

Announcement to ASX
ASX: PGY

21 October 2021

PILOT COMMENCES FEASIBILITY STUDY ON SOUTH WEST CARBON MANAGEMENT PROJECT

Highlights

- **Pilot commences South West Carbon Management and Blue Hydrogen Feasibility Studies**
- **Key consultants engaged to conduct the feasibility studies include internationally recognised Genesis and Technip Energies and RISC**
- **Studies to focus on the feasibility of capturing CO₂ and flue gas streams potentially expanding the services Pilot can provide during the energy transition**

Pilot Energy Limited (ASX: PGY) (“Pilot” or “The Company”) is pleased to announce the commencement of the South West Carbon Management and Blue Hydrogen Feasibility Study (“Feasibility Study”). The Feasibility Study is forecast to complete in the first quarter of CY2022.

The South West region of Western Australia represents an opportunity to leverage existing infrastructure and the well progressed South West Hub Carbon Capture and Storage (“CCS”) project to materially reduce emissions in South West of Western Australia during the energy transition. The Feasibility Study will explore the opportunity to capture and store the regions flue gas and CO₂ emissions generated in the Kwinana Industrial Precinct, in addition to the development of a blue hydrogen supply project. Pilot currently holds a 100% interest in the oil and gas exploration tenements which overlay the South West Hub CCS project reservoirs. Figure 1 sets out the Feasibility Study area.

The Department of Mines, Industry, Regulation and Safety (“DMIRS” – formerly the WA Department of Mines and Petroleum) led the South West Hub Project through a series of technical assessment activities and desktop studies with funding from the Australian Government’s CCS Flagships program through the Department of Industry, Innovation and Science (DIIS). At the completion of the \$50 million program, the Project was identified as having the potential to store 800,000 tonnes per annum of CO₂ over a 30 year project life¹.

¹ <https://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx> “The Australian South West Hub Project: Developing confidence in Migration Assisted Trapping in a saline aquifer”

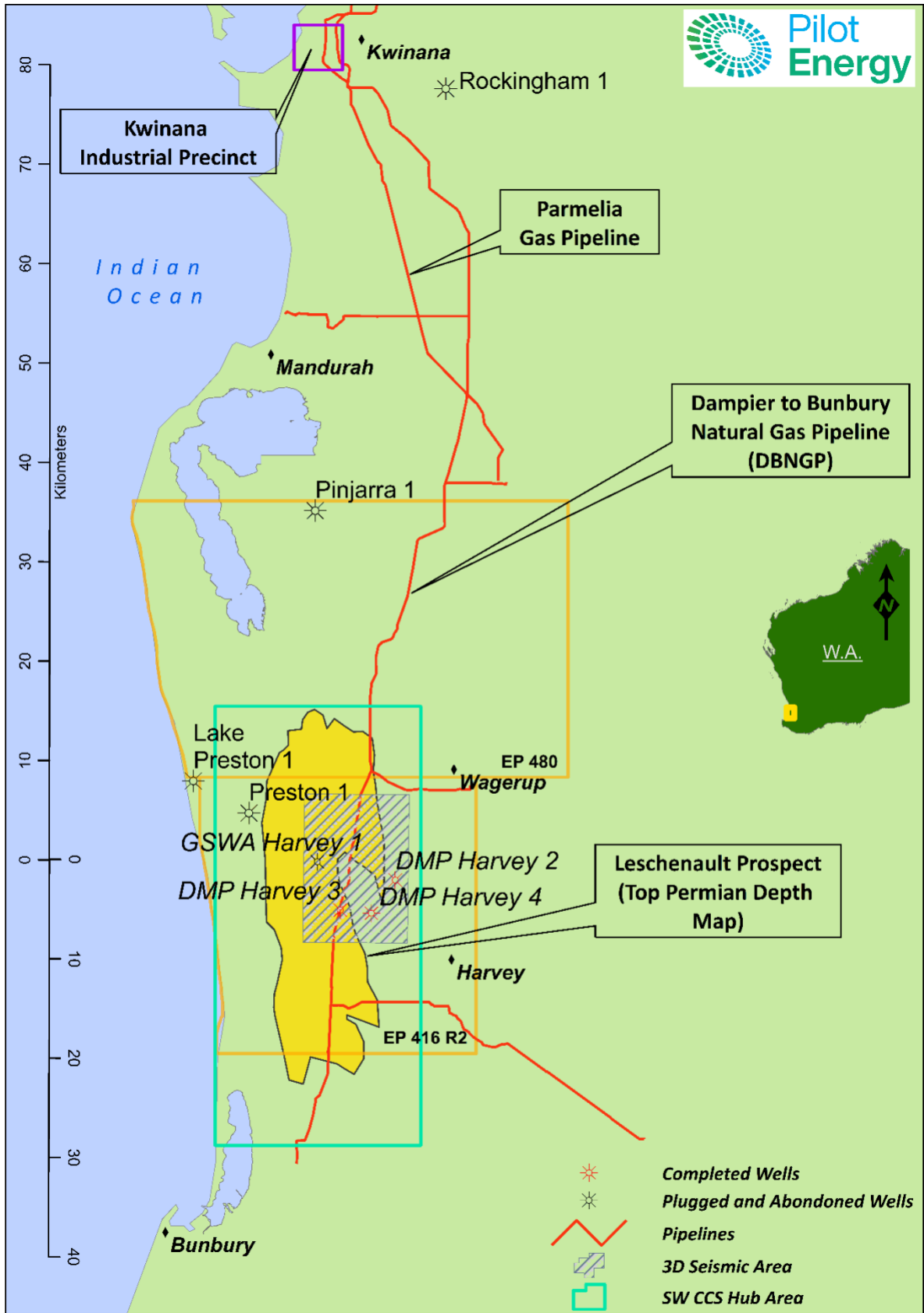
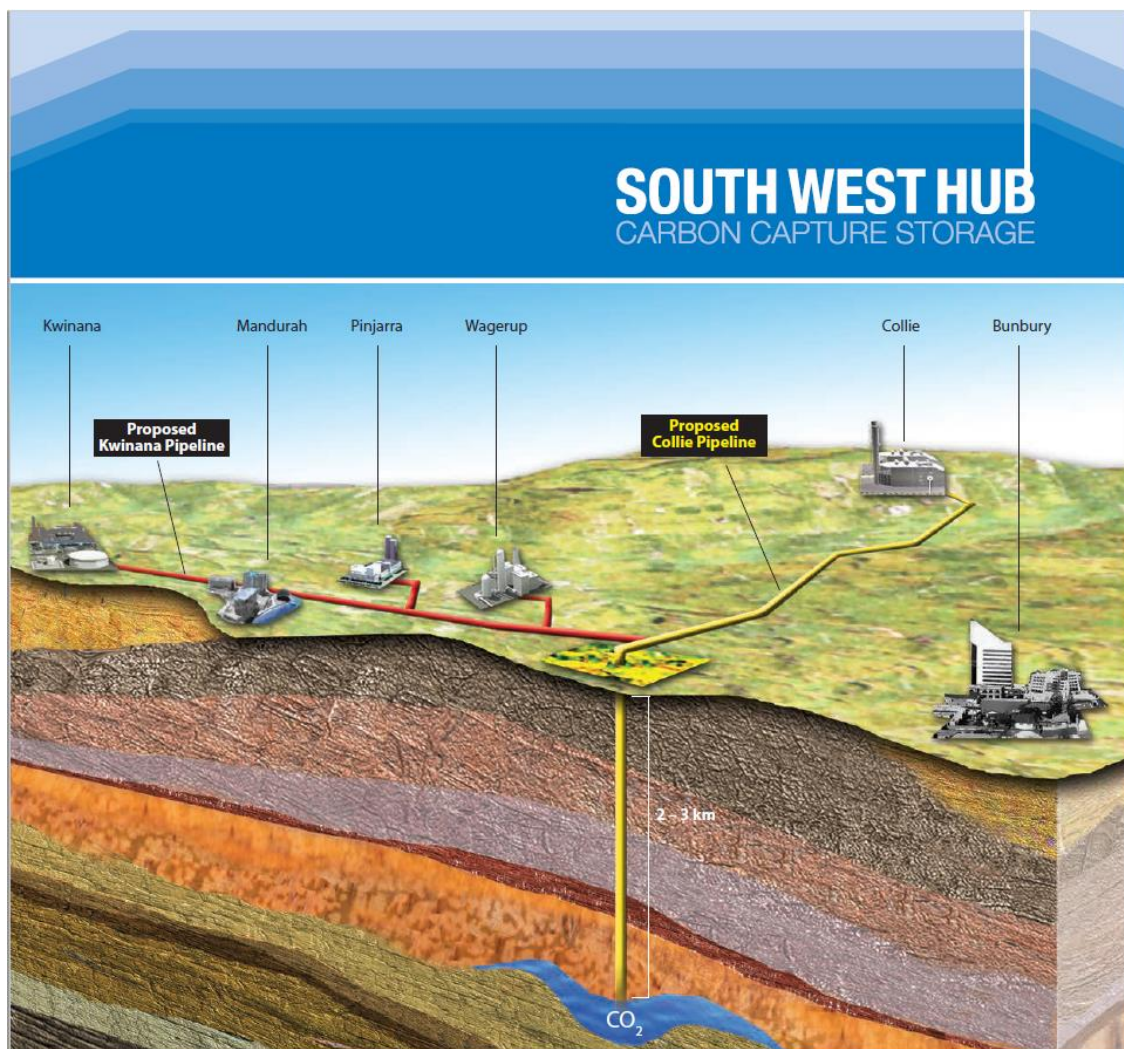


Figure 1. South West Feasibility Study project area

Pilot's Executive Chairman, Brad Lingo noted that "the South West Feasibility Study will define the regions flue gas and CO₂ opportunity set, the cost base to capture these streams and an assessment of the South West Hub CCS project. This data set provides the foundation for the development of a separate South West focussed business unit leading up to the drilling of the AET farm in well at the Leschenault gas prospect in late 2022. The secondary target of this well is expected to also test the CCS horizons targeted by the South West Hub CCS Project."

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 CO₂ deep underground in the Lesueur Sandstone formation. More information on the project can be found on the DMIRS website at <http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx>.



Above image sourced from Government of Western Australia Department of Mines and Petroleum South West CO₂ 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 CO₂ 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.²

South West Carbon Management and Blue Hydrogen Feasibility Study

The objective of the South West Carbon Management and Blue Hydrogen Project Feasibility Study is to define the regions flue gas and CO₂ emission opportunity set, assess the CCS potential of the South West Hub Project and commercialisation via the provision of carbon management services and sale of hydrogen. The Study will incorporate the blue hydrogen assessments from the Mid West feasibility study and the 8 Rivers Capital blue hydrogen technology study (announced 12 August 2021). Two leading international feasibility contractors have been engaged to assist with the Feasibility Study and further external assistance may be required to complete the study.

Genesis has been engaged to project manage the Feasibility Study and prepare the overall study report in conjunction with Pilot and the other feasibility consultants. In addition, Pilot will be leveraging Technip Energies' significant hydrogen/CCS industry experience to complete an assessment of the flue gas/CO₂ technology and opportunity set.

RISC has been engaged to conduct the assessment of the South West hub data set and previous modelling, recommend next steps for an injection trial, and assess the CCS infrastructure and well requirements downstream of the point of emission capture.

The Feasibility Study will be conducted over a 6-month period. Key outcomes of the study will include a detailed assessment of the South West Hub Project and next steps, description and assessment of CO₂ and flue gas opportunity set and the levelised cost of carbon management services.

² 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 <http://www.dmp.wa.gov.au/South-West-Hub-CCS-1489.aspx> and <https://wapims.dmp.wa.gov.au/WAPIMS/Search/SwHubCarbonStorage>

Feasibility Consultants – further information

Genesis, Technip Energies



Genesis Senior Vice President Christophe Malaurie noted “*We are very proud to continue our relationship with Pilot Energy, and excited to help Western Australia on their journey to the energy transition. This award confirms our commitment to a sustainable future through working in true partnership with our clients, and demonstrates our experience in the CCS market.*”

Genesis is a market-leading advisory company wholly owned by Technip Energies and is focused on providing technical and advisory services to the global energy industry. Located in 18 global locations, Genesis’ highly experienced teams and sophisticated tools and processes, offer robust support to our clients, helping them to de-risk projects and maximise value in their investments. Genesis is committed to being trusted advisors while delivering low-carbon solutions for a sustainable future.

Genesis and Technip Energies are at the forefront of the energy transition which provides the ability to reach out to over 15,000 employees worldwide including global subject matter experts in key areas such as Hydrogen, Sustainable Chemistry, Decarbonisation and Carbon Free Energies. This will provide the Feasibility Study with the latest up-to-date understanding of technologies from across the globe and how they can be utilised for the Mid West Projects.

Technip Energies brings quality consultancy experience, with highly regarded expertise in both the energy and hydrogen fields. It has been responsible for over 270 hydrogen production plants worldwide, which now account for more than 35% of the world’s current hydrogen production, and has recently launched BlueH2 by T.EN™, a full suite of deeply-decarbonized and affordable solutions for hydrogen production able to reduce by up to a 99% the carbon footprint compared to the traditional hydrogen process.

<https://www.technipenergies.com/>

<https://www.genesisenergies.com/>

RISC



RISC has supported the energy industry for over 25 years, providing independent and impartial advice to investors in energy projects around the world. RISC’s highly skilled multi-disciplinary teams are routinely deployed for complex due diligence in support of acquisitions and divestments and regularly work to tight timeframes. In the past 5 years they have supported over \$20 billion of transactions, including some of the largest in Australia. RISC’s advice is trusted by the principal lenders to the industry and many ASX listed firms use them as their annual reserve auditors. RISC’s regional and global coverage enables them to provide a unique, balanced, and holistic perspective to all the projects with which they are involved.

RISC's advice combines commercial and technical recommendations enabling their client to make business decisions with confidence.

RISC has a long history in Western Australia, and RISC staff have been involved in most of the major developments in the state over recent decades. RISC's experience also includes miscible gas floods, natural gas storage developments (they have experience of all Australian gas storage projects), Carbon Capture and Storage, and key features of the emerging hydrogen economy. They can support projects from concept through to delivery providing a long-term technical partner that will add credibility to the future plans for the South West Carbon Management Project.

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 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.