Parliamentary Assembly
Assemblée parlementaire
https://pace.coe.int

COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

**Resolution 1435 (2005)**[1]

# Energy systems and the environment

Parliamentary Assembly

1. As worldwide concern for air pollution and climate change increases, the Parliamentary Assembly recognises that the environmental impact of energy production, transport and use should be given greater attention.

2. Fossil fuels (oil, coal and gas) have serious environmental consequences. They generate greenhouse gases, which contribute to global warming and fine particle pollution. In addition to the issue of the security of supplies, such energy sources are depleting rapidly without any possibility of natural replenishment.

3. Modern nuclear power plants, envisaged by certain European states as a possible medium-term solution, avoid increasing air pollution (greenhouse gases and fine particles) but still entail the hitherto unresolved problem of the processing and storage of radioactive nuclear waste. Therefore, an urgent assessment of the long-term safe storage of spent fuels and other forms of nuclear waste produced in the greater European area needs to be undertaken by European states.

4. The dire situation of the Chornobyl sarcophagus, or "Shelter" facility, is of particular concern as it contains some 200 tonnes of nuclear fuel that remained after the accident at reactor 4 of the Chornobyl nuclear power plant. The same can be said of the dangerous conditions in which 1 800 tonnes of waste nuclear fuel unloaded from the plants' other three reactors are now kept in provisional storage on the premises of the Chornobyl nuclear power plant.

5. Furthermore, accidents, whether natural, technological or caused by acts of terrorism, may have disastrous consequences for population safety. The risk of radioactive contamination may also be detrimental to the image of quality farm and food products from areas in the vicinity of nuclear power plants.

6. Renewable sources of energy (for example, biomass, geothermal, hydropower, solar, wind, tidal and wave energy, etc.) may provide a solution to the issue of sustainability and may offer, in the long run, a viable alternative to conventional energy production systems. Targets for increasing the share of renewable energies have been set in the European Union, although recent information indicates that they will not be achieved by the deadline of 2010.

7. The Parliamentary Assembly considers that the benefits of renewable energies for the environment should be assessed separately.

8. A significant reduction of greenhouse gas emissions, which are mainly caused by the transport sector, is needed in order to mitigate climate change. Bearing in mind the increase of energy production, the targets of the Kyoto Protocol (United Nations Framework Convention on Climate Change) will be even more difficult to achieve without tackling the environmental impact of current energy sources.

9. In addition to climate change, the other main hazard linked to energy production is fine particles caused by combustion power plants and combustion engines (in particular diesel). When reducing greenhouse gas emissions, reducing the emission of fine particles should also be considered.

---

1. Assembly debate on 26 April 2005 (11th Sitting) (see Doc. 10486, report of the Committee on the Environment, Agriculture and Local and Regional Affairs, rapporteur : Mr Etherington). Text adopted by the Assembly on 26 April 2005 (11th Sitting).

10. Environmental risk concerns are increasingly taken into account when planning energy policies as far as production, transport and use are concerned and are bound to become determinant when addressing environmental issues. In order to make correct decisions regarding energy issues, decision makers need accurate information on the environmental hazards and risks that different energy systems may entail. Therefore, there is a strong need for a standardised method for assessing environmental hazards and risks.

11. The Parliamentary Assembly therefore invites member states to take urgent action to decrease the environmental impact of energy production, transport and use, in particular by :

*technological measures :*

*a. gradually reducing dependence on fossil fuels and ensuring a secure and sustainable energy supply, through options such as further developing renewable energies and the setting of coherent targets at pan-European level, taking those of the European Union into account ;*

*b. working towards achieving the emission reduction targets for greenhouse gases set in the Kyoto Protocol with special attention to the energy, industry and transport sectors ;*

*c. gradually implementing modern technologies in producing energy from fossil fuels (for example, "clean coal technology" (CCT) or co-generation – the recovery of heat generated during electricity production) without jeopardising policies on waste reduction, sorting and recycling to which priority must continue to be given ;*

*d. encouraging research and development in the field of nuclear waste management to minimise its environmental impact ;*

*e. encouraging any action to secure nuclear power plants against the risks of radioactive emissions as a result of natural or technological accidents or acts of terrorism or of war ;*

*f. supporting research and development in the field of nuclear fusion to gradually replace current fission-based nuclear power plants ;*

*g. promoting and implementing in all possible areas (industry, transport, household, etc.) environmentally-friendly technologies with increased energy efficiency and further encouraging research and development, particularly in the fields of energy use in the transport and building sectors ;*

*fiscal measures :*

*a. integrating environmental costs into energy pricing ;*

*b. integrating the environmental costs of the transport sector into fuel pricing ;*

*c. allocating a share of the revenue from energy taxes to research and development on clean technologies and renewable energies ;*

*d. developing a system of tax credits, grants and other fiscal incentives in order to encourage environmentally-friendly energy investments ;*

*educational and public information measures :*

*a. providing clear information on the environmental cost of using household electrical appliances in order to allow consumers to take informed and environmentally responsible decisions ;*

*b. developing education and awareness-raising programmes and initiatives on environmentally-friendly energy options and energy efficiency (schools, media, etc.) ;*

*c. providing information on energy options specially targeted at decision makers.*

12. The Assembly invites member states to strengthen co-operation between the authorities responsible for energy policies and those responsible for the environment with a view to facilitating the implementation of the above-listed measures.

13. The Assembly invites member states which use nuclear energy to respect the decision of other states which, in accordance with the precautionary principle, have decided against it in order to increase the level of public safety by avoiding siting nuclear power plants close to their borders so as not to expose the public in neighbouring states to any danger in the event of an accident.

14. It invites, in particular, central and eastern European countries to further enhance their energy efficiency, safety and industrial restructuring, to diversify and decentralise their energy sources and to reduce their energy consumption.

15. The Assembly invites the European Environment Agency, in co-operation with the International Energy Agency (IEA), to consider elaborating a standardised method to assess the environmental impacts of different energy systems.

16. The Assembly calls upon the European Bank for Reconstruction and Development (EBRD) and the International Atomic Energy Agency (IAEA) to urgently review the issue of intensifying work on the construction of the New Safe Confinement structure over the damaged "Shelter" facility, as well as putting the new depository for the safe storage of waste nuclear fuel in the vicinity of the Chornobyl nuclear power plant into operation as quickly as possible.

17. It also invites the IEA to continue its work on climate-friendly technologies and stresses the importance of focusing on topics such as renewable energies, energy efficiency and new carbon capture and storage technologies.

18. The Assembly fully supports the European Union's commitment to promote environmentally-friendly energy choices, as illustrated by its Intelligent Energy – Europe programme on energy efficiency and renewable energy sources (including the SAVE, ALTENER, STEER and COOPENER programmes) and invites all Council of Europe member states to develop similar initiatives at the national level in order to achieve a coherent pan-European approach.

19. The Assembly notes with interest current debates to set up an Energy Community of South Eastern Europe (ECSEE), led by the European Commission and supported by a number of donor agencies including the World Bank, EBRD and the European Investment Bank (EIB), and encourages its members to pay full attention to environmental aspects.