FUTURE LEADERS

YEFL Progress Report

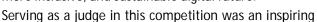
OCT 2023 - OCT 2024

FIRAS BOU DIAB CHAIR, WFEO-YEFL COMMITTEE FEDERATION OF LEBANESE ENGINEERS (FLE)

Empowering Change: Judging the SDG Digital GameChangers Awards

As Chair of the WFEO Young Engineers/Future Leaders Committee, Firas Bou Diab, had the honor of serving as a judge

for the prestigious SDG Digital GameChangers Awards during the "A Digital Future for All" event, held on 21 September 2024 at the UN Headquarters in New York. This event, which was part of the larger Summit of the Future Action Days, brought together global leaders, innovators, and changemakers from various sectors. Organized by the Office of the Special Envoy on Technology (OSET), the International Telecommunication Union (ITU), and the United Nations Development Programme (UNDP), the digital track aimed to propel forward-thinking commitments that leverage innovation, science, and data to build a safer, more inclusive, and sustainable digital future.

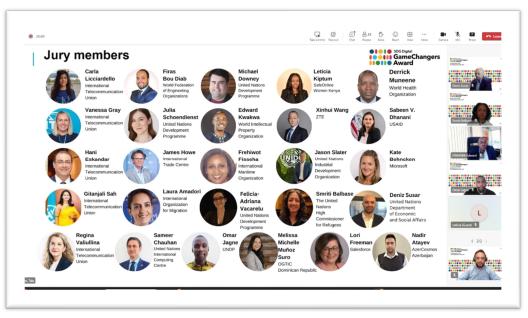




and enriching experience, as it highlighted the critical role of Information and Communication Technologies (ICTs) in addressing some of the world's most pressing social and developmental challenges. I had the responsibility of evaluating projects in Category 1: People – Empowering Lives and Communities. This category focused on initiatives that used ICTs to uplift marginalized populations, promote digital inclusion, and create opportunities for individuals

and communities. The projects I reviewed demonstrated how digital tools can provide access to services. essential enhance education, create employment opportunities, and advance aender equality, particularly for underserved and vulnerable groups.

The awards celebrated groundbreaking efforts to reduce



inequalities, fight poverty, and foster inclusive growth through technology. I was moved by the creativity and commitment of the participants, whose projects exemplified how digital solutions can transform lives, bridge gaps in access to resources, and contribute to a more equitable and just world.

WFEO-YEFL & Project Catalyst webinar – Engineering Insights

The WFEO Committee on Young Engineers / Future Leaders (YEFL) in partnership with Project Catalyst organized the webinar "Engineering Insights" on 8 August 2024.

This webinar explored future opportunities for up-and-coming engineers by fostering collaborations with organizations both within and outside the WFEO that directly serve rising engineers or have a direct engineering student base.

The goal of these collaborations is to provide up-and-coming engineers with access to quality resources and platforms for them to kickstart their careers and gain exposure to a variety of engineering-related experiences that can mold

their interests and job prospects. Project Catalyst is globally recognized organization dedicated serving students from diverse backgrounds the fields of biotechnology and engineering. Mission promote equity and inclusion in STEM education. providing



platform for students to thrive and succeed in their chosen disciplines. By offering a range of educational resources, mentorship programs, and collaborative projects, Project Catalyst is committed to building a more inclusive and innovative engineering community.

WFEO & ICSI webinar to celebrate World Engineering Day 2024 – Inspiring collective action through communication, advocacy and best practices – the role of engineers

The WFEO Working Group on Climate Change, the International Coalition for Sustainable Infrastructure (ICSI) and the WFEO Committee on Young Engineers / Future Leaders organized the webinar entitled "Inspiring collective action through communication, advocacy and best practices – the role of engineers" in celebration of the World Engineering Day on 14th March 2024.

This event demonstrated the pivotal role that engineers play in addressing climate-related challenges, and how they can help to communicate

challenges and solutions to key players such as local communities, policymakers and investors.

Discussions emphasized the importance of tailored communication strategies, highlighting successful case studies and best practices that effectively resonate with different audiences. In an era of information overload,



finding methods to convey the urgency of climate action is essential for mobilizing all stakeholders across the value chain towards sustainable practices.

World Engineering Day 2024 Hackathon

As a highlight of WFEO's World Engineering Day celebrations, Hackathon returned, encouraging engineering students to collaborate and tackle real-world challenges on a global scale.

In 2024, the competition took a green initiative, aligning all challenges with the United Nations Sustainable Development Goal 13 – Climate Action. This focus on sustainability reflects our commitment to addressing climate issues through innovative engineering solutions.

Over 2,500 participants from around the world registered for the Hackathon, resulting in more



than 200 innovative submissions. The finalists' projects were showcased on our 24-hour Global Stream on 4 March, culminating in the announcement of the winners.

The Young Engineers/Future Leaders (YEFL) Committee played a significant role in the preparation and organization of the Hackathon, actively participating to ensure its success. Additionally, members of the YEFL Committee served as preliminary judges, contributing their expertise to evaluate the submissions.

COP28

The WG on SDG13 has built on its experience and connections at the previous UNFCCC COPs to deliver an even more impactful presence at COP28 in Dubai. The group has hosted multiple side events and pavilion events in the Blue Zone and has contributed to high level initiatives, with the following highlights:

- The WG was selected as a co-lead for the Infrastructure, Energy, and Mobility theme for the COP28 Resilience Hub. Shaped the theme, organised one and supported three COP28 Blue Zone events at the Hub. Over 10 000 people joined the Hub in-person and the virtual platform during COP28.
 Delivered the "Engineering Action: Influencing the future of the built & natural environment" event together with International Coalition for Sustainable Infrastructure (ICSI) and United Nations Office for Disaster Risk Reduction (UNDRR). The COP28 Resilience Hub event used a very engaging fishbowl format and promoted a dialogue between engineers, policymakers and finance professionals to advance multi-stakeholder solutions in infrastructure, with a focus on UNDRR Principles for Disaster Resilient Infrastructure.
- Reviewed the GRA's 3xRenewables campaign ahead of its release (one of the flagship achievements of COP28) and provided feedback at meetings with the CEO and Chair of GRA.
- Organised a COP28 Blue Zone side event titled "Youth & Practitioners: Catalysts for Behaviour Change in Science-Based which Policy" promoted collaboration between engineers and policymakers, highlighted the role of young engineers in climate action. The event was delivered in partnership with FIDIC, Council of European Municipalities and Regions (CEMR) and Engineers Without Boarders International (EWB).
- Co-developed and co-delivered a COP28 Blue Zone side event in partnership with the WG on Climate Change titled "Systems thinking for holistic climate action: nature-driven engineering, policy and finance solutions". The event promoted trans disciplinarity and



systems thinking for inclusive, effective, nature-positive infrastructure and climate solutions in the context of the global stocktake (e.g. through nature-based and hybrid approaches, accelerating the energy transition) by mobilizing youth, finance, and policy.

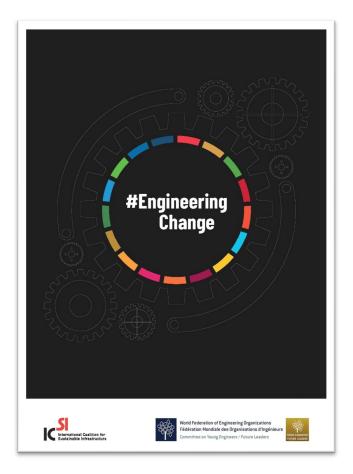
#EngineeringChange

Developed the #EngineeringChange campaign with ICSI, seeking to empower young engineers and their managers to:

- Implement sustainable development practices in their work.
- Lead and effectively advocate for the necessary changes.
- Systematically address barriers in their organisations.

Launched the campaign at the COP28 Resilience Hub. Conducted an international survey of young engineers and their managers to analyse barriers and perceptions to applying sustainable development practices in engineering, and produced a report that provided analysis and next steps for the campaign: https://sustainability-coalition.org/engineeringchange/

Currently collaborating with ICSI to develop a map of freely available resources for young engineers to upskill themselves in sustainable development practices.



Buildings and Climate Global Forum

Attended the inaugural Buildings and Climate Global Forum organised by the Government of France and UN EP in Paris, which brought together ministers and some of the key actors of the buildings and construction sector from around the world to focus efforts in decarbonising the sector.



C40 Cities event

Co-organised an online seminar with C40 Cities titled "Just Energy Transition Strategies for a Sustainable Future". The

event had the following objectives:

 Understanding key strategies of the just energy transition: The webinar delved some of the key just energy transition strategies, exploring how it complements traditional supply-side strategies.



- o Provide Real-world Examples: Discover successful implementations, opportunities, and challenges in different regions.
- o Share Policy and Regulatory Landscape: Understand the roles of various actors across the whole energy ecosystem in advancing the transition, and how governments and utilities are incentivising adoption of some strategies and promoting a cleaner energy ecosystem.
- o Explore the opportunities on the supply and demand side for shifting towards sustainable practices.

New York Climate Week

YEFL Working Group participated in the roundtable discussion titled "Scaling Up Adaptation Finance: A Dialogue Between Engineers and Investors," hosted by ICSI, GCoM, ICE, and BCG. The discussion focused on strategies for unlocking funding for equitable, sustainable, and resilient infrastructure, emphasizing the collaboration between engineers and the investment community to explore new opportunities.

COP29

In collaboration with FIDIC, Resilience First/ICSI, The Institute of Environmental Management and Assessment (IEMA), and the World Green Building Council, Inc. (WorldGBC), YEFL Working Group has secured a side event in the COP29 Blue Zone titled "Building Capacity and Capability for a Sustainable, Resilient, and Just Built Environment." This event will address the challenges of providing the global built environment community with the necessary knowledge, skills, standards, and tools to implement sustainable, resilient, and equitable solutions.