

# EXECUTIVE SUMMARY



# Executive summary

## Overview

Hunter Gas Pipeline Pty Ltd (wholly owned by Santos Limited (Santos)) is proposing the Narrabri Lateral Pipeline (referred to as 'the project' for the purposes of this document) south of Narrabri, New South Wales (NSW). The project involves constructing, operating (including maintaining) and decommissioning an underground gas transmission pipeline about 55 kilometres in length, along with associated surface infrastructure, to connect the approved Narrabri Gas Project to the approved Hunter Gas Pipeline. Once completed, the project would allow the transmission of all natural gas produced by the Narrabri Gas Project to the existing NSW natural gas transmission network near Newcastle via the Hunter Gas Pipeline for the east coast domestic gas market.

The project is driven by strategic planning and policy directions that are pivotal for the future of energy supply and development in Australia and NSW. The project addresses critical needs for energy security at national, state, and regional levels, ensuring a sustainable and reliable energy source.

As critical State significant infrastructure, the project is subject to approval by the Minister for Planning and Public Spaces under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). The project is also a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and requires approval from the Australian Minister for the Environment and Water.

This Environmental Impact Statement (EIS) considers the potential impacts of the project and has been prepared to support Santos' application for approval of the project in accordance with the requirements of Division 5.2 of the EP&A Act. The EIS addresses the environmental assessment requirements of the Secretary of the Department of Planning, Housing and Infrastructure (the SEARs). The EIS is supported by specialist technical assessment reports.

## Strategic context and project need

The project has been declared critical State significant infrastructure by the Minister for Planning as the connection between the approved Narrabri Gas Project and the approved Hunter Gas Pipeline. This connection allows the transmission of natural gas extracted and processed at the Narrabri Gas Project to the east coast domestic gas market, helping to address energy security risks and put downward pressure on electricity prices for households, manufacturers and businesses.

The project is needed to facilitate the provision of essential gas supply to the domestic market to address forecast shortfalls as the National Electricity Market transitions away from a long-term reliance on coal fired power stations.

The Australian Electricity Market Operator (AEMO) has confirmed natural gas is and will continue to be a key generation source in Australian energy markets, particularly as a peaking fuel when there is low renewables generation and storage options have been exhausted. AEMO's *2024 Integrated System Plan* (AEMO, 2024a), which provides a plan for essential infrastructure to meet future energy needs, identifies a critical role for gas in supporting energy system decarbonisation. As coal-fired power stations retire, renewable energy connected with transmission and distribution, firmed with storage, and backed up by gas-powered generation, offers a reliable and efficient way to supply electricity to homes and businesses through Australia's transition to a net zero economy (AEMO, 2024a). Gas generation provides back-up supply during long periods of 'dark and still' renewable droughts when energy supply from wind and solar sources is reduced and times of extreme peak demand, particularly in winter (AEMO, 2024a).

The Australian Government’s *Future Gas Strategy* (DISR, 2024a) recognises the ongoing importance and vital role of gas in supporting the renewable energy transition. Similarly, the NSW Government’s *Future of Gas Statement* (Department of Regional NSW, 2021) confirms that the NSW Government has committed to reducing domestic emissions, boosted by investments in renewables as part of the broader energy transition. This change will take several decades to complete and during that time, gas will continue to play an important role in energy supply, security and reliability in NSW. Currently NSW does not produce commercial quantities of gas and is reliant on imports from Queensland and South Australia via the Moomba to Sydney Pipeline, and from Victoria via the Eastern Gas Pipeline.

Gas shortfalls are projected to emerge unless new sources of gas supply are made available. The *Future Gas Strategy* (DISR, 2024a) confirms that, to meet forecast domestic demand, new gas supply and connecting infrastructure is needed from undeveloped fields. The *Future Gas Strategy Analytical Report* (DISR, 2024b) notes the key role that the Narrabri gas fields will play in increasing domestic supply and helping alleviate shortages both at a national and regional level. Within the *Future of Gas Statement* (Department of Regional NSW, 2021), the NSW Government identifies the Narrabri Gas Project as a critical energy supply project to provide gas for firming capacity.

The Independent Planning Commission of NSW, in its Statement of Reasons approving the Narrabri Gas Project (IPC, 2020) found the Narrabri Gas Project has the potential to meet about 50 per cent of NSW gas requirements in circumstances where (without the project) NSW is unlikely to be able to meet any of its gas needs from its own resources. Santos has committed that 100 per cent of gas from the Narrabri Gas Project will be supplied to the domestic market.

Once fully operational, the Narrabri Lateral Pipeline, together with the Narrabri Gas Project and the Hunter Gas Pipeline, would play a critical role in providing energy security for NSW and help put downward pressure on gas and electricity prices for households, manufacturers and businesses.

## How the project meets the need

The *Future Gas Strategy* (DISR, 2024a) confirms the role of gas infrastructure, including gas transport pipelines, noting that developing pipeline infrastructure and expanding pipeline capacity is crucial to bringing more sources of supply to the east coast domestic gas market. The *Future Gas Strategy Analytical Report* (DISR, 2024b) provides a supporting quantitative evidence base on the supply-demand balance of gas to 2050, drawing on existing analysis, including by AEMO and the Australian Competition and Consumer Commission (ACCC). The report identifies the Narrabri Gas Project and Narrabri Lateral Pipeline as key projects to increase domestic gas supply and transport capacity on the east coast, respectively.

The project is consistent with the interim findings of the ACCC Gas Inquiry (ACCC, 2025a; ACCC 2025b), which confirms that development of pipeline infrastructure to connect new supply sources to the east coast domestic gas market, and arrangements for access to infrastructure on reasonable terms, are essential to ensure domestic sources of supply continue to be brought online.

The project would provide essential infrastructure for the transmission of all natural gas produced by the Narrabri Gas Project to the east coast domestic gas market via the Hunter Gas Pipeline, consistent with the *Future Gas Strategy* (DISR, 2024a) and AEMO’s development pathway for Australia’s energy transition.

The most effective way to ensure timely delivery of gas from the Narrabri Gas Project to the existing NSW gas supply network near Newcastle is via the Narrabri Lateral Pipeline and the approved Hunter Gas Pipeline.

The Statement of Reasons for the declaration of State significant infrastructure and critical State significant infrastructure made by the Minister for Planning on 8 December 2022 recognises that the Narrabri Lateral Pipeline is essential to NSW for economic reasons as it would:

- supply natural gas into the NSW gas market from the Narrabri Gas Project
- strengthen the reliability of the east coast domestic gas market by providing additional gas supply security to users in NSW
- support the development of a local gas supply to place downward pressure on natural gas prices.

## The project

### Location

The project is located in the Narrabri Shire local government area in north-west NSW within the traditional Country of the Kamilaroi (Gomeri) People. The project extends between the approved Narrabri Gas Project gas processing facility at Leewood (located about 20 kilometres south-west of Narrabri), traverses south-east via the Narrabri Gas Project Bibblewindi facility, and ends at a tie-in to the approved Hunter Gas Pipeline (located about 5.5 kilometres south-east of Baan Baa).

### Key features

The project would be designed, constructed, operated and decommissioned in accordance with the Australian and New Zealand AS/NZS 2885 Pipelines – Gas and Liquid Petroleum series of standards (AS 2885) and the *Code of Environmental Practice – Onshore Pipelines* (Australian Pipelines and Gas Association (APGA), 2022) (the APGA Code of Environmental Practice).

The key operational features of the project include:

- an underground high pressure, steel gas transmission pipeline with a length of about 55 kilometres, a size of DN500 (equivalent to about 508 millimetres in diameter), and a nominal gas capacity (flow rate) of up to 200 terajoules per day
- a nominal permanent easement of 30 metres wide
- supporting above ground infrastructure, including:
  - two scraper stations, used for access to the pipeline for internal cleaning and inspection
  - a cathodic protection system to maintain pipeline integrity, including cathodic protection units, anode beds and test points
  - pipeline marker signs
  - access tracks.

### Construction

Construction is proposed to commence (pending approvals) around the end of 2026. Construction work would be undertaken over three phases with breaks in between each phase. The main construction works, following a period of site establishment, are expected to take about four months. During this phase, the pipeline and surface infrastructure would be installed, and the construction right of way and temporary workspaces would be reinstated.

The following two phases are:

- main construction works would take about four months
- hydrotesting would take about one month
- commissioning would take about four months.

There would be periods of time where no work would take place following the main construction works and prior to commissioning.

The following infrastructure is proposed to support construction:

- a construction compound south of Baan Baa near the Kamilaroi Highway
- use of land within the approved Narrabri Gas Project Leewood and Bibblewindi facilities
- other temporary workspaces along the project site
- new access tracks and works to a number of existing roads, tracks and intersections to provide access to the construction right of way and the Baan Baa construction compound.

## Operation

Subject to approval, the project is expected to commence operating around the end of 2028.

The pipeline would be designed to operate with minimal operator intervention using a supervisory control and data acquisition (SCADA) system for system sequencing, alarm monitoring and control. The pipeline would be continually monitored to confirm it is operating within the pipeline operating parameters. Remotely operated isolation valves would be located at either end of the pipeline, which would automatically close and raise an alarm in the event of an emergency. Access to the permanent easement would be necessary for inspections and to follow-up issues identified from inspections.

The project would operate until the Narrabri Gas Project ceases operation.

## Decommissioning

At the end of the project's operational life, decommissioning would be undertaken in accordance with the structured, risk-based process required by applicable legislation and industry standards (currently the *Pipelines Act 1967* (NSW), *Pipelines Regulation 2023* (NSW) and *AS 2885*).

This process involves a safety management study, segment analysis and preparing an abandonment plan, which together ensure that potential risks (including environmental and safety risks) are identified, assessed and managed.

Specific decommissioning activities would be determined through this process and would generally involve drawing down remaining gas as much as possible; managing residual gas; disconnecting and removing surface facilities; and, where required by the segment analysis and abandonment plan, cutting, capping and filling sections of the pipeline. The pipeline would be left in place to minimise land disturbance, and only limited areas would be subject to surface works.

## Community and stakeholder engagement

Engagement with the community and other key stakeholders has played an integral part in developing the project. Project-specific engagement started in December 2022 to raise awareness of the project, understand community and stakeholder questions and concerns, help shape and assess the project design, and guide future engagement. A Community and Stakeholder Engagement Plan was developed by Santos to inform the stakeholder engagement activities to be undertaken throughout the development of the EIS.

From 2023 to 2025, project engagement continued and included a range of in-person events, virtual meetings, a monthly e-newsletter, notices in local newspapers, an updated website, and engagement with key stakeholders.

The engagement undertaken to date has contributed to the project team's understanding of the potential impacts and has enabled the design to respond to and minimise potential impacts where practicable. Impacts would continue to be minimised throughout the design development and construction planning phases, considering further inputs from community and stakeholders.

For the eastern section of the project, within private properties, Santos has worked closely with landholders to identify an alignment that would minimise impacts on existing uses, structures and facilities (including property improvements such as farm dams, fencing, areas of cropping, location of dwellings etc). As part of the design development process, further refinements to minimise environmental and community impacts and improve outcomes are anticipated.

## Environmental assessment outcomes

Key findings of the EIS in relation to the potential impacts of the project and how these will be avoided, minimised, managed and offset are provided below.

### Biodiversity

The western section of the project site extends through, and is surrounded by, the Pilliga East and Bibblewindi State forests. The eastern section traverses agricultural land with limited scattered remnant vegetation.

The main potential impacts on biodiversity would be during construction, which would directly impact about 168.34 hectares of native vegetation. This includes about 10.36 hectares of vegetation in two threatened ecological communities listed under the *Biodiversity Conservation Act 2016* (BC Act) and 10.75 hectares of vegetation in three threatened ecological communities listed under the EPBC Act.

The project has applied a precautionary approach to biodiversity assessments and identified the potential for impacts on habitat for 15 threatened flora species listed under the BC Act, which includes eight threatened flora species also listed under the EPBC Act. A total of 50 listed threatened fauna species, including predicted (ecosystem credit species) and candidate species (species credit species) in accordance with the *Biodiversity Assessment Method* (2020b), have the potential to be impacted. These include 26 threatened fauna species listed under the EPBC Act.

The project is not likely to significantly impact important habitat for any migratory species, aquatic habitat, groundwater dependent ecosystems, threatened aquatic species or threatened aquatic ecological communities. No impacts on species, populations or communities listed under *Fisheries Management Act 1994* are expected, largely due to the ephemeral nature of watercourses in the study area and the lack of suitable permanent water habitat.

The presence of the permanent easement could affect movement of some fauna species and result in habitat fragmentation. To address this, a fauna connectivity strategy will be developed and implemented, including measures to support fauna movement across the easement, with a focus on areas of the project located within forests and other areas of connected vegetation.

Santos is committed to minimising the potential biodiversity impacts of the project. The area of direct impact will be refined during further design and construction planning, with the aim of reducing the amount of vegetation clearing required as far as practicable. Residual impacts on biodiversity, including those on species listed under the EPBC Act, will be offset in accordance with the NSW Biodiversity Offsets Scheme and the Biodiversity Conservation Regulation 2017, as endorsed through the Assessment Bilateral Agreement between the Australian and NSW Governments under section 45 of the EPBC Act.

### Soils

The dominant soil types within the project site are sodosols and vertosols, which are typical in the region. The key limitations of these soil types are the potential for soil acidification, soil structural decline and soil salinity. The potential to encounter acid sulfate soils within the project site is considered to be low or extremely low.

The assessment identifies soil erosion as a potential risk during construction, particularly once earthworks commence following vegetation removal. This risk is associated with temporary stockpiles and the presence of dispersive subsoils. However, once the pipeline trench has been backfilled, topsoil reinstated and vegetation re-established, the erosion risk would be similar to existing conditions.

Construction is unlikely to result in a worsening of soil salinity. Stockpiles would only be present for a short period and the dispersive nature of subsoils can be managed with common ameliorants, such as gypsum. The likelihood of encountering contamination is considered to be low.

Exposure of soils during construction requires management to mitigate the potential for erosion, sedimentation, and associated water quality and land capability impacts. Erosion and sediment control measures will be implemented in accordance with the APGA Code of Environmental Practice and *Best Practice Erosion and Sediment Control* (IECA, 2008). The approach to erosion and sediment control, including detailed management measures, will be defined in the soil and water management plan implemented as part of the construction environmental management plan (CEMP), which will be developed in accordance with these documents. This will include a requirement to develop site and activity-specific erosion and sediment control plans in areas of higher erosion hazard.

There would be minimal potential for impacts on soils during operation and decommissioning.

## Water

The project site is located within the Namoi River catchment and intersects multiple watercourses, all of which are ephemeral. These include Bohena, Bibblewindi, Little Sandy, Sandy, Tulla Mullen, Curracubah and Baan Baa creeks.

Construction would involve works within and/or around watercourses, depending upon the proposed construction method. Trenchless construction methods (horizontal directional drilling) are proposed at Bohena, Little Sandy and Tulla Mullen creeks to avoid physical disturbance of these watercourses. Any pooled water present during trenching would be dewatered to a downstream location within the same watercourse, resulting in no net loss of water from the system. As a result, there would be minimal potential for impacts on flow regimes and water quality. Watercourse crossings will be restored to a condition that, as far as practicable, reflects their existing physical condition and ecological characteristics.

Most construction work is shallow compared to the much deeper groundwater level in the Great Artesian Basin Southern Recharge. Shallower groundwater may be present in alluvium and colluvium. Any interception of shallow groundwater during trenching across watercourses is expected to be minor and limited to the short construction period at any watercourse. Standard measures will be implemented to manage the risk of accidental spills and leaks, ensuring minimal potential for groundwater contamination. As a result, potential impacts are consistent with the minimal impact considerations of the *NSW Aquifer Interference Policy* (DPI Office of Water, 2012), and no groundwater mitigation measures are required.

The assessment of potential changes to flooding behaviour concluded that any changes during construction would be generally localised to immediately upstream of the construction right of way and downstream of stockpile gaps. No broader changes to flooding patterns were identified, and there is no anticipated risk to public safety, residences or key infrastructure. The assessment concluded that operation would not result in any changes to flooding behaviour.

It is estimated that about 47 megalitres of non-potable water would be required to support construction, mostly for dust suppression and hydrostatic testing. Sources of construction water include reuse of treated water from Santos' Leewood reverse osmosis treatment facility, groundwater or surface water sources managed under a water sharing plan via an existing water access licence (including Santos water access licences), and/or from municipal water sources.

Where surface or groundwater sources are used, they would be drawn from water entitlements within the long-term annual extraction limits for each source. Preliminary analysis indicates that the estimated non-potable water demand represents less than 0.5 per cent of the total licensed volume for each relevant groundwater or surface water source. Use of any surface or groundwater sources would comply with regulatory requirements, including obtaining necessary approvals under the *Water Management Act 2000*.

## **Noise and vibration**

Noise modelling indicates that during mobile ('transient') construction activities (e.g. trenching and access track works), noise levels may be above noise management levels at several sensitive receivers, depending on the type of work, time of day and mitigation implemented. Impacts at any one location are expected to be brief (typically one to two days) as each type of work progresses along the project site; however, because several different transient construction activities would pass by a receiver, there is potential for a receiver to experience short-term noise impacts on multiple occasions. For longer-duration ('stationary') activities (e.g. trenchless crossings, construction facility operations), fewer sensitive receivers are predicted to be affected.

Construction vibration is not expected to impact any receivers.

Given the transient nature of most construction noise and the limited number of sensitive receivers close to the main noise generating activities, noise impacts are not anticipated to be a significant issue for the project. Although construction noise levels may be above the noise management levels at some sensitive receivers for some construction scenarios, the proposed management measures, particularly for out-of-hours work, would minimise potential impacts. Noise and vibration management measures provided in a construction noise and vibration management plan as part of the CEMP will be implemented to manage temporary impacts.

No noise and vibration impacts are expected during normal operation or decommissioning.

## **Air quality**

The main potential impact on local air quality would be dust generation during construction associated with works within the construction right of way, road and access track construction and use, and use of construction ancillary facilities.

The assessment identified that the project poses a low risk of impact based on the magnitude of likely dust emissions and proximity of receivers. Although the assessment indicates a low risk of dust impacts, air quality management measures provided in the CEMP will be implemented during construction to ensure that the risk of impact remains low.

The proposed surface infrastructure is not expected to generate material air quality emissions during normal operation. Releases of small quantities of gas at the scraper station would result from internal pipeline cleaning, conducted as part of routine maintenance, and would involve the release of about two cubic metres of gas into the atmosphere. These events would be infrequent and only occur about once per year on average and would generate minimal emissions. No air quality impacts are expected.

Measures to manage potential air quality impacts during decommissioning will be detailed in the decommissioning environmental management plan. Emissions are expected to remain within relevant air quality criteria and no impacts on sensitive receivers are anticipated.

## **Land use and agriculture**

The western part of the project has been co-located with Narrabri Gas Project infrastructure to minimise the overall impact of the project in this location and reduce the need for supporting infrastructure, such as temporary workspaces.

The land requirements for the project would affect about 12 privately-owned properties as well as public land (State forests, Crown land, and road and rail reserves). Santos has been actively working with landholders to refine the alignment and confirm the proposed location of the permanent easement. This has involved identifying and avoiding existing property uses, structures and facilities (such as farm dams and dwellings), as well as higher yield agricultural land, as far as practicable.

Construction would temporarily disrupt agricultural and forestry land uses and activities within the disturbance footprint. During operation, no restrictions would be placed on most normal agricultural activities within the easement. While some restrictions would apply to productive forestry uses in the easement during operation, these would represent only a very minor reduction within the two affected State forests.

The pipeline's permanent easement provides Santos access to operate and maintain the pipeline. There would be controls on the activities that can be undertaken within the easement, to ensure the safety and reliability of the pipeline. The pipeline easement would be registered on the underlying land title and remains on title following any future changes in land ownership.

Potential impacts on private properties during construction will be managed through the development and implementation of individual construction property management plans, which will be prepared in consultation with landholders affected by the easement. Arrangements for rehabilitating the disturbance footprint to agreed conditions will form part of the plans.

Given the limited scope, short duration, and localised nature of the proposed decommissioning works, no land use impacts during decommissioning are anticipated.

## **Heritage**

The project has been located to minimise impacts on known Aboriginal cultural heritage sites. No known sites in the Pilliga forests would be impacted. Although the disturbance footprint has been refined to avoid identified Aboriginal heritage sites as far as practicable, six sites within the disturbance footprint are located such that it would be difficult to avoid direct impacts. At this stage of construction planning, it is anticipated that construction would directly impact the entirety of two sites and part of four sites. No further impacts on Aboriginal cultural heritage are expected during operation or decommissioning.

Opportunities to further avoid or minimise impacts on Aboriginal cultural heritage will be considered during ongoing design and construction planning. This will include continuing to refine the design and construction planning to minimise and avoid direct impacts on Aboriginal sites as far as reasonably practicable, salvage, and implementing an Aboriginal cultural heritage management plan to minimise the potential for inadvertent impacts. These measures will be supported by the results of a further cultural values assessment, which is currently being undertaken to support the Aboriginal cultural heritage assessment for the EIS.

Santos has consulted and will continue to consult with relevant Aboriginal stakeholders, including the Registered Aboriginal Parties, about the project and its operations in the region, including potential impacts on the Pilliga forests and cultural heritage items and values.

No existing or potential non-Aboriginal heritage items or sites were identified within or close to the project site.

## **Traffic and transport**

Efficient and safe access would be required to the construction right of way and construction facilities to deliver materials and equipment, and for workforce access. Existing public roads and access tracks would be used as far as practicable; however, upgrade works and some new tracks would also be required.

Crossings of the Newell Highway, Delwood Road (as part of the crossing of Tulla Mullen Creek) and the Mungindi railway line (including Curracabah Road at Baan Baa) would be undertaken via trenchless construction methods to minimise potential disruption. The Newell Highway, Delwood Road and the Mungindi railway line are expected to remain fully operational during construction.

Construction would also require trenched crossings of unsealed local roads as well as a number of unsealed forestry access tracks. All local roads and forestry tracks that would be crossed are generally used for forestry operations or property access and do not accommodate substantial traffic. Trenched crossings of roads and access tracks are expected to take about one to two days each. As there is anticipated to be only a short duration of construction works affecting each road, the impacts of local road crossings are expected to be minimal.

Construction traffic generated by the project, including heavy vehicles and oversize overmass (OSOM) loads, would have a minimal impact on transport network performance, with sufficient capacity to accommodate additional traffic movements during the peak construction period. Detailed trip and route planning will be conducted during the construction planning phase, and all OSOM movements will be conducted in accordance with the relevant permits.

An upgrade of the intersection of the Kamilaroi Highway and proposed Baan Baa compound access would be required, with the necessary design and delivery requirements to be discussed and agreed with Transport for NSW and Narrabri Shire Council.

A construction traffic and access management plan will be prepared and implemented as a part of the CEMP. The plan will detail processes, requirements and responsibilities to minimise potential traffic, transport and access impacts during construction, including impacts on the safe and efficient operation of roads, and to minimise the potential for access impacts during construction.

No traffic and transport impacts are expected during operation and decommissioning.

## **Landscape and visual**

Construction would result in temporary changes to landscape character and visual amenity, which may be viewed from public locations as well as private residences. Within forested areas, the initial visual change due to vegetation clearing would be noticeable, noting that there are limited sensitive receivers.

As the vast majority of project infrastructure would be located underground, there is minimal potential for landscape and visual impacts during operation. Permanent changes during operation would primarily relate to the presence of the maintained easement for the underground pipeline and the limited surface operational infrastructure. In forested areas, the easement would represent a change in the landscape and visual character compared to the existing character. However, the easement will be progressively rehabilitated in accordance with the rehabilitation strategy and is expected to regrow ground and shrub cover over time, reducing the visual impact.

The long-term visual impacts within cleared agricultural landscapes would be minimal. Most normal agricultural land uses, such as cropping and grazing, would continue within the easement, further reducing the project's potential visual impact and blending into the surrounding agricultural setting.

The proposed surface infrastructure would be relatively minor additions in the landscape and would not represent a substantial change to the existing environment.

Given the limited scope, short duration, and localised nature of the proposed decommissioning works, no significant visual impacts are anticipated.

## **Social and economic**

Social and economic benefits and impacts would result from constructing and operating the project.

Construction and operation of the project would provide positive economic activity to the regional and NSW economy. The project is expected to require a peak construction workforce of up to about 200 people for about four months during the main construction works period. Beneficial impacts include an estimated direct expenditure of \$120 million, contributing an estimated \$33.3 million in direct value-added expenditure within NSW. This increased economic demand would support the creation of jobs and lead to additional wages and salaries in the NSW and regional economy.

With all gas produced by the Narrabri Gas Project to be supplied to the east coast domestic gas market, operation of the project would contribute to the supply of natural gas to homes, small businesses, major industries and electricity generators across NSW and the east coast, with flow on benefits to the economy. Increasing domestic gas supply can help secure manufacturing jobs in Australia by putting downward pressure on energy and feedstock costs, making local industries more competitive and sustainable. This supports existing operations, attracts new investments and helps stabilise regional economies.

The project would also unlock the substantial additional economic value of related developments (the Narrabri Gas project and Hunter Gas Pipeline).

Construction would result in temporary disruption for directly affected landholders and temporary amenity impacts. Given the relatively isolated location of the majority of the project site, and the short duration of construction at any one location, changes to local amenity and disruptions would be temporary, localised and not affect most community members.

Santos will continue to consult with local Aboriginal stakeholders and communities about the project and its operations in the region, including potential impacts on Aboriginal culture and communities, and the proposed approach to avoid or minimise potential impacts.

Santos is committed to maximising positive social impacts and opportunities and reducing potential negative impacts associated with the project and other projects in the Narrabri local government area. Santos has and will continue to implement a range of initiatives, including stakeholder engagement, complaints and dispute resolution, support for regional and local employment and business development, workforce management and community investment, to ensure that the impacts of its projects on the community and environment are minimised and managed. These processes will continue and be extended to support the construction, operation and decommissioning of the project.

## Hazards and risks

The project will be designed, constructed and operated in accordance with AS 2885 to ensure that all potential hazard, safety and risks are identified and appropriately managed.

With implementation of the identified mitigation measures, potential construction risks would be reduced to as low as reasonably practicable.

The quantitative risk assessment undertaken to determine the risk of a loss of containment during operation determined the project would comply with *Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning* (Department of Planning, 2011c) and that no sensitive receivers were located within any of the relevant risk contours.

A pipeline safety management system will be implemented in accordance with AS 2885 and Division 3 of the Pipelines Regulation 2023, including processes for managing any emergency events during pipeline systems operation and maintenance, and from external events that may affect the safe and reliable operation of the pipeline system.

Decommissioning activities are expected to have minimal potential for hazard and risk impacts due to the comprehensive and structured risk-based process that governs decommissioning in accordance with AS 2885. This process ensures that potential risks and impacts are systematically identified, assessed and managed.

## Waste management

Waste generated during construction, operation and decommissioning will be managed in accordance with the waste hierarchy and circular economy principles, prioritising avoidance, reuse, and recycling before disposal. The main wastes generated during construction include vegetation, packaging materials, scrap metal, general solid waste and liquid waste (such as hydrotest water). All waste will be classified and managed in accordance with relevant legislation and guidelines, and transported to appropriately licensed facilities where required. With these measures in place, the potential for environmental or human health impacts from waste is considered minimal.

## Greenhouse gas

The project is consistent with the greenhouse gas and climate change strategies of the Australian and NSW Governments, including the targets set by the *Climate Change (Net Zero Future) Act 2023*.

During construction, total Scope 1 emissions are estimated at 3,071 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>-e), primarily (about 88 per cent) from diesel use by construction equipment and vehicles. Other emissions would be from the direct use of fuels for transport, including delivery of pipes, water and fuel. Including Scope 3 emissions (mainly from the embodied emissions of steel pipes), total construction emissions are estimated at 12,559 tCO<sub>2</sub>-e.

During operation, annual Scope 1 emissions are estimated at 639 tCO<sub>2</sub>-e, mainly from calculated fugitive emissions, with total operational emissions estimated at 25,575 tCO<sub>2</sub>-e. Scope 2 and 3 emissions during operation are minimal.

The main source of potential greenhouse gas emissions during decommissioning is expected to be residual gas management, with actual emissions depending on the approach taken. Based on current estimates, decommissioning could result in Scope 1 emissions of up to about 2,460 tCO<sub>2</sub>-e. No Scope 2 emissions are anticipated, and Scope 3 emissions are expected to be negligible.

The greenhouse gas assessment concluded that emissions from the project are not expected to materially contribute to NSW's overall emissions or affect the State's ability to meet its legislated emissions reduction targets.

## Justification summary

The project alignment, design and construction methodology have been developed to avoid and minimise impacts on existing properties, and the local and regional environment as far as possible.

This EIS has been prepared to assess the potential impacts of the project and develop measures to mitigate the impacts and enhance the benefits of the project. It addresses the key issues identified in the SEARs issued under Part 5, Division 5.2 of the EP&A Act and the relevant provisions of section 192(1) of the EP&A Regulation.

Measures to minimise the identified potential impacts would be implemented through the design development and construction planning phases, taking into account the input of stakeholders and the local community.

To avoid, minimise, manage and offset the potential impacts identified by the EIS, the assessment chapters outline a range of mitigation measures that would be implemented during design, construction, operation (including maintenance) and decommissioning. The majority of the potential construction related impacts would be effectively mitigated by the implementation of best practice environmental management, including the implementation of the environmental management approaches described in chapter 20 (Approach to environmental management and mitigation) and the mitigation measures compiled in Appendix F (Consolidated mitigation measures). The project would comply with the conditions of approval and Pipelines Act licence, and would be undertaken in accordance with the APGA Code of Environmental Practice.

The environmental performance of the project would be managed by implementing the CEMP, operational management measures and the decommissioning environmental management plan (see chapter 20), which would also ensure compliance with relevant legislation and any conditions of approval. With the implementation of the proposed mitigation and management measures, the potential environmental impacts of the project would be adequately managed.

Within the context of the need for the project, potential impacts and benefits, the EIS concludes that the project is justified for the following reasons:

- Potential environmental and socio-economic impacts have been avoided and minimised as far as is reasonable and feasible, measures to manage the potential for impacts have been developed, and appropriate consideration has been given to the potential for biophysical, economic and social impacts.
- There is a demonstrated strategic need for the project, which is consistent with relevant strategic plans and policies at the national, state and local levels.
- The project has been declared critical State significant infrastructure as there is no existing pipeline network that could transport the gas from the approved Narrabri Gas Project to the east coast domestic gas market.
- The project addresses critical needs for energy security at national, state and regional levels, ensuring a sustainable and reliable energy source in Australia's transition to a net zero economy.

Although constructing and operating the project would result in some impacts, with the implementation of proposed management and mitigation measures provided in the EIS, and in the context of the project's need and benefits, the potential impacts are considered acceptable and manageable.

## How can I comment on the project and/or the EIS?

### Public exhibition

The EP&A Act requires exhibition of an EIS for public comment for a minimum period of 28 days.

The NSW Government will exhibit the EIS on the NSW Major Projects website. The EIS will also be referred to key government agencies for their review.

Advertisements will be placed in newspapers to advise of the public exhibition periods, where the EIS can be viewed, and to provide details of community consultation activities and information sessions.

## **Making a submission**

Submissions about the project are invited during the exhibition period from any interested person or organisation. Submissions can be made to the NSW Department of Planning, Housing and Infrastructure via the Major Projects website.

Details on how to make a submission are provided on the project website and in other communication material. All submissions must be received before the close of the exhibition period (as detailed on the project website and the Major Projects website).

Following exhibition of the EIS, all stakeholder feedback will be reviewed and addressed in a Submissions Report. If further engagement is required to respond to the issues raised (e.g. to clarify issues of concern or to seek feedback on proposed refinements to the project), the details of that engagement will be outlined in the Submissions Report.

## **Engagement activities**

Community and stakeholder engagement will continue during the public exhibition period of the EIS. Santos will provide opportunities for the community and other stakeholders to find out more about the project prior to making a submission through a number of consultation opportunities as well as in-person and virtual engagement events.

If approved, engagement with key stakeholders would continue through construction and operation of the project.