Experiences and Opportunities for CCS in China

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Outline of the presentation

- Main domestic activities
- Cooperation activities
- Experiences
- Storage potentials

Main Domestic Activities on CCS

- Several experimental EOR (Enhanced Oil Recovery) projects have been implemented in oil fields;
- Several academic institutes are doing researches on carbon capture technologies, including post-combustion and precombustion technologies;
- In 2005, the CCS technology was integrated into the National Medium- and Long-term Science and Technology Development Plan towards 2020;
- High Tech Program may support CCS technology development.

Cooperation Activities

- China and UK signed a MoU on cooperation on near-zero emission power plant through CCS. The cooperation covers: 1) Develop knowledge & expertise in CCS; 2) Assessment of CCS potential; 3) Identify opportunities for demonstration & deployment in China; 4) Review costs & economics of CCS in China; 5) Options for financing R&D.
- China and the European Commission signed another MoU on near-zero emission power generation technology through CCS. Under the MoU, three phases of the cooperation are foreseen:1) Exploring the options for zero emissions coal technology through CCS in China; 2) Defining and designing a demonstration project; and 3) Construction and operation of a demonstration project.

Cooperation Activities

Geo-Capacity (EU project)

- Coordinator: Geological Survey of Denmark and Greenland
- Total 26 partners, but Tsinghua University as the only Chinese partner.

COACH (Cooperation Action within CCS China-EU)

- Coordinator: Institute of French Petroleum
- Totally 21 partners, including 8 Chinese partners.

Experience

- Policy and financial support: domestic and international policy and financial support
- Ownership: entities of host do activities
- A consortium to implement projects: academic entities and business sector with support by government

CO₂ storage potential (very initial estimation)

- 46 oil & gas reservoirs: 7.2 billion t-CO₂
- **68** unmineable coal bed: 12 billion t-CO₂

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