

# Near Zero Emissions Coal study launched in Beijing

November 20 2007

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China's CO<sub>2</sub> emissions from using coal are set to double by 2030, the scale of which is significant in the context of mitigating global climate change. In view of the essential role of coal in China's energy system, it is vital to minimise emissions where coal is used.

The British Geological Survey (BGS) attended the launch of the Near Zero Emissions Coal (NZEK) Phase 1 study in Beijing, China today. The aim of this study is to look at the feasibility of building coal fired power plants in China fitted with CO<sub>2</sub> capture and storage (CCS). NZEK implements the vision of realising a large scale Near Zero Emissions Coal demonstration in China as agreed at the EU-China Summit in September 2005.

Dr. Nick Riley MBE, Head of Science for Energy at BGS said: "CCS offers the opportunity to reduce emissions per unit of electricity by 85 - 90%. Large-scale deployment of CCS in China has potential to significantly reduce future greenhouse gas emissions".

The geotechnical aspects of the research will involve selecting strategic sedimentary basins to be mapped for potential regional CO<sub>2</sub> storage assessments (geocapacity), followed by more detailed assessment of sites potentially suitable for a demonstration of CO<sub>2</sub> storage in China linked to a demonstration of CO<sub>2</sub> capture from a coal-fired power station. A Geographical Information System (GIS) linking current and planned large CO<sub>2</sub> point sources to potential geological storage options (source-sink matching) will be constructed.

BGS and the China University of Petroleum (Beijing) lead the CO<sub>2</sub> geological storage part of the study, which also includes working in close partnership with Heriot Watt University, BP & Shell (UK) and the China University of Petroleum (HuaDong), Institute of Geology and Geophysics Chinese Academy of Sciences (CAS), Tsinghua University, PetroChina, Jilin Oilfield and China United Coalbed Methane Corp (CUCBM). NZEC is funded by the UK Government through Defra and DBERR and is co-ordinated by AEA Energy & Environment (UK) and ACCA21 (China).

Source: British Geological Survey

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