

WORLD FEDERATION OF ENGINEERING ORGANIZATIONS



World Federation of Engineering Organizations Committee on Engineering and the Environment 2011-2015

FACE-TO-FACE MEETING #6 Singapore City, Singapore September 9, 2013

Meeting Summary

of Discussion AND INTRODUCTIONS relcomed everyone to the meeting. He welcomed some special e meeting including two members of the Executive Board (P. and H. Bedelian), WFEO Executive Director (T. Youseff) and cutive Director (A. Cleland), who is serving as a special adviser to re Board on the review of standing committees. s introduced themselves and their affiliations. The list of who attended all or part of the meeting is attached. Several were g the CEE member for their country. ND APPROVAL OF AGENDA g additions were added to the agenda: xecutive Board – Review of Standing Technical Committees ngineering Management Conference afrastructure Rating Scheme Update	None Agenda approved as amended.
who attended all or part of the meeting is attached. Several were the CEE member for their country. ND APPROVAL OF AGENDA g additions were added to the agenda: xecutive Board – Review of Standing Technical Committees ngineering Management Conference	• • • •
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g was organized into two sessions: 1) A Business Meeting held in ; and, 2) 2012-2015 Strategic Plan Review which was held in the	
as given discretion to re-arrange the order of the agenda to the the availability of participants.	
EBOARD - REVIEW OF STANDING TECHNICAL ES od informed the Committee that the Executive Board has a review of the standing technical committees over the past few onsultation with the Chairs. It was noted that hosts and chairs of ees had been mostly stable for the past ten years until the 2011 sembly, when there was a significant turnover. New Rules of vere also adopted and have now been in effect for two years. the standing technical committees is the majority of the work of ration of Engineering Organizations. The work is very important he goals of enhancing the organization's reputation and on to other international bodies as well as providing value to	
	as given discretion to re-arrange the order of the agenda to e the availability of participants. BOARD - REVIEW OF STANDING TECHNICAL ES and informed the Committee that the Executive Board has a review of the standing technical committees over the past few insultation with the Chairs. It was noted that hosts and chairs of es had been mostly stable for the past ten years until the 2011 embly, when there was a significant turnover. New Rules of ere also adopted and have now been in effect for two years. The standing technical committees is the majority of the work of ation of Engineering Organizations. The work is very important e goals of enhancing the organization's reputation and



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Item	Summary of Discussion	Decisions:
	The 2011 Rules of Procedure include Annex C, technical committees. It describes the responsib chairing a standing committee (including success providing guidance on membership, finance, me (Secretary's Note : Annex C - Rules of Procedure Committees is included as Attachment A). It has process for the evaluation of committees.	ilities for hosting and sion planning), as well as etings and publications. re for Standing Technical
	The review included an annual self-assessment responding to a series of questions. The respons members and advisers formed a Review Commi well as other materials such as newsletters, repo Comments were prepared and a draft was given coming week the Review Committee will be mee discuss the feedback and ways to make adjustme effectiveness.	sible Executive Board ittee to review responses as orts and the website. to each chair. Through the eting with individual chairs to
	The Review Committee reported that the Comm Environment was the best performing of the star It operates in full compliance with Rules of Proce for how these committees should operate. It was Danyluk, FEC, P.Eng. has been a huge contribut Review Committee through the CEE as well as E	nding technical committees. edure and serves as a model s noted that Chair Darrel tor to the work of WFEO
	 A. Cleland noted that the review was an importa WFEO as an organization. The Review Commit standing technical committees through question 1. If the committee did not exist would we do 2. What are the issues that can be better ta a standing committee versus being work 3. How does the committee operate in prace 	ttee evaluated all the is: create it now? ackled internationally through ted on at a national level?
	 There was discussion of these questions among observers who were present: 1. The CEE exists to identify good practice environment especially for developing conguidelines. 2. The WFEO and the work of CEE opens 	es for engineering and the ountries that have few, if any
	and other international bodies to hear th engage with the profession. There is a c committee.3. CEE operations are exemplary. It has a	lear international role for the structured strategic plan with
	dedicated staff and financial resources f support the Chair and the committee.4. The CEE shares good practices and cre to national members.	ate products that are helpful
	 There is a reasonable spread of countries support assigned themes within the strat which other national members contribute sufficient. Furthering broader and deeper members is encouraged. 	tegic plan. The extent to e to the committees work is er engagement of national
	The second term with Engineers Canada	a as host ends in December



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	 2015. The Executive Counce one years` time. Succession the Rules of Procedure. The its Strategic Plan and is pure 7. The Committee on Disaste completing its first term. The the Executive Board that Jac 8. The renewal and appointment 	cil has to decide on the next host in about n planning and implementation is part of e CEE has included this activity as part of rsuing options. r Risk Management hosted by Japan is e Executive Council is recommending to apan host for a second term. ent processes for hosting committees are eded to maintain the quality of the	
	Questions posed to the Review Co 1. How have the committees con the WFEO?	tributed towards achieving the objects of participation in the standing committees	
	It was noted that the CEE and its st some of the objects of WFEO. It is	rategic plan gives focus to achieving less apparent for other committees.	
	The Executive Board is concerned with the contribution of national members who do not host committees. It is a real challenge and difficult to communicate the concern in a way that will prompt action. Committee hosts contribute the most. There are very few national members that will commit staff or financial resources if they are not hosts. Individuals will join because the work is important to them.		
		s has created a process for submitting bsites. Requests used to be ad-hoc but	
4.	Slovenia on September 16, 2012 was approved as written.		Meeting Summary approved as written.
	Director. It will be sent separately to	CEE members and meeting participants.	
5.	reported that many of the action ite	iction items from the last meeting. He ms were completed, a few are still in 's agenda with following exceptions:	
	 Organizations website (ww updates. Provide feedback missing information. This is Members to forward inform upcoming meetings, confer on the WFEO website. Sec request for placement to th task. 	view World Federation of Engineering w.wfeo.net) and WFEO-CEE section for to the Secretariat on any errors or an ongoing task. ation or links to the Secretariat on ences and reports that they wish to place retariat to forward this information and e WFEO webmaster. This is an ongoing in the Strategic Plan. Efforts to secure a	Secretary to complete outstanding action items.



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	 subject theme and theme leader have rejected the idea of leading a task zones within the CEE. Their wish is committee. No national member very theme on quality infrastructure sys. With only two years left in the currer theme in the strategic plan is no lo It was not possible to organize a ter the summer of 2013 due to many so differences. It was also not possible leaders and regional Vice-Chairs for the summer of the sum	group on oceans and coastal s to have a separate standing olunteered to lead the proposed tems in developing countries. ent mandate, adding another nger being considered. eleconference of the CEE prior to scheduling conflicts and time zone e to schedule a call of the theme	
6.	CHAIR'S ACTIVITY REPORT The Chair reported on a number of items the	nat he has been involved for the	
	 past several months. 6.1 WFEO Executive Board Meeting – Apr This meeting consisted of a series of r within the WFEO structure. Participant Executive Board, the Standing Commi members and some national members the proceedings. The meetings include a formal meeting that occurs twice yearly, Executive Bo of Executive Council. The chairs met t progress within their own committees collaboration. They discussed challeng agendas forward within the WFEO stru Executive Board and WFEO headquar were also covered. Visitors to the meeting interested in WFEO STC activities. Se to discuss follow up action with severa The meeting of chairs reviewed the Ru standard model for all committee to fol standing committees do not always ler The WFEO President-Elect provided s World Engineering Forum that would b the World Economic Forum. Qatar has including significant financial support a 	 The Chair reported on a number of items that he has been involved for the past several months. 6.1 WFEO Executive Board Meeting – April 2013 This meeting consisted of a series of meetings among different groups within the WFEO structure. Participants included members of the Executive Board, the Standing Committee Chairs, Executive Council members and some national members who were interested to observe	
	 and prestige of the WFEO with the Unicommunity if it is well-executed. 6.2 Report of the Committee on Engineerin 2013 Since 2013 was a General Assembly y standing committees to prepare bi-ann progress since 2011. All committee report of the com	ng and the Environment 2011- rear, the WFEO required all ual reports on their activities and	



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	ltem	Summary of Discussion	Decisions:
		2011-2013 WFEO Bi-Annual Report that is tabled at the General Assembly and distributed to all members. A copy of the CEE report was included in the meeting materials. The Chair thanked the theme leaders and their task groups for work accomplished over the past two years as well as providing information to enable the CEE report to be prepared. There were no questions or comments.	
		6.3 UN Secretary-General's Report on Millennium Development Goals (MDGs) This annual report covers progress in the implementation of the MDGs, which are in place to 2015. It includes steps to advance the development agenda beyond 2015. The report sets direction from the highest levels on where the United Nations should go in the pursuit of these goals. The WFEO has an opportunity to present he engineering perspective through co-chairing the Major Group on Science and Technology (with International Science Council (ICSU)), one of nine civil society groups recognized by the United Nations in this process. WFEO manages this group through the UN Relations Committee (acronym WURC), currently chaired by Engineer Jorge Spitalnik of Brazil. The CEE Chair and Secretary are members of WURC.	
		 6.4 United Nations Framework Convention on Climate Change (UNFCCC) The CEE is the designated UNFCCC focal point for World Federation of Engineering Organizations. Attendance of WFEO delegates at UNFCCC meetings is arranged through D. Danyluk. The CEE Chair and Secretary attended the June 2013 meeting of the UNFCCC in Bonn. The activities completed included: 1. Delivered a WFEO-CEE side event (workshop) "Knowledge Development and Capacity-Building for Adapting Bridge Infrastructure in Honduras" in partnership with WMO. 2. Delivered a presentation on Using climate services from an engineering perspective" at a WMO side event (workshop). 3. Delivered a presentation to delegates and negotiators on our capacity-building experiences in Costa Rica and Honduras at 	
		 the 2nd Durban Forum on Capacity-Building. Operated an information booth on WFEO and the work of the CEE for the second week of the meeting. Planning is underway to attend the Conference of the Parties Meeting No 20 (COP-20) in Warsaw in November. It is hoped to include one or more representatives from our national member from Poland as part of the WFEO delegation. 6.5 Liaison with UNESCO 	
		6.5 <u>Liaison with UNESCO</u> The notes of a March 2013 teleconference involving the CEE Chair, Secretary, the CEE Theme Leaders and WFEO headquarters staff with several members of UNESCO staff was included in the meeting materials. Each theme leader and the UNESCO staff provided a briefing on their work. A meeting was to be arranged with UNESCO in April. Since that time there has been little contact due to staff turnover at	



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	of cooperation between the two a two-year action plan with thre	as sent to OECD outlining potential areas organizations. It included a proposal for e projects: 1) food security and rural a changing climate and 3) climate change	
	the Executive Board was meeti limited by other topics It was left start engagement. Unfortunatel	al OECD staff in April in the same week ng. Discussion on the action plan was it to OECD to prepare a response and y there was staff turnover at OECD and so there has been no formal response to	
		Marketing Plan is focusing on ways to meeting tomorrow so more details will be	
	standing committee chairs to de Elect candidates that help clarif	tect Questionnaire he had led an exercise with the other evelop 12 questions for the two President- y their views on various aspects of WFE nnical committees) and plans for when	
	the week to exchange informati	will be having a closed meeting later in on, meet with the President-Elect 2 questions and to further discuss the s.	
	various UN bodies such as the Development, UNFCCC, UNISI Secretariat provided support fo	EO activities and representations to Commission on Sustainable DR, FAO and other bodies. The CEE r the early meetings of this committee in 113. WFEO Headquarters staff has since	
	Information on the work of the p achieved and where we have fa	nd the work and mandate of the WURC. bast six years to determine what has been allen short is in order. This prompted to provide examples to illustrate what	
	international conference on A one day WFEO workshop a Declaration that was sent	esence and engagement at the Rio +20 sustainable development in June 2012. o on Sustainable Communities produced to all WFEO national members Many ational governments and negotiators in	



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ltem	Summary of Discussion	Decisions:	
	<ul> <li>Rio. One sentence in our declaration was used by United States Secretary of State Hilary Clinton in her remarks. This was a win for the profession in the UN forum.</li> <li>At the UNFCCC the WFEO achieved a milestone in presenting its work on capacity-building inside and directly to delegates and negotiators.</li> <li>WFEO has been actively engaged with meetings of the UN Commission on Sustainable Development. Numerous interventions through the Major Group on Science and Technology* have demonstrated front-line positions on sustainable development goals.</li> <li>*WFEO co-chairs the Scientific and Technological Major Group with ISCU (International Science Council), and ICSS (International Council of Social Scientists)</li> </ul>		
	The following conclusions were reached:		
	<ol> <li>Encourage the other standing committees to participate in these meetings. The expertise of WFEO is in the standing committees so they should be engaged through communication and participation.</li> <li>Show that WFEO is a reference body that the United Nations can go to for unbiased advice.</li> <li>WFEO national members could make representations to their national government representatives who are delegates and negotiators at UN meetings.</li> </ol>		
	There are many challenges to the UN system. There are many meetings in locations around the world and it is difficult to cover them with WFEO representatives who are well-briefed on the issues to be discussed and have the engineering advice and wisdom to contribute. Currently this activity usually falls to a few knowledgeable individuals with limited time and lack of funding for travel.		
	Coordination with local national members to represent WFEO is needed but also communication of the issues so representatives are informed going into such meetings. This includes reporting back on outcomes and recommended next steps and positions in a timely manner.		
7.	<b>ROUNDTABLE OF MEMBER/OBSERVER ACTIVITIES AND ISSUES</b> The Chair convened a roundtable session in which participants briefly described activities, upcoming events and particular issues or concerns. The following is a brief summary of remarks by particular individuals. <u>Nigerian Society of Engineers – Eng. Olumuyiwa Ajibola</u>	No decisions. Actions arising placed on the Action Item list to accompany the meeting summary.	
	As the regional representative for CEE, the Society circulated the draft Model Code of Practice to African national members. The feedback was satisfactorily incorporated into the final document. The result is considered a very satisfactory document.	meeting summary.	
	Nigeria is experiencing serious environmental issues arising from more frequent and severe flooding in recent years. Areas are flooding that have never flooded before. The government is developing a national climate change policy. The work of the Committee on Engineering and Environment		



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	on adaptation to, and mitigation of, Society to provide input to this polic	y as it develops.	
		<u>– Er. Alfred Wong</u> assure potable water sustainability. It ces and recycling of wastewater using	
	change from a combination of rising	ious flooding issues from future climate sea level and more intense rainfall. e systems are backed up causing local	
	issues. Poor air quality and haze fro and burning from Indonesia is carrie	oundary air pollution and related health om unsustainable forest cutting, slashing ed to Singapore by prevailing winds. It is res more negotiation between the two	
	Slovenian Chamber of Engineers (I	<u> ZS) - Engineer Zeyko. Vukelic</u>	
	IZS published the proceedings of W held in September 2012 in conjunct Council ( <u>www.wfeo.net/world-engin</u>		
	years. A number of projects to gene	inate its use of oil and gas within a few erate power from geothermal sources are ntry, projects to increase geothermal	
	Bahrain Society of Engineers – Eng The Model Code of Practice was dis satisfaction with the final draft addre	stributed widely for comment. There is	
	Bahrain and in other neighboring Ar distributed on the 1 st Energy Manag to be held 9-11 December 2013 in E	erences and meetings each year within ab partner nations. A brochure was lement Conference and Exhibition 2013, Bahrain. At this conference and others I presentations on environmental issues.	
	Institute of Civil Engineers – United	l Kingdom – Hayley Coleman	
	In June 2013, the ICE-United Kingd Transport 2013 report: ( <u>www.ice.org</u> <u>library/state-of-the-nation-transport-</u>	g.uk/information-resources/document-	
	2. Clear national transport stra	e road conditions, planning and funding ategies for all parts of the UK r-integrated transport powers, particularly	
	This report advocates for a high spe which is quire controversial.	eed rail configuration referred to as HS2	



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	The ICE is also leading Theme 2 of the CEE Strategic Plan led by Dr. Paul Jowitt. It focuses on climate change mitigation. ICE is working in partnership with the Institute of Mechanical Engineers – United Kingdom. More details on progress will be presents at this meeting's e afternoon session on the Strategic Plan.	
	<u>Engineering Council of Zimbabwe – Eng. Farai Mavhiya</u>	
	The Council is engaged in sustainable development and environmental issues and welcomes the proposed model code on sustainable development and environmental stewardship. It works with the country's environmental management agency. Issues include:	
	1. Excessive deforestation in rural areas	
	<ol> <li>Wildfires</li> <li>Pushing for more hydro and solar power and other renewable energy technologies, but all are costly to implement.</li> </ol>	
	Mining development is a very significant activity with many environmental impacts. The Council is working with the government on environmental impact assessments for new mining projects.	
	Ghana Institution of Engineers – Eng. G.J. Brocke	
	Ghana has recognized the need to adapt to climate change and the country now has a policy. The current strategy is to learn from others on how to manage and adapt. Roads and transportation sector are a priority.	
	Sociedad de Ingenieros Bolivia - Marria Teresa Dalenz	
	Bolivia is a very small country that is just starting to examine environmental issues. Very happy to attend the meeting and learn. (www.sib.org.bo).	
	Engineers Australia – D. Hood Australia has elected a new government which is likely to scrap the carbon tax that has been in place for the past two years. The tax was to convert to a cap and trade system but this is also in doubt.	
	The Australian Climate Commission, informing the Australian public on the impacts of climate change, published a series of reports from 2011-2013 under the theme "The Critical Decade" focusing on 2011-2020 for topics such as health, risks, international efforts, energy and other topics. (https://climatecommission.wordpress.com ) .The future work of the Commission is under review by the new government.	
	Engineers Australia's November 2013 Congress will be reviewing its climate change policy as well their 2007 sustainability charter.	
	A major conference on sustainable energy is to be held shortly. One of the topics is where nuclear energy fits. Nuclear is carbon-free and should be part of the energy mix.	



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	Engineering Council of South Africa – M. van Veelen	
	There is not much discussion or work around climate change at the moment.	
	South Africa has instituted new regulations around environmental impact	
	South Africa has instituted new regulations around environmental impact assessment. Every property development project big or small has to do a full	
	air quality and waste disposal analysis to comply with the minimum	
	requirements of the act. It is cheaper for a developer to pay the fines rather	
	than the costs of the analyses. The process introduces excessive delays and	
	costs for very limited value It is very trying for property developers who are	
	waiting for project authorization and the results of the environment impact	
	assessment and project authorization.	
	AIME and the United States – Dr. Nikhil Trivedi	
	There is continued growth in the development of the Marcellus Shale deposit	
	for gas production. Many states are issuing exploration permits for fracking	
	shale deposits with unknown environmental impacts.	
	The United States Environmental Distantian Agenavia taking a harder	
	The United States Environmental Protection Agency is taking a harder stance with utilities on coal-fired electricity production. Regulations to make	
	in mandatory to use natural gas and not coal are in development.	
	Negotiations are underway between industry, utilities and government.	
	College of Engineers – Tunisia – Eng. F. Thabet	
	The country is in a difficult situation politically with transition to a new regime with new institutions underway. The institutions are in their infancy and very	
	fragile since they are transitioning processes that have been in place for over	
	60 years. The pace of change is slow, but there is hope that there will be	
	more attention on environmental issues in about six months' time.	
	Chinese Society for Electrical Engineering – Eng. Bernell Downer	
	Ching is dealing with air and water pollution issues. Here and error secure	
	China is dealing with air and water pollution issues. Haze and smog occurs in many of the bigger cities with health and safety impacts. Beijing is facing a	
	shortage of water. China has a green energy overcapacity in wind and	
	hydropower generation There are also challenges in enforcing environmental	
	regulations.	
	Engineers Canada Jim Resket EEC D Eng	
	Engineers Canada – Jim Becket, FEC, P.Eng. The issues that are of concern in Canada related to environment, climate	
	change and sustainability include:	
	1. Addressing the deficit in public infrastructure repairs and	
	<ul><li>maintenance in a time of tightened budgets</li><li>Addressing public infrastructure vulnerabilities to changing climate</li></ul>	
	and severe weather events	
	3. Resource extraction, particularly the oil sands and shale exploration	
	through fracking	
	4. Transportation of oil resources by pipeline and rail	
	Engineers Canada is concerned about succession planning for hosting and	
	chairing the Committee on Engineering and the Environment after December	
	2015. We want to ensure a smooth transition as well as some assurance that	
	the Engineers Canada's investment is sustained through the next term and	



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		beyond		
		noted that one the issue of air pollur particulates that create visibility/haz	ject could be a future theme if a national	
	8.	WFEO-CEE NEWSLETTER	ther #0 April 2012 was published in the	
		last week of March just prior to the supported by the Task Group on CI Institute of Civil Engineers- United I 2013 focused on the WFEO Model Development and Environmental St	Kingdom. Newsletter #10 – September Code of Practice for Sustainable wardship. It was published in the last rere placed on the WFEO-CEE portion of	
			or's contact information at the end of This will allow readers to directly follow- iating follow-on discussion.	Future newsletters to include contact information on article authors.
		CEE after December 2015. Engined host by November 2014 Executive	to confirm a new host to take over the ers Canada is working to confirm a new Council meeting. In the final year of its vith the new host to prepare the next four-	
			d lessons learned for the committee as a themes. This reflection and planning for	
		Options on themes for the two 2014	I newsletters included:	Agreement on the schedule for
		infrastructure. This is the th by the Nigerian Society of E	ocus on best practices in sustainable eme of the conference being organized Engineers as part of the Executive	newsletter publication and the themes for each issue.
			ne theme of sustainable infrastructure for consensus emerged on the spring issue	
	9.	OTHER BUSINESS There were several other items of b the business meeting.	ousiness that were discussed to conclude	
		Processes at WES2013	Climate Risk Assessment: Tools and gical Organization (WMO) and Institute of ed a one-day training workshop on	



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	September 10 as part of the World Engin approximately 20 registered participants. P.Eng. is the Lead Trainer.		
	The workshop teaches the principles and applications of the PIEVC Engineering Protocol, which is a structured process to identify the vulnerabilities and assess the risks of current and future climate to existing and planned infrastructures. The Protocol was developed in Canada and applied to a wide range of infrastructures systems ranging from an individual building to a complete potable water system for a large urban center. It has also been used in Costa Rica and Honduras as part of the adaptation to climate change theme being led by Engineers Canada.		
	The workshop includes a presentation from the WMO on climate data and projections. The WMO has started a worldwide consultation on climate data needs, and engineers are a significant user for infrastructure design and operations. WFEO has a Memorandum of Understanding (MOU) with WMO that is administered and executed by the CEE. Their contribution to the workshop included sending a senior staff member and covering their preparation and travel to Singapore.		
	The material presented in the workshop is presented at a university level. Engineers Canada, as the theme leader on adaptation to climate change, has presented shorter versions of the workshop as side events at the UNFCCC meetings in Bonn for the past several years.		
	<b>9.2 Website Updating</b> The Chair noted that the website is the primary vehicle for placement and retrieval of information and results. WFEO headquarters has dedicated resources to maintain the website and are very responsive to request for placing information and materials to improve the content. It is the primary means of communicating our work internationally		CEE members submit materials and information to CEE Secretariat for placement on WFEO website and
	He encouraged CEE members to submit environment, sustainability and climate ch include reports, links, studies, papers, ed so forth. He encouraged members to sub ensure these are sent to the webmaster a location.	nange related topics. These can ucation and training materials and mit these to the Secretariat who will	dissemination to others
	It was also suggested that countries that the first time provide a point of contact in Lapp – <u>david.lapp@engineerscanada.ca</u> ) disseminate information and updates with	their country to the Secretariat (D. that could be used to help	New attendees to CEE meeting to provide a point of contact to CEE Secretariat
	<b>9.3 Membership Review</b> The Chair requested that CEE members information for the member listed or provi representative. If a national member wish letter addressed to D. Danyluk as Chair w Lapp) is necessary. It was noted that only to vote on motions of the committee, but meetings and participate in the discussion	de the name of the new les to change its representative, a vith a copy to the Secretariat (D. y official representatives are eligible all persons can observe the	CEE members to provide updated contact information to the Secretariat or national member submit a letter to nominate a new





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10.	version dated September, 2012 wa	on was devoted to the strategic plan. The	
	Each theme leader reported on their their remarks.	ir progress. The following is a summary of	
		nate risk assessment of infrastructure and gineers. Theme Leader Darrel Danyluk	
	<ol> <li>Completed the Honduras Highw         <ul> <li>Assessed climate risks to ferthe PIEVC Engineering Presented and advised on a construction codes and star procedures to include cons</li> <li>Developed capacity of Hon infrastructure climate risk a national member - Colegio (CICH) and the Honduras r</li> <li>Developed of educational rate of the Honduras and Costa</li> <li>Delivered educational mate engineering students throug</li> </ul> </li> <li>This project was funded by Canadia contribution from Engineers Canada in partnership with CICH, The proje completed in July 2013. A summary materials.</li> <li>Written submission to UNFCC N         <ul> <li>Provided written input for u and damage associated wit</li> <li>Delivered a workshop at the UN</li> <li>Title: Local and Regional K Building to Adapt Bridge St</li> <li>Building country-level and r resilience of transportation information, risk assessment</li> <li>Presented the results of the learned in developing capa</li> <li>Delivered in partnership with</li> </ul> </li> </ol>	vay Bridge Project – July 2013 bur highway bridges in Honduras using otocol adjustments to bridge design and indards and procurement policies and ideration of climate change duras engineers to undertake ssessment in partnership with WFE O des Ingenieros civiles de Honduras neteorological service naterials on the Protocol and the results Rica projects trials to Honduras and Costa Rica gh an on-line classroom environment an Federal government with in-kind a. It was managed by Engineers Canada ct started in January 2012 and was y article was included in the meeting lairobi Work Program – July 2013 pcoming report risk management for loss th climate change impacts FCCC Bonn Meetings – June 2013 nowledge Development and Capacity- ructures in Honduras regional adaptive capacity to improve the infrastructure through enhanced climate en and regulatory processes. e Honduras project and the lessons city. th Canadian Federal government on of Engineering Organizations n Forum on Capacity-Building – UNFCCC	
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	Presentation to German Intern 2012	ational Development Agency (GIZ) – April	



OF ENGINEERING ORGANIZATIONS         engineerscanad         ingénieurscanad           Item         Summary of Discussion         Decisions:           This work has caught the attention of some of the International Financial Institutions, the German International Development Agency (GIZ) and a broad variety of countries. It has generated requests for presentations in Chile, Barbados and at the Inter-American Development Bank in the fall of 2013 and winter of 2014.         Decisions:           The process within the PIEVC Engineering Protocol enables infrastructure engineers think as engineers when considering climate. Engineers know infrastructure but much less about climate effects except through design criteria. The question is do climate design criteria exist, and if so, are they still applicable. Assessing vulnerabilities and risks allow and risks enables prioritizing, planning and budgeting for making engineering decisions to adapt the infrastructure and improve its resilience.         KEE national           Next steps include attending the UNFCCC Conference of the Parties – Meeting No 19 (COP-19) in Warsaw, Poland in November. There we will talk to representative countries as well as observers such as GIZ to plan strategies for further engagement and profile.         CEE national members to obtai names and contact information of their country delegates of the countries where WFEO has national members. The following steps were suggested:         CEE national members to obtai names and contact information of their country delegates to the UNFCCC (or at least the lead negotiator)         CEE Chair and Secretariat to develop a         CEE Chair and Secretariat to develop a	Ŷ.
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	<ul> <li>Summary of Discussion</li> <li>The project is focusing on the application of existing technologies for GHG reduction, and is very focused on engineering feasibility and solutions. One of the aims will be for WFEO member countries to complete country reports, which will be used to advise governments and the United Nations towards implementing these solutions for GHG reduction.</li> <li>The background on the FC-ES project and its evolution was described:         <ul> <li>Started by the Danish Institute of Engineers (IDA - not a member of WFEO)</li> <li>Spent 500K to prepare a report on mitigation measures to reduce GHGs that included 11 countries in the initial Phase 1. Information on Phase 1 and the country reports can be found at www.fc-es.net</li> <li>Each country prepared a report and all except India concluded that existing technologies could reduce GHGs significantly. India's GHGs would increase but by much less.</li> <li>The people who can implement these technologies are engineers in the country</li> <li>The people who can implement these technologies are engineers in the country.</li> <li>The project has gone through two phases and a third is underway. After Phase 1, led by IDA, the leadership was transferred to IMechE, led by Dr. A. Cooke.</li> <li>Several more countries completed country reports in Phase 2. Total number of countries is now 15</li> <li>Phase 3 has focused on the development of country energy plans that focus on GHG reductions as a key objective.</li> </ul> </li> <li>Ideally all WFEO member countries would do a country report.</li> <li>H. Coleman noted that the Commonwealth Engineers Council would be holding a workshop on the FC-ES project at its upcoming meeting later in the week. The report from this workshop will be posted on the WFEO-CEE portion of the website. There will also be a presentation on the project at the World Engineering Summit Session</li></ul>	Circulate FC-ES Phase 3 framework and accompanying notes to all meeting attendees. Post CEC report on
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	Farming First is a coalition of multi- organization. The coalition exists to practical, actionable programs and agricultural development worldwide	articulate, endorse and promote activities to further sustainable	
	assure accuracy from an engineering engineers are not the leaders but s needs to be harnessed to deal with losses and improving transport. Mut	role to read and review documents to ng viewpoint. This is an example where upporters. The expertise of engineers agriculture issues such as reducing ich food is lost in storage and wasted in ed efficiencies in storage and transport	
	review documents produced by Fai and IFIs. The African Development	e of appropriate expertise are needed to rming First and other international NGOs Bank would like access to engineering of agricultural issues. Agriculture requires eering to solve problems.	
	and Agriculture Task Group and the opportunity for the profession to be	significantly without the need to lead. ore easily controlled. The Task Group	
	Several members committed to hel be willing to provide review and adv	p find volunteers to join the task group o vice:	follow up with CEE
	<ul> <li>It was suggested that volur Vic-Presidents of the CEE</li> <li>WFE O Headquarters could</li> </ul>	ers would help find expertise in Africa nteers be recruited through the regional d also assist in seeking volunteers nbers who do not participate in the CEE	national members to recruit expertise and members for the Engineering and Agriculture Task Group and support its review
	It was noted that food security is no Nations, but also for the Internation	ot only a huge issue within the United al Financial Institutions.	and advisory work
	facets of agricultural engineering. S		
	sustainability and food security in A sustainable development agenda p	plans to organize an expert meeting on frica later in 2014. Priorities for the ost 2015 are underway and food security as included in the meeting materials.	
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	Item	Summary of Discussion	Decisions:
		Summary of Discussion           THEME 4 - SUSTAINABILITY AND MINING           Theme leader N. Trivedi delivered a presentation on the 2012 strategic plan for the committee and its progress to date. A copy of the presentation is attached to the minutes.           The overarching goal of the work is capacity-building. The group focuses on small to medium sized mining companies that do not have resources or focus on sustainability. Most of the biggest mining companies do have such resources so the task group's work is less relevant. Other groups served include government authorities, other NGOs and the general public.           Membership has a wide geographical and regional representation. This is needed because mining occurs in most places of the world, and involves a broad spectrum of people. Membership continues to grow – three new members were recruited at the 2012 meetings in Slovenia and five from the Milos conference in July 2013. The locations of membership are periodically reviewed to identify gaps in coverage. The task group is open to new representatives from the CEE or arranged through national members.           There are four members in a core group, including the Theme Leader and Secretary that serve and coordinate the total membership. The remaining task group members are at large. Membership is fluid but no one has left since joining. Communication with committee members is through a bulletin board (www.smenet.org).           The mining industry is a large user of water and destroyer of water. A significant effort is required to mitigate through strategies such as re-use, recycling and repurpose. The committee is developing booklets and guidelines. They are using the World Federation of Engineering Organizations Capacity-Building Guidebook to construct their own booklets that provide checklists for the target groups. In	
		are great opportunities for collaboration with other WFE O standing committees such as capacity-building and women in engineering. The Task Group would like to see collaboration with UNESCO for capacity-building in several regions or individual countries. If funding can be secured, a capacity- building workshop in South Africa with the small to medium-sized mining	
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	Companies will be organized in 2014. It was noted that the Chair of the Capacity-Building Committee is from South Africa so collaboration could be explored.	
	M. Sanio encouraged collaboration with the PanAmerican Union of Engineering Organizations (UPADI) to share knowledge with small mining companies in Latin America. There is considerable illegal mining and poor practices that could be reversed with collaborative and localized capacity- building efforts.	
	Chair D. Danyluk summarized his observations on the Task Group on Sustainable Mining:	
	<ul> <li>The SDIMI July 2013 conference involved the who's who of the mining industry</li> <li>Public perception of mining is way off what is really happening</li> <li>Good focus on the small and medium mining companies where need for capacity-building is greatest</li> <li>The proposed capacity-building workshop in South Africa would be enhanced with cooperation of the Committee on Capacity Building whose Chair lives in South Africa</li> <li>UNESCO has asked WFEO to attend meetings to pursue cooperation – a proposal on training small and medium mining companies on sustainable engineering practice would be a great example</li> <li>All the pieces for success are there</li> </ul>	
	<b>THEME 5 – WFEO MODEL CODEOF PRACTICE FOR SUSTAINABLE</b> <b>DEVELOPMENT AND ENVIRONMENTAL STEWARDSHIP</b> Chair D. Danyluk explained that he is seeking a formal endorsement on the Approval Draft of the Model Code as it stands. He would like the CEE's authority to present it to the Executive Council for their approval to table at the General Assembly. This work was a carry-over from the first strategic plan and required several	
	years of effort. It was prepared by volunteers on the national Environment and Sustainability Committee of Engineers Canada. The development consultation process was very lengthy and required considerable time to complete.	
	The process included a review of all existing guides and subject-related matter. Versions of the draft were review internally and a Review Draft was circulated to all national and international members of WFEO. Not all members responded, but a significant number did provide comments and suggestions. Almost all of them were incorporated into the final version.	
	It is in two parts – 10 principles on one page that are the Code of Practice. The second document is an Interpretive Guide that provides amplification and explanation of the ten principles. Together these documents constitute the Model Code of Practice.	
	D. Danyluk reported that UNESCO wishes to put its signature on the final document and promote it among its constituency. A signing ceremony will	



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11.	2014. D. Lapp explained that work on this Engineers Canada's term as host a need to raise awareness though pre- seminars and formalized training. V incorporated into engineering curric There was discussion around assess towards achieving the goals of the 0 project is more or less sustainable. developed as well as methods to do There was unanimous approval of t	ssment tools that could measure progress Code of Practice. How can we judge if a Measurement tools may need to be	
12.	2011-2015 STRATEGIC PLAN REVIEW Chair D. Danyluk noted that we have completed two years of the four-year		Secretary to edit
	will edit the plan to reflect the progree The edited plan, dated September 2 to replace the September 2012 vers	discuss the [plan further. The Secretary ess to date and the removal of Theme 6. 2013, will be sent to WFEO headquarters sion on the website.	the Strategic Plan to reflect the results of the September 2013 meeting and submit to WFEO Headquarters for the website update.



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3.	<b>INTERNATIONAL ORGANIZATIONS LIAISON</b> Over the past year the WFEO has pursued or supported the development and, in some cases, renewal of working relationships with other international organizations. The CEE has been involved directly and indirectly	al
	<ul> <li>organizations. The CEE has been involved directly and indirectly.</li> <li><u>OECD</u> In early 2013, the CEE took the lead on pursuing collaboration with OECD though work on projects of mutual interest and benefit. A teleconference was held between OECD staff and representatives and the CEE Chair, Secretariand several theme leaders to discuss project possibilities. It was noted that the WFEO can provide experts, but have to recover costs to participate e.g. travel. This makes negotiations difficult because OECD is also looking for external funding for projects – the same as WFEO. Most of the staff at OECD are economists while WFEO are engineers. It has proven difficult to come together to identify and work on common issues. This issue of closest common interest is climate change. OECD also has an</li></ul>	ry S
	interest in agriculture but more on the economic impacts and benefits and much less on technical areas. In recent months there have been several false starts to resume discussion on projects of mutual interest and benefit. The relationship with OECD will be developed over the longer term by P. Jowitt and H. Coleman of ICE. World Meteorological Organization (WMO)	
	<ul> <li>Chair D. Danyluk negotiated an ambitious Memorandum of Understanding (MOU) between WFEO and WMO that was signed in October 2012. A copy of the MOU was provided with the meeting materials.</li> <li>The MOU has been used to build a solid working relationship between the two organizations. Some of these activities were reported earlier in the meeting.</li> </ul>	'
	WMO has a keen interest to understand engineers' needs for climate information. There is discussion to form a joint task group to develop and oversee a process to engage with engineers.	
	WFEO was invited to a workshop on climate services at the beginning of Ju 2013. A representative attended and prepared a report that was included in the meeting materials.	
	International Science Council (ICSU www.icsu.org) and International Social Science Council (ISSC www.worldsocialscience.org) WFEO Co-Chairs (with ICSU and ISSC) the Major Group on Science and Technology. Nine Major Groups are recognized by the United Nations to represent civil society. WFEO's Co-Chair is Mr. Jorge Spitalnik. The Major Group gets involved in the review of UN documentation on sustainable development.	
	The Major Groups are engaged in a lengthy process to define Sustainable Development Goals to replace the Millennium Development Goals by 2015	
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14.	<b>NEW BUSINESS</b> D. Danyluk reported that the document "Environmental Impacts of Major Sporting Events (Olympic Games)" has been published and distributed to over 60 national and international sports organizations, Hard copies are available through the Secretariat. The report was one of the outcomes from a theme in the 2008-2011 strategic plan of the Committee.	
	M. Sanio informed participants of the 1 st International Conference on Sustainable Infrastructure being organized by the American Society of Civil Engineers from November 6-8, 2014 in Long Beach California. The overall theme is on how to build sustainability into infrastructure systems. Information on the conference can be linked through the front page of the WFEO website ( <u>www.wfeo.net</u> ). In the coming months, individuals and organizations will be approached to sponsor and/or organize sessions. It is hoped that WFEO will engage as a non-financial sponsor and promoter of the event.	
	The target is 350 attendees and proceedings for about 200 papers. The plan is to organize the conference every two years.	
	It was noted that the conference dates potentially conflict with the WFEO Executive Committee meetings in Nigeria.	
15.	NEXT MEETING         The next face-to-face Meeting #7 will be held in Abuja, Nigeria on November 2, 2014. Meetings of the WFEO Executive Council will be held in the following days. As well there will be a Wold Engineering Conference on Sustainable Infrastructure (www.wecsi2014.org.ng)         The Chair thanked everyone for their participation. Many good points and ideas were presented and the work was progressing well. He was thanked by the meeting participants and acknowledged for chairing a good meeting.	Next face-to-face meeting to be held in Abuja, Nigeria on November 2, 2014
	The Chair was congratulated by President-Elect Marwhan Abdelhamid for his continuing leadership of the Committee. The CEE is a model for others to follow.	