 310 | 51 |
| SENIOR MEMBER | 65 | 6 |
| STUDENT | 13745 | 7595 |
| Grand | 29050 | 9801 |

| Discipline | MALE | FEMALE | Discipline | MALE | FEMALE | Discipline | MALE | FEMALE |
|--------------------------|------|--------|---------------------------|------|--------|---------------------|------|--------|
| AERONAUTICAL | 41 | 6 | ELECTRONIC | 1901 | 919 | MECHATRONICS | 843 | 160 |
| AEROSPACE | 71 | 30 | ELECTRONIC & RADIO | 4 | 0 | METALLURGY | 9 | 3 |
| AGRICULTURAL | 49 | 9 | ENERGY | 2 | 1 | MICROELECTRONIC | 7 | 0 |
| ARCHITECTURAL | 2 | 1 | ENVIRONMENTAL | 53 | 35 | MINERAL PROCESSING | 2 | 0 |
| AUTOMOTIVE | 28 | 4 | FOOD & PROCESS | 5 | 2 | MINERAL RESOURCES | 23 | 16 |
| BIOCHEMICAL | 3 | 16 | FUEL | 1 | 0 | MINING | 28 | 2 |
| BIO-MEDICAL | 65 | 136 | GEOLOGICAL | 3 | 0 | MINING & METALLURGY | 1 | 0 |
| BIOTECHNOLOGY | 1 | 1 | GEOTECHNICAL | 19 | 10 | MUNICIPAL | 1 | 0 |
| BUILDING | 4 | 1 | HIGHWAY | 8 | 1 | NAVAL ARCHITECTURE | 25 | 7 |
| BUILDING SERVICES | 11 | 0 | HIGHWAY & TRANSPORT | 1 | 1 | NUCLEAR | 17 | 4 |
| CHEMICAL | 1530 | 1422 | INDUSTRIAL | 33 | 12 | OTHERS | 13 | 1 |
| CIVIL | 9914 | 3669 | INFORMATION SYSTEM | 1 | 0 | PETROLEUM | 143 | 70 |
| CIVIL & STRUCTURAL | 1 | 1 | INFORMATION TECHNOLOGY | 2 | 0 | POLYMER | 31 | 23 |
| COMMUNICATION | 15 | 13 | INFRASTRUCTURE MANAGEMENT | 6 | 4 | PROCESS | 2 | 1 |
| COMPUTER | 122 | 51 | INSTRUMENTATION & CONTROL | 43 | 7 | PRODUCTION | 16 | 0 |
| COMPUTER & COMMUNICATION | 5 | 6 | INTEGRATED | 6 | 6 | STRUCTURAL | 51 | 6 |
| COMPUTER SYSTEM | 4 | 1 | MANUFACTURING | 376 | 200 | TELECOMMUNICATION | 28 | 15 |
| CONSTRUCTION | 8 | 3 | MANUFACTURING SYSTEM | 2 | 0 | TEXTILE | 1 | 0 |
| CONTROL | 1 | 0 | MARINE | 37 | 0 | TRAFFIC | 2 | 0 |
| ELECTRICAL | 4661 | 995 | MATERIALS | 105 | 84 | TRANSPORT | 6 | 3 |
| ELECTRICAL & ELECTRONIC | 908 | 371 | MECHANICAL | 7735 | 1456 | WATER RESOURCES | 8 | 13 |
| ELECTROMECHANICAL | 3 | 1 | MECHANICAL SYSTEM | 3 | 0 | | | |