

COACH Other = **Near Near Emissions Coal** Assessment

UK

UK Phase 1 Assessment

Overall Objective

Identify <u>early opportunities</u> for demonstration coal-fired power generation with CCS with potential for <u>rapid deployment</u>.

Opportunities presented as 'real' case studies complete with technoeconomic analysis on consistent and China specific basis.

Identification of **barriers to deployment and gaps in knowledge**.

Considering replicability in China for each technology/region considered.

WP1. Country wide assessment of emissions sources and of coal related CO2 emissions.

WP2. High-level characterisation of <u>~5 regions</u> with high storage potential.

WP3. Techno-economic analysis of demonstration case studies.

WP4. Reporting and dissemination activities

WP1. Country wide assessment of emissions sources and of coal related CO2 emissions.

Aim: EU-China agreed projections on emissions trajectory and sources. Develop and improve emissions projections from IEA WEO 2004.

Focus: Update IEA GHG R&D data base on point sources, building on APEC work 2005

Challenge: Data Access, State through to Govt level.

Duration: 6-8 months for initial output, follow up work to keep estimates current for final assessment report.

WP2. High-level characterisation of ~5 regions with high storage potential.

Aim: Determining what is known and what needs to be known. Access to data and availability.

Focus: Identify work to be done as a matter of urgency. Storage potential to include short-term EOR and also long-term aquifer potential. Much less detail than COACH or Geocapacity studies, but will contribute.

Challenge: Data access mediated by MOST?

Duration: 6-8 months initial findings, follow-up work as appropriate.

WP3. Techno-Economic Analysis of Demonstration Case Studies

a. Generation of case study matrix from WP1 and WP2.
b. Techno-Economic Analysis of Case studies with reference to agreed criteria (Environmental, Commercial).
Focus: Adapting existing and ongoing work on economics of different capture technologies to the case studies in question. This will involve taking account of existing and new references including specific COACH work packages.
Duration: 6-8 months.

Challenge: Adaptation of economics into China specific estimates on a consistent basis.

WP4. Reporting and dissemination activities

Three month report preparation followed by a series of international workshop events to promote recommendations to wider audience.

		2007				2008			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WP1	Sources and Projections								
WP2	Regional Storage Potential								
WP3	Techno-Analytical Case Studies								
WP4	Report Preparation and Dissemination								

Contact: Dr. Matthew Webb, defra matthew.j.webb@defra.gsi.gov.uk