



Recommendation 1520 (2001)¹

Technological possibilities for fulfilling the targets of the Kyoto Protocol (to the United Nations Framework Convention on Climate Change)

Parliamentary Assembly

1. The Kyoto Protocol to the United Nations Framework Convention on Climate Change was signed with the aim of mitigating the climate change. The signatories have committed themselves to reducing their average annual greenhouse gas (GHG) emissions from their 1990 level by about 5% for the period 2008-2012, calculated as an average over these five years. The Kyoto Protocol is only the first step, since, according to the climate experts, emissions should be reduced by between 60% and 80% in the following decades to bring the rate of climate change to an acceptable level.

2. The European Union countries and other member states of the Council of Europe have committed themselves to an average reduction of 8%. By 1995 or 1996, emissions of the principal GHG, carbon dioxide, had decreased from the 1990 level in Germany, the United Kingdom, Luxembourg and in many transition countries. However, they have increased in the remaining European Union countries; a continued increase is forecast until 2010. The efforts already undertaken in the OECD countries to sever the link between the growth of gross national product and the additional production and use of electricity should be increased. Thus the fulfilment of the Kyoto agreement is a great challenge and all available means must be used to this end.

3. The World Health Organisation (WHO) has pointed out that as well as reducing GHG emissions from energy production, fine-particle emissions also need to be reduced. Fine-particle emissions are generated by the combustion of fossil fuels and biomass and are carried beyond the borders of the producing country over distances of thousands of kilometres as an almost even carpet of air pollution. The fine particles penetrate directly into the lungs, causing allergies, cardiovascular and respiratory diseases and cancer. WHO estimates that fine-particle emissions cause over 100 000 deaths in Europe each year.

4. The Assembly, reiterating its [Recommendation 1390 \(1998\)](#) on fine-particle emissions and human health, consequently recommends that the Committee of Ministers advise the member states of the Council of Europe to implement the Kyoto Protocol and to reduce fine-particle air pollution by:

4.1. implementing all possible means to save energy, whether this be the development of technological and scientific capabilities, the introduction of taxes on certain energy sources, or other initiatives aimed at changing the practices of the different consumers;

4.2. improving the energy efficiency of existing power plants and building new plants to state-of-the-art level;

4.3. enhancing, where coal is used as the source of energy, the use of clean-coal-technology in coal combustion plants, so that energy efficiency can be improved and fine-particle emissions reduced;

1. Text adopted by the Standing Committee, acting on behalf of the Assembly, on 23 May 2001 (see [Doc. 8810](#), report of the Committee on Science and Technology, rapporteur: Mr Tiuri; and [Doc. 9040](#), opinion of the Committee on the Environment and Agriculture, rapporteur: Mr Martínez Casañ).



- 4.4. encouraging if possible, where fossil fuels are used, the use of natural gas in place of other fossil fuels since natural gas plants generate only half the carbon dioxide emissions of coal power plants and one-third of fine-particle emissions;
- 4.5. increasing the amount of combined heat and power co-generation (CHP), so that total fuel efficiency can be almost doubled;
- 4.6. re-examining the use of nuclear power by comparing its risks to the risks of other energy sources;
- 4.7. ensuring that transport policies, while contributing to the balanced development of the European area, are in keeping with the rationale behind the aims of the Kyoto Protocol, and therefore place the emphasis on a shift from road to rail transport and on intermodal transport;
- 4.8. promoting the use of cars with three-way catalytic converters to reduce fine-particle emissions;
- 4.9. encouraging research and the development of alternative technologies to the traditional combustion engine in the traffic sector;
- 4.10. re-examining, with a view to reduction or abolition, the subsidies to fossil fuels which contribute to the maintenance of a high level of GHG; and taking the appropriate economic action to promote the production and use of renewable energy sources and to improve their competitiveness.