



Fostered Transition towards the Clean, Sustainable Energy Age

ISEO - the constructive warning voice at many international meetings.!

“Beyond Carbon” Symposium by Swiss Re

Organized by Swiss Re, the large reinsurance group in Zurich, Switzerland, this meaningful event attracted a prominent world audience. It was dedicated to ecological ways and means to mitigate the disastrous effects of greenhouse gases. However, ISEO had to warn that carbon sink management is not enough to mitigate the man-made CO₂ emissions caused by the use of fossil fuels and intensive agriculture.

It had to be reiterated by the ISEO representative that main the source of the problem is the excessive combustion of fossil fuels, which cannot be balanced by biosphere management and efficiency measures alone - a drastic reduction of fossil fuel use is the only solution to bring the earth into its natural balance.

“To wait for the total depletion is fatal for the global climate”, Executive Secretary Grob pointed out “and economically suicidal too, since we are frantically burning the indispensable feedstock for the organic chemical and metallurgical industries, depriving future generations from plastics, paints, synthetic fibers, medicine and the many other products based on hydrocarbons. The only remedy is to implement clean, pollution-free energy systems on the fast track – not only in industrialized nations, but very much so in the large developing countries with their very fast growing economies and rising motorized mobility”.

Business Models for Environmental Protection

Switzerland invited experts, NGOs and governments to this workshop in cooperation with the Global Environmental Fund GEF, initiated at the Rio Summit in 1992, which is active in LCD biodiversity, climate change and water projects with several billion dollars spent so far.

As regards energy emissions, the main cause of many environmental and health problems, the two-day meeting concluded that not enough is done in the field of decentralized clean energy systems. “Much more has to be done to finance small hydropower”, exclaimed Alex Arter of Entec, which installs such systems since decades, “we requested GEF funds for viable hydropower systems in Asia three years ago and are still waiting for a reply, although all our projects are ecologically as well as economically viable”.

Shell Solar representative Damian Miller pointed out that PV systems have the potential to bring electricity to millions of people without access to the electricity grid, but the problem encountered in some areas was to collect the money to recover the cost of small systems consisting of a PV module, a battery and a few appliances.

Nigel Baker of Swiss Re’s Greenhouse Gas Risk Solutions Department criticized the lack of effective mechanisms to implement sustainable energy fast enough to mitigate harmful emissions causing the incessantly rising natural disaster damages.

Prominence at Swiss Energy Agency Meeting

Dr.med. Gro Harlem Brundtland, former Norwegian Prime Minister, often called “Mother of the environmental movement” with her historic report “Our Common Future” published in 1987, followed by the “Commission of the Future”, who headed later the World Health Organization (WHO) in Geneva, pleaded that urgent action is now required to protect life on Earth 12 years after the historic Rio Conference on Environment and Development.

SwissRe Board of Directors Delegate and Credit Suisse President Walter B. Kielholz showed the dramatic increase of natural disasters during the last few decades and the continued up-trend of billions of environmental damages, caused by record global warming from man-made pollution.

Swiss Government Energy Department Head, Dr. Walter Steinmann warned, that legal measures have to be introduced, if the voluntary greenhouse gas mitigation efforts by the Swiss industry and the population do not achieve the CO₂ reduction targets of the Kyoto protocol, as ratified by Switzerland.

UN-ECE Sustainable Energy Meetings in Geneva

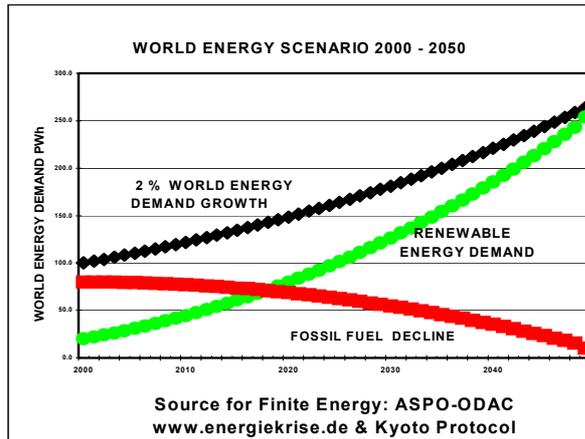
About 200 Delegates from 34 member states of the UN-ECE-Energy Committee on Sustainable Energy gathered with NGOs and UN body representatives. ISEO played an active role in pinpointing repeatedly to the need for more clean, sustainable energy and less fossil fuels to cope with the environmental dilemma, having caused historic record floodings, storms, draughts and melting glaciers in the ECE region. More information see www.unece.org/ie.

Investment Priorities

Out of the forecasted 16 trillion USD energy investments until 2030, presented by WEC and IEA, the largest portion is supposed to go into fossil fuels and thermal power stations, rather than to mature sustainable energy systems – thus totally ignoring the IPCC recommendations and the Kyoto Protocol.

ISEO presented the sustainable future world energy scenario with its depleting fossil fuel share and the annual increase of at least 2 % total energy consumption, resulting in an annual renewable energy growth of 5,2 % on the basis of the actual 20 % share in the energy mix. This realistic

forecast requires an annual investment of at least one trillion USD/EURO, if the present standard of living in industrialized nations and the economic development of less developed countries has to be maintained.



Future energy scenario showing the growth of decentralized renewable energy, thus reducing the fossil energy security risk considerably

The statement by WEC representative Dr. Brendow, that renewable energy systems are not competitive with mineral fuel systems was contradicted by ISEO representative Grob, who urged experts to use the international standard ISO 13602-1 to calculate the total cost of energy systems, which will reveal the much better competitiveness of renewable energy.

The Need for Better Statistics

Actual energy statistics are utterly incomplete as regards renewable energy, since they do not include decentralized, non-commercial energy, muscle power and new renewable options, becoming indispensable with a rising share. In IEA-WEC statistics renewable energy was always much underestimated, distorted and mixed up with coal in the case of biomass, with its existing 14 % share of world energy use, bringing the world renewable energy share to over 20 %. Everybody was invited to join the technical committee ISO/TC203 and work on the new international standard for an adequate energy statistics and forecasting methodology.

Harmful Subsidies

A very sore point at the Johannesburg Summit energy discussions was the hundreds of billions harmful subsidies, which have to be redirected to clean, renewable energy. Germany with its multibillion coal subsidies gives a typical example of misallocation of taxpayer's money, which could create thousands of cleaner jobs and resolve the CO₂ problem, if spent on renewable energies like solar, hydro, wind, geo and ocean energy – and efficiency.

Another case of tax misallocation is the fission and fusion research, radiation damage remediation, toxic waste disposal and decommissioning of hazardous power plants, costing trillions, which could have financed thousands of clean, safe energy systems.

Future Electricity Demand

Sustainable electricity production has to be multiplied this century to satisfy the clean mobility needs of the

future made up of hydrogen and electric vehicles and by more electric public transport.

In Switzerland, about one third of total energy is consumed as fossil fuels for transport vehicles, while the electricity share of total energy production is 21 %, i.e. electricity generation has to be more than doubled to satisfy future clean mobility needs. This switch is not a question of altruism, but rather an urgent necessity within a generation because of fossil fuel depletion and environmental constraints.

Swiss studies showed, that health cost would be half of what is paid now by suffering health insurers

Energy Security considerations

In the day-long session on energy security ISEO pointed out that there is a short-term fossil and a long term renewable energy security problem. Sustainable energy is indeed the only real energy security option, based on local production – as nicely called “*proximity energy*” by ECE Energy Commission Vice Chairman Michael Hors from the French Ministry of Economy, Finance and Industry.

ISEO delegate Grob stressed “*that fossil fuel conservation and substitution is the only way forward to safeguard the organic chemical industry feedstock for many generations to come.*”

Conclusions of the 5-day ECE Sessions

The ECE Energy Commission meeting concluded that renewable energy must be much more focused on in line with the Sustainable Energy Commissions name, and that a good working relationship shall be established with ISEO and other RE organizations.

UNFCCC – COP 9 Meetings in Milan

The 9th session of the Framework Commission of Climate Change in December 2003 was another tremendous effort, causing horrendous cost of organizing and traveling by thousands of delegates and NGOs. It showed the helpless situation facing the world with so many major polluters ignoring any obligation to reduce greenhouse gas emissions.

The only solution out of this dilemma is a strong, effective ISEO, rapidly implementing the transition towards the clean, sustainable energy age, thus resolving the perpetual stalemate of fruitless arguing about climate change.

Diligently Doing the Sustainable Energy Job is the only sensible motto for the coming years, rather than indulging in more idle debates about what might be needed to save our planet and on what could be the reasons of the rising disasters around the world, hitting new damage records year by year!

The money and expert's time is much better spent on remedial action than on political debates.

Procrastinating the progress towards rescuing our climate, health and biosphere from energy pollution and risks does not serve anybody – the least to conserve the precious fossil resources for higher added-value uses in the chemical industry.

ISEO has all the solutions and the world-wide network ready to accomplish that urgent job !