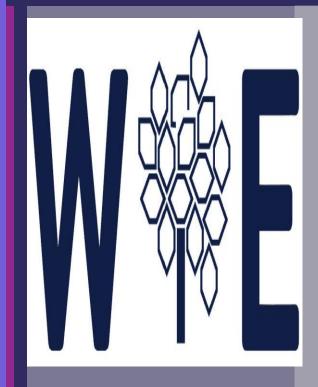
WFEO- WOMEN IN ENGINEERING COMMITTEE REPORT

ACTIVITIES AND PROGRAMMES 2022-2023

Ву

Engr .Yetunde Holloway

Chair





- Introduction
- Leadership & Themes
- Committee Membership
- Summary of activities
- Collaborations
- Publications
- Communications
- Going Forward
- Conclusion



Introduction

Vision & Mission



The Women in Engineering Committee is a Policy Implementation Committee of WFEO

VISION

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

MISSION

To seek ways to harness the collective power of our group, using technological skills, to achieve an engineering profession which attracts, retains, promotes, and welcomes the inputs of women and other under-represented groups, in order to achieve a sustainable world, that leaves no one behind.

Themes



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-Gender Equality, and its relationship to the other Goals in particular SDG13 and 17.



Committee Leadership



Chair: Yetunde Holloway (Nigeria)

Deputy Chair: Dawn Bonfield (UK)

Theme 1 Lead : Wai Yie Leong (Malaysia)

Theme 2 Lead: Enyonam Kpekpena (Ghana)

Co-Lead: Alice Cunha da Silva (Brazil)

Theme 3 Lead: Jeanette Southwood (Canada)

Co-Lead: Micheline Wehbe

(Lebanon)

Co-Lead: Ania Lopez

(Italy)

Theme Lead 4: Dawn Bonfield (UK)

Co-Lead Eveline de Kokx

(Netherlands)

Membership

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- The committee of Women in Engineering currently has a membership of 42 Voting Members and 29 non-voting Members from 42 WFEO member countries and some international organizations.
- There are concerted and on going efforts to increase membership from WFEO member countries who do not have members in CWiE.



Theme 1

Increase Inclusivity and Diversity in Engineering pipeline



World Engineering
Day for Sustainable
Development WIE ---

Restatement of goals & call for disaggregated data 4 March 2022 'Build Back Wiser -Engineering the Future"

THE WOMEN IN ENGINEERING COMMITTEE STATEMENT FOR WORLD ENGINEERING DAY 4TH MARCH, 2022

Build Back Wiser-Engineering the Future

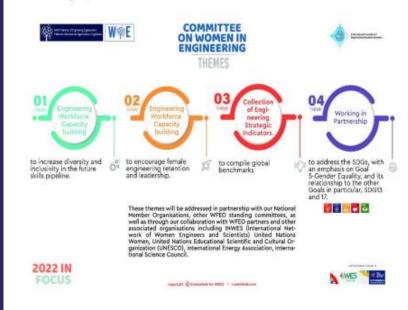
The World Federation of Engineering Organizations (WFEO) boasts of a large and diverse community of engineers from over 100 countries across the globe including Asia Pacific, Africa, America and Europe. The Women in Engineering Committee (WIE) is a Policy Implementation Committee of WFEO.

In coming years, sustainability of engineering will depend on Diversity, Equity, and Inclusivity (DEI) and these three guide the activities of our committee and form the basis of our strategic goals and overarching themes.

From ideation and conception, procurement, creation and production, application and use of modern engineering and technology, DEI has become a vital factor for global progression. Our committee promotes and advocates DEI within the sector and aims to ensure that more and more females join and thinve in the workforce, and that their opinions and perspectives contribute to the future of engineering and technology, across all the Sustainable Development Goals such as industry, innovation and infrastructure development, climate change, health security, access to clean water and sanitation, sustainable cities, digital technology, and gender equality.

To Build Back Wiser, after the Covid pandemic and various climate disasters, the engineering and technology community needs to embrace all people, rich and poor, and including the most vulnerable, with diverse and inclusive innovations that are accessible to all.

Four main thematic goals, form the basis of our work and are shown below:



Strategic Theme Three: Collection of disaggregated strategic indicators -will be an area of major emphasis for the Committee in 2022.

The simple GENDER SCORECARD, (shown below) was initiated by Engineers Canada, and adopted by the Women Engineering Committee, for collection of gender disaggregated data. The scorecard can be used by countries to establish engineering data baselines for 2022, and to create targets and track and benchmark progress achieved in subsequent years. The scorecard allows for additional information depending on the country and engineering culture, categorization, registration, progression procedures etc.

International Women's Day 2023



Yetunde Holloway joined the world to wish the Women Happy International Women's day, 2023 and members of the WIE community embraced equity with this poster showing our members on 8th March 2023- DigitALL: Innovation and technology for gender equality,





International Women's Day 2022





WFEO-WIE committee and friends joined the world on 8th March, 2022 to celebrate International Women's Day with the symbol 'Break the Bias' – Fostering and Celebrating Inclusivity. https://www.internationalwomensday.com/2022theme and shared on social media handles worldwide

WIE EGALITE Charter

Inclusivity and Diversity in Engineering



UN Action Coalition on Technology & Innovation for Gender Equality Action

Action Expected Outcome



Action Coalitions are global, innovative, multistakeholder partnerships that mobile international organizations to catalyze collective action, spark global and local conversations, drive investment, and deliver concrete and game changing results for women and girls.

THE EGALITE CHARTER COMMITMENT

The EGALITE charter has been developed by the Women in Engineering Committee as part of their commitment to greater diversity, equity and inclusion in the engineering sector

To create a more diverse, equitable and inclusive engineering industry.

The EGALITE Charter



Action Coalitions are multistakeholder programmes coordinated by UN Women under the Generation Equality campaign to focus on delivering progress on six critical areas underpinning equality:

WFEO Women in Engineering Committee proposed involvement in theme 5

Technology and Innovation for Gender Equality



World Federation of Engineering Organisations – A Charter for Equity, Diversity & Inclusion



A Commitment to Equity, Diversity & Inclusion

The members of the World Federation of Engineering Organisations pledge to commit to the following aims and actions to create a more diverse, equitable and inclusive engineering industry. Organisations that sign up to this pledge are committing to driving equity, diversity & inclusion within their sector and providing fair treatment of and opportunities for women and under-represented groups to succeed at the highest levels, and to ensure diversity at all levels across the industry.

The EGALITE Charter:

- Equity. We commit to ensuring that all members of our profession have equitable
 experiences and opportunities to succeed, are treated fairly and with respect, feel
 safe, and are free from harassment and discrimination.
- Growth. We commit to growing our diversity to ensure that we have representation
 in line with our regional population in all areas and at all levels, including in our
 governance, on committees, panels, and recruitment boards, and to create an
 inclusive culture where all employees are able to thrive and progress equally.
- Accountability. We will be accountable for progress, create a plan of action including measurable targets, and will publish our results.
- Leadership. We will visibly support these commitments at senior level, leading by example, and reflect these commitments in our actions, communications, publications, and reporting.
- Indicators. We will measure disaggregated data, comply with industry-wide initiatives to compile global data, and use this data to inform action.
- Training, We will put relevant training in place for our members and employees to reflect our commitment to Equity, <u>Diversity</u> and Inclusion.
- Everywhere. We will ensure that our EDI commitments are reflected in all parts of our organisation, and at every level, including in the engineering products, services and outputs that we produce.

This charter is part of the Commitment mode by the World Federation of Engineering Organisations Women in Engineering Committee to apply engineering to address the Sustainable Development Gook. The Commitment is made to the UN Women Generation Equality Action Coalition on Technology and Innovation for Gender Equality, https://commitments.generation.equality.org/en/action-coalitions

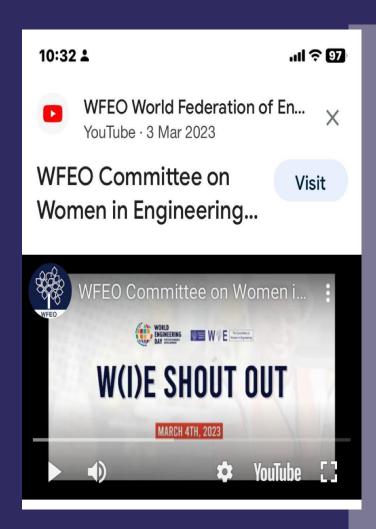
WFEO 2021

World Engineering Day (WED) Celebration, 2023



- In celebration of 2023 World Engineering Day (WED), the Women in Engineering Committee in collaboration with FAEO-WIE organized a "W(I)E Shout Out".
- Showed-off it's huge diversity of female engineers from all over the world.
- Kindly click on the link to watch the Shout Out

https://www.youtube.com/watc
h?v=cEh1uC_bcAg



Theme 2 Female retention and leadership in engineering

W#E

In celebrating the
International Women in
Engineering Day 2022, the
WIE Committee of the WFEO
hosted winners of the 2019
and 2020 WFEO-GREE Awards
in a webinar

"Leadership for Innovation in Engineering" in line with the INWED 2022 theme: INVENTORs & INNOVATORS on 22nd July, 2022



Speaking UP





WORLD FUTURES STUDIES FEDERATION

INDEPENDENT GLOBAL PEAK BODY FOR FUTURES STUDIES SCHOLARSHIP A UNESCO PARTNER – FOUNDED PARIS 1973

In the March 2022 edition of the magazine "Human Futures", by World Futures Studies Federation (WFSF), Dawn Bonfield, MBE, Deputy chair of the WFEO-Committee on Women in Engineering had an interview with Claire A. Nelson, Chief Ideation Leader of WFSF as regards the work of the women in Engineering and the future.

See link to the full conversation:

https://www.wfeo.org/conversations-on-the-future-we-want-un-agenda-2030/

Theme 3: Female Strategic Indicators



GENDER EQUALITY SCORECARD FOR THE MEASUREMENT OF GENDER DISAGGREGATED DATA

The Women in Engineering Committee, as part of their 'Strategic Indicators' Action Theme have developed, in collaboration with Engineers Canada, a Gender Equality Scorecard which is being used to encourage Professional Engineering Institutions (PEIs) and engineering regulators to collect and report on metrics related to professionally registered women engineers in their institutions or licensed by their engineering regulators



Commitment to the Generation Equality Action Coalition on Technolog and Innovation for Gender Equality

Gender Equality Scorecard for the Measurement of Gender Disaggregated Data for Professionally Registered Engineers

The Gender Equality Scorecard is a gender disaggregated data measurement tool which has been developed by Engineers Canada to track the progress in numbers of women in the engineering sector who are members of Professional institutions on their journey to professional registration. The ambition is for engineering regulators globally to adopt a standardiged method of measuring data, helping them to set appropriate goals to increase numbers of women in the engineering sector within their own country, and simultaneously promolgating a global benchmark through and Engineering Regulators are requested to report annually against a moroid matrix of eight or more measures, depending on applicability, starting with the next reporting regulators are requested to

- The gender disaggregated metrics listed on the scorecard are:
- Total percentage and number of licensed (professionally registered) engine
 Percentage and number of newly licensed engineers for that particular yea
- Percentage and number of newly licensed engineers for that particular year
 Percentage and number of Engineers in Training (ETTs)
- Percentage and number of newly registered Engineers in Training (ETTs)
 Student members
- Percentage and number of mentorship program participants (where an official
- recognized institute scheme exists)
- nized Institute scheme exists)
- . Any other regulator-specific metric

Regulators can use the scorecard to set their own yearly targets for each of these categories. If Regulators have other metrics they would like to track as part of the scorecard they can add their own Regulator-specific metrics, or replace some of the met-

The purpose of this scorecard is to provide a tool for Regulators and professional engineering institutions to set and measure aspirational yearly targets, and for the data to be collected and used globally by the World Pederation of Engineering Organizations-Women in Engineering Committee to monitor, track and report progress on a global level.

For further details, and to be involved in joining this initiative, please contact Tessy Gnayan on wfeo-wie@wfeo.net or Dawn Bonfield on dawnbonfield@btinternet.com

This progress towards global adoption of this Scorecard is part of the Commitment made by the World Federation of Engineering Organizations: Women in Engineering Committee to apply engineering to address the Sustainable Development Goals. The Commitment is made to the UN Women Generation Equality Action Coalition on Technology and Innovation for Gender Equality.

In conclusion, measurement of engineering disaggregated data is expected to raise awareness on the insufficiency (or otherwise) of diversity and inclusivity in engineering, particularly as it affects women and is further expected to hold engineering communities and organizations accountable on the female perspectives reflected in their work. Studies indicate that a more diverse workforce of females and other disadvantaged groups, which reflects a wider variety of experiences and views, can greatly benefit the profession and humanity as a whole.

WIE invite(s) our colleagues in the World Federation of Engineering Organizations and beyond, to join our call for the measuring and reporting of gender disaggregated statistics, and the adoption of the Gender Equality Scorecard, and to unite with us in creating a global benchmark, which will accelerate progress towards a more diverse and inclusive engineering sector worldwide.

Let's celebrate an inclusive World Engineering Day!

Yetunde Holloway Chair, WFEO-Women in Engineering Committee yuholloway@gmail.com

To sign-up, please contact: Dawn Bonfield
Deputy Chair
dawnbonfield@btinternet.co

Tessy Gbayan Secretariat wfco-wica wfco.net

World Engineering Day 2023



Achieving Gender Diversity in Engineering: Strategic Indicators –Yetunde Holloway participated in panel presentation in collaboration with other WFEO committees and **International Coalition** for Sustainable Infrastructure (ICSI)











World Engineering Day webinar

Collaborative Engineering Initiatives for a Sustainable and

Resilient Built Environment

February 21, 2023 / 4 PM (GMT) / 5 PM (CET)



Davide Stronati
Chair, WFEO
Committee on
Engineering and the
Environment, and Chair
of all Committee Chairs



Savina Carluccio
Executive Director,
nternational Coalition
for Sustainable
Infrastructure



David Smith
Chair, ICE Sustainable
Resilient Infrastructure
Community Advisory



Christopher Chukwu Member, Commonwea Engineers Committee a Lead, WFEO YEFL Clim



Register: bit.ly/3kV8HyP

Yetunde Holloway Chair, WFEO Committee on Women in Engineering

WFEO becomes a repository for gendered indicators First results

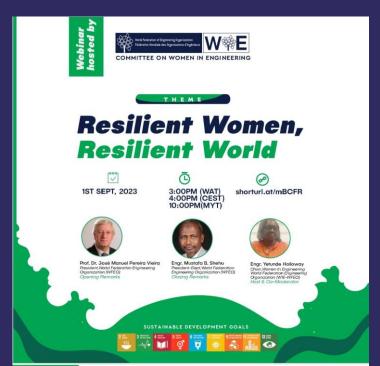


| | Male | Female | Total | % Female |
|--|---------|--------|---------|----------|
| Institution of Engineers Kenya | 7327 | 1133 | | 13.4% |
| Institution of Engineers Mauritius | | | | |
| | 287 | 46 | 333 | 13.8% |
| Pakistan Engineering Council | 304766 | 24721 | 329487 | 7.5% |
| Institution of Civil Engineers, UK (ICE) | 75740 | 14601 | 90340 | 16.2% |
| Zimbabwe Institution of Engineers | 11276 | 925 | 12201 | 7.6% |
| IEU Iraq | 186235 | 65434 | 251669 | 26.0% |
| IESF France | 931000 | 294000 | 1225000 | 24.0% |
| Ghana | 12008 | 992 | 13000 | 7.6% |
| CIE Chinese Taipei | 18059 | 947 | 19006 | 5.0% |
| Portugal | 43862 | 12080 | 55942 | 21.6% |
| New Zealand | 20001 | 4502 | 24736 | 18.2% |
| Slovenia | 6283 | 892 | 7175 | 12.4% |
| Poland | 64203 | 17060 | 81236 | 21.0% |
| Hong Kong | 15289 | 1623 | 16902 | 9.6% |
| Costa Rica | 20849 | 6962 | 27811 | 25.0% |
| Spain | 62459 | 13205 | 75664 | 17.5% |
| Peru | 246107 | 67640 | | 21.6% |
| | | 2.3.0 | | |
| | 2025751 | 526763 | 2552709 | 20.6% |

https://www.dropbox.com/scl/fo/jgumh6isf zklxi2r5tgqj/h?rlkey=9susu4bei2t7lq2nzkhw aro3p&dl=o

Theme 4: Resilient Women, Resilient World







WIE hosted a webinar on 1st Sept. 2023 -Resilient Women, Resilient World

Watch Recording Here: https://www.youtube.com/watch?v=OUDp02Mq8RE

Collaborations FAEO ICSI COP26



In collaboration with FAEO-Women in Engineering, the WIE Committee hosted a panel session on the theme: Innovative Ways of adopting and mitigating Climate Change in Africa on 13th October, 2022 focused on the effect of Climate change in and suggested measures of adaptation



WFEO -Women In Engineering Committee At Cop26



On Monday 8th November, 2022
Dawn Bonfield in a panel session
of the Green Zone of COP26 (the
public zone), where they are took
part in the debate entitled <u>Using</u>
the SDGs to tackle the Climate
Emergency: Here's how!

The debate focused on the role of the SDGs in tackling the climate emergency, bringing in references to diversity and inclusion and managing a 'whole life' approach.



United Nations Commission for the Status of Women 67 6 - 17 March 2023.



UNITED NATIONS CSW67 Virtual Parallel Session: "The Challenges and Opportunities of Achieving Gender Equality- Africa speaks". Priority theme, 'Innovation and Technological Change, and Education in the Digital Age for Achieving Gender Equality and the **Empowerment of All Women and Girls**. For the first time, FAEO-WIE participated in the high profile event with a virtual parallel webinar on 8th of March. It was an interactive session with a panel of six eminent speakers and a number of participants from the various regions of Africa. click here to watch the recorded session of the event.



United Nations Commission for the Status of Women CSW66





Monday 21 March 2022 | 10-11.30am EST (New York) / 2-3:30pm (GMT)

At COP26 in 2021 the World focused on the climate emergency like never before. Our speakers today will talk about their experience at COP26, and the work that they do to focus on the gender perspective, the implications for engineering and technical solution development, and how this viewpoint must be embedded in strategy & planning

vent hosted by the Women in Engineering Committee (WIE) of the World Federation of Engineering Organisations (WFEO) REGISTER HERE: https://bit.ly/34tK04w











tember of Belgian Consultative









The WFEO –Women Engineering Committee participated in CSW66 on the theme Climate Change: Environment Disaster Risk Reduction. The Committee organized a virtual parallel event in relation to the theme on creating Gender Inclusive Engineering & Technology to Address Climate Change... The event which held on Monday, 21st March, 2022 had high profile speakers who spoke extensively to address the issues around the theme.

6th African Women Engineers Forum, 25th September, 2023



The 6th African Women Engineers Forum (AWEF) organized by the FAEO Women in Engineering (WIE) Committee in collaboration with WFEO-WIE and Women Engineers of the South Africa held 25th September, 2023, as part of the 9th Edition of UNESCO Africa Engineering Week and 7th Africa Engineering Conference. The forum addressed and strengthened a conducive environment which enabled women's participation in the engineering sector with focus on the Economic, Environmental, Social, and Governance (EESG) features in the Engineering Space.



5th African Women Engineers Forum, 10th November, 2022



• The 5th African Women Engineers Forum (AWEF) organized by the FAEO -Women in Engineering (WIE) Committee in collaboration with WFEO-WIE held 10th November, 2022, during the 8th Edition of UNESCO Africa Engineering Week and 6th Africa Engineering Conference.

The 5th AWEF was themed SUSTAINABLE INFRASTRUCTURE **DEVELOPMENT IN AFRICA TOGETHER-THE GENDER PERSPECTIVE**. As part of her vital role to encourage the study of Science, Technology, Engineering and Mathematics (STEM) among the Girl Child, the Committee visited students in two high Addis Ababa, Ethiopia for a career talk.





FAEO-WIE Virtual Art Competition

Capacity Building in Africa



The second edition of STEAM Virtual Art event on 26th June 2022 to commemorate INTERNATIONAL WOMEN IN ENGINEERING DAY (INWED) and adopted the theme for 2022 -Inventors and Innovators # Imagine the future. The competition then focuses on Climate Change, in order to engage the young minds on topical issues.

Participants were aged 6-8 yrs and 9-11y from different African Countires. Winners from Nigeria, Namibia and Zambia were awarded with Laptops, Tablets, Science books and Cash.

The 3rd edition in line with the INWED theme for 2022 - "Make Safety Seen: AFRICA in Focus. The

assessment session will take place from 27th -31st October, 2023.









Participation at the WFEO-UNECSO Joint Meeting for Member States Thursday 27 October, 2022,



The Chair represented the Committee and made a presentation at the joint meeting of WFEO-UNESCO which held at UNESCO Headquarters in Paris/

The meeting aimed to present the UNESCO-WFEO partnership and contributions to the SDGs by working with Member States, especially on engineering capacity building and education, and relevance to the variety of regional and national contexts with regard to building more inclusive and responsible communities.





WIE Celebrates International Day of Men, 19th November, 2022



- The Committee hosted a webinar on the theme Gender Perspectives on Achieving SDG 5. To celebrate the International Day of Men.
- The event highlighted different approaches/views towards achieving gender equality which is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

Communication s



NEWSLETTERS

The Committee has published 4 newsletters from 2021-2022. Preparations are in place for the last quarter publication in 2023. View all our newsletters on

https://www.wfeo.org/committee-women-in-engineering/

MEETINGS

The theme leads bimonthly virtual meetings to discuss programmes and activities that will take the committee forward as well as work towards the achievements of the Committee's goals.

What's App Platform

The Women in Engineering Committee has a vibrant What's app platform which reflects our diversity

This is a live and lively informal chat, where we plan some of our events and share events from our countries and regions.







Going Forward **2024** and beyond



Members of the Women in Engineering committee are encouraged to have a joint and multiplying roles at WFEO by:

Participating in other standing committees, to optimise visibility, ,facilitate partnerships as well as inclusion and diversity in WFEO

Aspiring for leadership roles in other committees

Focus on SDG 5 and connection with all the SDGs

Working towards the achievement of the EGALITE Charter Committee from members of WFEO



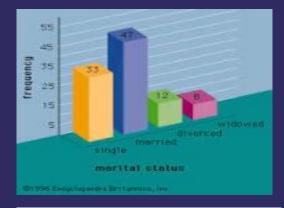




Going Forward 2024 and Beyond



Further the cause of the Gender Equality Scorecard for the measurement of Gender Disaggregated Data in various PEIs across the World. This will be used as a tool for advocacy towards greater and more equitable representation of females in engineering leadership Work to identify 'What Works' in terms of countries that do well with gender equality in engineering to identify best practice







Conclusion



- Over the last four years, the Committee of Women in Engineering has worked very hard and collaborated across continents, communities and cultures and other diverse groups.
- The WIE has made lasting impact. One major influence is the formation of strong networks of Engineering ladies across Africa and the World. This is evidenced by the success of the African Women in Engineering Forums, in the last 4 years.

The art competition explores the nexus between fine art and engineering by getting African children across countries to proffer solutions to African problems -a virtual forum to interact whilst creatively solving problems using art In addition to this, the last Wie webinar which took place last month recorded resounding success as it had over 100 participants from all over the world, discussing Resilience of women and the SDGs with one voice, including the male participant.

End



Finally, big congratulations to WFEO for implementation of the collection of disaggregated Engineering Strategic Indicators (ESI)! While data so far is not complete, the patterns already reveal in black and white, the underrepresentation of women in engineering across the world.

The next steps would be More data collection using 2023 as a baseline Extensive analysis WFEO becomes a repository for this information policy recomendations and actions to bridge the Policy advisory document to address obvious gender

gap in engineering Thank you