

Brussels, 10 January 2007

## **Limiting Global Climate Change to 2 degrees Celsius**

### **Summary**

The Communication, a key element of the Commission's new energy and climate change strategy, sets out proposals for action by the EU and the rest of the international community to prevent global climate change from irrevocable consequences. This means limiting global warming to no more than 2°C above the temperature in pre-industrial times. The Commission's central proposal is that, under a future global agreement, the group of developed countries should cut their emissions of CO<sub>2</sub> and other 'greenhouse gases' responsible for warming the planet to an average of 30% below 1990 levels by 2020. The EU should take the lead by committing autonomously to reduce its own emissions by at least 20% by 2020 – a cut that should be increased to 30% as part of a satisfactory global agreement. In the longer term, greater emission reductions will be necessary and developing countries will also have to be part of the global effort: worldwide emissions will need to be cut by up to half of their 1990 levels by 2050.

### **Why is action necessary?**

Climate change is among the gravest environmental, social and economic challenges facing mankind, and it is already happening. Urgent action is needed to limit climate change to a manageable level and prevent serious physical and economic damage. The Kyoto Protocol is an important first step towards cutting emissions of greenhouse gases, but its targets expire in 2012 so further international action needs to be agreed for the period after that. In the Commission's view the EU must adopt domestic measures to reduce its emissions further and take the lead internationally to ensure that the 2°C global warming limit is respected.

### **Who is the Communication addressed to?**

The Communication is addressed to the Spring European Council taking place on 8-9 March in Brussels. This summit of EU leaders should decide on a comprehensive approach to the EU's energy and climate policies. Their decisions on the next steps in EU climate change policy will need to facilitate the efforts under way to reach a new global agreement on reducing the world's greenhouse gas emissions after 2012. The Communication will first be discussed by EU Environment Ministers, meeting on 20 February in Brussels.

## **What are the key elements of the Commission's proposals?**

- Limiting global warming to 2°C is both technically feasible and economically affordable if the international community acts swiftly. As reaffirmed by the recent Stern Review of the economics of climate change, the benefits of taking action to limit global warming far outweigh the costs of reducing greenhouse gases. Delaying action will only increase economic costs and physical damage from climate change in the long run.
- A 30% cut in developed country emissions by 2020 is an essential step towards the longer term objective of reducing global emissions by as much as 50% below 1990 levels by 2050. A reduction on this scale is needed to meet the 2°C objective, which in turn should prevent massive and irreversible disruption of the global climate system.
- The EU should continue to take the lead by committing autonomously to reduce its own emissions by at least 20% below 1990 levels by 2020. This figure should be increased to 30% as part of a satisfactory global agreement on reducing worldwide emissions after 2012. The measures foreseen in the Strategic EU Energy Review, together with others already in place, will deliver an important part of the EU's reduction.
- Developed countries should continue to shoulder most of the global effort to reduce emissions over the next decade or so, as they are already doing under the Kyoto Protocol. However, keeping global temperatures within the 2°C temperature limit will also require action by developing nations. They should start to slow the rate of growth in their emissions as soon as possible, and then reduce their emissions in absolute terms from 2020-2025 onwards. Many options are available for cutting emissions in developing countries that would deliver immediate economic and social benefits and would not affect their pursuit of economic growth and poverty reduction.
- To control climate change effectively it will also be essential to halt tropical deforestation completely within the next two decades and then reverse it through afforestation or reforestation schemes. Deforestation currently contributes around 20% of global greenhouse emissions, more than transport. Discussions are taking place under the UN climate change convention aimed at creating appropriate incentives for reducing deforestation.
- Company-level emissions trading schemes such as the EU Emissions Trading Scheme (EU ETS) will be a key tool to ensure that developed countries can reach their future targets cost-effectively. The international framework for combating climate change after 2012 should enable comparable trading schemes in different regions to be linked together. In this way the EU ETS would be the pillar of a global carbon trading network. The scope of the Kyoto Protocol's Clean Development Mechanism should be expanded after 2012, for instance to cover entire national sectors rather than individual projects.

## **How will the EU achieve these emissions reductions?**

The Communication identifies a range of measures to reduce EU emissions further, including:

- Improving the EU's energy efficiency by 20% by 2020, in line with the Energy Efficiency Action Plan announced by the Commission in October 2006
- Increasing the share of renewable energy to 20% by 2020
- Putting in place an environmentally safe strategy to promote the industrial use of carbon capture and storage technology
- Strengthening and expanding the EU emissions trading scheme
- Limiting emissions from transport through action focusing eg on cars, civil aviation and transport fuels
- Reducing CO<sub>2</sub> emissions from other sectors, eg residential and commercial buildings, and emissions of other greenhouse gases from a range of different sources
- Significantly increasing the EU budget for climate, energy and transport research again after 2013, as has been done for the Community's Seventh Research Framework Programme (2007-2013).