



**World Federation of Engineering Organizations
Committee on Engineering and the Environment
2008-2011**

**FACE-TO-FACE MEETING #4
Geneva, Switzerland
September 4, 2011**

Meeting Summary

Item	Summary of Discussion	Decisions:
1.	WELCOME AND INTRODUCTIONS The list of attendees is attached. Several attendees were representing the CEE member for their country.	None
2.	REVIEW AND APPROVAL OF AGENDA The following were additions to the agenda that were requested at the start of the meeting: Item 6.4 – AGIC Presentation on Infrastructure Rating Systems Item 6.5 – Presentation on FEIAP Activities Item 6.6 – Workshop at 2012 WFEO Executive Council Meeting in Slovenia. The Chair was given discretion to re-arrange the order of the agenda to accommodate the availability of participants.	Agenda approved as amended.
3.	APPROVAL OF WFEO-CEE MINUTES Minutes of October 16, 2010 Face-to-Face Meeting #3 held in Buenos Aires, Argentina and the July 5, 2011 Teleconference #4 were approved as written (and provided in the meeting materials). It was noted that, despite best efforts, the number of participants on the teleconference call was small. Part of the issue is scheduling the time for the call given the need to consider all 24 time zones. It was agreed that the 2012 call will be scheduled at two times of the day so that participation of members can be maximized.	Minutes approved as written.
4.	CHAIR'S ACTIVITY REPORT The Chair reported on WFEO's participation at the UN Commission on Sustainable Development (UN-CSD) Meeting No 19 held at UN Headquarters in May 2011. Several years ago, then WFEO President B. Gear formed a WFE O committee consisting of the chairs of Capacity-Building, Energy and Environment, together with the President to participate in the February and May meetings of the UN-CSD in partnership with the International Science Union (ICSU). The two organizations co-chair the Major Group on Science and Technology with an equal status and recognition as scientists within the UN-CSD structure. In addition to attending the meeting, the WFEO Committees on Energy and Environment, together with ICSU International Council for Science (ICSU) jointly organized a side event entitled "'State of the Art Innovative and Sustainable Technologies in Waste Management, Mining, Transport and Chemicals'. There were over 30 participants from several countries and included government officials as well as representatives from non-	Prepare a 2-3 page fact sheet on reasons for adapting infrastructure to climate change



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	<p>government organizations, either at national or international levels. These workshops enable delegates to see that there are solutions that can be implemented.. There are over 3,000 Non-Government-Organizations that are registered with UN-CSD with very focused problems and perspectives that can benefit from engineering.</p> <p>WFE O's pro-active participation in the CSD raises the profile of engineers and engineering within the United Nations. The Chair noted there has been good progress over the past four years, but the efforts need to continue.</p> <p>The Chair also reported on attendance at the UNFCCC Bonn Climate Talks in June 2011, where a WFEO-CEE side event on infrastructure climate risk assessment work completed in Costa Rica was presented. WFEO is a recognized NGO within the Framework Convention and the CEE is a participant in the Nairobi Work Program on Climate Change Impacts and Adaptation. .</p> <p>The Chair expressed a desire to see increased participation from CEE members at future UNFCCC events. We need more representation from engineers to succeed. The next UNFCCC Conference of f the Parties meeting (COP-17) will be held in Durban South Africa in late November The Chair will approach the Engineering Council of South Africa to nominate representatives to attend on behalf of CEE and World Federation of Engineering Organizations which will save travel costs.</p> <p>He noted there are UN funds available for developing countries to attend UNFCCC meetings and encouraged eligible CEE member countries to apply.</p> <p>From the last meeting there was an action to develop a two to three page fact sheet of arguments in favour of adaptation of infrastructure to climate change. This is an outstanding action item for the Chair and Secretariat to prepare for the review of CEE and will be carried forward as an action item from this meeting.</p> <p>There was widespread support among the meeting attendees to continue these efforts that provide opportunities for engineers to tackle these problems and engage with decision and policy makers. The advantage of WFE O participation is that it is viewed an unbiased worldwide organization for the profession that provides an objective view. It was agreed that WFEO should keep pushing to have the engineering perspective considered, but to in doing so we must provide evidence based arguments otherwise we are just viewed as another lobby group.</p> <p>The Chair also reported that a meeting has been set up on September 7 with the World Meteorological Organization in Geneva to explore avenues of cooperation, including the possibility of joint side events with CEE and the Committee on Disaster Risk management at upcoming UN meetings such as Rio +20.</p> <p>The Chair also attended a conference of the UN Institute for Disaster Risk Reduction in May 2011, along with the Chair of the Committee on Disaster Risk management (Dr. Ishii) at the invitation of the UN. The WMO also want</p>	



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	WFEO to be involved in this effort. Our participation is limited by the available human and financial resources.	
5.	<p>MEMBERSHIP RENEWAL – 2001-2015 TERM</p> <p>The Chair explained two levels of membership within the committee:</p> <ol style="list-style-type: none"> 1. National member representative 2. Individual corresponding member <p>The national member representative is confirmed by the World Federation of Engineering Organizations' national member and is eligible to vote on motions of the committee. This person may attend meetings and teleconferences and typically participates on one of the working groups formed for each of the themes being addressed in the Strategic Plan.</p> <p>A corresponding member does not represent a national member of the WFE O, but may attend and participate in meetings and teleconferences, but does not have a vote on motions of the committee. There is no restriction on the number of corresponding members from countries that have a national member representative, nor is there a requirement to have a national member representative from a country to have corresponding members.</p> <p>The Chair noted that an individual may also participate as a technical specialist for a task group or at a project level.</p> <p>The Chair asked the members present at the meeting as well as those who could not attend to re-confirm their membership for the 2011-2015 term of CEE as either a national member representative or as a corresponding member or to nominate new or replacement representatives.</p> <p>Members were reminded to provide the Secretariat with updated contact information when they are informing the Secretariat of their willingness to continue for the 2011-2015 period.</p>	Members to confirm their membership in CEE for the 2011-2015 term as either national member representative or as a corresponding member (with no vote on motions)
6.	<p>2012 WFEO-CEE BUDGET</p> <p>The Chair reported that the CEE had only been allocated 1200 euros for 2011 with notice that the original request for 6,000 euros had been denied. It was agreed to disburse \$500 CAN to the African Engineers Congress on Climate Change December 2010 as indicated in the CEE 2010 budget.</p> <p>It was agreed to submit a 2012 budget request for 6,000 euros to the Executive Board.</p>	<p>Chair to apply for outstanding funds for 2011.</p> <p>Apply for a 2012 budget of 6,000 euros</p>
7.	<p>WFEO-CEE NEWSLETTER AND SCHEDULE</p> <p>The Chair noted that the committee has published six newsletters over the past three years, including the most recent issue in August 2011 that dealt with Climate Change Adaptation – Theme 5 in the 2008-2011 Strategic Plan.</p> <p>The next newsletter is scheduled for publication in April 2012 and will focus on one of the themes in the 2011-2015 strategic plan. The Chair will be in contact with the theme leaders to determine which one would be willing to</p>	Next newsletter to be published in April 2012.



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	<p>have the next newsletter dedicated to their theme.</p> <p>The schedule of newsletters for the remainder of the 2011-2015 term will be decided at the June 2012 teleconference.</p>	
8.	<p>SUSTAINABLE COMMUNITIES AWARD</p> <p>Dr. A. Linberg briefed the committee on the Sustainable Communities Award, to recognize initiatives communities make to sustainable development. It is to be annual global award of the highest stature for sustainable communities, and open to all communities big or small. It will strive to be the world's premier award to promote the advancement of sustainable communities with a standing similar to the Nobel series of awards.</p> <p>The award will be managed and administered by the Globe Award Foundation with an independent Board of Directors and Secretariat operated in Sweden. The Secretariat will have the responsibility to set up and administer the award process.</p> <p>The Foundation is approaching the WFEO to be come a partner in this initiative and in particular support the award selection process through the nomination of suitably qualified engineers to participate in the committees that support the process. After discussion of WFEO and CEE participation with widespread support and interest, the following motion was approved unanimously:</p> <p>MOTION:</p> <p>That WFEO-CEE recommends to WFEO Executive Council that WFEO become a partner in the Sustainable Communities Initiative. In addition, the CEE be delegated to facilitate the development of a suitable Memorandum of Understanding (MOU) for the approval of the Executive Council.</p>	<p>Recommendation to WFEO Executive Council to pursue a Memorandum of Understanding with the Globe award Foundation to support the Sustainable Communities ward</p>
9.	<p>INTERNATIONAL SESSION ON CLIMATE CHANGE</p> <p>The Chair briefed the committee on the upcoming session, which is set for the afternoon of September 6 as part of WEC2011. There will be two sessions, one on mitigation of GHGs and the other on climate change adaptation. Various methods have been used to advertise the session, including the use of social media. In addition to the traditional workshop report and copies of presentations, a visual recording of the presentations in the form of murals will be produced.</p>	<p>None</p>



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10.	<p>FUTURE CLIMATE - ENGINEERING SOLUTIONS DRAFT DECLARATION</p> <p>Chair D. Danyluk tabled a draft declaration from the Danish Society of Engineers Future Climate Engineering Solutions project entitled "The world society has solutions and we have the technologies" pertaining to the reduction in GHGs through technology for the endorsement of the committee. The views of the committee will strongly influence whether WFEO will endorse it as written or will require changes before any approval. He noted that he would take a straw poll of the committee members at the end of the discussion.</p> <p>The Chair noted that Engineers Canada had reviewed the wording from a purely engineering viewpoint and did not agree with its view that such solutions apply to everything. It was noted from several members that the text is not clear and needs to be re-written to clarify its intent and to further define some terms such as green jobs i.e. what is a green job?</p> <p>The committee agreed that they were not prepared to forward the declaration in its current form to the Executive Council.</p>	No support for draft declaration – not approved
11.	<p>UN COMMISSION ON SUSTAINABLE DEVELOPMENT – RIO +20</p> <p>The Chair informed the committee about the next major meeting of the UN Commission on Sustainable Development, which will be held in Rio de Janeiro in June 2012 to commemorate the 20th anniversary of the first Rio Summit held in 1992.</p> <p>WFEO, through UN Relations Chair J. Spitalnik is co-organizing a science and technology forum with the International Council for Science (ICSU) and UNESCO, along with the Brazilian Department of Science, Technology and Innovation. This five-day event will be held in advance of the summit (dates June 11-15, 2012). There are opportunities for side events and speaking opportunities for engineers to speak on subjects related to environment, sustainability and climate change. CEE through D. Danyluk and D. Lapp, are assisting in the organizational effort.</p> <p>Chair D. Danyluk encouraged CEE members to become part of the WFEO delegation but noted that no travel funds are available. He also asked members to bring forward ideas for topics and speakers so that a list could be forwarded to the WFEO members of the organizing committee. Registration for Rio +20 will begin in January 2012 and over 40,000 delegates are expected to attend.</p> <p>T. Marjoram noted it is very important to emphasize the distinct contributions engineering and science make to these issues. CK Mak noted that we need clear succinct statements that distinguish and differentiate the role of engineers from scientists but still provide the linkages.</p> <p>D. Danyluk noted that the joint ICSU-WFEO organizing committee for the five day forum is still in its formative stages and will require negotiation to establish the role of WFEO and its degree of participation which is limited by limited human and financial resources as well as the availability of accommodation</p>	.



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12.	<p>UNESCO REPORT</p> <p>T. Marjoram reported on the publication of UNESCO's first international report on engineering. He noted that there is a declining interest in engineering enrolment worldwide as well as brain drain from developing to developed countries where higher salaries and benefits are paid.</p> <p>He noted that young people are concerned about climate change and sustainable development, and we should note that engineering is among the most important professions to develop and implement solutions on these issues. Such a message could attract more people to the profession and enable them to deal with the development agenda. It is a challenge for the profession to position itself in this area</p> <p>He also noted that UNESCO has been discussing an international engineering program for the past 2-3 years. However with changes in staff and priorities the potential implementation of this idea is waning.</p> <p>It was suggested that WFEO member countries encourage international engineering programs in their countries at a national level.</p> <p>CK Mak noted that young people are very committed to the environment and the planet and that we need to get this message and the role of engineering to the policy-makers.</p> <p>D. Danyluk thanked T. Marjoram for his contributions to the CEE in his capacity as the UNESCO representative, and expressed the hope that he could contribute in some role going forward.</p>	None
13.	<p>WFEO YOUTH</p> <p>Discussion of this issue was postponed to the next meeting of the committee</p>	Postponed to next meeting.
14.	<p>PRESENTATION ON AUSTRALIA GREEN INFRASTRUCTURE COUNCIL RATING SCHEME</p> <p>D. Hood presented an infrastructure rating scheme that has been developed by the Australian Green Infrastructure Council (AGIC). It is based on sustainability principles and criteria. The tool does not apply to certain infrastructures such as pipelines or mines.</p> <p>The tool is able to risk analyze an infrastructure project much better, which is great for asset managers. The costs for implementing the scheme are in the range of US 250K, but it pays for itself after the realized savings from a few projects.</p> <p>D. Hood also reported that the AGIC has a guideline on climate change adaptation of infrastructure that is available on its website www.agic.net.au</p>	None



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15.	<p>2008-2011 STRATEGIC PLAN WRAP-UP</p> <p>Chair D. Danyluk reviewed the accomplishments and milestones achieved from the Strategic Plan covering the first term with Engineers Canada as host and chair. He noted that it had been a privilege to work with the Theme Leaders and thanked them for their efforts. He observed that there were notable successes and progress in some themes, less so in others</p> <p>THEME 1 – ENVIRONMENTAL IMPACTS OF MAJOR SPORTING EVENTS (OLYMPIC GAMES)</p> <p>The final report on this work was completed and a colour copy will be distributed to the Executive Council later this week. Theme Leader Spyros Papagrigoriou thanked the committee for their support through the process. He noted that the final step is to distribute the report to the more than 70 organizations he identified in a list he submitted to the Secretariat.</p> <p>THEME 2 – ADAPTATION and CLIMATE CHANGE</p> <p>Side events on climate change adaptation of infrastructure were presented at June meetings of the UNFCCC for the past four years (2008-2011). In addition, international training workshops were delivered in Brazil, Costa Rica, Honduras and Panama. The first international infrastructure climate risk assessment using the PIEVC Engineering Protocol for a sewage treatment infrastructure in Costa Rica was successfully completed in 2011. Negotiations are underway with the Canadian government to secure funding to support a knowledge development and capacity building project in Honduras to assess highway bridges.</p> <p>Theme Leader D. Danyluk indicated that work on this theme will be carried on in the 2011-2015 strategic plan.</p> <p>THEME 5 – PRACTICE GUIDELINE FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL STEWARDSHIP FOR ENGINEERS</p> <p>D. Lapp reported that an initial draft of this guideline has been written and tabled for an initial discussion by the committee at this meeting. Due to the delay in completing this draft, and the need for review and refinement, this activity will be carried over into the 2011-2015 strategic plan. The objective is to create a shorter document that would be tabled at the 2013 General Assembly for adoption by all WFEO members.</p>	<p>Appreciation of the committee members on the successful conclusion of Theme 1 work.</p> <p>Continue work on adaptation to climate change in the 2011-2015 strategic plan</p> <p>Complete the preparation of the practice guideline as part of the 2011-2015 strategic plan</p>



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16.	<p>2011-2015 DRAFT STRATEGIC PLAN REVIEW AND DISCUSSION Chair D. Danyluk reviewed the draft strategic plan for 2011-2015, the second and last term of the committee with Engineers Canada as host and chair. He noted that several new themes have been added with some carried over from the previous plan. He asked CEE members to consider assuming leadership of themes that do not yet have leaders or to indicate their willingness to contribute to the work in one or more of the themes. The following is a summary of comments on particular themes in the new plan:</p> <p>THEME 1 – CLIMATE CHANGE ADAPTATION OF INFRASTRUCTURE (carry-over) Work on this theme will be continued with a focus on climate risk assessment of infrastructure and the promotion of this as a best practice for engineers. Further knowledge development and capacity building of engineers, particularly in developing countries, to assume this work will be emphasized.</p> <p>THEME 2 – CLIMATE CHANGE MITIGATION AND ENGINEERING (new) The work would focus on advancing the Future Climate Engineering Solutions project within the WFEO membership. Outreach would be aimed at increasing the awareness of engineers to consider GHG reduction as part of the professional practice and encourage the application of technologies such as clean energy.</p> <p>THEME 3 – ENGINEERING AND AGRICULTURE (new) Planning the work for this theme was started in 2010 with Argentina assuming leadership; however, the leader resigned so a new one is required. The CEE, through the Chair, has developed a good working relationship with the Farming First organization that is comprised of over 130 farming groups that is actively engaged with the UN Commission on Sustainable development and other agencies such as the UN Food and Agriculture Organization (FAO). Several times Farming First has requested engineering input in the development of their documentation to the United Nations.</p> <p>In addition the notion of engineering solutions to problems along the agricultural supply chain was noted as a potential area of focus for outreach and partnership opportunities.</p> <p>THEME 4 – ENGINEERING AND MINING (new) The United States, through the Society of Mining Engineers, a member of the AAES is meeting in mid-September to decide on assuming leadership in this theme, which will include the selection of the Theme Leader. Following approval, members will be recruited to form a working group which will develop an action plan. The details of this plan will be presented at the next meeting of the CEE, subject to confirmation of leadership.</p> <p>THEME 5 – PRACTICE GUIDELINE FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL STEWARDSHIP FOR ENGINEERS (carry-over) A revised version of the guideline, based on comments received from CEE, will be reviewed and sent to members for an approval to submit to all WFEO members for review. The objective is to submit a final document for adoption at the 2013 General Assembly.</p>	Carry forward current version as an interim version to be updated as theme leaders and further plans for work become known.



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17.	<p>THEME 6 – INFRASTRUCTURE IN DEVELOPING COUNTRIES (carry-over)</p> <p>Most of the outreach for this theme in 2008-2011 was within India. There is a need to expand this outreach to other countries and to identify additional strategies and best practices to inform engineers. A new theme leader is being sought to continue this work.</p> <p>CK Mak noted that there is an inner city decay that is apparent in existing infrastructure in developing countries. There is a need to look at existing assets not just new development. He proposed a re-naming of this theme to “Quality Infrastructure Systems” and after discussion this was agreed by the committee provided the scope includes sustainability and that a precise terminology be developed to ensure there is no confusion.</p> <p>It was noted that developing countries need a better quality procedure for infrastructure development and re-habilitation for developing countries. It should emphasize the engineering, management and maintenance of the infrastructure over its life cycle.</p> <p>It was noted that some of these practices may be within international systems such as ISO but there was uncertainty on this point so it needs investigation</p>	<p>Re-name Theme 6 as “Quality Infrastructure Systems</p>
18.	<p>2011-2015 STRATEGIC PLAN APPROVAL</p> <p>A motion to accept a modified version of the draft plan in principle was passed unanimously by the committee. All agreed that the draft could be used by theme leaders on a go forward basis for an interim period until the final version was ratified. This will occur at the next teleconference of the committee in July 2012.</p>	<p>Approval of 2011-2015 as amended on a go-forward basis until ratification in July 2012</p>
19.	<p>WORLD METEOROLOGICAL ORGANIZATION (WMO)</p> <p>D. Danyluk reported on a very recent initiative to approach the WMO to identify engineering needs for current and future climate data. A high level meeting has been scheduled for September 7 at WMO offices in Geneva, and the chairs of CEE and Disaster Risk Management will participate. The objective is to secure a project through a Memorandum of Understanding to define engineering needs. The intent is to build a long-term working relationship between the two organizations.</p>	<p>None</p>
20.	<p>INTERNATIONAL WATER ASSOCIATION (IWA)</p> <p>IWA is a very large organization with many conferences, technologies, best practices and initiatives that are relevant to engineering. It does not have an efficient way of getting its technology base to engineers. It was proposed that such information could be disseminated through the WFEO-CEE.</p> <p>It was agreed that the secretariat look into this matter and propose a communications structure for the next meeting.</p>	<p>Examine the feasibility of communicating IWA information to WFEO national members through the CEE</p>



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21.	OTHER INFORMATION AND REPORTING C. Remec from Slovenia provided an overview of planning for the next series of face-to-face meetings of WFEO to be held in Ljubljana, Slovenia in mid-September 2012. The 2012 World Engineering Forum (www.wef2012.si) will be held in conjunction with the meetings and will focus on good practices for good construction of infrastructure, including the application of high technologies such as sustainable materials. The conference will be looking for keynote speakers so if anyone is interested please approach him.	
22.	NEXT TELECONFERENCE The next teleconference call will be arranged by the Secretariat for the last week of June or the first week of July 2012. It will be offered at two times on the same day to accommodate the time zones for CEE members to maximize participation. It was noted that the next face-to-face meeting will be held in Slovenia with a tentative date of September 16 or 17, 2012 (Secretary's Note: Subsequently confirmed for September 16, 2012). For the next WFEO General Assembly in Singapore, the target date for the face-to-face meeting is September 7, 2013.	Teleconference to be arranged for the last week of June or first week of July 2012.

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Committee on Engineering and the Environment
2008-2011**

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Geneva, Switzerland
September 4, 2011**

List of Attendees

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