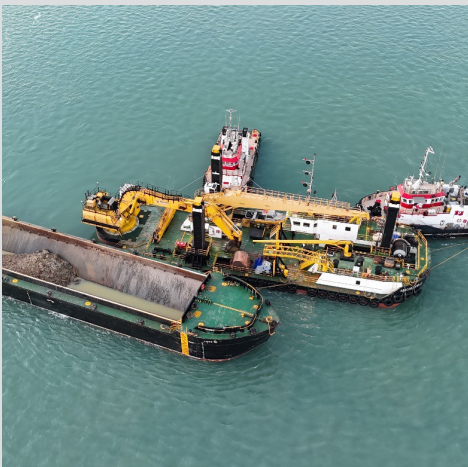


## Stakeholder Consultation

# Barossa Gas Project

### In this edition



- DPD works continue in Darwin Harbour.
- Subsea infrastructure installation continues.
- FPSO on-track for sail-away in Q1 2025.
- Development wells produce good results.

### Work progress highlights

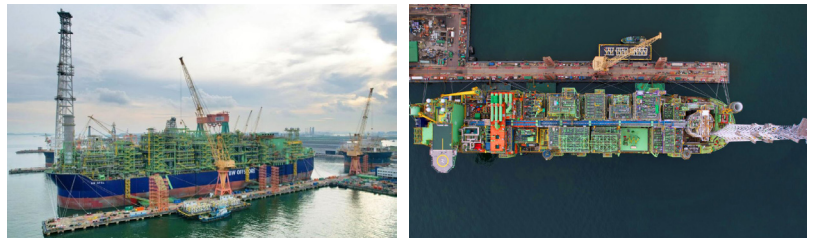
The Barossa Gas Project is now more than 80 per cent complete with first gas expected in the third quarter of 2025.

Offshore works for the Darwin Pipeline Duplication (DPD) will continue within Darwin Harbour for the remainder of 2024.

In remote Commonwealth waters off the Northern Territory (NT), the second phase of subsea infrastructure installation will be undertaken during the next quarter, and we will continue to drill our production wells.

The Floating Production, Storage and Offloading (FPSO) vessel, currently in Singapore, is expected to head to Australia in the first quarter of 2025.

### FPSO construction



Installation of all 16 topside modules on the Floating Production Storage and Offloading vessel (FPSO) has been completed in Singapore.

The vessel, one of the largest FPSOs ever built, is now into the commissioning phase during which detailed inspections and testing of systems are being undertaken to ensure they are operating safely and to design parameters.

Once onshore commissioning has been completed, the FPSO will be towed from Singapore to Australia using ocean-going tugs. Sail-away is on track for Q1 in 2025.

Following the FPSO's arrival in the Barossa Field, it will be connected to the mooring system. Equipment and systems will all be tested during this commissioning stage in readiness for start-up operations.

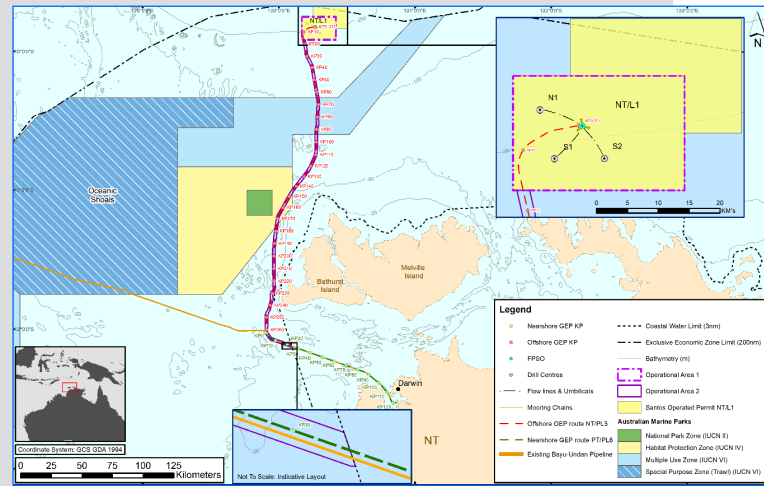
The FPSO, which will be permanently located in the Field, (subject to receipt of the necessary approvals) is 358m long and 64 meters wide and can accommodate up to 140 personnel.

## Project Overview

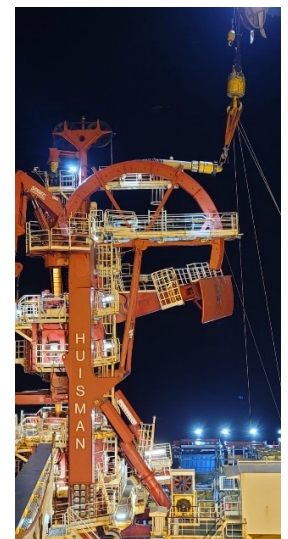
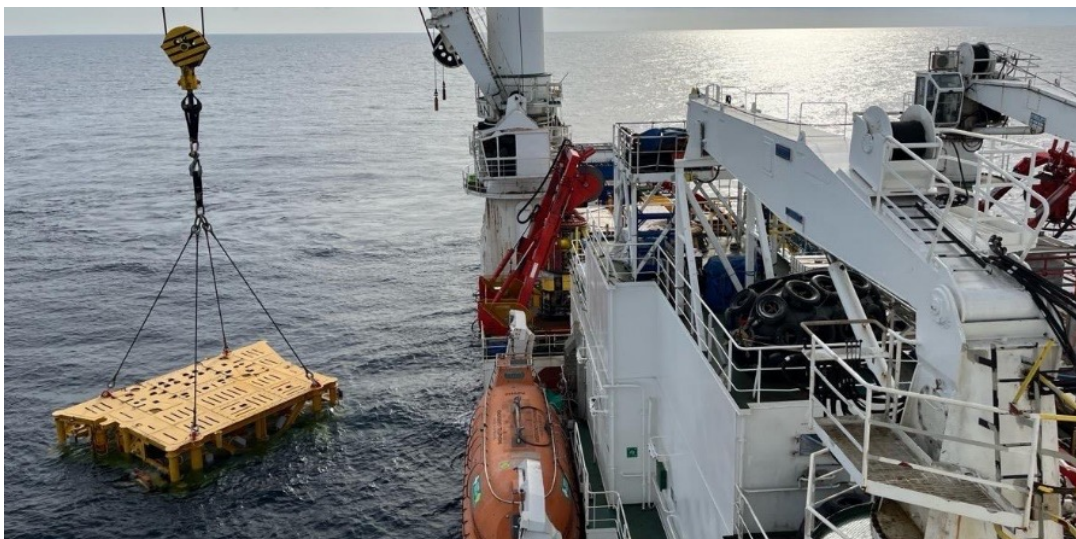
The Barossa Gas Development, located approximately 285km offshore from Darwin in the Northern Territory, comprises a Floating Production Storage and Offloading (FPSO) facility, a subsea production system, supporting in-field subsea infrastructure and a gas export pipeline (GEP).

Once complete, the Barossa Gas Development will transport natural gas from the offshore Barossa field via the GEP to the existing Darwin liquefied natural gas (DLNG) facility.

The development is expected to commence delivering natural gas in 2025. Barossa gas is a critical energy source and will ensure affordable and reliable energy for Santos' customers for decades to come.



The Barossa Gas Development will create and sustain hundreds of jobs in the Northern Territory and will inject billions of dollars into the local economy, supporting the continued regional development of northern Australia.



## Subsea Infrastructure Installation

The second campaign for the installation of subsea infrastructure in the Barossa Field, located 285km offshore from Darwin, is due to commence in mid-November and continue until mid-March 2025, subject to weather conditions and operational performance.

During the first campaign, installation of the infield flowlines that connect the drill centres to the FPSO location was completed along with the installation of manifolds, risers and umbilicals. This phase also involved the installation of the suction anchor piles and hook-up of the Submerged Turret Production buoy for the FPSO mooring system. Flowline pre-commissioning activities for two drill centres were also completed.

Campaign 2 will involve the installation of production manifolds, spools, umbilicals, flying leads and jumpers, designed to support the connection of subsea production wells to the FPSO. Further pre-commissioning will be undertaken to test the various connections and systems.

The third campaign will take place in 2025 when the drilling phase is completed.

Once all installation and testing has been completed, a preservation phase will commence that will maintain the integrity of the infrastructure in readiness for future operations expected to start in 2025.

Trench construction activities within Darwin Harbour using the 'Machiavelli' back hoe dredge.



Installation of concrete mattresses for pre-lay span supports within Darwin Harbour.

## DPD Project

The DPD Project effectively involves 'duplicating' the existing Bayu-Undan to Darwin pipeline in NT internal waters, NT coastal waters and Commonwealth waters. Once in operation the new pipeline will only be used for transporting natural gas (not oil or condensate) from the Barossa gas field to the Darwin LNG (DLNG) facility.

All work has been completed to date in accordance with an accepted Environment Management Plan. Since the commencement of works in NT internal waters in May 2024, significant progress has been achieved.

Construction of the trench in Darwin Harbour, within which the pipeline will be laid, has been completed along with installation of concrete mattresses for pre-lay span supports, pipeline crossings and cable crossings.

Onshore at Wickham Point, where the existing DLNG facility is located, construction of the shore crossing for the pipeline is nearing completion.

During the next quarter, trench maintenance activities will be undertaken in locations where build-up of sedimentation has occurred.

Installation of the rock bedding layer and pull-in wire at the Wickham Point shore crossing is being undertaken in readiness for shallow water pipelay and associated survey activities to commence in October.

The construction activities occur within a Project area, encompassing the pipeline route with an approximate 2 km buffer either side of the pipeline and the spoil disposal ground.

Other Darwin Harbour users are asked to exercise caution at all times and maintain a distance of at least 500 metres from any vessels undertaking the construction activities.

The activities are managed to ensure that environmental impacts and risks are avoided or mitigated to meet Santos and regulatory requirements.

The DPD Project in NT internal waters has received all primary approvals. The NT Government approved the DPD activity in NT jurisdiction under the *NT Environment Protection Act* following assessment by the NT Environment Protection Authority.

The DPD activity in NT and Commonwealth jurisdictions has also been assessed and approved under the *Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act)*.



Valaris MS-1 MODU (view from support vessel).

## Drilling and Completions

Drilling of the six development wells is continuing at the Barossa Field, 285km offshore from Darwin. The moored semisubmersible mobile offshore drilling unit (MODU) is currently positioned at the South 1 (S1) drill centre location, and is working on the fourth well.

All work has been completed to date in accordance with the accepted Environment Plan and without any environmental incidents.

The MODU is planned to move from the S1 to the South-2 (S2) drill centre location in October/November 2024 to complete the remaining work at that location.

Drilling activities occur within a 2.5-km radius of each well. During drilling, a 500-metre exclusion zone (known as a petroleum safety zone) is in place around the MODU. Vessels are prohibited from entering or being present in a petroleum safety zone without authorisation.

Work at the North-1 (N1) drill centre location is planned for subsequent quarters. The entire



Valaris MS-1 MODU helicopter deck.

drilling campaign, including completions and installation of subsea vertical trees, is still expected to take approximately 24 months in total. All schedule estimates are subject to weather and operational performance.

The MODU continues to be supported by helicopters and up to four support vessels which transit between the development area and onshore supply base in Darwin as required.

## GEP installation

With all testing and pre-commissioning activities completed, the installed 262-kilometre GEP is safely preserved on the seabed in readiness for future operations expected to start in 2025.

The GEP will connect the Barossa field to the DPD and together these pipelines will transport natural gas from the Barossa field to the Darwin LNG (DLNG) facility.



The 'Fortitude' construction support vessel performing pre-commissioning activities on the GEP.



## Work Opportunities

We continue to have 11 First Nations people engaged in Santos funded roles/ training programs that work offshore in positions related to the Barossa Gas Project.

These comprise four Tiwi people engaged as Cultural Observers and Monitors on the GEP pipelay and support vessels and seven Larrakia and Tiwi people engaged in offshore roles on the Santos' contracted drilling rig.

Two Santos Offshore Health, Safety and Environment (HSE) Advisor Trainees have been recruited and will undertake a formal 12-18-month traineeship to obtain a Certificate IV in HSE.

One of the trainees, a Tiwi woman, has commenced work on the Santos contracted drill rig while the other trainee will start offshore in October 2024.

Another Tiwi man, one of six indigenous trainees in the MS-1 drill rig training program, has transitioned from offshore assistant to a core roustabout position.

First Nations people represent 55% of Santos' current trainees and apprentices in the NT.

## Barossa Aboriginal Future Fund

Santos' Barossa Aboriginal Future Fund (BAFF) aims to invest in projects that will directly benefit NT Aboriginal Coastal Communities.

The Fund will invest in projects and programs that improve community infrastructure, health, education, housing, and economic outcomes and support employment pathways.

The Fund will also support First Nations people to maintain cultural practices, carry out cultural obligations and care for country.

The Barossa Joint Venture Partners initial contribution to the Fund is \$10 million, with additional payments to be made into the Fund once Barossa starts producing and selling gas.

Santos is working with our Barossa Joint Venture Partners to finalise the revenue stream for the Fund and establish legal structures with sound governance.

Santos wants to listen to NT Coastal Aboriginal people about the needs for their communities.

If you want more information or want to share your ideas, you can visit the NT Community Team at the Santos shop in the Darwin Mall or contact us via email at [enquiriesNT@santos.com](mailto:enquiriesNT@santos.com) or phone on **+61 8919 1900**.

## Environmental Approvals and Consultation

### DPD Project – NT waters

DPD activities in NT internal waters are being undertaken in compliance with the primary environmental approvals received from the NT and Commonwealth governments.

The NT Government approved the DPD Project, following the completion of assessment by the *NT Environment Protection Authority under the Environment Protection Act 2019 (NT)*.

The DPD Project was also assessed and approved by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

### DPD Project – Commonwealth and NT coastal waters

Additional environmental approvals are under assessment by the Regulator for the DPD Project activity in each of Commonwealth and NT coastal waters. Santos has submitted the Environment Plan (EP) for DPD installation (~23km section of pipeline) in Commonwealth waters and a Construction Environmental Management Plan (CEMP) for DPD installation (~8km section) in NT coastal waters. Consultation for these plans has been completed.

The Commonwealth waters EP is currently under assessment by NOPSEMA and can be viewed [here](#). The CEMP has been submitted to the NT Department of Industry, Tourism and Trade (NT-DITT) for assessment and can be viewed at [Published environment plans | NT.GOV.AU](#)

### Barossa Productions Operations – Commonwealth and NT waters

Santos has submitted the Barossa Production Operations EP in Commonwealth waters (~285km section) to NOPSEMA for assessment. The link to the EP is accessible on the NOPSEMA [website](#).



The EP covers (among other things) the following activities:

- Arrival, hook-up and commissioning of the FPSO (section 2.5 of the EP);
- Initial start-up of production to a steady state (section 2.6 of the EP);
- Operation of the FPSO and subsea infrastructure and associated activities (section 2.7 of the EP); and
- Inspection, monitoring, maintenance and repair (IMMR) activities for subsea infrastructure and the Gas Export Pipeline (section 2.9 of the EP);

The EP also provides information on (among other things):

- the potential risks and impacts of these proposed activities; and
- the consultation undertaken by Santos on the proposed activities (section 4 of the EP).

If you have any queries about this EP, please contact us by phone or email (see details below).

Operations Environmental Management Plans (OEMPs) for Operational activities along the Barossa pipeline in NT coastal waters (~8km section) and NT internal waters (~92km section) will be submitted to the NT-DITT for assessment and approval.

## Contact Us

We are committed to ongoing engagement about our activities. If you require further information or would like to speak to us, please do not hesitate to contact us.

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Email: [offshore.consultation@santos.com](mailto:offshore.consultation@santos.com)

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