# Western Australia and Northern Australia Offshore Quarterly Update



This Quarterly Update combines our Western Australia and Northern Territory offshore activities (excluding Barossa Gas Project) into a single reference, outlining proposed activities requiring consultation, as well as other information about planned activities in the field. This Update includes information about:







# **Business Update**



Devil Creek Gas Plant.



Companywide, highlights included safely and permanently injecting and storing CO<sub>2</sub> at Santos' Moomba Carbon Capture and Storage (CCS) project in South Australia, successfully progressing the Barossa Gas development in Northern Australia and the Pikka development in Alaska.

Closer to home, in WA Santos successfully brought the Halyard 2 infill well online supplying gas to our Varanus Island Gas Processing facility. The Halyard 2 well is located approximately 114 km north of Onslow. Gas from the Varanus Island facility feeds into the Dampier to Bunbury Natural Gas Pipeline, supplying businesses and households in the state's Southwest. We also continued to make significant progress on our decommissioning activity, successfully decommissioning (plugged and abandoned) six of eleven wells across our Mutineer, Exeter, Fletcher and Finucane (MEFF) field, located approximately 147 km north of



Santos Campbell Project.

Dampier. We safety removed the Campbell Platform and associated offshore infrastructure at our Varanus Island Hub, with 99 percent of the infrastructure recycled.

Coming up, Santos' Devil Creek Gas Plant, located 50 km south of Karratha, and fed by the offshore Reindeer field, is planned to cease operations in 2025 as the Reindeer field reaches end of field life. The Devil Creek Gas plant has been operating since 2010, with all produced gas suppling the WA domestic market. Concurrently, we continue to progress work on developing a WA CCS hub utilising the Devil Creek facility and Reindeer field reservoirs, potentially offering third party CO<sub>2</sub> storage solutions to large customers.

Santos also plans to drill two (2) gas exploration wells in the Bedout basin in 2026, subject to the required regulatory approvals. We are seeking to understand more about the broader Bedout basin to inform an integrated oil and gas development concept for Bedout/Dorado.

We will continue to engage as these activities progress and all updates will be available on our website.





# **Community Update**

Santos is committed to partnering with communities to build respectful and mutually beneficial relationships and delivering positive outcomes in the areas where we operate. In Western Australia, our key communities are Perth, Gascoyne and Pilbara regions. Our focus areas are Resilient Communities, Economic Pathways and Environment.

#### St John Ambulance Exmouth

Santos is supporting St John Ambulance Exmouth, with part funding for a new ambulance. The hardworking Exmouth Sub Centre is entirely volunteer run, and services an area of approximately 45,000 square kilometres, and 280kms of coastline. Their volunteers respond to around 300 call outs for residents and visitors to the region each year. The new Mark 7 Mercedes Sprinter will serve Exmouth and surrounding areas for the next 10 years, providing a modern ambulance platform with the most up-to-date equipment available, ensuring better communications and better outcomes for the community.

### **Lifeline WA**

Santos has a long-term partnership with Lifeline WA, that has grown and changed over time with increased need for mental health support and suicide prevention. Each year, Santos sponsors the training and deployment of new WA telephone crisis support volunteers, who answer the calls to the Lifeline helpline 13 11 14. It is an incredible community resource for people in times of need. Santos also supports Lifeline WA to engage with high-risk groups in the communities where we operate.

Recently, Santos collaborated with Lifeline WA and regional community partners to deliver training, to build the capacity of local people to support each other in times of crisis. Lifeline WA delivered 'Accidental Counseller' training in Karratha with Clontarf Northwest staff, and in Exmouth with the Shire of Exmouth and Exmouth Chamber of Commerce & Industry.

Santos and Lifeline WA are planning further collaborations to support community need across 2025/26.



St John Ambulance Exmouth.



# remember we are always here

- **(6)** 13 11 14
- © 0477 13 11 14
- (©) lifeline.org.au/crisis-chat

Lifeline WA.





# **Carnaryon Basin Activities**

#### **Overview**

Santos is one of the largest producers of domestic natural gas in WA and also a significant producer of oil and condensate.

We have a long-standing presence in the Carnarvon Basin, one of Australia's premier hydrocarbon basins, which encompasses over 1000 km of the west and northwest coast of Western Australia, from Geraldton to north of Port Hedland.

We are the operator of the Varanus Island and Devil Creek domestic gas processing facilities and a joint venture partner in the Macedon gas facility, all supplied by offshore fields.

We operate the Ningaloo vision floating production storage and offtake (FPSO) facility, and we are a joint venture partner in the Pyrenees FPSO.

Santos Midstream and Energy Solutions is seeking to develop a Carbon Capture and Storage (CCS) hub using existing infrastructure in the Basin that would otherwise no longer be required at the end of field life, and is working with potential industrial CCS customers in northwest Western Australia.

# At a glance

# **CCS** preparation activities:

• Gnu and Reindeer wellhead survey.

#### **Decommissioning activities:**

- · Devil Creek.
- Harriet Joint Venture (HJV).
- Ningaloo Vision Cessation of Production and Floating Asset Removal.
- Reindeer.
- WA-20-L.

#### **Operations activities:**

• Varanus Island Hub.

Santos operated facilities

#### **Planned Plug and Abandonment activities:**

• Mutineer Exeter Fletcher Finucane.

John Brookes Platform Port Hedland VI Hub Oevil Creek NV CoPFAR Onslow Exmouth Western Australia





#### **Carnaryon Basin Activities ... continued**

## **CCS Preparation Activities**

#### **Vessel Based Activities Environment Plan**

Activity: Gnu-1 and Reindeer-1 wellhead survey.

Latitude/Longitude: approximately 75 km north northwest of Dampier.

Water depth (approx): 50-65 m.

End date estimate: The survey activity will be undertaken using a vessel of opportunity between Q3 2025 and Q1 2026.

**Exclusion zone details:** 500 m around the survey vessel at all times whilst in the operational area.

**EP status:** The EP has been accepted by NOPSEMA and is in force until March 2026.

This proposed vessel based survey activity will inspect abandoned wellheads, Reindeer 1 & Gnu 1. located on permit WA-41-L. within Operational Area B as described in the accepted EP. The wellheads are located approximately 1.3 km apart within the Dampier

The wellheads are not in service. The Reindeer-1 wellhead was temporarily abandoned in November 1997 and is not connected to the wellhead platform, and the Gnu-1 well was plugged and abandoned in August 2006.

Detection, exposure, cleaning and visual inspection of the abandoned Reindeer-1 and Gnu-1 wellheads will be performed to support the engineering of a technical solution to install plugs for future carbon capture storage activities. All activities will be performed using a Remote Operated Vehicle (ROV) with various tool attachments.

The activity may occur any time within the validity period of the EP (i.e. before 4 March 2026) using a vessel of opportunity.

### **Decommissioning Activities**

**Devil Creek Gas Supply Pipeline and Sales Gas Pipeline Operations Environment Plan** (State waters)

**Activity:** Gas production.

Latitude/Longitude: Mardie. Western Australia.

Water depth (approx): 38 m at Commonwealth

State Boundary.

End date estimate: Ongoing operations.

**Activity summary:** Operation and cessation of production (CoP) activities associated with the State waters section of the Devil Creek (DC) gas supply pipeline and sales gas pipeline.

Activities include, operation of the pipeline and inspection, maintenance monitoring and repair (IMMR) activities that may be undertaken during the operations and CoP phases. The pipeline will also be flushed and preserved for future decommissioning or repurposing activities under this EP. Future decommissioning or repurposing activities will be subject to a separate EP. The section of the DC supply pipeline in State waters is 48.3 km in length and extends from the Commonwealth State Boundary (CSB) to the shoreline at Gnoorea Point. The DC supply pipeline is located approximately 12 km west of the Dampier Archipelago at the closest point. CoP activities are proposed to commence in 2025.

EP status: Submitted to DEMIRS on 8 October 2024. Under assessment.





#### **Carnaryon Basin Activities ... continued**

## **Harriet Joint Venture (HJV) Environment Plan**

Activity: Decommissioning. **Permit number:** TL/1, 6, 8 & 9.

Latitude/Longitude: Coordinates available

on request.

Water depth (approx): Approximately 0 to 40 m.

Start date estimate: Q3 2025. End date estimate: Q4 2026.

Exclusion zone details: A 500 m radius PSZ around each platform for the duration of the

activity.

**Activity summary:** Decommissioning of the HJV field, comprising removal of all platforms and decommissioning of substructures, as well as pipelines associated with the Simpson facility. The HJV field is approximately 117 km west of Dampier and 117 km north east of Onslow. Activity commencement is planned from Q3 2024.

EP status: HJV Simpson Offshore Facilities (two platforms and offshore pipelines) accepted by DEMIRS on 20 December 2024. HJV Offshore platforms for remaining platforms and structures accepted by DEMIRS on 13 September 2024.

# **Ningaloo Vision Cessation of Production and Floating Asset Removal Environment Plan**

Activity: Oil production.

Latitude/Longitude: Coordinates available

on request.

Water depth (approx): 340 m.

End date estimate: Ongoing operations. Exclusion zone details: 500 m around FPSO. **Activity summary:** Allows for CoP phase and floating asset removal activities. The operational area is located approximately 45 km north northwest off the Cape Range Peninsula in Western Australia, Activity commencement is dependent upon reservoir performance and approvals, and is currently expected to commence in 2025. The EP comes into force when the FPSO disconnects for permanent sailaway.

EP status: Accepted by NOPSEMA on 23 December 2025.

# **Reindeer Wellhead platform and Offshore Gas Supply Pipeline Operations and Cessation of Production Environment Plan**

**Activity summary:** Operation and CoP activities associated with the Reindeer Wellhead platform and the Commonwealth waters section of the Devil Creek gas supply pipeline.

Activities include, operation of the pipeline and IMMR activities that may be undertaken during the operations and CoP phases. The pipeline will also be flushed and preserved for future decommissioning or repurposing activities under this EP. Future decommissioning or repurposing activities will be subject to a separate EP.

The Reindeer gas field is located within permit area WA-41-L, approximately 80 km northwest of Dampier, in the Barrow Sub-basin on the Northwest Shelf, offshore of Western Australia. Activity commencement is dependent upon reservoir performance and is currently expected to commence in 2025.

**EP status:** Submitted to NOPSEMA on 13 September 2024. Under assessment.





#### **Carnaryon Basin Activities ... continued**

#### **WA-20-L Environment Plan**

Activity summary: The permit area is approximately 105 km north of Dampier in Commonwealth waters. The EP includes the presence of the Legendre-1 wellhead, and occasional vessel-based monitoring of the small gas seepage bubbles in the WA-20-L permit area. The monitoring program is to be carried out once in the duration of the EP, within the fourth year after the EP is accepted.

EP status: The revised EP has been 'accepted with conditions and/or limitations' by NOPSEMA on 10 February 2025. The EP is available on the NOPSEMA website.

#### **Operations Activities**

#### **Varanus Island Hub Operations Environment Plan**

Activity: Oil and Gas production.

Latitude/Longitude: Lowendal Islands, WA.

Water depth (approx): Various offshore platforms

from approximately 5.3 m to 11 m.

End date estimate: Ongoing operations. Environmental monitoring program ongoing at Varanus Island.

Exclusion zone details: 500 m around all offshore platforms (coordinates available on request).

**Activity summary:** 5-year revision to the EP for ongoing operations.

EP status: Submission to DEMIRS Q3 2025.

### **Plug and Abandonment Activities**

### **Mutineer Exeter Plug and Abandonment Environment Plan**

**Activity:** Plug and Abandonment of wells on title.

Latitude/Longitude: Coordinates available on

request.

Water depth (approx): 130 - 160m.

End date estimate: Q2/Q3 2025 (subject to MODU/LWIV availability, MODU/LWIV capability and metocean conditions (particularly cyclonic activity).

Exclusion zone details: 500 m around MODU and existing drill centres.

Activity summary: Allows for the plug and abandonment of the wells on title, including wellhead removal.

**EP status:** Accepted by NOPSEMA on 12 February 2023.





# **Bedout Basin Activities**

#### **Overview**

Santos has strategic petroleum acreage in the Bedout Basin, north of Port Hedland.

We have undertaken extensive exploration activities in the region and to date five fields have been discovered.

These discoveries include Dorado Development, which is proposed to be an integrated gas and liquids project.

Two gas exploration wells are proposed to be drilled in 2026 as part of a broader exploration program, encompassing exploration and appraisal drilling, as well as a 3D marine seismic survey.

The 3D marine seismic survey is proposed as results from previous exploration drilling and seismic acquisition undertaken in the area have highlighted potential for further gas and liquids resources.

# At a glance

## **Exploration and Appraisal Drilling:**

• Bedout Multiwell.

#### Seismic exploration activity:

• Keraudren 3 3D Marine Seismic Survey (MSS).



Broome Bedout Multiwell K3 Seismic Survey

Port Hedland

Western Australia





#### **Bedout Basin Activities ... continued**

### **Exploration and Appraisal Drilling**

#### Multiwell

**Activity summary:** The Bedout Exploration & Appraisal Multi-well activity is located within Commonwealth waters offshore of Eight Mile Beach, Western Australia. The permit areas are wholly within offshore Commonwealth waters, approximately 50 km north from the nearest shoreline (Bedout Island), 99 km from the closest mainland point (De Grey River-mouth) and 123 km from Port Hedland, within water depths 75 - 250 m. Activity includes drilling up to 10 wells of which 2 are planned for 2026 (exploration & appraisal) across 4 permits, with 6 specific operational areas. Activity commencement is planned for Q3 2026 at the earliest.

**EP Status:** EP preparation is underway.

### **Seismic Exploration Activities**

### **Keraudren 3 3D Marine Seismic Survey (MSS)**

Activity summary: The proposed Operational Area (OA) is located approximately 130 km northeast of Port Hedland and 64 km north of Cartaminia Point on the Western Australian (WA) coastline at the closest point. This proposed seismic survey is located adjacent to the Keraudren Extension 3D MSS completed by Santos in 2021 and 2022 respectively and will be undertaken in petroleum titles WA-438-P, WA-64-L, WA-435-P, WA-436-P, WA-437-P and surrounding waters.

**EP status:** EP is currently being developed.





# **Bonaparte Basin Activities**

#### **Overview**

The Bonaparte Basin, located offshore between Western Australia and the Northern Territory, is a key focus area for Santos Midstream and Energy Solutions. It presents an opportunity to store carbon dioxide emissions from our own operations, as well as carbon dioxide generated from third-party sources.

CCS is a core component of Santos' decarbonisation strategy, as well as the decarbonisation strategies of our customers and emitters in hard-to-abate industries.

Santos is seeking to acquire subsurface data via a 3D Marine Seismic Survey to identify and image detailed subsea geological formations for the potential injection and storage of carbon dioxide (CO<sub>2</sub>).

We are also seeking to drill up to three wells in the Basin, commencing with the drilling exploration of the Astraea-1 well. The purpose of the well is to evaluate subsea geological formations for the potential injection and storage of  $CO_2$ .

## At a glance

#### **Appraisal Drilling:**

• G-11-AP CCS.

# Appraisal Drilling & Plug and Abandonment activities:

• Tern-2 Plug and Abandonment.

#### Seismic exploration activities:

• EOS 3D Marine Seismic Survey (MSS).

#### Ongoing activities:

- Darwin LNG Ops.
- Bayu-Undan GEP Ops.









# **Bonaparte Basin Activities ... continued**

### **Appraisal Drilling**

### **G-11-AP CCS Appraisal Drilling Environment Plan**

**Activity summary:** Santos is planning to drill up to three wells in greenhouse gas permit G-11-AP, starting with the Astraea-1 well. The purpose of the well is to identify subsea geological formations for the potential injection and storage of carbon dioxide (CO2), The Operational Area for the Astraea-1 well is approximately 115 km from the nearest coastline and approximately 275 km west-southwest from Darwin, Northern Territory.

**EP status:** Submission to NOPSEMA planned for Q4 2025.

# **Drilling & Plug and Abandonment Activities**

## **Tern-2 Plug and Abandonment Environment Plan**

Activity summary: Permanent plug and abandonment activity for one historic well previously temporarily abandoned. The well is approximately 300 km WSW of Darwin, and approximately 106 km off the coastline of Western Australia. Activity commencement is planned for Q4 2025 at the earliest.

**EP status:** EP to be resubmitted to NOPSEMA middle May 2025 to align with Well Operations Management Plan.

## **Seismic Exploration Activities**

### **EOS 3D Marine Seismic Survey (MSS) Environment Plan**

**Activity summary:** 3D marine seismic survey activity to appraise carbon capture storage potential of Santos' greenhouse gas permit G-11-AP. Survey location is approximately 107 km from the nearest WA - coastline and approximately 102 km from the nearest NT coastline. Activity commencement is planned for Q2 2026 at the earliest.

**EP status:** Earliest submission to NOPSEMA planned for Q2 2025.

# **Ongoing Activities**

## **Darwin LNG Ops**

**Activity:** Operations.

Latitude/Longitude: Darwin, NT.

Water depth (approx): N/A.

End date estimate: Ongoing operations.

Exclusion zone details: N/A.

#### **Bayu-Undan Gas Export Pipeline Operations**

**Activity:** Operations.

Latitude/Longitude: Coordinates available on

request.

Water depth (approx): Variable, 500 km Pipeline.

End date estimate: N/A, Pipeline.

**Exclusion zone details:** N/A.

# **About us**

Santos is a global energy company, with operations across Australia, Papua New Guinea, Timor-Leste and North America. Santos provides reliable, affordable energy for progress and seeks to provide lower carbon energy over time.

We have interests in three of Western Australia's major domestic gas plants, located in the Pilbara region – Varanus Island (Operator), Devil Creek (Operator), and Macedon (non-Operator). We operate the Ningaloo Vision floating production, storage and offloading vessel (FPSO) and have non-operator interests in the Pyrenees Venture FPSO.

In the Northern Territory, we operate Darwin LNG, a gas liquefaction and storage facility that started production in 2006. Darwin LNG is currently supplied gas via a 500 km 26-inch

subsea pipeline from the Bayu-Undan central production and processing complex in offshore Timor-Leste waters. The Barossa field is planned to be the source of gas to backfill Darwin LNG from 2025, following the end of field life at Bayu-Undan. The Barossa Gas Project is located 300 km north of Darwin.

Our current activities are focused on near-field exploration and development activities, ongoing operations at our existing facilities, carbon capture and storage, and the progressive decommissioning of facilities and infrastructure no longer required.

### **Activity notifications**

All activities will be managed under Regulatoraccepted EPs. Please contact us if you would like to be notified prior to, during or following the completion of any activities listed above. Email: offshore.consultation@santos.com Toll free phone: 1800 267 600.



