

cags⁺ proposal

Dr Andrew Feitz and Dr Xian Zhang

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Australian Government
Geoscience Australia



CAGSIII

- CAGSIII funding finishes in December 2018
- Received endorsement at the Australia – China Joint Coordination Group on Clean Coal Technologies in June 2018 to explore options to continue CAGS
- Desire from both governments to continue collaboration
- Pursuing options for new project

Focus of CAGSIII

- Bilateral relationship maturing
- Scientific exchanges, especially supporting Australian researchers to gain practical geological storage experience in China (5 Australian, 5 Chinese)
- Provincial level capacity building at Xinjiang (high priority region)
- Supporting larger priority research projects, with Chinese co-funding
- Support more senior Chinese researchers to share experience in Australia



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Broaden CAGS beyond capacity building

- Propose to build on existing network and transform CAGS into the CCUS knowledge and data sharing platform for China
- Use CAGS to facilitate increased collaboration around demonstration projects in Australia and China
- Undertake joint Australian-Chinese research projects
- Use facilities in China to undertake targeted research not possible in Australia

“Building on a decade of CAGS progress to drive CCS cooperation between China and Australia forward”



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Key Challenges in China (and Australia?)

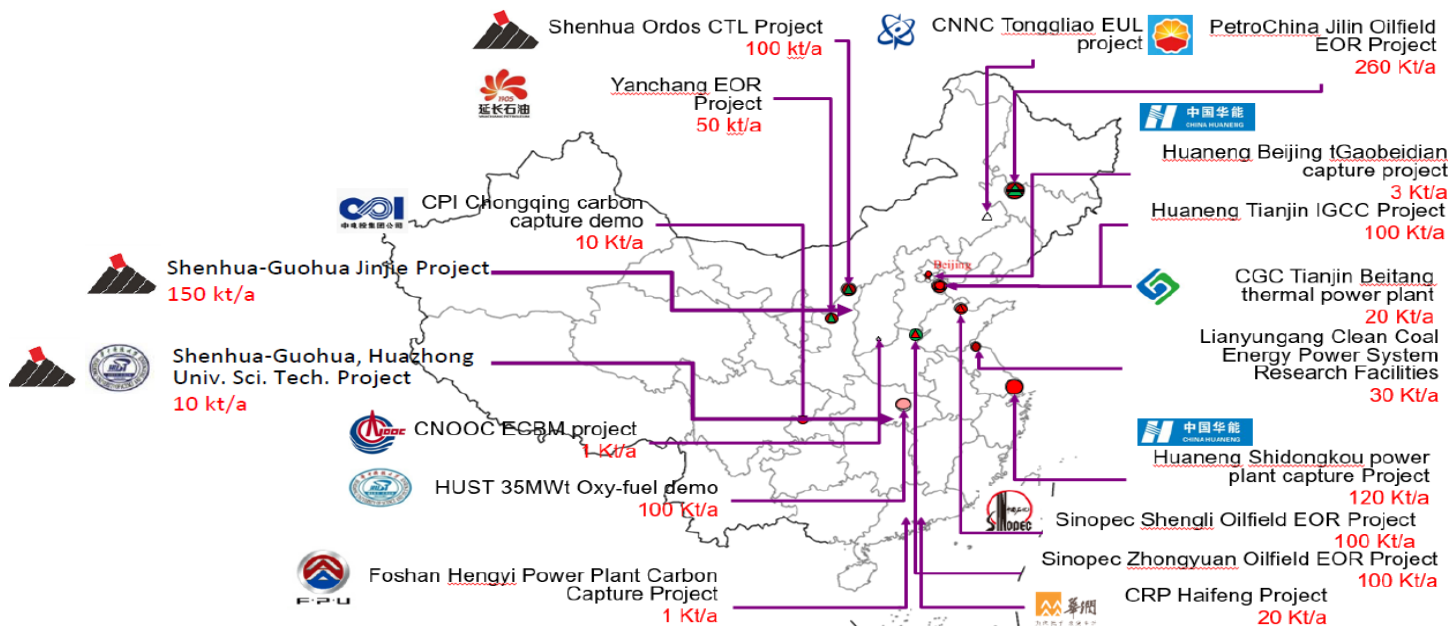
- The greatest near-term challenges for CCS research and development is financing demonstrations. Utilise existing pilots?
- How to integrate CO₂ storage with other CCUS component technologies into full-chain demonstration projects
- How to improve public acceptance for CO₂ sequestration
- Eliminate unnecessary obstacles for the deployment of CCS and CCUS systems and establish national legislative and regulatory frameworks in China
- Lack of CO₂ geological storage demonstration projects (Xinjiang EWR-CO₂?)



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Underutilised CCUS assets in China

- How to better use MOST funded CCUS assets (more than \$1billion RMB have already invested in China):



Data sharing

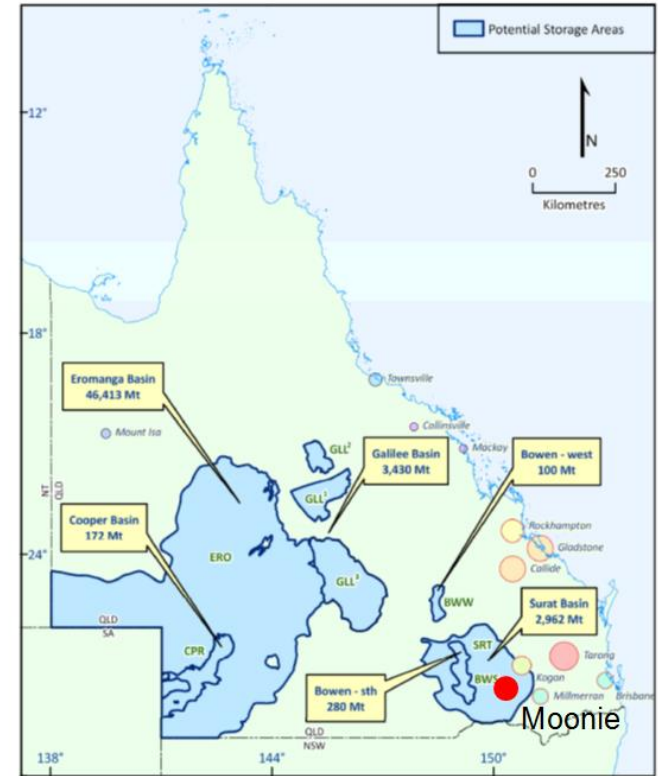
- Start to share data collected from MOST funded projects
- Potentially attract data from other Chinese CCUS projects over time
- Australia has considerable expertise and experience in open access data management

Potential CAGS involvement

- Enhance collaboration through collaborative ties, joint scientific exchanges, workshops, training schools and complementary joint research projects



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Potential joint research in China

- Potential for Australia researchers to use facilities in China to undertake joint research not possible in Australia, e.g.
 - Shenhua Ordos project (coal mining over CO₂ storage/security of storage/questions about 'locking up' mineral resources)
 - Qinghai leaky well research site to assess quantification techniques

Other research gaps?

Looking for your input and suggestions!



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Thank you!



Australian Government
Department of Industry,
Innovation and Science



中华人民共和国科学技术部

Ministry of Science and Technology of the People's Republic of China