



## Activities of the WFEO Committee on Engineering and the Environment, 2019-2023

Summary: Since November 2019, the CEE has held meetings every few months, with a select group meeting additionally every month in the lead up to COP26, to prepare WFEO's contribution to the conference. General CEE meetings focus on the actions and progress of projects led by Theme Leaders.

The work of the Committee on Engineering and the Environment (CEE) is aimed at enabling WFEO and the global engineering profession to support the achievement of the UN Sustainable Development Goals through the development, application, promotion and communication of:

1. Environmentally sustainable and accountable engineering practices and technologies;
2. The adaptation of infrastructures to the impacts of a changing climate (SDG 13), decreasing resources and increased populations;
3. Assessing and promoting engineering practices to mitigate climate change (SDG 13);
4. Coordinating perspectives on the engineering required to deliver SDGs 6, 7, 9 and 11;
5. Policy frameworks, sets of guidelines and best practice for practicing engineers on responsible environmental stewardship and sustainable and ethical practices in various areas of engineering practice.

Since 2019, the CEE has continued work on SDG 13 'climate action', primarily through its task groups on Climate Change Adaptation and Mitigation.

Members of the CEE regularly attend the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) meetings to promote the role of engineers in combating climatic uncertainty. At COP25, following the 2019 General Assembly in Melbourne, WFEO and the CEE launched the WFEO Declaration on Climate Emergency, which has now been signed by 28 countries.

2021 also saw CEE members contributing to the Triennial Conference hosted by the Canadian Society for Civil Engineering (CSCE). This conference is jointly organized every three years by three civil engineering societies that total more than 300,000 members, the American Society of Civil Engineers (ASCE), Institute of Civil Engineers (ICE) and Canadian Society for Civil Engineering (CSCE).

### Climate Change Adaptation Task Group

This is led by Darrel Danyluk, an independent advisor to the CEE, and firstly aims to promote The Code of Practice on Principles of Climate Change Adaptation for Engineers by reaching out to National Members. It also aims to contribute to WFEO's presence at COP26 and future COPs.

The WFEO Model Code of Practice on Principles of Climate Change Adaptation for Engineers was adopted at the December 2015 General Assembly. It was prepared by CEE members as a complement to the WFEO Model Code of Ethics for Engineers and the Model Code of Practice for Sustainable Development and Environmental Stewardship. In, 2021 the CEE has held workshops with WFEO National Members on adopting its principles.

Since 2019, Engineers Canada and Polytechnique Montreal have continued their Massive Open On-Line Course "Sustainability in Practice". This course presents the principles explained in the WFEO Model Code of Practice for Sustainable Development and Environmental Stewardship and the equivalent national guideline published by Engineers Canada. WFEO and CEE promote the course to national and international members each year.



### **Climate Change Mitigation Task Group**

The WFEO Climate Change Mitigation Best Practice Project is led by Prof. Wu of CAST. This project is aimed at mitigating climate change on our planet. The Climate Change Mitigation Best Practice Project will build a database/collaborative platform to collect, organize and store successful engineering projects, plans and ideas from WFEO national members and partners. The project mainly focuses on civil and construction engineering. The first step is to build a database of Climate Change Mitigation Best Practice Projects, plans and ideas from WFEO national members and partners.

Highlight: COP26 activity

**The WFEO delegates for COP26 were as follows:**

#### **Both weeks**

Davide Stronati, Chair of the Committee on Engineering and the Environment (in person)

Milda Pladaite, Lead of Global Young Engineers Working Group on SDG 13 (in person)

Dawn Bonfield, Member of the Women in Engineering Committee (in person)

#### **First week**

Katie Momber, Secretary to the WFEO CEE (in person)

Lylia Coelho Ferreira, Member of the WFEO CEE (in person)

Hannah Besford, ICE staff helping to organise side event (in person)

#### **Second week**

Gong KE, President, WFEO (virtual)

Jacques de Mereuil, Executive Director, WFEO (virtual)

David Lapp, Member of the WFEO CEE (virtual)

### **Details of WFEO-organised event at COP26**

#### **WFEO-organised Side Event, in partnership with International Network of Women Engineers and Scientists (INWES) and Engineering Institute of Canada:**

Title: Increased climate action, building resilience and lowering emissions: Lessons learned

Description: Showcasing the experiences and lessons learned from the engagement of women and young engineers, and the worldwide engineering profession, for increased climate action on reducing emissions and building the climate resilience of cities and communities with an eye to the future.

Speakers: Davide Stronati, Chair of the WFEO CEE; Prof. Jianping Wu, Tsinghua University; Milda Pladaite, Leader, WFEO Young Engineers WG on SDG13; Darrel Danyluk, EIC; Dawn Bonfield, Past President of Women's Engineering Society, and WFEO WIE committee member; Wai Yie Leong & Gail Mattson, INWES

#### **Events organised by WFEO Young Engineers Group on SDG13 (sub-group of WFEO CEE & YE/FL committees:**

1. Deploying Global Youth Capacity in UN Organisations and Engineering for SDG 13, at the Capacity Hub in COP26.
2. COP Resilience Hub - Enhancing Climate Resilience through water by building the capacity of Youth, (fully virtual)
3. International Chamber of Commerce - Closing the Youth Skills Gap to Fill Green Jobs of the Future (this event is happened on the margins of COP, fully virtual)



For more information on the WFEO Young Engineers Group on SDG13 activity at COP26, as well as their overall contribution, see Appendix A, and the [Climate Declaration: COP26 Joint Statement of International Youth Organisations](#).

## Photos



Davide Stronati, Milda Pladaite and Dawn Bonfield taking part in the side event in the Blue Zone of COP26.



Davide Stronati (CEE Chair) and Katie Momber (CEE Secretariat) at COP26.