Submission No 22

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

Organisation: Lock the Gate Alliance

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LOCK THE GATE ALLIANCE
AUSTRALIANS WORKING TOGETHER TO PROTECT OUR LAND, WATER, AND FUTURE

Submission: Inquiry into the Supply & Cost of Gas & Liquid Fuels in NSW

December 30th 2014

Please accept this submission to the Inquiry into the Supply and Cost of Gas and Liquid Fuels in NSW which is being conducted by the NSW Legislative Council, from Lock the Gate Alliance.

Lock the Gate Alliance is a national organisation with over 230 member groups and more than 35,000 supporters. Our mission is to protect Australia's agricultural, environmental, and cultural resources from unsafe or inappropriate mining and to educate and empower all Australians to demand sustainable solutions to food and energy production.

Summary

There is an unprecedented expansion underway in the production of unconventional gas along the eastern seaboard of Australia. It is estimated that gas production in eastern Australia is set to triple over the next few years. However, demand for gas in NSW is falling and will undoubtedly continue to fall.

There is no gas shortage and there will not be a gas shortage in NSW. However, there will be a price shock due to CSG exports linking eastern Australia to global markets for the first time. This price increase is already being felt in NSW, after a decision by IPART to allow a number of gas retailers to increase prices in response to the export market.

The price increase is likely to have a major impact on the manufacturing industry, and on jobs in manufacturing, as well costing low income households dearly.

Mining additional gas in NSW will not have any significant impact in bringing down inflated gas prices caused by world parity pricing. Even the most optimistic studies conducted for the CSG industry have shown that unfettered CSG mining in NSW will have little or no impact on domestic gas prices, because the eastern Australia market is now dominated by Asian prices.

The NSW Government is currently attempting to force CSG mining onto an unwilling population, and by so doing is putting land and water resources at risk as well as costing NSW consumers and putting jobs in manufacturing under threat.

Instead of pursuing such a zero sum game, the NSW government should be identifying opportunities to reduce the dependence of NSW households and businesses on gas, and hence reduce their vulnerability to the gas price shock. A restructure to reduce gas dependence could be used to reduce business costs and boost the international competitiveness of NSW businesses.

The price shock itself will lead to a substantial and inevitable decline in demand for gas, and the only valid policy response is for the NSW Government to support and encourage structural changes in NSW to quickly and dramatically reduce the gas dependence of NSW businesses and households.

CSG mining is the cause of the gas price shock in Australia, not the solution. If the NSW Government pursues an ill-considered CSG expansion that does nothing to address the price shock, then it will be condemning the NSW economy to negative and far-reaching economic impacts that it could and should have prevented.

The current NSW Gas Plan is entirely predicated on the false premise of a gas shortage. The Gas Plan should be re-written as a diversified Food and Energy Plan, that delivers strong and far-reaching protections for farmland, rural communities and natural areas, and that encourages structural diversity to avoid the worst of the gas price shock that has been caused by LNG exports.

Eastern Australia gas production is tripling, and so are domestic gas prices

Australia has vast amounts of gas and is in the midst of an unprecedented expansion in gas production. Eastern seaboard gas production will triple over the next few years [1]. Gas companies intend exporting over 70% of that gas to Asia[2].

The LNG export industry in Australia is causing gas prices to rise dramatically, with wholesale gas prices for large manufacturers expected to triple by 2030[3]. The construction of three LNG export plants in Qld is linking Australia to the higher prices paid by the world market[4]. Domestic prices are rising to match the world price[5].

After the retail price rises agreed by IPART in June 2014, household gas bills will increase by up to $162 per year by 2016 in NSW, whilst gas bills for small business will increase by up to $625[6] per year. Further increases are likely beyond 2016. IPART have attributed the great proportion of this rise to world parity pricing.

The mining industry has attempted to blame communities in NSW who are opposed to CSG mining for price increases and predicted future shortages. Nothing could be further from the truth, and there is not a skerrick of evidence to support the proposition. On the other hand, numerous commentators, reports and government authorities, have all recognised that LNG exports are the driver of domestic gas price increases. This was confirmed recently by IPART who stated that *"The main driver for price increases is structural changes in the wholesale gas market, including increased exposure to the international gas market".*[7]

The Premier of Western Australia, Colin Barnett, summarised the magnitude of the rip-off that has been perpetrated on the Australian people by the unconventional gas industry, as follows:

'It's a hard narrative to sell, to a community, to a government, that we are going to increase production of gas and we are going to export it, and in the meantime, domestic gas supplies will be diminished and domestic prices will go up. I'm a politician and I'm pretty good at selling a story, but I'd find that a tough one to sell'[8].

[1] Australian Energy Market Operator, Gas Statement of Opportunities 2013
[2] Derived from figures provided in Australian Energy Market Operator, Gas Statement of Opportunities 2013
[3] Grattan Institute. Getting Gas Right: Australia's Energy Challenge. June 2013.
[4] Independent Pricing and Regulatory Tribunal Fact Sheet, 23 April 2014. Regulated retail gas prices from 1 July 2014 to 30 June 2016.
[5] AGL. VPA - Proposed price path for NSW regulated gas prices from 1 July 2014 to 30 June 2016 – public submission. 2014.
[6] Independent Pricing and Regulatory Tribunal Fact Sheet, 23 April 2014. Regulated retail gas prices from 1 July 2014 to 30 June 2016.
[7] Independent Pricing and Regulatory Tribunal Fact Sheet, 23 April 2014. Regulated retail gas prices from 1 July 2014 to 30 June 2016.
[8] http://www.pnronline.com.au/article.aspx?p=1&id=1161

There is no gas shortage

As noted above, there are vast quantities of gas being produced in eastern Australia. NSW has never produced large quantities of gas itself and has always obtained all the conventional gas it needs via pipelines which link it into the eastern Australian gas network.

The purported gas shortage that the CSG industry has been using as an argument to unleash CSG drilling in NSW, if it exists at all, has been caused entirely by the industry itself. LNG exporters are allegedly running short on supplies from Qld CSG gasfields to meet their export contracts and are sucking up conventional gas supplies which have previously been used to supply gas in Australia[9].

AGL summarise the situation as follows: "*The commitment of large LNG projects in Queensland has driven intense competition for available gas between domestic customers and LNG projects as the CSG reserve have been committed to LNG projects in order to underwrite their development*" [10].

However, existing conventional gas suppliers have made it clear that the market will adjust and there are sufficient supplies overall to maintain domestic supply, but at a higher price. BHP Billiton Petroleum and the BG Group have both stated that there is no looming gas shortage in NSW. BHP Chief Executive Mike Yeager has stated that there is plenty of conventional gas in the Bass Strait to supply the eastern seaboard 'indefinitely'[11]. He is quoted as saying that "*We want to make sure that the market knows that the Bass Strait field still has a large amount of gas that's undeveloped. We have a lot of gas in eastern Australia that's available...there's plenty of gas to supply ...you know, indefinitely*[12]. BG Group has also stated that gas will be available for all those prepared to pay[13].

In late 2013, Origin Energy agreed to buy more than $3 billion of Bass Strait gas, which is equivalent to more than 33% of NSW supply for a nine year period[14]. Certain industrial users have also secured additional gas supplies from South Australia[15].

In short, numerous commentators have indicated that there will be gas available, both in NSW and elsewhere across the eastern seaboard, but at the increased world parity price. In short, there will be gas for those who are prepared to pay.

However, CSG companies who want to drill for gas in NSW are claiming that there will be a gas supply shortfall or 'crisis' in 2016-2018 unless CSG drilling is approved. But close inspection of their own commissioned research shows it doesn't support those claims.

A recent report commissioned by AGL purported to show that there would be a gas supply 'crisis' in 2018. The "shortfall" it identified was equivalent to less than one third of 1% of expected east cost gas production in 2018, a volume, that if it eventuated would be easily solved by ordinary market mechanisms. The report actually acknowledged that the 'market' would solve any shortfall.

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[9] AGL. VPA - Proposed price path for NSW regulated gas prices from 1 July 2014 to 30 June 2016 – public submission. 2014.
[10] AGL. VPA - Proposed price path for NSW regulated gas prices from 1 July 2014 to 30 June 2016 – public submission. 2014.
[11] http://www.smh.com.au/business/nsw-to-press-on-with-coal-seam-gas-hartcher-20120515-1yo6c.html
[12] http://www.smh.com.au/business/nsw-to-press-on-with-coal-seam-gas-hartcher-20120515-1yo6c.html
[13] http://www.theaustralian.com.au/business/looming-gas-shortage-a-myth-says-bg-group/story-e6frg8zx-1226732175131
[14] http://www.theaustralian.com.au/business/mining-energy/origins-priceless-3bn-deal-delivers/story-e6frg9df-1226723111645
[15] Simshauser & Nelson, 2014. Solving for 'x'- the NSW Gas Supply Cliff. AGL Applied Economic & Policy Research

It reads that *'To the extent that any residual shortfall may exist in NSW, we would expect LNG producers, gas-fired power stations, gas shippers and large industrial consumers to initiate a series of transactional swaps and options so that NSW demand and supply clears*'.

It also identified there were additional infrastructure measures that could be implemented to increase gas supply from Victoria to address any shortfall, and then inexplicably chose to assume these measures would not be taken. This report also took no account of falling demand for gas, which is explored below, and would undoubtedly negate the purported shortfall entirely.

Demand for gas is falling

Gas demand in NSW is falling and not expected to increase significantly for decades[16]. Last year alone average consumer gas demand in Eastern Australia was down 10.3% [17]. Increased domestic prices due to world parity pricing will undoubtedly lead to further dramatic reductions in domestic gas demand. However, the NSW Government has to date not conducted any analysis that we are aware of to assess the impact of increasing prices on demand.

The trend in electricity demand over the last five years as prices have increased is a very good indicator of what is likely to happen to gas demand in NSW, particularly given the extraordinary scale of the gas price shock. In short, there is no doubt that gas demand will fall dramatically over the coming decade.

Commissioning research on the likely scale of the fall in demand in response to the tripling of domestic gas prices should be the first priority of the NSW Government in developing a response. There is no doubt that any purported shortfall in gas supply from 2016-2018 will be offset by the fall in demand. As gas prices rise, more consumers will switch to other energy sources, leading to increased costs to maintain pipelines and other infrastructure, and thence to likely further increases in prices and further reductions in demand. This is a pattern that has been seen in the electricity industry, with AEMO data indicating that actual energy consumption from the grid has declined for the last five consecutive years[18].

CSG Exports Will Damage Manufacturing and Cost Australia

A recent Deloitte Access Economics report claimed that the LNG export induced gas price shock will cost the Australian manufacturing industry $118 billion[19], whilst resulting in an $81 billion bonanza for the gas industry. Credit Suisse note that LNG exports are expected to result in a 0.8% drag on Australia's GDP for every $2 increase in the wholesale gas price[20], and wholesale gas prices are expected to increase by at least $6 GJ[21].

Manufacturing Australia estimates that close to 100,000 direct manufacturing jobs may be lost as a result of LNG exports[22]. Industrial output will decrease in Australia as a result. The Grattan Institute

[16] Australian Energy Market Operator (2013) Gas Statement of Opportunities.
[17] AGL Investor Presentation August 2014
[18] AEMO. 2014 Electricity Statement of Opportunities for the National Electricity Market
[19] Deloitte Access Economics (2014), Gas market transformations - Economic consequences for the manufacturing sector.
[20] Credit Suisse (2014)
[21] AGL (2014)
[22] http://www.abc.net.au/news/2014-03-27/gas-boom-threatens-australian-manufacturing-jobs/5349822

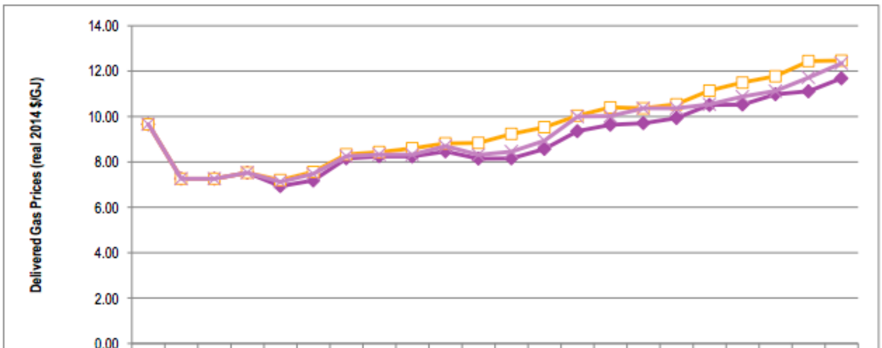
estimate that rising gas prices will cost households across Australia an extra $544 million per year and industrial users up to $3.2 billion per year[23].

CSG Mining in NSW Will Not Reduce Gas Prices

Industry media releases used the recent Deloitte Access Economics report to argue that increased CSG mining would somehow solve the problem of the gas price shock[24], but the report itself had no analysis to support this argument. CSG exports mean that all gas mined in eastern Australia, whether it is exported or used domestically, are part of the same market and linked to Asian prices. No amount of CSG mining in NSW will change this.

Even the gas industries' own modeling shown in the graph in Figure ES 3 from a report by ACIL Allen Consulting for gas company AGL shows that gas prices will be virtually the same whether or not further CSG mining is allowed in NSW.[25] In 2035, the price is almost identical under either scenario, at approximately $12/GJ. This compares with a pre-LNG export price of approximately $4/GJ. Therefore, regardless of whether there is CSG mining in NSW or not, the price of gas will triple for Australian consumers and businesses. The NSW Government should be focusing its efforts on mitigating this price shock by supporting structural change, not by blindly propping up and promoting the very industry that has caused the problem and is now profiting from it.

Figure ES 3 **Delivered gas price at Sydney for Base Case and the constrained scenarios**



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Base	9.66	7.26	7.26	7.52	6.93	7.19	8.15	8.25	8.24	8.46	8.14	8.16	8.57	9.35	9.64	9.71	9.93	10.51	10.52	10.98	11.11	11.69
CSG Freeze	9.66	7.26	7.26	7.52	7.20	7.56	8.34	8.43	8.60	8.82	8.84	9.23	9.53	10.04	10.40	10.36	10.54	11.14	11.49	11.78	12.44	12.46
Gloucester Only	9.66	7.26	7.26	7.52	7.12	7.47	8.25	8.33	8.32	8.69	8.31	8.45	8.94	10.00	10.02	10.36	10.36	10.53	10.88	11.12	11.72	12.35

Source: ACIL Allen

CSG mining in NSW will not save manufacturing jobs

CSG driven gas price rises in NSW will increase costs to NSW industry and ultimately cost manufacturing jobs. Because mining CSG in NSW would have virtually no impact on domestic gas prices, it would have virtually no effect on manufacturing jobs.

Recent claims by the gas industry that allowing CSG mining in NSW "could deliver 16,000 jobs by 2013"[26] are highly misleading. The claim appears to suggest that there will be 16,000 more people

[23] Grattan Institute. Getting Gas Right: Australia's Energy Challenge. June 2013.
[24] APPEA media release July 21, 2014, Manufacturers' report reinforces need for gas expansion.
[25] ACIL Allen Consulting (2014) Future NSW gas supply and usage: Economic benefits of coal seam gas development.
[26] http://yoursayagl.com.au/welcome-to-agls-online-community?page=7

employed in 2035 if CSG mining is allowed to go ahead. A closer examination of the ACIL Allen Consulting report cited by AGL to support this claim refers to "*16,000 cumulative job years by 2035*" and in fact claims that there will only be 771 extra jobs in 2035.[27]

Even if we accept the assumptions behind this figure, which we do not, it should be viewed in the context of the overall NSW workforce currently standing at over 3 million, and at the many thousands of jobs that are likely to be lost in manufacturing due to the price shock. In short, CSG mining is causing a major net loss of employment in NSW.

CSG Mining Will Not Guarantee Gas for NSW

No matter how much gas is mined in NSW or elsewhere, LNG export capacity can simply be expanded to export more gas. According to the Australian Energy Market Operator AEMO, there are plans for over three times as many LNG trains as are currently under construction[28]. The LNG export industry is now acting as a giant suction, siphoning gas supplies out of Australia, and it will expand to continue doing just that.

A recent report by the Institute for Energy Economics and Financial Analysis[29] on the proposed Narrabri Gas Project has debunked the myth that CSG mining in NSW will reduce gas prices or guarantee supply for NSW. The report notes that the MOU between the NSW Government and Santos is not a legally binding document, and cannot ensure gas for NSW.

The report noted that the Gladstone LNG project (GLNG) in which Santos holds a major stake, is short of gas, and that Santos would be incentivised to supply additional gas to GLNG from its own assets in NSW if the economics are favourable. It indicates that profit optimization, and the requirement for Santos to optimise returns for its shareholders, will drive its decision-making as to the final destination of the gas produced, not the preferences of the NSW Government.

The report notes that even if the gas supply did flow south to Sydney, that given the total project investment, Santos would need to charge higher wholesale prices then that predicted by the ACIL Allen 'CSG Freeze' scenario ($7.20/GJ in 2018), in order to cover its cost of capital on the project.

It is notable that Santos has recently experienced a dramatic share price collapse after sliding oil prices meant it was forced to cancel a hybrid debt/equity raising it had planned for 2015. As a result, Santos has slashed its 2015 capex program - reducing projected 2015 capital expenditure by 25% to $2b. Discretionary programs such as the Narrabri Gas Project appear to have been hit hardest by this change. The Narrabri Gas Project is now one of five projects for which Santos has nominated a combined spend of just $150M in 2015[30].

This appears to have pushed the Narrabri Gas Project back even further, with the chances that it could possibly be up and running by 2018 now almost non-existent. The project is already well behind the timeline set out in the MOU. The production of an EIS has been pushed back to 2015, and the latest investor presentation indicators that first gas production is four years away at the earliest. Therefore, the Narrabri Gas Project will do nothing to deal with an alleged gas shortage in 2016-2018.

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[27] ACIL Allen Consulting (2014) Future NSW gas supply and usage: Economic benefits of coal seam gas development.
[28] Core Energy Group (2012), Eastern & South-Eastern Australia: Projections of Gas Demand for LNG Export. Table 5.2 p22
[29] IEEFA. Briefing note: The Narrabri CSG Project, November 2014
[30] http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=STO

The Santos share price collapse has also had the effect of making Santos a takeover target[31], and should that occur, any non-legally binding MOU between the NSW Government and Santos will be entirely moot.

CSG Companies Engineered the Price Shock, Costing Australia Billions

Santos has made it clear to investors that forcing Australian customers to compete with high Asian prices by opening their export terminal was a deliberate strategy to increase the value of their domestic gas sales[32]. The NSW Government should not allow our economy to be held to ransom in this fashion by the mining industry.

The failure of Qld and Federal governments to conduct proper cost/benefit analyses of LNG export projects, prior to approval, has been one of the greatest regulatory failures of our time. If the NSW Government approves CSG mining in NSW on the basis of a false gas shortage 'scare campaign', it will be dramatically compounding that error and putting the NSW economy at risk in order to do the bidding of the gas industry.

The opportunity

Fortunately there are many straight-forward energy efficiency measures and more efficient, cheaper electrical alternatives for many of the main uses of gas in NSW. Many of these measures are already cheaper than using gas, and result in lower energy bills for NSW households and businesses.

Identifying and implementing energy efficiency and fuel switching options for NSW manufacturing will ultimately reduce costs and improve the international competiveness of NSW businesses.

NSW does not face a gas shortage, but does face a gas price shock as a result of CSG exports.

As such, the NSW Government should act to reduce the gas dependence of NSW households and businesses and hence their exposure to the inevitable gas price increases. The NSW Government should take action to provide alternative, cheaper energy supplies to NSW gas users wherever possible and to promote energy efficiency. The benefit is that many of these energy sources are from safer alternatives that do not put our land, water, or health at risk.

The NSW Government needs to choose the most assured, dependable approach to ensure energy security and minimise costs for NSW consumers and businesses. The only certain path is clearly to deliver structural changes to reduce gas dependence. To choose more CSG mining, against the wishes of the community, when there is a substantial body of evidence to show that it will do nothing to deal with the price shock and will cost NSW consumers dearly, would be a very ill-considered gamble.

Instead, we believe the following steps should be taken by the NSW Government:

1. Immediately commission a thorough and independent analysis of the likely reduction in gas demand in NSW in response to the LNG export induced price shock
2. Identify low cost energy efficiency and energy alternatives to gas use for businesses and industry.

[31] http://www.smh.com.au/business/comment-and-analysis/oils-turf-war-pushes-santos-towards-takeover-territory-20141204-1209n3.html

[32] Santos Investor presentation 2011, slide 5; Credit Suisse (2014) Equity Research: Santos, the seven-year itch.

3. Introduce energy efficiency measures for NSW households and businesses, and incentives for implementation (such as low interest loans).
4. Support installation of electrical heat pump or solar hot water systems, efficient reverse cycle air conditioners and induction cook-tops in all new homes and businesses.
5. Support replacement of gas appliances with more energy efficient heat pump and solar hot water heaters and reverse cycle air conditioning.
6. Support solar PV for households and industrial/commercial premises
7. Legislate for full transparency on all gas supply contracts so that the NSW Government has full knowledge of all commercial transactions relating to gas supply
8. Review pipeline capacity for conventional gas supplies from Victoria and support improved capacity if/where appropriate
9. Explore other regulatory options to ensure NSW can source adequate conventional supplies in the short-term