WFEO-CEE 2007-11 Summary Report August 2011

At the WFEO 2007 General Assembly in New Delhi, India, Engineers Canada began hosting and chairing the Standing Committee on Engineering and the Environment (CEE). A small secretariat provided by Engineers Canada supports Chair Darrel Danyluk, P.Eng. and the committee.

The Executive Committee members for the 2007-2011 CEE were as follows:

Chair: D. (Darrel) Danyluk, FEC, P.Eng. (Canada) Vice-Chairs: Engr. Spyros Papagrigoriou (Greece) and Eng. Salim Aoun (Lebanon) Past-Chair: Eng B.J. Vasoya (India)

The countries who were committee members included Argentina, Australia, China, Costa Rica, France, Ghana, Hong Kong, Italy, India, Japan, Kuwait, Morocco, New Zealand, Pakistan, Slovenia, Syria, Tunisia, United Kingdom and the , United States.

Over the four years, CEE held four, one-day face-to-face meetings organized in conjunction with the 2009 and 2011 General Assembly Meetings, and the November. 2008 and October 2010 Executive Council meetings.

From June 2008 through July 2011, four mid-year teleconferences/webinars reviewed progress in the Strategic Plan and received the Chair's report on WFEO and UN activities.

Report on 2008-2011 Strategic Plan

The Committee executed a four-year Strategic Plan focusing on six themes summarized in following table. At the 2009 General Assembly, the Disaster Risk Management Theme became its own standing committee and was replaced by the Engineering and Agriculture Theme.

Theme	me Key Focus Notable		
(and Lead Country)	Additional Background	Achievements	
Theme 1 - Environmental Impacts of Major Sporting Events (Greece)	Environmental impact and sustainability issues around recent large-scale Olympic sporting events, and communication with future Olympic organizing committees	Final report accepted for publication in October 2010 and issued in September 2011.	
Theme 2 - Engineering and Climate Change Adaptation (Canada)	Assess engineering vulnerability and risks of climate-change impacts on	Pilot project in 2010-11 with the Costa Rica Colegio to assess one of the	

Table 1 – Summary of Themes and Notable Achievements

	infrastructure. Develop strategies and engineering practices to improve resilience of existing and planned infrastructures to climate change	country's sewage treatment systems by drawing on Engineers Canada's PIEVC Engineering Protocol. Technology transfer and capacity-building sessions in Costa Rica, Honduras, Guatemala, Panama and Brazil
Theme 3 – Engineering and Agriculture (Argentina)	Most recently established theme, focuses on engineering and agriculture.	Task group formed to develop action plan for the 2011-2015 Strategic Plan.
Theme 4 – Sustainable Development Evaluation Framework (United Kingdom)	Sustainable development evaluation	Developed environment and sustainability evaluation framework to apply to engineering projects, policy initiatives.
Theme 5 - Environmental and Sustainable Engineering Practices for Engineers (Canada)	Sustainable Engineering Practices	Drafted international guideline for engineers on sustainable development and environmental stewardship focusing on professional and ethical principles. Results prepared for presentation to the CEE in Geneva.
Theme 6 - Infrastructure in Developing Countries (India)	Developed training and education materials for recommendations arising from the November 2007 international conference held with WFEO General Assembly in New Delhi.	Over the past four years, delivered many training sessions within India.

UN Millennium Development Goals

The Strategic Plan directly supported WFEO's mission for engineering to contribute meaningful and recognized support towards addressing the achievement of the UN-MDGs. Over the past four years the profile of the WFEO has been raised substantially in several UN initiatives through the work of the Committee and other WFEO committees.

UN Framework Convention on Climate Change (UNFCCC)

In 2008, WFEO was granted observer status as a Non-Government Organization (NGO) for all UNFCCC meetings, with the Chair of WFEO-CEE as the Designated Contact Person. Since then the Committee Chair, together with the Secretary and occasionally

other Committee members formed the WFEO delegation to the meetings. In most cases participation in these meetings included the delivery of workshops, or "side events" on infrastructure and climate change adaptation. Table 2 provides a summary listing of the meetings and the titles of the side events.

UN Organization	Year/Month	Location	Title
UNFCCC Climate Talks	June 2008	Bonn, Germany	Adaptation of Infrastructure to Address Impacts of a Changing Climate
UNFCCC Expert Working Group	April 2009	Mexico City, Mexico	Adaptation Tools and Data Requirements
UNFCCC Climate Talks	June 2009	Bonn, Germany	Engineering Vulnerability of infrastructure to climate change in newly developed and developing countries
UNFCCC Climate Talks	June 2010	Bonn, Germany	Infrastructure Climate Risk Assessment: Principles and Applications
UNFCCC Climate Talks	June 2011	Bonn, Germany	Infrastructure Climate Risk Assessment in Costa Rica: Knowledge Development and Capacity Building Experience
UNFCCC COP-15	December 2009	Copenhagen, Denmark	Danish Society of Engineers KlimateForum 2009 – "Adaptation of Infrastructure – Best Practices"
UNFCCC COP- 16	December 2010	Cancun, Mexico	No side event.
UN CSD16	May 2008	UN Headquarters New York	No side event but contributed to joint ICSU/Business/Farmers Side Event
UN CSD17	May 2009	UN Headquarters New York	Capacity Building – Words Into Action: Physical, Social & Economic Infrastructure
UN CSD18	May 2010	UN Headquarters New York	Capacity Building – Words Into Action 2010 "Transport Efficiency and Waste Avoidance – Input for Policy- Makers"
UNCSD19	May 2011	UN Headquarters	Capacity Building – Words Into Action 2011

Table 2 – Listing of UN Meetings Attended

New York	"State-of-the-Art Innovative and Sustainable Technologies in
	Waste Management, Mining,
	Transport and Chemicals"

The UNFCCC work on climate change adaptation includes the Nairobi Work Program that focuses on climate change impacts and adaptation. In 2009, WFEO-CEE joined the program as a partner and submitted an action pledge to the NWP relating to work on infrastructure and climate change. Since then the WFEO-CEE delegations have participated in numerous workshops and meetings organized by the NWP at the UNFCCC meetings. The Committee submits yearly written progress reports on the status and achievements on the Action Pledge which are published in UN documents.

UN Commission on Sustainable Development (UN-CSD)

For the past four years, the Chair participated in a WFEO Task Force consisting of the Chairs of Energy, Capacity-Building and Engineering and the Environment that participated in preparatory and full meetings of the Commission by submitting interventions providing the engineering perspective on policy positions and recommendations.

Participation included the delivery of side events which are listed as part of Table 2. These events consisted of presentations from, and dialogue with, subject matter experts from around the world. These presentations are available on the WFEO website.

UN International Strategy for Disaster Reduction (UN-ISDR)

The Committee Chair attended the 3rd Session of the ISDR Global Platform for Disaster Risk Reduction and the World Reconstruction Conference, held May 2011 in Geneva. He attended as part of the WFEO delegation led by the Chair of the Committee on Disaster Risk Management (CDRM) who reported on the 2011 Great East Japan Earthquake.

Newsletter

Between April 2009 and September 2011, the committee published six newsletters as follows:

- Issue #1: United Nations April 2009
- Issue #2: Theme #3 Disaster Risk Management October 2009
- Issue #3: Theme #1 Environmental Impacts of Major Sporting Events (Olympic
- Games) April 2010
- Issue #4: Theme #6 Infrastructure in Developing Countries October 2011
- Issue #5: Theme #5 Engineering and Sustainability April 2011
- Issue #6: Theme #2 Climate Change Adaptation August 2011

2011-2015 Strategic Plan

Engineers Canada has confirmed its desire to host and chair the Committee for a second term. The Chair and Secretary are working with Committee members to confirm themes for the 2011-15 plan to be tabled for approval at the Committee's September 2011 meeting.

Ongoing initiatives being investigated include:

- Supporting the proposed Sustainable Cities Award
- Future Climate Engineering Solutions Project Phase 2
- Working relationship with the World Meteorological Organization (WMO)