#### **Pilot Energy Limited**

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Announcement to ASX 22 October 2021

**ASX: PGY** 

# PILOT AND ADVANCED ENERGY TRANSITION BINDING FARM-IN AGREEMENT TO DRILL EXPLORATION WELL BY DECEMBER 2022

# **Highlights**

- AET will drill the exploration well to test the Leschenault Gas Prospect to earn a 50% interest in the Leschenault Gas Prospect for fully funding the well
- The Leschenault Gas Prospect has been independently assessed to have a Gross Prospective Resource of 725 BCF (Best Estimate) and up to 1.595 TCF (High Estimate)<sup>1</sup>
- Leschenault Gas Prospect located in South West Western Australia in close proximity to Kwinana Industrial Hub and the Dampier-to-Bunbury Gas Pipeline
- Pilot's EPs 416/480 overlie the area of the Western Australian Government-sponsored South West Hub Carbon Capture & Storage Project
- The exploration well will also assess the suitability of reservoirs for carbon sequestration including the Triassic-age Lesuer Sandstones
- Subject to regulatory approvals and land access, drilling operations for the Leschenault Gas Prospect exploration well are forecast to commence by December 2022

Pilot Energy Limited ("**Pilot**" or the "**Company**") is pleased to announce that it entered into a binding farm in agreement with Advanced Energy Transition Pty Ltd ("**AET**"). AET will earn up to 50% interest ("**Farmin Interest**") in a future retention lease or future production licence granted to Pilot by fully funding the drilling of an exploration well in Exploration Permit EP 416 or EP 480 (collectively, the "**Permits**"). The

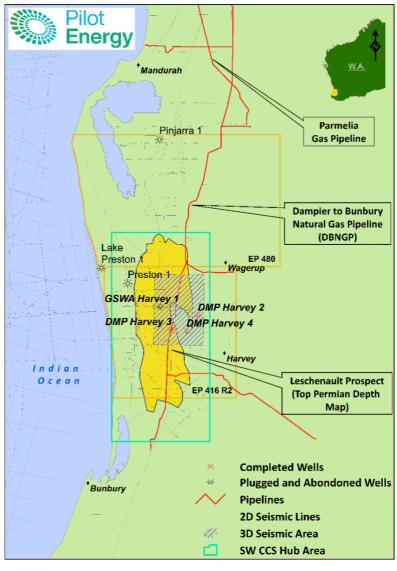
<sup>1</sup> The Prospective Resource estimates contained in this announcement are based on the Independent Technical Specialist Report prepared by RISC Advisory Pty Ltd (RISC) dated 28 January 2021.

objective of the well is to test the natural gas potential of the Leschenault Gas Prospect (see map below) and further assess and test the underground CO<sub>2</sub> sequestration potential.

The gas exploration well also represents the first operational activity associated with the South West Carbon Management and Blue Hydrogen feasibility study which commenced this week.

# **Leschenault Gas Prospect**

The Leschenault Gas Prospect is a large faulted anticlinal structure mapped on existing 2D seismic and straddles both EP 416 and 480. Pilot is the operator of EP 416 and EP 480 and currently holds a 100% interest in the Permits.



Location Map

Leschenault Gas Prospect in EP 416 and EP 480 and

SW Hub CCS Project Harvey-1 CO<sub>2</sub> Sequestration Injection Test Well

The contiguous Permits have a combined area of 2,310 km2 and have only been sparsely explored with two wells drilled in the 1960's and the GSWA Harvey-1 well (2012) and Harvey-2,3 and 4 wells (2015) drilled, as part of the assessment of the South West Hub Carbon Capture and Storage (CCS) Project.

In addition to encompassing the location of the South West Hub CCS Project, the Leschenault Gas Prospect is also transected by the Dampier to Bunbury Natural Gas Pipeline and is in close proximity to the Kwinana, Pinjarra and Wagerup industrial areas – all located within approximately 100 km of the prospect.

Limited drilling to date across the Permits has confirmed the presence of a Permian petroleum system with the primary reservoir target being the Permian Sue Group sandstones and the Triassic age Leseur sandstones with the gas having been generated from mature Permian coal measures located within the Permits.

Existing 2D seismic confirms the Leschenault Gas Prospect, which is a large faulted anticlinal structure straddling both Permits, with up to 240 km2 of mapped areal closure at the Top Permian Sue Group sandstone level. The reservoir target is at a depth of 2,250 to 2,500 metres. Regional gravity data shows the presence of a depocenter in the north eastern and eastern part of the Permits. The Leschenault Gas Prospect is located up dip of these possible "gas kitchens" on the flank of the regional gravity high. The Sue Coal Measures are known to be a source for gas in the South Perth Basin with TOC of up to 54% and would have been generating hydrocarbons at the time of the Jurassic uplift and are likely to be generating at the present day.

The Leschenault Gas Prospect Prospective Resource<sup>1</sup> estimates are summaried in Table 1.

Table 1 - Leschenault Gas Prospect Prospective Resource Estimates				
Target Reservoir	Gross (100%) BCF			
	Age	Low	Best	High
Lesueur sandstone	Triassic	150	435	970
Sue sandstone	Permian	120	290	625
Total		270	725	1595

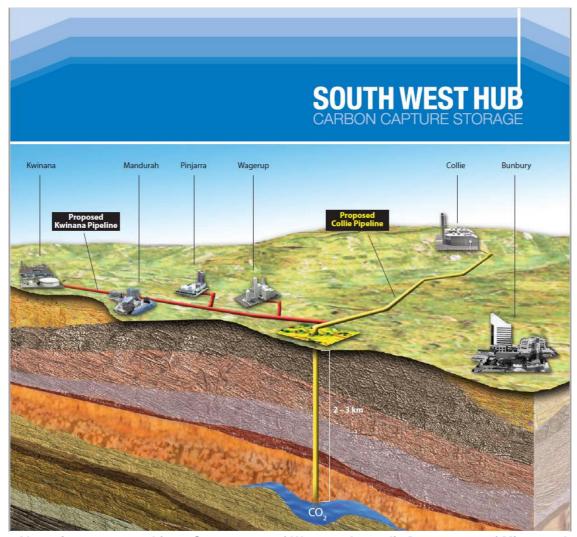
- Probabilistic methods have been used.
- Leschenault Prospect is prospective for gas.
- Volumes are rounded to the nearest 5 BCF

With respect to the Prospective Resources associated with the Leschenault Gas Prospect set out above in Table 1, the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Pilot is responsible for procuring the necessary regulatory approvals and land access arrangements for the exploration well. A key aspect of well planning processes involves engaging with the community and stakeholders. Pilot expects to commence its community and stakeholder engagement process later this year.

### **South West Hub Carbon Capture and Storage Project**

The South West Hub CCS Project is led by DMIRS and is a leading Government-sponsored initiative to address greenhouse gas emissions in Western Australia by establishing the feasibility of storing industrially generated CO<sub>2</sub> deep underground in the Lesueur Sandstone formation. More information on the project can be found on the DMIRS website at <a href="http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx">http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx</a>.



Above image sourced from Government of Western Australia Department of Mines and Petroleum South West CO<sub>2</sub> Geo-sequestration Hub Project and Activity Progress Report for the Global Carbon Capture and Storage Institute (May 2012)

Pilot notes that the South West Hub CCS Project has been progressed to a mature stage through some \$50 million of federal and state funding to date. Since 2011, led by DMIRS, four wells have been drilled to test the suitability of the target reservoirs for carbon sequestration and 2D and 3D seismic surveys have been completed. Four generations of reservoir modelling confirm a base case for the Wonnerup reservoir to capture 24 million tonnes of CO<sub>2</sub> over a 30-year period with injection rates of up to 800,000 tonnes p.a. and to remain in the reservoir for over 1000 years. Extensive reservoir modelling has demonstrated that the 1,500 metre-thick Wonnerup sandstone represents a major carbon storage resource that is perfectly located due to its proximity to local industry and infrastructure, and an absence of the regional aquifer.<sup>2</sup>

https://wapims.dmp.wa.gov.au/WAPIMS/Search/SwHubCarbonStorage

<sup>&</sup>lt;sup>2</sup> The above materials for the South West Hub CCS Project are taken from the Government of Western Australia Department of Mines, Industry Regulation and Safety South West Hub web page at <a href="http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx">http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx</a> and

As a secondary target of the Leschenault Gas Prospect exploration well, Pilot and AET also intend to confirm that the key carbon sequestration reservoirs focussed on as part of the South West Hub CCS Project are also present in the exploration well and suitable for carbon sequestration as part of the overall project. The Company sees the exploration well as a key step in assessing the feasibility of developing the proposed South West Carbon Management and Blue Hydrogen Project.

Pilot notes that the existing Petroleum and Geothermal Energy Resources Act 1967 (WA) provides tenement holders with certain rights to explore for hydrocarbons, however exploration for CCS resources is not currently addressed in any of the Western Australian current legislation. As such any assessment of potential CCS reservoirs will be incidental to the proposed petroleum exploration activities. Potential future development by the Company of a carbon capture and storage project within the Permits will be subject to a yet to be determined regulatory regime.

#### **Farmin Terms**

The parties entered into the Farmin Agreement on 22 October 2021 which includes the following key terms:

- AET will earn the Farm-in Interest by undertaking and fully funding the drilling of one exploration well in the Leschenault Gas Prospect (Leschenault Well) within the area of either of the Permits (Farmin Work Program);
- Agreement is subject to the satisfaction of a number of conditions which include AET securing funding (prior to April 2022), providing a Drilling program and AFE (March 2022 target date) and Pilot obtaining all Authorisations, land access and regulatory Approvals (prior to September 2023);
- The Leschenault Well operations to commence by February 2023 or Pilot may terminate the farm-in;
- If the Leschenault Well is a gas discovery, AET will, at its cost, test and complete the Leschenault Well as a gas producer. In return for funding 100% of the costs, AET is to be transferred a 50% interest in a future retention lease or future production licence granted to Pilot;
- If no gas discovery is made in the Leschenault Well, AET must, at its cost, case
  and suspend the Leschenault Well as a potential carbon sequestration
  appraisal injection well and Pilot and AET will negotiate and agree whether to
  proceed to assess the potential of the Leschenault Well to qualify as carbon
  capture and storage (CCS) reservoirs (subject to necessary licences and
  authorisations being obtained under the applicable legislation);

- If the Leschenault Well contains two or more CCS reservoirs, AET may elect to fund 50% of the well (with Pilot to reimburse the remaining 50% at the completion of drilling operations) to participate as a joint venture partner with a 20% interest in the licences or permits that would allow the well to be used for carbon sequestration; and
- If no gas discovery is made in the Leschenault Well and the Leschenault Well does not qualify as two CCS reservoirs under the relevant legislation, then Pilot must reimburse AET for the costs of drilling and abandoning of the Leschenault Well.

As part of the overall farm-in transaction terms outlined above and subject to AET securing the necessary funding by March 2022, Pilot will issue to AET (or its nominee) 2,500,000 3-year options with an exercise price of \$0.096 per share.

The Company's Executive Chairman, Brad Lingo noted "the transaction with AET is absolutely aligned with Pilot's business plan of leveraging off its existing oil & gas assets and diversifying into new competitive energy production streams. The development of carbon capture and storage at our existing gas permits complements the expansion of our footprint in the South West Western Australia energy market and can form the core of a significant blue hydrogen and CCS project for South West Western Australia. Community and stakeholder engagement and support is a key aspect of Pilot's project development strategy and we look forward to discussing the project with stakeholders."

## **Competent Person Statement:**

This announcement contains information on conventional petroleum 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's 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 Limited and has consented to the inclusion of this information in the form and context to which it appears.

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

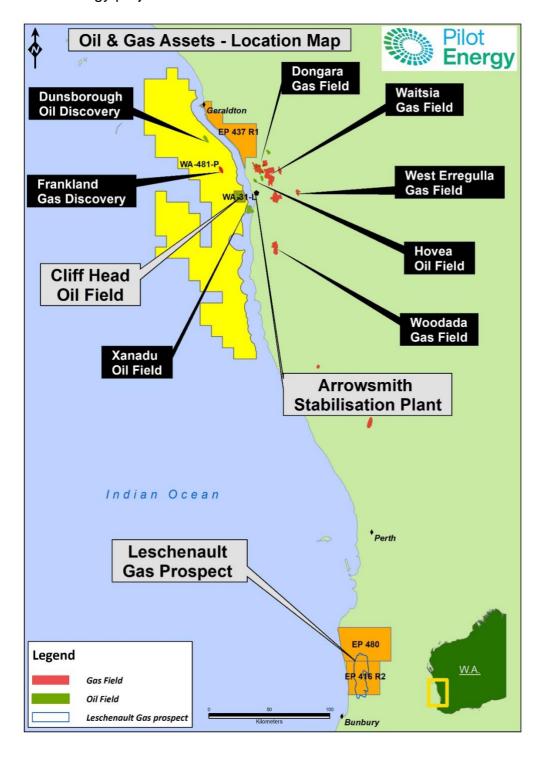
## **Enquiries**

Cate Friedlander, Company Secretary, email: <a href="mailto:cfreidlander@pilotenergy.com.au">cfreidlander@pilotenergy.com.au</a>

About Pilot: Pilot is currently a junior oil and gas exploration and production

company that is aggressively pursuing the diversification and transition to the development of integrated renewable energy, hydrogen and carbon management projects 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, 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.



#### **About AET:**

Advanced Energy Transition Pty Ltd (AET) ACN 650 365 727 is a recently-established Western Australian based company focused in the energy transition sector. The company was established by Cameron Manifold and David McNeill, industry professionals with over 30 years' experience each in delivering innovative technical solutions to the oil and gas sector. Cameron and David are now focusing their knowledge, experience and global network in transitioning the capabilities resident in the oil and gas industry to the massive opportunities in the transition pathway to net-zero.

AET will apply the equipment, materials, knowledge and skills from decades of oil and gas projects (onshore, offshore and subsea) and apply these capabilities in key sectors of the transition pathway. Planned activities include:

- Decommissioning and repurposing of shallow water offshore oil and gas fields and facilities.
- Onshore storage applications for carbon capture and compressed air energy storage.

These activities are planned to be supported through re-activation of a high capacity, automated and highly mobile drilling package with application for onshore operations and suitable for marriage to a shallow water jack-up (SWJU).

AET is planning to mobilising the **SWJU** to Australia to support our clients in the following areas:

- Late life field extension enabling funding for decommissioning and/or repurposing of offshore facilities to support clean energy;
- Decommissioning of shallow water oil and gas facilities with low-emission innovative equipment and technologies;
- Installation of offshore wind power utilising proven oil and gas technologies and capabilities.

The drilling package which has previously operated in Western Australia under DMIRS-approved Health and Safety Management System can be deployed onshore and on the SWJU providing versatility for clients operating across these sectors.

AET is delighted to have the opportunity to support Pilot on their EP416/480 permit areas targeting the Leschenault gas prospect and the important ongoing analysis of the CCS potential of this region, previously established by DMIRS and CSIRO.

Cameron Manifold is co-founder of AET and is an engineer with over thirty-six (36) years' experience in the global energy sector. Cameron has established and run a number of engineering consultancies in the oil and gas sector and provided services globally from a base in Western Australia. He is a recognised Industry leader in well design, innovative well construction and well integrity.

David McNeill is a well engineering and intervention professional with over 30 years of global experience predominately in the North Sea and Australasia within service, operating, technology development and venture/PE led companies. He has successfully established and expanded several oilfield services companies in Australia, set-up and exited his own successful wells and subsurface engineering consultancy in 2011 and designed and brought to market an innovative exothermic sealing technology for well applications in production enhancement and well abandonment. His main focus will be in the design and execution of drilling, wellbore isolation, plug & abandonment and deployment technologies which reduce emissions, hazardous material waste, risk, time and cost.