

UK-China Near Zero Emissions Coal Initiative

CCS technologies have a critical role to play in mitigating carbon emissions and averting dangerous climate change. In order for this potential to be achieved there needs to be rapid progress made in terms of numbers of demonstration projects being developed around the world and a subsequent move from demonstration to deployment.

Against this backdrop, together with a realisation that coal will continue to be an important part of the global energy mix for many years to come, the Near Zero Emissions Coal (NZECC) initiative was announced as part of the EU-China Partnership on Climate Change at the EU-China Summit in September 2005. It was agreed that both partners would aim *“to develop and demonstrate in China and the EU advanced, near-zero emissions coal technology through carbon capture and storage”* by 2020. More recently, at the UK-China Summit 2009, both countries expressed their hope that demonstration could be achieved by 2015.

Memoranda of Understanding were signed between the UK and Chinese Ministry of Science and Technology (MOST) in December 2005, and between MOST and the European Commission in February 2006, leading to the UK-China NZECC and COACH projects respectively. Both projects are looking at options for CCS in China, although COACH focuses specifically on polygeneration, and will be completed in Autumn 2009.

The UK-China NZECC project is managed by AEA for the Department of Energy and Climate Change, and includes a range of Chinese and European partners working around the themes of (1) knowledge sharing and capacity building; (2) future technology perspectives; (3) case studies for carbon dioxide capture; (4) carbon dioxide storage potential; and (5) policy assessment.

The project was launched by Vice-Minister Liu Yanhua and Deputy Head of the British Embassy, Barbara Woodward, in November 2007. Considerable progress has been made since the project's start in April 2008, both in terms of building important evidence on more technical issues, and in strengthening relationships between Chinese and European CCS experts. Of particular note are capacity building activities which have included a workshop for Chinese storage experts hosted in the UK by the British Geological Survey; a CCS study tour in the UK and Europe [in March 2009] for Chinese policy makers to learn about CCS in a European context including through visiting a pilot plant and talking to key experts in industry and government; and arranging for Chinese students to study in UK academic institutions with particular expertise in CCS.

As regards the broader set of activities, final results will be made available in Autumn 2009. This will include a final report exploring options to help shape and drive the activities necessary for establishing CCS in China, with an emphasis on moving towards an NZECC demonstration. It is intended that the final report will be launched at an event in Beijing in November 2009. More details of this launch event will be made available at www.NZECC.info, which also provides further details of the UK NZECC initiative. More information on the COACH project can be found at www.co2-coach.com.