

Parliamentary Assembly Assemblée parlementaire

Strasbourg, 1 March 1991 AAS14.42 Restricted AS/Science (42) 14

## COMMITTEE ON SCIENCE AND TECHNOLOGY

## PRELIMINARY DRAFT RESOLUTION

on renewable energy sources and solar hydrogen

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1. The Assembly notes with concern that world energy supply is heavily dependent on fossil fuels of which there are limited reserves unevenly distributed over the planet. The concentration of nearly 60 % of the world's oil reserves in the Middle East is a permanent threat to peace in that region.

2. Among human activities the burning of fossil fuels is the main responsible for the increase of carbon dioxide concentration in the atmosphere and therefore it is also one of the main contributors to the man induced greenhouse effect. Burning fossil fuels also releases pollutant gases such as SO<sub>2</sub> and NOx.

3. The Assembly considers that the use of nuclear energy will remain restricted for as long as waste disposal and security problems are not considered to be satisfactorily solved. On the other hand nuclear energy production requires highly advanced technology and administration and therefore it does not seem likely that it will play a significant role in the energy supply of countries with a less developed economic infrastructure. AS/Science (42) 14

4. In theory, the potential of renewable energies is more than enough to meet the needs of mankind. World energy consumption in one year is equivalent to the solar radiation that reaches the earth in only 45 minutes. This energy can be used either by converting direct solar radiation into heat or electricity or through atmospheric winds, ocean thermal energy, hydropower or biomass. Other renewable energy sources are the waves (ocean kinetic energy) and geologic heat (geothermal energy). It should be noted that renewable energies produce less impact on environment and human health than fossil or nuclear energy. No difficulties arise from waste or reactor accidents and there are no traces of gas which are harmful to the earth's atmosphere. Irreversible global damages do not arise

5. The Assembly believes that energy policy should be linked to environment policy and therefore energy conservation through the efficient use of energy and the gradual replacement of traditional energy sources with renewable energies should be among the goals of any sound energy policy.

6. It notes however that renewable energies have not been a priority in European research and development budgets in the field of energy. Indeed R & D in renewables have stagnated or decreased in many European countries since 1981 despite its contribution to the solution of many technical problems, the reduction of a number of uncertainties and the establishment of solid technical basis.

7. Therefore, in order to prepare for a sound long term energy policy that would secure energy supplies, protect and improve the quality of the environment and ensure a rational utilisation of natural resources, the Assembly calls on member states to :

i. pursue, in particular through the continuation of present efforts, research, development and demonstration programmes at national and international levels, and periodically assess them from the techno-economic point of views, in relation to market potential;

ii. review priorities for further development of renewable energy and energy saving technologies, in coordination with European and international organisations and focus on those which seem most promising, considering each country's resources and constraints;

iii. compile national inventories of renewable energy resources and disseminate these inventories as widely as possible at international, national, regional and local levels ;

iv. promote cooperation among industries producing equipment for the exploitation of renewable energy sources and promote the transfer of technology and cooperation between small and medium enterprises to facilitate their adjustment to potential demand ;

v. promote the transfer of technology between industrialised and Third World countries in particular through the establishment of an International Solar Energy Agency (ISEA) which would promote and coordinate international non-commercial technology transfer as recommended by the General Assembly of the United Nations in November 1990; vi. guarantee tariffs for the supply to the distribution network of energy generated by private enterprises from renewable sources in the light of Italian and German legislation in force since 1 January 1991;

vii. consider the introduction of technologies for the use of renewable energies in private homes, small and medium sized enterprises, agricultural facilities, etc. through financial subsidies and tax benefits;

viii. ensure that in public investment the possibility of using renewable energy and energy saving measures is taken into account ;

ix. introduce, where appropriate and necessary, legislation and/or administrative procedures which would help to overcome, on a non-discriminatory basis, obstacles to the exploitation of renewable energy sources;

x. increase taxes on the use of energy from conventional sources to take account of the effects of such energy on the environment and human health ; national policies in this respect should be coordinated at international level (e.g. agreements regarding  $CO_2$  emissions);

xi. ensure that information on renewable energy and energy saving technologies is widely circulated among those who could best develop their utilisation either as producers or consumers of energy;

xii. ensure that the teaching of renewable technologies is included in the cirrucula of the appropriate university or other post-secondary level studies (e.g. solar passive design in architecture).

8. The Assembly instructs its Committee on Science and Technology to consider energy policies and prospects in Europe and the world, to take account of the work of international organisations in the field of energy and to propose guidelines and measures for a comprehensive long-term energy policy.