



United Nations
Framework Convention on
Climate Change



**World Federation of
Engineering Organizations**

Meeting Summary

UNFCCC SBSTA 44

Bonn Germany, May 16-26, 2016

Background

- The WFEO CEE Task Group on Climate Change Adaptation attended the 44th meeting of SBSTA at the UNFCCC at the 1st negotiating sessions Post Paris COP-21 and its agreement.
- WFEO requested and was successful in obtaining an exhibit booth for the duration of the meetings, a dedicated room for informal discussions with attending engineers and a side-event slot during week 2 of the event.
- WFEO was represented by Darrel Danyluk P.Eng Past Chair of WFEO-CEE (Focal point to UNFCCC) and David Lapp P.Eng former secretariat to CEE. WFEO is an accredited observer to the UNFCCC and has attended all COP meetings and mid-year negotiation meetings since 2007.
- Photos and presentations are attached

Summary of Meeting Activities

- **WFEO Side Event May 24th 4:30**
Title Model Code of Practice "Climate Change"

This Model Code was approved by the WFEO. It presents the approach needed in designs to address the challenges of the changing climate, including the need to undertake climate risk and vulnerability assessments and engaging with the climate science community in arriving at the optimal solution.

Thematic areas promoting implementation

Adaptation; Capacity building; Disaster risk reduction, risk assessment/insurance;
Mitigation; Science and assessments

Speakers: D.J Danyluk - WFEO D. Lapp - Engineers Canada

WFEO Exhibit (May 16 to May 26th)

- **Engineering is required to implement adaptation and mitigation actions to address climate change. The exhibit presented information on feasible approaches as well as the newer technologies. Thematic areas addressed:**

Capacity building; Disaster risk reduction, risk assessment/insurance; Mitigation; Science and assessment; Sustainable development; Technology

- **Information displayed/Materials provided**

WFEO Banner, PIEVC panel, Engineers Canada panel, CEE newsletters (Infrastructure Assessment and Adaptation Critical in Responding to Climate Induced Vulnerabilities; Climate Change Task Group on Mitigation Forms an important WFEO-CEE Initiative; Mitigating Green House Gasses-Engineers can make a difference); Part 1 of PIEVC Protocol and link to Case studies; ASCE report “Adapting Infrastructure and Civil Engineering Practice to a Changing Climate” by Committee on Adaptation to a Changing Climate; Engineering Education for Sustainable Development by WFEO Committee on Education in Engineering; Cities Adapt to Extreme Rainfall “Celebrating Local Leadership” by Kovacs, Guilbault, Sandink; “Basement Flooding” by Institute of Catastrophic Loss Reduction; Engineering: Issues Challenges and Opportunities for Development-UNESCO; Low Impact Development guides by Credit Valley Conservation Authority “Grey to Green residential Retrofits, Grey to Green Business & Multi-Residential Retrofits, Grey to Green Road Retrofits”;

- **Informal Engineering Discussions (May 17- May 20)**

WFEO chaired informal meetings for attending engineers from the student, party, and NGO communities. This initiative builds upon the 2015 pilot project which was seen to be beneficial to engineering members of the parties. Topics included Risk Management options and obstacles; Feasible Mitigation Options specifically the Future Climate-Engineering Solutions initiative; and the Modal Code of Practice for engineers related to Climate Change. Comments from attendees were positive and continuation of this initiative is recommended.

At the request of an engineer from a developing country WFEO-CEE prepared a draft intervention for the deliberations of the SBSTA, (Subsidiary Body for Scientific and Technological Advice). The text follows:

“Now that the world has negotiated the Paris agreement to mitigate GHGs and pursue adaptation to the changing climate, the focus must now turn towards implementation to turn the words into action. The world’s engineers are a human resource that must be tapped to contribute to this implementation. All countries use engineers to deliver services that provide the quality of life that society enjoys, in particular, potable water, sanitation, shelter, buildings, roads, bridges, power, energy and other types of infrastructure. There are opportunities to

achieve GHG reduction as well as improving the climate resilience of this infrastructure through design, construction and operation all of which require the expertise and experience of engineers. Engineers are problem-solvers and seek to develop feasible solutions that are cost-effective and sustainable.

For example, engineers have been involved for over 10 years in the evaluation of the climate risk and vulnerability of civil infrastructure and buildings. This assessment has been standardized into a procedure known as the PIEVC Protocol, which has been used in over 40 projects in Canada and two internationally. The assessments inform decisions on how to adapt the infrastructure to improve its climate resilience over its life cycle where the climate in which it operates is changing significantly. This allows engineers, planners and managers to build and operate infrastructure to meet the needs of the population.

Engineers serve the public interest and offer objective, unbiased review and advice. Having their expertise to evaluate the technical feasibility and economic viability of proposals to reduce GHGs and to adapt to climate change impacts should be pursued. Engineers input and action is required to implement solutions at country and local levels.

There is an international organization known as the World Federation of Engineering Organizations whose members are the national engineering organizations from over 90 developing and developed countries representing more than 20 million engineers. Many of these are G77 countries. The WFEO has offered to facilitate contact and engagement with these organizations to identify subject matter experts that will contribute their time and expertise as members of the engineering profession. The expertise of the world's engineers is needed to help successfully implement the Paris agreement. We encourage all G77 countries to engage their engineers in this effort. The WFEO is prepared to assist in this effort."

- **General comments/observations**

The atmosphere at these UNFCCC meetings were noticeably more relaxed compared to the earlier years leading up to Paris. The "agreement" is in place and signed, and the ratification process is ongoing. Attendance numbers of NGO's are down and the emotional displays of climate impact and controversy have gone with the winds of change. Accordingly those presenting side events are mostly linked to the UN system and/or parties. There is a sense of optimism that the transition towards implementation will not be derailed by political discord. The pace of ratification of the agreement is the metric to watch. Only 17 of the 197 signatory countries had ratified the Paris agreement at the start of these meetings.

In 2015, WFEO-CEE was approached to join a Climate Change Adaptation project where WFEO would support the development of NAPs (National Adaptation Plans) for 4 developing countries. After nearly a year since initial concept discussions and on-going negotiations the project is

awaiting final approval (expected shortly). A project status meeting was held during this UNFCCC event.

The UNFCCC Adaptation Committee has started its meetings with the “technical expert group” on the topics of Procedural matters, Climate Finance and Planning. Meetings with Engineering Experts are to come and WFEO has requested to be included.

A representative of the Technology Committee approached us with a concept to hold a meeting between WFEO expert engineers and expert engineers from the Parties. The concept will be refined, then raised at the TechCom meeting for consensus and further discussions are planned. Expansion of the informal meetings outlined above is envisioned.

WMO representatives approached us as a follow up to the MOU signed between WFEO and WMO in 2011. Further discussions are planned to explore next steps.

- **Value and nature of WFEO collaboration and future involvement with UNFCCC and affiliates**
WFEO became re-engaged at UNFCCC in 2007 and subsequently WFEO-CEE took the lead. Over these 9 years the voice of the worlds engineering community has repeatedly presented the engineering perspectives on climate change adaptation and mitigation. As the Climate Change focus shifts towards implementation the activities of the last 9 years have positioned WFEO to be the catalyst for putting “the words into action”. WFEO, its standing committees and our national members must respond to this opportunity in order to fulfill its desire to be the global voice and leader of engineering. Tactical planning and resourcing are required to address the activities presented above.

Respectively submitted

Darrel Danyluk P.Eng