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Item	Summary of Discussion	Decisions:
4.	<p><b>REVIEW OF ACTION ITEMS</b></p> <p>The Secretary reviewed the list of action items from the last meeting. He reported that all action items were completed or were part of this meeting's agenda with following exceptions:</p> <ul style="list-style-type: none"><li>• Strategy for dissemination of International Water Association documentation to be developed by the Chair and Secretary.</li><li>• Arrangements for transferring \$ 500CAN to the African Engineers Congress for a conference on climate change in December 2010 were never completed because the conference was cancelled. After considerable discussion, it was agreed that the Secretariat would consider requests if received before the end of 2012, and provided the funds can be spent before the end of the year.</li></ul>	Secretary to complete outstanding action items.
5.	<p><b>CHAIR'S ACTIVITY REPORT</b></p> <p>The Chair reported on a number of items that he has been involved for the past several months.</p> <p><b>5.1 WFEO Executive Board Meeting – March 2012</b></p> <p>The meeting included a joint session between WFEO and UNESCO at UNESCO headquarters in Paris. The session was organized through Gretchen Kalonji, Assistant Director-General for Natural Sciences who has replaced Tony Marjoram as the principal UNESCO liaison with engineering. All of the UNESCO directors were present for presentations from standing committee chairs. Discussion of potential areas of cooperation and synergies followed. Our UNESCO link is Mr. Peter Dogse and he will be sent a copy of our strategic plan.</p> <p>The Executive Board also held a marketing workshop which is reported later in these notes. The Chair was unable to attend that session because of illness. Minutes for the March meeting will be available through the website.</p> <p>The Chair briefed on a further review of the rules of procedure for standing committees. The rules were approved last year in Geneva. There is a proposal to create an oversight group separate to the Executive Board. Options being explored include an oversight and monitoring role versus a mentoring role and whether a separate group is necessary. There was general discussion of the issues to seek clarification of the intent of such an initiative.</p> <p>It was suggested to steer away from any further bureaucracy and additional layers that may dilute or block the messages between standing committees and the Executive Board and Council. It was noted that the Terms of Reference of the Executive Board and Council are vague with respect to respective roles and responsibilities. Actions by standing committees are very important to follow-up - WFEO sometimes steps back instead of building on what has already been done.</p> <p><b>5.2 UN Commission on Sustainable Development (UN-CSD)</b></p> <p>The Chair reported on the five day Forum on Science, Technology and innovation that was organized by ICSU in partnership with World Federation of Engineering Organizations.</p>	

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	<p>UNESCO and others. ICSU represents individual scientists with a large budget and dedicated people to deal with UN-CSD. Our relationship with ICSU is solid and generally equal despite the difference in available resources.</p> <p>In the CSD, ICSU and WFEO are equal partners in the Science and Technological Major Group that is recognized by the CSD. There are nine Major Groups which have an almost equal voice with countries in the UN-CSD process.</p> <p>The WFEO organized a Seminar on Sustainable Communities on June 16 at the offices of FABRAE. SIEMENS was one of the major sponsors. There were many excellent speakers and presentations, all of which are on the WFEO website. One presentation of note was from the City of Tokyo, which has developed and implemented a viable carbon cap and trade system. It is in its second year of operation and has exceeded expectations. The system has worked out all the details, including the cost of carbon, which have been accepted by the participants.</p> <p>At Rio +20 Summit, WFEO President Al-Kharafi met the UN Secretary General and provided him material from engineers to the Rio +20 process. Next month, there will be a meeting of the Major Groups to discuss follow-on work arising from Rio +20.</p> <p>The Chair noted that WFEO has improved and expanded its profile at the United Nations through active participation in the Commission on Sustainable Development Rio + 20 event and the Framework Convention on Climate Change.</p> <p><b>5.3 UN Framework Convention on Climate Change</b></p> <p>The Chair and Secretary attended the Bonn Climate talks which were held in Bonn, Germany in May 2012. A side event was delivered that provided an update on infrastructure climate risk assessment work in Latin America as well as introducing a new tool called the triple bottom line analysis module. This tool evaluates the costs of adaptation actions and strategies from a triple bottom line (economic, social and environmental) cost perspective.</p> <p>The next Convention Conference of the Parties Meeting No 18 (COP-18) is set for Doha Qatar from November 26 to December 7, 2012. The Chair asked if anyone wished to attend on behalf of the World Federation of Engineering Organizations. The deadline for applications is October 7 and must go through Chair Darrel Danyluk. Persons who attend will be provided information on arrangements and background information from the Secretariat and must also cover their own travel expense. The next meetings in Bonn will be held in early June 2013.</p> <p><b>5.4 Liaison with International Social Science Council</b></p> <p>At Rio +20, the Executive Director of ISSC approached the Chair to explore opportunities to jointly address quality of life issues. There was recognition that engineering and social sciences need to work together. Discussions centered on where each organization could support the other. Contact will be maintained and opportunities to work together will be pursued.</p>	



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	<p><b>5.5 <u>Liaison with UNESCO</u></b> WFEO headquarters has identified points of contact within UNESCO for each standing committee. Discussions on how each could contribute to the work of the other at the committee level are at a preliminary stage. The Chair and Secretary will contact our UNESCO contact (Peter Dogse) in the next few weeks to introduce our work and strategic plan.</p> <p><b>5.6 <u>Liaison with OECD</u></b> The WFEO Past President has pursued discussions with OECD on areas of cooperation. Climate change is one of these. The Chair has been asked by the WFEO President to prepare an initial action plan for liaison with OECD and other international organizations. The plan does not include the UNFCCC and UN Commission on Sustainable Development where considerable efforts are already underway.</p> <p><b>5.7 <u>Future Earth Research Platform</u></b> The Future Earth Research Platform was introduced internationally at the Forum on Science, Technology and Innovation held in Rio de Janeiro prior to the UN Rio + 20 Summit. Future Earth is a new 10-year international research initiative organized by ICSU (International Union of Scientists - <a href="http://www.icsu.org/future-earth">www.icsu.org/future-earth</a>) that will develop the knowledge for responding effectively to the risks and opportunities of global environmental change and for supporting transformation towards global sustainability in the coming decades. Over the next several months the Chair and Secretary will evaluate this research platform to determine if WFEO and CEE should be involved, and if so, how.</p> <p><b>5.8 <u>UNEP Report to Rio +20</u></b> Reports on the outcomes of Rio + 20 were included in the meeting materials. The Chair recommended visiting the United Nations website on Rio +20 which includes many documents including the final declaration.</p> <p>The seminar included a declaration which was agreed unanimously among the participants. It was forwarded to the Rio +20 Secretariat as well as communicated to WFEO members through headquarters.</p> <p><b>5.9 <u>Rio + 20 Forum on Science, Technology and Innovation</u></b> The Chair and Secretary, along with F. Thabet attended this five-day forum held in Rio the week before the summit. There were excellent presentations on a wide variety of topics in thematic sessions. Summaries of the sessions as written by the moderators were included in the meeting materials.</p> <p><b>5.10 <u>WFEO Marketing Plan</u></b> In March 2012 the Executive Board and Standing Committee Chairs participated in a workshop to define the needs and opportunities where WFEO could secure new sources of revenue and increase its international profile. A document has been prepared and will be discussed later in the week by the Executive Council. It will be circulated to national members and ratified at the General Assembly in September 2013. The Chair remarked that this is a positive development for WFEO and evidence of its evolution as an organization.</p>	



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6.	<p><b>ROUNDTABLE OF MEMBER/OBSERVER ACTIVITIES AND ISSUES</b></p> <p>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.</p> <p><u>Institute of Engineers of Singapore - SC Tan</u> The Singapore government has released its national climate change strategy to 2020. The Institute is very interested to participate in the implementation of this strategy with government. The website address will be provided through the CEE Secretariat.</p> <p>Singapore wants to reduce its carbon footprint by 15% by 2020. As part of this plan, laws will be in place that will reduce emissions up to 2025. An emphasis is being put on electric cars with incentives to buy them. Construction of buildings that accommodate energy efficiencies, reduced water use and recycling of water are among the measures to be promoted. Current issues include coastal protection, hazardous waste re-cycling with incentives being provided by government. The Institute is participating in government committees on policy development.</p> <p><u>Engineers Australia – D. Hood</u> Getting climate change and sustainability on the government agenda is currently a challenge with a minority government in Australia. The country experienced 7 years of drought which drove government policies. This was followed by heavy rains and flooding over the past few years. Australia has introduced a carbon tax of \$23 AUS per ton which came into effect in July 2012. This is leading to a carbon trading system that will be in place by 2014. In Australia the deniers of climate change are getting considerable publicity with more than 50% of exposure in the media which makes it difficult to get traction on policies. In addition, there is a more than 500 year supply of coal in the country which companies have successfully argued to continue production and the widespread use and export of coal.</p> <p>Engineers Australia is re-writing all of its facilities management strategies to reflect sustainability principles. These will be applied to the \$25-30M in property the organization owns to improve its practices.</p> <p>Continuing professional development includes sustainability requirements and accreditation of undergraduate programs stress sustainability as an evaluation criteria. Engineers Australia has developed a guideline for sustainability outcomes from events and is willing to share this with others. The Secretariat will follow up and place a copy on the WFEO-CEE portion of the website.</p> <p><u>Greece Chamber of Commerce – S. Papagrigoriu</u> There is an era of de-regulation within the European Union that extends into environmental areas. There are a number of policies and conflicts under review and how these will be handled going forward.</p> <p>The last two years have seen a huge economic adjustment. How to frame programs and policies trying to meet immediate needs that don't meet environmental standards is a very intense discussion at present. What is</p>	<p>No decisions.</p> <p>Actions arising placed on the Action Item list to accompany the meeting summary.</p>



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	<p>dealt with first – dollars or the environment is under discussion.</p> <p>Greece is the leading state within EU on policies and regulations around bio diversity. Other areas of focus include air pollution in cities and noise pollution. There is a new policy introduced for the marine environment that covers land-based sources of pollution. There is also a policy focus on fisheries management and marine pollution.</p> <p><u>Bahrain Society of Engineers – A. Algassab</u> Bahrain is currently investing over \$2B U S to upgrade refineries to meet latest environmental regulations. Since January 2011 the society has delivered 52 presentations on environmental issues to raise awareness. Every two years the country hosts a conference of petroleum and chemical industries with 800-900 participants. The next conference is scheduled for March 2013. Information on the conference was distributed.</p> <p><u>AIME and the United States – N. Trivedi</u> The American Institute for Mining, Metallurgical and Petroleum Engineers (AIME) has 150,000 members, and there is a considerable focus on incorporating sustainable principles into mining undergraduate curriculum. The AIME website has some good topics and material for sustainability education and everyone was encouraged to access the site. These materials are a work in progress.</p> <p>There is considerable attention on the development of the Marcellus Shale deposit for gas production. Shale gas deposits in various United States locations are being mined through a process known as fracking. The environmental impacts of this process are not well understood. In the United States there the balance of the need for domestic energy production versus minimizing environmental impact that is a central issue under discussion.</p> <p><u>Commonwealth Engineers Council and the United Kingdom – H. Coleman</u> Sustainable development and climate change are tackled by a number of government departments. There are discussions to reconcile sustainable development frameworks within the United Kingdom with those in the European Union. Discussions are ongoing. There is a considerable focus on energy including district heating, bioenergy strategy and energy efficiency. Current issues of concern to the Institute of Civil Engineers (ICE) form engagement include waste management, the state of the nation's water as well as transport and sustainable transportation that includes high speed rail and the addition of a third runway at Heathrow Airport.</p> <p>With the 2012 Olympic Games, sustainability principles and examples were at the forefront. Positive publicity and public support accompanied the development of the lands and infrastructure for the games. Very pioneering construction practices were used and the grounds where the games were held were cleaned up and modernized to a very positive effect.</p> <p>The United Kingdom Commission on Sustainable Development was disbanded in 2011 and its functions have been taken over by the Department of Energy and Climate Change – back into the government bureaucracy. The ICE is becoming involved with the IMECHE to oversee the climate change mitigation theme under the CEE. The intent is to work with a project</p>	



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	<p>already in place known as Future Climate Engineering Solutions, which is being led through Alison Cooke of IMECHE. She is located at Cambridge University.</p> <p>D. Danyluk provided additional background on the Future Climate Engineering Solutions (FC-ES) Project. Phase I was led by the Danish Society of Engineers, and involved the preparation of country reports on what countries could do to reduce emissions through the application of existing technologies. WFEO endorsed the Phase I report, which was completed just prior to the UNFCCC Conference of the Parties Meeting No. 15 in Copenhagen in 2009. The initial 13 country reports estimated that emissions could be reduced between 50 and 90% depending on the country. The exception was India where the increase in emissions was projected at 100% instead of 400% if no such action is taken.</p> <p><u>PanAmerican Union of Engineering Organizations ( UPADI) and Costa Rica – I. Campos</u> Costa Rica currently hosts the Secretariat for the PanAmerican Union of Engineering Organizations until December 31, 2012 when it will be transferred to Brazil. The Costa Rica Secretariat will become a climate change office for Central America and the Caribbean. I. Campos will also complete her UPADI Presidency as of the end of 2012.</p> <p>Tropical storms are having a profound impact on the country's infrastructure and are difficult to deal with from a planning and engineering perspective. The application of the PIEVC Engineering Protocol for infrastructure climate risk assessment is underway with plans to apply it for new infrastructure planning as well as assessing existing infrastructure. An application of the Protocol currently under consideration is to apply the process to assess the Inter-American highway.</p> <p>The Colegio has completed measurements of the carbon footprint of their building and are looking at ways to reduce it.</p> <p>A special standing committee on Sustainable Construction has been formed to build capacity for planners, engineers and architects through special courses. One initiative is to examine the feasibility of applying the LEED standard in tropical countries.</p> <p><u>Engineering Council of South Africa – M. van Veelen</u> The most pressing issue in South Africa is high unemployment - approaching 25%. For young people the rate is 40-50%. The high unemployment rates are of great concern to the government. It has committed to create 5 million jobs and has tabled an Infrastructure Plan as part of a National Development Plan to support economic growth and job creation.</p> <p>If the country wants to implement these plans, it requires not only engineering but also have to get permits and licensing through environmental review processes that need to be streamlined. Social and economic issues are more important to the government than the environment right now. GHG reduction is of less concern at present.</p> <p>The challenge for engineers is to propose a balance between social,</p>	





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	<p>economic and environmental factors. These are the three pillars of sustainable development. It is positive that all three are acknowledged and the challenge is to inform engineers of these pillars and to implement them within their practice.</p> <p><u>Slovenian Chamber of Engineers – Z. Vukelic</u> Slovenia is small country of 2 million people. Its green policy is similar to the EU policy. 30% of the country's energy comes from thermal plants and there has been considerable work on carbon capture for the emissions from these plants. The country has closed all of its coal mines except for one (that will continue to 2050). Coal has a natural energy source for the country because of its close proximity to the towns. The pollution impact from coal has been minimal.</p> <p><u>College of Engineers – Tunisia – F. Thabet</u> The revolution in the country has given freedom to consider environmental reforms but the process is difficult. The country has become more polluted because of strikes and the disruption.</p> <p>The country will conduct a historic election in the next few months. Afterwards institutions can be built to steer environmental reforms and development of regulations but this will take time.</p> <p>F. Thabet attended a seminar on the environmental situation in the Arab world which was held in Kuwait. There was a focus on water and ocean pollution. The Mediterranean Sea is heavily polluted and this is of great concern. Environmental assessment of refining projects is needed. There are only 20 environmental inspectors in Tunisia and little capacity to enforce environmental regulations, There is a need to increase capacity in Tunisia and other Arab nations that border on the Mediterranean.</p> <p>It was noted that Greece and Malta have an interest in tackling ocean pollution in the Sea. There is a Mediterranean Action Plan to control pollution which is being run by the United Nations Environmental Program (UNEP), but there has been very little action taken to take. The group briefly discussed engaging with the UNEP on the action plan to provide technical advice. It was noted that the Mediterranean Sea is of interest to northern European countries as well such as Sweden as well as those that border its waters.</p> <p><u>Engineers Canada and Canada– B. Kyle</u> There are multiple jurisdictions that administer and regulate environmental and sustainable development matters in Canada. The Federal government has limited jurisdiction on environmental matters which are handled by provinces and territories which makes it difficult to be universal across the country. The Federal government has recently introduced proposals to simplify the environmental assessment process for projects to reduce the time required for environmental reviews.</p> <p>Production of the oil sands has had considerable negative publicity at the UNFCCC and NGOs such as Greenpeace. Issues include the watersheds around the oil sands as well as the potential for pollution over a wide area. Two pipelines for transport of oil sands crude oil are under consideration:</p>	





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	<p>1) Keystone Pipeline – Routing from the oil sands to refineries in southern Texas has created a political storm in the United States 2012 election. The route was going through a key aquifer but has been recently changed to around it. No decision on approval of this pipeline in the United States will be made until after the election.</p> <p>2) Northern Gateway pipeline which proposes a pipeline from the oil sands to a terminal on the Pacific coast of British Columbia. There are questions of environmental impact due to potential for spills or disruptions along the pie as well as the transport of oil through sensitive coastal areas and the potential for spills. Another issue is the revenue sharing between Alberta and BC as well as the Federal government. This proposal is generating a great deal of publicity. Approval of this project is very uncertain.</p> <p>The Chair thanked everyone for their overviews and the realities that we face as engineers. Our challenge is to make things better in the time of our practice.</p>	
7.	<p><b>WFEO-CEE NEWSLETTER</b></p> <p>The Secretary reported that Newsletter #8 – September 2012 was completed in the first week of September. The focus was on engineering and agriculture.</p> <p>It was forwarded to the WFEO webmaster for placement on the website. Hard copies of the newsletter will be distributed at the Executive Council meeting. A limited number of hard copies were distributed to meeting participants. The newsletter was delivered electronically to CEE members with encouragement to forward to their networks. Several members noted they have done so with previous issues.</p> <p>The upcoming publication schedule was reviewed. The next issue will focus on mitigation of climate change with publication targeted for the end of April 2013. There is one issue (April 2014) with no theme identified as yet.</p> <p>The newsletter will remain a standing item on future meeting agendas.</p>	<p>Agreement on the schedule for newsletter publication and the themes for each issue.</p>
8.	<p><b>OTHER BUSINESS</b></p> <p>There were several other items of business that were covered to conclude the business meeting portion of the agenda.</p> <p><b>8.1 International Session Climate Change at WEC 2011</b></p> <p>The summary report from this session was included in the meeting materials. The half-day event held September 6, 2011 was very successful with over 90 attendees. The Chair noted the use of social media to promote the event as well as the use of a graphic artist who created visual murals summarizing each of the technical presentations. These are included in the summary report.</p> <p><b>8.2 Website Updating</b></p> <p>The Chair reported that WFEO has a new webmaster who is pro-actively soliciting the standing committees for updates and new content to add to the website <a href="http://www.wfeo.net">www.wfeo.net</a>. He encouraged members to submit materials to the</p>	



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	<p>Secretariat who will ensure these are sent to the webmaster and placed in the appropriate location.</p> <p><b>8.3 WEF 2012 Green Buildings Session</b> B. Kyle from Engineers Canada reported on the details of a session he is chairing on green buildings at WFE 2012 on September 19. In September 2011, the Committee had committed to organize a parallel half day workshop on the topic, but this could not be arranged. The green buildings session has six speakers, five of whom are from east central Europe. The presentations cover technologies and applications with three focused on energy efficiency.</p> <p><b>8.4 Publication of Environmental Impacts of Major Sporting Events - Olympic Games</b> This report was completed in the 2007-2011 term through the leadership of Spyros Papagrigoriou, Vice-Chair of the Committee. It was distributed in a color printed copy to the members of the Executive Council in 2010. A distribution list of Olympic authorities and government agencies was prepared at that time. However, the report has not been distributed because a higher publication quality was needed and financial resources were lacking to complete this task. Now the Technical Chamber of Greece will co-sponsor the publication with Committee and this will occur in early 2013 when the new budget for the Committee becomes available.</p>	
9.	<p><b>MEMBERSHIP RENEWAL – 2011-2015 TERM</b> This item was covered under other business but reported separately to underscore the need to explain the criteria and process for members, corresponding members and meeting observers.</p> <p>The two levels of membership are:</p> <ol style="list-style-type: none"> <li>1. National member representative (Member)</li> <li>2. Individual corresponding member</li> </ol> <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 WFEO. However such members are encouraged to attend and participate in meetings and teleconferences. Corresponding members cannot vote on recorded motions of the committee.</p> <p>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>An individual may also participate as a technical specialist for a task group or at a project level.</p> <p>All face-to-face meetings of the Committee are open to observers who are</p>	



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	<p>neither full nor corresponding members of the committee.</p> <p>The Chair asked those present at the meeting as well as those who could not attend to <u>re-confirm</u> their membership for the 2011-2015 term of CEE. Please confirm status as a national member representative or corresponding member. Alternatively, nominate a new national member representative. The same procedure applies to national members and individuals who wish to join the committee for the 2011-2015 term.</p> <p>All full and corresponding members were reminded to provide the Secretariat with updated contact information when they are informing the Secretariat of their willingness to serve for the 2011-2015 period.</p>	<p>Members to confirm their membership in CEE for the 2011-2015 term as either national member representative or as a corresponding member</p>



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10.	<p><b>2011-2015 DRAFT STRATEGIC PLAN REVIEW AND DISCUSSION</b></p> <p>The afternoon session was devoted to the strategic plan. The latest version dated June 25, 2012 was distributed as part of the meeting materials. Each theme leader reported on their plans and progress. The following is a summary of their remarks.</p> <p><b>THEME 1 – CLIMATE CHANGE ADAPTATION OF INFRASTRUCTURE</b></p> <p>Work on this theme focuses on climate risk assessment of infrastructure and the promotion of this as a best practice for engineers. Chair Darrel Danyluk reported that he had been requested to make a presentation to the Executive Council on where WFEO should be going with respect to the climate change issue. He presented his draft slides to the Committee for feedback and suggested changes or additions. The committee spent time discussing each slide and providing specific comments on certain slides.</p> <p>There was considerable discussion regarding recommendations to the WFEO on how the organization should participate in climate change issue going forward. The suggestions for adaptation work included:</p> <ul style="list-style-type: none"> <li>• Promote adaptation assessments through WFEO national members</li> <li>• Encourage UN and International Financial Institutions (IFIs) to require assessments before funding approval of infrastructure projects</li> <li>• Develop and distribute assessment tools and knowledgeable people to use them</li> <li>• Tie assessments within existing budgets to address vulnerabilities</li> <li>• Build capacity</li> </ul> <p>With respect to climate change mitigation the committee suggested:</p> <ul style="list-style-type: none"> <li>• Develop WFEO policy statements on climate change</li> <li>• Encourage national members to undertake country reports as part of the Future Climate Engineering Solutions Project</li> <li>• Develop and implement a strategy to UNFCCC and other agencies on the “engineering of climate change”</li> <li>• Develop and present position papers on the need for mitigation and adaptation from a technical feasibility perspective</li> </ul> <p>The Chair requested members to add to or remove from this list of recommended actions. There was discussion around the modification of codes, standards and engineering practices to account for current and future climate. A survey of national members on the availability of infrastructure codes and standards and which have been or could be modified to account for climate change was suggested.</p> <p>There is a need to develop a new definition of acceptable risk for infrastructure in a changing climate. It would be good to provide an example in a case study.</p> <p>It was also suggested that WFEO, through the CEE, maintain a watching brief of this issue and inform national members of developments and their implications. An advantage of WFEO is that it is an unbiased, knowledgeable organization.</p> <p>I. Campos reported that the Costa Rican Ministry of Planning is looking for a method to account for climate change in the planning and design of new infrastructure. The PIEVC Engineering Protocol is a candidate tool and discussions are underway.</p>	
WFEO-CEE Meeting Summary – FTF Meeting #5 – September 16, 2012	Further knowledge development and capacity building of engineers, particularly in developing countries, to assume this work will be emphasized.	Page 12 of 17



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11.	<p><b>THEME 2 – CLIMATE CHANGE AND MITIGATION</b></p> <p>Chair D. Danyluk reported that the Institute of Civil Engineers (ICE) will team with the Institute for Mechanical Engineers (IMECHE) to Co-Chair this theme. The co-chairs will be Dr Paul Jowitt of ICE and Dr. Alison Cooke from IMECHE.</p> <p>The work will focus on supporting the Future Climate Engineering Solutions Project (FC-ES) that is being led by IMECHE. The project is focusing on the application of existing technologies for GHG reduction, and is very focused on engineering feasibility and solutions. There are 15 countries that have produced country reports on the state of their technologies and an assessment of their application to reduce GHGs in their country. 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.</p> <p>The task group is developing its work program and will share it with the committee in due course.</p>	



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12.	<p><b>THEME 3 – ENGINEERING AND AGRICULTURE</b></p> <p>Theme leader F. Thabet reported that a draft work plan has been developed and is being used as the basis to recruit members and to focus discussion on priorities. The suggested priorities include:</p> <ul style="list-style-type: none"><li>• Land conservation</li><li>• Water availability and use</li><li>• Food security</li></ul> <p>Land conservation includes desertification, deforestation and erosion.</p> <p>More than 800 million people in Africa do not have access to water and only 5% of water is renewed in Africa.</p> <p>More than 1 billion people in the world are considered hungry.</p> <p>Engineers need to understand the agricultural supply chain from field to table. It is estimated that more than 30% of food is lost in the chain. How to reduce the waste is the challenge and engineers can help.</p> <p>F. Thabet needs help to identify and recruit experts to be part of the team that addresses this theme. Help from the Secretariat is requested.</p> <p>In the past three months F. Thabet reported the following progress:</p> <ul style="list-style-type: none"><li>• Introductory meeting with African Development Bank</li><li>• Work on developing a roster of experts for the task group</li><li>• Introductory meeting with Farming First organization in London</li><li>• Publication of the CEE Newsletter #8 on Engineering and Agriculture theme in September 2012</li></ul>	



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13.	<p><b>THEME 4 – SUSTAINABILITY AND MINING</b></p> <p>Theme leader N. Trivedi delivered a presentation on the strategic plan for the committee and its progress to date. A copy of the presentation is attached to the minutes. Membership has a wide geographical and regional representation but needs more representation from SE Asia and Russia. The task group is open to new representatives from the CEE or arranged through national members. (S. Papagrigoriu volunteered to join).</p> <p>Communication with committee members is through a bulletin board (<a href="http://www.smenet.org">www.smenet.org</a>). Attempts at arranging teleconferences have been challenging with a wide range of time zones and connection issues but meetings have been held with most members participating.</p> <p>The goals and objectives are focused on capacity-building for mineral producers, particularly the smaller ones which have less focus and experience with sustainability practices and need be more locally, culturally sensitive. Other groups of interest include government authorities, other NGOs and the general public. Geographic and sectoral areas of interest that would be benefit most from capacity building will be identified in the coming months</p> <p>There is a need to increase the understanding of good engineering practices and locally appropriate application of sustainability principles in the mineral industry. These practices include reuse, re-purposing and recycling of minerals. Environmental risk assessment also needs to be addressed The task group will also assist the CEE in the dialogue around achieving the UN MDGs from the minerals perspective.</p> <p>The strategic plan for the task group in the coming months includes completing a survey of expertise within the task group as well as available time to commit to the work. Volunteers will lead particular efforts, lend their expertise and assist as a resource.</p>	





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14.	<p><b>THEME 5 – INTERNATIONAL CODE OF PRACTICE FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL STEWARDSHIP</b></p> <p>Theme leader D. Lapp explained that the draft document was developed by the national Environment and Sustainability Committee of Engineers Canada. It is based on an exhaustive review of similar documents produced by several national members, United Nations organizations and the international consulting organization FIDIC. It is in two parts – 10 principles presented on one page that make up an Engineers Code of Practice with a second document that provides amplification and explanation of the ten principles.</p> <p>The committee discussed each of the ten principles and agreed on changes and additions. These were documented and will be incorporated into the final version of the Review Draft. Members were encouraged to provide comments on the interpretive guide after the meeting. The Interpretive Guide is a much longer document and there was not enough time in the meeting to go through it in any detail.</p> <p>The Code of Practice and Interpretive Guide will be presented to the Executive Board and Executive Council with a recommendation to send out for consultation with national members. (<b>Secretary's Note:</b> Chair D. Danyluk will present this document at the next meeting in March 2013)</p>	
15.	<p><b>THEME 6 – QUALITY INFRASTRUCTURE IN DEVELOPING COUNTRIES</b></p> <p>The Secretary noted that a theme leader had not been confirmed despite several efforts to interest member countries. The Chair noted that unless a theme leader can be confirmed in the next 2-3 months, the theme would be removed from the strategic plan. Either a new theme would be brought into the plan or we would move forward with five themes instead of six.</p> <p>The Chair and Secretariat will keep the CEE advised on developments.</p>	
16.	<p><b>2011-2015 STRATEGIC PLAN APPROVAL</b></p> <p>The June 25, 2012 plan was approved as amended with the updates received from theme leaders at this meeting. It will be placed on the WFEO website and distributed to the CEE.</p> <p>The Chair noted that the plan is a living document that will be reviewed annually and changed as appropriate to reflect progress and adjustments to the action plans of the themes as they progress in their work.</p>	Approval of 2011-2015 as amended. Chair and Secretary to complete the final edits and distribute.
17.	<p><b>ACTION PLAN FOR LIAISON WITH INTERNATIONAL ORGANIZATIONS</b></p> <p>The Chair briefly reviewed a list of international organizations that CEE could potentially have interaction with on behalf of WFEO. However, with limited time and resources it will require identification of priorities that will provide maximum benefit to CEE's work. Some liaisons may be recommended for the consideration of other standing committees</p> <p>It was agreed that the Chair and Secretary would draft an action plan for international organization liaison for review by the Committee. This plan will be prepared in the next three months. The objective is to present a proposed plan to the Executive Board in March 2013.</p>	Chair and Secretary authorized to develop a draft action plan for international liaison for CEE



**WORLD FEDERATION  
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Item	Summary of Discussion	Decisions:
18.	<p><b>NEXT MEETINGS</b></p> <p>The teleconference call of the theme leaders and regional representatives will be arranged for the last week of June or the first week of July 2013. It will occur at a time that is most convenient for participants.</p> <p>The next face-to-face Meeting #6 will be held in Singapore with a tentative date of September 9 or 10, 2013. The next WFEO General Assembly will be held later that week.</p> <p>The Chair thanked everyone for their participation and noted that many good points were raised and the work was progressing well. The Chair was thanked for his continuing leadership of the Committee and for chairing a good meeting.</p>	<p>Teleconference of theme leaders and regional representatives to be held in the last week of June or first week of July 2013.</p> <p>Next face-to-face meeting to be held in Singapore either September 9 or 10, 2013.</p>