

**Submission
No 30**

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

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Legislative Council Select Committee

on the Supply and Cost of Gas

and Liquid Fuels

in New South Wales

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Table of Contents

Item	Page
1. There are growing signs that the Queensland-based LNG export industry may not be competitive or profitable.	3
2. World oversupply will exert downward pressure on gas prices	5
3. It is unlikely that capital will be available to finance a NSW gas industry because following an export collapse, cheap and abundant Queensland gas will be available to forestall entry by prospective NSW producers. Banks are also facing pressure to divest from what are regarded as “unburnable” fossil fuel projects.	7
4. Australia’s East Coast needs for gas can be provided from existing Reserves.	9
5. Gas companies and politicians are clearly not operating in our state and national interests. Allowing market forces to determine these matters is not a substitute for reasoned public policy.	10
6. The gas industry’s benefits to Australia are not commensurate with its economic, social and environmental costs.	13
7. Gas is not a transition fuel.	14
8. There are growing reports of adverse effects from gas mining and opposition to its imposition by force on unwilling communities.	16

1. There are growing signs that the Queensland-based LNG export industry may not be competitive or profitable.

October 2014

Former senior BHP Billiton executive Alberto Calderon says a sustained period of oil pricing at \$US80 a barrel would accelerate an inevitable move to lower LNG prices causing a failure for most Australian LNG projects to return their cost of capital.

<http://www.abusinessherald.com/2014/10/oil-slump-threatens-lng-projects/>

September 2014

Seven Group Holdings chief executive Don Voelte has raised fresh questions about the viability of \$70 billion worth of gas export plants in Gladstone, warning the economics of the industry had become tougher and coal seam gas remained difficult to extract.

While the former Woodside Petroleum boss stressed he wished the three massive Queensland plants “all the success in the world” – BG Group’s Queensland Curtis, Santos’s GLNG and Origin Energy’s APLNG – he described the investment as “a big bet” in a process “with no pilot and no test”.

<http://www.macrobusiness.com.au/2014/09/qld-lng-doubts-as-competition-mounts/>

The problem extends across Australia:

August 2014

Recent news headlines on the liquefied natural gas (LNG) sector in Australia seem to be centred about its unsustainable rising costs. Woodside Petroleum had to ditch plans last year for its Browse LNG plant, which had gone way over budget at an estimated cost of \$80 billion. In the interest of continuing the development, Woodside and its partners have now turned to floating LNG (FLNG) vessels as a practicable alternative. More

recently, Santos and GDF Suez have also scrapped plans to build gas plants off the Northern Territory Coast of Australia. Projects that have gone ahead have seen significantly increased costs. At 80% completion, the Gorgon LNG project is now estimated to cost \$54 billion – a sharp contrast to the original budget of \$37 billion (46% over budget).

<http://www.ogfj.com/articles/2014/08/douglas-westwood-australian-lng-a-lost-cause.html>

June 2014

LNG expert Dr Fesharaki advises that any new LNG project worldwide need to be able to supply LNG at just \$US13 per thousand cubic feet of gas to win customers. That compares with an average price of Australian LNG into Japan of about \$US15.80 in March.

So it appears that the decision by our economic mandarins to restructure the Australian economy based upon notions of limitless Chinese demand for gas is going to be seen by historians as a monumental blunder.

<http://www.macrobusiness.com.au/2014/06/australian-lng-priced-out/>

September 2014

As a consequence of being globally uncompetitive, more Queensland produced gas could become available for NSW consumption but only if governments impose anti-hoarding measures to stop multinational producers shelving Australian projects that could profitably supply local markets in favour of developing overseas projects with better returns.

http://www.domgas.com.au/pdf/Media_releases/2014/2014%20MR%20BHP%20retentions.pdf

2. World oversupply will exert downward pressure on gas prices

December 2014

China is trying to find buyers for its contracted LNG purchases on the international market, which is already oversupplied due to slowing demand and rising output that have seen Asian LNG prices halve this year, with analysts expecting another 30 percent fall by 2015.

Sinopec, China's state owner energy organisation is reportedly in early talks to sell off chunks of the 20-year, 4.3 million tonne per annum supply it bought from Origin Energy's Australia Pacific LNG plant due to start in 2015.

<http://uk.reuters.com/article/2014/12/09/china-gas-imports-idUKL6N0TN1HM20141209>

August 2014

The US Department of Energy has streamlined an Alaska LNG monster project capable of delivering 20 million tonnes per annum, roughly the entire output of Australia's three QLD projects. The capital outlay is comparable with Gorgon but the break-even price is several dollars/mbtu below Australia's LNG projects.

<http://www.macrobusiness.com.au/2014/08/us-pushes-monster-alaska-lng-project/>

July 2014

A study of production data from 65,000 wells from 31 different unconventional shale rock formations in 2012 predicts big trouble ahead for North America's unconventional hydrocarbon revolution. The four big challenges are: escalating capital costs, uneven performance and a growing environmental footprint, all followed by rapid depletion.

<http://www.resilience.org/stories/2014-07-01/ailing-shale-gas-returns-force-a-drilling-treadmill>

June 2014

Large natural gas field discoveries on and off shore have prompted several countries to plan liquefied natural gas (LNG) export projects, including in North America, Australia, East Africa and the east Mediterranean but high development costs and low profit margins in the gas sector mean most of the projects will fail, Royal Dutch Shell's director of projects and technology has said in an interview.

<http://www.smh.com.au/business/mining-and-resources/most-big-gas-export-projects-doomed-says-shell-20140609-39syk.html>

May 2014

US drillers are struggling to keep pace with the relentless spending needed to get oil and gas out of the ground. Shale debt has almost doubled over the last four years while revenue has gained just 5.6 percent, according to a Bloomberg News analysis of 61 shale drillers. A dozen of those wildcatters are spending at least 10 percent of their sales on interest compared with Exxon Mobil Corporation's 0.1 percent.

<http://www.bloomberg.com/news/2014-05-26/shakeout-threatens-shale-patch-as-frackers-go-for-broke.html>

August 2013

"It doesn't even seem all too likely that there still will be a viable US shale industry by 2020. The predictions for the future of shale gas, whether they're accurate or not, have pushed domestic US gas prices so low that while the American economy enjoys a temporary windfall, profit margins for actually producing it have fallen so much it's hardly economically viable any longer. At the Bakken play, well over \$1 billion worth of gas is

simply flared off, and that's probably a lowball estimate. A waste? Absolutely. Polluting? You bet. But there's no profit in shale gas anymore”.

<http://www.theautomaticearth.com/shale-is-a-pipedream-sold-to-greater-fools/>

June 2012

“USA natural gas companies gambling on shale gas have been facing prices so low – far below the cost of production – that all of them have been producing gas unprofitably.

The financial risk has been increasing dramatically as the companies have been drowning in debt trying to ride out the rock bottom prices that have been the result of people believing the fantasy. Finally, casualties of the financial shenanigans involved are emerging. It is very likely that there will be many more, as companies that have tried to ride out the low prices go under”.

<http://www.theautomaticearth.com/shale-gas-reality-begins-to-dawn/>

The global gas industry appears to have inherent prospects for a collapse and none of the threatening elements provide any cause for optimism about supporting a New South Wales gas industry, remembering that governments seem invariably drawn into financially supporting this industry.

3. It is unlikely that capital will be available to finance a NSW gas industry because following an export collapse, cheap and abundant Queensland gas will be available to forestall entry by prospective NSW producers.

Banks are also facing pressure to divest from what are regarded as “unburnable” fossil fuel projects.

March 2014

It has been calculated that dangerous climate change would result if all of the current reserves held by fossil fuel companies were used. These unburnable (or “stranded”) assets are valued as if climate change and pending regulation does not exist and consequently, the market faces a potential depression-sized overvaluation of reserves, or “carbon bubble”.

Ben Caldecott, director of the Stranded Assets Program at Oxford University, who recently visited Australia for a series of lectures and meetings with investors and politicians about his research, said that moves by large funds to exclude coal stocks from their portfolios were spreading remarkably rapidly.

<http://www.theage.com.au/business/mining-and-resources/coal-miners-starting-to-count-the-cost-of-activist-pressure-on-funding-20140324-35dbe.html>

December 2014:

The Bank of England has revealed that it will broaden its investigation into “unburnable carbon” – and the prospect that continued investment in oil, coal and gas by global giants could precipitate a share market crash, and become of the sub-prime crisis of the current economic cycle.

This is the first major acknowledgement from a financial regulator that most of the world’s listed coal, oil and gas reserves could become “stranded assets” and have significant financial consequences.

<http://reneweconomy.com.au/2014/a-regulators-climate-nightmare-carbon-bubbles-and-market-crashes-73340>

September 2014

Northern Rivers gas explorer Metgasco has taken the red pen to capitalised exploration expenditure and downgraded its gas reserves to nil, blaming the huge uncertainty over the possibilities for development of its gas in the Northern Rivers region.

The accounting adjustment involves an \$80 million impairment of all the capitalised exploration and evaluation expenditure on its balance sheet last year and will take Metgasco deeper into the red for the 2014-15 financial year.

http://www.afr.com/p/business/companies/metgasco_in_write_down_reserves_Zi3fM1N3yDbie9LPtuQAZP

<http://www.asx.com.au/asxpdf/20140919/pdf/42sb74f64907jx.pdf>

March 2014

A recent Australia Institute report has been released, clarifying the nature of fossil fuel investment risk:

http://www.tai.org.au/system/files_force/Climate%20Proofing%20Your%20Investments_final.pdf

4. Australia's East Coast needs for gas can be provided from existing reserves

March 2014

The Australian east coast gas market is experiencing rapid price rises to export parity levels, not because there is a shortage of gas, but because the gas is to be exported through new export facilities to world markets. Gas is going to overseas customers prepared to pay more. Development of controversial NSW CSG projects will do almost nothing to change this situation. They cannot change world prices. There is plenty of gas, NSW consumers will just have to pay the world price for it.

<http://www.tai.org.au/content/briefing-note-debunking-solving-x-nsw-gas-supply-cliff>

March 2014

Those producers who do not have an interest in removing restrictions on CSG production in NSW and Victoria are telling customers that they have plenty of gas to sell at the export parity price – this includes Origin Energy and BG Group. By contrast, AGL Energy and Santos, who both have CSG interests in NSW, are warning of a 'gas crisis' and price increase that can only be prevented by removing restrictions on CSG.

<http://www.tai.org.au/content/fracking-future>

October 2013

Gas giant BG Group Australia says there is no looming shortage of gas in New South Wales or any other east coast state, and accused gas consumers of waging a scare campaign.

<http://www.theaustralian.com.au/business/looming-gas-shortage-a-myth-says-bg-group/story-e6frg8zx-1226732175131>

5. Gas companies and politicians are clearly not operating in our state and national interests. Allowing market forces to determine these matters is not a substitute for reasoned public policy.

December 2014

NSW Resources and Energy Minister Anthony Roberts says Santos has committed to making gas available to the NSW state market and the government's preference was for gas to stay in NSW but there is no obligation for Santos to send gas to Sydney if better prices can be achieved exporting through Queensland.

<http://www.theaustralian.com.au/business/latest/narrabri-gas-may-go-to-qld/story-e6frg90f-1227154712851>

October 2014

Not only is the gas industry cartel foisting its price hikes on consumers, says energy analyst Bruce Robertson, it is also using high prices as a method of developing a high-cost domestic source of gas. Australia will soon be the largest exporter of gas in the world yet beleaguered consumers are forking out wholesale gas prices of about \$7-\$8 a gigajoule. The second largest exporter is Qatar where the locals pay \$1-\$2 a gigajoule.

<http://www.smh.com.au/business/comment-and-analysis/the-gas-clubs-deals-like-their-product-are-not-to-be-seen-20141016-11726r.html>

July 2014

According to a recent Deloitte Access Economics report, commissioned by half-a-dozen industry groups:

“While the gas and construction sectors are expected to benefit from the development of a new East Coast LNG industry, almost all other sectors within Australia’s economy are likely to experience losses in income”.

The report warns that the manufacturing sector alone will contract by as much as \$118 billion by 2021, with nearly 15,000 jobs lost if rapidly rising domestic gas price rises caused as the market links in with international prices, go unchecked.

<http://www.abc.net.au/news/2014-07-21/high-gas-prices-threaten-thousands-of-jobs-billions-of-dollars/5610846>

<http://www.macrobusiness.com.au/wp-content/uploads/2014/07/Deloitte-Gas-Market-Transformations-Manufacturing-Impacts-Report-web-final-July-14-2014.pdf>

May 2014

Export parity pricing of gas leads to domestic price gouging. According to a Credit Suisse internal industry report presented to the NSW Independent Pricing and Regulatory Tribunal in May 2014:

“Santos now argues that its aim in GLNG was always as much about raising the domestic gas price, and therefore re-rating large parts of the portfolio outside of GLNG, as it was about the project.”

The report says there is a negative impact to Australian GDP of 0.8% for each \$2 rise each gigajoule in the domestic gas price, which “certainly wouldn’t have been terribly popular with politicians who approved the project”.

<http://www.theguardian.com/world/2014/may/13/santos-accused-of-using-cynical-strategy-to-lift-gas-price-in-australia>

March 2014

The industry should be regulated more rigorously in the interests of protecting our local gas consumers and our democracy.

Simply increasing production in NSW will not lead to a cheap and plentiful gas supply in NSW without government intervention. In order to overcome the prospect of our local market facing supply restrictions and export parity pricing, action is needed to

- restrain local retail prices
- restrict exports by reserving gas for local use
- tax gas exporters and redistribute the proceeds appropriately to ensure affordable domestic supply is maintained
- Legislate to prevent hoarding of gas reserves in the hands of non-compliant companies.

<http://www.theguardian.com/business/grogonomics/2014/mar/21/why-increasing-coal-seam-gas-supply-will-result-in-higher-gas-prices>

December 2013

Two things can be done, and should be done, to stave off escalating gas prices. The first is to introduce a "domestic reservation policy" so the nation's natural endowment can be directed firstly, and more cheaply, into the local economy. Selling gas to Japan and China may mean higher prices for producers but the upward pressure feeds through into higher energy costs for the domestic market.

In short, all businesses and consumers lose, except gas producers. Many are already hurting. In a speech last month to the East Coast Gas Outlook Conference by Innes Willox of the Australian Industry Group, Willox said a survey of gas users found one in 10 was unable to lock in a contract at all. A third was unable to get a realistic offer and a quarter was only able to source an offer from one supplier.

The second thing needed to ensure supply is to bring in a "use it or lose it" policy to prevent mining companies from locking up prospective ground - keeping their rivals off it and keeping commodity prices up.

<http://www.smh.com.au/business/gas-majors-hot-air-and-supply-20131201-2yjqq.html>

6. The gas industry's benefits to Australia are not commensurate with its economic, social and environmental costs.

March 2014

The CSG industry clearly does create some jobs. But the number of people it employs is far lower than many of the industry's exaggerated claims suggest. The whole oil and gas industry employs only 20,700 people.

According to Australian Bureau of Statistics and Australian Taxation Office figures, the oil and gas industry paid an effective corporate tax rate of six per cent. The statutory corporate tax rate in Australia is 30 per cent.

In 2010-11 the oil and gas industry made \$20.2 billion in profit, representing approximately six per cent of all Australian profit in that year. This compares to 0.2 per cent of employment.

<http://www.tai.org.au/content/fracking-future>

7. Gas is not a transition fuel

July 2014

Gas industry pricing has in fact led a transition back to coal:

Stanwell, one of Queensland's government-owned electricity companies, will bring a coal-fired generator at its Tarong Power Station back into service this month, because the rising export parity price of gas makes its own Meandu mine coal a cheaper proposition.

<http://www.abc.net.au/news/2014-07-03/electricity-providers-return-to-coal-fired-power-as-natural-gas/5567252>

June 2014

Common sense leads to the conclusion that investment in gas processing plants with an operating life of 40 years is not facilitating a transition to renewable energy sources in time to avert climate disaster.

<http://www.commondreams.org/views/2014/06/10/new-environmentalism-unfractured-future>

June 2014

A Princeton University study has found that leaks from abandoned oil and gas wellbores pose not only a risk to groundwater, but represent a growing threat to the climate.

Between 200,000 and 970,000 abandoned wells in the state of Pennsylvania are likely to account for four to seven per cent of estimated man-made methane emissions in that jurisdiction, a source previously not accounted for, the study says.

<http://www.thetyee.ca/News/2014/06/14/Oil-Wells-Spout-Methane/>

June 2014

Australia currently aligns with a fringe group of nations: petro-states like Canada, Saudi Arabia and Turkey, who have snubbed or actively blocked multilateral attempts to reduce global emissions.

<http://www.theguardian.com/environment/southern-crossroads/2014/jun/05/g20-climate-change-agenda-obama-abbott>

August 2013

The claim that CSG can act as a bridging fuel cannot be substantiated. The level of fugitive emissions for unconventional gas is simply unknown and far more research needs to be done before the claims by the gas industry can be taken seriously. The impact of increasing the release of methane into the atmosphere is also problematic since it has the potential to cause substantial short term warming at a time when the world is moving too slowly to combat climate change.

New South Wales has an opportunity to operate on the right side of history. Renewable energy is becoming cheaper and its use is imperative on environmental and climate change grounds.

8. There are growing reports of adverse effects from gas mining and opposition to its imposition by force on unwilling communities

December 2014

In a 70 page report, Concerned Health Professionals of New York has aggregated findings from scientific, medical, and journalistic investigations, indicating that fracking poses significant threats to air, water, health, public safety, and long-term economic vitality.

The report shows rapidly expanding evidence of harm but fundamental data gaps still remain, largely because of industry secrecy, government inaction, non-disclosure agreements and sealed court records.

Concerned Health Professionals considers a moratorium on unconventional oil and natural gas extraction (fracking) the only appropriate and ethical course of action while scientific and medical knowledge on the impacts of fracking continues to emerge.

<http://concernedhealthny.org/wp-content/uploads/2014/07/CHPNY-Fracking-Compendium.pdf>

August 2014

More families living in the vicinity of QGC's Kenya gas field near Tara Qld are calling for the company to buy them out. They are surrounded by hundreds of wells with a compressor station 3km away that keeps them awake at night, they will not drink the water from their tanks, they have given up on growing vegetables and cane toads lie dead outside the house after rain.

<http://www.couriermail.com.au/news/queensland/tara-residents-want-out-as-coal-seam-gas-mining-takes-hold/story-fnihsrf2-1227033653813>

October 2013

An observer's impressions of life in the Queensland town of Wandoan after a gasfield invasion show extensive community dislocation.

<http://nofibs.com.au/2013/10/16/wandoan-thriving-dying-either-way-new-name-town-anniekia-reports/>

A litany of other adverse effects arises from this industry relating to its impacts on water, soil, air, real estate, earthquakes and so on.

Finally and probably most importantly, the clear majority of the NSW's community does not want this industry. Certainly prospective host communities do not want the industry.

November 2014

A group of leaders from Jewish, Christian, Hindu, Muslim, Buddhist and indigenous communities have signed an open letter describing fossil fuel subsidies as an unacceptable threat to the natural world and human life.

They have called for a rapid and just transition away from fossil fuels and towards renewable energy saying that to do otherwise will result in unthinkable suffering.

<http://www.theaustralian.com.au/business/latest/religious-group-urge-g20-climate-action/story-e6frg90f-1227120233365>

July 2014

The World Council of Churches, an umbrella group representing 345 churches or more than half a billion Christians worldwide, after considering its ethical investment criteria has said it decided to no longer fund oil, gas, or coal at its central committee meeting in Geneva, and urged that its members, including the 25 million-member Church of England, do the same.

<http://reneweconomy.com.au/2014/churches-representing-500m-christians-pull-fossil-fuel-investments-13082>

May 2014

The police action to remove an anticipated 7,000 anti-gas protesters from the Bentley Blockade near Lismore NSW could have cost taxpayers well over \$8 million involving police using helicopters, dogs, horses and possibly water cannon.

More than 40 accommodation providers stretching from Casino to the Tweed were booked out by the NSW police for a period of 20 nights commencing 18 May to accommodate the (700 – 800) officers. They have effectively lost approximately \$50,000 in revenue due to the cancellation of the police action.

<http://www.accomnews.com.au/industry/154-news-in-brief/3934-40-hoteliers-anger-over-police-3-day-cancellation>

Large sections of the community do not trust or respect governments that display an unswerving dedication to satisfying the demands of the mining industries when these demands are clearly not in the interests of the wider community.

This parliamentary inquiry has an opportunity to help expose the ill-conceived and self-serving demands of the gas industry, propose remedies that stop its spread through New South Wales and restore faith in democracy.