China Deep Dive
BP activities and areas of Interest

11th February, CMI Annual Meeting, Princeton University
CCBU is actively looking at various opportunities to participate in "Clean Coal" activities in China, we see CCS as a key enabler to this in the short / medium term and seek to build on our previous experiences in the area.

We are actively engaged in various activities in China such as the BP Clean Energy Centre, Energy Innovation laboratory and Clean Energy Commercialization Centre looking to develop and find opportunities to use Clean Coal Technologies.

At Tsinghua, the BP Clean Energy Centre is one of the leading centres in China for developing real CCS capability in China. The CEC/Tsinghua is:

- Writing the draft policy and regulations for CCS in China (joint project with US and WRI, steering committee includes Shenhua, Petrochina, Greengen and other China experts, draft due in a few months) – BP is supporting this
- Mapping the sites and sinks in China and characterizing them to fit into an economic model of CCS projects in China
- Systems modelling of coal conversion systems for lowering cost of capture, transport and injection
- Working directly with Shenhua and Petrochina for EOR based CCS from the Majiata DCL plant (Petrochina wants this to be 1 MM tpa CO2)
- We are currently evaluating the opportunities for CCS in various locations in China specifically associated with Major Coal mining activities, to better understand the options for CCS on overall project economics.

- We are coordinating work aimed at understanding the costs of various CO2 reduction technologies in an integrated Coal To Products complex. As one example, we are working on a project at Tsinghua and a Chinese Design Institute (Huanqiu) to incorporate low carbon energy (windpower/nuclear/electrolysis) into coal conversion for much lower CO2 emissions.
BP is a core participant in the Coach project. This EU funded project is focused upon identifying options for a demonstration of CCS from a polygeneration plant (Power and methanol as products). The geographical focus of this is the Bohai Basin. The project is due to conclude in Q3 2009.

BP is a core participant in the UK funded NZEC project. The focus of the current phase of this project is to create a set of options for CCS from coal based power generation in China. The geographical focus for storage is the Songliao, Jilin and Subei Basins. The current phase is due to finish in Q3 2009.

BP has participated in the GeoCapacity project. This EU funded project has been focused upon storage screening in Hebei province. The project has just concluded.

The current phases of Coach, NZEC and GeoCapacity is aimed at generating viable CCS options for demonstration. The output from the three projects is expected to be combined into a second phase of activity to select an option for a demonstration project. As yet no consortium has formed to address the second phase of work. A third phase of work would build the plant.