



Energy Revolution

25th Anniversary of the World Clean Energy Conference WCEC
uniting legislators, governments, academia, international NGOs and
decision makers 1- 4 November 2016 at the United Nations in Geneva

Updated Blueprint for the Clean, Sustainable Energy Revolution published for WCEC 2016

This famous energy policy and industry guide, that has been issued for the start of the 3rd Millennium will be updated and expanded for the 25th Anniversary of the historic World Clean Energy Conference - see <http://www.iseo.uno> > **Blueprint**.

The Blueprint contains recommendations from all UN agencies involved in environment, health, energy, development, science and education. Leading academia and NGOs give their advice on how to avoid damages to the health and environment by enabling governments and the private sector to implement the UN Sustainable Development Goal, SDG 7 for affordable, reliable sustainable and modern energy for all.

The World Clean Energy Conference goes far beyond the COP goals of limiting global warming

The critical heuristic CMDC-ISEO-WCEC approach to the very complex energy issue entails:

Health Protection and Reproduction; Environment; Forests, Lakes, River and Sea Protection; Energy Safety and Security; Finite Resource Conservation; Influence on National Balances of Payments; Individual and Public Mobility; Influence on Food Production; Education and Human Behavior; Energy for Military; Politics; Legislation and its needed legal Enforcements; Energy Influence on fatal Migrations; Importance of International Standards; Global Ethics.

Health Protection and Healthy Reproduction

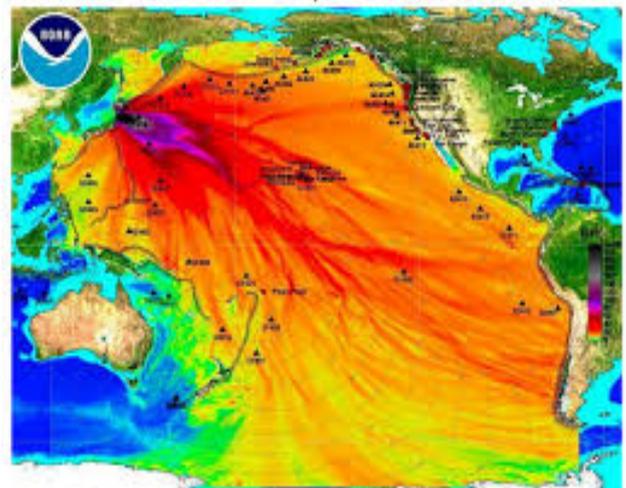
The negative impacts of visible and invisible energy pollution, radiation and noise upon the health of humans and their healthy reproduction, affecting also animals and plants, cost billions for treatments and lost productive working time, that can and must be drastically reduced by harmless clean energy systems. The apparent causes and hidden genetic damages by invisible radiation and lethal strontium⁹⁰ contamination must be legally prohibited by the UN and all governments ! See ISEO Spring issue 2015.



Environmental Protection Measures

The incalculable damages from unsustainable, polluting energies in and from coal mines, from oil spills destroying whole marine ecosystems, gravely endangered natural habitat of rare species, gas leaks endangering the climatic balances and worsening the global warming on top of natural climate cycles need fast remedial action by replacing dangerous polluting energies by clean sustainable and more efficient energy systems. Lakes, rivers and seas are particularly sensitive since water is one of the most important natural resources. The radioactive contamination of the whole Pacific by the Fukushima catastrophe is one of the worst examples of energy damages.

Fukushima nuclear radiation spread across the Pacific Ocean



Importance of Energy Safety and Security

As emphasized in above health and environment sections, **Energy Safety** is indispensable to protect life and to keep nature intact. Most conventional mineral fuel energy systems would not have been legally permitted if there would have been competent environment ministries and strict safety regulations in place at their outset, reason why better safety standards and international laws with strict endorsements are urgently needed.

Energy Security is very important to keep economies smoothly running, reason why for the public welfare domestic clean, renewable energy production is indispensable in order to reduce unsustainable energy imports with their fluctuating prices from risky nations.

Conservation of finite Resources

Since all mineral resources are finite, they have to be used wisely and responsibly, so that future generations have them still at their disposal for their survival. To burn fossil fuels with all their negative environmental impacts must stop as soon as possible to safeguard them for higher added value uses like the organic chemistry. Recycling is a valuable option like the recapturing of CO₂ for the production of methanol, rather than pumping it uselessly into the ground at prohibitively high cost.

Influence on National Balances of Payment

Fossil fuel imports disturb the balance of payments of most developing nations - the majority of the UN member states ! Locally produced renewable energy resolves this problem of foreign energy dependency and helps the local household and infrastructure development for better education, improved health sanitation and "Energy for All".

Individual and Public Transport

The fossil fuel based individual and much of public transport, still absorb about 1/3 of total world energy production and cause most of the pollution and noise, thus endangering health and environment. The highest priority is clean mobility with clean energy, an urgent multi-billion task for industry and governments as regards a power plug infrastructure for electric vehicles.

Energy Relationship with Food Production

Intensive agriculture depends mainly on fossil fuels for its mechanization and the food production depends on electricity still mostly from fossil fuel fired thermal or nuclear power plants. Its distribution is mainly by Diesel trucks and lorries. Bio fuels from energy crops absorb valuable farmland that is needed to feed the growing world population. Sustainable agriculture and food production must be part of a new global sustainable energy policy.

Education and Human Behavior

Progress of sustainable development depends on better education and more responsible human behavior, also as regards the clean, efficient energy usage by purchasing efficient energy appliances and their sensible use, ranging from clean vehicles to electronics without stand-by waste.

Energy for Military

Apart from the principle, that military should be a thing of the past in the third Millennium, as soon as the United Nations imposes a world-wide arms prohibition, ranging from defense to terrorism and private arms ownership, energy is an important means for armies and often a reason for bloody wars to get access to fossil fuels. It is of strategic importance to be independent of foreign fuels.

Energy Politics

Fossil fuel politics become meaningless when nations become energy self-sufficient with clean, renewable energy. It is the task of local politics to advance energy self-sufficiency by incentives.

Legislation and needed legal Enforcement

The "Global Energy Charter for the Clean, Sustainable Energy Age" contains all principles for new energy legislation with incentives that have to be enforced by all possible legal means.

Influence on fatal Migrations

Terrorist organizations and dictatorships, fuelled by illegal petroleum income, cause the history's worst destructions of habitats and sacrifice of life, displacing inhabitants as refugees to peaceful democratic nations. Clean sustainable energies prevent such criminal organizations from feeding their warfare causing such inhuman disasters.

Importance of International Standards

Clean sustainable energy systems need for their objective analyses, certification and implementation international standards from ISO, IEC and ITU. ISO13602-1 allows objective energy systems analyses to make competing systems comparable. See <http://www.iseo.uno> under "Implementation Tools"..

Global Ethics

The transition to clean, sustainable energy systems needs new global ethical principles for everyone as formulated and promoted by GLOBETHICS in Geneva - see <http://www.globethics.net>.

Sustainable Clean Energy Progress

World solar energy capacity passing 400 GW
Growth over 30 % pa..
World wind power capacity passing 500 GW
Growth over 25 % pa..
World hydropower capacity passing 1000 GW
Growth over 10 % pa..
Nuclear power declining to less than 290 GW
Pending international prohibition because of safety !

The international standards committee **ISO/TC203** issued the standard **ISO13602-1** for energy systems analyses to avoid ill-conceived energy technologies by calculating the total cost and true life cycle, including decommissioning cost - see <http://www.iso.org> > **Implementation Tools**.

ISEO Membership: Everybody is cordially invited to join ISEO to advance the clean energy development, start local action groups to implement clean technologies and to meet at joint events. Get free newsletters and the enrolment form under "Application" on www.uniseo.org

CMDC-ISEO - THE WARNING VOICE TO SAVE THE WORLD FROM DESTRUCTION