Minutes of WFEO Energy Committee Meeting:

Sunday, December 4, 2016

9:00 to 13:00.

CIP Building Auditorium LIMA, Peru

- 1. The Committee reviewed and approved minutes from 2015 Meeting in Kyoto, Japan
- 2. Review Energy Committee Activities since Kyoto:
 - a. Nuclear Report FC Chan: No update
 - b. Solar Report Carsten Ahrens: Presented final Solar Study for posting on WFEO Energy Committee webpage.
 - c. Sustainable Energy Renewal Pradeep Chaturvedi: No update
 - d. Wind Power Dermot Roddy: No update
 - e. Additional activities: No additional items were discussed
- 3. EXPO 2017 in Astana, Kazakhstan Ruomei Li and Carsten Ahrens spoke about the upcoming EXPO and encouraged everyone to attend.
- 4. Energy Internet- Effective Way Toward Sustainable Future Sun Hongbin presented

Energy Internet

- 5. Update from the WFEO Executive Office: No update
- 6. Vice Chair of Energy Committee
 - a. A Vice Chair should be selected for the next three years. Other STC's have had the potential new host country fill this role in other to make a smooth transition
 - i. Germany's Carsten Ahrens was selected as Vice Chair
- 7. Review of Task Force Chairs
 - a. Replacement of Geraldo Tavares-Wind Chair: No update
 - b. Other Chairs leaving?: None in attendance
- 8. Possible New Task Force
 - a. Energy Hierarchy (conservation, efficiency, renewable and low carbon)
 - b. Pathways to reduce CO2 by 2050: Olivier Appert of France volunteered to launch this Task Force.

- 9. Qatar Energy Conference
 - a. Qatar volunteered to host the 4th Sustainable Energy for Developing Countries in Qatar within the next two years.
- 10. Continued Support of UN/UNESCO programs
 - a. Support of UNESCO's Activities.
 - i. Next Steps to support UN's Sustainable Energy for All (SEFA) Initiative.
 - ii. Summer Technical Schools
 - iii. Solar School Project
 - iv. World Library of Science
- 11. Reports from the National Members (time permitting): No reports
- 12. New Business: No discussion
 - a. Challenges and risks in energizing growing communities.
 - b. Energy demand and energy efficiency from Market stability (Affordable, safe and reliable)
 - c. Recession of alternative energy infrastructure Investments
 - d. Creation value-chain in the renewable energy industries
 - e. Need of new or revamped concepts of energy-environment attributes
 - f. Energy basket competitions
 - g. WFEO's Role in promoting development
 - h. Engineering, science and technology: Energizing the future
 - i. Sustainable financing of the renewable energy industry
 - j. The New Producer Consumer Balance
 - k. Geopolitical cooperation: ensuring long term energy sustainability (Waleed Al-Bazzaz)
 - I. Address the question of licensing new technology based on an engineering development process such as that used in the aircraft industry or that used in the nuclear industry in the 1950s and 60s. The current process such as that set by the NRC in the USA requires detailed information that can only be obtained by testing and development but the testing and development cannot be done because there is no way to license it. This is the problem faced by even small modular nuclear plants. Many times non-US development is hindered because there is not an approved design in the US. It would be an interesting topic to be addressed by an international group (Kenneth Kok)