



Department of  
**Jobs, Tourism, Science  
and Innovation**

## **Future Gas Strategy Consultation Paper**

**WA Government Submission**



## Contents

Introduction .....	2
WA gas sector.....	3
Market characteristics.....	3
WA Domestic Gas Policy.....	5
WA market v east coast market.....	6
Role of gas.....	7
Energy security.....	7
Energy transition .....	7
Emissions reduction .....	8
Economic diversification .....	9
Factors critical to delivery of Strategy outcomes.....	9



## Introduction

The WA Government welcomes the opportunity to comment on the Future Gas Strategy (Strategy) consultation paper and inform the development of the Strategy.

The WA Government supports the need for an evidenced-based, long-term strategy that sets out the future direction for gas production and consumption in Australia. The WA Government also supports the development of the Strategy as it will provide the basis for policy stability across the various sectors of the gas market and broader economy. This stability is critical to support Australia's efforts to secure future investment in new gas developments, which will facilitate and complement the transition toward renewable energy generation and the pathway to net zero emissions.

The WA Government recognises the importance of gas in securing domestic and international energy needs, supporting the decarbonisation of the Australian economy and the energy transition.

This submission:

- Provides an overview of the WA gas market;
- Highlights the role of the *WA Domestic Gas Policy* in driving investment, which has secured local energy needs and is facilitating the transition toward a new energy, decarbonised economy in WA;
- Recognises differences between the east coast and west coast gas market structures which contribute to necessary differences in policy;
- Highlights the importance of gas in supporting the delivery of a number of WA Government priorities, including how these priorities are closely aligned with the Strategy's objectives and related to transforming the economies of the State's trading partners; and
- Highlights a number of factors that the WA Government regards as critical to the successful implementation of the Strategy.



## WA gas sector

### Market characteristics

The WA domestic gas supply chain is divided into three sectors: upstream producers, transmission and distribution network operators and downstream consumers.

The WA domestic gas market is characterised by<sup>1</sup>:

- Large gas reserves that are mostly located offshore and developed mainly to supply the global LNG market.
- A limited number of large suppliers and consumers.
- Bilateral, commercial, and historically long-term take-or-pay gas sales contracts.
- Residential, commercial, and small industrial consumers comprising around 15% of total demand.
- Small volumes of short-term and spot gas sales.
- A small number of pipelines and interconnectors, with limited surplus pipeline capacity.
- Limited information about gas that is available to be contracted, potential buyers, and gas contract pricing.
- Total gas storage capacity of 78 PJ, which can receive up to 160 TJ/d and supply up to 210 TJ/d.

### Consumption

Close to 85 per cent of WA's domestic gas is consumed by large operations in the mining, mineral processing, electricity generation and industrial sectors. Small-use residential and non-residential retail customers consumption is relatively small (3.5 per cent of total gas demand). The Australian Energy Market Operator's (AEMO) WA Gas Statement of Opportunities (GSOO) reports WA's gas demand as follows<sup>2</sup>:

- Minerals processing (25%).
- Electricity generation (South West Interconnected System (SWIS) and non-SWIS) (23%).
- Mining (21%).
- Industrial (major users such as ammonia and fertiliser manufacturers) (11%).
- Retail through distribution network (7%).
- Others (13%).

Most large customers are supplied directly through the transmission network such as the Dampier to Bunbury Natural Gas Pipeline and the Goldfields Gas Pipeline.

---

<sup>1</sup> AEMO 2022 WA GSOO, p. 24/5, [2022-wa-gas-statement-of-opportunities.pdf \(aemo.com.au\)](https://aemo.com.au/gas/2022-wa-gas-statement-of-opportunities.pdf)

<sup>2</sup> ibid



## **Production**

### *Domestic gas*

The State's annual domestic gas supply is provided by a mix of offshore and onshore gas. As outlined above, the WA domestic gas market is characterised by a limited number of large gas suppliers. Santos, Woodside, Chevron and Shell account for over 80 per cent of current domestic production capacity.

The WA Gas Bulletin Board reports that there are currently ten production facilities supplying the WA domestic gas market, with a total domestic production nameplate capacity of about 1,821 TJ/d. The Karratha Gas Plant (KGP) operated by Woodside Energy maintains the largest nameplate production capacity at 630 TJ/d, however production at KGP has been in decline since mid-2020 due to natural field depletion.

### *LNG*

In 2022, WA itself accounted for 12 per cent of global LNG exports. WA currently has five operating LNG export projects, including the North West Shelf, Pluto, Gorgon, Wheatstone and Prelude projects, with a combined nameplate capacity of 50 million tonnes per year. Around 75 per cent of WA's LNG exports are delivered to customers in Japan (41 per cent), China (19 per cent) and South Korea (14 per cent). WA's LNG projects play a critical role in meeting the State's domestic gas needs and the needs of Australia's international customers.

This submission does not specifically focus on these domestic gas and LNG facilities, other than to highlight the critical role of gas from these projects in meeting domestic and international energy needs and supporting the transition to a decarbonised economy.

## **WA Demand-Supply Balance**

The Australian Energy Market Operator (AEMO) expects base case demand in WA to grow at an average annual rate of 1.7 per cent over the next decade, which is more than double the forecast growth rate in 2021. AEMO's forecast reflects its position that the closure of state-owned coal-fired power plants by the end of this decade will lead to a sharper increase in gas demand for electricity generation and to complement renewables as a firming fuel. AEMO is also of the view that the transition from coal to gas in the mineral processing sector as well as development of new mines and mineral processing projects will lead to an increase in gas demand. Broader WA Government policy is supporting new energy projects that will increasingly replace gas driven electricity generation which will result in a net decrease in gas demand over the long-term. However, both the Federal and WA Government acknowledge the role of gas in the transition toward an increasingly decarbonised economy.

In its December 2022 WA Gas Statement of Opportunities, AEMO's base case forecast is for a small shortfall in gas supply from 2023 through to 2026, a small surplus from 2027 to



2029 and a deficit thereafter. On current projections, it is not expected that advanced new gas supply projects will meet the forecast shortfalls<sup>3</sup>.

New gas supply is therefore critical to meet the needs of the WA market in both the short and long-term, displace high-emitting energy sources such as coal and diesel and provide a flexible energy source to support renewable generation, ensuring an orderly energy transition. On the demand side, the WA Government expects gas demand to increase into the 2030s, particularly as coal-fired generation is retired and new mining and mineral processing projects are developed.

## WA Domestic Gas Policy

In WA, domestic energy security has been underpinned by the long-standing *WA Domestic Gas Policy* (Policy). Successive WA governments have maintained a domestic gas commitments since the North West Shelf LNG project in 1979, and in 2006 a Domestic Gas Policy was formalised for Western Australia. The Policy has ensured sufficient gas supply to underpin some of the State's largest mining, mineral processing and industrial operations.

The Policy is applied in a flexible manner, enabling producers to seek the best prices and commercial terms for supply. This allows producers to increase supply during more favourable domestic market conditions. The flexibility mechanism has balanced investment and exploration in WA's LNG industry and supply for domestic consumers. Long-term stability around the Policy has also ensured WA remains an attractive trade and investment destination, particularly for Asian economies. LNG projects with domestic gas commitments agreements have generated hundreds of billions in capital investment in WA, both during their construction phase and in sustaining their long-term operations.

There is no specific legislation or regulation supporting the Policy. Rather, the Policy is given effect through long-term agreements between developers of LNG export projects, developers of onshore gas projects and the WA Government. These agreements are struck at project inception to provide certainty for LNG export and onshore project developers and allow for a sustained supply of gas into the local market. Historically, this non-regulatory approach has ensured continued project investment while delivering broader social and economic benefits to the State and WA community.

The Policy is built on three pillars, which require LNG exporters to:

- Reserve and supply domestic gas equivalent to 15 per cent of LNG production over the life of the project;
- Develop and obtain access to the necessary infrastructure (including a domestic gas plant, associated facilities and offshore pipelines) to meet their domestic gas commitments; and
- Show diligence and good faith in marketing and making available gas to existing and prospective domestic consumers.

---

<sup>3</sup> Advanced new energy projects include those projects that have taken or are close to FID.





The key objective of the Policy is to ensure sustained domestic gas supply to secure WA's long-term energy needs and ongoing economic development. This includes supply to support the attraction of new downstream gas processing industry, which is a priority of the WA Government. Supply from commitments under the Policy accounts for roughly half of WA's total domestic gas supply.

The Policy does not seek to regulate price, with prices determined by free market mechanisms.

The Policy was formalised in 2006 and was updated in 2011, 2020 and 2023 to respond to trends in the LNG industry and changing dynamics in the WA gas market<sup>4</sup>.

The WA Government's Economics and Industry Standing Committee has initiated a Parliamentary Inquiry into the Policy, which is assessing the effectiveness of the Policy and opportunities going forward. The WA Government will consider the recommendations from the Inquiry and potential implications for the Policy.

Going forward, the Policy will be critical to:

- Ensure continued long-term energy security, particularly in light of volatile global market conditions.
- Support decarbonisation through displacing high emissions energy sources such as coal and diesel.
- Support the energy transition through offsets, enabling commitment holders to supply alternative domestic energy sources, such as biomethane, renewable hydrogen or green ammonia instead of domestic gas.

## **WA market v east coast market**

Policy mechanisms and measures to safeguard energy security and affordability vary depending on each jurisdiction's gas market structure.

On the east coast, where a large portion of gas is consumed by manufacturers and households, price controls may be deemed necessary, as these sectors are likely to be more sensitive to and/or affected by price volatility. In WA, the majority of the gas is consumed by the mining, mineral processing, industrial and electricity generation sectors, under long-term contracts with fixed volumes and prices. Further, these sectors are more likely to be able to absorb higher gas prices to a certain degree without material impacts on viability. These structural differences between the east and west coast markets may in part explain the different objectives of the various domestic supply mechanisms, with WA's Policy focused on sufficiency of supply while the east coast, through the Gas Code of Conduct, focused on price affordability.

The WA Government understands that the Australian Domestic Gas Security Mechanism, if activated, would apply to all States and is available if WA requires enforcement over and above the Policy.

---

<sup>4</sup> [Implementation of the WA Domestic Gas Policy \(www.wa.gov.au\)](https://www.wa.gov.au/government/publications/implementation-of-the-wa-domestic-gas-policy)



## Role of gas

Gas is critical to meet a number of WA Government priorities, including:

- **Energy security** through meeting the State's long-term energy needs.
- **Energy transition** by complementing the transition to renewable generation.
- **Emissions reduction** by displacing high-emitting fuels such as coal and diesel.
- **Economic diversification** by unlocking new gas-intensive downstream projects.

WA LNG is also supporting the energy requirements and emissions reduction ambitions of our key trading partners by displacing more carbon intensive sources and supporting the roll out of renewables. These priorities are closely aligned with the Strategy's key objectives of decarbonisation, energy security and driving further trade and investment.

### Energy security

The State's energy security has been underpinned by sufficient domestic gas supply. This gas supply has supported the development of large-scale industry and delivered a range of economic and social benefits for the State.

WA will continue to need gas in the short, medium and long-term. In particular, gas will:

- Meet the energy needs of the growing mining and minerals processing sector, which is responding to increasing global demand for critical minerals needed to support the global energy transition. The International Energy Agency forecasts demand for critical minerals is set to grow by up to 3.5 times more over the period to 2030, compared to 2022 levels, under a 2050 net zero emissions scenario.
- Ensure the energy system remains secure, stable and reliable as coal-fired generation is retired, complementing renewable energy generation.

Energy security and availability will also ensure WA remains an attractive investment destination for new industry.

LNG supply from WA has and will continue to underpin the energy needs of key Asian customers, including Japan and South Korea. These countries, which have insufficient domestic energy resources, require LNG to support local industry development and supply for residential customers and will continue to rely on the fuel to complement renewable energy generation. Recently, the demand for WA LNG has increased further as geopolitical tensions (i.e. Russia-Ukraine crisis) have negatively impacted global energy supply, including for gas, with customers focused on security of supply. WA LNG will also be critical for other customers looking to diversify supply outside of Europe.

### Energy transition

Natural gas is an important, complementary fuel supporting the global transition to a decarbonised economy fuelled by clean energy sources. Gas provides a flexible and firming energy source, enabling it to support the grid during periods of intermittent renewable generation.





Gas is critical to support WA's orderly energy transition, particularly as coal-fired generation capacity is retired, and will support renewables such as solar and wind to replace this capacity. Gas will therefore remain an important part of the State's energy mix. The South West Interconnected System Demand Assessment highlights the need for an additional 3.9 GW of new flexible gas generation capacity by 2039 for peaking capacity and to complement increasing renewable generation.

The energy transition is being supported by the WA's Energy Transformation Strategy, which will ensure the delivery of secure, reliable, sustainable and affordable electricity to Western Australians for years to come. The WA Energy Transformation Strategy includes a range of initiatives to shift and adapt the energy system to ensure it is fit for purpose into the future. This strategy also recognises that while clean energy sources as a proportion of the State's energy mix will increase, gas-fired generation will continue to remain an important part of the supply mix for the next decade and beyond.

WA LNG exports are also supporting our major trading partners with their energy transition ambitions, including Japan and South Korea, which have highlighted the need for gas to meet their 2050 net zero targets.

## Emissions reduction

Natural gas is critical to support emissions reduction targets by replacing high-emitting energy sources such as coal and diesel. The closure of state-owned coal-fired power stations will support the WA Government's target to reduce its own emissions by 80 per cent by 2030 with this capacity to be replaced by a combination of gas and renewables. Internationally, South Korea, a key LNG customer, has flagged an increase in gas demand as it shifts its energy mix away from coal to meet its 2050 net zero target.

The WA Government has committed to legislating a 2050 net zero emissions target and establishing interim 2035, 2040 and 2045 targets through its *Climate Change Bill*. Achieving these targets will be supported by Sectoral Emissions Reduction Strategies, which will develop credible emissions reduction pathways, and potentially include an assessment of the role of gas in supporting the transition of the State's electricity sector and emissions-intensive industries. The Australian Government's Safeguard Mechanism will also complement state-based emission reduction initiatives by requiring large facilities, including WA's gas production facilities, to reduce emissions consistent with achieving Australia's emission reduction targets.

Gas production and usage will also need to be decarbonised, including through the use of Carbon, Capture and Storage (CCS), Carbon, Capture, Utilisation and Storage (CCUS) technologies and integration of decarbonised energy sources into LNG and domestic gas production facilities. The WA Government is focused on attracting investment to develop its CCS and CCUS industry and diversify the economy. Developing and commercialising CCUS technology is a targeted opportunity for the State as identified in 'Future State, Accelerating Diversify WA', a plan to build a more diversified economy for WA by leveraging the State's



unique strengths and areas of global growth<sup>5</sup>. WA has an opportunity to leverage its existing expertise in CCS, including at Chevron's Gorgon Project, and legislation currently being developed to support the transport and onshore geological storage of carbon dioxide.

## **Economic diversification**

The availability of gas to support the development of new, downstream processing developments is a priority for the WA Government. Many of these developments are critical to supporting global emissions reduction measures, the energy transition, the agricultural sector and food security.

Domestic gas supply has underpinned some of the State's largest employing, high value-adding downstream operations, including Alcoa's and Worsley's alumina refineries, Yara Pilbara's liquid ammonia plant and CSBP's ammonia production facility. Gas from the Scarborough project will underpin the 2.3 million tonne per annum Perdaman Urea Project in the Pilbara, currently under construction.

Gas will also support the development of new critical mineral processing projects, value-adding to the State's mining sector and nearshoring supply chains, which is a priority for international customers. WA is uniquely positioned to take advantage of the economic opportunities arising from growing demand for critical minerals.

## **Factors critical to delivery of Strategy outcomes**

Successful implementation of the Strategy will ensure the gas industry continues to support domestic and international energy security, underpin economic development and complements efforts to reduce emissions and meet 2050 net zero targets.

The WA Government perspective is that the delivery of these outcomes is contingent on:

- An orderly energy transition
- Stable policy and regulatory settings
- Market transparency
- Support for emissions reduction initiatives

### **Orderly energy transition**

The Strategy highlights the need to reduce demand faster than supply to meet the Strategy's decarbonisation and energy security and affordability objectives. However, without sufficient demand, there is a commercial disincentive for producers to supply, which may undermine Australia energy security needs, particularly if sufficient renewable capacity is not built in a timely manner.

It is critical gas demand is reduced at a rate over the long-term that supports an orderly energy transition and does not discourage producers to supply. This decrease needs to be met by a proportionate increase in renewable energy capacity. An orderly energy transition

---

<sup>5</sup> [Future State Prospectus \(www.wa.gov.au\)](http://www.wa.gov.au)



for WA may initially require increased gas into the early 2030s as coal-fired generation is retired, renewables continue to be commercialised and scaled up and demand for energy transition commodities escalates. Gas will therefore provide an economic safety net and ensure the energy system remains secure, stable and reliable while other generation capacity is being built.

This energy transition should also consider opportunities to:

- Adapt and retrofit existing gas infrastructure to facilitate renewable energy production and supply.
- Engage First Nations' people, highlighting their contributions, opportunities to participate and share in the economic and social benefits.

The WA Government would support measures in the Strategy that incentivise investment frameworks aimed at promoting the supply and use of gas to deliver energy transition projects.

### **Stable policy and regulatory settings**

Policy and regulatory stability is critical to maintain and grow Australia's reputation as a reliable investment partner and destination. Certainty around approvals and timeframes is necessary to bring new supply to market sooner, meet Australia's and its trading partners' security needs and put downward pressure on prices. This supply is critical now more than ever, in light of the scheduled retirement of coal-fired facilities and significant investment in development of renewable capacity.

The WA Government recently released 8 onshore petroleum exploration blocks providing opportunities for future development of the State's oil and gas resources. This regulatory certainty sends positive investment signals to the market, unlocking new supply opportunities.

The WA Government would support measures in the Strategy that:

- Clarify the application at State and Commonwealth levels of regulatory approvals mechanisms for both onshore and offshore gas projects.
- Ensure the timely development of new gas projects.

### **Market transparency**

Improved market transparency is critical to support an efficient and effective operation of the gas market. Improved gas market transparency:

- Enables more informed decisions and facilitates more efficient planning and investment, including in new supply and to manage the risk of stranded assets;
- Provides more timely and accurate signals about the supply-demand balance so that the market can respond more efficiently to changing market conditions, and



- Promotes competition, lowering search and transaction costs and reducing the information asymmetry and imbalance in bargaining power that users can face through the supply chain.

Market transparency should not only apply to gas market participants in transactions and investment decision making but should also be provided to the public and community. This includes transparency from government and industry on the benefits of gas and its role in the energy transition and supporting emissions reduction.

The WA Government is working on a number of transparency initiatives, including a WA Gas Statement, which will seek to provide transparency to the market on gas availability by producer and gas requirements by user. The delivery of this initiative is contingent on standardised requests and/or requirements for all market participants to provide information, noting currently, formal information provision requirements only apply to WA producers with State Agreements/Domestic Gas Producer Agreements/Domestic Gas Commitment Agreements.

The WA Government would support measures in the Strategy that provide a framework for improved gas market transparency to remove current information asymmetries, including in contract negotiations between buyers and sellers, investment decision making and in the general community on the role of gas.

### **Emissions reduction support**

Emissions reduction technologies are critical to decarbonise gas operations and provide a pathway to net zero emissions. The WA Government recognises the importance of CCS and CCUS as a cross-sector technology to decarbonise multiple industries, the economy and support economic diversification. Research, development and commercialisation of CCS/CCUS and other clean energy technologies could be supported by further incentives and more inter-jurisdictional and international collaboration. There also may be opportunities to export this technology expertise to support our key trading partners with their emissions reduction ambitions.

This technology expertise could support Australia's value proposition as an investment destination and facilitate greater trade and investment flows.

The WA Government would support measures in the Strategy that enable the delivery of net zero emissions by 2050 through both private sector and government investment. The WA Government notes that some large private enterprises have more ambitious emissions targets and are not investing in gas to achieve these targets. Notwithstanding, the WA Government is of the view that the Strategy should recognise that it will not be possible for all enterprises to commit to these ambitions and that gas as well as CCS, CCUS and other greenhouse abatement policies will be required to meet broader emissions reductions targets.