Submission
No 35

INQUIRY INTO THE SUPPLY AND COST OF GAS AND LIQUID FUELS IN NEW SOUTH WALES

Organisation: The Australian Workers' Union

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The supply and cost of gas and liquid fuels in New South Wales (Inquiry)

Reserve Our Gas Alliance

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RESERVE OUR GAS COALITION POLICY PROPOSAL – GAS RESERVATION

OVERVIEW

The Reserve Our Gas (ROG) Campaign has gathered thousands of supporters including community groups, union members, parliamentarians, media personalities and thousands of ordinary Australians.

Failure to act on the looming gas crisis could represent an economic catastrophe for Australia.

The White Paper correctly identifies the issue of rising gas prices, but misdiagnoses the problem as one of supply. Australia is producing a record amount of gas, yet prices continue to surge beyond their historic prices. This suggests there are other factors at play preventing gas from being a truly 'free market.'

The linkages between Australia's east coast gas market and the global market are the clear new factor driving gas prices higher. More supply, while welcome, will not be enough to keep prices at historically competitive levels.

The ROG campaign commissioned research by BIS Shrapnel into Australia's gas market and relies on that paper (attached) for the bulk of its substantive submissions. A summary of the substantive arguments of the ROG campaign and the BIS paper are included within this submission.

ROG POLICY PROPOSAL

That the Federal Government – with support of the states – adopt a regulatory approach that ensures Australia's gas prices are not completely exposed to a distorted global price. This would be in the form of a gas reservation – or reservation like – policy.

Australia can, and should, have a vibrant gas export industry, however it should not come at the expense of other sectors and the community at large. **Every other country in the world manages to balance the interests of gas producers and the broader economy – Australia should too.**

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1. EXECUTIVE SUMMARY

Australia's gas prices are set to triple in the coming 12-24 months as major gas export operations being to ship LNG to overseas markets.

Gas is a significant competitive advantage for Australia's economy, as well as a major household cost. Unlike any other gas-exporting nation in the world**, Australia is the only country that has no mechanism to ensure that exports do not adversely impact on domestic gas prices.** Gas majors operate in every jurisdiction that places some restrictions on export, therefore it is a nonsense to suggest that they would not invest in Australia.

WA currently operates a successful reservation policy of 15 per cent. This has been in place since 2006 and has not deterred investment in LNG ($88 billion invested since 2006).

There is no such thing as a 'global price' for gas. Gas tends to operate in regional markets due to the historic difficulty of shipping gas without a pipeline. With every gas-exporting nation placing some form of restriction on exports the global price is distorted. Australia should not be willfully subjected to this price to the detriment of industry and households.

The impending price increase will have significant impacts on:

A. **MANUFACTURING JOBS –** it is projected that up to 235,000 jobs could be lost across the economy, with 1 in 5 heavy manufacturing sites closing down (see below for further detail).

B. **COST OF LIVING** – household bills are expected to jump sharply across Australia by hundreds of dollars a year. This will impact severely on families, as well as low-income earners and pensioners (see below).

C. **AUSTRALIA'S INTERNATIONAL COMPETITIVENESS –** Gas is a significant energy input in Australia's energy and competitiveness. It is estimated that retaining some gas provides a 20X return to the economy via downstream economic activity. This is compared to a 3X return on pure LNG export, which largely accrues to overseas gas companies.

2. DIAGNOSING THE PROBLEM

A problem of demand

The Federal Government's recent Energy White Paper correctly identifies the issue of rising gas prices, but misdiagnoses the problem as one of supply.

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> *Australia's gas markets are changing. The east coast market, which until now has only been a domestic market, is preparing to export LNG. Supply now needs to meet domestic and international demand, and domestic prices naturally will start to match higher international prices. This export industry provides an enormous opportunity for the nation's economy. The east coast market is also starting to need unconventional gas resources as more conventional resources are depleted. Some states have regulatory and planning barriers preventing needed supply. These barriers are creating potential near-term supply shortages on the east coast, and also increasing prices. Increasing supply is the best way to ease the pressure, but increasing prices are nonetheless inevitable. The timely increase of gas supply must be supported by regulation that addresses community and environmental concerns.*

Australia's gas markets are indeed changing. For a long period Australia's gas production and demand remained relatively stable, ensuring a traditional price in the range of $3-4 g/j.

Through a surge in investment, Australia is now producing a record amount of gas, and yet prices continue to surge beyond their historic prices, with suggestions that prices could triple in coming years.

So, despite an era of gas abundance and increased production, Australia is set to enter a period of scarcity and price escalation. This strongly points to market dysfunction, and disproves the notion that supply alone can fix this problem which seem underpin the policy rational of the White Paper. If traditional laws of supply and demand were at play

The blind faith in the notion that Australia's gas problem can be dealt with through the extraction of more gas is simply fallacious given the almost negligible impact Australian gas production will have on global demand and therefore price.

What is clear from the operation of Australia's gas market is that the problem is not supply i.e. how much gas produces but one of demand i.e. where gas is going.

The linkages between Australia's east coast gas market and the global market are the clear new factor driving gas prices higher. More supply, while welcome, will not be enough to keep prices at historically competitive levels.

Furthermore, given the timeframe of this looming crisis, which is already biting and will greatly escalate from July 2015, it is simply impossible for supply to be expanded quickly enough to deal with the impending price crunch and the consequences that will flow through to employment, cost of living and general economic activity.

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Supply-Side Profiteering

Gas companies are taking advantage of the looming price increases to engage in supply-side profiteering. Origin Energy announced at the company's recent annual general meeting, that: *"Origin will reduce its call on production from its upstream business and bank contracted gas this year and call for that gas in the following years when it is more valuable."*

The deliberate restriction of current supply, in anticipation of future price increases, has profound implications for those sectors of the economy dependent on a gas as an input to production. This practice also makes a mockery of the supply side argument that price increases can be avoided by increasing gas exploration and extraction.

The lack of transparency in the market, the concentration of market players and the lack of good faith of major gas players make the case for urgent government action in the Australian gas market.

While gas-dependent industries are placed in peril, Australia's gas industry is the most profitable industry in Australia, with a profit ratio of 66%. This compares favourably to Australia's biggest export earners iron ore (32%) and coal (3.5%). This profitability would be relatively unaffected by any reservation policy, as shown in the BIS Shrapnel paper.

No global price for gas

The argument that Australian supply now needs to 'meet international demand prices' and that will 'naturally' increase overlooks the economic destruction that will occur if prices are allowed to occur without a near term policy solution. It also overlooks the fact that no other gas-producing nation allows for this to occur domestically without a form of policy to safeguard prices from rapid inflation.

It is vital to understand that no gas-exporting nation on earth – apart from Australia – allows unfettered access to its gas markets. Australia's blind adherence to the notion of the free market is foolish in this instance as the market for natural gas is inherently distorted. There is no global price for gas, with gas supply divided into regional markets that are dictated by major gas supplying nations.

As gas-producing nations around the world quarantine gas for domestic usage, the gas available on the 'global' market is not one of a free floating supply-demand exchange, but rather a distorted market where supply is restricted by exporting nations for their own benefit. As a result Australia is choosing to willfully subject itself to an artificially high global price that is not reflective of a free market, but one that is actively manipulated by other market players.

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For reasons that can only be explained as ideological, Australia is choosing to cede its position and trading advantage as a gas rich, gas-exporting nation and adopt a position of a price taking, gas-importing nation.

As a result of this discrete policy choice, Australia will move to having the world's highest gas price of any gas-exporting nation.

Without a proper diagnosis Australia is left with the unacceptable policy position of effectively doing nothing to offset the looming economic disaster that will greatly undermine employment, living standards and national economic competitiveness.

KEY ARGUMENTS OF ROG COALITION

1. FACTS

- Gas prices to triple. (9.5 from historic $3-4).

- 7 LNG trains in Queensland to be fully operational by 2023. This dwarves the outlook for domestic demand and will see LNG exports account for nearly 75% of total gas demand by 2021.

- Gas shortfall to peak in 2023 with this shortfall projected to remain around these levels for most of the next decade. This shortfall is equivalent to 16.3% of total manufacturing gas consumption.

2. MANUFACTURING IMPACTS

- 1 in 5 (heavy) manufacturers to shutdown.

- Manufacturing production will be reduced by 15.4% in 2023.

- For every $1 of output produced by the manufacturing sector there are 71 cents of other goods and services used in the production process (including from within manufacturing). This compares to only 30 cents for the oil and gas extraction sector and 41 cents for the mining sector as a whole.

- Local content of LNG construction has fallen considerably over recent years to below 40%, compared to earlier periods when the local content of engineering construction related to LNG was reported to be well above 60%.

- Petroleum, chemical, polymer and rubber manufacturing, iron and steel and parts of pulp and paper manufacturing use 89% of industrial gas.

- The direct impact on manufacturing employment is 91,300 fewer jobs.

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- The net direct impact on industry output is negative $58 billion.

- Already, there are a number of high profile examples of investment being delayed or moved offshore. Incitec Pivot has announced it will build a US$850 million (around A$940 million) ammonia plant in Louisiana, USA, rather than in Australia. Coogee Energy also considering building a billion dollar methanol plant in the US, rather than Laverton, Victoria because it cannot secure the 50 PJ of gas locally it needs annually for the methanol plant. Meanwhile, BASF (the large German conglomerate) is also warning that $1.5 billion of capital earmarked for Australia will not be spent if there are continuing uncertainty

3. FLOW-ON IMPACTS

- Net flow-on loss is $101 billion (taking into account benefits of LNG)

- 235,000 job to go economy wide.

- There are only 8,600 jobs once gas projects are in operation phase – they are not major employers. Employed 35,000 at its peak which has passed.

- In effect, this will see a substantial transfer of national income from Australian gas-using industries and employees to the gas and LNG producers.

4. COST OF LIVING

- We estimate that the annual gas bill of Australian households will increase by $260 on average, or 26 per cent over the next four years, from the current average of $997 to $1,259.

- This effectively represents a transfer from households to the gas producers of over $2 billion.

- It will also add 0.2 percentage points to the annual CPI inflation over the next four years.

- Victorian residents will incur the highest additional cost to their gas bills.

- This will impact on low-income households disproportionately and increase incidence of energy poverty.

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5. GAS COMPANY PROFITS GOING OFFSHORE

Once fully operational, only 18% of Australia's gas will be extracted by Australian owned firms (including BHP which is on 58% Australian).

Oil and gas extraction has profit ratio (profit as percentage of revenue) of 66%.

This is compared to iron ore (32%) and coal (3.4%).

Iron ore and coal account for 65% of the mining sector 110,000 people, compared to 18,000 in gas and oil extraction (will only be 8,600 eventually).

Over the 2014/15 to 2022/23 period, total remitted profits from the Australian economy are expected to total $166 billion, with $49 billion from Queensland alone.

The mining industry has been responsible for between 20 to 30 per cent of all profits repatriated from Australia.

Of the $9.8 billion remitted from the total mining sector in 2013, BIS Shrapnel estimates that $1.9 billion came from the existing LNG projects (Pluto, Darwin LNG, North West Shelf).

This will see the ratio of remitted profits to total mining operating profits increase significantly from its current 12 per cent.

Repatriated profits are therefore forecast to reach $6 billion by 2019, and continue rising through to 2023 as these established projects undergo expansions.

The LNG-related figure is expected to swell to $21.2 billion by 2019, due to the start-up of the new, predominantly foreign-owned, plants.

Gas companies would only 'lose' $1.2 billion in profits from a 20% reservation.

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Foreign Ownership Table

	Australian Ownership	Expected Output (Mt) 2014	2015	2016	2017	2018	2019	2023
North West Shelf	33%	16.5	16.5	16.5	16.5	16.5	16.5	
Pluto	100%	4.1	4.3	4.3	4.3	4.3	4.3	
Darwin LNG	0%	3.2	3.2	3.2	3.2	3.2	3.2	
Australia Pacific LNG	38%	0.0	0.0	2.0	6.0	9.0	9.0	
Curtis Island LNG	0%	0.0	1.8	8.3	8.5	8.5	8.5	
Gladstone LNG	30%	0.0	0.4	5.8	8.2	8.2	8.2	
Gorgon	0%	0.0	0.0	1.3	8.3	14.3	15.0	
Wheatstone	0%	0.0	0.0	0.0	1.9	8.8	8.9	
Prelude	0%	0.0	0.0	0.0	1.5	3.5	3.6	
Ichthys	0%	0.0	0.0	0.0	5.4	8.2	8.4	
Exchange Rate	A$/US$	0.92	0.90	0.90	0.90	0.90	0.90	0.90
LNG Price	A$/tonne	672	674	674	674	674	674	674
	US$/tonne	617	607	607	607	607	607	607
	A$/GJ	11.8	11.9	11.9	11.9	11.9	11.9	11.9
Australia								
Total Production/Exports (Mt)		23.8	26.2	41.4	63.8	84.5	85.6	110.9
Total Revenue (A$)		15,973	17,672	27,932	42,987	56,952	57,728	74,774
Total Profits (A$) (45% margin)		7,188	7,953	12,569	19,344	25,628	25,977	33,648
Total Repatriated Profits (A$)		4,297	4,940	8,838	14,939	20,882	21,231	26,602
Queensland								
Total Production/Exports (Mt)		-	2.2	16.1	22.7	25.7	25.7	31.7
Total Revenue (A$)		-	1,474	10,857	15,304	17,327	17,327	21,361
Total Profits (A$) (45% margin)		-	663	4,886	6,887	7,797	7,797	9,612
Total Repatriated Profits (A$)		-	627	4,130	5,458	6,027	6,027	7,616

Source: BIS Shrapnel, ABARE, ABS data, Company Annual Reports

6. AUSTRALIAN TRADE BALANCE

Export revenues from LNG will increase significantly over the next decade, from an estimated $16 billion in the 2013/14 financial year to $74 billion in 2022/23

Remitted profits, dividends and reinvested earnings (essentially returns to equity) now account for just over half of the $87 billion of income debits. Interest payments on debt account for 42%.

However, a worst case scenario decline of $53 billion in the value of manufacturing production would, other things being equal, largely translate to an equivalent worsening in merchandise trade balance.

Manufacturing output and sales essentially are a substitution for imports in the domestic market or are exported, so without this production, imports would escalate and exports from the manufacturing sector would decline. In terms of the present manufacturing sector trade balance of -$129 billion this would represent a 40% deterioration.

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7. AUSTRALIAN POLICY (STATES)

WA – has had a reservation policy since 2006, with $88 billion invested during that time.

NSW – In May 2012 a New South Wales parliamentary inquiry into CSG recommended that the NSW Government implement a domestic gas reservation policy, under which a proportion of the CSG produced in NSW would be reserved for domestic use.

Queensland – doesn't have a gas reservation policy but it does have a Prospective Gas Production Land Reserve (PGPLR) policy. This policy allows the Government to limit the gas produced in certain areas for the Australian gas market when tenure is granted.

8. IS MORE GAS THE SOLUTION?

The problem is demand side, not supply side – "If producers are not forced to dedicate gas to the domestic market then we see no reason why they would choose to do so at prices below international netback prices, particularly with Santos being involved in both the Narrabri gas fields and the Gladstone LNG project."

OTHER COUNTRIES

The US Congress is currently debating whether to change its policy and further open up LNG exports, with the Republicans and BHP Billiton arguing in favour of such a move, whilst Democrats and large manufacturers (Industrial Energy Consumers of America) such as Dow Chemical and Incitec Pivot are lobbying to maintain preferential access to cheap gas domestically.

Australian policy is being used as an example of how not to export gas, citing the impact it has had (and will have) on Australian gas prices and manufacturing (citing the DAE report). Mr Fazzino from Incitec Pivot told legislators he chose to develop an ammonia plant in Louisiana instead of Australia because of its business-friendly regulation and access to cheap and copious amounts of domestic gas[1], highlighting the benefit of cheap and plentiful gas in promoting the domestic manufacturing industry.

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[1] (Kehoe, 2014)

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OTHER NATIONS SUMMARY

Country	Annual gas exports	Gas market policies
Algeria	12.6 Mt (LNG)	· Government-owned Sonatrach dominates production · International oil and gas companies must partner with Sonatrach (requires a minimum 51% ownership in production sharing) · Domestic prices are regulated
Egypt	8.6 Mt (LNG)	· 1/3 of gas production must be directed to domestic consumers · International producers required to enter into 50% JVs with state-owned companies · International oil and gas producers receive capped prices and domestic prices are government subsidised · Restriction on new gas export contracts
Qatar	3.6 tcf (LNG and pipeline)	· Government-owned Qatar Petroleum dominates production and controls most projects, with international participation · Downstream industrial gas consumption controlled by Qatar Petroleum · Domestic allocation of gas to vertically integrated downstream uses, although comes with high opportunity cost compared to LNG export value
Indonesia	1.4 tcf (LNG and pipeline)	· Domestic market obligation policy is applied on case-by-case basis to new projects. Reservations of up to 40% have been agreed for new projects · Domestic gas prices are regulated by government below market rates
Malaysia	1.2 tcf (LNG)	· Government-owned Petronas monopolises upstream development · Domestic gas prices subsidised by government
Canada	2.2 tcf (pipeline)	· Gas exports require government licence approval · Approvals are dependent on adequate supply being left for domestic requirements
United States	0.5 tcf (pipeline) 13.1 tcf (LNG conditional)	· Gas exports to non-FTA countries require government approval · exports must be found to be in the 'public interest' by the DOE, which takes into account domestic energy security, the adequacy of supply and the impact on the US economy
Norway	3.5 tcf (LNG and pipeline)	· Government-owned Statoil the dominant producer, with participation from international oil and gas companies · No specific policies to preference domestic consumers · Domestic prices determined by export market
Russia	6.4 tcf (LNG and pipeline)	· State-owned company Gazprom the dominant producer · Significant domestic gas price regulation and subsidisation
Israel	-	· Recent discoveries have significantly increased Israel's export capacity · 450 billion cubic metres of natural gas reserved for domestic use, essentially reserving 60% of Israel's natural gas reserves for domestic use

Source: Eastern Australian Domestic Gas Market Study

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