



Australian Government

DEPARTMENT OF RESOURCES, ENERGY AND TOURISM

Australia's CCS Engagement with China

CAGS Workshop: Beijing, 17 April, 2012



ENHANCING AUSTRALIA'S ECONOMIC PROSPERITY
www.ret.gov.au

International collaboration

- Australia is an active member of a number of multilateral forums:
 - Carbon Sequestration Leadership Forum (CSLF);
 - CCUS Action Group – through the Clean Energy Ministerial (CEM);
 - International Energy Agency (CCS Unit);
 - Global CCS Institute
 - Asia-Pacific Economic Cooperation (APEC)
- Australia - China Joint Coordination Group (JCG) on Clean Coal Technology:
 - Co-chairs are the Department and China's National Energy Administration (NEA)
 - The JCG meets annually with the 6th meeting to be held in China later this year



International
Energy Agency

Australia - China JCG

- Key Objectives:
 - Work closely together as both countries develop and deploy low emissions coal technologies.
 - Develop a targeted suite of collaborative projects across the low emissions coal commercialisation curve.
 - Hold regular meetings to reinforce communication channels between government, industry and R&D organisations from Australia and China.

Australia - China JCG



- Australia-China Post Combustion Capture (PCC) project:
 - NEA and the Department signed an MoU in December 2010
 - Agreed to cooperate to undertake feasibility study for an industrial-scale 600MW post combustion capture (PCC) project in China
 - The feasibility study will draw on up to \$12 million committed under the JCG
- Laboratory Scale R&D:
 - RET is funding six collaborative research projects which are being supported by approximately \$3 million over two financial years.

Australia – China JCG Collaborative R&D Projects

1. Integrated radar & optical satellite remote sensing for safeguarding CCS

Uni of NSW; National Research Centre [China]; China Shenhua Group

2. Assessing the value of co-optimising ECBM recovery and CO₂ storage

Uni of NSW; China Univ of Geosciences; Qinshui Lanyan Coalbed Methane

3. Chemical looping gasification of coal for zero emissions power generation

Uni of Qld; Southeast University, Nanjing; Zhejiang University, Hangzhou

4. Further dev of an aqueous ammonia PCC process for application in Australia and China;

CSIRO; Tsinghua University, Zhejiang University

5. Optimal practices for CO₂ ECBM productions for Chinese Coals

CSIRO; China University of Geosciences

6. Kinetics of steam fluidized bed drying and Oxy-CFB combustion characteristics of Victorian brown coal & Chinese lignite

Monash Uni; Shengli Energy; Kelong Pet. Chem. Equip; Liaoning Fu-an Grp

Future Opportunities for Clean Coal Cooperation

Several objectives were achieved at the 5th JCG meeting last year :

- CSIRO-CERI MoU on Clean Energy
 - MoU to broaden and build on a long standing Australia-China relationship
- Australia-China JCG Partnership Fund:
 - To provide funding for a range of activities that support ongoing collaboration between Australia and China in low emissions coal technology
- ‘Medium scale’ projects: (contracting underway)
 - PCC pilot project (CSIRO/CERI)
 - CAGS project (Geoscience Australia /MoST-ACCA21)
 - Enhanced Coal Bed Methane project (CSIRO/CUCBM)



Thank you



www.ret.gov.au

**Mr Sean Hannan
International CCS, Clean Energy Division
Department of Resources, Energy and Tourism
Sean.Hannan@ret.gov.au**