

GORGON CO₂ INJECTION PROJECT

The Gorgon Joint Venturers (GJV), with Chevron as the operator, plan to sequester more than 100 million tonnes of reservoir CO₂ in geological formations occurring at about 2500 m depth at Barrow Island. The injection of CO₂ commenced in August 2019.

GORGON PROJECT OVERVIEW

- Gorgon CO₂ project is part of the Gorgon Gas development project, operated by Chevron Australia on behalf of the GJV
- The project has the capacity to export approximately 15.6 million tonnes of liquefied natural gas (LNG) and provide Western Australia with 2000 PJ of domestic gas (up to 300 TJ/d)
- Gas in the Gorgon field has an average CO₂ content of 14%
- Gas from the Jansz-Io field has <1% CO₂

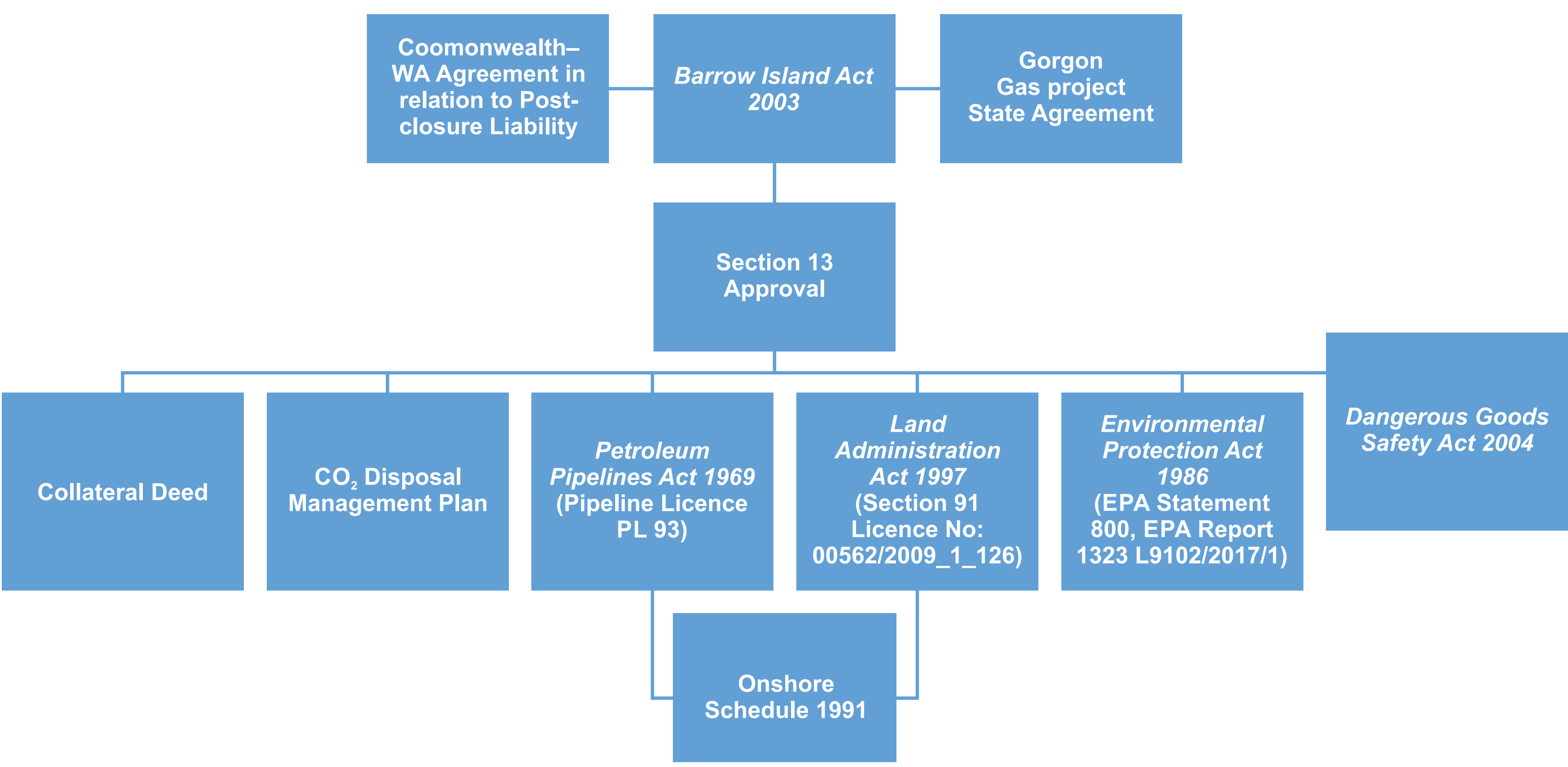
GORGON CO₂ INJECTION PROJECT

- CO₂ is being separated/removed during the gas processing operations on Barrow Island
- CO₂ is being injected into the Jurassic Dupuy Formation at about 2.5 km depth
- CO₂ will be injected at peak rates of 3.4 – 4.0 Mt/a over approx 40 yrs; more than 100 Mt in total
- Planned average daily injection rate of CO₂ is 220 million standard cubic feet per day
- The post-closure, long-term common law liability will transfer to the State and Commonwealth Governments subject to the governments being satisfied, among other conditions, that the plume is behaving as predicted and there is no significant risk of leakage (Barrow Island Act 2003, Part 5A)

DMIRS ROLES AND RESPONSIBILITIES

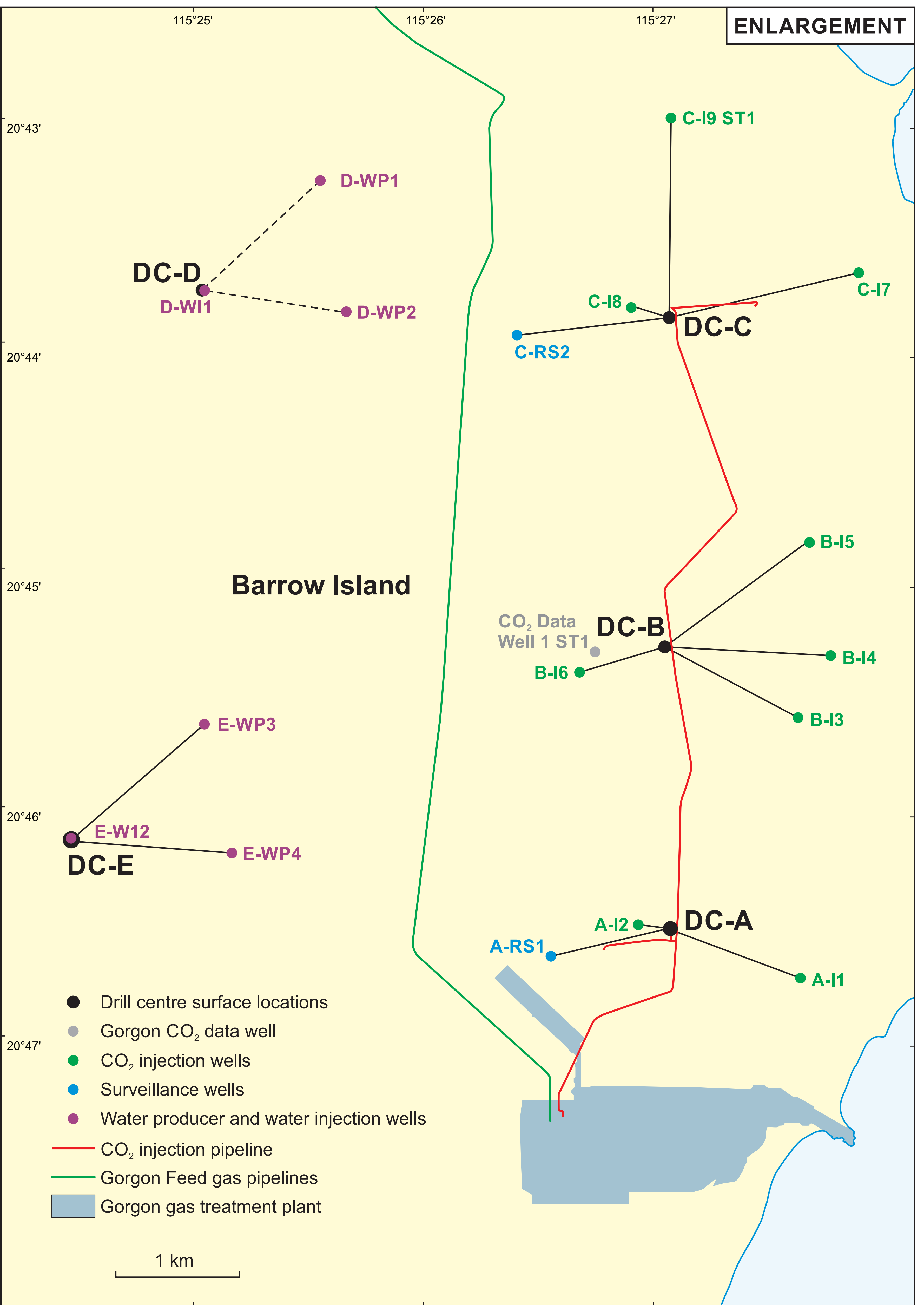
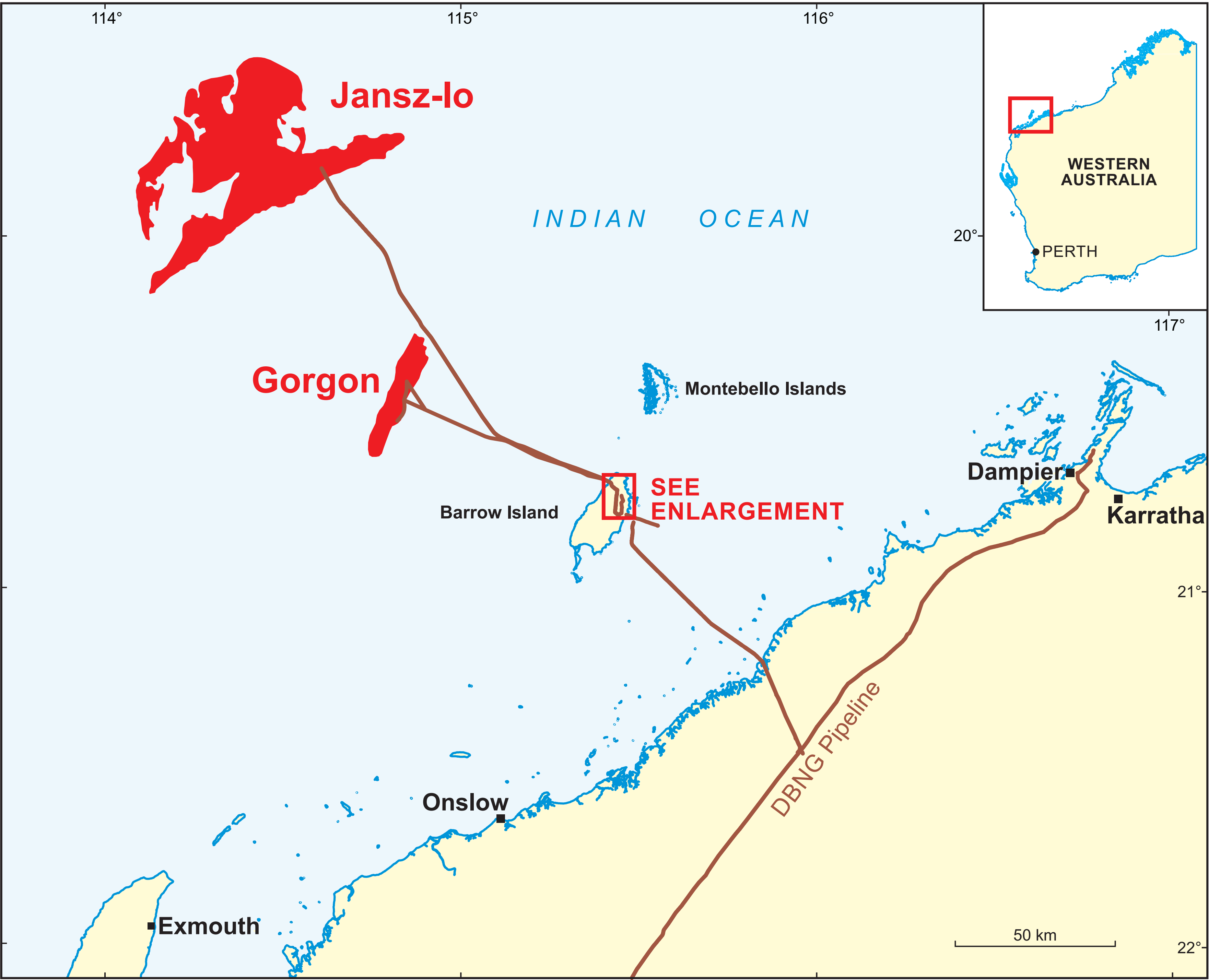
- Gorgon CO₂ injection project has a complex regulatory regime
- DMIRS administers the *Petroleum Pipelines Act 1969* ensuring compliance with the Pipeline Licence PL 93
- DMIRS also administers the Schedule of Onshore Petroleum Exploration and Production Requirements 1991
- It has an advisory role in administration of the *Barrow Island Act 2003* and ensuring compliance with the section 13 approval conditions in collaboration with Department of Jobs, Tourism, Science and Innovation (JTSI)
- Other responsibilities include:
 - incoming data/reports storage management
 - ensuring compliance with the Commonwealth–State agreement
 - ensuring robustness of predictive models through ongoing project due-diligence
 - ongoing in-house capability development.

REGULATORY REGIME



DUE DILIGENCE STUDIES

- Due diligence studies provide DMIRS with a first-hand understanding of the project for ongoing management of approvals and the long-term liability transfer to the State
- There have been five third party independent due diligence studies conducted to date; four before the final investment decision (FID) (2003–09) and one after FID in 2013
- Ongoing in-house due diligence (2015 to present)
- In the project operational phase, the focus will shift to regulatory compliance



Location of drill centres and CO₂ injection, surveillance and pressure management wells (Source: Chevron); DBNG, Dampier to Bunbury Natural Gas

PROJECT LIFE CYCLE

Entity	Site screening	Site characterisation	Design and development period	Operational period	Post-injection period	
					Closure period	Post-closure period
Operator (Chevron)	1998–02	2003–09	2009–19	40–45 Yrs	At least 15 Yrs	
Regulatory Authority (DMIRS, JTSI, DWER, EPA)		Due diligence phases I–IV (2003–09)	Pipeline licence (2011) Due diligence phase V (2013); DMIRS ongoing due diligence (2015–19); Consent to Operate (2019)	Compliance monitoring and audits, data management		
Designated Authority (WA and Cwth Governments)						Indefinite

Abbreviations: DWER, Department of Water and Environmental Regulation; EPA, Environmental Protection Authority

