CLIMATE ANALYTICS

Briefing

AEMO's WA gas market projections reflect government inaction on renewable energy and LNG exports

- Increase in gas use would drive up energy bills and emissions.
- Supply shortfall can be addressed with renewable energy, and by prioritising domestic consumers over exports

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Key points

- AEMO's new long term gas market projections anticipate WA's fossil gas use will grow significantly, and will outpace supply in the longer term.
- The projections reflect the lack of policies to support the transition to renewable energy in WA, and governments allowing gas companies to continue prioritising export markets over domestic consumers.
- The high level of gas use projected by AEMO would drive up emissions and lock in higher energy bills for households and industry in WA.
- Projected supply shortages and high energy prices can be avoided with cheaper and cleaner renewable energy and storage, however government action is required.
- Projected supply shortfalls could be eliminated until at least the 2040's through strgonger enforcement of WA's domestic gas reservation policy.
- New gas supply projects like Browse Basin are not needed. This project would drive up WA emissions and energy prices.
- Government policies are required, including:
    - A WA renewable energy target and accelerated pipeline of large-scale renewable energy projects.
    - WA emissions reduction targets aligned with the Paris Agreement.
    - Stronger requirements and incentives for industry to decarbonise, and a plan to electrify and decarbonise mining, mineral processing and other industries.
    - Removal of ongoing government support and subsidies that encourage increasing gas use.
    - Strengthened domestic gas reservation requirements that currently allow gas companies to prioritise exports over the domestic market.

Summary

AEMO has released its first longer-term 20 year projections for gas use in the WA domestic gas market, as part of its 2025 Gas Statement of Opportunities (GSOO)[1].

While these projections see a decline in gas demand over the long term, AEMO's projections see a significant growth in the short term, which would see WA domestic gas demand reach record levels in the early 2030's.

The projections indicate that *under current WA policy settings*, new mining and industrial projects will significantly increase gas demand, especially in off-grid areas. At the same time, the use of fossil gas to generate electricity on the South West grid is projected to increase as coal-fired generators are retired by 2030.

AEMO's projected growth in gas demand reflects the slow rollout of large-scale renewable energy in WA, especially in off-grid areas, and a lack of effective requirements and support for decarbonisation in WA's key industrial sectors.

[1] AEMO (2025) WA Gas Statement of Opportunities

The WA government has a range of policies that continue to provide support and subsidies for new projects that increase fossil gas demand.

The high levels of gas use projected by AEMO are not consistent with Paris Agreement's 1.5˚C temperature limit. High and growing gas use would also lock WA households and industry into a high cost, high emissions energy future.

The projections also suggest a widening and structural supply gap from 2030 onwards under all scenarios, as existing gas supplies cannot meet projected demand. This is likley to be used by gas companies to suggest that the controversial and expensive Browse Basin—and other new gas developments such as those proposed in the Perth Basin–will be needed to meet WA's future gas demand.

However the AEMO projections should be considered *a warning of what could happen without government policies*, rather than an inevitability. The projections demonstrate that more must be done to replace fossil gas with lower-cost and cleaner renewable energy and storage—including by electrifying mining and mineral processing—rather than increasing fossil gas supplies.

Our analysis shows there is potential to significantly reduce fossil gas demand in WA through a faster transition to cheaper and cleaner renewable energy sources. This would deliver lower energy costs for WA consumers, and avoid the need for large new and expensive gas projects such as the Browse Basin to meet the state's energy needs.

Policy measures that are required to achieve this include:

- state targets for renewable energy generation and emissions reductions that are aligned with the 1.5°C global temperature goal established under the Paris Agreement[2].
- strengthened requirements and assistance for for key industrial sectors to decarbonise, through at-source abatement rather than offsets,
- removal of subsidies and other government support for projects that increase gas demand or prolong the use of fossil gas in the WA economy.

Even with projected demand growth, shortfalls in supply to the domestic market projected by AEMO could be fully eliminated until at least the mid 2030's by strengthening the enforcement arrangements for the current domestic market obligation on LNG exporters.

The projected domestic market demand would be fully supplied with no shortfall if the WA Government adopted a policy to enforce the existing 15% domestic gas market obligation for LNG producers on an annual basis, and prevented further exports of gas from the domestic market. In addition to these measures, requiring LNG exporters to pay back their accumulated 'domestic gas debt' would produce more gas than would be required to meet projected demand until at least 2040.

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[2] For example, see Climate Analytics (2025) 1.5°C-aligned climate targets for Western Australia

In this way, the need for new expensive and polluting gas supply projects like Browse Basin can easily be avoided through either: a) managing demand growth for fossil gas and faster adoption of renewable energy to replace existing gas use; or b) stronger enforcement of the domestic gas reservation policy for LNG exporters, or a combination of both.

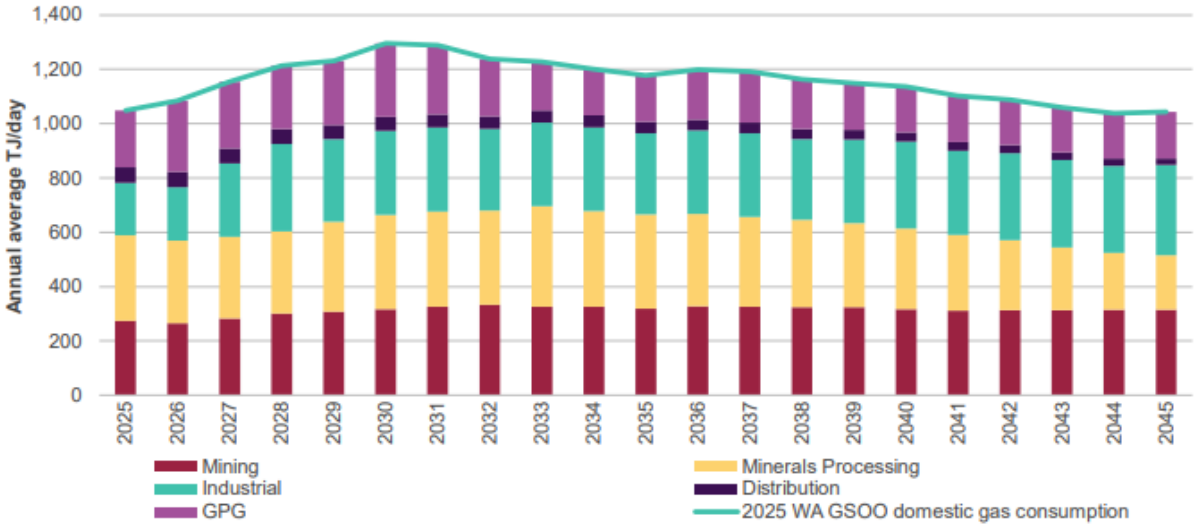
What is driving fossil gas demand in WA?

The projections presented by AEMO reflect two main drivers of gas demand in WA, particularly over the next five years:

- Increasing gas use by new industry and mining projects coming online, particularly in the North West and other off grid areas; and
- increasing gas use to generate electricity in the early 2030's, as coal generators are retired in the SWIS electricity system.

Combined, these represent a nearly 20% increase in gas demand on the WA domestic market by 2031.

Added to this is the export of gas from WA's domestic reserves which is now occurring through the Woodside North West Shelf LNG facility, but is not shown in the AEMO projections.



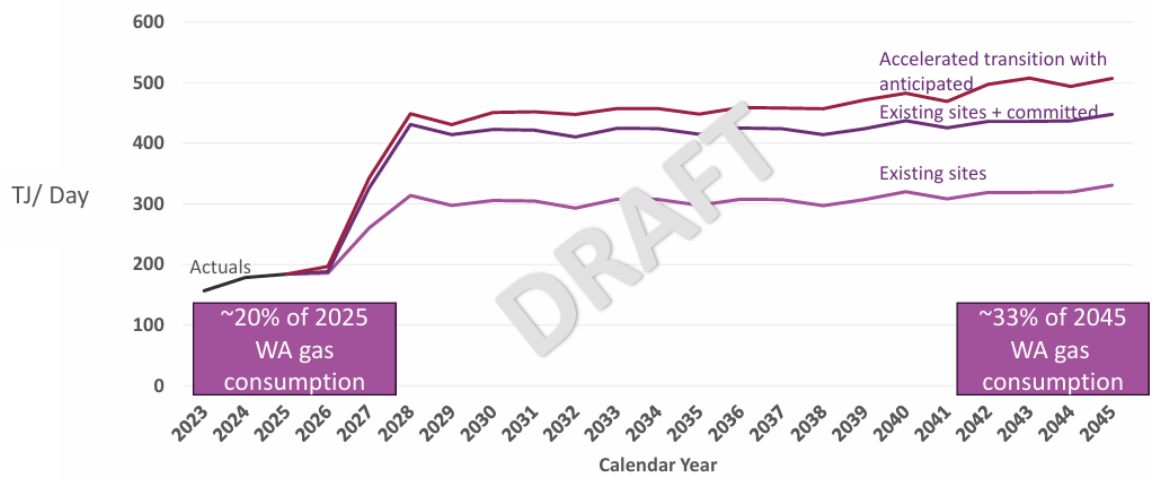
AEMO's 2025 GSOO (Figure 8) - demand forecasts, by usage category (Step Change scenario) to 2045 including Gas Power Generation

Growth in gas demand from new mining and industrial projects

Around 160 TJ/day of additional gas demand from new projects in the mining and industrial sectors is projected to come online by 2030, equivalent to around 14% of the current domestic gas market in 2025.

Other increases in demand are projected to come from growth in production from existing facilities including alumina processing as well as iron ore and gold mining.

However, under the right policy settings it is likely that a far greater share of this projected new gas demand could be met by renewable energy rather than fossil gas. This is particularly relevant for projects that are yet to be built.



AEMO's draft 2025 GSOO - projected new gas demand in the industrial sector

New projects anticipated by AEMO include 125 TJ/day of new demand from the Perdaman urea project, which will become the single largest fossil gas user in the WA domestic market when it becomes operational in 2029. This project, which received significant subsidies from the State and Commonwealth governments, will be responsible for around 80% of the projected demand increase outside of power generation. This represents a significant missed opportunity for the Perdaman project to utilise renewable green hydrogen/ammonia in a region with likely the lowest cost of renewable energy in the world.[3]

While other existing fertiliser projects are transitioning to green hydrogen, the Perdaman project is locking in a very large new demand for fossil gas with no plans to transition to renewable-based production during its lifetime. This would need to be revisited for emissions and fossil gas use in WA to be reduced in line with the temperature goal in the Paris Agreement.

[3] Climate Analytics (2023) Perdaman urea plant to increase emissions in Western Australia and misses green fertiliser opportunity

The remainder of the new projected demand is from a variety of minerals and mining-related projects, many of which are yet to commence, including several lithium and rare earths projects as well as the De Grey Mining Hemi Gold project and Mineral Resources Ken Bore iron ore mine.

With strengthened policy settings, a far greater share of this projected new gas demand could be met by renewable energy rather than fossil gas, especially given the growing number of similar facilities already meeting energy needs in this way. For example, Liontown's Kathleen Valley Lithium project is powered by up to 80% renewable energy in one of Australia's largest off-grid renewable energy systems[4].

Accelerating the transition to renewable energy in existing mining operations and other industry currently using fossil gas also has the potential to significantly reduce gas demand from these sectors, while at the same time future-proofing these industries.

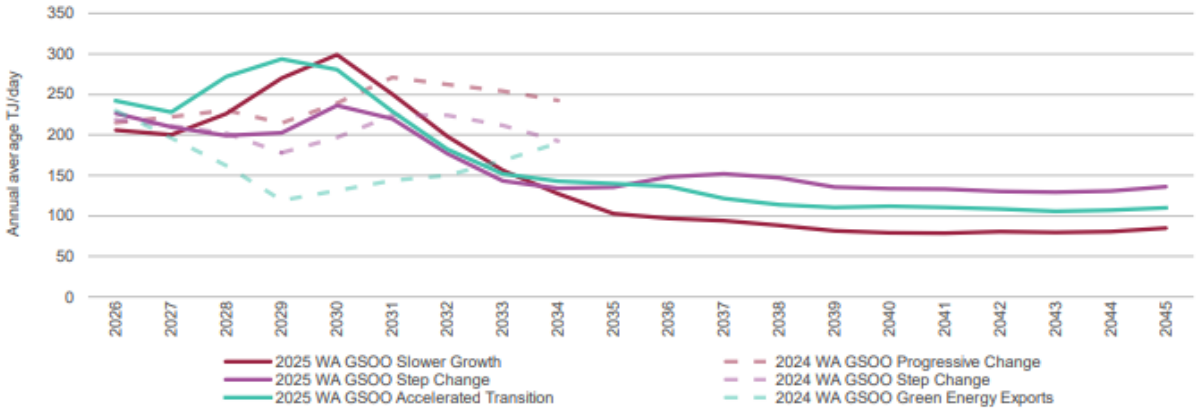
Power generation on the SWIS electricity grid

While the underlying trend is towards reduced gas use for electricity generation on the state's main electricity grid over the longer term, in the short term, AEMO's projections incicate very high levels of demand for gas power generation, peaking at nearly 240 TJ/day around 2030. This demand is driven by the retirement of coal generators on the SWIS grid before renewable energy supplies are sufficient to replace this capacuity. This would see gas use for electricity generation on the SWIS around 25% higher than recent years in 2030.

Over the longer term, AEMO projects gas use in the SWIS to remain at around 140-150 TJ/day from the mid-2030's to at least 2045. This corresponds with emissions from gas generation on the SWIS of around 2.5MT CO2e- per year by 2045.[5]

This ongoing fossil gas use is not consistent with benchmarks for gas phase out of electricity systems in developed countries in line with the Paris Agreement. Net zero scenarios that are compatible with 1.5°C with limited overshoot require gas to be phased out of energy systems globally by 2045, and by 2040 in developed nations.[6] At the national level, achieving 1.5°C-compatible pathways in Australia would involve increasing the share of renewables in the power sector to 90-95% of the total generation mix by 2030.[7]

[4] Zenith Energy
[5] AEMO WA GSOO 2025 Appendices (Figure 15)
[6] Climate Analytics (2022) Fossil gas – a bridge to nowhere
[7] Climate Analytics (2022) 1.5°C national pathway explorer – Australia



AEMO's 2025 GSOO Figure 12 - gas demand for power generation (GPG) on the SWIS electricity Grid to 2045 (EY Modelling)

While WA's main electricity grid has seen strong growth in rooftop solar, the lack of renewable energy targets in WA and other constraints is presenting barriers to investment in utility-scale renewable energy projects. This has seen a slow pipeline of such projects in the West, leading WA to fall behind other states.

By setting renewable energy targets and additional measures, the WA Government could significantly increase investor confidence in these projects and unlock a pipeline of new renewable energy projects to replace retiring coal generators.

This would significantly reduce demand for fossil gas used for electricity generation, while at the same time reducing emissions and energy prices for consumers connected to this system.

High levels of gas use will drive up energy costs in WA

Maintaining high and growing levels of gas use in line with AEMO projections would result in WA's economy increasingly locked into a high cost and high emissions energy future.

The cost of gas as an energy source is increasing in WA, while the cost of renewable energy is falling. This trend is consistent with national and global trends, where Australia's CSIRO[8] and the International Energy Agency[9] have recognised that high levels of renewable energy consistent with net zero emissions scenarios will provide the lowest prices for consumers.

Regardless of the state's supply and demand balance, there are a number of structural reasons why gas prices will continue to rise in WA including increasing costs of gas production, carbon costs, increasing exposure to international market prices and increasing costs of distribution.

For example, according to the Department of Jobs, Tourism, Science and Innovation, the price of domestic gas extraction in WA increased 20% between the March quarters of 2021

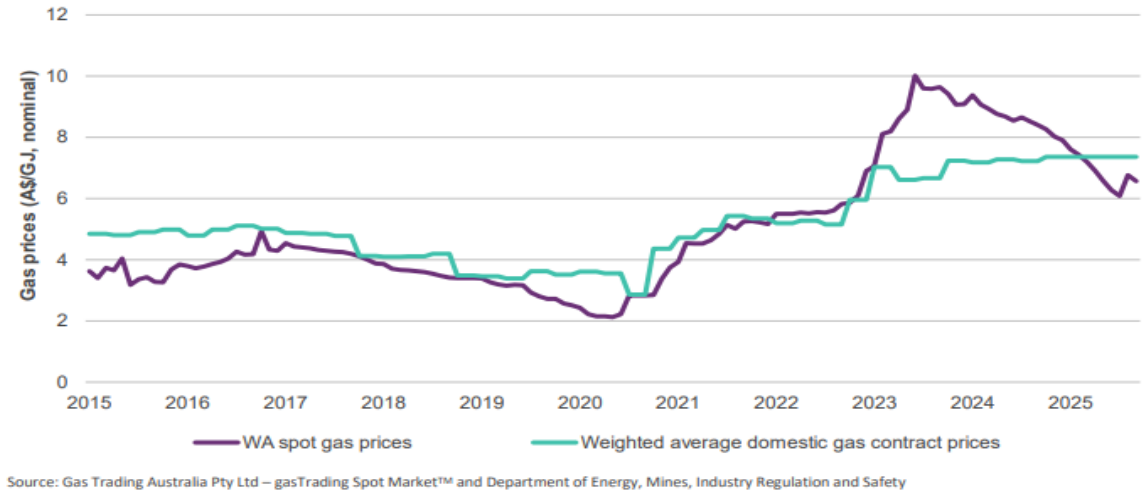
[8] CSIRO 2024-25 GenCost report
[9] IEA World Energy Outlook 2025

and 2024 (Department of Energy and Economic Diversification, 2025). This follows a global trend, as the most easily recoverable reserves are depleted.

This means that gas is becoming less competitive as an energy source, especially relative to the falling costs of renewable energy and battery storage supporting electrification.

According to the Department of Jobs, Tourism, Science and Innovation, the price of domestic gas extraction in WA increased 20% between the March quarters of 2021 and 2024 (Department of Energy and Economic Diversification, 2025).

Gas prices in WA have already risen because of exports from the domestic market and other factors, as reported by AEMO and Gas Trading Australia and in the figure below.



AEMO's 2025 GSOO Appendix A3 Figure 10 - Western Australia spot gas prices from gasTrading, January 2015 to September 2025 ($A/GJ))

The development of major new gas projects in WA such as the Browse Basin will lead to further increases in energy prices in WA. For example, a recent analysis by IEEFA has found that gas produced from the Browse project is likely four times more expensive than existing domestic gas.[10]

On the other hand, the use of renewable energy to displace gas demand in WA will result in lower emissions and lower energy prices. Gas demand in WA's economy, including in the growth areas projected by AEMO can be avoided, or replaced through electrification of industrial energy demands, and by increasing the share of renewable generation on the state's main electricity grid.

This will reduce costs borne by energy consumers including households, as the use of expensive gas for electricity generation regularly determines the price in WA's electricity market.

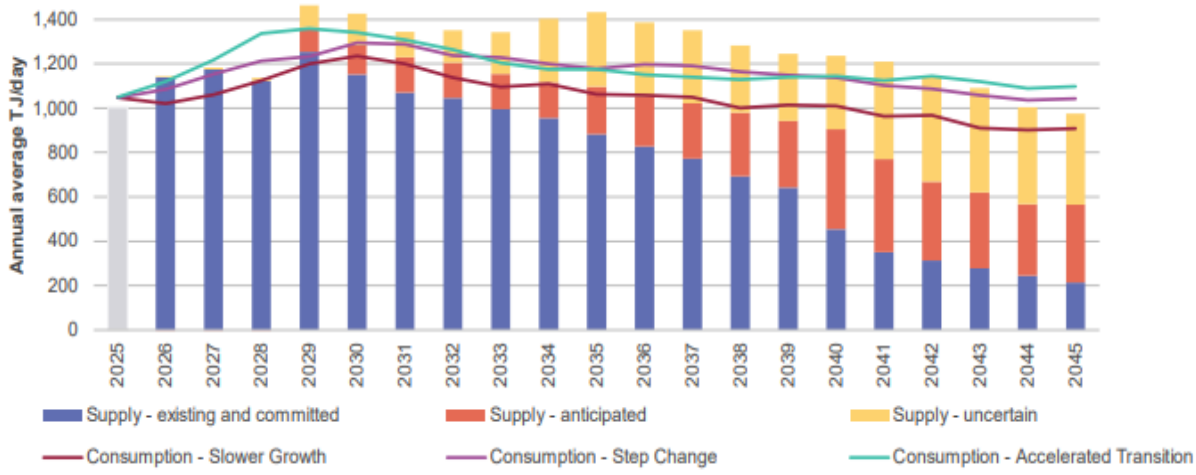
[10] Institute for Energy Economics and Financial Analysis (2025) Browse gas Expensive, emissions-intensive, unnecessary

Projected supply shortfall is a call for more renewables and electrification of mining and mineral processing, not new gas

AEMO also projects future gas supplies to the WA domestic market. When AEMO's gas demand projections are compared with certain and anticipated supplies, the projections suggest a *'widening and structural supply gap from 2030 onwards under all scenarios'*.

This leads AEMO to conclude that more supply will be required under all scenarios to meet forecast gas consumption.

In particular, AEMO states that new projects currently classified as 'uncertain' will be required. Projects in this category include the controversial Browse Basin offshore gas development. This project would come into production in the early 2030's—if it proceeds as planned.



AEMO's 2025 GSOO Figure 23 - supply and demand forecasts to 2045 (three demand scenarios)

The AEMO projections for ongoing high levels of gas use should be considered a warning of what could happen, rather than an inevitability.

The high levels of gas use in the AEMO projections are unlikely to be consistent with Australia's national emission reduction goals and imply high and increasing energy costs for WA households and industry, compared with a scenario where lower cost renewable energy meets a greater share of demand.

AEMO's projections should be seen as a call to action to speed up WA's renewable energy transition, rather than to develop new gas supplies.

The main drivers of demand underpinning AEMO's gas market projections can be significantly reduced, and in some cases totally eliminated through the deployment of renewable energy and battery storage to meet these energy demands. A suite of mature technologies can be rolled out in WA's main industrial sectors, while the shift to use of renewable energy in the mining sector can be accelerated.

These projections show that if the WA government does not take action now to increase renewable energy and phase out the use of fossil gas, WA's economy will be locked into a high cost and high emissions energy future.

Policy measures could prevent a supply shortage, reduce energy costs and lower carbon pollution

A range of policy measures could be deployed by both the WA and Commonwealth Governments now, to avoid the high cost, high emissions scenario presented by AEMO, and to avoid the need for expensive and polluting new gas developments such as the Browse Basin in WA.

Our analysis indicates that replacing gas use with renewable energy in industry and for electricity generation can avoid the need for new gas supply projects such as the proposed Browse Basin development.

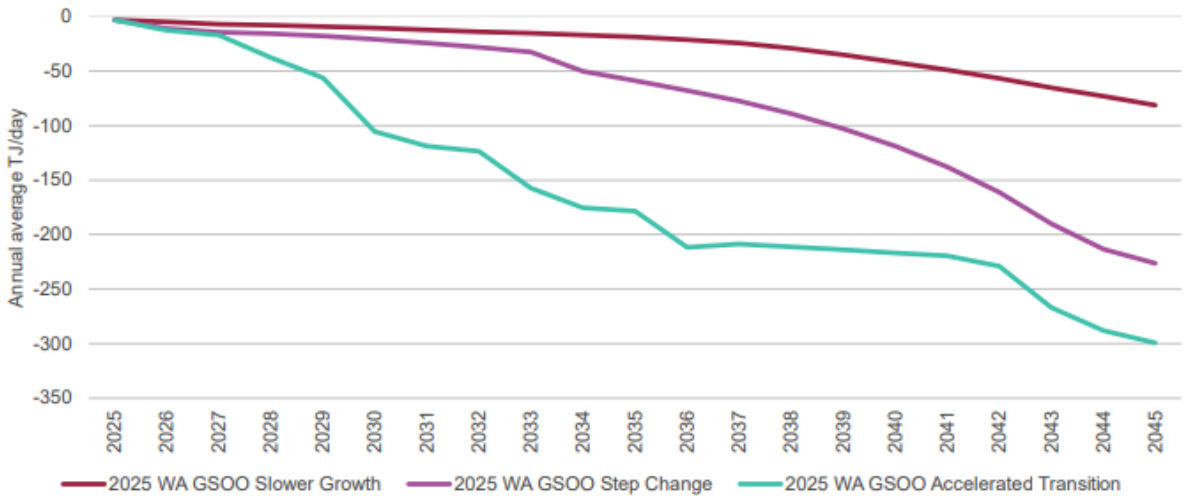
Policies required to achieve this include a **renewable energy target** for WA, and legislated state **emissions reduction targets** that align with global temperature goals. These measures will provide the long term investment certainty needed to deploy the capital required to build renewable energy generation capacity and storage on the state's electricity grids, and technology to replace gas with renewable energy in industrial sectors.

A high priority must be tackling areas of growing demand for fossil gas in new industrial and mining projects. This will require the following mix of policies:

- **Strengthen the Safeguard Mechanism** (SGM): under current settings, the SGM is not providing sufficient incentive for new facilities to use renewable energy, and existing facilities can offset their emissions rather than invest in at source abatement that would reduce gas use. SGM emissions reduction targets must be strengthened and the use of offsets must be phased out;
- Introduce **complimentary measures** at a state level, including **requirements** to prioritise at-source emissions reduction, and **assistance and incentives** for electrification;
- **Phase out or review** the broad range of **legacy measures** that are currently in place supporting, facilitating and in some cases subsidising new gas use and supply in WA to ensure they remain fit-for-purpose in the energy transition.
- **Ensure sufficient renewable energy** to meet displaced gas demand. This will require a **WA Renewable Energy Target** to provide investor confidence in utility-scale renewable projects, additional **investment in transmission lines,** and other measures.

Policies that encourage and subsidise demand or prolong the use of fossil gas in the WA economy are working against decarbonisation goals, while delaying the transition to cheaper and cleaner energy for households and industry. Examples of such policies include the over AUD 500 Million in subsidies that have been provided to the Perdaman urea project[11], as well as fast-tracked approvals and other incentives and support for other projects that increase gas demand.

AEMO's *Accelerated Transition* scenario shows the potential for significantly greater reductions in gas use with higher rates of electrification, energy efficiency and remote-site renewables compared with the base *Step Change* scenario. By 2036, AEMO estimates that these technologies could deliver additional reductions of around 140 TJ/day or around 13% of current total demand in the domestic market beyond what is projected under *Step Change*.



AEMO's 2025 GSOO Figure 10 – Combined impact of electrification, energy efficiency and remote-site renewables, (all scenarios) to 2045

Prioritising domestic use over LNG exports and enforcing the existing domestic gas reservation

Gas exporters in WA currently export vastly more gas than they provide to consumers on the WA domestic market and AEMO's projections suggest that LNG exporters will continue to fall short of meeting their obligations to provide 15% of production to the export market.

WA's domestic gas reservation policy and Domestic Market Obligations (DMO's) provide high levels of flexibility to industry and currently lack a statutory basis to ensure domestic

[11] Climate Analytics (2023) Perdaman urea plant to increase emissions in Western Australia and misses green fertiliser opportunity

supplies are met. While the policy requires the equivalent of 15% of LNG exports to be provided to the domestic market, in practice far less has been delivered by LNG companies.

LNG producers have on average delivered only around eight per cent of domestic gas relative to LNG exports; just over half of what is required to be reserved under the WA Domestic Gas Policy according to evidence presented by JTSI to the WA Economics and Industry Standing Committee[12]

This led the Committee to observe that "*some producers strictly apply the terms of their domestic gas agreements seemingly without regard to either the spirit of the Policy or their social contract with the Western Australian community.*"

AEMO's projections anticipate that LNG producers will continue to provide far less than 15% of production to the WA domestic market. Data in the 2004 GSOO confirms that only 8% of LNG export production was provided to the domestic market in 2022-2024, accounting for around 50% of total domestic market demand. This amount was projected to increase to 11% in 2025 – still well below the 15% required.

The domestic market obligations are structured to allow flexibility to exporters in the timing of supplying their domestic gas obligations, assuming they are met over the life of the project. This means that underperformance in the past has effectively accumulated a 'domestic gas debt' that is owed to the domestic market by exporters. Our analysis indicates this accumulated gas debt is around 630 PJ since 2022, or enough to supply the entire domestic gas market for over 1.5 years.

Based on AEMO's published projections for LNG exports, our analysis indicates that **if LNG exporters met the full 15% domestic gas allocation from this point forward, then the projected supply gap in the domestic market could be fully met until at least 2034, and likely for a considerable period after that.** This is without considering the accumulated debt to the domestic market that has occurred as a result of underperformance.

If the domestic gas debt accrued by LNG exporters as a result of underperformance over the last 4 years was 'called in', the shortfall in supplying the domestic market projected by AEMO could be met for much longer - until at least the early 2040's.

The failure of LNG exporters to meet domestic market obligations has been further exacerbated in recent years by the purchasing of gas out of the domestic market to supply to LNG export facilities. This has occurred in the case of the Waitsia Joint Venture which was provided with an exemption to the onshore domestic gas export ban, resulting in reports of up to 180 TJ/day (equivalent to 16% of the total domestic gas market) exported via Woodside's North West Shelf LNG facility[13]. This is larger than the total amount of domestic

[12] Economics and Industry Standing Committee (2024) Legislative Assembly West Australian Parliament, Inquiry into the WA Domestic Gas Policy: Interim Report

[13] ABC News (2025) Waitsia gas project delays leave Kerry Stokes-backed firm exporting reserved WA supplies https://www.abc.net.au/news/2025-07-21/waitsia-gas-project-delays-spark-exports-from-wa-domestic-market/105542324

gas supplied by the NWS facility under its domestic gas obligation in 2025, meaning the facility is likely to have been a net taker of gas from the WA domestic market in this year.

Since the Waitsia exemption, the Cook government has allowed further exports from onshore gas fields that are connected to the WA domestic gas pipeline network. This policy change has resulted in the projects such as the Lockyer Deep project backed by Gina Reinhart and others seeking to export more onshore gas via the North West Shelf facility.

This export of gas from domestic reserves not only places additional demands on the domestic market, competing directly with WA gas consumers, but increases the exposure of WA gas consumers to higher international market prices.

By **strengthening domestic gas reservation arrangements**, and **preventing further export of domestic gas reserves**, the WA Government could ensure that any remaining shortfall in the domestic market is met without the need for new gas supply projects beyond those already comitted and under development.

Our analysis indicates that even with projected demand growth, shortfalls in supply to the domestic market projected by AEMO could be fully eliminated until at least the mid 2030's by strengthening the enforcement arrangements for the current domestic market obligation on LNG exporters.

The projected domestic market demand would be fully supplied until at least 2034 if the WA Government adopted a policy to enforce the existing 15% domestic gas market obligation for LNG producers on an annual basis, and prevented further exports of gas from the domestic market. This would see around 70% of total projected domestic gas demand met from four LNG export facilities in 2030[14], compared with around 50% of demand met from these facilities in recent years.

In addition, calling in the accumulated 'domestic gas debt' accrued by LNG producers failing to meet the 15% reservation in the past could eliminate the projected supply gap until at least 2040.

[14] Production from the Shell Prelude FLNG facility is not included in these calculations as it is not connected to the domestic gas network and does not have a Domestic Gas Obligation.