



Woodside Energy Group Ltd.

ACN 004 898 962

Mia Yellagonga
11 Mount Street
Perth WA 6000
Australia

Please direct all responses/queries to:
Natalee Connor, Corporate Affairs
E: natalee.connor@woodside.com.au

11 August 2023

Economics and Industry Standing Committee
Parliament of Western Australia
Level 1, 11 Harvest Terrace
WEST PERTH WA 6005

Dear Chair

INQUIRY INTO THE WA DOMESTIC GAS POLICY

Woodside Energy Group Ltd (**Woodside**) welcomes the opportunity to contribute to the Economics and Industry Standing Committee's (**Committee**) Inquiry into the WA Domestic Gas Policy (**Policy**). This submission to the Committee is made by Woodside in its corporate capacity.

Woodside has also contributed to the submissions from the Australian Petroleum Production & Exploration Association and the Chamber of Minerals and Energy of Western Australia. We support these submissions' recommendations that there be no change to application of the Policy to offshore projects and increased transparency for the WA domestic gas market.

In making the attached submission, Woodside draws the Committee's attention to the following key points:

- Woodside supports the intent of the Policy to ensure reliable and affordable energy supply to WA households and businesses.
- Woodside supplies domestic gas to the WA market in support of the state's energy needs and continues to act in accordance with the commitments in our various agreements with the State Government.
- Over almost 40 years of operations in WA, Woodside has supplied domestic gas volumes equivalent to more than one third of our exported liquefied natural gas (**LNG**) volumes.
- Without development of future LNG projects, ongoing domestic gas shortages are forecast to become increasingly inevitable in WA.
- This includes the Woodside-operated Browse development, which is critical to resolving the forecast post-2030 gas supply shortage and supporting the state's long-term energy security.
- The State Government can ensure adequate availability of domestic gas into the future by providing stable policy and regulatory settings that facilitate the timely development of new energy supply.
- Strong government leadership is also needed to support community understanding around the role of gas in a stable energy transition.
- Flexible implementation of the Policy is essential to account for the unique aspects of each project and to allow the Policy to evolve in line with the state's needs.
- Transparency by all individual producers around historical and expected supply would improve accountability and confidence in the Policy.

Woodside will continue to work closely with the State Government on solutions that support reliable, competitively priced gas supply for WA into the future. Should you have any queries regarding this submission, please do not hesitate to contact me via the details provided above.

Yours sincerely

Liz Westcott
Executive Vice President Australian Operations

WOODSIDE ENERGY: SUBMISSION TO INQUIRY INTO THE WA DOMESTIC GAS POLICY

Woodside Energy (**Woodside**) is a leading global independent energy company and the largest energy company listed on the Australian Securities Exchange. We are proudly headquartered in Perth, and our Western Australian (**WA**) assets are fundamental to our global success. We provide energy that the world needs to heat and cool homes, keep lights on and support industry.

Woodside's WA-based projects make a significant contribution to the WA economy and community. For example, our operations support more than 3000 WA-based jobs and a significant local contractor workforce. More than \$1.1 billion in operational and capital expenditure from the Woodside-operated North West Shelf (**NWS**) Project was spent with WA-based businesses in 2022, while \$3.6 billion of contracts have been awarded within WA on the Scarborough and Pluto Train 2 projects. Woodside contributed \$2.7 billion in taxes and royalties to Australian governments in 2022. Royalties from the NWS Project contributed almost A\$1.4 billion (estimated) to WA Government revenue last financial year.

Woodside has been supplying reliable, competitively priced domestic gas to WA for almost 40 years. Our share of production from assets currently owned by Woodside is 3787 petajoules (**PJ**) of domestic gas, which is equivalent to 38% of our exported liquefied natural gas (**LNG**) volumes over this period.¹

We continue to supply the WA market in line with our LNG Project domestic gas agreements, and from the Macedon Project.² Woodside equity volumes from these projects accounted for approximately 16% of domestic gas supplied to the WA market in 2022.

Evolution of the WA Domestic Gas Policy

The WA Domestic Gas Policy (**the Policy**) is the primary mechanism by which the State has ensured the timely delivery of gas to the WA domestic market. Woodside supports the intent of the Policy to ensure reliable and affordable energy supply to WA households and businesses.

As a long-standing producer of domestic gas and exporter of LNG, Woodside has a history of active engagement with the State Government as it has iteratively applied the Policy.

Domestic supply obligations were initially given effect in State Agreement Acts negotiated between LNG project proponents and the State Government.

In October 2006, the Domestic Gas Policy was formalised, setting out three pillars:

- 1) reserving domestic gas equivalent to 15% of LNG production from each LNG export project;
- 2) developing and obtaining access to the necessary infrastructure (including a domestic gas plant, associated facilities and offshore pipelines) to meet domestic gas commitments; and
- 3) showing diligence and good faith in marketing gas to existing and prospective consumers.

The Policy states it will be applied flexibly by State Government. Woodside supports the WA Government maintaining flexibility to apply the Policy in a manner that recognises the specific circumstances of particular projects and the needs of State.

In 2020, the State Government further clarified the policy would not allow the export of gas via the existing WA pipeline network other than in exceptional circumstances, or consider LNG used to supply Australian east coast markets or international shipping as domestic gas.

Since its formalisation, the Policy has generally been implemented through domestic gas commitment agreements negotiated between LNG project proponents and the State, rather than State Agreement Acts.

Over the past decade, these agreements have become more prescriptive with regard to the timing of delivery of domestic obligation volumes. Whereas older agreements provide some timing flexibility by requiring 15% of LNG export equivalent volumes to be delivered to the domestic market over the life of a project, newer arrangements require approximate equivalence with the 15% to be maintained throughout the project's life.

¹ Includes volumes acquired as part of the merger of Woodside and BHP Petroleum in 2022, which contribute 1013 PJ (equivalent to 30% of LNG production) with pre-merger Woodside assets contributing the remaining 2,744 PJ (equivalent to 42% of LNG volumes).

² Macedon is a 100% domestic gas project, acquired in 2022 as part of Woodside's merger with BHP Petroleum.

As a result of this iterative application of the Policy, obligations differ between agreements and projects. Furthermore, some terms within these agreements may adapt elements of the Policy to accommodate project specific challenges or the prevailing economic conditions. The 2006 Pluto Domgas Arrangements are a case in point, which are discussed in further detail below.

Woodside acknowledges and continues to support the efforts of the Department of Jobs, Tourism, Science and Innovation (DJTSI) to progressively modernise the domestic gas agreements and standardise reporting requirements.

Woodside's Contribution to WA Domestic Gas Supply

Woodside's domestic gas agreements with the State Government underpin our commitment to the WA Domestic Gas Policy's objectives and contribution to state development. We are party to the following domestic gas agreements:

- *North West Gas Development (Woodside) Agreement Act 1979*
- *Pluto Domgas Arrangements (2006)*
- *Pluto Acceleration Domestic Gas Commitment Agreement (2021)*
- *Additional Domgas Commitment Agreement (2021)*
- *Wheatstone – Ashburton North State Development Agreement (Wheatstone Project) and Julimar-Brunello Domestic Gas Producer Agreement (2011)*
- *Scarborough Domestic Gas Commitment Agreement (2021).*

In respect of each of the projects in which Woodside is a participant, each joint venture (**JV**) participant markets their own gas separately according to their equity position in such projects.

In projects where Woodside also acts as Operator, Woodside's role is to develop, operate and maintain the facilities of each venture. In that capacity, Woodside does not have visibility over its partners' marketing activities or the extent to which they comply with their respective domestic gas obligations.

Woodside's contribution to the WA domestic gas market through each of these agreements is outlined the agreement summaries below.

North West Gas Development (Woodside) Agreement Act 1979 (NWS State Agreement)

The WA gas market was established through the NWS State Agreement negotiated with the State Government and NWS joint venturers, including Woodside. The NWS State Agreement provided the basis for the then state-owned electricity provider, the State Energy Commission of WA, to enter a 20-year offtake agreement with the NWS JV, partially underwriting the development of the project and the Dampier to Bunbury Natural Gas Pipeline (**DBNGP**). The NWS State Agreement has proven successful in establishing an LNG export industry in the Pilbara and securing long-term gas supplies for WA.

Prior to formal implementation of the Policy in 2006, Woodside (including pre-merger BHP Petroleum volumes) supplied domestic gas volumes equivalent to 50% of LNG export volumes over that period.

The State Agreement has been amended and updated several times, including in 2015 when the NWS JV assumed an additional domestic gas commitment, equivalent to 15% of the increase to its LNG export approval of up to 86 million tonnes (Mt). NWS JV companies, including Woodside, began supplying domestic gas against this "New Domgas" commitment in 2016 and marketing gas on an individual basis.

In addition, the 2015 amendment to the NWS State Agreement required future users of the NWS LNG facilities to enter into domestic gas commitments with the state consistent with the terms of the NWS State Agreement. The Pluto Acceleration and Waitsia approvals were provided on this basis.

Through to 2022, Woodside (including pre-merger BHP Petroleum volumes) has supplied 57 PJ of gas to the domestic market as part of the New Domgas commitment. This equates to 14.7 percent of LNG export volumes over the period. Prior to the merger with BHP Petroleum, Woodside domestic gas volumes were equivalent to 23.1% of LNG export volumes over the period.

Pluto Domgas Arrangements (2006)

Woodside and the State agreed to the Pluto Domgas Arrangements (PDA) in 2006, and the associated commitments took effect from May 2017, five years after the commencement of LNG production. Under the PDA, Woodside agreed to market and make available for sale domestic gas quantities linked to LNG production from the Pluto site subject to commercial viability.

These arrangements recognised the specific circumstances and challenging business case for the Pluto LNG Project at the time of final investment decision in 2007 and its significance to the state at that time. Pluto faced particular challenges as a single-train LNG project targeting only 4.3mtpa of LNG production, at the start of a period of significant cost escalation for the industry and the region.

Further, the composition of gas from the Pluto fields impacts the potential for large scale, commercial production of domestic gas at the site. Gas from these fields typically has a nitrogen content in excess of 8% along with a carbon dioxide content typically about 2%, which exceeds the maximum inert components allowed by the relevant regulations for the Western Australian pipeline gas network.

Woodside and its JV partners have to date implemented two domestic gas production facilities to make gas available domestically at the Pluto site:

- A pipeline gas export facility based on utilising an on-specification fuel gas stream, which has been operational since 2018 and is supplying up to 25 TJ/d of gas into the pipeline network for a range of customers³; and
- A trucked LNG export facility with an initial capacity of 0.1mtpa (approximately 15 TJ/d), which has been operational since 2021 and is supplying gas to remote mining facilities in the north west of WA.

In addition, since the initial project investment, Woodside has spent more than A\$2 billion to progress the expansion potential of the Pluto LNG facilities, including exploration and appraisal drilling, front-end engineering design and other studies, and site preparation works, and has now commenced the construction of the Pluto Train 2 facilities which include the installation of additional domestic gas capacity.

These significant investments reflect Woodside's ongoing commitment to market domestic gas under the PDA and that Woodside continues to meet its domestic gas commitments under the arrangements.

From 2017 through 2022, Woodside has supplied 23 PJ of gas to the domestic market from the Pluto LNG Project. Woodside continues to assess opportunities for further commercially viable supply of domestic gas from the Pluto site.

Pluto Acceleration Domestic Gas Agreement (2021)

As part of the arrangements for the processing of gas from the Pluto fields through the NWS infrastructure, delivered by the Pluto-KGP Interconnector, Woodside has agreed to produce 15% of these volumes as domestic gas.

Under this arrangement, additional supply typically in the order of 20TJ/d has been made available to the WA market during 2022 and 2023, with a total current commitment of 20.5PJ over the term of this agreement. This equates to 18.2 percent of LNG export volumes supplied through the Pluto-KGP Interconnector during this period.

Additional Domgas Commitment Agreement (2021)

Woodside has agreed to market and make available an incremental 45.6 PJ to the domestic gas market using its share of NWS gas reserves and infrastructure. This agreement also includes any remaining committed volumes from the Pluto Acceleration Domestic Gas Agreement.

This arrangement is expected to supply around 25TJ/d of additional supply to the WA market from 2025. The State considers Woodside's Additional commitment as a contribution towards the 2006 Pluto Domgas Arrangements.

³ Woodside is able to utilise a gas stream within Pluto's fuel gas system which allows for the production of up to 25 TJ/d of gas within the gas quality specifications of the Western Australian pipeline gas network.

Wheatstone – Ashburton North State Development Agreement (Wheatstone Project) and Julimar-Brunello Domestic Gas Producer Agreement (2011)

The Wheatstone Project's State Development Agreement requires domestic gas supply infrastructure to be in place and users of the LNG facilities to agree domestic gas commitments. Each Wheatstone JV participant has signed a Domgas Producer Agreement with the State. Woodside, as a participant in the Julimar Brunello and Wheatstone JVs, and the State entered into such a Domgas Producer Agreement in 2011.

The 200 TJ/d Wheatstone domestic gas facility was constructed and the first deliveries of gas commenced in March 2019. Initial capacity of the plant was 200 TJ/d but was later increased to 205 TJ/d. Wheatstone JV companies market gas on an individual basis. Through to 2022, Woodside has supplied 27 PJ from the Wheatstone domestic gas facility. Woodside is supporting the project Operator to further increase production capacity of the facility.

In April 2023, Woodside made a final investment decision on Julimar-Brunello Phase 3. The project, which involves the drilling of up to four development wells in the Julimar field and the installation of subsea infrastructure, demonstrates Woodside's ongoing investments in new supply. The Julimar-Brunello Domestic Gas Producer Agreement will continue to apply to these additional volumes.

Scarborough Domestic Gas Commitment Agreement (2021)

In November 2021, Woodside, as a participant in the Scarborough joint venture, entered into the Scarborough Domestic Gas Commitment Agreement and Scarborough Development Deed with the State.

Scarborough will add up to 225 TJ/d of new domestic capacity into WA, with first gas expected in 2026.

In April 2023, a 20-year gas sale and purchase agreement with Perdaman Fertilisers Pty Ltd (**Perdaman**) became unconditional following a positive final investment on its urea plant near Karratha, demonstrating Woodside's ongoing commitment to delivering domestic gas to support local jobs and investment in WA. Gas will be supplied from Woodside's portfolio and sourced primarily from Scarborough.

Macedon Domestic Gas Project

In addition to these domestic gas agreements, Woodside also makes a significant contribution to WA domestic gas supply through the Macedon Project.

Located near Onslow, the Macedon offshore field and onshore gas treatment plant produces gas exclusively for the WA market with current deliverability of 170 TJ/day. From project start up through to 2022, 444 PJ of gas has been supplied from Macedon.

The Macedon Low Pressure Operations project has commenced to improve offshore deliverability and extend the life of the Macedon domestic gas plant to the mid-2030s

Woodside Marketing Activities

Woodside primarily markets and makes available domestic gas from its portfolio rather than from specific facilities, providing us with flexibility to move volumes to where they are needed most. Woodside responds to market participants' requests for gas supply with consideration to the gas available within the portfolio.

In the quarter ending 30 June 2023, Woodside executed several natural gas sales agreements for the combined supply of approximately 80 petajoules of pipeline gas to WA domestic customers including retailers, commercial and industrial users. Delivery is expected to take place from Q4 2023 to the end of 2025.

In July 2023, Woodside issued a market wide expression of interest for supply to the WA domestic market over 2024 and 2025, providing transparency to market participants on Woodside's available domestic gas.

Woodside publishes realised prices in its quarterly shareholder reports. During the second quarter of the 2023 calendar year, the average realised price was A\$6.10 per gigajoule (**GJ**) in WA, compared to A\$12.60 / GJ in east coast Australia.⁴

⁴ [Second Quarter 2023 Report - woodside.com](https://www.woodside.com/second-quarter-2023-report)

WA Domestic Gas Market Overview

The WA gas market, with different infrastructure constraints, demand profiles and regulatory frameworks, has not experienced the same supply and pricing issues as those recently experienced in the east coast market. Development of the industry in WA has demonstrated that delivery of domestic gas and LNG exports can co-exist in a way that delivers significant benefits for the state.

Demand

Geographically isolated from other Australian gas markets, WA has a comparatively small number of buyers and sellers with demand driven by large industrial users (84%) rather than retail customers (7%)⁵.

The gas generation demand profile has changed significantly with the WA Government's decision to retire State-owned coal-fired power generators by 2030. The Australian Energy Market Operator (**AEMO**) forecasts that renewable power generation will only partially compensate for the loss of coal-fired baseload power, with gas-fired baseload and firming capacity needed to support system stability and reliability. Separately, planned reductions in mining sector demand as a result of decarbonisation efforts are offset by higher expected demand for mineral processing and refining.

As a result, over the next decade electricity generation is expected to be the largest growing sector for gas demand and a key driver for the forecast supply shortfall from 2030. In its *2022 Gas Statement of Opportunities (GSOO)*, AEMO forecasts gas demand to grow at an average annual rate of 7.7% for the 10-year period to 2032.

Subsequent to publication of the 2022 GSOO, Perdaman made a positive final investment decision on its urea plant near Karratha. Demand associated with the Perdaman urea plant was not included in the 2022 GSOO forecast of demand.

Supply

Since the introduction of the WA Domestic Gas Policy, LNG exports have underpinned domestic gas supply.

Development of new gas projects in WA have created a more diverse and competitive market, however it remains relatively illiquid and concentrated compared to the more developed Australian east coast market and other mature jurisdictions (e.g. Europe and the US). While the Policy sustains low domestic gas prices for WA, helping to support industry and jobs, it challenges the investment attractiveness of domestic gas only projects.

The large mature reserves of the NWS and other projects that have underpinned supply to WA for the last several decades are in production decline. There is an abundance of offshore natural gas reserves located in proximity to the WA market in the Northern Carnarvon, Browse and Bonaparte Basins. However, these future offshore reserves are inherently more technically challenging and costly to commercialise due to their distance from shore and additional regulatory costs, such as those associated with emissions reduction.

As a result, WA's domestic gas market is forecast to be facing a tight supply-demand balance through to the end of the decade. Timely development of Woodside's Scarborough and Pluto Train 2 projects, which includes domestic gas infrastructure with total capacity of 225 TJ/d, will be critical to achieving a short-term rebalancing of the WA gas market from 2027.

Domestic gas from Woodside's proposed Browse to NWS development will be critical to resolving WA's longer-term gas supply shortage. Browse has the potential to deliver domestic gas to WA of more than 200 TJ/d, which is roughly equivalent to the shortfall that is forecast from the start of the 2030s in the 2022 WA GSOO.

The proposed Perth Basin projects could also be a significant source of new supply to the market, however government policy needs to be set appropriately to allow these proposed projects to come to market, as continues to be the case for all new gas developments.

Upstream production is only one part of the gas value chain, with supply also constrained by processing and transmission infrastructure. The WA market is characterised by a small number of pipelines and

⁵ AEMO, 2022 WA Gas Statement of Opportunities, page 25.

interconnectors, with limited pipeline capacity. Since the 2012 update to the Policy to include an infrastructure requirement, significant new domestic gas processing facilities have been developed with a current total nameplate capacity to 2040 TJ/d, exceeding average market demand of 1100 - 1500 TJ/d.⁶

However, the market is not immune from supply challenges, as evidenced by outages and supply disruptions experienced at three producing facilities between November 2022 and January 2023. In response to these events, energy producers and consumers adopted a shared responsibility approach for contributing to supply security. Woodside, in its capacity as NWS Project Operator, worked closely with the DBNGP operator by supplying an additional 200 TJ to support linepack.⁷ In addition, Woodside equity volumes were offered to the domestic market, with priority given to power generators and customers with no alternative supply options.

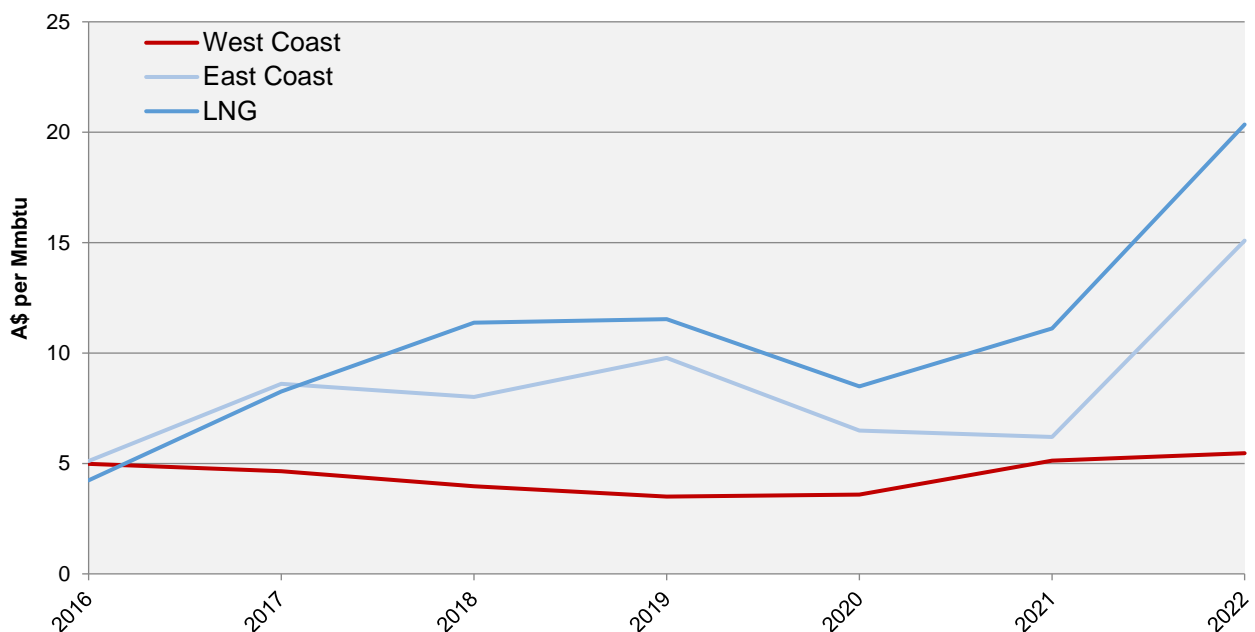
Price

WA domestic gas prices have increased since 2020 due to a decline in reserves from existing fields and an increase in gas-fired power generation demand. Despite this increase, WA prices remain below national and international benchmarks.

Figure 1 below presents average LNG prices for several key international gas markets and for the Australian west and east coast gas markets. This illustrates that:

- Gas prices in Australia (both east and west coast) have been significantly lower than international prices over an extended period;
- Prices in WA have typically been lower than prices in the east coast markets; and
- WA gas prices do not correlate with export markets.

Figure 1: Historic Annual LNG and Domgas Prices



Source: ABS, DMIRS, AER

These different gas price dynamics reflect the underlying differences in market structure, regulation, consumer profiles, fuel competition and supply opportunities in each market.

Data from the WA Department of Mines and Petroleum indicates that the average WA pipeline gas price in 2022 was approximately A\$5.46 / GJ ex-plant. The corresponding average WA LNG price for 2022 was A\$19.66 / GJ. As noted earlier in this submission, the realised price for gas supplied from Woodside's portfolio the WA market in Q2 2023 was less than half that of gas supplied to the east coast market.

⁶ AEMO WA 2022 GS00, page 35

⁷ Linepack refers to the volume of gas effectively stored in a gas transmission pipeline to ensure customer demand can be met.

A majority of WA pipeline gas is supplied under bilateral, confidential contracts with fixed pricing typically linked to local inflation. In WA there is no transparent price for gas supplies and gas prices are determined between parties at the time a contract is negotiated. This is consistent with the Policy, which specifies that gas prices will be determined by negotiations between gas producers and consumers.

Recent increases to WA domestic gas prices are a response to a supply-demand imbalance, not an indication of market failure. Fundamental market economics dictate that available supplies of gas will be allocated according to willingness to pay. Further, WA's experience shows that price signals sent as a result of increased demand have stimulated development by making new supply projects commercially viable.

Inquiry Terms of Reference

Woodside welcomes the Terms of Reference for this Inquiry as a timely opportunity to review existing market mechanisms and government policies regarding WA's gas market. Ongoing supply of reliable and affordable gas will be a key component of energy security and a stable energy transition for WA.

1. The adequacy of mechanisms to ensure:

a. Timely delivery of gas into the domestic market

Since the WA Domestic Gas Policy's formalisation in 2006, the timely delivery of gas into the WA domestic market has been maintained as evidenced by the WA domestic gas market's historically low pricing.

The three pillars of the Policy have been especially effective in maintaining sufficient domestic gas production capacity and making volumes available to the market as and when required by buyers, including during times of supply disruption, as occurred from late 2022 when three domestic gas production facilities had unscheduled outages.

As noted earlier, LNG export projects have underpinned domestic gas supply in WA. This has in turn supported the growth of local gas-intensive industries and the overall WA economy. Without the ability to access international markets through LNG exports, it would not have been economically viable to develop WA's large offshore gas resources as the domestic market is not large enough to justify pure pipeline-based developments.

However, with a number of the state's large offshore gas fields now in production decline, ensuring the timely delivery of gas into the future should prompt reconsideration of the current Policy's restrictions on development of onshore resources. Emerging capacity at the NWS Project's KGP is available for utilisation by onshore gas proponents pre-2030, enabling these projects to provide competitively priced domestic gas to the market.

The commencement of third-party gas processing at KGP in March 2022 was an important development for the future of WA domestic gas supply, enabling volumes from new projects to be processed at the established KGP facility and supplied to local customers. In December 2022, Western Gas' Equus Project became the third project proposing to supply domestic gas through KGP through a non-binding agreement with the NWS Project participants.⁸

Browse is the most credible large backfill opportunity to fill long-term KGP ullage because of the quantity and compatibility of the composition of the gas resource to the facilities, and if developed will be critical to resolving WA's forecast post-2030 gas supply shortage. The Browse to NWS development also has the potential to deliver a range of broader economic benefits for the people of WA by:

- generating substantial royalties and other government revenues;
- providing significant employment, training and business opportunities;
- supporting ongoing employment and community benefits in the Pilbara; and by
- supporting associated Pilbara industrial decarbonisation opportunities including carbon capture and storage.

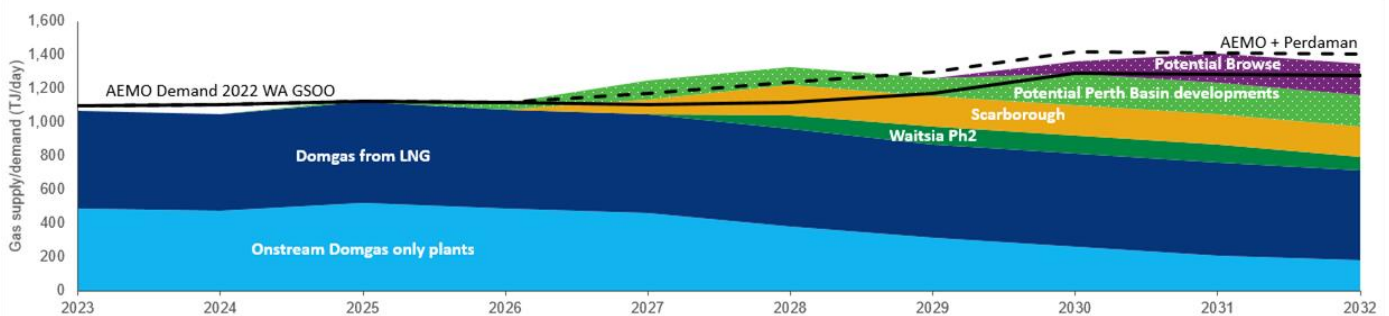
⁸ Following the Woodside-operated Pluto LNG and Mitsui E&P-operated Waitsia Project.

The current domestic gas processing infrastructure at KGP was put in place at a time when the NWS was the sole supplier of domestic gas in Western Australia.⁹ The NWS JV are demonstrating a commitment to optimising and refurbishing domestic gas infrastructure at KGP to underpin this long-term domestic gas supply from Browse and other third-party projects. However, with NWS reserves in decline, and without additional third party gas supply, it will no longer be economic to continue operating all domestic gas and LNG processing infrastructure at KGP.

The NWS JV continues to evaluate opportunities to optimise its domestic gas infrastructure so it remains available for the requirements of the JV participants, and can be operated in an efficient, cost-effective and lower-carbon manner. As ullage increases, the NWS JV will need to assess taking an LNG train offline in 2024. In the absence of new third party gas, staged infrastructure retirements would follow, with only 2 of 5 LNG trains at KGP to remain operational by 2030.

Without the ability to utilise existing infrastructure at KGP, Browse becomes commercially challenged and no longer presents as a long-term potential domestic supply opportunity for WA.

Figure 2: Forecast WA gas market balance 2023 - 2032



Sources: Wood Mackenzie and AEMO WA 2022 GSOO

Notes:

1. AEMO Demand 2022 WA GSOO, does not include Perdaman volumes
2. New Perth Basin developments are supply estimates for discovered fields: Lockyer Deep, West Erregulla, South Erregulla
3. Data was sourced from Woodmac's "Western Australia's domestic gas outlook: supply demand balance 2023" Insight Report and "Browse LNG – Upstream" Asset Report

b. Transparency of supply and prices of gas available to the domestic market

Woodside reports annually to the Minister for State and Industry Development, Jobs and Trade on its performance in relation to the three pillars of the policy as set out in respective domestic gas agreements. DJTSl aggregates inputs from annual reporting submissions on a project basis for publication on its website.

In relation to the market more broadly, there is limited information about contract pricing, available supply or potential buyers. Contracts are typically confidential to the parties involved. Gas is largely sold through bilateral medium and long-term contracts, with a small amount of volumes sold on a spot / short term (less than one year) basis. Liquidity and depth of the spot market in WA is relatively limited, with AEMO estimating that only approximately 3–5% of total gas consumption in WA is traded on a short-term basis.

Recommendation 14 of the 2011 Inquiry into Domestic Gas Prices (**2011 Inquiry**) to introduce a Short Term Trading Market in Western Australia has not been implemented. Woodside is supportive of such a market being introduced. Currently there are two local short-term trading platforms in WA which have increased transparency and liquidity in the short-term market. However volumes traded remain relatively limited, as a majority of WA domestic gas customers are large baseload users that require security of supply and pricing to underpin investment in projects.

In addition to these platforms, many suppliers and customers transact spot / short-term volumes on a bilateral basis under master sales agreements. As a result, liquidity and depth of the spot market in WA is relatively limited.

⁹ Two Domestic Gas processing trains, each capable of processing 500 TJ per day, operating with 100% redundancy.

As envisaged by Recommendation 15 of the 2011 Inquiry, the Parliament of WA enacted the *Gas Services Information Act 2012* to provide for the establishment and operation of a gas bulletin board and the preparation and publication of a gas statement of opportunities.

Woodside considers the WA Gas Bulletin Board (**GBB**) a useful tool for gas producers and consumers, albeit with opportunities for improvement as outlined in Term of Reference 2 below. It provides information regarding the short-term status of the WA domestic gas market, including information on current domestic gas supply, demand and transmission and storage capacity. Combined with the GSOO, an annual statement of the medium to long-term status of the domestic gas market in WA, market participants (both buyers and sellers) are better placed to assess the market, and more efficiently transact.

2. The state government's role in ensuring adequate availability of domestic gas into the future, particularly over the short to medium term.

The key role for government in the WA gas market is to implement policies that support an open and transparent market, in which prices incentivise investment in new supply. The most significant benefit to WA gas consumers will likely come from policy measures that encourage investment in new gas projects and support the long-term growth of a competitive, transparent energy market.

While Woodside notes the forecast tightness in the WA market in the short to medium term, the clear challenge for WA's gas market – and the state's energy security more broadly – lies beyond 2030 as coal-fired power generation exits the system. For WA to execute a stable energy transition that meets net zero commitments while not undermining the prosperity of the state and living standard of its people, gas must continue to play an important role. It is incumbent upon the State Government to support this through policies that encourage new long-term investments in WA's offshore and onshore gas reserves.

Improving Transparency

An important role for government is ensuring transparency in the market for both buyers and sellers of domestic gas and providing the certainty required for long-term infrastructure investment. Woodside sees the following items as providing an additional level of transparency to those already provided by current policy settings:

Gas Bulletin Board

- At present there is a two-day delay in publishing data on events impacting the market. Improving timeliness of information provided on the GBB would better inform decision making by market participants.
- Therefore, publishing actual available domestic gas processing capacity that can be accessed by project proponents, rather than nameplate capacity as the GBB currently displays, would improve the ability of participants to respond to such events.

Domestic Gas Agreements

- Versions of the domestic gas agreements between the State and project proponents are already made public.
- Noting this, for exporting projects subject to a Domestic Gas Agreement, each owner or joint venture participant's domestic gas supplied under the agreement could be made public on an annual basis.

Market Transparency

- All individual producers could be required to publish historical domestic gas production on an annual basis and publish a non-binding, indicative forecast of what they expect to supply to the market over the next time horizon (a more accurate forecast than the GSOO forecast capacity).
- However, it is critical to apply consistent reporting requirements across all market participants, not just domestic gas commitment holders, to avoid creating an asymmetry of information and the potential for competitive disadvantage for some participants.

Policy and regulatory enablers

Woodside intends to continue making long-term energy investments in WA and supply energy to local homes and industry that is reliable, affordable and lower carbon. This will support WA continuing its role the engine room of the Australian economy as it transitions to a lower-carbon future.

With forecast demand for gas in WA far exceeding available supply by the end of the decade, active support to bring new gas projects on-line is critical. For example, to meet a start-up window at the beginning of the 2030s for a development such as Browse, commercial decisions and regulatory approvals need to occur now, requiring State Government focus and commitment beyond the current electoral cycle.

Confidence to make long-term investments in new gas supply relies on stable and predictable policy and regulatory settings that support timely project development. In line with this, Woodside recommends the State Government:

- Ensures adequate resourcing for project facilitation and assessment of primary and secondary approvals for major gas and other energy projects, including associated decarbonisation activities;
- Provides greater timeline certainty around the completion of assessments for key approvals, noting that protracted approvals processes delay the responsiveness of supply to increased demand, resulting in higher prices for consumers;
- Advocates as appropriate for the Commonwealth to streamline relevant approvals processes and similarly progress time-critical approvals to develop new gas supply and support decarbonisation initiatives in a manner consistent with legislative and regulatory requirements;
- Leads an informed public discussion on the legitimate and necessary role of gas in WA's energy transition.

Such stable and supportive policy settings that encourage new investment in WA gas supplies will become increasingly important to avoid the market disruptions and resulting policy interventions recently experienced in eastern Australia.

Woodside continues to advocate that the Australian Government's Mandatory Code of Conduct including reasonable price provision should not apply to the WA gas market, recognising it is physically separate and not subject to the same supply and pricing issues. While these differences have been recognised in consultation, WA has not been expressly excluded from the implementation scope.

Woodside notes the revised Australian Domestic Gas Security Mechanism provisions now apply to WA. This increases the imperative for industry and the State Government to work cooperatively to ensure the domestic market continues to be well supplied in future years, avoiding interventions that risk undermining investor and customer confidence.

In addition, it is vital the State Government maintains its flexible approach to applying the Policy to account for the unique circumstances facing each project. A prescriptive approach risks rendering projects commercially unviable and limiting potential supply, not only for the domestic market, but also for key international partners who rely upon LNG from WA to power homes and industries and decarbonise their economies.

Woodside also supports flexibility to enable the Policy to evolve in line with the State's changing energy requirements. This includes updating the Policy to allow onshore gas developments to export a limited portion of production, thus incentivising new gas resources to be developed and alleviating the significant forecast supply shortfall in the WA gas market following the retirement of coal-fired power generation.

Alongside Woodside's oil and gas business we are working hard to expand new energy products and lower-carbon services that Woodside can offer to new and existing customers. We are doing this in line with our climate targets to reduce our net equity Scope 1 and 2 greenhouse gas emissions by 15% by 2025 and 30% by 2030, towards our aspiration to achieve net zero by 2050 or sooner.

Woodside has also set a target to invest US\$5 billion in new energy products and lower-carbon services by 2030.¹⁰

To support investments in lower-carbon projects that will assist WA's energy transition and create new energy export industries for WA, Woodside also recommends the WA Government work with industry to define an offsets regime that credits gas producers for assisting customers to transition to lower-carbon energy sources, and clarify how the Policy will interact with the production of new energy fuels including hydrogen and ammonia.

Given the imperative to progressively reduce operational emissions, Woodside also encourages the WA Government to facilitate necessary enablers to support industry to decarbonise gas supply including:

- Making available 'shovel-ready' land for lower-carbon projects, concentrated in strategic areas;
- Coordinating the planning and development of new common-user infrastructure, particularly electricity transmission and pipelines;
- Initiatives to support WA-based lower-carbon project proponents access markets and supply chain opportunities; and
- Initiatives to encourage skills and local workforce development in lower-carbon industries.

3. *The findings and recommendations of the 2011 Inquiry into Domestic Gas Prices, prepared by the previous Economics and Standing Committee (2008-2013), to the extent that they are relevant to the current Inquiry's terms of reference 1 and 2.*

Woodside notes the commentary on the findings and recommendations of the 2011 Inquiry in the Australian Petroleum Production & Exploration Association's submission, of which Woodside is broadly supportive. We also agree with the view expressed in the Chamber of Minerals and Energy of WA's submission that this Inquiry should be forward looking in its recommendations, noting the substantial structural changes in natural gas and LNG markets domestically, nationally and internationally over the past decade.

We have commented on recommendations 14 and 15 of the Inquiry in our feedback on Term of Reference 1 above. For the purpose of this submission, we also would like to draw the Committee's particular attention to the following 2011 Inquiry recommendations:

Recommendation 3: The flexibility within the state's domestic gas reservation policy should be maintained unless an independent cost-benefit analysis demonstrates that a strict reservation of 15 per cent of the gas from each LNG project for the domestic market represents a more valuable and efficient use of the resource.

Woodside notes that such cost-benefit analysis has not been conducted. However, analysis from a number of sources has found that diversion of gas to lower-value uses can result in an opportunity cost for the local economy, and net economic cost from lost export revenues.¹¹

The 2011 Inquiry also recognised that "great care needs to be exercised when determining appropriate volumes to be held for the domestic market", noting that "a rigid application of a 15 per cent reservation obligation risks flooding the local market with more gas than it genuinely needs, thus driving prices down to a level where development again becomes uneconomic for current and prospective producers".

Woodside endorses this finding and believes that ongoing flexible implementation of the Policy is essential to account for the unique aspects of each project, and to allow the policy to evolve in line with the state's needs

¹⁰ Target is for net equity Scope 1 and 2 greenhouse gas emissions, relative to a starting base representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Further information on definitions and basis of calculation are provided in our [Climate Report 2022](#). Individual investment decisions are subject to Woodside's investment targets. Not guidance. Potentially includes both organic and inorganic investment.

¹¹ Detailed analysis on the policy includes

- ACIL Allen 2014, *Domgas Reservation Policy: Review of Literature and Policy Recommendations*.
- Deloitte Access Economics, 2013 *The Economic Impacts of a Domestic Gas Reservation*,
- Economic Regulation Authority 2014, *Inquiry into Microeconomic Reform in Western Australia: Final Report*. 30 June 2014.
- Neill, K 2015. *Western Australia's Domestic Gas Reservation Policy: The elemental economics*, University of Western Australia Business School Discussion Paper.

through the energy transition. Woodside's own track record has demonstrated a willingness to be flexible above mandated requirements and to help the government stabilise and balance the market when required.

Recommendation 5: *The Department of State Development commence discussions with the North West Shelf Joint Venture to obtain a commitment from the joint venturers that production capacity at the Karratha Domestic Gas Plant will continue at current levels, as per the terms of the existing State Agreement, until at least 2025. Scope should remain open within the agreement to allow third party gas processing at the Karratha Gas Plant should North West Shelf reserves prevent full production capacity from being maintained after 2020.*

Woodside notes that subsequent to the 2011 Inquiry, the NWS JV assumed a new domestic gas commitment agreement in 2015, in exchange for an 86 Mt LNG export approval. The NWS JV began supplying domestic gas against the commitment in 2016 and market gas on an individual basis. While daily volumes of domestic gas delivered from KGP have declined due to a more diverse market and expiry of legacy joint marketing contracts, domestic gas infrastructure of 630 TJ/d capacity remains in place and available.

As foreshadowed by the 2011 Inquiry, processing of third party gas through the KGP domestic gas infrastructure commenced in 2022, under the Pluto Acceleration Domestic Gas Commitment Agreement. The Waitsia Joint Venture Domestic Gas Commitment Agreement was also approved in 2020 to enable Waitsia domestic gas to be processed at KGP. Updates to the Policy in 2020, preventing exports of any portion of onshore gas reserves other than in exceptional circumstances, significantly restricts the ability of future third party gas to be processed at KGP.

As part of Woodside's proposed Browse to NWS development, domestic gas volumes of more than 200TJ/d could be processed through KGP infrastructure, demonstrating the long-term value of this facility to the WA energy market. Without timely development of Browse, the current domestic gas infrastructure of 630 TJ/d cannot be maintained long term.

Conclusion

Each of Woodside's LNG projects are different in terms of domestic gas commitment arrangements and supply outcomes, with the State Government's flexible application of the WA Domestic Gas Policy supporting these projects to come online. As a result Woodside has been, and continues to be, a significant supplier of domestic gas to WA under Policy arrangements that to date have ensured the market has been well supplied.

However, the large reserves that have provided an abundance of gas to WA are in production decline. Given its direct link to LNG production, for the Policy to continue to be successful in underpinning domestic energy security, governments at a state and national level will need to ensure predictable policy settings and regulatory processes that enable the timely development of new LNG projects.

Woodside believes the near-term supply challenges identified in AEMO's forecasting can be effectively addressed by government and producers working together on practical solutions to meet any shortfall that may emerge. An exclusive focus on WA's near-term energy security, while important, ignores the more significant challenge of energy security from the end of this decade.

The 2030s may appear distant from today. However, the delivery of major gas developments takes years. There is a risk of an energy crisis emerging in WA from the end of this decade if decisions are not made now to enable Browse and other large gas resources to progress. This requires government, industry and the community working together to recognise the role of gas in a stable energy transition and ongoing prosperity for WA.