

Victorian Brown Coal and CarbonNet: leading the transition to a low emissions future

Clean Coal Day 2022

Jane Burton

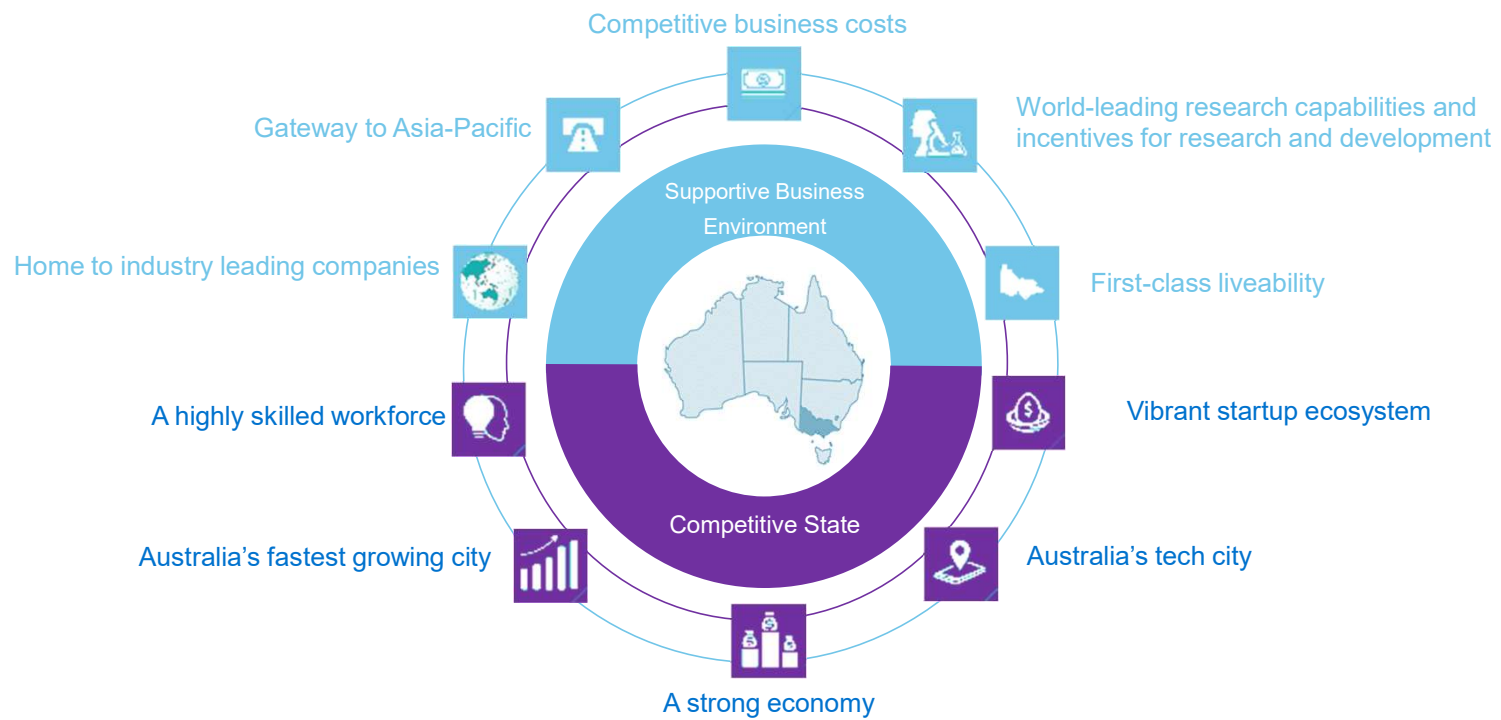
Acting Head, Resources

Department of Jobs, Precincts & Regions

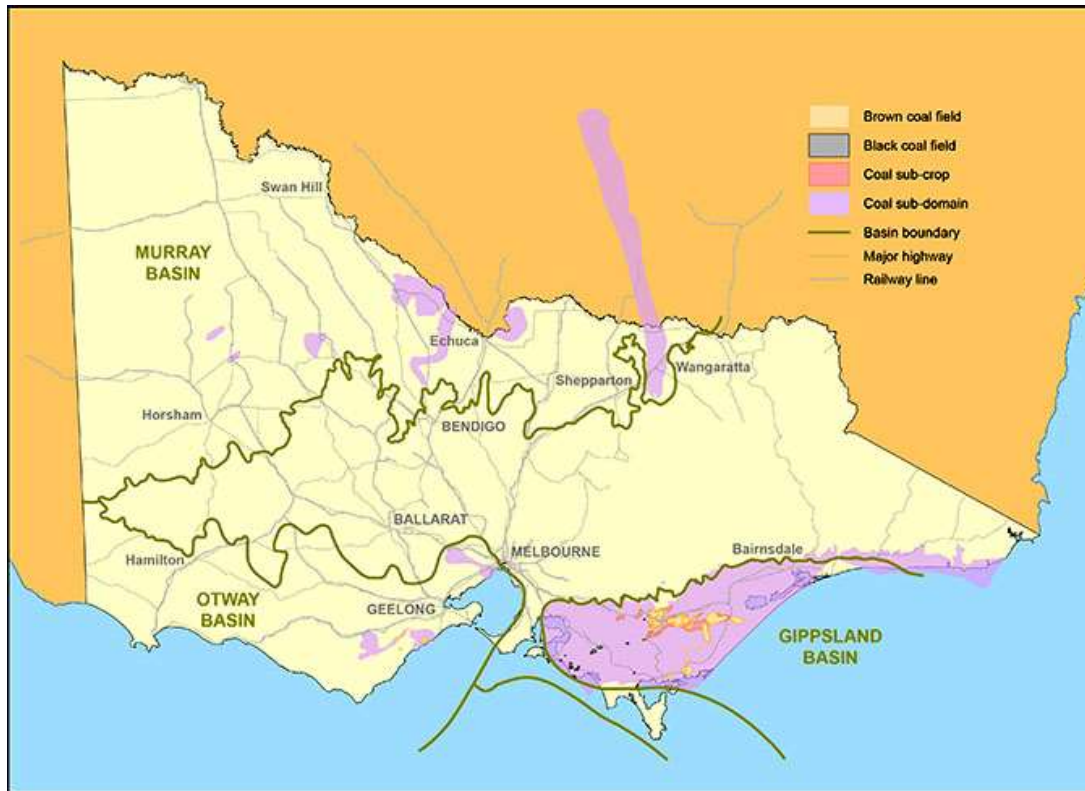
Victoria, Australia

6 September 2022

Victoria – An Outstanding Place to Invest



Victoria's brown coal resource

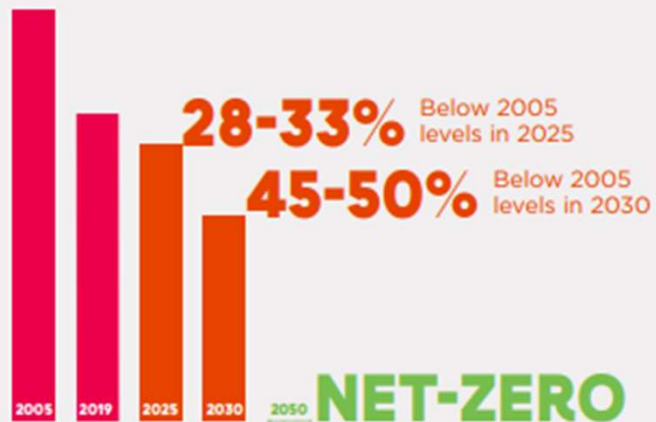


- **430 billion tonnes** in situ brown coal
- **65 billion tonnes** of measured coal
- **33 billion tonnes** of potentially economic brown coal



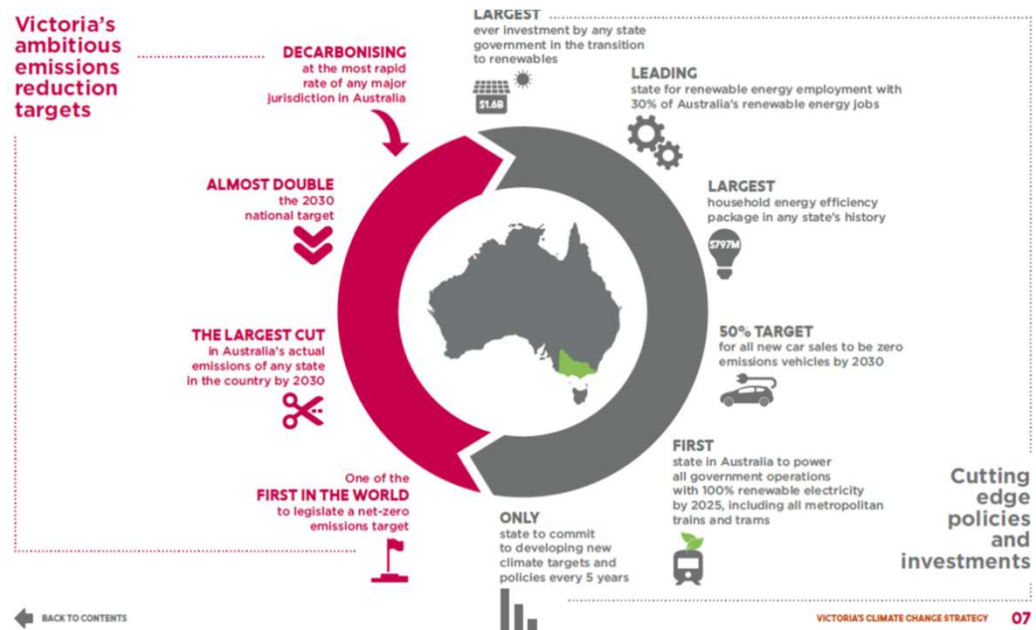
Victorian Climate Change Strategy

Ambitious targets guiding us to net zero



Decarbonising at the most rapid rate of any major jurisdiction in Australia

Victoria's ambitious emissions reduction targets



Victoria's Coal Policy – Key elements



'OPEN FOR BUSINESS' APPROACH

The State will adopt an 'open for business' approach



INDEPENDENT EXPERT PANEL

Independent Expert Panel to support decision making



ACCESS TO COAL

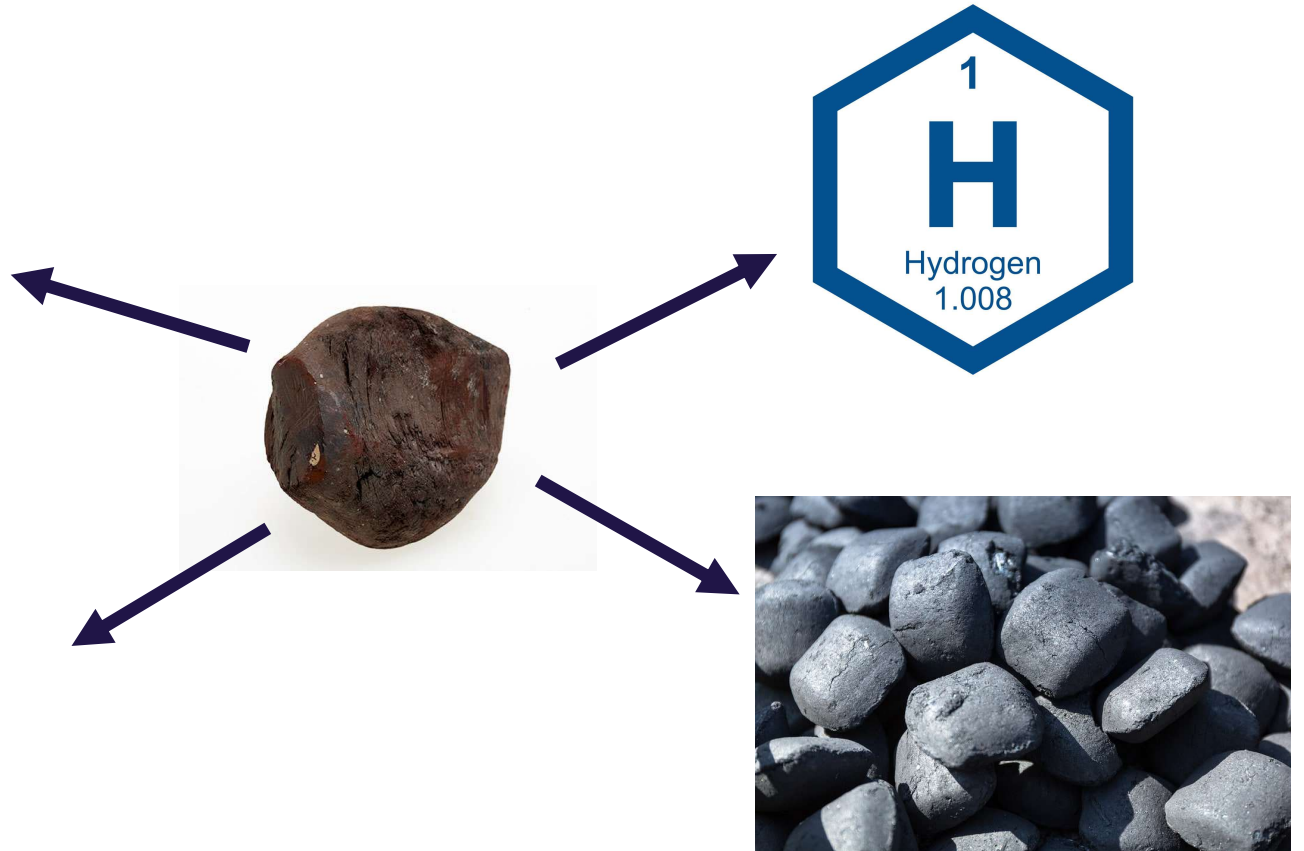
Preference given to sourcing coal from existing mines



EMISSIONS STANDARD

0.45 t CO₂-e/MWh or 0.3 t CO₂-e/ tonne of coal

High-value brown coal derived products



Hydrogen enabled by CCS

Hydrogen Energy Supply Chain Project

- enables clean hydrogen from brown coal and biomass- with CCUS to enable zero emissions
- has received investment and strong interest from Japanese and Australian Governments
- Consortia members include: Kawasaki Heavy Industries, JPower, Marubeni, Iwantani, Sumitomo, AGL
- HESC' Suiso Frontier hydrogen carrier arrived in Kobe, February 2022 carrying Latrobe Valley hydrogen.
- Project Partners are preparing to advance to the next phase with the support of Australian and Victorian Governments.



“This project (HESC) has the potential to fulfill the dream, the dream to produce clean hydrogen for export to Japan and other countries to help them deliver the most fundamental revolution of modern civilization – the transition to net zero emissions.”

Dr Alan Finkel – Special Advisor to Commonwealth on Low Emission Technologies

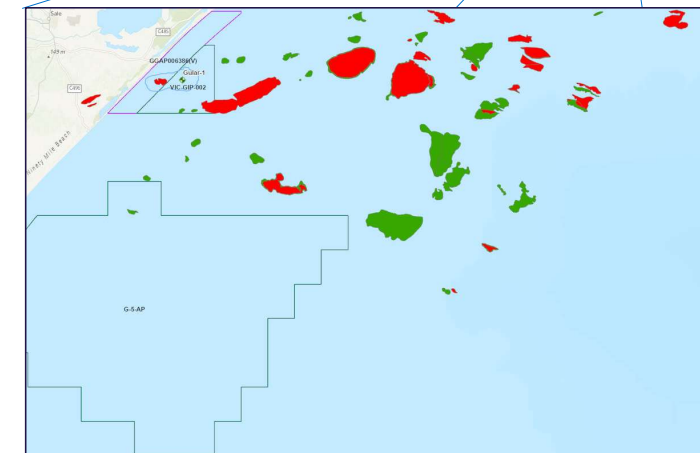
Gippsland Basin – significant CO2 abatement opportunity

- World class geological basin
- Fifty years of data from oil and gas industry
- High injectivity, proven seals
- Multiple potential storage sites
- Proximity to industrial hubs
- Highly skilled workforce

**Total Basin
Storage
Capacity
31 000 Million
tonnes**
National Taskforce
2009

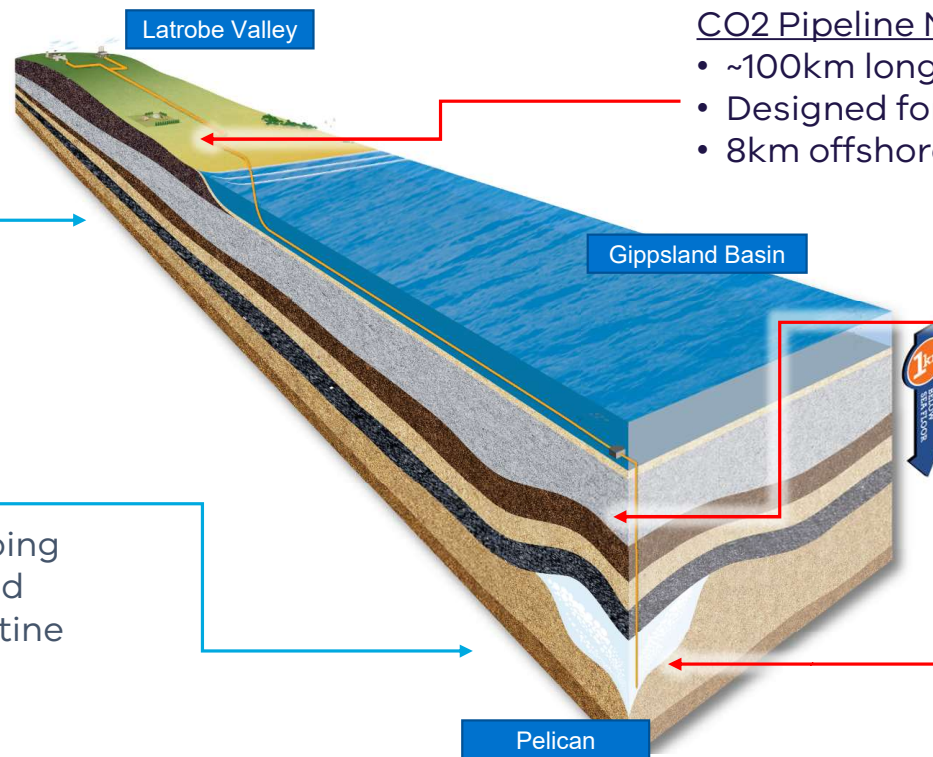
**Exxon Bream site
injecting 0.5Mt pa by 2025**

**CarbonNet sites
(Pelican and Kookaburra)
combined injection capacity
10Mt pa by 2030**



The CarbonNet Project

- 1 CO₂ is captured at industrial facilities across **Gippsland** and is compressed
- 2 The liquid CO₂ is transported along the CarbonNet pipeline to the Gippsland Basin
- 3 CO₂ is stored permanently at the Pelican site (and later at the Kookaburra site)
- 4 Environmental monitoring ongoing to confirm safe containment and respond quickly to any non-routine situations



CO2 Pipeline Network

- ~100km long
- Designed for >5Mt/ year
- 8km offshore pipeline

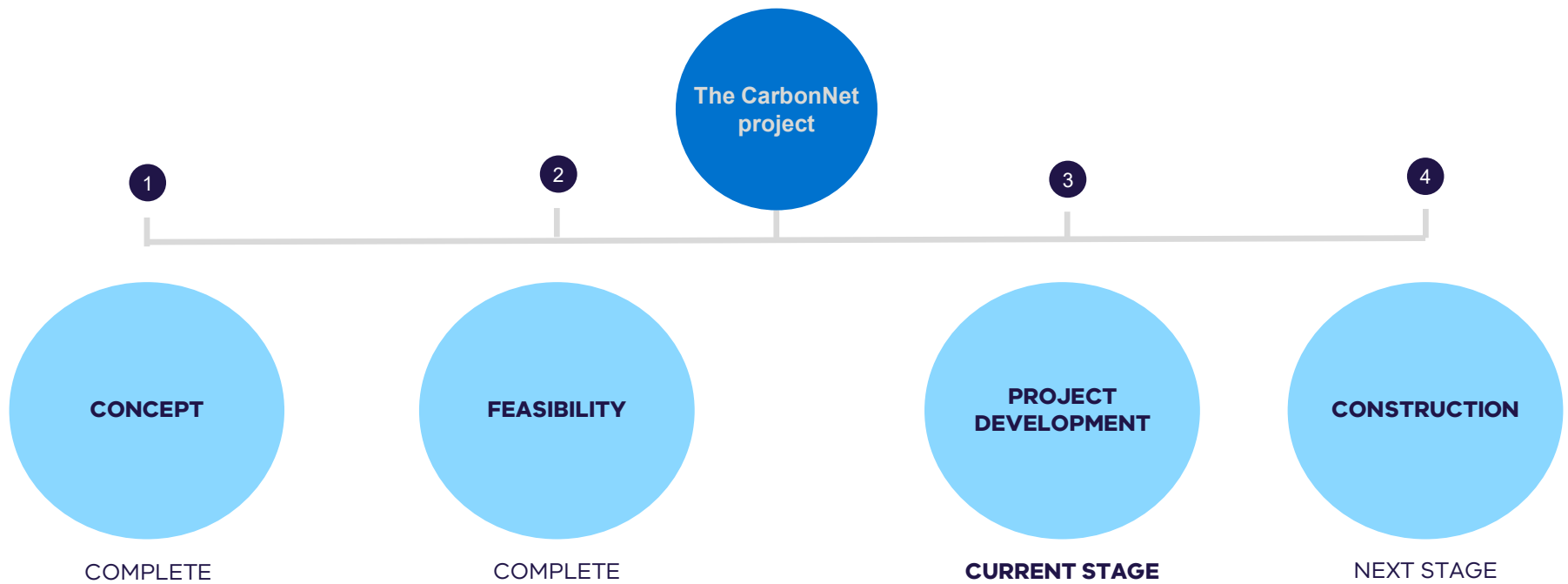
Offshore Development

- 3 subsea injection wells
- 1 monitoring well
- Monitoring network assets

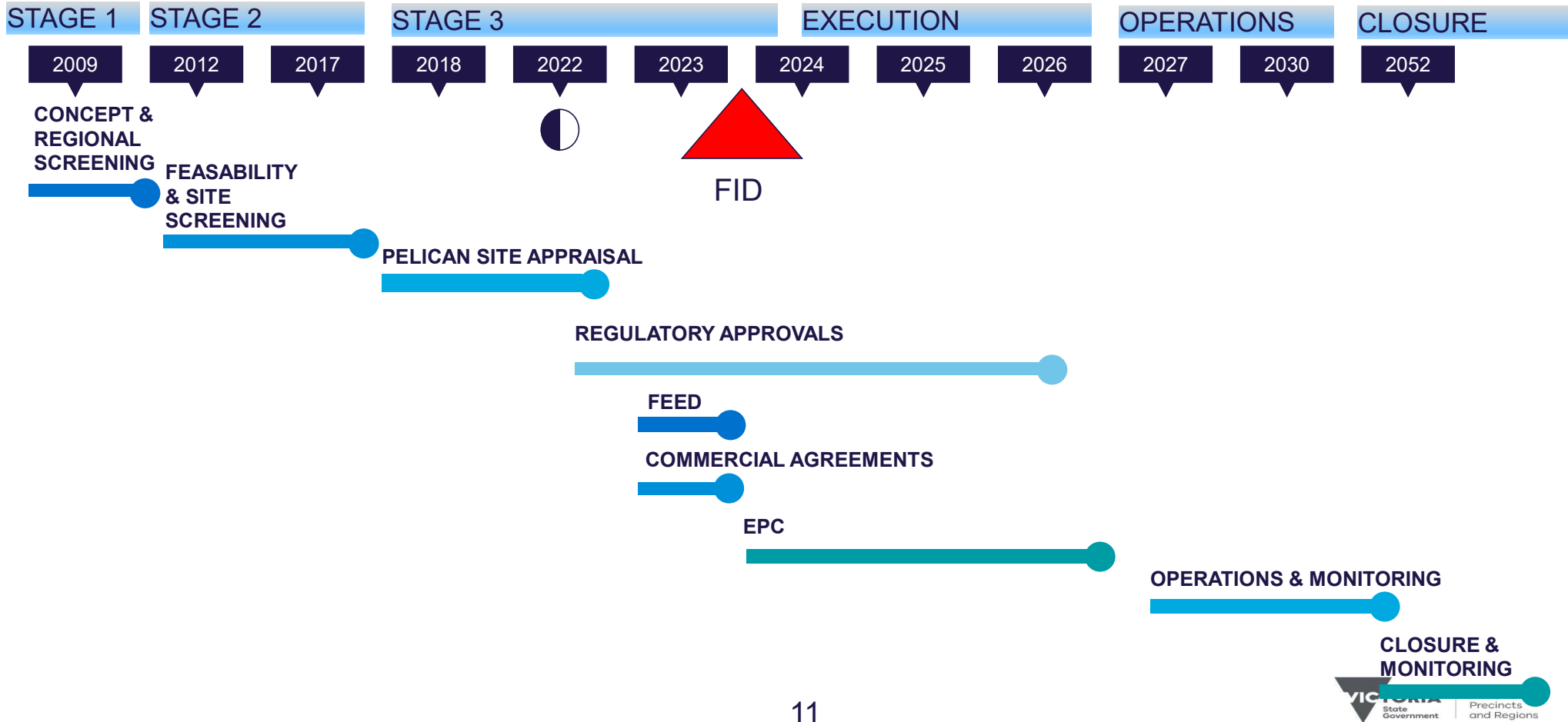
Pelican Reservoir

- 125 Million tonnes capacity
- 5-8Mt/ year injection

CarbonNet lifecycle – Project Development



CarbonNet project timeline



CarbonNet – 2022 activities underway

- Numerous regulatory applications & submissions;
- Cross-boundary permit application lodged, etc
- FEED activities:
 - Working with key stakeholders to finalise onshore pipeline route
 - Market tendering and engagement of onshore and offshore FEED packages with a view to commencing FEED in Jan 2023
- Approvals being progressed for Pelican and pipeline
- Engagement with commercial clients has continued
- Engaging with stakeholders across Gippsland and Latrobe Valley
- New Leadership Team – Project Director and other roles
- New commitment from Commonwealth and Victorian Governments to take project through to FID



CarbonNet – stakeholder engagement

Continue to build public acceptance and grow CarbonNet’s presence in the Gippsland region and more broadly.

- Pipeline & EES consultation plan drafted.
- Preliminary landowner engagement commenced to introduce/advise on the project and seek land access.
- Market Research planned for 2022/23 to understand project awareness and sentiment across Victoria.
- Engagement with GLaWAC - Traditional Owner Engagement Strategy underway.
- Presence at Gippsland New Energy Conference 11 & 12 August
- Science Week 2022 event held on 17 August at Gippsland Tech School
- School CCS/Climate Change module Phase 1 successfully implemented.
- Next Community Reference Group (chaired by Lead Scientist, Amanda Caples) scheduled for 14 Sept.
- Successful presence at APPEA in May 2022, Brisbane (photo).



Questions

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