



VENICE ENERGY CHARTER

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Premise

Energy is the engine of civilisation: it drives agriculture, transportation, health, manufacturing, communication and recreation. Energy is directly related to the quality of life in all its forms. As a result, international energy agencies indicate that, as the world develops, global energy demand is expected to increase by over one-half by 2030.

Energy cannot be viewed in isolation. Unless we take precautions, environmental damage will increase as energy demand increases. Energy-related carbon dioxide (CO₂) emissions will increase by over one half by 2030 and its negative impacts will affect the entire world. Less developed countries with lower energy demands will particularly suffer the consequences of environmental damage created by energy-deploying countries. Moreover, fossil fuel resources are finite; oil reserves will last for perhaps 100 years and coal for about four times longer. We have a moral duty to find solutions and to mitigate the effects of our global development.

Context

Abundant and virtually inexhaustible energy sources are the Sun and the atom; more limited resources include hydro, biomass, wind energy. Furthermore the Earth under our feet is hot and is a potential source of clean, inexhaustible geothermal energy. In principle these are all solutions, but research and development, investment, and public debate are required to make them acceptable and viable.

Energy consumption can be curbed thanks to new materials and advanced technologies. Policies that encourage more efficient production and use of energy can reduce CO₂ emissions to a significant extent, as may CO₂ capture and sequestration strategies.

RECOMMENDATIONS

Strategy

The use of fossil fuels must be progressively reduced. Clean fossil technologies should be developed and deployed soon. In addition to improving electric generation efficiency, implementing carbon capture and storage, there are a number of alternative clean energy supplies that must be vigorously pursued.

Solar energy is an inexhaustible and pollution-free resource. This potential should be extensively developed.

Nuclear energy should be further developed and research efforts on related technologies should be pursued.

The potential of plant biomass, particularly agricultural and forestry coproducts and vegetable waste should be developed. The use of marginal and abandoned land for industrial crops should be exploited to minimise conflicts with food production and new technologies for plant breeding should be used.

Wind, water and geothermal sources need to be developed wherever natural conditions permit.

Each nation state should develop a portfolio comprising a range of different energy sources.

In view of its likely effects as a greenhouse gas, CO₂ emissions must be aggressively reduced.

Policy

Governments should give top priority to the problems of energy and sustainability and promote substantially investments in scientific research and the development of new and advanced technologies. Investments in such R&D could be self financing from revenue raised from auctioning permits or from a carbon tax.

International energy agencies, driven by scientific authority, must have a stronger impact on world policies. Governments should initiate and pursue an effective program of energy efficiency. Even small incremental contributions to efficiency can accumulate and have a significant impact on both our energy need and the environment.

Public awareness and acceptance of the implications of lifestyle, especially in the field of transportation, must be encouraged worldwide, without infringing the rightful aspirations of developing nations.

The international, global dimension of these issues must be recognized and steps taken to help every nation in the world to make the appropriate transitions.