

Sustainable Energy will be able to save our precious Mother Earth !

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Mother Earth Day by the United Nations

The U.N. General Assembly adopted an unanimous resolution designating April 22 each year as the International Mother Earth Day. This move was sponsored by Bolivia and 50 nations. The Earth Day Observance was started in 1970 in the United States and many other countries to bring awareness to the environmental problems facing our planet.

In adopting the resolution, the UN General Assembly invited all member states, the U.N. system, regional and non-government organizations to observe and raise awareness of International Mother Earth Day.

"Sixty years after adopting the Universal Declaration of Human Rights, Mother Earth is now finally having the rights recognized" said Morales, Bolivia's first indigenous President.

In order to achieve a just balance among the social, economic, and environmental needs of present and future generations, it is necessary to promote eternal harmony with nature and the Earth.

Visit the link below to view the draft GA Resolution:
http://www.un.org/esa/socdev/unpfii/documents/mother_earth_day_RES_en.pdf.



In 2008, more than 90% of Chinese energy supplies still came from non-renewable fossil fuels, with almost 70% from coal alone. The disproportionately heavy dependence on coal is unique among major economies and made China the world's largest emitter of greenhouse gases. With coal reserves estimated to last only 50 years, and in an attempt to combat environmental and ecological damage, recent years have seen increasing emphasis placed on developing the many indigenous clean renewable hydro, wind, solar, geo and bio energy resources.

China Plans Renewable Energy Revolution

China is planning a massive expansion of its renewable energy generation capacity, with a strategy of producing at least 20% of its total energy requirements from renewables. Based on the trend of development in China's renewable sector, it is a realistic target for China to have at least 20% energy sourced from renewables by 2020, according to the vice-chairman of China's national development and reform commission, Zhang Xiaoqiang, who said that China would easily surpass its current 2020 wind and solar targets and is now considering expanding them by a factor of three. For example, under the terms of the current proposals, wind is set to reach 30 GW by 2020 but Zhang said the new goal could be 100 GW in saying: "Similarly, by 2020 the total installed capacity for solar power will be at least three times that of the original target of 3 GW".

In an interview in 2009 in London Zhang said: "We are now formulating a plan for the development of renewable energy. We can be sure we will surpass the target of having renewables provide 20% of total energy consumption and ultimately 100 %."

By the end of 2009 the installed gross capacity of wind turbines in China reached 28'000 MW well exceeding the Chinese government's initial target of 5000 MW for 2010. In the past few months, national and local governments of China have made a stunning focus on the development of renewable energy by publishing a series of policies to stimulate this important sector, including adopting preferential treatments and state investment plans. Leading state-owned enterprises and private companies are very active in taking actions to increase their manufacturing capacity, especially in wind and solar power, by buying advanced technologies from Western countries.

This trend will also be reinforced by the strong interest in space based solar power SBSP by an SE J.V. and deep geothermal energy such as GEOCOGEN, both in the GW class, which will be dealt with at the international Low Carbon Clean Energy Conference in Chengdu on 12-14 April 2010. This development is the subject of the introductory keynote speech "Low Carbon Energy Systems – Clean High Tech Energy Evolution" by ISEO Executive Secretary Gustav R. Grob – see agenda on the website www.SpaceEnergy.com.

Evolution of ISO and IEC Standards

Energy is the largest economic sector and one of the main activities of ISO since its establishment and the fundamental reason for IEC since we all live in the electrical age. The significance of the new term "sustainable" related to energy was also promoted at the UN Summit of Sustainable Development 2002 in Johannesburg, promulgated by the UN Commission for Sustainable Development CSD, the UN-ECE Economic Commission for Sustainable Energy of the Northern Hemisphere, the UN Environment Program UNEP, the World Meteorological Organization WMO, its joint IPCC committee with UNEP and the UNFCCC-COP climate conferences and by the World Health organization WHO, besides all the environmental activities by the World Conservation Union IUCN, the International Sustainable Energy Organization ISEO and the many specialized NGOs on energy efficiency, renewable energy and energy carriers like electricity and hydrogen.

Sustainable energy became the generic term for the entire scope from renewable energies, clean energy carriers, energy storage, energy efficiency to the user's side, including clean mobility and housing.

Due to the global importance of energy and the key role energy is playing in both IEC and ISO a joint ISO/IEC effort is overdue to resolve interdisciplinary problems in international standardization, which are becoming more and more important in the United Nations context also in conjunction with the World Trade Organization WTO, UNDP, UNIDO, UNCTAD and the World Bank Group.

The overwhelming world-wide response by ISO and IEC members for the establishment of a Joint Programme Committee JPC 2 to coordinate energy matters with common terminologies in a committee called "Energy efficiency and renewable energy sources – Common international terminology" show the necessity to intensify the ISO-IEC cooperation in the emerging sustainable energy age by an expanded Joint Technical Committee **JTC 2**.

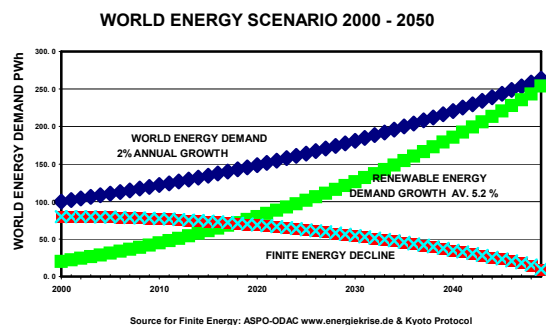
Subjects in both standardization domains are the clean energy carriers like hydrogen which is split into ISO/TC197 & IEC/TC105, metrology based on the SI system of ISO/TC12 & IEC/TC25, solar energy in the case of hybrid collectors and space based PV, geothermal cogeneration with its steam turbines and generators, bio energy also producing electricity, wind turbines by IEC containing gears of ISO, electromechanical ocean energy and the hot topic of electric vehicles handled by ISO/TC22 & IEC/TC69. Some of these emerging technologies do not yet have ISO or IEC standards because of their interdisciplinary complexity with their mechanical, civil engineering, chemical process and electrical subsystems. They all need urgently a joint interdisciplinary standardization effort to enable the industry to produce such systems due to the rapid depletion of finite mineral energy resources with rising ecological and climatic concerns about global warming and health deteriorations from emissions.

Hence a fully fledged JTC 2 on energy is as important as the JTC 1 on information technologies.

Proposed Title: **Sustainable energy technologies**

- SC1 Terminology (replacing the committee on energy efficiency and renewable energy)
- SC2 Technical energy systems (ISO/TC203 to be harmonized with other TCs and SC1)
- SC3 Energy statistics (draft available as ISO / DIS 13602-3 to be harmonized with SC1)
- SC4 Energy carriers other than electricity (hydrogen at ISO/TC197, methanol etc.)
- SC5 Geothermal energy (not yet existing in ISO or IEC - cooperation with CEN needed)
- SC6 Bioenergy (not yet existing in ISO or IEC - only in CEN for some solid biomass)
- SC7 Space energy (Space vehicles ISO/TC 20 & Photovoltaics IEC/TC 82)
- SC8 Marine energy with its mechanical and electric subsystems in cooperation with CEN
- SC9 Electric road vehicles and tractors (ISO/TC22, ISO/TC23, IEC/TC21, IEC/TC69, IEC/TC105)

These international standards will facilitate the certification of sustainable energy systems, thus enabling the future energy scenario of ISEO:



Energy Events around the World

On the ISEO web portal www.uinseo.org > News & Events, there is an updated list of hundreds of international conferences all over the world, dealing with all aspects of environment protection, climate change, renewable energy and energy efficiency.

Dialogues with ISEO

You may send us your questions, suggestions, updates and missing links for inclusion in ISEO's international networking portal www.uniseo.org where also membership application forms, the statutes, mission goals with past Newsletters and appeals to decision makers can be found.