Marine CO$_2$ storage: Australian perspective

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Offshore basins in Australia
CarbonNet

Area of Interest
- Contains the world's 2nd largest brown coal deposit
- Produces more than 90% of Victoria's electricity
- Storage potential of 20gt
CarbonNet: mission

• A foundation infrastructure network that demonstrates commercial scale CCS and provides scalable infrastructure for future users - includes defining pipelines and storage.

• A business model concept seeking to balance private/public sector risk allocation to maximise private investment.

• Joint Federal and State project
CarbonNet storage facts

• Investigating potential for 1 – 5 Mt/yr storage offshore from high-intensity point sources onshore (lignite power stations)

• Extensive site screening has identified 3 possible sites with capacities up to 125 Mt; basin overall is 20 Gt

• Detailed appraisal now under way; approximately 20 FTE already invested in the site selection process

• Acreage releases continuing (Federal and State)
More info on the GCCSI site

The CarbonNet Project: a historical perspective
25 Jun 2015
Department of Economic Development, Jobs, Transport and Resources
Global CCS Institute

provides a historical perspective of CarbonNet from prior to its inception to now. It is intended to help project in Victoria, Australia. The CarbonNet Project: a historical perspective Carbon capture, use and storage (CCUS) ... Disclaimer 1 Introduction 2 2 The CarbonNet Project: A Historical Perspective 5 Appendices 16 Appendix ...

Topics: Carbon capture, use and storage (CCUS) CO₂ hubs

The CarbonNet Project: developing a business model for a CCS hub network
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project. The CarbonNet Project: developing a business model for a CCS hub network Carbon capture, use ... Disclaimer 1 Introduction 1 2. CCS and a hub network approach 3 3. The CarbonNet Project 7 4. Framework ... role in knowledge sharing for the development of CCS globally. CarbonNet, together with many other CCS ...

Topics: Carbon capture, use and storage (CCUS) CO₂ hubs
General comments - pro

• Already have

  • Regulations – in place but untested

  • Sources and sinks – offshore basins are close to significant sources, mapped and evaluated

  • In-country knowledge and experience – long offshore and onshore history of exploration and production

  • Enough R&D to get started
General comments - con

• Main issues
  • Pipeline networks – “first mover” problem – national infrastructure issue
  • Permitting - overlap of jurisdictions & general administrative friction
  • People – public opposition likely (fisheries, national parks, recreation...)
  • Politics – currently no incentives for CCS to proceed
The missing piece

Innovative financial engineering to make CCS projects investible
Government, Industry and Research Partners
Gorgon
Ichthys
Hazelwood, Latrobe Valley
Latrobe Valley sources