## The new energy and climate package of the European Commission – 20% renewables in the European Union by 2020 - kicking off Carbon Capture and Storage

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On 9 March 2007, the EU Heads of State have agreed on a comprehensive package of measures to establish a new integrated climate change and energy policy to combat climate change and boost the EU's energy security and competitiveness. as proposed in the Commissions' Communications of 10 January 2007 "Limiting Global Climate Change to 2° Celsius: The way ahead for 2020 and beyond" and "An Energy Policy For Europe". Key features of this new EU policy are:

- Reducing greenhouse gas emissions from developed countries by 30% by 2020 in the framework of an international agreement
- Committing the EU independently to reduce greenhouse gas emissions by 20% by 2020 even in the absence of an international agreement
- Improving energy efficiency by 20% by 2020
- Raising the share of renewable energy to 20% by 2020
- Increasing the level of biofuels in transport fuel to 10% by 2020

As outlined in a Renewable Energy Roadmap<sup>1</sup> the EU sets a binding target of increasing the level of renewable energy in the EU's overall mix from less than 7% today to 20% by 2020. This will involve a massive growth in all three renewable energy sectors: electricity, biofuels and heating and cooling.

Coal and gas account for 50% of the EU's electricity supply. Much cleaner coal generation and  $CO_2$  abatement will be necessary. Developing clean coal and carbon capture and geological storage is crucial also at the international level: the IEA expects twice more electricity to be produced from coal by 2030. To provide global leadership, the EU will provide a clear vision for the introduction of  $CO_2$  capture and geological storage in the EU, establish a favourable regulatory framework for its development, invest more, and more effectively, in research, as well as taking international action. The EU Emissions Trading System will also need to incorporate capture and storage in the future. Key measures will be:

- Create enabling legislation for the safe and environmentally sound operation of carbon capture and geological storage.
- Design a mechanism to stimulate the construction and operation by 2015 of up to 12 large-scale demonstrations of sustainable fossil fuels technologies in commercial power generation.
- Provide a clear perspective when coal- and gas-fired plants will need to install CO<sub>2</sub> capture and storage. On the basis of existing information, the Commission believes that by 2020 all new coal-fired plants should to be fitted with CO<sub>2</sub> capture and storage and existing plants should then progressively follow the same approach.
- Co-operate with partners from 3<sup>rd</sup> countries on CCS.

Communication from the Commission to the European Parliament and the Council: Renewable Energy Roadmap: Renewable Energies in the 21<sup>st</sup> century; building a sustainable future - COM(2006) 848.