

A World Consensus is Developing on Sustainable Energy

Over 3000 delegates from 154 nations gathered at the RENEWABLES 2004 Summit in Bonn where ISEO proved with its World Energy Survey that Renewable Energies can easily replace all mineral resources !

Both initiatives, ISEO, and the **Bonn Renewable Energy Summit** invited by German Chancellor Gerhard Schroeder, were sparked off at the Johannesburg Summit on Sustainable Development two years ago. Both proved to the world, that the new energy age has begun, changing the energy mix dramatically towards cleaner, sustainable systems and sources. The majority of the Minister-level government delegates, legislators and virtually all NGOs agreed that the only way forward for humanity are renewable energies coupled with more efficient energy applications – goal of ISEO !

ISEO submitted its report “The Global Mechanism for Bundling the Forces towards the Transition to the Clean, Sustainable Energy Age” and took the floor at the plenary session of the Ministers to stress the importance of global harmonization with international standards – see www.uniseo.org - and at many side-events, promoting the Global Energy Charter for Sustainable Development, better global networking, more effective financing mechanisms and easier technology transfers.

RENEWABLES 2004 Summit 1 - 4 June 2004 in Bonn



From top left: Plenary assembly with 154 nations attending – hosts Gerhard Schroeder (center) Ministers Heidemarie Wieszorek-Zeul (Development), Jürgen Trittin (Environment and Renewable Energy), Professor Klaus Toepfer, UNEP Executive Director with Martina Sumenjok, ISEO VP & SLOBIOM President - and with RE friends Franz Alt on her left, Geoffrey Boyle, Open University UK on her right. Geoffrey Boyle with Professor Josep Puig, Catalonia; bottom far right: Executive Secretary G.R. Grob at the plenary assembly.

At its **General Assembly** in Bonn the ISEO Board was reconstituted with Professor Ernst Bucher, solar energy expert from Constance University and Martina Sumenjok, bio energy expert from Slovenia joining. At the public session of ISEO the world energy survey was presented and the problems of the countries in transition were discussed at practical examples like Madagascar, the African and South American needs for easier financing and better technology transfers for renewable energy systems. A regional meeting is planned in Madagascar at the end of September this year. The premiere of the film about ISEO's 16 year history received great applause.

The ISEO **World Renewable Energy Survey** was drawing following conclusions:

- 1) There is more affordable renewable energy available on Earth than humankind ever will need.
- 2) Most renewable energy systems are competitive with the depleting non-renewable sources.
- 3) All nations are able to become energy self-sufficient with renewables and thus can drastically reduce pollution and poverty by cleaner, more efficient power plants and transport modes.
- 4) The remaining mineral energy resources can and shall be conserved for higher added values !

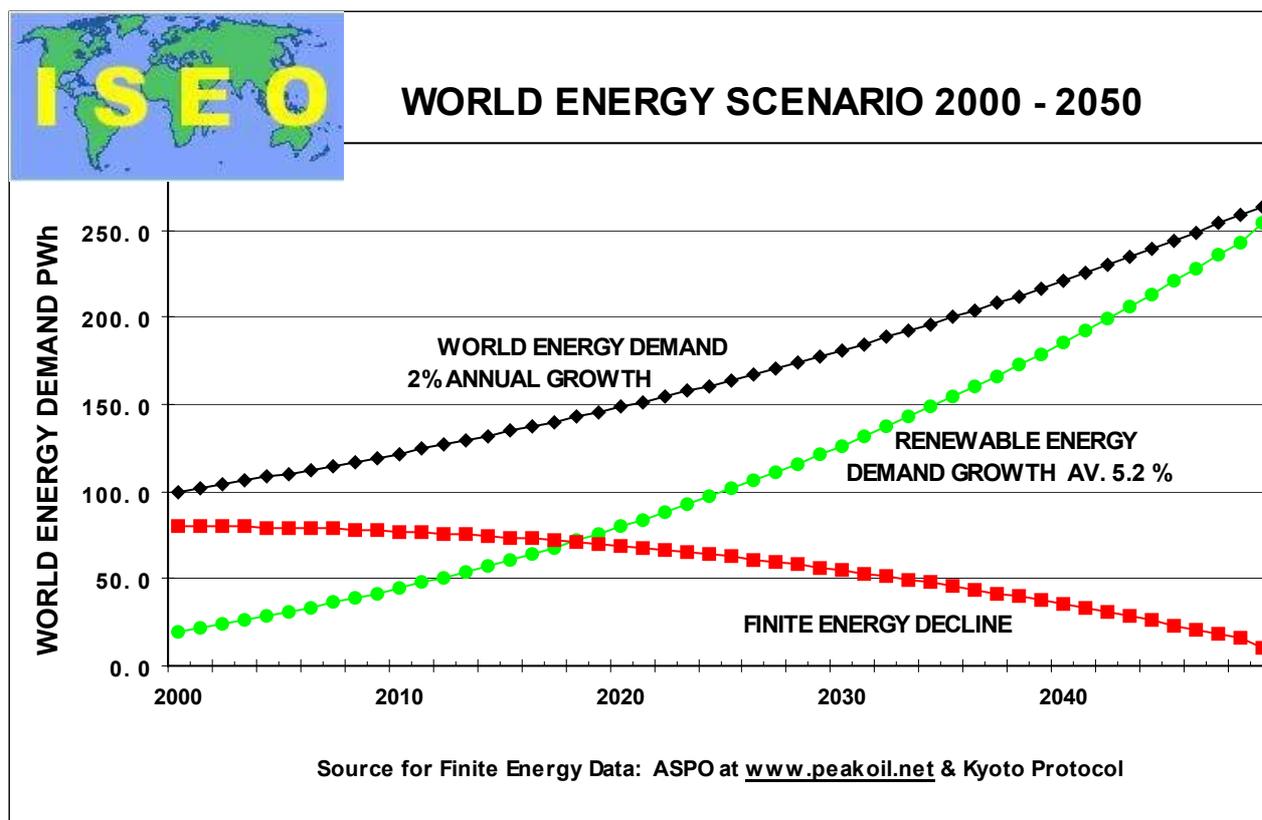
Positive Signals from China

One of the positive outcomes of the Bonn Summit was the statement by the Chinese Government, that renewable energy efforts will be multiplied, realizing China's limited mineral resources. China possesses indeed enough renewable energy sources to replace all harmful non-renewable energy systems. The wind resource alone is already a multiple of the present coal fired power capacity and hydropower could also alone provide all electricity needs with a proper long-distance power line infrastructure, besides the ample solar, bio, geo and marine energy resources.

These clean energy alternatives will relieve the world oil, gas and coal markets, which were driven up recently due to the rapidly increasing Asian demand. China is also one of the leading nations with electric vehicles, beating all growth records in this sector, which must be fed by "green" power.

IIASA-IEA Energy Modeling Workshop in June at Paris IEA Headquarters

ISEO Executive Secretary G.R. Grob presented the results of the World Renewable Energy Survey and its scenario, which is inevitable if the energy needs of humanity have to be satisfied.



It is imperative that the average world energy consumption growth is limited to about 2 %, which is one of main tasks to grant sustainability in global prosperity. Much more education and better legislation is needed to avoid wastage of energy, coupled with the intensified implementation of renewable energy systems to safeguard the precious mineral resources for better uses in the chemical-metallurgical industries than to combust them at the inherently low thermal efficiencies.

Encouraging Response from the World Bank

The reply to ISEO's letter addressed to James Wolfensohn, President of the World Bank, by its Director of Energy and Water, Jamal Saghir, and the statements made at the Bonn Summit, are encouraging. The World Bank Group seems to realize now that the bulk of its funds have to go into labour-intensive sustainable energy systems, instead of environmentally harmful conventional thermal systems. The donor nations of the World Bank have now the duty to monitor this new sustainability policy, which was also stressed by former Indonesian Environment Minister Emil Salim in his recent Extractive Industry Review (EIR) recommendations to the World Bank Group.

More information about ISEO events, sustainable energy technologies, policies, implementation tools, membership and sustainability success stories can be viewed on www.uniseo.org.