

# What is the case for more gas?

## Government modelling of the Future Gas Strategy does not show a need for more gas

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*The 'evidence and facts' presented in the Future Gas Strategy seem to say whatever the Minister wants. The Analytical Report and modelling underpinning the Strategy show there is little to no need for additional gas mining or exploration, and include scenarios compatible with the Australian Government's net zero emissions by 2050 policy. The government has chosen to ignore this evidence.*

Discussion paper

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# Summary

The Future Gas Strategy, published in May 2024, sets out the Albanese Government’s plan for gas production and consumption in Australia between now and 2050. Despite its stated objective to “support decarbonisation of the Australian economy” and the government’s previous stated policies of pursuing net zero emissions by 2050, the Strategy argues for the expansion of Australia’s existing gas production capacity.

The government presents two basic rationales for expanding gas production: that more gas-fired generation capacity is needed to facilitate the transition to a renewable grid, and that more gas production is required to address potential shortfalls (“supply gaps”) in domestic supply. Neither of these rationales are supported by evidence. Nor, indeed, are they supported by the government’s own modelling—or the Future Gas Strategy itself.

Australia produces far more gas than it needs to meet domestic demand. The issue of potential shortfalls in domestic supply has only arisen because Australia prioritises the desires of foreign-owned liquified natural gas (LNG) exporters over ensuring domestic supply. The diversion of some of the gas earmarked for export to the domestic market appears the most straightforward way of resolving questions of domestic supply. This would not even require renegotiation of export contracts as a significant proportion of the gas currently earmarked for export is uncontracted.

The *Future Gas Strategy Analytical Report*, on which the Future Gas Strategy is based, identifies three potential supply gaps of concern: one in Western Australia, one along the eastern seaboard, and one in the southern regions. The first two could be met in a relatively straightforward manner with the diversion of export gas. As a major producer of gas, with a domestic gas reservation policy already in place, there is no reason that Western Australia should ever run short of domestic supply. Similarly, the east coast supply gap could be bridged by redirecting a portion of the gas currently earmarked for export as LNG from Queensland.

The question of the Southern Regions supply gap—a subset of the east coast gap—is more nuanced because it involves issues of infrastructure, particularly gas pipeline capacity. The South West Queensland Pipeline (SWQP)—which links the southern regions (NSW, VIC, SA, TAS) to the gas-producing regions of Queensland and the NT—currently lacks the capacity to transport the volume of gas required to bridge the Southern Regions supply gap as production in the Southern Regions declines over the coming years. So long as this remains the case, producing more gas in Queensland and the NT will do nothing to close the Southern Regions supply gap. More gas in remote Western Australia does not help either. It appears clear, then, that the most straightforward solution to this problem would be to

invest in expanding the SWQP capacity, allowing for regions that produce vast amounts of gas to meet the needs of regions that require increased supply.

Instead, the Future Gas Strategy simply argues for more gas anywhere, despite the geographical and pipeline capacity issues, and specifically the development of fracked gas in the Narrabri region of New South Wales to help close the Southern Regions supply gap. This is an inferior solution for several reasons. It would produce only 73 PJ of gas a year, while expanding the pipeline capacity would allow up to an extra 180 PJ of gas to be supplied to the Southern Regions every year. The use of fracking creates environmental concerns that have been well-documented elsewhere. And the production of new gas adds to Australia's emissions at a time when the government's priority should be reducing them.

So why is the Strategy so insistent that Australia needs to produce more gas? There is a third, unspoken rationale at work here: the idea that it is in Australia's economic interest to continue producing gas and selling it to the rest of the world. This reasoning underpins the Strategy's repeated claims that gas will be needed to power the growth of Australian manufacturing, and that one of the Strategy's six "guiding principles" is an assurance that "Australia is, and will remain, a reliable trading partner for energy, including Liquefied Natural Gas (LNG)".

Given the ongoing damage that consumption of gas continues to wreak on the atmosphere, this is blind short-termism at best and deeply cynical at worst. For Australia's LNG export facilities to continue working at full capacity, the rest of the world would have to resign itself to something in the region of 2.4°C to 2.6°C of warming. Such a scenario would not just be calamitous for millions of people around the world—not least in the Pacific region—it also stands in direct defiance of the scientific consensus on climate change, and the government's own climate pledges and policies.

Similarly, the Future Gas Strategy's preferred domestic demand scenario is that with the highest continued domestic gas usage. This level of domestic gas consumption would make it impossible to achieve net zero emissions by 2050—again, a direct contradiction to official government policy.

Despite the green-tinted language in which the Strategy sets out its vision of the future, that future is anything but green. It's a future in which sea levels rise, extreme weather events increase in frequency, bushfires lay waste to the countryside—and gas companies make money hand over fist thanks to Australia's refusal to confront the consequences of its greed and short-sightedness. This is not a future in which anyone wants to live, and it is not a future we should bequeath to the world.

# Introduction

The UN Secretary General, United Nations Framework Convention on Climate Change (UNFCCC) and International Energy Agency (IEA) have all said that new sources of fossil fuel production are unnecessary in a world transitioning away from fossil fuels and are inconsistent with limiting climate change to 1.5°C.

Despite the scientific evidence on the risks of further fossil fuel expansion, the *Future Gas Strategy* (“the Strategy”), published by the Department of Industry Science and Resource (DISR), underscores the Albanese Government’s commitment to gas expansion in the short term, and to the gas industry to 2050 “and beyond”.<sup>1</sup>

One of the “principles” on which the Strategy is based is:

New sources of gas supply are needed to meet demand during the economy-wide transition.<sup>1</sup>

One of the actions arising from the strategy is:

Prevent[ing] gas shortfalls by working with industry and state and territory governments to encourage more timely development of existing gas discoveries in gas-producing regions.<sup>2</sup>

In her press release announcing the Strategy, federal Minister for Resources Madeleine King declared:

It is clear we will need continued exploration, investment and development in the [gas] sector to support the path to net zero for Australia and for our export partners, and to avoid a shortfall in gas supplies.<sup>2</sup>

She went on to say:

We cannot rely on past investments in gas to get us through the next decades. We need continued investment in, and development of, gas supply and transport infrastructure to get us through the energy transition with thriving industries. To secure the clean, affordable and reliable energy Australia needs to compete in the

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<sup>1</sup> DISR (2024a) *Future Gas Strategy*, <https://www.industry.gov.au/publications/future-gas-strategy>

<sup>2</sup> King (2024a) *Australia's Future Gas Strategy*, Hon. Madeleine King – Press Release, 9 May 2024, <https://www.minister.industry.gov.au/ministers/king/media-releases/australias-future-gas-strategy>

global race for jobs and opportunities, (sic) and we need to capitalise on our natural resource endowment.<sup>3</sup>

King went on to link the need to increase gas production with the opportunity to expand Australia's manufacturing industry:

Gas is crucial for [the government's \$22.7bn budget package] A Future Made in Australia as it supports manufacturing, food processing and refining of critical minerals which will help Australia and the world to lower emissions.<sup>4</sup>

Both the Albanese government's commitment to expanding gas production and its determination to link this expansion to the growth of Australian manufacturing are clear. On the same day the Strategy was released, King wrote an opinion piece for the *Australian Financial Review* entitled "We will need new sources of gas", the opening paragraph of which declared:

A future made in Australia will need Australian gas. We will need affordable gas to support energy reliability for households and businesses as we move to a more renewable grid. We need gas to support Australian manufacturing and Australian industry, and tens of thousands of Australian jobs in the manufacturing sector.<sup>5</sup>

While the Strategy is entirely inconsistent with the scientific consensus around what is required to limit climate change, the stated priorities of Australia's Pacific neighbours, the views of multiple Australian Labor Party (ALP) members of parliament,<sup>6</sup> and the expectations of many Australian voters, it does at least provide clarity about the plans and priorities of the Albanese government.

The Strategy makes clear that a transition away from fossil fuel production is neither underway nor expected in Australia any time soon. While such a position may be a source of surprise and disappointment for some, King's clarity of purpose is a welcome relief from the vagaries of politicians who continuously refer to their desire to "transition", "transform" and/or decarbonise the Australian economy, while simultaneously supporting decisions such as:

- The approval of four coal mines since the 2022 election.
- The approval of 250 gas wells since the 2022 election.

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<sup>3</sup> DISR (2024) *Future Gas Strategy - Minister's foreword*, <https://www.industry.gov.au/publications/future-gas-strategy/ministers-foreword>

<sup>4</sup> King (2024a)

<sup>5</sup> King (2024b) *We will need new sources of gas*, AFR Opinion Piece, 9 May 2024, <https://www.afr.com/policy/energy-and-climate/we-will-need-new-sources-of-gas-20240508-p5gz05>

<sup>6</sup> Hegarty & Dhanji (2024) *Federal Labor MPs rebel over government gas strategy, 'blindsided' by policy 'championing' fossil fuels*, <https://www.abc.net.au/news/2024-05-09/labor-mps-revolt-over-gas-strategy/103827902>



- The commitment of \$1.9 billion to the Middle Arm gas project in Darwin Harbour.
- The provision of Commonwealth and state government subsidies for fossil fuel use and production, which total \$25.6bn for 2022–23 and 2023–24.

The Strategy provides certainty to energy sector investors about the Albanese government’s priorities—but also to other countries, climate scientists, Non-Government Organisations (NGOs) and voters. In a democracy, this clarity of purpose is a virtue, even when the goals are at odds with the priorities of many. The choices made by members of parliament, as well as the choices voters make when electing their representatives, clearly impact the design of climate policy and the level of support for fossil fuel expansion.

The aim of this report is to understand and analyse the case for more gas contained in the Strategy.<sup>7</sup> We begin with an overview of the *Future Gas Strategy Analytical Report* (“the Analytical Report”), which underpins the Strategy.<sup>8</sup> Next, we use data from the Analytical Report to develop a big-picture overview of the Australian gas industry and the relevant forecasts, particularly from the demand side, to provide much needed analytical context. This context, which is missing from the Analytical Report itself, will guide the remainder of the analysis.

We identify and examine potential supply gaps to show that the case for more gas is almost non-existent. This analysis reveals that supply gaps stem primarily from satisfying the export plans of foreign-owned liquified natural gas (LNG) exporters, along with challenges related to pipeline and storage capacity rather than a gas supply shortage. We then show that Western Australia, the Northern Territory, and even Queensland are unlikely to address the potential supply gap of most concern to Australian Energy Market Operator (AEMO): the so-called Southern Regions supply gap. Indeed, AEMO have already modelled solutions that do not require more gas.

Further analysis looks at ways to close the Southern Regions supply gap, finding that developing new gas reserves in the Southern Regions is likely the least effective strategy. The paper concludes by noting the fundamental disconnect between the findings of AEMO and the Analytical Report, and the Strategy and the Government rhetoric advocating for more gas.

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<sup>7</sup> DISR (2024a) *Future Gas Strategy*, <https://www.industry.gov.au/publications/future-gas-strategy>

<sup>8</sup> DISR (2024b) *Future Gas Strategy – Analytical Report*, <https://www.industry.gov.au/sites/default/files/2024-05/future-gas-strategy-analytical-report.pdf>

# Overview of the Future Gas Strategy Analytical Report

The Strategy is built upon the Analytical Report. The Strategy notes that the Analytical Report “provide[s] the data for the Future Gas Strategy” and refers the reader to the Analytical Report 37 times.<sup>9</sup> The Analytical Report contains the data and forecasting foundation for the policy approach of the Strategy. Therefore, an understanding of the Strategy cannot be achieved without a thorough understanding of the Analytical Report.

The Analytical Report is divided into two main subject areas:

1. An overview of current Australian and international gas and LNG markets; and
2. Forecasts of the future Australian gas industry and parts of the international gas market.

The forecasting sections in the Analytical Report are important as they form the numerical and political foundation for the Albanese Government’s claim that Australia, and the world, need to expand the gas industry.

The forecasting sections are further broken down into four main forecasts:

1. Australian liquefied natural gas (LNG) export scenarios;
2. East coast gas market forecasts;
3. Southern regions (NSW, VIC, SA, TAS) forecast; and
4. West Coast forecasts.

In reality, many of these industry segments are interlinked. However, the Analytical Report does not provide a unified overview, despite the fact that gas intended for export is the same gas intended for domestic consumption, and the East Coast and Southern Regions clearly overlap.

Forecasts two, three and four from the above list are AEMO based forecasts contained within the *Gas Statement Opportunities* and the *WA Gas Statement Opportunities*.<sup>10</sup> However, the Australian LNG forecasts were undertaken by the Department of Industry Science and Resource (DISR) using a privately owned global gas model—the Nexant World

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<sup>9</sup> DISR (2024a), p.7

<sup>10</sup> AEMO (2024) *Gas Statement of Opportunities*, <https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo>; AEMO (2023) 2023 Western Australia Gas Statement of Opportunities, [https://aemo.com.au/-/media/files/gas/national\\_planning\\_and\\_forecasting/wa\\_gsoo/2023/2023-wa-gas-statement-of-opportunities-wa-gsoo.pdf?la=en](https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/wa_gsoo/2023/2023-wa-gas-statement-of-opportunities-wa-gsoo.pdf?la=en)

Gas Model—and it is unclear if these forecasts are compatible with the AEMO forecasts. To add further confusion, forecasts two and three use different timeframes from those used in forecasts one and four.

Each of the four forecasts describes three scenarios. The specifications of the three scenarios for each of the four ‘separate’ markets were originally developed by the International Energy Agency (IEA). They have been adopted by AEMO with confusingly different names, and used for the LNG forecasts but with the IEA names. The three scenarios and their related IEA and AEMO scenarios, in order from least to most abatement effort, are summarised in Table 1.

**Table 1: Scenarios in the Future Gas Strategy Analytical report**

Future Gas Strategy Scenario	Climate outcome	IEA Scenario	AEMO Scenario
Current Policies	2.4°C–2.6°C	STEPS (Stated Policies)	Progressive Change
Net Zero post-2050	1.6°C–1.8°C	APS (Announced Pledges)	Step Change
Net Zero 2050	1.5°C	NZE (Net Zero Emissions)	Green Energy Exports

Source: Future Gas Strategy Analytical Report

To add a final layer of confusion, despite the scenario name gymnastics outlined in Table 1, the Analytical Report, for the most part, ignores its own scenario names and instead uses the relevant IEA or AEMO names depending on the context.

The main variable in each of the three scenarios is the level of domestic and global climate abatement effort, with the Current Policies scenario representing the least effort and Net Zero 2050 being the most ambitious. The level of assumed economic growth also differs between some of the scenarios, making it difficult to ascertain what is driving some of the forecasting outcomes. Interestingly, the varying level of economic growth across the scenarios confirms that the IEA believes that higher abatement efforts will likely lead to higher economic growth.

## DOMESTIC GAS FORECASTS ARE INCOMPATIBLE WITH AUSTRALIA’S NET ZERO TARGET

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When discussing the domestic gas outlook, the Analytical Report focuses on the AEMO Step Change scenario. It suggests that the department considers this scenario the most likely. The choice to focus on this scenario is highly important as the Step Change scenario has the highest level of forecast future domestic gas usage. That is, even though the preferred Step Change scenario assumes more emission abatement effort than the Progressive Change scenario, the Step Change scenario is associated with greater reliance on domestic gas consumption than the Progressive Change scenario. This is because the higher level of

abatement effort is assumed to encourage more electrification which drives electricity demand higher, and in turn this is assumed to drive increased demand for gas-fired electricity. Also, as the level of economic growth is assumed to be higher in the Step Change scenario, there is greater need for all sources of energy, including gas.

Despite the Commonwealth Government's commitment to net zero emissions by 2050, the Future Gas Strategy's preferred scenario ignores its net zero commitment and is the scenario with the highest continued domestic gas usage.

## LNG FORECASTS

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For its LNG outlook, the Analytical Report shows no strong preference for any of the three scenarios mentioned in Table 1, noting there is more uncertainty around the international outlook compared to the domestic market. However, it seems likely that the gas industry and the Albanese Government are basing their mutual support for ongoing exploration of undiscovered gas fields and the rapid development of existing gas fields on the assumption that global climate policy aligns with the least ambitious scenario (Progressive Change), which is associated with 2.4°C to 2.6°C of global warming. As shown in Figure 1 below, only the least ambitious global efforts to reduce fossil fuel use can keep Australia's fleet of LNG export facilities operating at near full capacity. Both the Strategy and Analytical Report support and promote this outcome as the most desirable, without explaining why.<sup>11</sup>

## OVERVIEW OF THE GAS INDUSTRY AND THE SCENARIO FORECASTS

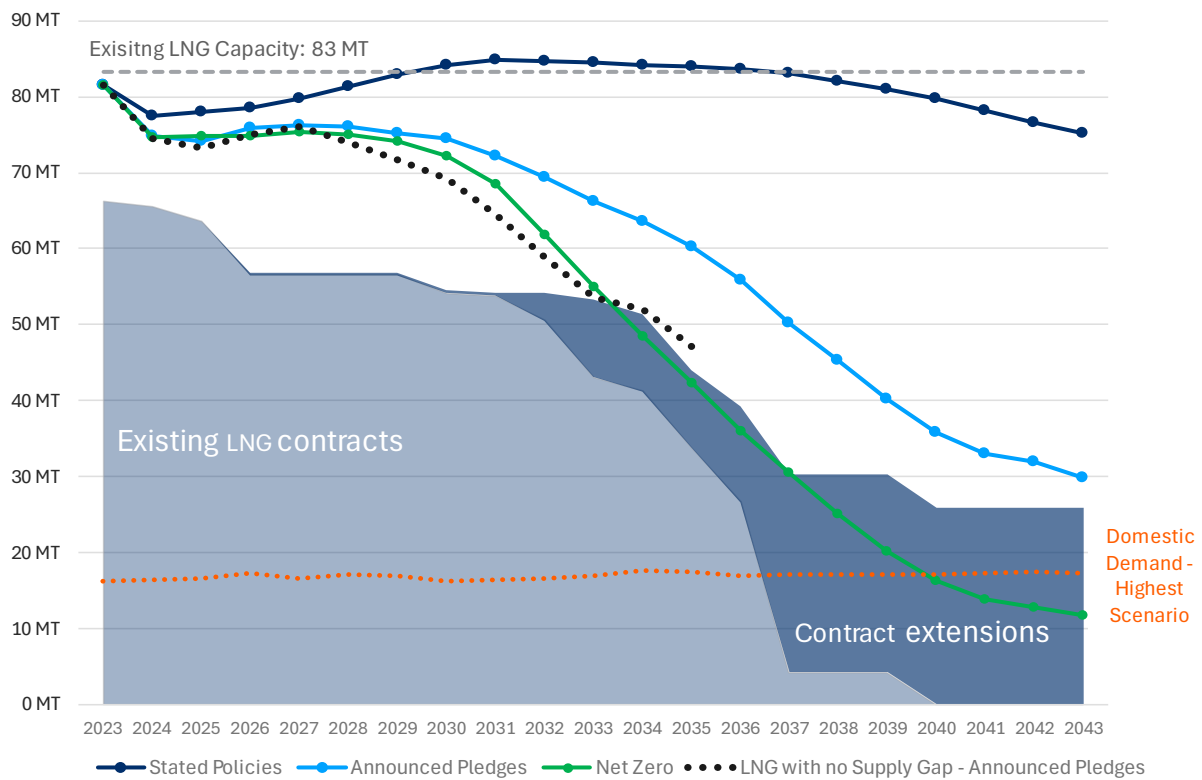
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As previously noted, the forecasts within the Analytical Report are poorly integrated, rely on multiple time frames, and use labels that are inconsistent with commonly used international analyses. Like the scenarios themselves, the Government's motivations in presenting the data in this confusing way are unclear. While the Analytical Report allows the authors to focus on individual elements of a complicated story, it makes it hard for readers to form a clear overall picture of the futures the Strategy is supposed to help Australia plan for. With that goal in mind, Figure 1 provides a general overview of the forecasts, a consolidated perspective that the Analytical Report failed to include.

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<sup>11</sup> DISR (2024a), p.50; DISR (2024b), p.54

**Figure 1: Future Gas Strategy: LNG projections compared to domestic demand, MT LNG**



Note: All energy units converted to million tonnes (MT) of LNG.

Source: Analysis of the *Future Gas Strategy Analytical Report* (2024)

Figure 1 is not the easiest chart to follow, but stepping through each line and shaded area provides a general overview of the full outlook contained in the Analytical Report. At the top of Figure 1, the horizontal grey dashed line represents Australia’s current LNG export capacity, estimated at the recent maximum of 83 MT in 2021. While the nameplate capacity of the LNG is industry is a little higher, exports have not exceeded 83 MT per year.

The three solid-coloured lines represent the three LNG export scenarios using the IEA naming convention outlined in Table 1. The Stated Policies forecast (navy blue line) represents the least ambitious scenario for global climate action, which would keep Australia’s LNG export industry operating at near full capacity to 2050 and beyond. Alternatively, the Announced Pledges (light blue line) and Net Zero (green line) scenarios suggest that Australia has significantly overinvested in LNG export capacity and, in turn, that the owners of Australia’s LNG export facilities could incur very large losses as global demand for their product declines steadily.

The grey-shaded areas represent existing LNG contracts between Australian gas exporters and foreign customers, as well as potential contract extensions. The white space between the grey-shaded LNG contracts and the LNG export capacity (grey dashed line) represents the spare capacity that the LNG exporters would like to fill with increased gas supply. This situation is unlikely and would only be possible under the least ambitious Stated Policies

scenario. Importantly, for 2023 the white space indicates the current level of uncontracted gas, which could potentially be used domestically instead of being exported. More generally, it represents an amount of gas that, if not exported, should pose no issues for existing trade relationships since no long-term supply contracts would be broken.

By comparison, the orange line represents the highest domestic demand scenario—AEMO’s Step Change scenario, which is the preferred scenario in the Analytical Report’s assessment of the domestic outlook.<sup>12</sup>

Finally, the dotted black line running out to 2035, while not in the Analytical Report, represents the LNG exports in the Announced Pledges scenario minus the supply gaps identified in the Analytical Report. The supply gaps are discussed in more detail in the following sections, but the inclusion of the dotted black line hints that it is perhaps possible to close supply gaps by simply reducing LNG exports without impinging on existing LNG contracts, although the complete story is more complicated.

Figure 1 highlights the following:

1. LNG exports increase in one scenario only, the scenario in which the rest of the world makes no additional efforts to reduce fossil fuel use.
2. All other scenarios show a significant reduction in LNG exports from 2028–30.
3. Domestic gas consumption is a small part of the overall gas story.
4. Domestic gas demand, even in the scenario with the highest gas usage, remains flat.
5. There is no need for more gas for domestic usage.
6. By simply allowing all existing contracts to run their course, the LNG outlook would be relatively consistent with the government’s net zero commitment.
7. All supply gaps could be closed by simply reducing LNG exports without affecting any contractual obligations.

Taken together, the need for more gas relative to current levels is not strongly supported by the evidence presented in Figure 1 or, indeed, the Analytical Report. At worst, domestic gas demand is expected to remain flat, and in most scenarios LNG exports will shrink considerably.

## SO, WHERE IS THE CASE FOR MORE GAS?

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The Analytical Report that accompanies the Strategy makes the case for continued expansion of Australian gas exploration and production by identifying several geographically-based “supply gaps”. These potential supply gaps are described separately

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<sup>12</sup> Due to timeline inconsistencies in the Analytical Report between the East Coast and West Coast domestic demand forecasts, a simplifying assumption was made that WA gas demand remains at 2034 levels to 2043.

from other elements of the forecast and without providing the overall context outlined in Figure 1.

The term “supply gap”, as defined in the Strategy, refers to the situation in which the forecast demand for gas exceeds the available supply in a particular geographic region for a specific amount of time. To be clear, the Strategy does not predict an overall, nationwide, sustained gas shortage. Nevertheless, the Strategy focusses solely on increasing gas production to mitigate the small risk of isolated “shortages”—in reality, however a wide range of other solutions exist.

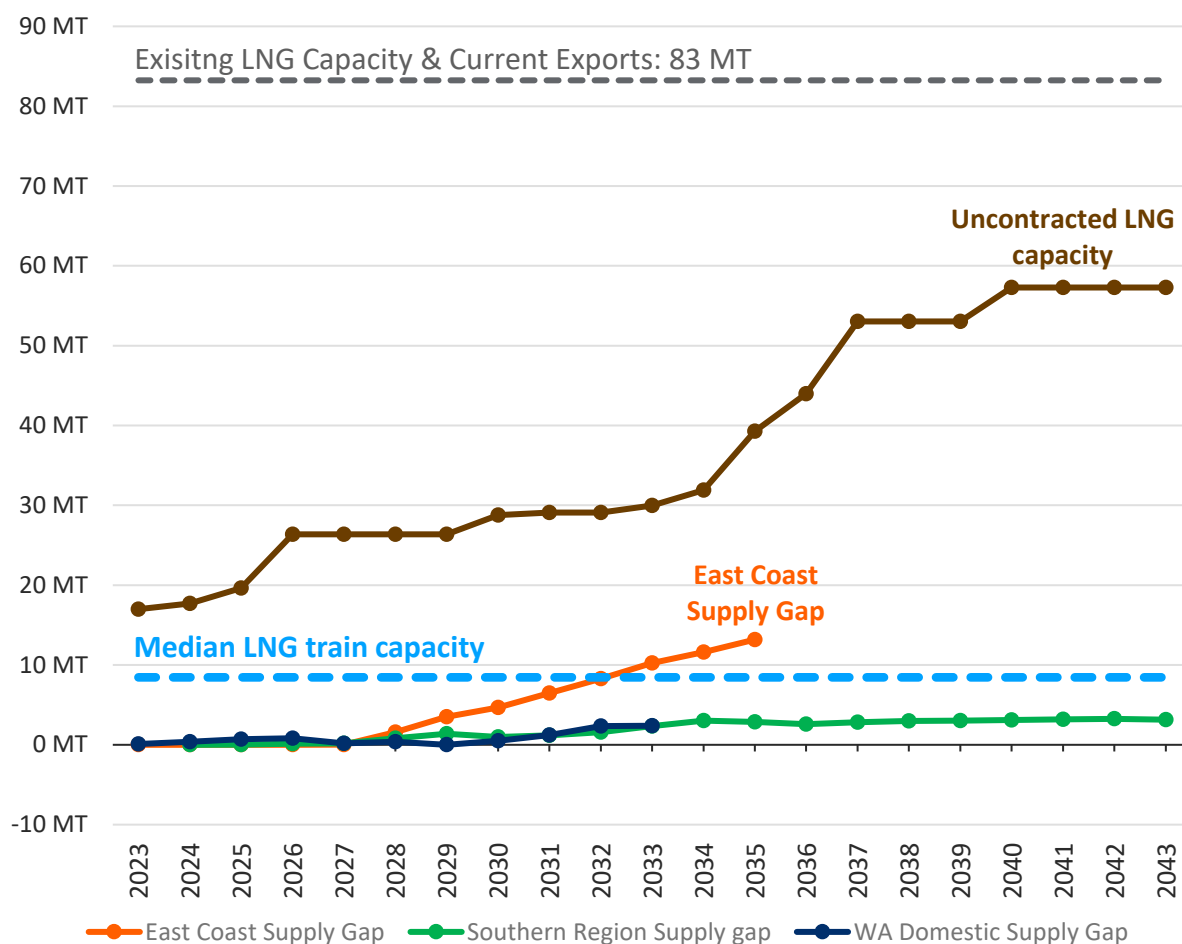
The Analytical Report and associated AEMO forecasts identify three separate supply gaps:

1. **Western Australia domestic supply gap:** The difference between domestic gas demand and the gas supplied under WA’s Domestic Gas Reservation Policy, which sets aside some gas from WA’s huge LNG facilities for domestic usage. There are significant potential supply gaps from 2030.
2. **East Coast supply gap:** The difference between East Coast domestic demand plus Queensland LNG exports and East Coast supply, potentially including pipeline supply from the Northern Territory occurring from 2026, and especially from 2028.
3. **Southern Regions domestic supply gap:** The difference between domestic demand and supply in the southern regions of Australia encompassing New South Wales, Victoria, South Australia, and Tasmania, and supply from those regions plus potential pipeline supply from the northern regions. The Southern Regions supply gap is a subset of the East Coast supply gap, and subsequently has similar timings to the East Coast supply gap.

Interestingly, the Analytical Report and associated AEMO forecasts do not include a comprehensive estimate of the total supply gap for the West Coast that incorporates the Western Australian LNG outlook. In fact, it is quite likely AEMO does not need to provide this estimate, since its primary concern is domestic gas markets. The Domestic Gas Reservation Policy ensures there is less of a direct link between LNG export volumes and the availability of gas for domestic usage than there is on the East Coast. In Western Australia, significant reserves are set aside exclusively for domestic use. Importantly, without estimating an overall supply gap for Western Australia, the rationale for increasing gas production cannot rely on the supposed need to support the Western Australian LNG industry. The existence of a gas shortage in Western Australia has simply not been established, nor the specific scenarios under which a shortage might occur.

Figure 2 shows the three projected supply gaps together with the current LNG export capacity, projected uncontracted LNG capacity, and the median size of an LNG train in Australia.<sup>13</sup>

**Figure 2: Future Gas Strategy and AEMO: Supply gaps compared to LNG capacity, MT LNG**



Note: All energy units converted to million tonnes (MT) of LNG.

Source: Analysis of the *Future Gas Strategy Analytical Report* (2024) and AEMO (2024)

Presented in this way, the supply gaps are obviously small compared to Australia’s massive current LNG export volumes, a significant and growing share of which is “uncontracted” and could be diverted to the Australian domestic market.

### *Western Australia domestic supply gap*

The potential Western Australian domestic supply gap is zero until 2030, and without a complete LNG story, it is difficult to draw an analytical conclusion from the limited data provided in the Analytical Report. With a large LNG industry, massive gas reserves, and an increasing share of LNG exports likely to be uncontracted, any domestic shortage can be

<sup>13</sup> For the Southern Regions supply gap the underlying AEMO forecasts provide a range of estimates. The largest of these is shown in Figure 2.



filled by enforcing the existing domestic reservation policy. Indeed, the current Inquiry into the WA Domestic Gas Reservation Policy found it was delivering only half as much gas to the domestic market as it should.<sup>14</sup> Ensuring the WA Domestic Gas Reservation Policy operates as legislated would solve any potential Western Australia supply gap.

### *East Coast supply gap*

The East Coast supply gap, the largest discussed in the Strategy, is based on AEMO forecasts. The East Coast supply gap is caused by the interaction of both domestic demand and LNG exports relative to likely future gas supply in the eastern half of Australia, including potential supply from the Northern Territory. This means the East Coast supply gap could potentially be addressed by limiting Queensland's LNG exports and undertaking less environmentally damaging fracking.<sup>15</sup> Such a solution would be better aligned with the Announced Pledges or Net Zero scenarios.

Queensland LNG contracted volumes are expected to be around 24.2 MT a year until 2034. This means that if the East Coast supply gap eventuated, it could impinge on these contracted LNG volumes. However, current Government policies permit forced curtailment of Queensland LNG exports through the Australian Domestic Gas Security Mechanism (ADGSM) to ensure adequate gas supply for domestic demand, a potential outcome the gas industry and many analysts are aware of.<sup>16</sup> This means that the East Coast supply gap does not justify increasing gas production if the gap is caused by contracted LNG volumes outstripping East Coast supply, since the ADGSM can redirect supply to meet domestic demand. The Analytical Report offers limited analysis of alternative methods to address the pipeline constraint and the potential Southern Regions supply gap beyond simply increasing gas production. It overlooks other viable solutions such as investing in upgraded pipeline capacity, gas storage, efficiency measures, or renewables and electricity storage. Instead of focusing on these potential solutions, the Analytical Report first portrays the Southern Regions supply gap with a misleading, or perhaps misplaced, chart that shows the far bigger East Coast supply gap, this chart is reproduced in Figure 4.

Figure 4 3 outlines the relevant data from the Analytical Report along with data on contracted Queensland LNG volumes from the International Group of Liquefied Natural Gas

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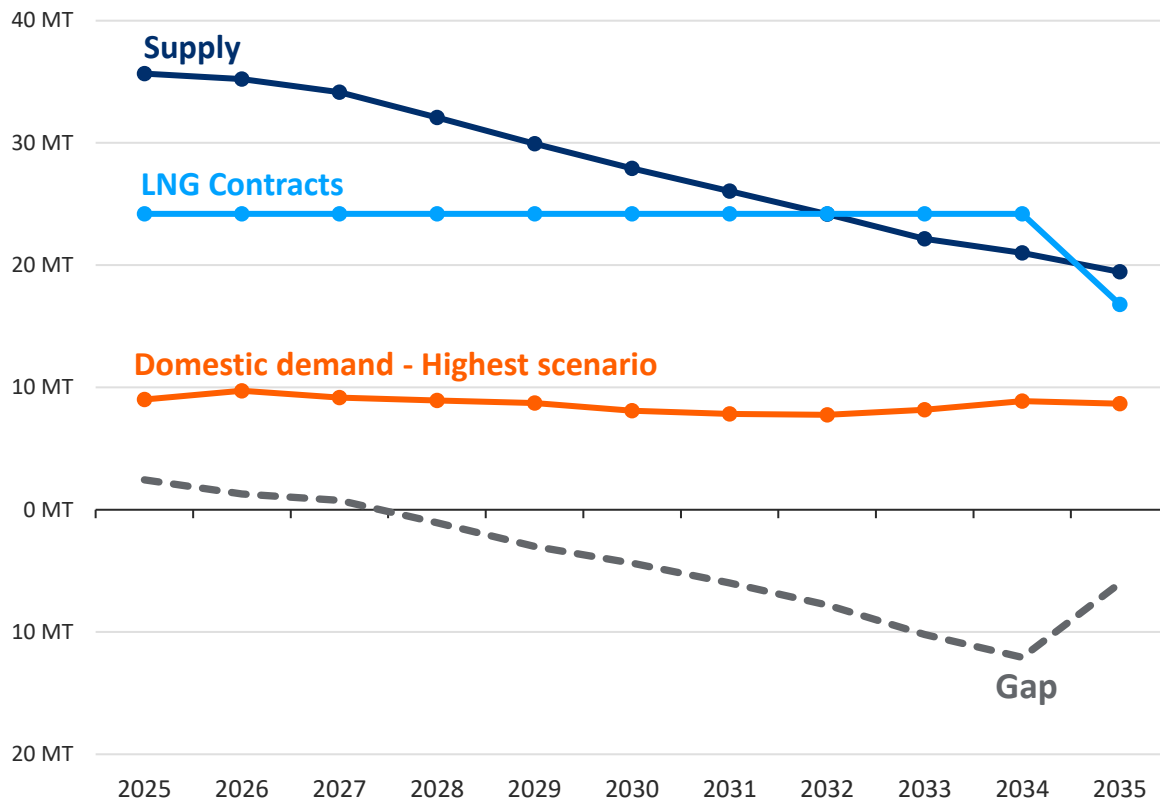
<sup>14</sup> Bourke and Mercer (2024) *Parliamentary Inquiry Report Says WA's Domestic Gas Export Policy No Longer Fit for Purpose*, <https://www.abc.net.au/news/2024-02-22/wa-domestic-gas-policy-no-longer-fit-for-purpose/103498186>

<sup>15</sup> Interestingly, in order for AEMO to establish an East Coast Supply Gap it would need to develop its own Queensland LNG export forecast. It is not clear if this forecast is compatible with the Australian LNG export forecasts from the Nexant World Gas Model used in the Future Gas Strategy.

<sup>16</sup> Mechademy (2018) *Queensland Curtis LNG*, [https://www.mechademy.com/lng\\_plant/queensland-curtis-lng/](https://www.mechademy.com/lng_plant/queensland-curtis-lng/); Wood Mackenzie (2018) *Australian Gas Shortages Loom as LNG Exporters and Domestic Consumers Compete for Supply*, <https://www.woodmac.com/press-releases/australian-east-coast-gas-market-outlook/>

Importers (GIIGNL).<sup>17</sup> This source is also used by the Analytical Report to establish Australia’s overall LNG contract position.

**Figure 3: East Coast forecast supply and demand balance, MT LNG**



Note: All energy units converted to million tonnes (MT) of LNG.  
 Source: Analysis of the Future Gas Strategy Analytical Report (2024), AMEO (2024), GIIGNL (2023)

The data in The Analytical Report offers limited analysis of alternative methods to address the pipeline constraint and the potential Southern Regions supply gap beyond simply increasing gas production. It overlooks other viable solutions such as investing in upgraded pipeline capacity, gas storage, efficiency measures, or renewables and electricity storage. Instead of focusing on these potential solutions, the Analytical Report first portrays the Southern Regions supply gap with a misleading, or perhaps misplaced, chart that shows the far bigger East Coast supply gap, this chart is reproduced in Figure 4.

Figure 4 is clear: the size of the East Coast gap is comparatively small compared to the contracted LNG volumes. Even under the highest domestic demand scenario, the ADGSM could be used to curb Queensland LNG exports to close the East Coast gap should it eventuate. The Analytical Report and the Strategy do not discuss the extent to which overselling capacity might cause contractual and legal issues for the Queensland LNG

<sup>17</sup> GIIGBL (2024) *GIIGNL Annual Report*, <https://giignl.org/wp-content/uploads/2023/07/GIIGNL-2023-Annual-Report-July20.pdf>

exporters, nor do they address why the Government should intervene to fix their problems. Besides, LNG contracts are renegotiated all the time, often with contractual clauses that expressly allow for renegotiation due to acts of government.<sup>18</sup>

### *Southern Regions domestic supply gap*

The remaining supply gap forecast in the Strategy is the Southern Regions supply gap, which is a subset of the East Coast supply gap. Therefore, it is a gap that could also be closed by diverting gas otherwise meant for Queensland LNG exports and then via pipeline to the Southern regions.<sup>19</sup> However, as outlined by AEMO, this solution would potentially cause a transmission pipeline capacity problem. As the Analytical Report notes:

...annual demand from the south is expected to exceed the annual pipeline capacity of the SWQP [South West Queensland Pipeline] by around 40–140 PJ especially from 2028 onwards. However, southern peak day shortfalls during winter are expected to exceed the pipeline capacity increasingly from 2026.<sup>20</sup>

The existing South West Queensland Pipeline (SWQP), which connects the Queensland gas system to the rest of the Eastern Australian gas network, has a capacity of 512 TJ/day according to the Analytical Report, equating to around 187 PJ of gas per year.<sup>20</sup> Therefore, doubling the pipeline capacity could provide an additional 187 PJ of gas and solve the Southern Regions supply gap.

The Southern Regions supply gap is perhaps the most important policy issue raised in the Future Gas Strategy. It is the focus of much AEMO analysis since this supply gap could materialise soon, especially during colder winter days, and cannot be closed by simply reducing LNG exports.<sup>20</sup> Since the strategy's release, announcements by AEMO and the ACCC along with considerable media attention concerning the potential shortfall further highlights the growing importance of the issue.<sup>21</sup> However, it should be noted, the forecasted arrival date of this supply gap has been repeatedly postponed over the years.<sup>22</sup>

Taken together, the Southern Regions supply gap caused by the SWQP pipeline capacity issue appears to be the most compelling justification offered by the Strategy and the Analytical Report for increasing gas production.

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<sup>18</sup> Llewellyn-Smith (2024) *Gas is the Answer to Everything*, <https://www.macrobusiness.com.au/2024/07/gas-is-the-answer-to-everything/>

<sup>19</sup> Or the crazy solution, suggested by AEMO and others, importing LNG.

<sup>20</sup> DISR (2024b) p.67

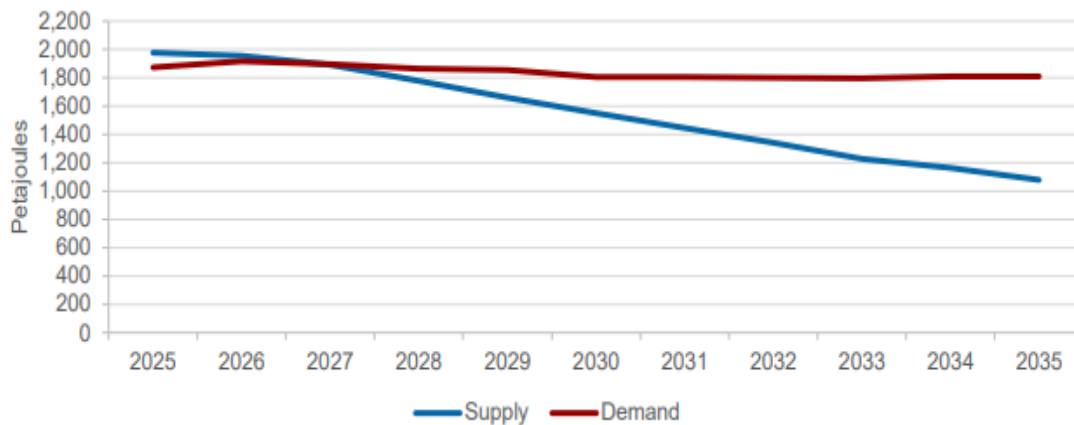
<sup>21</sup> Mercer (2024) *AEMO Warns of Immediate Gas Shortfall Threat as Cold Snap, Renewable Lulls and Outages Bite*, <https://www.abc.net.au/news/2024-06-20/aemo-warns-of-immediate-gas-shortage-risks-in-se-australia/104003166>; McIlroy (2024) *Winter Gas Woes to Extend into 2025*,

<https://www.afr.com/politics/federal/australia-s-winter-gas-woes-to-extend-into-2025-20240704-p5jr6h>

<sup>22</sup> AEMO (2024), p. 8

The Analytical Report offers limited analysis of alternative methods to address the pipeline constraint and the potential Southern Regions supply gap beyond simply increasing gas production. It overlooks other viable solutions such as investing in upgraded pipeline capacity, gas storage, efficiency measures, or renewables and electricity storage. Instead of focusing on these potential solutions, the Analytical Report first portrays the Southern Regions supply gap with a misleading, or perhaps misplaced, chart that shows the far bigger East Coast supply gap, this chart is reproduced in Figure 4.

**Figure 4: East Coast supply gap as presented in the Future Gas Strategy**



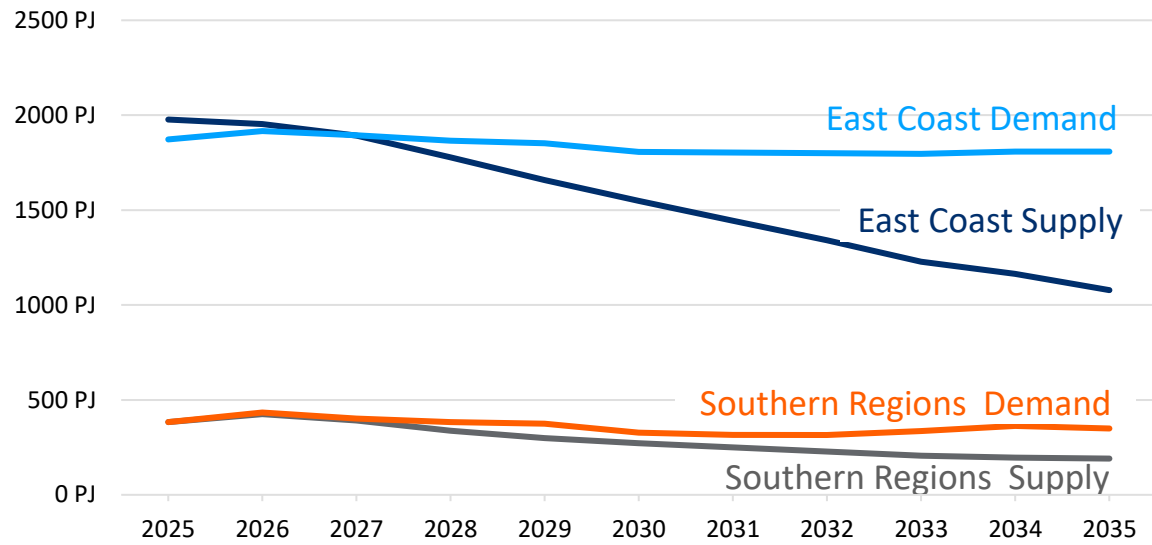
Source: Future Gas Strategy (2024)

Figure 4 does not show Southern Regions supply gap but the far larger East Coast supply gap which, as discussed above, is primarily the result of Queensland LNG exporters over-committing on their export contracts. Without the context of the broader gas industry, the chart suggests a gap of approximately 30% between supply and demand. In reality, both the East Coast supply gap and the Southern Regions supply gap is much smaller.

While the Analytical Report eventually shows the more pressing Southern Regions potential supply gap, it presents this data in terajoules (TJ), rather than petajoules (PJ) as used throughout the rest of the report.<sup>23</sup> This is because the Southern Regions is presented on a daily basis while other supply gaps are shown on an annual basis. But since one TJ is 1/1000<sup>th</sup> of a PJ, this data presentation – whether intentional or otherwise – creates the impression of a much larger shortfall. Figure 5 compares the Southern Regions supply gap with the East Coast supply gap, presented in consistent units and time intervals.

<sup>23</sup> See for example Figure 3.2 and Figure 5.4 of the Future Gas Strategy Analytical Report.

**Figure 5: Comparison of the East Coast and Southern Regions supply gaps**



Source: Future Gas Strategy (2024), AMEO (2024)

# Does the Southern Regions supply gap justify more gas production?

Having identified a potential (albeit small) Southern Regions supply gap, does this gap justify the need for more gas? More precisely, does this potential supply gap justify the need for the discovery and development of new gas reserves if Australia is to get on the path to net zero emissions by 2050?

Quite simply, developing more gas in Western Australia will do nothing to close the Southern Regions supply gap.

Moreover, expanding gas resources in the NT will not close the Southern Regions supply gap unless additional pipeline capacity from Queensland to the south is also developed. But once greater transmission capacity between the north and south is established, there is already sufficient gas, and existing policy tools, to ensure Queensland's gas can meet domestic demand in the Southern Regions.

Developing more gas reserves in Queensland will not help close the Southern Regions supply gap if additional gas is used to support over-contracted Queensland LNG exporters.

Therefore, the case for more gas is threadbare.

AEMO research outlines that existing gas basins in the Southern Regions are entering a mature phase and will likely see lower production levels in the future.<sup>24</sup> This leaves the development of fracked gas in Narrabri as the only remaining candidate in making the case for more gas to address the potential Southern Regions supply gap. Indeed, the Minister outlined the case for Narrabri gas in a radio interview shortly after the release of the Future Gas Strategy.<sup>25</sup> As noted by Llewellyn-Smith, the primary aim of the previous Morrison Government's Gas Fired Recovery policy was the development of fracked gas in Narrabri. This suggests the Morrison policy lingers in the shadows of the Future Gas Strategy.<sup>26</sup> But would developing Narrabri gas close the forecast Southern Regions supply gap, or are there better options?

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<sup>24</sup> DISR (2024b) p.67

<sup>25</sup> ABC Radio (2024) *Sabra Lane interview with Madeleine King*,  
<https://www.minister.industry.gov.au/ministers/king/transcripts/interview-sabra-lane-abc-radio>

<sup>26</sup> Llewellyn-Smith (2024) *Liberals are the Energy Superidiot*,  
<https://www.macrobusiness.com.au/2024/06/liberals-are-the-energy-superidiot/>

So, after 87 pages of forecasts and analysis the final and perhaps only policy question concealed in the Analytical Report appears to be how the Government should address the shortfall of gas in the Southern Regions. The options look to be:

1. Developing fracked gas in Narrabri.
2. Increasing transmission capacity between Queensland and the Southern Regions.
3. Developing a Southern Regions energy transition strategy to increase storage and lower gas demand.

Starting with an average supply gap of between 40 PJ to 140 PJ, as noted in the Analytical Report, development of Narrabri gas could deliver around 73 PJ a year according to Santos, the project developer.<sup>27</sup> When discussing Narrabri supply the Analytical Report found if delayed “then the east coast gap would emerge in 2027 of around X PJ [sic]”.<sup>28</sup> It can only be assumed that some of the modelling was not quite finished by the publication deadline. In comparison, doubling the SWQP transmission capacity could potentially supply 180 PJ of gas a year. In terms of developing an energy transition strategy, AEMO research shows that increased deep storage options in the Southern Regions could deliver around 200 PJ gas a year.<sup>29</sup> These options are shown in Figure 6.

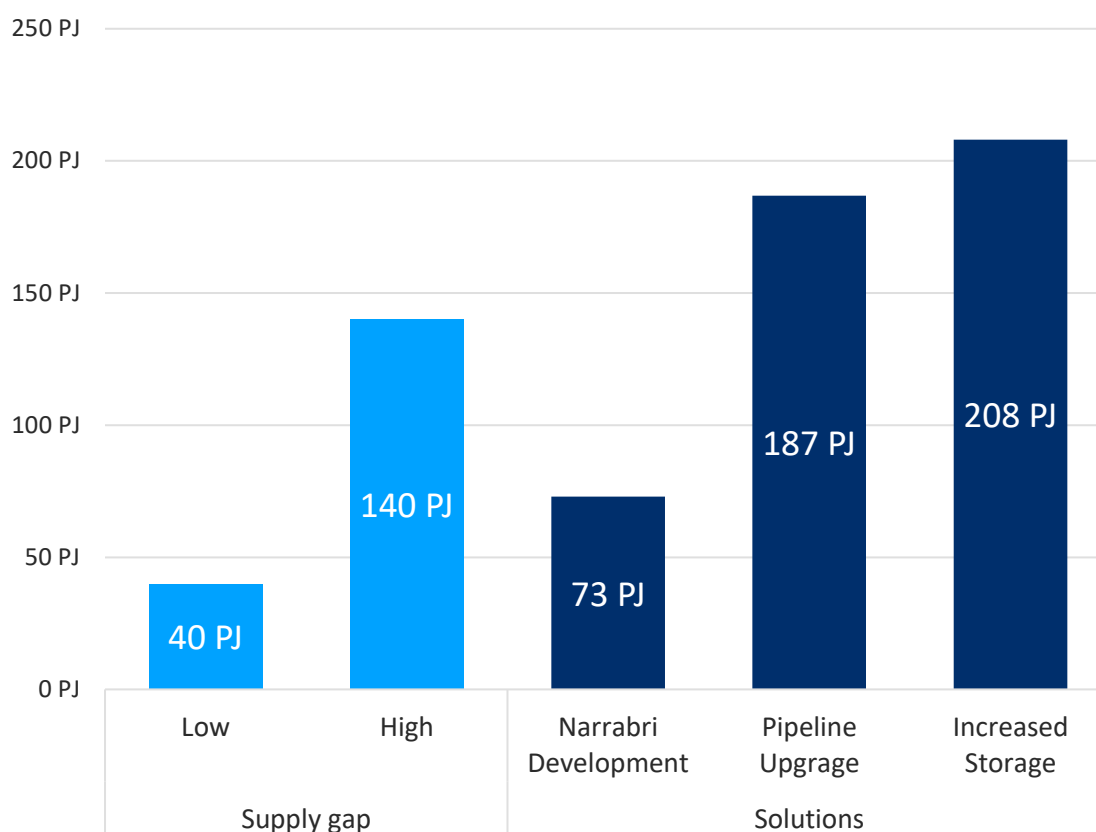
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<sup>27</sup> Santos (2014) *Narrabri Gas Project - Our plans to develop natural gas for New South Wales*, [https://narrabrigasproject.com.au/uploads/2014/08/Narrabri\\_Gas\\_Project\\_brochure\\_2014.pdf](https://narrabrigasproject.com.au/uploads/2014/08/Narrabri_Gas_Project_brochure_2014.pdf)

<sup>28</sup> DISR (2024b) p.98

<sup>29</sup> DISR (2024b) p.69 – Analysis of data from Figure 5.4

**Figure 6: Options for addressing the Southern Regions supply gap, PJ**



Source: AEMO (2024), Santos (2014), Future Gas Strategy (2024)

The data in Figure 6 clearly demonstrates that developing Narrabri is the least effective option for addressing the potential Southern Regions supply gap. Development of Narrabri would fail to cover the upper end of the Southern Regions supply gap. Doubling SWQP capacity or increasing storage would more than cover the higher-end estimates of the supply gap.

To be clear, assessing the engineering and economic viability of doubling the SWQP capacity is beyond the scope of this report. However, it is worth noting that capacity upgrades on the SWQP are already underway.<sup>30</sup> Combining storage options with pipeline capacity upgrades appears to be the most compatible plan for closing the gap that would align with the Government’s commitment to net zero. As summarised by Llewellyn-Smith in analysing the looming Southern Regions supply gap, the practical solution may be even simpler:

“Does the pipeline [SWQP] run full tilt all year? No. Only in winter. So build some gas tanks in the south and run the pipeline at full capacity every day to fill them up for winter. This is what the US and Europe both do.”<sup>31</sup>

<sup>30</sup> APA (2024) *East Coast Grid Expansion*, <https://www.apa.com.au/about-apa/our-projects/east-coast-grid-expansion/>

<sup>31</sup> Llewellyn-Smith (2024) *Energy Superidiot Meets its Doom*, <https://www.macrobusiness.com.au/2024/07/energy-superidiot-meets-its-doom>



The presentation of the Analytical Report in the Strategy, along with subsequent Government press releases and radio interviews, suggests that the Albanese Government is hellbent on a solution that includes the development of Narrabri gas. Conveniently, this aligns with the argument for more gas and continued support for LNG exporters in Queensland, Western Australia, and the Northern Territory, despite conflicting with the commitment to achieve net zero emissions.

# Disconnect between the modelling and the Minister

Fundamentally, both the Strategy and the government's rhetoric are disconnected from the analysis presented in the Analytical Report.

The Analytical Report shows that:

1. Under most international scenarios, including those aligned with Australia's climate commitments, LNG exports are expected to decline significantly;
2. LNG exports will decline significantly if existing contracts are simply allowed to run their course;
3. Domestic demand is expected to remain flat at most, or decline; and
4. There is a potential small supply shortfall to meet domestic demand in the Southern Regions, which is primarily due to a pipeline capacity issue.

AEMO regularly publishes forecasts and research about the Southern Regions shortfall, suggesting any gas strategy should focus primarily on this supply gap. In fact, AEMO provides a range of forecasts looking at the role of reduced domestic gas demand and suggests increased gas storage options could play in closing the supply gap. For AEMO, the solution to the potential supply gap is not confined to just "more gas".

Despite the AEMO forecasts and analysis in the Analytical Report, the Minister continues to advocate for gas expansion through the Future Gas Strategy:

We will need continued exploration, investment and development in the (gas) sector to support the path to net zero for Australia and for our export partners, and to avoid a shortfall in gas supplies.<sup>32</sup>

The disconnect between the Analytical Report and government rhetoric is about as wide as the pipeline would need to be long for Western Australia or the Northern Territory to supply gas to the Southern Regions.

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<sup>32</sup> King (2024)

# Conclusion

The research and analysis in this paper have attempted to identify and outline the case for more gas contained in the *Future Gas Strategy* and its analytical backbone, the *Future Gas Strategy Analytical Report*.

When considered in context, the case for more gas in the Analytical Report is threadbare. The research outlines that, in comparison to massive LNG exports, the potential gas supply gaps in Australia are relatively small. Most importantly, the Analytical Report identifies a pipeline capacity shortfall that could potentially lead to a gas supply gap in the Southern Regions in the coming years —then fails to present a viable solution to a problem with which it claims to be concerned. Developing more gas in Western Australia, Queensland or the Northern Territory will do nothing to address pipeline capacity issues.

Addressing the pipeline issue requires increasing pipeline capacity or reducing the demand for gas through the existing pipeline. Reducing demand through the pipeline involves either cutting overall gas demand or developing more gas in the Southern Regions. Since the shortfall is relatively small, the sensible option is to manage and reduce gas demand in the Southern Regions in line with the Government's commitments to net zero.

The Analytical Report does not make a case for more gas; it effectively makes a case for needing an energy transition strategy for the Southern Regions. Consequently, the Strategy contains no real justification for gas expansion. Instead, it offers empty rhetoric disconnected from clear analysis and evidence.