



Newsletter

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How to face natural and man-made disasters by global consensus

2004 was again a year of man-made and natural disasters with the worst Tsunami catastrophe in recorded history, but also with millions killed by affluence, pollution and oil wars.

Let 2005 be the year of united humanity to guard against such dangers

Wishes for 2005

While global military budgets still absorb about one Trillion USD annually, not enough is done to protect humanity from the real threats – self-inflicted ones by wrong energy systems, abused arms and wrong consumption habits, as well as unpredictable ones from the gigantic forces of nature.

It is high time for decision makers to think about priorities. Instead of contra-productive military expenses aimed at killing each other, a lot more must be done for humanity by implementing more sustainable energy systems, building clean and safe vehicles, planting useful crops instead of drug species, installing early warning systems to protect humanity from spring tides and river flooding, advancing desert replanting, nutritional education against obesity, more anti-smoking campaigns and much better character education to eradicate and avoid the roots of aggression and terrorism.

Politicians and the people electing them have the power to put these priorities right. Voters electing the law makers and executives shall choose their candidates under these pragmatic criteria.

Deep Condolences

to the many innocent victims of the worst natural disaster in history, with our sincere wish, that sustainable energy policies will halt the rise of oceans to reduce such fatal dramas !

Conferences & Publications

The growing number of **events** and **publications** on renewable energy, efficiency, clean power, climate and related matters is impressive. Let us hope that all these efforts, which cause a great deal of unsustainable travelling and need huge amounts of paper - i.e. trees - will create the awareness and action to save our waters, biospheres and climate from further decay.

ISEO web portal www.uniseo.org > **ISEO News & Events** contains updated information about such events and a new catalogue of some important periodicals. ISEO is again co-sponsoring important conferences, such as

ENVIRONMENT 2005 29 Jan. - 2 February 05
Abu Dhabi, UAE, on sustainable transportation in developing countries – www.erwda.gov.ae

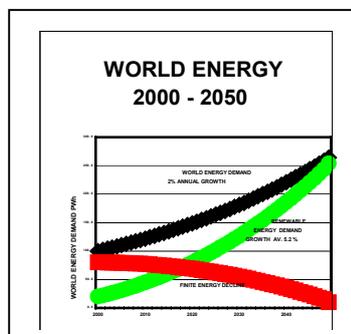
International Congress and Exhibition on Energy Efficiency and Renewable Energy

13 to 15 April 2005 at Plovdiv, Bulgaria.

Information on www.viaexpo.com

NRE 2005 2nd China International Renewable Energy Exhibition and Conference 25-27 May, Beijing, China – see www.nre.2005.com

Sustainable Energy Financing Urgency



Much faster and much more financing is needed to be able to cope with the problems of the growing world population, economic development and with the lack of finite mineral resources. The world military budgets of about one Trillion USD must be re-directed to benign sustainable energy.

Wars are often caused by the greed for mineral resources, wasting the tax payers money and killing innocent people. If these funds are invested in sustainable, local energy system development, lots of jobs are created, thus avoiding social unrest and migrations, allowing drastic cuts of unproductive defence budgets.

Rising fossil fuel prices help “Renewables”

Record oil, gas and coal prices caused by advancing depletion, booming economies in Asia and increasing numbers of vehicles, make renewable energy systems more competitive and speed up the transition toward the **Clean, Sustainable Energy Age** by creating jobs and reducing damages from emissions – see the relevant “Blueprint” on www.uniseo.org.

The theory that high oil prices would damage the economy is wrong, because labour-intensive decentralized renewable energy systems create so many new jobs in every country and balance hitherto deficitary national households.

A good example is Germany, where 27'000 new jobs were created in the solar industry within only six years, and wind power created also ten-thousands of new clean jobs world-wide.

The worst example of inappropriate spending are the USA, with their falling national currency, destabilizing the whole world economy, due to about 500 Billion \$ military expenses and as much for short-sighted oil and gas imports, thus wasting the missing Trillion \$, needed world-wide for sustainable energy systems, which outlast the military and fossil energy equipment by decades. It is hard to understand the logic of such energy policy, knowing that the sun radiated on US deserts could alone supply all the energy they need - not to mention the ocean energy along their extensive sea shores, their enormous wind and hydropower resources, besides the huge potential of geothermal power, heat pumps and novel decentralized energy sources developed at their excellent electro-chemical research labs !

Mobility Revolution

The success stories of the TOYOTA and Honda hybrid cars are positive signs of the beginning of a fundamental vehicle redesign with clean, quite drive-trains. While hybrid cars still use optimised combustion engines, charging batteries to feed electric drives, the truth of the matter is that these combustion engines will soon be replaced by fuel cells running on clean fuels - and even more economically by high density long-life batteries obsoleting on-board power generation by fuels.

The required extra electricity must of course come from clean power generation, which will have to grow very fast, because it will replace finite fossil fuels, now driving virtually all vehicles.

The illusion of "Clean Coal"

According to WEC and IEA forecasts there are plans to build and modernize hundreds of GW coal fired power plants, totally ignoring the emission problems they cause. While sulphur and mercury emissions might be captured by proper filtering, there is no economic method to avoid the CO₂ emissions. CO₂ sequestration with the risk of later leaks into the atmosphere makes coal power uncompetitive compared with clean power from wind, hydro, geo, bio and ocean sources. Dangerous jobs and terrible landscape deformations make coal even less desirable.

Blind (petroleum) economists

It is very strange that too many economists still ignore the warnings from the Association for the Study of Peak Oil & Gas (ASPO) with their monthly depletion forecasts, although some oil majors admit now the truth about fossil fuel reserves since some Board upheavals from misleading reserve reporting in balance sheets at some oil majors - see www.asponews.org.

The battle against desertification

Deserts comprise about 12 % of the Earth's land surface with a tendency to grow due to global warming and excessive deforestation. Sustainable energy is needed for irrigation and re-planting, but also to halt the man-made share of global warming which is badly advancing the deserts. The growing world population needs extra food production and more green space for liveable dwellings. Solar energy is able to solve this problem by a combination of shading with solar panels and power production for water pumping, allowing ample food production and clean housing.

International Standards

The importance of international standards by ISO & IEC for sustainable energy development is highlighted again in the January 2004 issue of the monthly "ISO Focus" by ISEO secretary G.R. Grob, who is acting also as chairman of ISO/TC203/WG3 on Energy Systems Analysis & Statistics. Energy experts are invited to attend the working group and plenary session of this committee on 7/8 Feb. 05 in Geneva, where the updating of the ISO13602 standard for energy analysis & full costing and the new, complete energy statistics are discussed - see www.uniseo.org > **Implementation Tools ISO/IEC** and also > **News & Events**.

Innovation

The power of innovation will ultimately solve humankind's energy problems. All mineral energy forecasts will become obsolete when novel decentralized energy systems start being mass produced like the modern wind, geo, bio, ocean and solar systems. The combustion engines of our days can one day be visited in the technical museums like old James Watt's roaring steam engine. The new ISEO page on www.uniseo.org > **Novel Energy Systems** will soon be up-loaded and regularly updated.

International Dialogue

ISEO invites all readers to make suggestions for the enhancement of sustainable energy and to join www.uniseo.org > **Application**.