



WFEO-WIE COMMITTEE REPORT



Vision and Mission

Vision Statement for WFEO-WIE

- To promote equality, diversity, and inclusivity in the engineering workforce (with a focus on women).

Mission Statement for WFEO-WIE

- To harness the collaborative power of the group to attract, retain, and promote the cause of females and other under-represented groups using innovation and technology to achieve a sustainable world, that leaves no one behind



Strategic Themes

WFEO-WIE has four overarching themes :

- **Theme 1:** Engineering Workforce Capacity building- to increase diversity and inclusivity in the future skills pipeline.
- **Theme 2:** Engineering Workforce Capacity building- to encourage female engineering retention and leadership
- **Theme 3:** Collection of Engineering Strategic Indicators
- **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.



Operating Principles

- The WFEO-WIE facilitates programmes and activities to increase the visibility of women in WFEO by ensuring the active involvement of female engineers in other Standing Technical Committees (STC's) of WFEO.
- The WFEO-WIE works through its assigned theme leads to execute its strategy with the support of the hosting institution.
- Currently GhIE is hosting the WFEO-WIE Secretariat for 2024 to 2027
- The WFEO-WIE Executive Committee has been established with representatives from 4 regions of WFEO (Africa, Asia/Pacific, Europe and Americas). We are still working to get a representative from Arab Region to join theme leads



IR Prof. Dr. LEONG Wai Yie, Malaysia
Vice Chair- Theme 1



Eng. Sharon Mabengwa Musonda, Zambia
Deputy Vice Chair, Theme 1



Jeanette Southwood, Canada
Vice Chair, Theme 3



Yvette Ramos, Switzerland
Deputy Vice Chair, Theme 3



Dawn Bonfield, UK
Vice Chair, Theme 4



Eng. Agness Mofya Mwansa,
Zambia
Deputy Vice Chair Theme 4



Engr. Yetunde Holloway,
Nigeria
Deputy Vice Chair, Theme 4



Nassirah Laloo, Mauritius
Vice Chair, Theme 2



WIE WFEO Secretariat Ghana



Ing. Dr Enyonam Kpekpena, Ghana
Chair, - WIE-WFEO, Ghana)



IR Prof. Dr. LEONG Wai Yie, Malaysia
Vice Chair- WIE –WFEO



Phyllis Ocran, Ghana
Administrator, WIE-WFEO Secretariat



Ayisha Osmanu, Ghana
Deputy Administrator, WIE-WFEO



Ing. Mavis Dede Allotey, Ghana
Organizer, WIE-WFEO



Ing. Felicia Ankrah – Quarm, Ghana
Coordinator, WIE-WFEO



Achievements

- **WFEO-WIE Secretariat was established in Ghana in January 2024**
- **WFEO-WIE 2024-2027 theme leads were appointed by March 2024.**
- **Eight (8No) Theme leads meetings held so far**
- **Meeting held with Society of Women Engineers, Liberia in February 2024 during the 6thb Annual Conference of the Engineering Society of Liberia on 9th February 2024**
- **2024 Open Forum Webinar was held on 24th May 2024**
- **Published 3 Newsletters Published (June 2024, December 2024, May 2025)**
- **INWED 10th Anniversary Webinar held on 21st June 2024**
- **WIE Plenary Address at 2024 International Conference on Engineering and Technologies for Sustainable Development (ICETSD 2024) on 28th august 2024**
- **7th African Women Engineers Forum held on 10th September 2024**



Achievements

- **Meeting was held with female Engineers in Rwanda during Global Engineering Conference in Rwanda on 17th October 2024**
- **GECO WIE Committee Meeting Held on 23rd Oct 2024**
- **4th FAEO WIE VIRTUAL STEAM ART COMPETITION**
- **Country Reports received from 11 Institutions and Submitted to WFEO**
- **WIE featured in partnership with Zambia Women Engineers (ZWES) in a webinar on International Day for Women and Girls (UNESCO) – 4th February, 2025.**
- **WIE was represented during 2024 UNESCO WED under the theme “Engineering Solutions for a sustainable world “ on 4th March, 2024 in Lisbon, Czech Republic**
- **WIE was represented and WIE Chair Participated in a Fire-side Discussion - World Engineering Day for Sustainable Development – 4th March, 2025 (UNESCO)**
- **WIE joined the WFEO delegation to participate in the 10th UN Multistakeholder Forum on Science, technology and Innovation in Newyork from 6th to 8th May 2025**
- **WIE Committee Membership has grown from 72 to 82 representing all WFEO regions. 2 New theme leads have been appointed to replace theme 2 leads (From Mauritius and Indonesia)**



Achievements – 2024 Country Reports Received from 11 Institutions and submitted to WFEO

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



Achievements - Newsletters


WFE0-WIE - WFE0

wfeo.org/committee-women-in-engineering/


- To collaborate with other Standing Technical Committees and Policy Implementation Committees to conduct webinars, events and progress the other goals and objectives of WFE0.
- To encourage greater diversity and inclusivity in WFE0.
- To report progress on an annual basis.

WIE Newsletters


[April 2025](#)



[December 2024](#)



[April-May-June 2024](#)



[November 2021](#)

<https://www.wfeo.org/wp-content/uploads/stc-women/2024/WIE-WFE0-Newsletter-December-2024.pdf>



Achievements – WIE Group Photos



Picture with ZWES Liberia , Feb 2024



Picture with WIE, Rwanda , Oct 2024

Achievements – Theme Leads Meetings





Achievements – Program Pictures



10TH INWED Anniversary, June 2024



7th Africa Women Engineers Forum , Sept 2024



Achievements – Program Flyers

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

CO-HOST
Ing. Dr Enyonam Kpekpema, Ghana
 Chair, Women in Engineering Committee (WFEO) & President, Women in Engineering (WIE, Ghana), Manager/ ICT Project Delivery, Electricity Company of Ghana.

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

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

SPEAKER
Ken Dunn, UK
 Founder & Chairperson of Africa's GRI (charity), and Founder & Managing Director of Eternal Flame Worldwide Limited.

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

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

[Join the Zoom Webinar](#)

4TH STEAM VIRTUAL ART AWARD CEREMONY

THEME ENHANCED BY ENGINEERING

2024 Global Engineering Conference and WFEO Committee Meetings

WOMEN IN ENGINEERING COMMITTEE MEETING

Scan to Save Event

Wednesday
 23rd October 2024

Duration
 14:30 to 16:30 GMT

Online Meeting link
<https://shorturl.at/NjQv>

Visit Our Website
<https://www.wfeo.org>

OPEN FORUM

22nd MAY 2024 | 14:30 to 15:30 GMT | ONLINE WEBINAR

Register here: shorturl.at/knuK4

For more info visit our website: www.wfeo.org

Organized by: **INTI International University**
 YOUR FUTURE BUILT TODAY

ICETSD

INTERNATIONAL CONFERENCE ON ENGINEERING & TECHNOLOGIES FOR SUSTAINABLE DEVELOPMENT 2024

THEME: "SUSTAINABLE ENGINEERING AND TECHNOLOGIES' BEST PRACTICES FOR A BETTER TOMORROW."

SCAN FOR REGISTER

CALL FOR PAPER!
 Abstract Submission Deadline: 10 July 2024
 Notification of Abstract Acceptance: 15 July 2024
 Early Bird Registration: 20 July 2024

HYBRID MODE: VIRTUAL PLATFORM
 INTI INTERNATIONAL UNIVERSITY
 28 AUGUST 2024

AIMS:
 The International Conference on Engineering and Technologies for Sustainable Development (ICETSD 2024), organized by the Faculty of Engineering and Quantity Surveying (FEQS) of INTI International University, is set to be a pivotal event for academics, researchers, and industry professionals from various disciplines. The conference aims to provide a platform to present the latest findings and research relevant to sustainable development, fostering on the main theme "Sustainable Engineering and Technologies' Best Practices for a Better Tomorrow."

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icetd2024.newinti.edu.my

GLOBAL AI SYMPOSIUM 2025

AI-Powered Business Optimization: Driving Growth & Transformation

Discover the future of AI-driven business transformation! Explore how AI enhances efficiency, optimizes decision-making, and drives growth. Join us to unlock AI-powered solutions for smarter strategies and customer engagement

Date : 28 May 2025 (Wednesday)
 Time : 2.00pm - 4.00pm (GMT+8 - Kuala Lumpur Time)
 Venue : Microsoft Teams

28 May 2025 | 2.00pm - 4.00pm (GMT+8) | ONLINE SYMPOSIUM

Register here: shorturl.at/knuK4

For more info visit our website: www.wfeo.org



Achievements – WIE Committee Members & WIE PEIs





Achievements –
WED 2025



Next steps

- **Upcoming WFEO Elections – Encouraging WIE Members to step up for Nomination**
- **Ongoing White Paper Preparation on Harmonizing Data Collection**
- **Hold 11th INWED Webinar**
- **Work with PEIs and WIE chairs to align their WIE activities with WIE strategic objectives**
- **Implement WFEO-WIE Plan and Activities for 2025**
- **Ensure WIE representation on all WFEO STCs and WFEO Committees**
- **Hold Theme Webinars**
- **Partner with WIE Chairs and WFEO STCs to hold Webinars and organize Activities**

*Thank
you*





THEME 1 PRESENTATION



THEME 1:

Engineering Workforce
Capacity building- to increase
diversity and inclusivity in the
future skills pipeline.

Wai Yie LEONG (Malaysia) , Sharon Musonda
(Zambia)



ENGINEERING WORKFORCE CAPACITY BUILDING – WFEO COMMITTEE

- “Capacity Building in the Engineering Environment is a lever for Economic, Social and Sustainable development and is recognized as a priority in the global Engineering community”-Martin Manuwa Chair CECB



INCLUSIVITY AND DIVERSITY IN THE FUTURE PIPELINE SKILLS

- **Promotes Creativity**
- **Brings a sense of Belonging**
- **Promotes teamwork**
- **Improved Decision making**
- **Increased Innovation and Creativity**

Theme 1: Engineering Workforce Capacity building- to increase diversity and inclusivity in the future skills pipeline.

The WiE is committed to capacity building programs which will:

Attract a diverse future generation;

Champion the reduction of the gender digital divide;

Work with partners, provide guidance on creating and maintaining inclusive cultures;

Create opportunities for employers to drive strategy;

Extend the focus of our diversity and inclusion activity beyond gender to other underrepresented groups and recognize the impact of intersectionality;

Engage engineering PEIs in using the case studies to build a culture of inclusion across the engineering profession;

Use our membership to identify innovative policies, programs, measures and conditions needed to attain gender balance, eliminate violence and promote inclusive representation in engineering.

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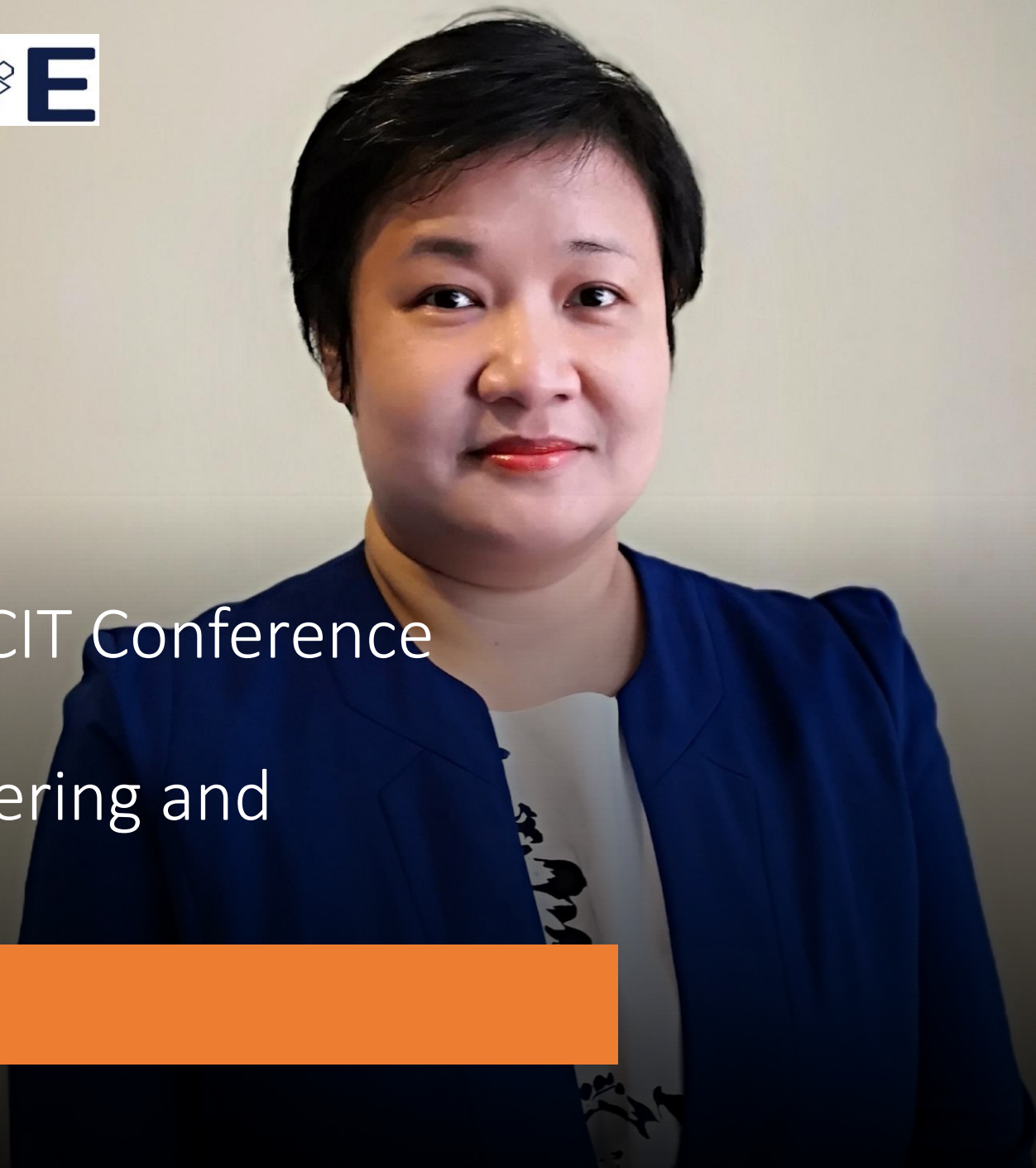
INTERNATIONAL CONFERENCE ON
INNOVATION AND TECHNOPRENEURSHIP
2024

W  E



- a) Host a Special WiE session at ICIT Conference
- b) 3 Webinars on Women Engineering and Leadership

26 & 27 September 2024 | Hybrid Mode



Education
Next-Gen Horizons in Computing
Engineering Innovation and Invention
Integrating Health and Life Sciences for a Sustainable Future



ACTIVITIES TO BE COVERED IN 2025

- Identify partners within the engineering space who are championing inclusivity and diversity and synergise on particular programs e.g mentorship
- Hold at least 2 webinars this year from representation within the region with the help of identified partners championing the cause of women in Engineering
- Synergize with theme 2 and possibly have a webinar or panel discussion on the two themes that's on women in leadership and cover diversity/inclusivity



THANK YOU FOR YOUR ATTENTION!!



THEME 2 PRESENTATION



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

Theme 2: Overview

Engineering Workforce
Capacity building- to
encourage female
engineering retention and
leadership



No	Activity	Performance Indicator	2024 Action Plan	Current Status /Baseline at 2024
1	Promote and support our members and their activities to enable them to reach leadership positions and celebrate them , through visibility of their work and their global activity.	Ongoing communication - through newsletter, WhatsApp, and other means, to promote and amplify work and voice of WIE members	4 newsletter per year	Q1 Newsletter almost ready for circulation
			Keep Log of member activity promoting WIE members (retention & leadership)	
2	Create rich resource of global women in engineering contacts to be used for partnership opportunities for engineering activities	Up to date Rich Database of members and other contacts	Develop and circulate Form for WIE members to fill and provide essential details	1. WFEO-WIE Membership list received from WFEO 2. 16 Form entries received

Theme 2: Overview

Engineering Workforce
Capacity building- to
encourage female
engineering retention and
leadership



No	Activity	Performance Indicator	2024 Action Plan	Current Status /Baseline at 2024
3	Encourage innovative deliberations on start-ups and entrepreneurship	Showcased female entrepreneurs and up to date database of women in engineering and technology entrepreneurs globally in WIE Database and signposting of any entrepreneurship programmes available to members or other stakeholders	Female engineering and technology entrepreneurs featured in WFEO-WIE newsletters (4 per year)	Q1 Newsletter almost ready for circulation
			Search for, post and promote at least 4 entrepreneurship programmes per year to members or other stakeholders	
4	Work with WFEO to ensure inclusivity in WFEO	A diverse and inclusive WFEO organisation	Identify improvements required to support inclusion	

Theme 2: Overview

Engineering Workforce
Capacity building- to
encourage female
engineering retention and
leadership



No	Activity	Performance Indicator	2024 Action Plan	Current Status /Baseline at 2024
5	Work with UNESCO to deliver the recommendations of the 2021 UNESCO Engineering Report	UNESCO Engineering Report launched	Recommendations from report that WIE supports identified	Report identified and being reviewed
6	Encourage building inclusive cultures in the existing workplace and in the PEIs	Compilation of global reports and successful initiatives which build inclusive corporate cultures yearly	Compile 2024 Report on best practice initiatives to build inclusive cultures	
7	Engage in, encourage and promote activities that retain and mentor the next generation of female engineers and leaders	Group mentoring program established and ongoing at global level	Continue group mentoring initiative from where 2023 theme leads stopped.	Concept note received and under review

Theme 2: Overview

**Engineering Workforce
Capacity building- to
encourage female
engineering retention
and leadership**



Work with WFEO-WIE members to:

- Publish quarterly newsletters of WIE activities
- Develop up-to –date database and profile of WFEO-WIE members
- Showcase WFEO-WIE leaders and entrepreneurs.
- Ensure inclusive WFEO Organization
- Compile and publish reports on gender inclusivity efforts across WFEO PEIs
- Establish group mentoring at global level



THEME 3 PRESENTATION

Theme 3 Leads 2024-2027



Yvette Ramos, MBA, MSc Eng. PhD-4th, Switzerland
President and cofounder WOMENVAI NGO
President Swiss Engineering, Switzerland
Past WFEO-WIE Theme Lead (2016-2019)



Jeanette Southwood, P.Eng., FCAE, FEC,
LL.D. (honoris causa), Canada
Executive Vice President,
Corporate Affairs and Strategic Partnerships,
Engineers Canada
Past WFEO-WIE Theme 3 Lead (2020-2023)



Theme 3: Collection of Engineering Strategic Indicators

Yvette RAMOS, MBA, MSc Eng. PhD-4th
SWISS ENGINEERING Geneva, WOMENVAI

Jeanette SOUTHWOOD, P.Eng., FCAE, FEC, LL.D. (honoris causa)
ENGINEERS CANADA

PRESENTATION OUTLINE

- Overview and Background
 - Strategic Indicators
 - Theme 3 - Sub-themes and Objectives
- Our proposed paper
- Example from Canada
- Next steps
- Acknowledgements and Thanks

STRATEGIC INDICATORS

UNESCO Report ‘Cracking the Code’- “Internationally comparable data are also needed on a larger scale to ensure evidence-informed planning and policymaking, as well as further documentation of the effectiveness and impact of interventions.”

Theme 3: Ov

Collection of Engineering St

No	Activity	Performance Indicator	2025 Action Plan	Current Status /Baseline at 2025
3.1	Create a <u>methodology</u> for standardizing and measuring gender disaggregated data on women in engineering and collect and publish this data annually.			
3.2	Analyze data as collected above to establish prima facie <u>evidence on the regional and global gender gaps</u> in engineering.			
3.3	Create a globally standardized <u>Gender Equality Scorecard</u> for WFEO and partners			
3.4	Stimulate the <u>integration of Gender Mainstreaming</u> policies across WFEO and PEIs			

1-
Work in partnership with WFEO members, and other national and international engineering organisations

THEME 3 SUB-THEMES AND OBJECTIVES

Theme 3.3 - Gender Equality Scorecard % Engineers* who are women (*definition differs depending on country)

*[Many thanks to Dawn Bonfield
and Yetunde Holloway]*



Organization	Men	Women	Total	% Women
Chinese Institute of Engineers Taipei	18059	947	19006	5.0%
Costa Rica	20849	6962	27811	25.0%
Engineers Canada	270215	47941	319023	15.0%
Ghana	12008	992	13000	7.6%
Hong Kong	15289	1623	16902	9.6%
IESF France	931000	294000	1225000	24.0%
IEU Iraq	186235	65434	251669	26.0%
Institution of Civil Engineers, UK (ICE)	75740	14601	90340	16.2%
Institution of Engineers Kenya	7327	1133	8460	13.4%
Institution of Engineers Mauritius	287	46	333	13.8%
New Zealand	20001	4502	24736	18.2%
Pakistan Engineering Council	304766	24721	329487	7.5%
Peru	246107	67640	313747	21.6%
Poland	64203	17060	81236	21.0%
Portugal	43862	12080	55942	21.6%
Slovenia	6283	892	7175	12.4%
Spain	62459	13205	75664	17.5%
Zimbabwe Institution of Engineers	11276	925	12201	7.6%
Total	2295966	574704	2871732	20.0%

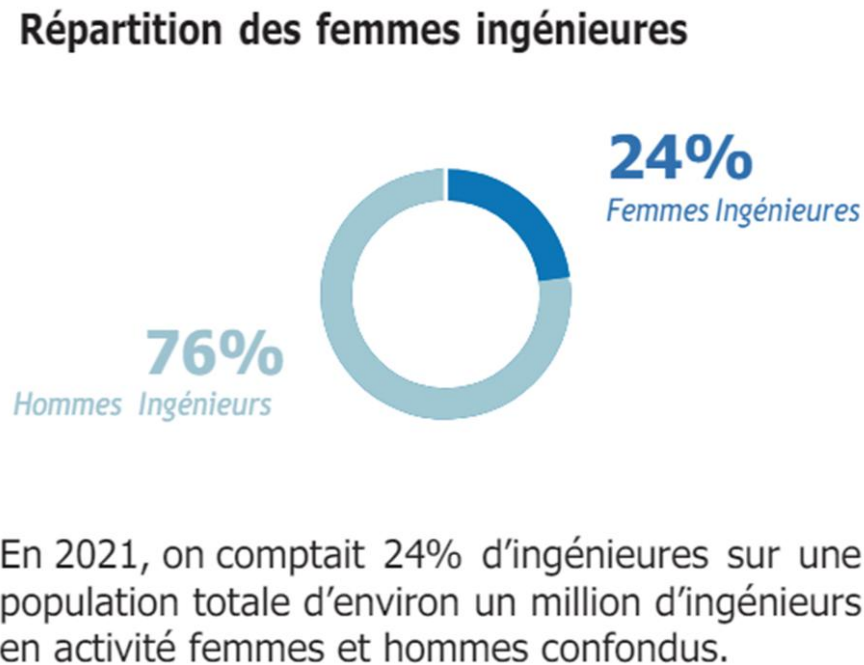


CHALLENGES IN DATA COLLECTION AND HARMONIZATION (WFEO REGIONS)

- . Differences in definitions of engineers between countries.
- . Variations in national data collection methods.
- . Issues with global data comparability.

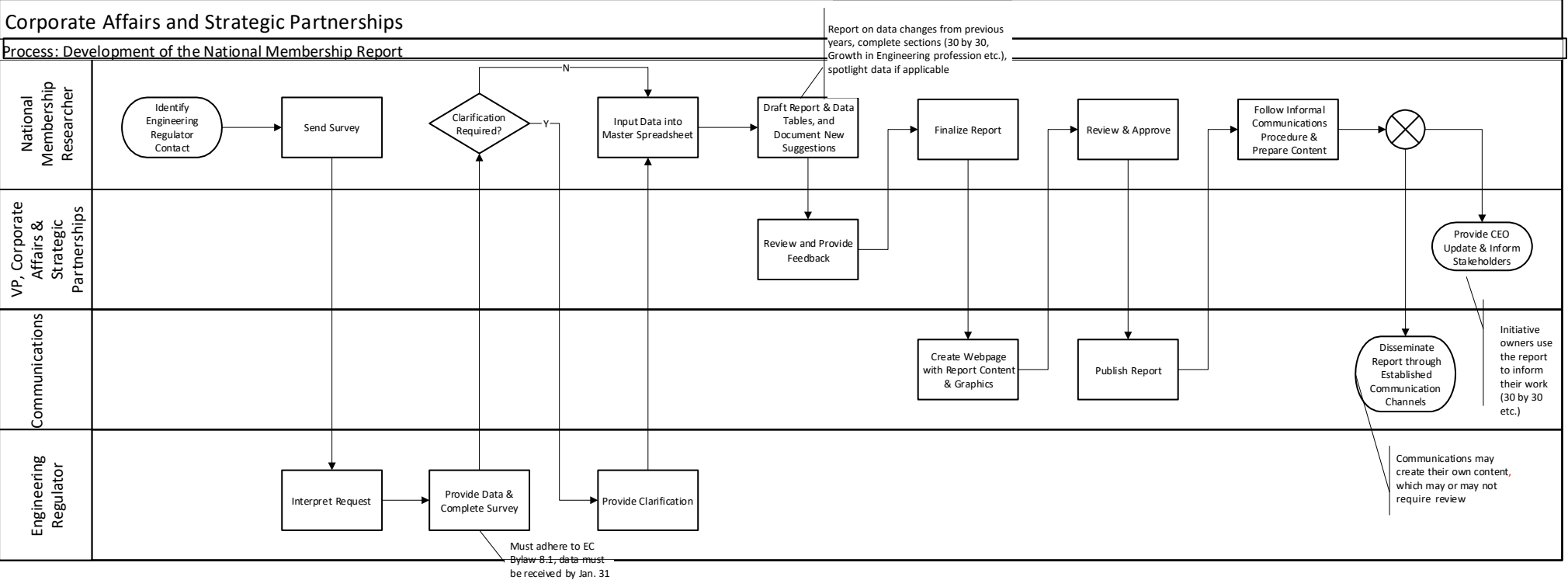
RATIOS:

Example of what France IESF is doing in partnership with FEMMES INGENIEURES



SOURCE:

https://www.femmes-ingenieures.org/offres/doc_inline_src/82/Observatoires%2Bdes%2Bfemmes%2Bingénieures%2B2023.pdf



Purpose: The National Membership Report informs Engineers Canada of fees to be collected from the regulators

Example: Canada

OUR PROPOSED PAPER

Crucial for several reasons

Harmonizing data collection on Women Engineers across countries: a proposal for standardized metrics and methodologies Co-authors : Y. Ramos , J.M. Southwood, Y. Holloway , T. Cornelius, E. Kpekpena · to be completed with other co-authors

1. **Comparability:** standardized data allows for meaningful comparisons across different countries and regions, helping to identify global trends and disparities;
2. **Policy development:** consistent data supports the creation of effective policies and initiatives aimed at increasing the representation of women in engineering
3. **Resource allocation:** harmonized data helps in the efficient allocation of resources by highlighting areas with the greatest need for intervention
4. **Benchmarking:** it enables organizations and countries to benchmark their progress against global standards and best practices
5. **Financing the recommended actions** through government funding, including grants and scholarships, and private sector investment via Corporate social responsibility (CSR) initiatives and partnerships with educational institutions.

Theme 3 - Next steps towards « MEASURE WHAT YOU TREASURE »

- A. COLLABORATE WITH COMMITTEE MEMBERS ON A METHODOLOGICAL CONCEPT NOTE AND PAPER TO « MEASURE WHAT YOU TREASURE » - SINCE MARCH 2024
- B. PRESENT STATUS OF THE PAPER AS WELL AS COUNTRY- AND REGION-SPECIFIC METHODOLOGIES AND RESULTS ON THE OCCASION OF THE JUNE 23 INWED WEBINAR
- C. FINALIZE THE PAPER, INCLUDING CONCRETE CASE STUDIES AT NATIONAL, REGIONAL, AND GLOBAL LEVELS, AND PRESENT IT ON THE OCCASION OF THE WFEO MEETING IN OCTOBER 2025 IN SHANGHAI
- D. PUBLISH THE PAPER BY MARCH 2026





ACKNOWLEDGEMENTS AND THANKS



THEME 4 PRESENTATION





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

Dawn Bonfield, UK

Eng. Agness Mofya Mwansa, Zambia

Maria Noelia Centry Rodriguez, Peru

Yetunde Holloway, Nigeria



Theme 4 Leads



Dawn Bonfield, UK



**Eng. Agness Mwansa,
Zambia**



**Engr. Yetunde Holloway, Nigeria
Past Chair, WFEO-WIE**

Theme 4: The SDGs, Goal 5, & Relationships to Other Goals



Goal 5 of the SDGs is **Gender Equality**: specifically ensuring that women are not harmed or discriminated against; have equal rights; are heard and empowered; and have equal access to all opportunities, including leadership and decision-making roles.

In engineering and technology this means ensuring that women are equally represented at all levels, but also that engineering and technology is used in ways that empower and support the equality of women globally.

The work of Theme 4 is to understand the relevance of Goal 5 to engineers and engineering, and to focus on the impact of gender equality on each of the SDGs individually.

Theme	WIE Actions	Deliverables	Ultimate Outcomes
Theme 4: Addressing the SDGs	4.1 Understanding Goal 5 and map the Targets of Goal 5 to engineering and engineers	1. Develop understanding and corresponding document which maps goal 5 targets with potential technological solutions, and identifies any missing technologies	<ul style="list-style-type: none"> Use of engineering and technology to empower women, reduce inequalities, and give women access to leadership and decision making processes.
	4.2 Examine the gender perspective in relation to the SDGs, looking at ways that engineering can address disproportionate disadvantage faced by women	2. Set of 17 pop up banners that can be used in displays, once for each SDG, showing the gender perspective in relation to each. Contribution to the World Water Development Report to accelerate SDG6	<ul style="list-style-type: none"> Development of engineers who understand their role in empowering women through the use of engineering and technology, and how this relates to the SDGs.
	4.3 Deliver against the WFEO Climate Change Declaration to <i>'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.'</i>	3. Continued conversations and interventions about women's role in climate change, and how engineering and technology can address these issues.	<ul style="list-style-type: none"> Contribution to the World Water Development Report on Water and Women
	4.4 Understand the work of our own WIE members in relation to the SDGs they work on.	4. A database of the biographies of women engineers indicating which sustainable development goals they are working on, giving us access to experts who can speak on particular topics.	<ul style="list-style-type: none"> Mainstreaming of the gender perspective in climate change mitigation and adaptation responses.
	4.5 Bring the gender perspective into the work of all of the WFEO committees, to mainstream gender perspective work	5. Evidence that committees have understood and embedded gender perspective into their own committee work	<ul style="list-style-type: none"> Women in leadership roles, conference speakers, and as visible role models to the next generation of young people.
	4.6 In collaboration with other WIE themes, organisation of the annual Virtual Art Competition for the engagement of young girls in Africa to combine engineering and art	6. Delivery of art competition to engage young girls in Africa to combine engineering and art	<ul style="list-style-type: none"> More enlightened engineers and WFEO colleagues on the role of gender in engineering and their own subject areas. Ultimately more gender diversity in the engineering sector globally.
			<div>Theme 4: Addressing the SDGs</div> <div>50</div>

Action 4.1 Understanding Goal 5 and map the Targets of Goal 5 to engineering and engineers



Goal 5 Targets	Example Engineering Response
5.1 End all forms of discrimination against all women and girls everywhere	<p>How do we ensure that women and girls are not discriminated against in their choices to study engineering, or in relation to their career pathways?</p> <p>How do we ensure that technology is not gender biased, and does not exacerbate inequality or discrimination?</p>
5.2 and 5.3 Eliminate all forms of violence, harmful practice, and exploitation of women and girls	How can technology be used to help women and girls escape violence and exploitation, for example through online support services, access to digital information, apps or equipment linked to personal safety.
5.4 Recognize and value unpaid care and domestic work	Support, promote and encourage the labour reintegration and hiring of women after the maternity stage or their return to work, complying with the nation's current labour regulations.
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making	Raise the profile of women engineers, ensure equal opportunities, remove bias and discrimination in the engineering sector, provide examples of inclusive leadership practice, etc.

Action 4.2 Examine the gender perspective in relation to the SDGs





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 No. 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, accessibility flexibility, 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 influential leadership opportunities. If women were to participate in the labour market at the same rate as men, it could add up to \$28 trillion, or 26%, 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 35% invested 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



6 CLEAN WATER AND SANITATION

The Gender Perspective

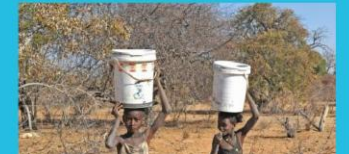
WASH interventions cannot be successful if women's and girls' needs are neglected



When safe drinking water and safe sanitation and hygiene facilities are not available in the household, the burden of water collection and treatment falls largely on the shoulders of women and girls, and this lack of access exposes them to illness, harassment and violence—hampering their ability to learn, earn an income, and move around freely. Where household members fall sick due to water-borne illnesses, it is mainly women and girls who provide the care.

Strengthening Meaningful Participation

The disproportionate responsibility that women and girls bear as primary users, providers and managers of water, sanitation and hygiene (WASH) in households is not matched in decision making on 'big water' issues—such as large-scale infrastructure investments, water allocations or water trading that would result in



The Gender Perspective



7 AFFORDABLE AND CLEAN ENERGY

The Gender Perspective

Access to Affordable, Reliable, Sustainable and Modern Energy for All



Affordable, clean energy fuels sustainable development, such as by providing the light that allows a child to do her homework or the power that a woman uses to run her home-based business. Worldwide, 1.1 billion people still have no electricity. Three billion burn solid fuels such as wood and animal dung for cooking and heating, filling their homes with dangerous pollutants.

Solar Sisters: 'We invest in local women's enterprise'

Everyone should have access to affordable clean energy. Solar Sisters support local African women to create sustainable businesses that spread clean energy to their

Over 4 million
people died prematurely from indoor air pollution caused by

Action 4.3 The WFEO Climate Change Declaration



No climate justice without gender justice

1. Women are more **vulnerable** to the impact of climate change. They depend on resources that are threatened and they have unequal access to other resources. Their ability to cope with threats is limited due to inequality. They have limited voice in decision making.
2. Women are **effective actors** when it comes to mitigation and adaption to climate change, and have a strong body of knowledge to draw upon, and are able to influence behaviour at community level.
3. There is a need for the development of **Technology and Innovation for Gender Equality**.
4. They have a role to play in **creating technological solutions**, but currently are not well represented in the engineering & technology sectors.



4.4 Understand the work of our own WIE members in relation to the SDGs they work on.



Eng. Agness Mofya Mwansa, Zambia
Energy, Automation and Control Systems Engineering

Agness is a holder of a Bachelor's Degree in Electrical and Electronics Engineering and a Master's Degree in Control Systems Engineering. Driven by a passion to learn, she is currently pursuing a master's degree in Renewable Energy Engineering.

She currently works as an Engineering Superintendent for a mining firm in Zambia. She also serves as a non-executive director of GEI Power Limited, as well as a board member and chair of Zambia Cargo and Logistics limited technical committee.

She is the Chairperson of the Zambia Women in Engineering Section (ZWES), Vice Chairperson of the Federation of African Engineering Organizations (FAEO) WIE Technical Committee, and a member of the World Federation of Engineering Organizations' WIE Committee.



Professor Dawn Bonfield, UK
Engineering for Sustainable Development

Dawn Bonfield is a materials engineer by background and now works on sustainable development, inclusive engineering outcomes, ethics, and global responsibility in engineering at a UK University called King's College London.

Inclusive Engineering is the process of ensuring that engineering products and services are accessible and inclusive of all users, and are as free as possible from discrimination and bias, throughout their lifecycle.

She is President of the **Commonwealth Engineers' Council** and is an International Representative member of the World Federation of Engineering Organisations.

She was founder of International Women in Engineering Day (INWED) which takes place on 23 June annually.



4.4 Compilation of Member Biographies including relevant SDGs



Compilation of member biographies, e.g. Eunice Seyaker

Eunice Sua Seyaker is a dedicated and technically skilled Electrical Engineer with a strong foundation in project management, leadership, and technical communication. She earned her Bachelor of Science degree in Electrical Engineering from William V. S. Tubman University in 2019, and has since pursued professional development through various certifications, including "Supervisory Management Leadership," "Foundations of Project Management," and "Solar Energy Basics."

Eunice currently serves as an Engineer in Training III at the Liberia Electricity Corporation, where she manages electrical grids in Maryland and River Gee counties, contributing directly to several of the United Nations' Sustainable Development Goals (SDGs). Her work aligns particularly with:

Eunice's technical expertise extends to roles at Landstar Engineering and Transport Services, American Procurement Services LLC, and CEMENCO-Liberia, where she sharpened her skills in grid construction, electrical distribution systems, and maintenance of industrial electrical systems.

Outside of her professional endeavors, Eunice actively contributes to various engineering societies, holding leadership positions such as Interim President of the Society of Electrical, Electronic, IT and Telecommunication Engineers (SEEITE), Treasurer of the Society of Women Engineers (SWE) - Liberia Montserrado County, and Publicity Chair of the Society of Women Engineers of Liberia. She is also a full member of the Engineering Society of Liberia and has engaged in STEM motivational speaking.

Eunice's strengths lie in her problem-solving abilities, effective communication, and adaptability to diverse environments. She is proficient in Microsoft Office applications, AutoCAD, technical writing, and critical thinking. Eunice is recognized for her leadership, technical prowess, and commitment to advancing engineering in Liberia while actively contributing to sustainable development goals and advocating for gender equality in engineering.



4.5 Bring the gender perspective into the work of all of the WFEO committees, to mainstream gender perspective work

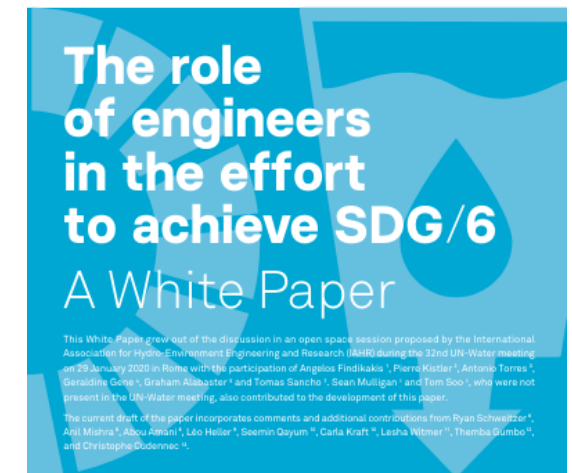


Bringing the gender perspective into the WFEO committee work

- Organize a webinar to align committee Chairs-INWED

A great example from a recent Water Report:

- “Moving forward, engineering studies must include social analysis of key issues, among them importantly an analysis of the impacts that proposed solutions may have on gender equity, i.e. they **should incorporate a gender-lens** into the social analysis in the discipline of engineering. It is also important to ensure equal access to such education for women.”
- “Mechanisms should be in place to **ensure the voice and agency of women to contribute to and be consulted in such community dialogues**. Engineers will only be able to contribute meaningfully to the achievement of SDG 6 if they employ a human rights-based approach.”



4.6 In collaboration with other WIE themes, organisation of the annual Virtual Art Competition for the engagement of young girls in Africa to combine engineering and art



Planning the 2025 Version of the Competition and looking for sponsor



Federation of African Engineering Organisations
Women in Engineering Committee

5th Anniversary

STEAM Virtual Art Competition

The Federation of African Engineering Organizations-Women in Engineering (FAEO-WIE) Committee is excited to announce its **5th STEAM Virtual ART Competition** to commemorate International Women in Engineering Day (INWED), which will be held globally on 23 June 2025.

