

Scientific and Technological Community Major Group for Rio+20 and post-Rio+20 processes

Co-organizing Partners

- World Federation of Engineering Organizations (WFEO) Secretariat/Paris
- International Council for Science (ICSU) – Global Secretariat/Paris
- International Social Science Council (ISSC) - Secretariat /Paris

The Scientific and Technological (STC) Major Group provides governments, policy makers and Society the understanding of the limitations and parameters imposed by the laws of Nature and indicates what is scientifically and technologically achievable based on what we know now and on what we can do with the knowledge and technological tools we have in hand - including those being developed with potential success.

Progress in all topical areas of the sustainable development debate requires substantial innovative advances in science and technology and a thorough analysis of the feasibility of proposed solutions. Thus, by exchanging and applying scientific knowledge, engineering creativity and practice, and up-to-date technology, the STC Major Group is able to substantially introduce feasible sustainable solutions in most areas of activity that contribute to increasing peoples' quality of life.

A summary of programs and activities For WFEO follows.

WFEO ROLE IN THE STC MAJOR GROUP



(<http://www.wfeo.net>)



WFEO JANUARY 2015

WFEO was established under UNESCO sponsorship to contribute with the engineering expertise, as well as with sound, evidence based solutions, to assure access to sustainable fresh and safe drinking water, energy, sanitation and waste management,

agriculture and food, health and medical processes, and communication, shelter and transport services.

For tackling the issues related to sustainable development, WFEO role is to provide policy-makers and Society, updated, unbiased and reliable information on the different technical paths and technologies, based on scientific principles, engineering criteria and demonstrated technological development. WFEO has engineering society members from 90 countries and 10 International Engineering Member Organizations, representing some 20 million engineers of the World.

WFEO has long standing cooperation activities with UN bodies and agencies, like ECOSOC, UNDESA, UNDP, UNEP, UNESCO, UNFCCC, UNISDR and WMO, in areas related with sustainable development.

WFEO Programmes for Sustainable Development

- Engineering and the Environment: Climate Change Adaptation and Mitigation; Engineering and Agriculture; Sustainability in Mining; Environmental and Sustainable Engineering Practice.
- Engineering Capacity Building: Capacity Building in Africa; Capacity Building Guidebook; Capacity Building Compendium.
- Engineering for Innovative Technologies: Nanotechnology; Smart materials; Sustainable Development; Public Systems; Sensor Networks; Bio-Engineering.
- Information and Communication: Information and Communication Technologies (ICT) Education in Developing Countries. ICT Innovation and Evolution; Green ICT.
- Disaster Risk Management: Sustainable and Sound Development for Disaster Prevention; Measures for Risk Management of Water-related and Earthquake Disasters.
- Education in Engineering: Engineering Education for Sustainable Development; Gender Balance for Human Resources Development.
- Energy: Sustainable Energy; Renewables and Bio-Energy; Nuclear Power Feasibility; UNESCO Biosphere Reserve Program.

International Engineering Member Organizations

ASEAN Federation of Engineering Organizations (AFEEO); Commonwealth Engineering Council (CEC); Federation of African Engineering Organizations (FAEO); Federation of Arab Engineers (FAE); European Federation of National Engineering Organizations (FEANI); Federation of Engineering Institutions in the Asia Pacific (FEIAP); Federation of Engineering Institutions of South and Central Asia (FEISCA); Pan American Union of Engineering Societies (UPADI); Union of Scientific and Engineering Associations (USEA); World Council of Civil Engineers (WCCE).

Announcements:

- ASEAN Australian Engineering Congress 2015 – 11-13 March 2015, Singapore.
- Convention & General Assembly of 2015 FEIAP – 5-7 July 2015, Taipei, Taiwan.
- World Congress on Engineering Education 2015 – 29-30 October 2015, Beirut, Lebanon.
- Conference of the ASEAN Federation of Engineering Organizations 2015 – November 2015, Penang, Malaysia.
- World Engineering Conference and Convention- November 30- December 2, 2015, Kyoto, Japan.