

Background note for the public consultation

Roadmap for a low carbon economy by 2050

Climate change is one of the biggest challenges we face. The average global temperature is already almost 0.8°C higher than the climates of the pre-industrial period. There is a broad scientific consensus that global warming must be kept below 2°C to avoid the most dangerous consequences of climate change.

Last year, countries representing over 80% of global emissions signed the Copenhagen Accord which made it clear this limit was essential to avoid or at least mitigate dangerous impacts of climate change.

To achieve this aim of keeping global temperature increases below 2°C every country across the globe will have to move rapidly towards a low-carbon development pathway. In particular, developed countries will need to have cut their emissions by 80-95% by 2050.

The EU is leading the way in sustainable emissions' reductions. Collectively the Member States decided in 2008 to cut their greenhouse gas emissions to at least 20% below 1990 levels by 2020, together with meeting 20% of their energy needs from renewable sources and moving towards 20% energy efficiency improvements. The EU has also put in place a binding policy framework that ensures that, as a whole, it will deliver these major goals.

Moreover the EU is ready to scale up its efforts to 30% emission cuts by 2020, provided other industrialised countries commit to comparable emission reductions and developing countries contribute adequately to the global effort in GHG reductions. Last May the EU issued an analysis of the implications of a move to 30% in the new economic circumstances and after the international agreement signed in Copenhagen. This study revealed options for further emission reductions by 2020, reduce the EU's reliance on foreign oil and gas and make it easier for Europe to meet its longer-term emission reduction goals.

In tackling climate change the EU is implementing policies which are both cost-effective and fair, enabling it to realise the optimal benefits in terms of growth and jobs, alongside the environmental gains. Indeed the EU Climate and Energy Package is already boosting employment in fast-growing low carbon sectors.

By taking the lead in building a low carbon economy, the EU will be able to realise the advantages of being the first to move into the emerging low-carbon marketplace. The global market for low carbon technologies is predicted to be very large and low carbon innovation is expected to deliver additional benefits for economic productivity.

We have just borne witness to an economic crisis of unprecedented scale. It has placed huge pressures on businesses and communities across Europe, as well as

stretching public finances to their limit. But at the same time as measures to encourage a green recovery are delivering benefits, low-carbon sectors are thriving in some of the most dynamic regions of the world, confirming that there are real opportunities within Europe for building a resource efficient society.

Moreover, realising the decarbonisation of our energy and transport sectors will decrease the EU's dependence on imported oil and gas, increasing our resilience to volatile global energy prices and uncertain supply chains.

In the first half of 2011, the Commission intends to submit a Communication on the development of a *Roadmap for a Low Carbon Economy by 2050* to the Council and the European Parliament, outlining a strategy to enable and steer the transition. The roadmap will explore the most effective options for "decarbonising" the European economy. It will contain an analysis of milestones on the pathway to 2050, including the necessary scenarios of the ambition level for 2030 reflecting the contributions from key emitting sectors. It will assess ways to maximise benefits in terms of stimulating technological innovation, economic growth, job creation and strengthening the energy security within the EU.