

FUTURE OF GAS STATEMENT





Deputy Premier's Foreword

Secure, reliable and affordable gas supply is important to support economic recovery, particularly as regional industry, businesses and communities work hard to bounce back from bushfires, drought, floods, pests and COVID-19.

Gas-backed industries have a bright future in regional NSW, and the NSW Government is committed to delivering secure and reliable access to gas through a mix of sources. We are also committed to providing certainty for local communities where gas exploration and production occurs, and guidance on what the future will look like for key gas users in the manufacturing sector.

This *Future of Gas* Statement outlines the NSW Government's balanced approach to securing gas supplies and working with industries to generate regional jobs and prosperity. This means backing the Narrabri Gas Project and investments in LNG import terminals, pipelines and gas-fired power generation, as well as continuing investigation of the Narrabri Special Activation Precinct to drive growth in the manufacturing sector. These investments are vital to ensuring we deliver the tools industry needs to spur job creation and economic growth.

Our balanced approach also means being clear about where gas exploration and production will and won't occur. The NSW Government has listened to communities impacted by gas production, and we will only support limited new gas production in this state beyond the Narrabri Gas Project. The NSW Government will significantly reduce the total footprint of land covered by Petroleum Exploration Licences, resolving historic land use conflict and providing certainty for both gas users and local communities.

I am determined to leave a lasting and sustainable legacy for regional industries and communities, and this *Future of Gas* Statement delivers a clear plan to achieve secure gas supply and back our industries, and give confidence to communities on the future for gas exploration and production in NSW.

The Hon John Barilaro MP

Deputy Premier,
Minister for Regional New South Wales, Industry and Trade
Minister responsible for Resources

A photograph of a man with curly hair and safety glasses, wearing a dark blue work shirt with a yellow high-visibility vest, working in an industrial environment. He is looking down at a piece of machinery. In the background, there are several rows of electrical control panels with drawers. A red 'WARNING!' sign is visible on one of the panels.

Introduction

Gas is an important enabler for job creation and economic growth. It is an important source of energy for major industrial processes, but also as a feedstock for chemical processes in the production of fertiliser, construction materials, explosives and plastics. These are important inputs into several downstream industries including agriculture, construction, and food and beverage manufacturing. It is also used widely in the commercial and residential sectors.

Gas will continue to play an important role in the energy transition and will maximise investments through our Electricity Infrastructure Roadmap and Renewable Energy Zones. Gas-fired electricity plants will act to support demand during peak times, firm supply, and support wholesale energy prices as some coal-fired power station reach end of life. This provides the certainty and security of energy supply for consumers.

This statement sets out a balanced approach for the future of gas exploration, production and supply in NSW, and considers the need of secure, reliable and affordable gas supply to support economic development and job creation, and the need for certainty for local communities around future land use.

The NSW gas industry

Secure, reliable gas supply will come from a diverse range of sources

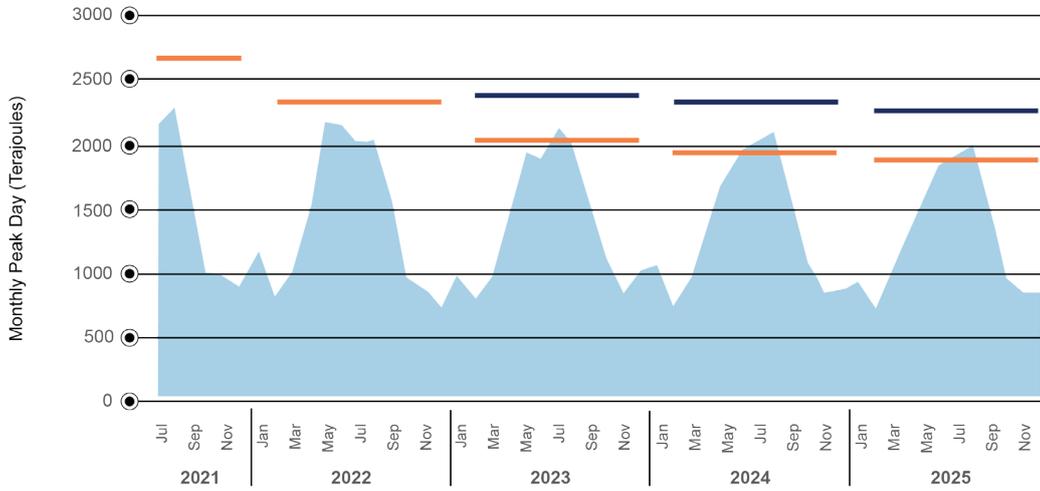
Without investment in additional gas supply, there is a risk of a supply shortage in the East Coast gas market as early as 2023. Australian Energy Market Operator forecasts (Figure 1) show that a gas shortage could occur in 2023 if proposed investment in a liquified natural gas (LNG) import terminal does not proceed. This forecast shortage is pushed out to 2026 if investment in a new LNG import facility progresses.



“Without investment in additional gas supply, there is a risk of a supply shortage in the East Coast gas market as early as 2023.”

Figure 1: Forecast maximum daily southern demand

Source: AEMO 2021 GSOO



LEGEND

- Forecast maximum daily southern demand
- Production, pipeline and constrained storage
- Production, pipeline, constrained storage and an import terminal

A supply shortage would create significant disruption for gas users and put jobs in energy-intensive industries at risk. Investment in a range of supply sources, including the Narrabri Gas Project and LNG import facilities will work to mitigate the risk to supply disruptions, help push down energy prices and support industry development and investment. Further, it will help secure energy supply by ensuring sufficient gas supply to support gas-fired electricity generation at the Tallawarra B and proposed Kurri Kurri plants.

The Narrabri Gas Project is critical to drive regional economic development and support supply security

The recently approved Narrabri Gas Project would make a significant contribution to unlocking gas supply and improving energy security for NSW. The Project, once confirmed and operational, is projected to inject up to 70 petajoules of gas each year across its 25-year life. The Narrabri Gas Project would represent about half of the gas used in NSW.

This will deliver on the commitment in the Energy and Emissions Memorandum of Understanding between the NSW and Commonwealth Governments to increase gas supply in NSW.

The Narrabri Gas Project is projected to generate 1,300 jobs during construction, 200 ongoing local jobs, and over 250 jobs in the surrounding NSW region. It is estimated to increase economic output by between \$9 billion and \$12 billion. Over the project's life, the Narrabri Gas Project could generate up to \$3 billion in direct revenue for the NSW and Commonwealth Governments through royalties and taxes.

Future extensions to the Narrabri Gas Project would bring further economic benefits for NSW, and the NSW Government welcomes future extension proposals, subject to planning assessment and approval. Any further proposed developments would be subject to rigorous assessment, and managed under the Government's robust regulatory framework.

“Supply security will be achieved through the Narrabri Gas Project, and interstate imports, supplemented by LNG imports from overseas.”



The NSW Government will support limited gas exploration beyond the Narrabri Gas Project

Given the expected longer term outlook for gas demand amid the broader energy mix, ongoing land use conflict in areas subject to gas exploration and proposed investments in additional supply infrastructure, the NSW Government will not release further areas for gas exploration in NSW. This means that the Government will only support limited gas production projects in NSW, specifically, the Narrabri Gas Project and its potential extensions.

Supply security will be achieved through the Narrabri Gas Project, and interstate imports, supplemented by LNG imports from overseas. This will ensure gas supply can be flexibly scaled to respond to demand.

Industrial gas users and regional communities will benefit from lower gas prices arising from increased supply. Recent gas price modelling has found that local gas production can help reduce end user exposure to global LNG market volatility. The Commonwealth's National Gas Infrastructure Plan (NGIP) Interim Report outlines that local gas production combined with an import terminal eliminated both annual and daily shortfalls in southern states and provides additional flexibility to meet the needs of gas-powered electricity generation.

The NSW Government remains committed to ensuring secure, reliable and affordable gas supply, and will continue to pursue development of emerging fuel sources, including developing hydrogen export capacity through the NSW Hydrogen Strategy.

Gas will also play a role in the energy transition to lower emissions sources

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.

Investments in Renewable Energy Zones and other initiatives will deliver a lower-emissions electricity sector. Renewables need to be backed by long duration storage and firming capacity to ensure secure and reliable electricity supply

The NSW Government supports investments in gas-fired electricity, such as the Tallawarra B power station. This project is expected to help ensure sufficient firming capacity alongside batteries and pumped hydro. Gas-fired power is especially well-suited to support demand during extended peak times, firm supply, and keep down wholesale energy prices as some coal-fired power stations reach end of life.

Our plan of action

To deliver on this vision, the NSW Government will act to:

- 1.** Improve certainty about future gas production and exploration
- 2.** Enable downstream users to access gas to unlock economic benefits
- 3.** Use gas for firming capacity where it is the most economic option to ensure reliability
- 4.** Enable gas-related infrastructure



1. Improving certainty about future gas production and exploration

The NSW Government is significantly scaling back the area where gas exploration and production will be permitted in NSW, to provide certainty to local communities and regional industry. This will result in a 77 per cent reduction in the total area currently covered by Petroleum Exploration Licences (PELs) (Figure 2).

The Narrabri Gas Project is expected to play an important role in the future of gas for NSW, providing supply for gas-fired power generation and industrial and residential users. NSW has a strong regulatory framework in place to manage potential environmental impacts.

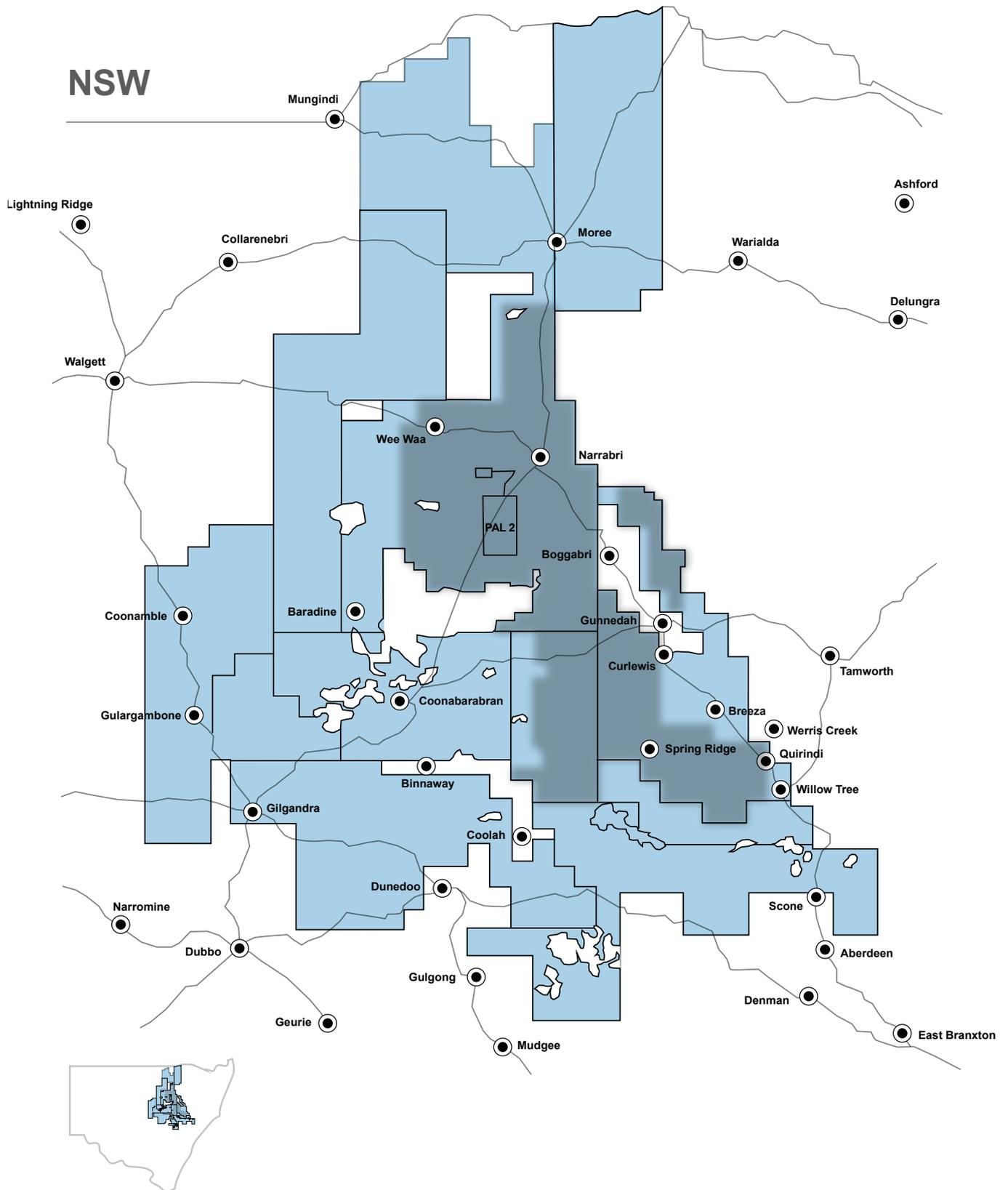
To support the development of the Narrabri Gas Project and ensure sufficient local production, the NSW Government will renew a limited number of Petroleum Exploration Licences, based on factors including resource potential and feedback from the community.

Further, the NSW Government will also not release further areas for gas exploration in NSW, including parts of Far West NSW near Wilcannia and Broken Hill that were recently assessed under the Strategic Release Framework.

To support the gas sector in NSW, the NSW Government will:

- Review options to share benefits for landholders impacted by gas pipelines to ensure they are receiving their fair share and have opportunities to diversify their income.
- Update the Code of Practice for Coal Seam Gas Well Integrity to ensure it reflects current best practice in the safe and environmentally sound production of gas;
- Update the Petroleum Minimum Standards to reflect the modern, outcomes-focused approach recently established for the Mining Prospecting Minimum Standards;
- Ensure that the EPA, as lead regulator, is able to recover costs of regulation from the industry, consistent with Recommendation 4 of the Chief Scientist and Engineer's Final Report of the Independent Review of Coal Seam Gas Activities in NSW.

Figure 2: Areas where gas will and will not be considered



LEGEND

- Areas where gas development will be prohibited
- Areas where gas development will be considered





2. Enabling access to gas or affordable alternatives to unlock economic potential and job creation

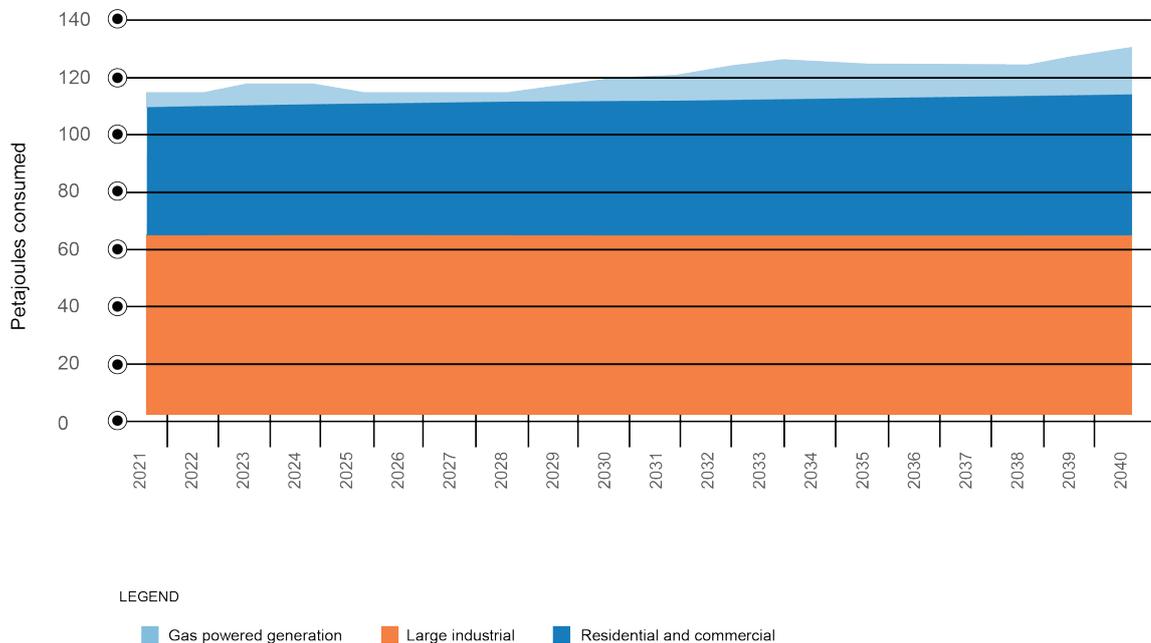
Investigations to establish a Special Activation Precinct (SAP) at Narrabri are underway. This will enable opportunities for energy-intensive manufacturing, like fertiliser and plastics manufacturing, located near secure and reliable gas supply.

The Narrabri Gas Project will have a major impact on economic output and could create over 450 ongoing jobs. Access to reliable and affordable gas will enable new demand and growth in regional NSW with the right pipeline infrastructure. This is especially important as new sectors with intensive energy needs emerge in NSW, such as critical minerals processing.

The use of gas in applications other than power generation is likely to remain significant for some time. AEMO forecasts that NSW consumer gas demand will remain relatively stable over the next 20 years (Figure 3). This creates a need to support diverse supply sources and the development of alternative fuels, to free up more gas supply for use by commercial downstream users and help households to save money on their energy bills.

Figure 3: Forecast NSW Gas Consumption by Customer Segment

Source: AEMO



The NSW Government will continue work to identify where current gas usage might be better met through alternate solutions, like hydrogen, electrification and other fuel-switching opportunities through the Net Zero Industry and Innovation Program. This will free up gas supply for gas-reliant industry, supporting further job creation and economic development.

The NSW Government has also recently launched Australia's first Renewable Gas Certification scheme to allow gas users to buy renewable gas produced from wastewater, food, and garden waste. The scheme will be piloted at the Malabar Biomethane Injection Project (MBIP), which will convert raw biogas into biomethane, and then be injected back into the NSW gas distribution network.

NSW Waste and Sustainable Materials Strategy will support the capture and use of biogas by providing funding to support landfill gas capture infrastructure and establishing a regulatory framework to incentivise the capture and use of biogas.

The forthcoming NSW Hydrogen Strategy will provide a vision for building hydrogen economy in NSW, including a development pathway with coordination of production and consumption via new hydrogen hubs. Over time, natural gas could be supplemented with these alternative fuels such as hydrogen or renewable biogas. During the transition, existing distribution pipeline infrastructure has capacity to introduce new fuel blends up to technical operating limits.

The NSW Government will also pursue other opportunities to increase gas supply for NSW manufacturers, including by supporting households to install fuel-switching and energy efficiency technologies under the Energy Security Safeguard.



3. Using gas for firming capacity in the broader energy transition

As the electricity market moves towards more generation that relies on variable conditions, like weather, firming is increasingly valuable to ensure we can quickly stabilise the electricity system and meet peak demand. Firming can be provided by a range of technologies, including gas generators, batteries, demand response and pumped hydro. In the future, fast firming may also be provided by hydrogen generators.

In its November 2020 Electricity Infrastructure Roadmap, the NSW Government committed to supporting firming capacity. The Roadmap will provide contracts for firming generation (such as peaking gas, batteries and pumped hydro) if the NSW Energy Security Target is forecast to experience a shortfall, including having regard to the long duration storage supported by the Roadmap. The Energy Security Target is set at the capacity level needed to meet customer demand during a summer heat wave while maintaining a reserve margin to account for the unexpected loss of two of the state's largest available generating units.

The NSW and Commonwealth Governments are backing investment in gas-fired electricity generation. The Commonwealth Government's investment of \$600 million in a new gas-fired power station at Kurri Kurri, and the NSW Government's investment of \$78 million for the Tallawarra B green hydrogen and gas net zero emissions power plant will be critical to provide peaking capacity and support reliability. These investments are vital to meet the NSW Energy Security Target, and place downward pressure on electricity prices.

These gas-fired generators are expected to continue to play an important role in keeping electricity affordable as coal-fired electricity generators retire and in providing firming capacity to ensure grid stability and security



4. Enabling gas-related infrastructure

Supporting domestic users of gas will require further investments in gas-related infrastructure, including import terminals, pipelines, storage, and hydrogen and biogas facilities.

The NSW Government supports the development of LNG import terminals at Port Kembla and Newcastle.



The Port Kembla Import Terminal has received planning approval and is expected to be commissioned by early 2023, subject to a final investment decision. The Newcastle LNG import terminal is in the early stages of its planning assessment and has been declared as Critical State Significant Infrastructure.

While import terminals are unlikely to deliver gas into NSW at the same price as local production, they can provide an additional source of supply and greater choice for industrial customers. This will reduce the risk of price volatility for NSW gas users and the likelihood of supply shortfalls in the mid-2020s.

Two pipeline projects are proposed to deliver Narrabri gas to the existing transmission network. The Hunter Gas Pipeline has received planning approval and would connect the Wallumbilla Gas Hub directly to NSW if constructed.

The proposed Western Slopes pipeline connects into the Moomba to Sydney pipeline. This proposal requires some expansion of the Moomba-Sydney pipeline and the proponent has commenced part of this work as a separate project.

The position of supporting diverse gas supply is dependent on timely private sector investment decisions, including in the Narrabri Gas Project, import terminals and pipelines. The NSW Government will monitor the development of these gas infrastructure projects and the risks posed by delays or unforeseen events.

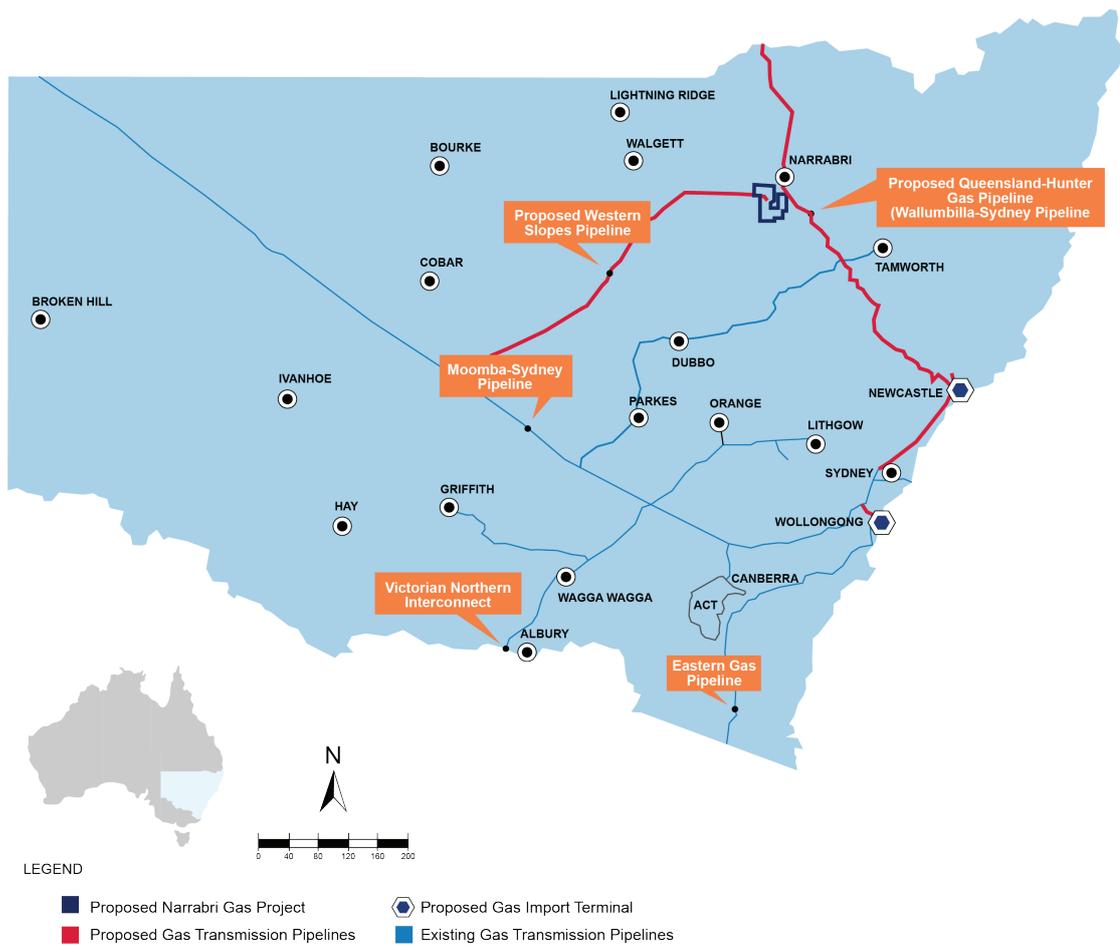
The Commonwealth and NSW Governments have delivered significant gas pipeline regulation reforms. These reforms will deliver a simpler regulatory framework by introducing effective constraints on pipeline operator market power and an improved access and negotiation framework for gas shippers. The reforms will continue to encourage investment but also support the safe, reliable and efficient use of gas pipelines. New pipelines will have an important role in NSW in enabling interstate imports.

The development of gas-related infrastructure can have negative impacts on landholders, businesses and residents in the areas directly affected by development. The NSW Government will conduct a review of the benefits and compensation provided to community members affected by investments in electricity transmission infrastructure, and will expand the scope of this to include a review of gas pipeline infrastructure to ensure those impacted are fairly remunerated.

Development of carbon capture, utilisation and storage (CCUS) technologies present opportunities to enable emission reductions from gas and gas-using industries. The Commonwealth Government has committed \$313.7 million to support the development of CCUS projects and hubs. The NSW Government has also recently commenced a program to explore the potential for carbon storage sites in NSW, focusing on the Darling Basin.

The NSW Government will continue work to recommend where gas infrastructure investments will maximise downstream industry development. This includes further leveraging the development of the Commonwealth NGIP and future opportunities for the State.

Figure 4: Map of existing NSW transmission pipelines (existing and proposed)



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