

ASX Announcement

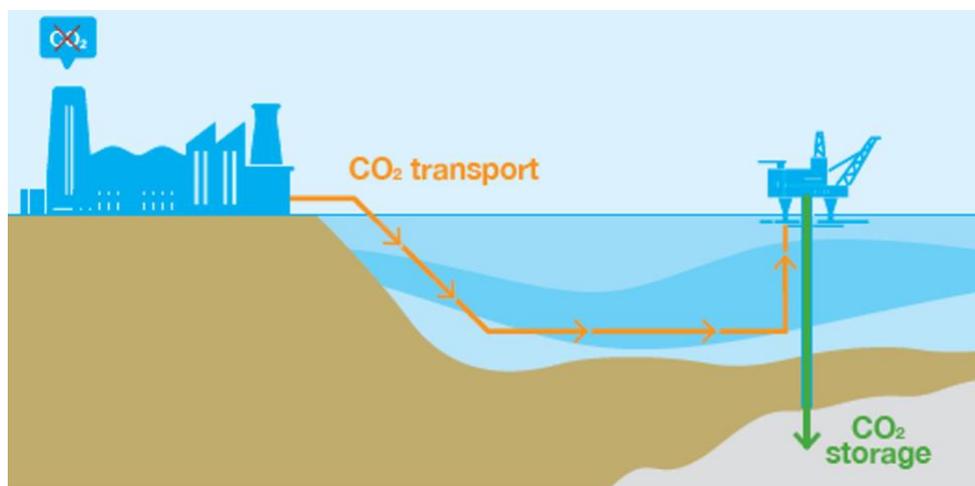
7 June 2022

Mid West Clean Energy Project: Stage 1 Cliff Head CCS Update

Highlights

- Technical and engineering studies and cost estimates completed by Genesis Energies and CO2Tech demonstrate strong fundamentals and business case for Cliff Head CCS Project development;
- Cliff Head CCS Project estimated to deliver gross project real pre-tax NPV of ~\$110 to 210 million and project IRR of ~30 to 40%;
- Studies confirm Cliff Head CCS Project can safely and permanently provide up to 16 million tonnes of CO₂ storage with a CO₂ injection rate of up to 1.1 million tpa;
- Studies confirm the existing Cliff Head wells and facilities are suitable to be converted to CO₂ injection with minimal modifications; and
- Commonwealth and State of Western Australian regulatory approval process underway

Pilot Energy Limited (**ASX: PGY**) (**Pilot** or the **Company**) is pleased to provide an update on recently completed studies on the Cliff Head Carbon Capture and Storage project (**CCS Project**) - Stage 1 of the Mid West Clean Energy Project. The results from the technical studies and projects economics demonstrate the strong fundamentals which support the business case for the development of a near term CCS project in the Mid West.



Stage 1 of the Mid West Clean Energy Project involves the conversion of the Cliff Head oil field from oil production to a CCS project. Recent technical studies and economic analysis has confirmed the commercial viability of providing CCS services to the Mid West. The technical studies also indicate sufficient scale in the offshore permits held by Pilot to provide CCS services in parallel with permanently storing CO₂ produced during Stage 2 and Stage 3 of the Mid West Clean Energy Project.

CCS Resource Assessment

Technical studies completed by CO2Tech have confirmed the significant CO₂ storage potential of both the Cliff Head production license (WA 31-L) and the WA-481-P exploration license areas with a total 10.8 million tonnes 2C Contingent resources and best estimate Prospective resources of 80.4 million tonnes.

**Table 1- Greater Cliff Head & WA 481P CCS Storage
Contingent & Prospective Resources***

Contingent Storage Resource (million tonnes)	1C	2C	3C
WA 481P (100% basis)	2.8	4.4	7.2
WA 31L (100 % basis)	1.0	6.4	15.8
Prospective Storage Resource (million tonnes)	1U	2U	3U
WA 481P (100% basis)	46.2	80.4	144.2
*Determined in accordance with the SPE SRMS Guidelines for estimating CO ₂ storage resources			

Conversion of Project Infrastructure to CCS

Assessments completed by Genesis Energies and CO2Tech have considered the existing Cliff Head wells, pipelines and infrastructure and the necessary works required to augment and upgrade the infrastructure to facilitate CO₂ injection. These assessments have concluded that the Cliff Head wells, pipelines and infrastructure are suitable for conversion from oil production to CCS with minimal modifications.

The conversion of the current Cliff Head oil field production operation into a CCS operation will occur over three basic stages – Storage Reservoir Preparation, Facilities Conversion and CO₂ Injection Operations. Additionally, the initial CO₂ Injection Operations can also be expanded to both increase the CO₂ injection rate up to 1 mmtpa and overall storage capacity to 16 million tonnes.

The resulting capital works are summarised below across the key stages of developing the CCS Project (100% basis):

Storage Reservoir Preparation:

Prepare Cliff Head Oil Field for CO₂ injection.

Capex: \$13 million

Timing: 2023 (Following Declaration of WA 31-L Greenhouse Gas Formation)

Duration: 36-48 months

Activities:

- Increase fluid handling capacity up to 60,000 bbls per day

Pre-CO₂ Injection Facilities Conversion:

Convert existing Cliff Head production wells and facilities to CCS operations

Capex: \$110 million

Timing: Mid-2025

Duration: 6-months

Activities:

- Convert 5 existing wells to CO₂ injectors
- Brownfields upgrades to existing platform and pipeline

Commence CO₂ Injection Operations

Commence CO₂ injection into Cliff Head CCS Project

Timing: 2026

Duration: ~15-years @ 550,000 tpa

Activities:

- Transport supercritical CO₂ to CHA via existing onshore/offshore 10" pipelines
- Inject supercritical CO₂ into reservoir through 5 existing wells

Increase CO₂ Injection Storage Capacity/Injection Rate

Increase storage capacity to up to 16Mt and injection rate to at least 1.1 mmtpa

Capex: \$60 million

Duration: ~30-years @ 550,000 tpa / ~15-years @ 1.1 million tpa

Activities:

- Deepen two existing wells
- Drill and complete 1 new injection well

Indicative Key Metrics

Miro Capital is assisting Pilot to identify strategic and/or industry partners for the Mid West Clean Energy Project and has worked with Pilot's internal team to assess the project economics of Stage 1 Cliff Head CCS. The project economics assume the CCS business provides a CO₂ abatement service and have been assessed based on a 550,000 tpa and 1.1 million tpa injection rate scenarios.

100% Basis, Real A\$ 2022	Scenario #1 550,000 tpa	Scenario #2 1.1 million tpa
Initial CCS Project capex	\$110 million	\$110 million
Timing	Mid-2025	Mid-2025
Storage Expansion capex	\$60 million	\$60 million
Timing	~2037	Mid-2028
CCS project opex	~\$16/tonne	~\$9/tonne
Project life	~30 years	~15 years
Project NPV (pre-tax 8%)	\$110 million	\$210 million
Project IRR	~30%	~40%

Note: Any forward-looking statements (including projections) contained in the 'Indicate Key Metrics' are estimates only. The indicative estimates are based on inputs from the previously advised completed feasibility studies and internal assessment of operating expenditures. Such estimates are subject to market influences and contingent upon matters outside the control of Pilot Energy and therefore may not be realised in the future.

Project Commercialisation and Funding

In parallel with the commencement of the regulatory approval process for the CCS Project, the Company is also commencing engagement with prospective third-party customers seeking near-term effective, high-quality carbon reduction solutions for their existing businesses. The Company has identified several large, long-term sources of industrial CO₂ emissions in very close proximity to the Project which are potential customers for the Project. The Company believes that such industrial customers will seek long-term arrangements to manage their existing and future CO₂ emissions thus supporting the long-term commercial utilisation of the Project. Additionally, the Company believes that these potential customers of the Project may also seek to secure equity participation in the Project as part of putting into place CCS contracts.

Concurrently with the commercialisation of the Project, the Company is also advancing plans to secure funding for the Project. The Company believes that the Project can be largely funded through a combination of long-term debt financing as well as direct equity investment in the Project through the introduction of direct project participation by Project customers or Project equity investors. In this regard, the Company is currently engaged in discussions with multiple Australian diversified industrial companies, energy producers and overseas investor groups to progress possible participation in the Project.

Given the low development and operational risk profile of the Project and the likely commercialisation of the Project through long-term contractual arrangements, the Company

believes that the Project is likely to be significantly funded through infrastructure-style conventional long-term commercial bank debt financing. The net funding requirement for the CCS Project will be in the order of \$70 million (100% project basis, ~\$40M net to Pilot), after taking into account the net cashflow from oil production during the pre-injection phase. The majority of this funding will not be required until circa 2025. To this end, the Company has also engaged Bridge Street Capital Partners to assist the Company with the development of this funding strategy in conjunction with the commercialisation and partnering engagements being developed with Miro Capital and Reputex Energy.

Pilot Chairman, Brad Lingo commented “The Pilot team are extremely excited by the results of the technical and economic studies for the Cliff Head CCS Project. The studies demonstrate that the existing Cliff Head oil field production operation can be converted into an offshore carbon capture and storage project in a simple, straight-forward, low risk way and at a low cost.”

Mr. Lingo continued “The project has very robust economics and delivers real, tangible and direct ability to reduce significant and growing CO₂ emissions in the Mid West region of Western Australia.”

Mr. Lingo added “The project will provide a safe and permanent solution to make a material contribution to Australia meeting its greenhouse gas emissions reduction commitments.”

ENDS

This announcement has been authorised for release to ASX by the Chairman, Brad Lingo and Managing Director, Tony Strasser.

Enquiries

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About Pilot: Pilot is currently a junior oil and gas exploration and production company that is pursuing the diversification and transition to the development of carbon management projects, hydrogen and integrated renewable energy by leveraging its existing oil and gas tenements and infrastructure to cornerstone these developments.

Pilot holds a 21.25% interest in the Cliff Head Oil field and Cliff Head Infrastructure, material working interests in WA-481-P and EP416/480 exploration permits, located offshore and onshore Western Australia, which form foundation assets for the potential development of clean energy projects in Western Australia.

Competent Person Statement:

This announcement contains information on CCS resources which is based on and fairly represents information and supporting documentation reviewed by Dr Xingjin Wang, a Petroleum Engineer with over 30 years’ experience and a Master in Petroleum Engineering from the University of New South Wales and a PhD in applied Geology from the University of New South Wales. Dr Wang is an active member of the SPE and PESA and is qualified in

accordance with ASX listing rule 5.1. He is a former Director of Pilot Energy Ltd and has consented to the inclusion of this information in the form and context to which it appears.