

*The implementation of the recommendations contained in the  
NSW Chief Scientist's Independent Review of Coal Seam Gas  
Activities in New South Wales*

Submission from  
**THE AUSTRALIAN WORKERS' UNION**

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**About the Australian Workers' Union**

The Australian Workers' Union ('AWU') is the nation's oldest union, and also one of the largest. The AWU has wide coverage in many blue-collar industries, such as steel, aluminium, chemicals, plastics and building materials manufacturing, oil and gas extraction and processing, metal ore mining, agriculture and civil construction.

## Prelude

The AWU maintains industrial coverage across all aspects of the gas supply chain including in gas-fired power generators.

The AWU also maintains significant coverage and membership across heavy industrial manufacturing, where baseload electricity power remains one of the largest input costs. This includes the milling and export of steel product, alumina and aluminium, chemicals, fertilisers, and building materials manufacture.

The NSW manufacturing sector employs approximately 250,000 workers.<sup>1</sup> That workforce comprises many of the AWU's high-employing heavy industrial work sites such as BlueScope Steel's Port Kembla Steelworks, Qenos's Botany Polyethylene plants, O-I Glass's Penrith bottling plants, Tomago's Newcastle Aluminium smelter, Orora's NSW packaging sites, AGL's Camden gas-fired power plant, and many more.

As a significant input cost, gas production (and its bearing on electricity as another significant input cost) in NSW is of interest to the AWU not only for the purpose of creating jobs in the civil construction and gas supply sectors, but importantly for preserving the job security across our heavy industrial manufacturing sector.

AWU officials have visited Narrabri and surrounding regions and met with local community members, workers in the gas industry, private landholders, and other stakeholders. The AWU has also have reviewed all marquee reports and inquiry recommendations both in NSW and across the country on coal-seam gas (CSG) mining and extraction, including the Chief Scientist's Inquiry into CSG in NSW, 2015.

The AWU is not well placed to report on the regulatory, legislative, or policy procedures required to satisfactorily implement each recommendation made by the Chief Scientist's inquiry. However as a general proposition, the AWU believes that when it is scientifically and geologically safe to do so, gas should be extracted for the benefit of NSW residents and businesses.

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<https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.003Aug%202019?OpenDocument>

## Overview

1. Introduction
2. Executive Summary
3. Key Recommendations
4. Implementation of the Chief Scientist's recommendations
5. Australia's Gas Markets
6. The Western Australian Gas Policy Framework
7. Developing a NSW Gas Policy Framework

## 1. Introduction

It is common for the benefits of gas extraction to be pitched as a two-dimensional economic opportunity borne from job creation and government royalties. Indeed, it is how the economic benefits of Australia's booming LNG export sector are often framed.

The reality is far more nuanced and consequential. Competitively priced gas can function as a country's economic arteries, helping to power the broader industrial and consumer sectors. This includes as a significant input cost for manufacturing, its bearing on the wholesale electricity price, and the commercial and residential consumption of energy.

The New South Wales (NSW) economy is a textbook case of this. Despite not producing one gigajoule of gas consumed in its own industrial or residential sectors, NSW consumes 30 per cent of the total demand of East Coast gas.<sup>2</sup> As a free rider beneficiary for decades, NSW is the largest consumer of domestic gas despite not going through any of the environmental, regulatory, and political obstacles of extracting it locally.

NSW is home to some of the largest steelworks and heavy industrial manufacturing sites in the country, and responsible for their export. Employing close to 250,000 workers, the NSW manufacturing sector is unreservedly underpinned by the economics of gas (directly and indirectly through its bearing on the electricity price).

Changes to the machinations of the east coast gas market – in particular the advent of LNG exports in Queensland, the substantial decline in reserves in the Bass Strait, and the recent fervor of Australian states sanctioning gas projects for state-domestic use only – mean that free-riding on other states has become less viable.

Manufacturers across the entire east coast have seen energy prices double and in some instances triple over the course of the last few years. There appears to be no price relief in sight. Needless to say, there have been no shortage of manufacturers warning the risk energy prices pose on the viability of manufacturing jobs in the future. In 2014 BIS Shrapnel predicted that without government intervention – gas

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<sup>2</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/GSOO/2019/2019-GSOO-report.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/GSOO/2019/2019-GSOO-report.pdf)

reservation controls and the increase of gas supply – economy-wide job losses could total 235,800 via the closure of 1 in 5 heavy manufacturers.<sup>3</sup>

With wholesale gas prices becoming an increasingly vulnerable pinch point for the viability of hundreds of thousands of NSW manufacturing jobs, previously trying aspects of the gas supply chain such as transmission costs have become critical junctures of competitiveness for manufacturers.

NSW industrial customers bear the highest transmission costs in the country. The reason for this is because they procure all of their gas from interstate. The unavailability of locally-sourced gas is a drag on the strategic advantage of NSW industries that employ hundreds of thousands of workers.

Indeed, the state's ban on unconventional gas production is at odds with the private sectors liberty to trade unconventional gas sourced from interstate.

During precarious times for heavy manufacturing (as currently is the case) the additional cost of gas transport and transmission costs can singularly tip a business case into the red. This has been echoed by the foreclosure warnings of several small manufacturing sites, but also the warnings of larger consumers such as Tomago smelter in Newcastle, Qenos smelter in Botany, and Bluescope's steelworks in Port Kembla.

Equally, it can also tip a prospective investment case into profitability. Perdaman's commitment several months ago to building a fertilizer plant in NSW (in the event of local gas production being approved) that could create almost 1000 jobs proves just how critical eradicating transmission costs of gas can be.<sup>4</sup>

It is therefore only appropriate to view the opportunities and risks of competitively priced gas in NSW in the broadest context possible. Not only for the new jobs created in its construction and production, the new opportunities for heavy manufacturing, government royalties or otherwise; but importantly the hundreds of thousands of jobs that are directly or indirectly underpinned the competitiveness of its price.

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<sup>3</sup> BIS Shrapnel, 2014, The Economic Impact of LNG Exports on Manufacturing and the Economy.

<sup>4</sup> <https://perdaman.com.au/2019/08/02/local-narrabri-jobs-hub-step-closer/>

Gas policy considerations should therefore – in conjunction with the appropriate environmental controls – be framed around mitigating economic and environmental risk and enhancing investment opportunities. The AWU believe this to be a critical consideration policymakers must concern themselves with in and above the terms of reference of this inquiry.

## 2. Executive Summary

The Chief Scientist's Independent Review of Coal Seam Gas Activities in New South Wales found that the technical challenges and risks posed by the CSG industry can be effectively managed.

The Chief Scientist's report provided sixteen recommendations towards establishing a CSG industry in the state, which the NSW Government has agreed to implement. Presently there are only two outstanding recommendations that have not been implemented relating to insurance and cost recovery. The AWU understands that NSW Treasury and other relevant agencies are finalising the appropriate pathway forward for the outstanding recommendations.

Having gone through similar processes over the last few decades, the benefits of a local gas industry in Western Australian (WA) have been significant to the local economy. Despite having only 10 per cent of Australia's total population, WA's domestic demand for gas is approximately 40 per cent of Australia's total domestic demand. The local gas industry underpins an industrial sector that generates tens of billions of dollars in exports of alumina, chemicals, and other manufactured product.

The WA Government achieved these outcomes by introducing best practice regulatory and risk mitigation frameworks in the sanctioning of projects. For **projects that require hydraulic fracturing**, this included granting veto rights to Native Title holders and private landowners, safeguarding water supplies, developing rigorous processes for the Department of Health to assess the public health risks of extraction methods used, and ring fencing certain regions from gas extraction.

By adopting a similar regulatory framework for projects that require fracking, NSW could also see substantial economic gains. These include:

- Reducing the price of wholesale gas in NSW,
- Putting downward pressure on the wholesale electricity price,
- Creating potentially thousands of new jobs across civil construction, gas production, and new manufacturing facilities.
- Reducing the risk of losing tens of thousands of jobs in the manufacturing sector in NSW.
- More sensibly aiding the transition from coal to renewables in the National Electricity Market, and

- Improving the competitiveness of the local NSW commercial and industrial sectors.

Importantly, the economic success story of WA's gas industry was secured not just by sanctioning gas projects with best practice risk mitigation frameworks, but by implementing a domestic gas reservation policy that works on ensuring competitively priced gas is delivered to local markets.

NSW must adopt a gas reservation or reservation-like policy to secure the same economic benefits of sanctioning gas projects.

This is because there remains a risk that in the instance a gas project is approved, the new gas supply would merely replace existing contracted volumes traditionally sourced from interstate. This would temper the expected surplus of gas in NSW and corresponding downward pressure on the NSW wholesale gas price.

These challenges remain a feature of the East Coast gas market which connects four states – compared to the West Coast market which comprises of only one state. The implication being that any solution would require working with other jurisdictions (federal and/or other states) to deliver the benefits.

Whilst any goodwill gesture by proponents of the gas industry to deliver gas locally is encouraging, a policy framework that overcomes these challenges needs to be in place to ensure that outcome. Without a gas reservation policy or the right monitoring and contractual enforcement framework in place to ensure those commitments are met, the potential economic gains of sanctioning gas projects in NSW remain an uncertainty.

### **3. AWU Key Recommendations**

1. The NSW Government adopts a framework for sanctioning gas projects that require fracking similar to that adopted in WA for the fracking industry. This includes veto rights for Native Title holders and private landholders, increased royalties, hypothecation of taxes to new energy projects, and ring fencing for sensitive areas.
2. The NSW Government develop a regulatory solution to reserve gas from local projects to remain in the state or, at the least, the broader East Coast market with a focus on providing competitively priced gas for local users.



### 3. Australia's Gas Markets

Australia now exports the largest volume of LNG than any other country in the world.

LNG has become Australia's 3rd largest commodity export after coal and iron ore with over AUD\$30 billion in value added product in export, and is responsible for tens of thousands of blue collar jobs across all mainland states. LNG exported from Australia makes up 11 per cent of total LNG traded on the international market.<sup>5</sup>

Geographically, Australia's gas production profile is split fairly evenly between the Western and Eastern sides of the country.

For instance, WA and the East Coast each share half of the 143,000 PJ of conventional 2P gas reserves in Australia. Similarly, of the 2380 PJ of LNG exported last year, WA and the East Coast were responsible for 49 and 51 per cent, respectively.

Despite these similarities the features of the domestic east and west gas markets are far more stark.

- **Price** – the wholesale price of gas across the east coast trades at double and at times triple the price of gas in WA.
- **Demand** – WA consumes almost 40 per cent of total domestic natural gas, despite only having 10 per cent of the population.
- **Domestic shortage** – Gas supply exceeds forecast demand in WA for over 10 years, whereas the East Coast is expected to endure a shortage before 2023.<sup>6</sup>

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<sup>5</sup> <https://www.australianmining.com.au/news/perth-is-a-global-oil-and-gas-hub-says-wa-mines-and-petroleum-minister/>

<sup>6</sup> <https://www.herbertsmithfreehills.com/latest-thinking/the-australian-domestic-gas-market-a-tale-of-two-coasts>

**Table 1** – Descriptive figures on Australia's gas markets

	East Coast (PJ)	West Coast (PJ)
Domestic Gas demand	600 <sup>7</sup>	390 <sup>8</sup>
Gas extraction	1,800	1570 <sup>9</sup>
Exported LNG	1200	1,180
Conventional 2P Reserves	71,093 <sup>10</sup>	72,186 <sup>11</sup>

WA's success in achieving a significant portion of the LNG export industry as well as an advantageous gas price and the manufacturing industries it underpins is attributable to three factors.

- **Early adoption** – the WA Government helped underwrite the establishment of the LNG export industry in the 1970s with the North West Shelf (compared to the East Coast's export industry over forty years later).
- **Geological advantage** – favourable shale gas reserves which have proven cheap to extract.
- **Regulatory framework** – successive Governments' willingness to work with gas production companies in achieving both a substantive gas production industry and delivering benefits for domestic industry and consumers. This includes a well considered and operating reservation policy.

In the absence of being able to control for the first two advantages, sensible state governments in the East Coast of Australia looking to expand gas production should look to the WA regulatory framework for guidance.

<sup>7</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/GSOO/2019/2019-GSOO-report.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/GSOO/2019/2019-GSOO-report.pdf)

<sup>8</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/WA\\_GSOO/2018/2018-WA-GSOO.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/WA_GSOO/2018/2018-WA-GSOO.pdf)

<sup>9</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/WA\\_GSOO/2018/2018-WA-GSOO.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/WA_GSOO/2018/2018-WA-GSOO.pdf), page 37

<sup>10</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/GSOO/2019/2019-GSOO-report.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/GSOO/2019/2019-GSOO-report.pdf), page 34

<sup>11</sup> [https://www.aemo.com.au/-/media/Files/Gas/National\\_Planning\\_and\\_Forecasting/WA\\_GSOO/2018/2018-WA-GSOO.pdf](https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/WA_GSOO/2018/2018-WA-GSOO.pdf), page 36

## 4. Western Australia Gas Policy Framework

The Western Australian gas market is isolated from all other states and territories in Australia.

### 4.1. Regulatory framework for project approvals

#### 5.1.1. Conventional Gas in WA

Conventional gas extraction in Western Australia has been permitted for decades. The regulatory framework governing conventional gas extraction in WA ensures every gas project complies with a multitude of compliance regimes and is monitored continuously by several government agencies.

**State government regulatory oversight** – The Department of Mines and Petroleum (DMP) is the lead agency responsible for the regulation of petroleum activities in Western Australia. It is complemented by key regulatory processes undertaken by the Department of Water, the Environmental Protection Authority (EPA) and the Office of the Environmental Protection Authority (OEPA). These agencies' roles include conducting detailed environmental impact assessments where activities may result in significant environmental impacts, providing licenses to extract water, the protection of drinking water, and protecting Aboriginal heritage.

**Federal government regulatory oversight** – The Australian Government, through the Department of the Environment (DoE), is required to assess any action that has the potential to have a significant impact on a matter of national environmental significance. Matters of national environmental significance include world heritage properties, national heritage places, listed threatened species or ecological communities, and water resources. In addition, all offshore petroleum titles are administered and regulated by the National Offshore Petroleum Titles Administrator (NOPTA).

**Compensation for landowners** – Once DMP grants a petroleum title, the registered holder(s) may agree to provide compensation to the landowner for the right to occupy private land. This includes for:

- Damage to the land
- The landholder being deprived of possession or use of the land
- Severance of adjacent land owned by the landholder.

The procedure for adjudicating any disputed compensation claim is through the Magistrates Court.

### **5.1.2. Unconventional Gas in WA**

After the March 2017 state election the WA Government imposed a moratorium on hydraulic fracture stimulation (or “fracking”), and announced an *Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia* (the Inquiry). According to DMP, before the moratorium 600 wells had been fracked in WA over the previous 50 years.

After 12 months, the Inquiry handed its [final report](#) in September 2018, which contained 91 findings and 44 recommendations to the WA Government. The final report drew upon consultation with stakeholders, review and analysis, and concluded that fracking could be operated safely.

The government adopted in-principle all of the recommendations, and endeavoured to introduce the appropriate regulation and legislation by the end of calendar year 2020.

The implementation plan for the recommendations included the following.

- **Demarcations for certain regions** – Lifting the hydraulic fracture stimulation moratorium on all onshore petroleum titles, and maintaining the ban over the South-West, Peel, and Perth Metropolitan regions. In total, 98 per cent of WA’s total land was excluded from fracking for reasons of environmental and social safeguarding.
- **Protect environmental landmarks** – Banning hydraulic fracture stimulation in national parks, the Dampier Peninsula, and other iconic natural heritage areas.
- **Veto rights for traditional owners and farmers** – Introducing a requirement for consent for relevant Traditional Owners and private

landowners before hydraulic fracture stimulation production is permitted. Traditional Owner veto rights do not extend to exploration wells.<sup>12</sup>

- **Increase the royalty rate** – Restore the 10 per cent royalty rate for all onshore petroleum.
- **Hypothecate government royalty proceeds to climate action** – Establish a Clean Energy Future Fund (with a \$9 million seed allocation), using net royalties from onshore hydraulic fracture stimulation petroleum projects, to support facilitation of clean energy developments.
- **Safeguarding water supplies** – Prohibit hydraulic fracture stimulation with 2,000 metres of gazetted Public Drinking Water Source Areas.
- **Isolate drilling from towns** – prohibit hydraulic fracture stimulations with 2,000 metres from residential towns and dwellings.
- **EPA assessment** – all applications for onshore hydraulic fracture stimulation exploration and production proposals to be referred to the EPA for assessment under the EP Act.
- **Public Health Impact** – Develop a process for the Department of Health (WA Government agency) to review and provide advice to the EPA on the robustness of referred, peer-reviewed, site-specific risk assessments for the cumulative short and long term health risk from:
  - Chemicals proposed to be used in hydraulic fracture stimulation or expected to be present in produced or flow-back water.
  - Air-borne chemicals on human health arising from hydraulic fracture.<sup>13</sup>

## 4.2. Domestic Gas Policy Reporting Framework

Successive WA governments have maintained a domestic gas reservation policy since helping underwrite the North West Shelf LNG project in 1979. The policy was formalised in 2006 and updated in 2012.

The policy requires LNG projects to be able to demonstrate their ability to service the domestic WA gas market as a condition of project approval. LNG projects commit to making domestic gas available by:

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<sup>12</sup> <https://www.smh.com.au/business/companies/traditional-owner-fracking-veto-right-won-t-extend-to-exploration-in-wa-20190716-p527r4.html>

<sup>13</sup> <https://www.hydraulicfracturing.wa.gov.au/wp-content/uploads/2019/07/Implementation-Plan.pdf>

- Reserving domestic gas equivalent to 15 per cent of LNG production from each LNG export project.
- Developing and obtaining access to the necessary infrastructure (including a domestic gas plant, associated facilities and offshore pipelines) to meet their domestic gas commitments as part of the approvals process.
  - Showing diligence and good faith in marketing gas to the domestic market.<sup>14</sup>

Projects may propose to offset their domestic gas commitment by supplying gas or other energy from alternative sources, rather than supplying gas from their LNG projects. Offsets must provide a net addition to the state's domestic energy supply. At present no LNG exporters use offsets to meet their domestic gas commitments.

The policy is given effect through long-term contractual arrangements between developers of LNG export projects and the WA Government. These agreements are struck at project inception in order to provide certainty for LNG project developers and allow for a sustained supply of gas into the local market.

If the domestic market is well supplied, the policy does not force producers to sell gas. Any unsold gas must be reserved for when market conditions change.

There are five key areas of reporting for the monitoring of domestic gas commitments.

1. LNG export approval and contracting – contracted LNG and LNG exported.
2. Domestic gas commitment, sale and supply.
3. Reserve adequacy – recoverable reserves, committed reserves and reserves available for domestic gas.
4. Domestic gas infrastructure – that is in place and operational, as well as access regimes and contracts.
5. Marketing – assessment of market and timing of supply.<sup>15</sup>

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<sup>14</sup> <https://www.jtsi.wa.gov.au/economic-development/economy/domestic-gas-policy>

<sup>15</sup> [https://www.jtsi.wa.gov.au/docs/default-source/default-document-library/the-wa-domestic-gas-policy-reporting-framework.pdf?sfvrsn=ea06731c\\_4](https://www.jtsi.wa.gov.au/docs/default-source/default-document-library/the-wa-domestic-gas-policy-reporting-framework.pdf?sfvrsn=ea06731c_4)

## 5. Developing a New South Wales Gas Policy Framework

### 5.1. NSW within the East Coast Gas Market

The NSW gas market is situated within the broader East Coast Gas Market and comprises Queensland, NSW, Victoria, and South Australia.

NSW consumes approximately 190 PJ of gas per year. For all states connected to the East Coast Gas Market, approximately 650 PJ of gas is consumed domestically per annum. In the same market, over 1600 PJ of gas is produced.

Gas in the East Coast is transported through pipelines that cross state borders. Importantly, most pipelines are connected to a distribution station in the far north-east of South Australia, in a company-town called Moomba. For NSW, a pipeline from Moomba to Sydney transports gas to the coast line.

Due to NSW's import of over 95 per cent of its gas needs from interstate, the flow and supply of gas from other states influences local gas price – including by adding additional the transportation and transmission costs of delivering gas to NSW industrial customers. Overwhelmingly, this makes NSW's dependency on other states an exception rather than the rule.

- **Queensland** – produces more than five times its own gas demand per year from onshore Coal Seam Gas (CSG) wells.
- **South Australia** – produces more than its own gas demand in its conventional offshore wells, and is expected to produce substantially more from onshore wells in the near future.
- **Victoria** – produces most of its own gas demand from its offshore conventional gas wells.
- **New South Wales** – produces under 5% of its gas from onshore CSG wells in Camden.

Despite negligible gas production, NSW's gas demand of 190PJ is the largest across all states in the East Coast.

- **Residential & Commercial** – 23% of NSW gas demand goes to commercial business and households. Approximately 60% of NSW households use gas, although this figure varies drastically across regions. In particular, metropolitan suburbs see a higher demand for gas, and particular regional suburbs also see higher demand for gas.
- **Electricity generation** – 27% of NSW gas demand goes to gas-powered electricity generation, equating to 12% of all electricity production in the state. This figure is expected to increase as the Liddell coal-fired power plant closes, and AGL's proposed gas-powered electricity plant opens in coming years.

**Manufacturing** – 50% of NSW gas demand goes to manufacturers. Energy-intensive manufacturing businesses such as steel and aluminium smelting, chemical product manufacturing, and fabrication of primary metals, are a few of the industries that rely heavily on gas. In NSW there are approximately 270,000 manufacturing jobs concentrated in Sydney, but also in large cities such as Newcastle and Port Kembla.

## 5.2. The Narrabri opportunity

Santos's proposed Narrabri Gas Project (NGP) is a CSG project of up to 850 production wells located in the south-west of Narrabri, NSW. It is seemingly the only large-scale viable project currently being considered for approval by the Independent Planning Commission.

The NGP contains 1460 PJ of proven economic reserves, which makes its approximately half of all proven and probable reserves in NSW currently. The estimated gas production flow is 200 TJ/day (73 PJ per annum) for 20-25 years, which equates to 40 per cent of NSW's current annual gas demand for 20-25 years.

The direct economic benefits of the NPG are several-fold.

- Over 1,200 jobs during construction, and approximately 100 on-going operational employees post-development.
- Gross State Product increase of \$5.1 billion in net present value terms over the life of the project.



- Real incomes increase of \$2.8 billion in net present value terms over the life of the project.

The Cost-Benefit Analysis produced by Santos provides indicative estimates for the price of gas from Narrabri. Breakeven point for the NPG is \$6.00-\$6.30/GJ, and sales price sensitivities were run on \$8.7/GJ. Whilst a sale price of \$8.7/GJ is well above historical levels (pre export-terminals) it sits in the lower-range of current spot market gas prices. It is also likely that large industrial users of gas could receive lower prices – though the government should work with all parties closely to ensure this outcome occurs.

The indirect economics benefits of the NPG are however far broader and could potentially deliver much more to the state economy. They include:

- Securing a sustainable source of gas supply for NSW industrial consumers, electricity-generators and retail consumers.
- Putting downward pressure on gas prices and in turn electricity prices.
- Creating thousands of jobs throughout the expansion of the industrial sector, as well as in construction and the gas extraction supply chain.

### **5.3. The NSW Government could adopt the WA model for Narrabri**

The NSW Government could adopt the WA Government's model for fracking project approvals. Specifically, this would include:

- **Granting veto rights** – granting Native Title holders and private land owners veto rights over gas extraction.
- **Safeguarding water supplies** – prohibiting gas extraction near areas that could affect the water table or water supplies.
- **Excluding certain regions from gas extraction** – including residential townships, heritage and environmental landmarks, and regions where support for a local gas industry are not significant.
- **Public health impact** – developing a process for the Department of Health to review and provide advice on all chemicals and processes used in extraction methods in NSW.

Critically, adopting the WA Government's model for approving projects that deploy fracking methods would grant NSW state with the most rigorous regulatory framework for gas development in the world.

In the instance the project was approved, Santos have committed to selling 100 per cent of the gas extracted from Narrabri to the NSW market.<sup>16</sup> The company has signed preliminary sales accords with three large industrial customers: Weston Energy, Brickworks, and Perdaman Group.

Regardless of any good will gesture, the NSW Government should take appropriate policy action to ensure that any gas extraction in the state is delivered to customers in the state and that these promises are legislatively enforceable. The NSW Government could achieve this by adopting WA's gas reservation policy framework, and by increasing the rate from 15 per cent to 100 per cent to ensure Santos's commitments are delivered upon. This would make NSW's domestic gas commitments the most rigorous in the country.

#### **5.4. Obstacles to achieving economics benefits of the Narrabri Gas Project**

Almost all gas supplied in NSW is sourced from other states.

Theoretically, the NSW economic advantage in approving the NPG is borne from increasing the supply of gas to NSW and in turn placing downward pressure on the NSW wholesale gas price.

There remains a risk that in the instance the NPG is approved, the new gas supply would merely replace existing contracted volumes traditionally sourced from interstate. This would temper the expected surplus of gas in NSW.

By reducing the significance of the surplus the expected downward pressure on the NSW wholesale gas price would dissipate. This would temper the predicted economic benefits of approving the project.

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<sup>16</sup> <https://www.afr.com/companies/energy/santos-sees-3b-narrabri-coal-seam-gas-approval-by-year-end-20190620-p51zjx>

As such, NSW's connection with the broader East Coast Gas Market is a feature that prohibits its ability to replicate the economic benefits of gas reservation observed in WA and isolate them to NSW only.

### **Hypothetical scenario – understanding the risk of not regulating reservation**

In 2019 all NSW industrial customers purchase gas from other states.

Consider a scenario where Santos are responsible for selling 30 per cent of the gas purchased by NSW industrial customers, and it sources all of that gas from a project in another state.

Santos's Narrabri project is approved and by 2023 begins supplying an extra 30 per cent of gas to the NSW market. Santos fulfils its NSW industrial contracts with gas from Narrabri, instead of gas from its project in another state.

Santos signs more export contracts with overseas customers, and ships gas from other states up to Gladstone and exports it in LNG form.

There is no surplus of gas in the NSW domestic market and therefore no downward pressure on gas prices.

A highly simplified view of the gas market can help illustrate the parameters of the outcomes available to the NSW Government relating to the NPG.

If the Narrabri project was approved, consider three hypothetical scenarios:

1. **NSW achieves significant economic benefits** – the increased gas supply is isolated to the NSW gas market only, putting significant downward pressure on the NSW wholesale gas price.
2. **The East Coast achieves mild economic benefits** – the increased gas supply increases the entire East Coast domestic gas market supply, putting mild downward pressure on East Coast wholesale gas prices.
3. **The East Coast and NSW achieve no economic benefits** – the increased gas supply is counter-balanced with more export contracts signed by Santos, meaning no net increase in the domestic gas supply in the East Coast.

In the absence of a regulatory regime that makes gas producers accountable to delivering to the domestic market, outcome three remains a strong possibility.

There are several policy avenues available to the NSW Government that could enhance its control over the direction of that gas supply. The NSW Government could adopt one or a combination of the following options.

### **1. Working with the federal government**

The federal government's Australian Domestic Gas Security Mechanism (ADGSM), which allows for it to moderate LNG export licenses on account of a domestic market shortfall, could be used to ameliorate the risk of the NPG not delivering downward pressure on domestic gas prices.

This would require cross-jurisdictional liaison between the NSW and Federal Government to ensure that further export contracts are not signed without a factoring of the national interest – or at the expense of the domestic east coast market.

This option is perhaps the strongest and most efficient legislative lever the NSW Government could lean on given the mechanism is already in place. It would require the participation of the federal government, which could involve further obstacles.

Ensuring that new gas volumes are not merely displaced by further export is vital to maximizing the benefit from gas extraction in NSW.

### **2. Working with the other state governments**

Liaising with other state governments (and potentially federal agencies) to establish a cross-jurisdictional monitoring and enforcement program to ensure that Santos's NPG does not result in a reduced flow of available gas to the state of NSW.

This option is less practicable and is likely to receive resistance from other state governments.

### **3. A customised approach to Santos (or the proponent of a gas project)**

A nuanced approach whereby the NSW Government actively monitored all gas contracts signed by Santos – both new and the replacement of existing contracts – to ensure the company is in fact increasing its total contracted supply to the state of NSW. This should have a particular focus on current and new industrial users and electricity suppliers, with long-term, price controlled contracts to be offered and enforced.

This option imposes a significant red tape burden on Santos, and is not a robust and sustainable framework that could cater for a market where several projects may be approved. However on a single project basis, and in the absence of federal government compliance, this could be a viable method.

