

Department of Climate Change, Energy, the Environment and Water

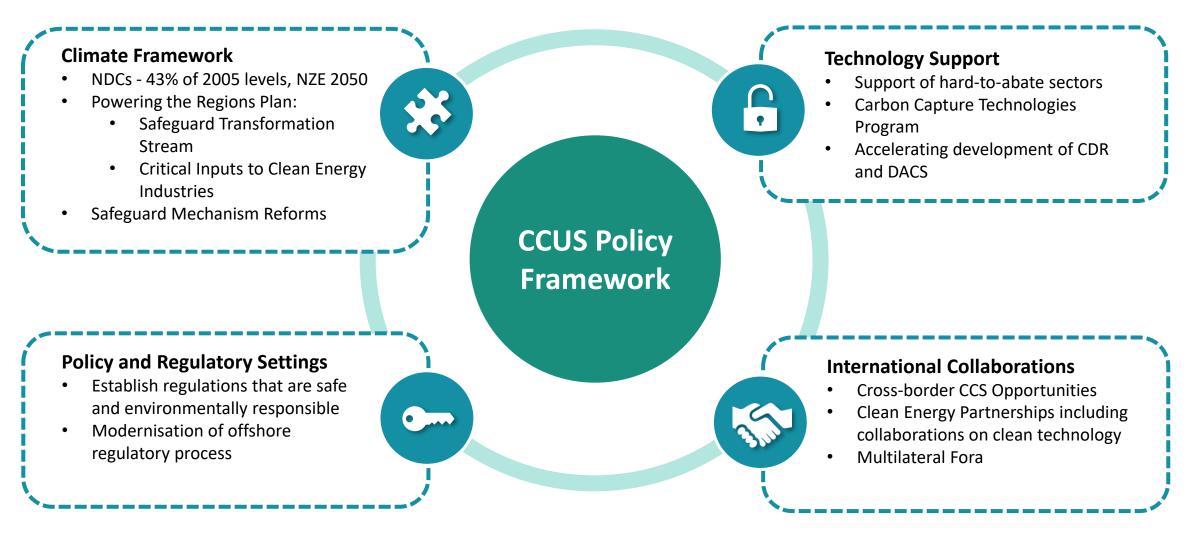
## **CCUS in Australia**

3<sup>rd</sup> Asia CCUS Network

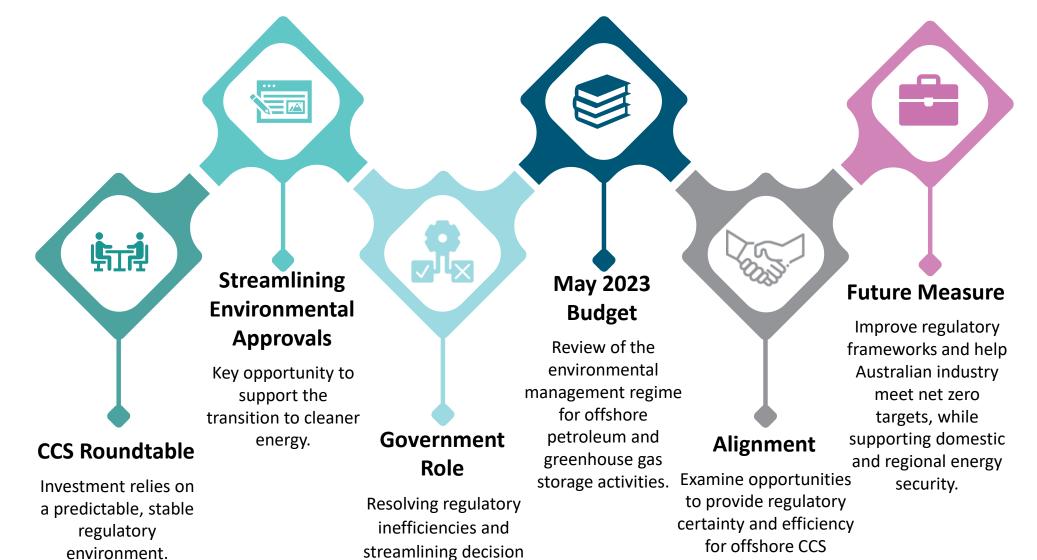
Jocelyn Taylor, Director, CCUS and Hydrogen Collaboration September 2023



## A Coordinated Approach to CCUS



## Alignment of offshore regulatory processes

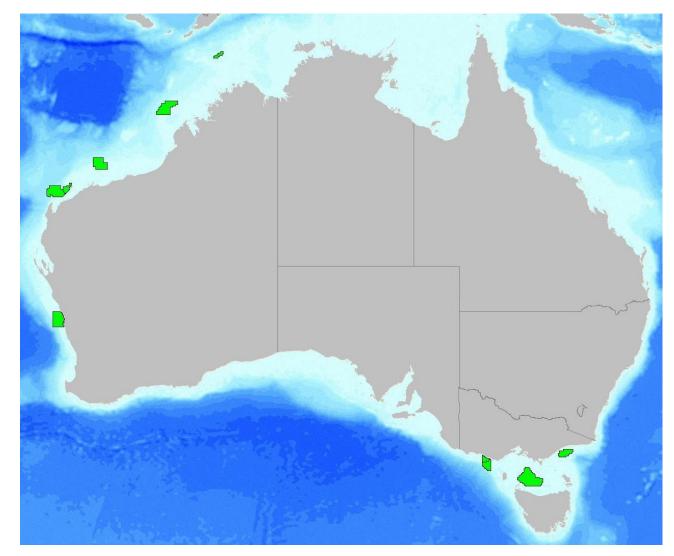


making.

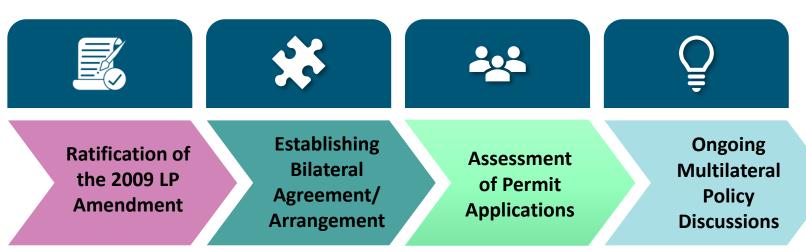
projects.

## 2023 Offshore GHG Storage Acreage Release

- The Minister for Resources announced the opening of the new release on 29 August 2023
- 10 areas are available for work program bidding
- Located offshore Western Australia, Tasmania and Victoria
- Bidding period closed 28 November 2023

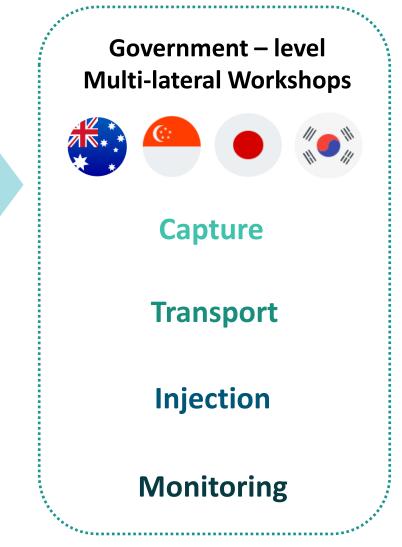


## Transboundary Movement of CO<sub>2</sub>



#### 2009 & 2013 Amendments to the London Protocol

- The Australian Government has introduced a bill to ratify these amendments:
  - 2009 Amendment: remove the prohibition to export CO<sub>2</sub> between countries for offshore geological storage.
  - 2013 Amendment: allow lacement of wastes, or other matter into the sea, for legitimate marine geoengineering research
- The Bill for amendments has passed the House of Representatives on 03 August 2023; and is now awaiting debate in the Senate, which may occur later this year.



## International Collaboration – CCUS & Hydrogen

#### **JAPAN**

- Australia-Japan Partnership on Decarbonisation through Technology
- MoC on Carbon Recycling
- Discussions on cross-border CO<sub>2</sub> policy
- Technical exchange of lowemissions technologies
- Engagement through Asia CCUS Network (hosted by Japan)



#### UNITED KINGDOM

- Australia UK Clean Technology Partnership
- Information exchange on policy, legal and regulatory frameworks and best practice
- CCUS hubs establishment via Net Zero Teesside Project

#### **Clean Energy Partnerships**

#### **REPUBLIC OF KOREA**

- Australia-Republic of Korea Low and Zero Emissions Technology Partnership
- Discussions on cross-border CO<sub>2</sub> Policy
- Technical exchange of lowemission technologies

#### **UNITED STATES**

- Australia-United States Net Zero Technology Acceleration Partnership
- Core member of MI:CDR mission
- CEM-GCCA Cement decarbonisation
- Carbon Management Challenge

#### **NETHERLANDS**

 Netherlands Memorandum of Understanding on Cooperation in the Field of Hydrogen

#### **SINGAPORE**

- Australia-Singapore MOU on Low **Emissions Solutions**
- Discussions on cross-border CO<sub>2</sub> Policy
- **Technical exchanges on CCUS** technology

#### **GERMANY**

- Australia-Germany Hydrogen Accord
- Cooperation on demonstration projects in hydrogen hubs
- Funding for new projects under HyGate
- INDIA
- Letter of Intent on New and Renewable Energy Technology
- Australia-India Green Hydrogen Taskforce

#### **Other Collaborative Partnerships**



Knowledge

Cooperation

Economic

Framework

exchange and

capacity building

under Indo Pacific









- Information exchange on policy, legal and regulatory frameworks and best practice
  - Lessons learned from cross-border CO<sub>2</sub> policy via Northern Lights Project

#### International Forums

- **Mission Innovation**
- G20 ISA Green Hydrogen Partnership ٠
- Asia CCUS Network (led by Japan) .
- **CEM CCUS Initiative** .
- **CEM Hydrogen Initiative**
- IEA GHGT
- QUAD

### Contact us

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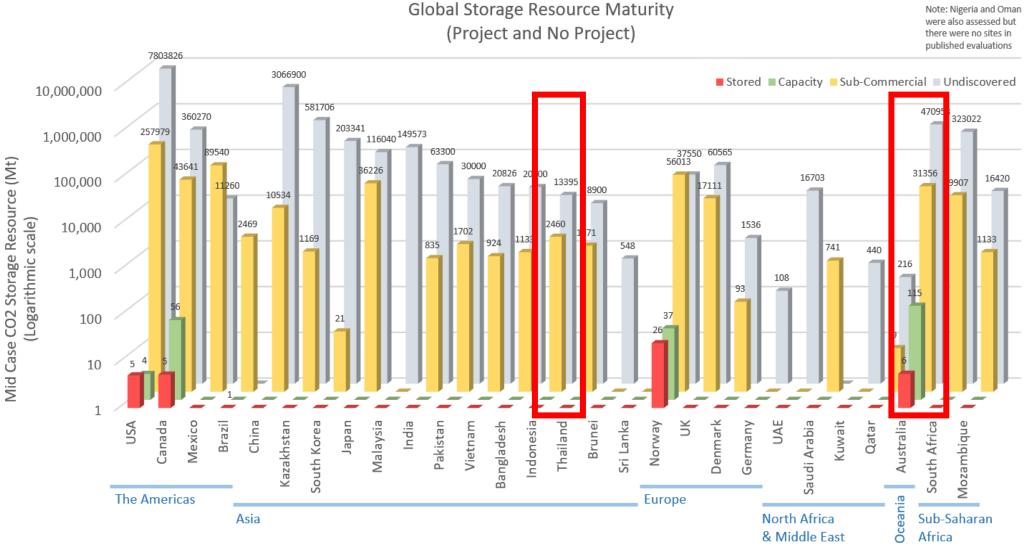
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For Panel discussion – Australia's geological storage potential slides courtesy of

Geoscience Australia

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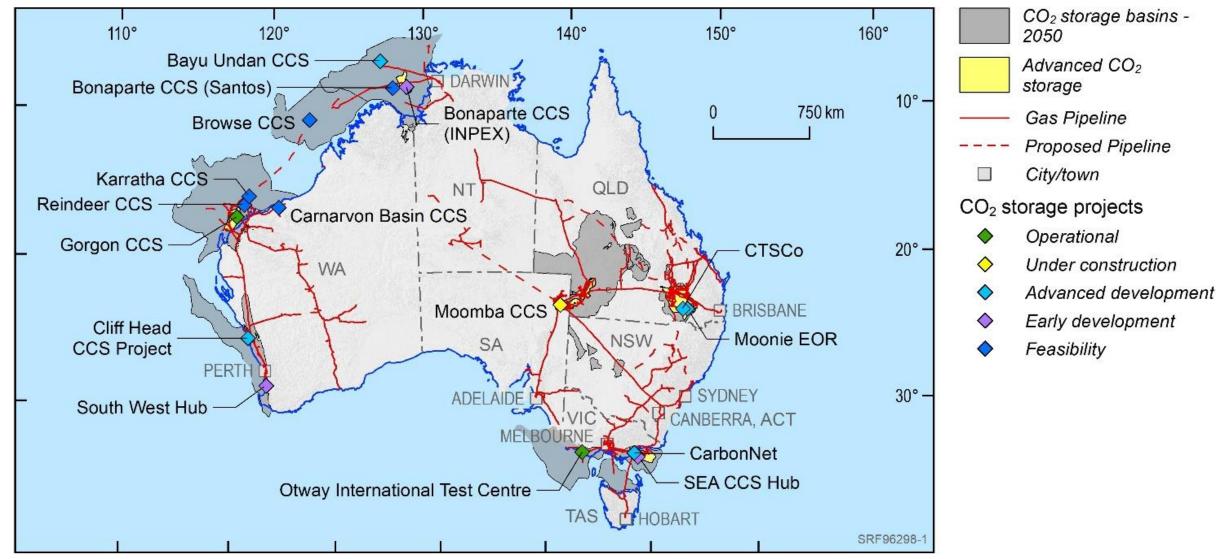
## Australia's CO<sub>2</sub> storage potential



(Oil and Gas Climate Initiative, CO<sub>2</sub> Storage Resources Catalogue Cycle 3 Report, March 2022)

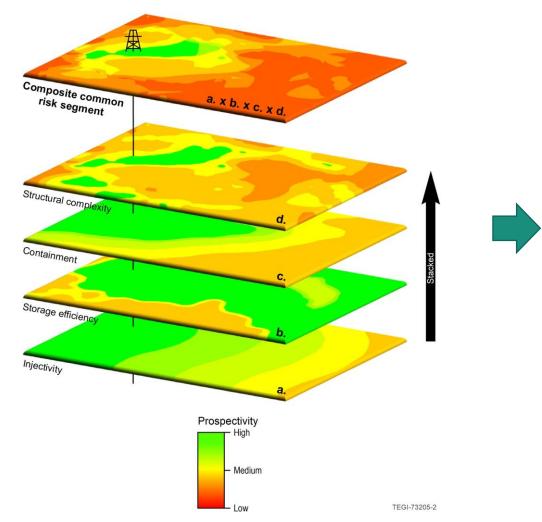
Note: Nigeria and Oman

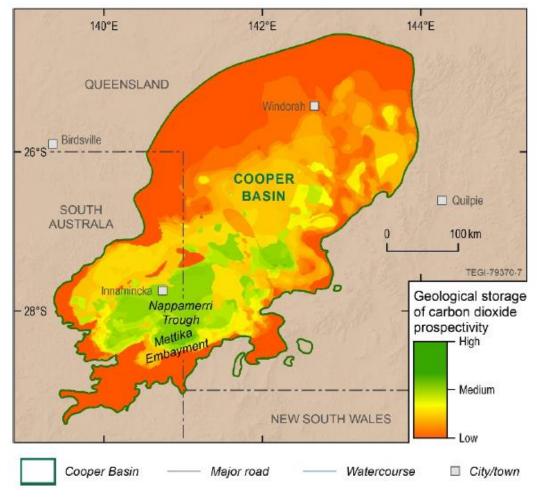
## Regions with CO<sub>2</sub> storage potential



(Patterson et al., 2023. https://dx.doi.org/10.26186/147913)

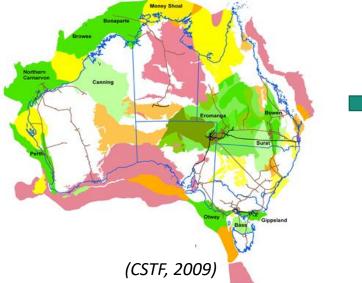
# Building the portfolio – play-based assessments

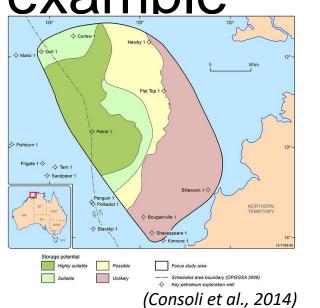


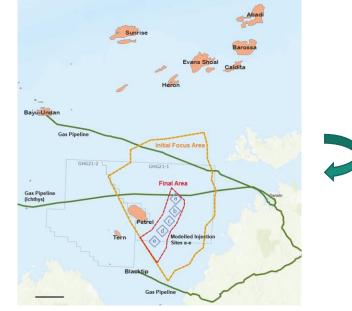


Toolachee Play example, Cooper Basin (GA, 2023)

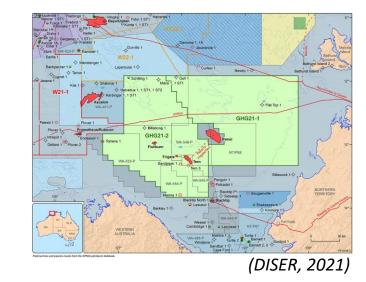
## Precompetitive work to GHG acreage award – Petrel Sub-basin example

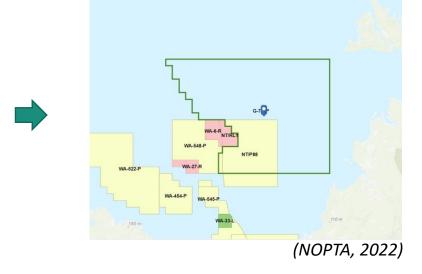






(Johnstone & Stalker, 2022)





Aug 2022: First GHG assessment permit in Bonaparte Basin awarded to Inpex (& Total, Woodside)

\$159m + 6m work program3D seismic, 2 appraisal wells

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