



Gas Cannot Stimulate the Economy, Reduce Emissions, or Provide Cheap Power

Australia's National COVID-19 Coordination Commission Is Not Serving the National Interest

Executive Summary

The Australian federal government has sought to map out the economic recovery from the COVID-19 pandemic via appointing the National COVID-19 Coordination Commission (NCCC).

The NCCC is looking to shore up the fortunes of the failed East Coast Australia coal seam gas (CSG) to liquefied natural gas (LNG) industry and is attempting to stimulate gas-based manufacturing in Australia. Its' model is to heavily subsidise gas infrastructure, gas projects and gas manufacturing.

The NCCC also looks to the U.S. as a successful model for producing low gas prices. Whilst it is true that gas prices are low in the U.S., it neglects the fact that the U.S. fracking industry has been unprofitable for most of the last decade and is currently suffering a depression and a tidal wave of bankruptcies. It is not a sustainable business model to follow.

**The U.S. fracking
industry is not a
sustainable business
model to follow.**

The gas industry is currently delaying projects, shutting in LNG capacity, and cutting capital expenditure budgets as gas prices plunge to all-time lows. The NCCC is trying to stimulate the Australian economy by subsidising an industry at a time when even those within the industry are not investing.

The Commission's favoured industrial project is an ammonia-based fertilizer and explosives factory at Narrabri in New South Wales. It neglects to look at world markets where ammonia-based fertilizers are at 10-year lows making any investment dependant on large government subsidies.

The East Coast CSG to LNG industry is a financial failure. Since 2014, the three companies leading the industry wrote off over \$19 billion, before the recent crash in oil and gas prices. Further large write-offs are assured in the next 12 months.

The NCCC and the government are propping up a failed industry that has demonstrably destroyed wealth. They should search for growing sectors in our economy with bright futures. A "gas-led" recovery is not possible and should not be pursued.

Introduction

The gas industry has again shown its influence in the corridors of power in Canberra and the other state capitals.

Angus Taylor MP, Minister for Energy and Emissions Reductions in the Australian government has called for a “gas-led” recovery post the COVID-19 global pandemic.

The government’s hastily created advisory body, the National COVID-19 Coordination Commission (NCCC) has echoed those calls, coming up with a number of suggestions to promote gas exploration, gas pipelines and gas-fired power stations.

A recently [leaked report](#) gives a very good insight into the government’s hand-picked Commission’s thinking on gas.¹ Essentially the NCCC sees four principal areas where the government can stimulate the economy:

1. Via direct subsidies to new gas ventures;
2. Via subsidising a massive \$5-6 billion pipeline across Australia;
3. Reducing environmental legislation; and
4. Subsidising gas intensive manufacturing.

This report will provide an overview of the gas industry, both in Australia and globally, to show that the government is backing a losing industry. Gas is not the stimulus to take the Australian economy forward post COVID as it is already a sinking ship.

¹ ABC. [Government's COVID Commission manufacturing plan calls for huge public gas subsidies.](#) 21 May 2020.

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The Gas Industry Is Currently Shrinking, Not Expanding

Using the gas industry to stimulate the economy is not possible in the current low gas price world where projects around the country, and the globe, have been put on hold.

Australian energy company's Santos and Origin have trimmed their exploration budgets. Santos announced a \$550 million (38%) reduction in its' 2020 capital expenditure. In February 2020, Santos put its \$7bn [Barossa field](#) development on "ice" and has withdrawn from its proposed Northern Territory projects for the foreseeable future.² Origin has stalled projects for the short term, but are looking to restart its Beetaloo fracking exploration in the Northern Territory in June 2020.

Santos announced a \$550 million (38%) reduction in its 2020 capital expenditure.

Gas producer Woodside has also postponed final investment decisions for its Western Australian Scarborough, Pluto Train 2 and Browse liquefied natural gas (LNG) growth projects (collectively called the Burrup Hub) worth more than \$50 billion, in a response to the oil price crash and the COVID-19 pandemic. Woodside will reduce capital expenditure budgets by \$2.7bn, a 60% reduction.

Clearly, gas companies are not seeing a "gas-led" recovery without massive subsidies.

Clearly the gas companies are not seeing a "gas-led recovery" without massive subsidies.

International Demand Will Remain Weak

International demand for LNG is very weak and gas prices are at historic lows (see Figure 1). Japan is the world's second largest importer of LNG and comfortably the largest market in Australia's key region, Asia. In April, Japan imported 5.13 million tonnes (MT) of LNG, down 8.8% from a year earlier and the lowest level since May 2010. While volumes may somewhat recover post COVID-19 the Japanese market has been declining for several years as renewables and the restart of nuclear power plants post Fukushima combine with declining demand.

The global gas industry was already suffering from a glut in supply pre-COVID as the overbuilding of LNG production facilities had outstripped demand. The COVID crisis has prolonged that glut in supply out to 2028-2030.

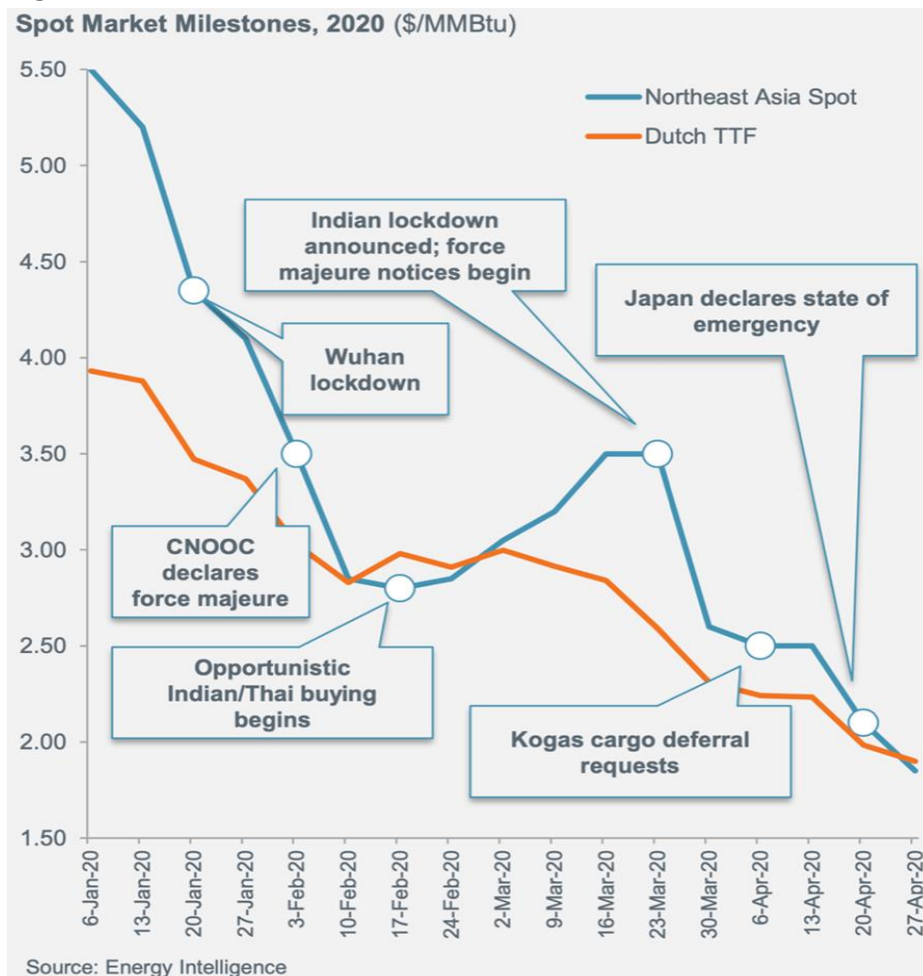
² AFR. [Santos nudges back Barossa gas go-ahead](#). 20 February 2020.

The COVID Commission is particularly scathing of State governments who have failed to approve gas fracking projects. East Coast Australia is a high cost producer of gas. According to Rystad Energy³, if current pricing persists, 18% of east coast gas production is uneconomic, and 67% of undeveloped gas fields in Australia are uneconomic at current prices.

A gas-led recovery suggests that gas globally is in high demand and garnering a return on investment. This is not the case.

With enough government subsidy, any project can be economic. As a nation coming out of an economic lockdown and looking for ways to stimulate our economy, we cannot afford to subsidise a loss making industry.

Figure 1: International Gas Prices Have Crashed in 2020




Source: Energy Intelligence

³ Rystad Energy. Up to 42% of Australian gas resources uneconomic at current LNG netback prices. 3 April 2020.

The Gas Pipeline Across Australia Idea Has Already Been Proven Uneconomic


The idea of a \$5-6bn pipeline across Australia was found *not* to be economic by ACIL Allen Consulting 18 months ago.⁴ This pipeline is an old idea taken out of the rubbish pile. It would take billions in direct subsidies to get the pipeline off the ground and would embed gas in Australia's energy system until well past 2050, which would then be a breach of our Paris Climate accord undertakings.

In response to the government's announcement for a gas-led recovery, Director Owen Kelp from ACIL Allen Consulting said that they stood by their report of 2018 (see below). I actually disagree with Owen Kelp. The situation has got much worse for the economics of the West-East pipeline simply because gas prices are now so low.



Owen Kelp • 2nd
Director at ACIL Allen Consulting
2d • 🌐

Our report in 2018 found that a West-East gas pipeline was not the best option for dealing with supply issues on the East coast of Australia. Despite current commodity market upheavals, its unlikely things have changed.



✓

\$6b trans-Australia gas pipeline gets fresh legs
afr.com • 4 min read

Source: *LinkedIn*

⁴ The West Australian. [West-east gas pipe dream fails to add up](#). 17 January 2019.

The Government Wants to Maintain “Cheap” Domestic Gas, but What Is Cheap?

In announcing its gas-led economic recovery package, the Australian government also stated that it wants to [keep gas prices at \\$6-7/gigajoule \(GJ\)](#) in the medium term⁵, a price it views as low.

Keeping gas prices at this level however is simply not possible without a comprehensive domestic gas reservation policy on both new and existing gas fields on over 30% of current east coast production. The east coast of Australia is likely the only gas producing area in the world without a domestic gas reservation policy. The gas reservation policy of Western Australia diverts a percentage of LNG exports to the local market, suppressing domestic gas prices.

The price the government is aiming for (A\$6-7/GJ) is twice the average gas price in the U.S.

The eastern Australian gas market is controlled by a handful of producers behaving as a cartel; they have successfully kept the gas price in eastern Australia at levels well above international parity pricing for substantial periods of time since 2014.

The price that the government is aiming for (A\$6-7/GJ) is **twice** the average gas price in the U.S. in the last 12 months. Australia simply cannot compete with expensive gas.

Gas Intensive Manufacturing

Ammonia Based Fertilisers/Explosives Top the List

Ammonia based fertiliser plants are touted by the COVID Commission as being at the top of the list of projects in its vision for a gas-led recovery, followed by petrochemicals and methanol.⁶

One of the key projects that the COVID Commission is backing is the proposed Perdaman ammonia nitrate plant at Narrabri, New South Wales, which is still in the preliminary stages of project development.

In February 2019, Santos and Perdaman Chemicals and Fertilisers signed a non-binding agreement for the supply of 14.5 petajoules (PJ) of gas per annum over 20 years, subject to a final investment decision on Santos' proposed Narrabri Gas

⁵ AFR. [Cheap gas to power recovery](#). 20 May 2020.

⁶ Daily Telegraph. [National COVID-19 Co-ordination Commission boss Nev Power supports Perdaman ammonia plant](#). 24 April 2020.

Project.⁷ In August 2019, Santos and Perdaman then signed a heads of agreement for the further study and design of Perdaman's new ammonia production facility using Narrabri gas.

Whilst the COVID Commission is pushing more ammonia plants, existing industry participants have been struggling to survive. Orica have two ammonia nitrate plants: one in Alberta, Canada and one in Newcastle NSW. Orica CEO Alberto Calderon said that the Newcastle plant, which employs about 300 people, was highly efficient, however the company was considering importing ammonia rather than producing it on site:

"Despite their similarity, the Australian site is in the last quartile in regards operational efficiency when compared to the broader industry. However, when the impact of the high price of Australian natural gas is factored out of the analysis, this site joins our Canadian plant as being among the most efficient across the sector."

*"Put simply, the price of Australian gas makes our Australian plant uncompetitive in the global context."*⁸

Ammonia based fertiliser prices are currently [at 10 year lows](#). It is simply not possible to build a fertiliser plant with high cost feedstock in the current environment.

With this in mind, there should be little prospect for the Perdaman ammonia plant to progress in the medium term.

The COVID Commission must be misinformed to be targeting gas intensive manufacturing in an over supplied ammonia market. It will simply not be possible to advance such projects in such a weak global market for these commodities.

Global Petrochemicals Are Oversupplied With Very Weak Pricing

Two of the major petrochemical products globally are the plastics: HDPE (High Density Polyethylene) Injection GP and HDPE Extrusion film HWM.

Plastics Exchange, which tracks spot prices in the plastics market, puts HDPE Injection GP sales spot market prices at 32 to 40 cents/lb. as of 15 May 2020, and HDPE Extrusion film hwm at 32 to 39 cents/lb. Both products were over \$1/lb in 2014-15. Clearly prices are very weak in North America for these global commodities.

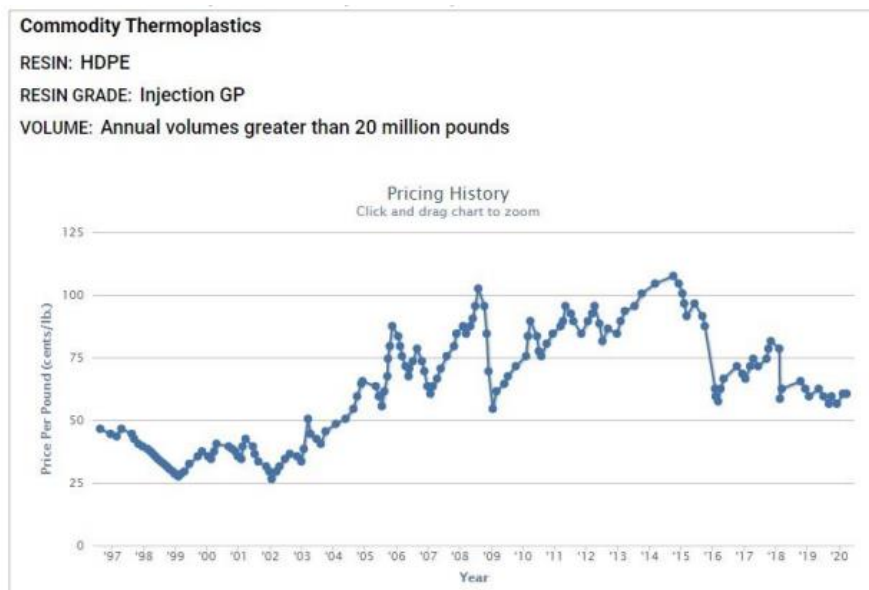
⁷ Perdaman. [Local Narrabri jobs hub a step closer](#). 2 August 2019.

⁸ Newcastle Herald, ['The High Price of Gas has made the Operation Uncompetitive on a Global Level'](#), 8 March 2019.

Globally, petrochemicals, and particularly plastics, are oversupplied and have weak pricing. According to the International Energy Agency (IEA)⁹, the pace of investment in petrochemical facilities in recent years has moved well ahead of the pace of demand growth. The over capacity has led to a significant drop in ethylene prices across the board. Earnings of many chemical companies fell sharply by 60-80%, compared with 2018. The IEA notes that a confluence of weakened economic outlook and over capacity casts clouds over industry margins and utilisation rates in the coming years. The IEA also notes headwinds from a growing backlash against plastic waste, citing bans on single use plastics and plastic bags.

Breaking into a globally over supplied market in the short and medium term is problematic for new projects.

Figure 2: Commodity Price History: HDPE Injection GP (1997-2020)

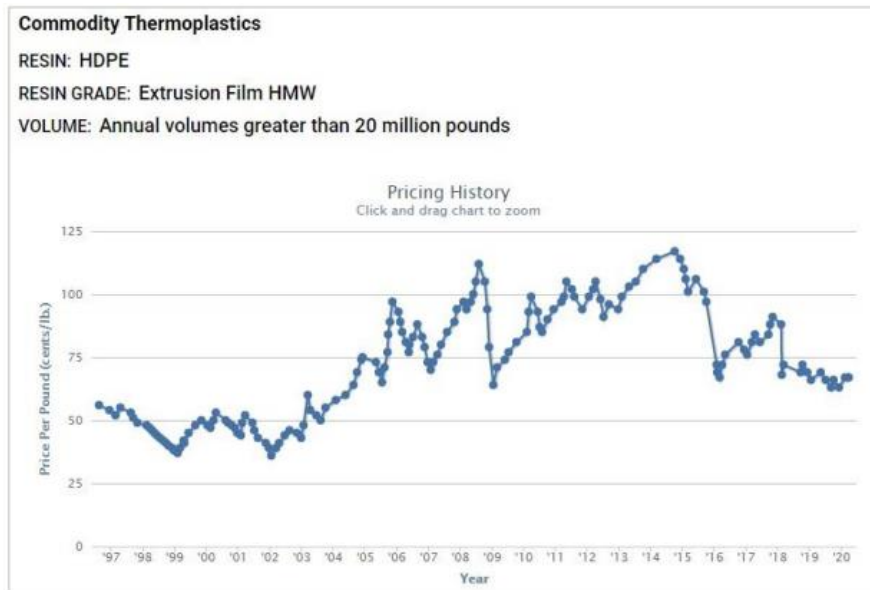


Source: IEEFA¹⁰

⁹ IEA. World Energy Investment 2020. Page 53.

¹⁰ IEEFA. Proposed PTTGC Petrochemical Complex in Ohio Faces Significant Risks. March 2020.

Figure 3: Commodity Price History: HDPE Extrusion Film HWM (1997-2020)



Source: IEEFA ¹¹

The COVID Commission Wants Australia to Follow the U.S. Fracking Industry Model

The COVID Commission's leaked report sees the U.S. as the business model Australia should be following for cheap gas.¹² This shows a lack of understanding of the economics of gas in the U.S.

The U.S. fracking industry is collapsing. The Baker Hughes rig count records the number of operating oil and gas rigs in the U.S. As of 22 May 2020, the rig count was 318 operating rigs, down 665 rigs on the count a year ago.¹³

U.S. fracking companies have essentially been **unprofitable** for the last decade. Equity and debt markets have lost patience. There will be a flood of bankruptcies.

North American oil exploration and production companies have \$US86 billion in debt that will mature between 2020 and 2024, and pipeline companies

U.S. fracking companies have essentially been unprofitable for the last decade.

¹¹ Ibid

¹² National COVID-19 Coordination Commission. Manufacturing Taskforce. Interim Report. Page 23.

¹³ Baker Hughes. [Rig Count Overview & Summary Count](#).

have an additional \$US123 billion in debt coming, due over the same period, according to Moody's.¹⁴

Already one of the largest shale fracking companies in North Dakota, [Whiting Petroleum](#) has gone bankrupt. [Callon Petroleum](#) has called in the merchant bankers to restructure its debt. The ASX listed LNG Ltd is expected to run out of cash in May.

Following the U.S. fracking loss-making business model is a way to destroy the wealth of Australia.

Australia Is Backing a Losing Industry

Santos has written off nearly \$7bn since 2014¹⁵ on its failed coal seam gas (CSG) to LNG experiment. Origin Energy¹⁶ has written off over \$3bn in the same time frame. BG Group (now part of Shell) was forced to write off \$8.7bn¹⁷ in early 2015. Total losses on the failed CSG to LNG industry from these three companies alone total \$19bn.

These extraordinary (in every sense of the word) write-offs are before the coronavirus-infected demand slump. Export oil-linked contracts declined to less than A\$7/GJ at US\$ 35/bbl. The east coast plants cannot operate profitably at these levels. Further material write-offs are a given.

Governments in Australia should not be subsidising this loss making, wealth destroying industry.

¹⁴AFR . [Indebted US oil companies further strained as prices collapse](#). 22 March 2020.

¹⁵ Santos Annual Reports.

¹⁶ Origin Energy Annual Reports.

¹⁷ABC. [Shell pounces on a wounded BG Group , hit by sliding oil prices](#). 9 April 2015.

Gas Intensive Manufacturing Relies on Cheap Prices

These Cannot Be Achieved

The COVID Commission relies on cheap gas to stimulate manufacturing on the east coast of Australia. The price it nominates as achievable is \$4/GJ.¹⁸ This price is simply not attainable.

Rystad Energy¹⁹ stated that at USD34/barrel of oil (A\$7/GJ export gas price), 67% of Australia's discovered but undeveloped gas resources are not economic, and a staggering 18% of current operating wells are loss making on the east coast.

**67% of Australia's
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It is not just Rystad that states this. Core Energy, in its study for the ACCC: "Gas Production Cost Estimates – Eastern Australia November 2018", came up with equally damaging Forward Cost *estimates* (see Figure 4).

It is interesting to note that the coal seam gas forward production cost estimates are in the range of \$4/GJ to \$6.70/GJ (note Camden ceases production in 2023).

We cannot really look at the forward cost estimates for the lower cost sources of gas, such as conventional gas in the Bass Strait, for that resource is in decline post 2023-4.²⁰ The other major conventional source of cheap gas, the Cooper Basin, sees costs rise from \$2.95 for existing developed fields to \$6.25/GJ for undeveloped gas fields.

Essentially the cheap gas has already been used up and the future of gas post 2023 is for higher cost sources to be developed. This makes the job of delivering \$4/GJ gas to manufacturers very challenging without massive government subsidies or a comprehensive domestic gas reservation on *existing* and potential fields.

¹⁸ National COVID-19 Coordination Commission. Manufacturing Taskforce. Interim Report. 14 May 2020. Page 22.

¹⁹Rystad Energy. [Up to 42% of Australian gas resources uneconomic at current LNG netback prices](#). 3 April 2020.

²⁰ AEMO. Gas Statement of Opportunities 2020. Page 49.

Figure 4: Forward Production Costs (Core Energy/ACCC)

Supply Region	Basin	Resource Type	Reserves 31 Dec 2017 (PJ)	Forward Cost (AUD/G)			Lifecycle Cost (AUD/G)		
				Low Estimate	Best Estimate	High Estimate	Low Estimate	Best Estimate	High Estimate
Gippsland Basin Joint Venture excl. Kipper	Gippsland Basin	Conventional	2,377	2.35	3.90	4.75	3.30	3.60	4.10
Kipper	Gippsland Basin	Conventional		1.90	2.90	3.70	6.10	8.25	9.10
Longtom	Gippsland Basin	Conventional	355	2.90	3.20	3.70	4.90	5.60	6.30
Sole *	Gippsland Basin	Conventional		4.85	5.60	6.15	5.15	6.50	7.10
Camden Gas Project	Sydney Basin	CSG	33	1.80	2.40	3.40	4.30	5.10	5.90
Bass Gas Project	Otway Basin	Conventional	80	1.90	2.85	3.10	3.85	4.55	4.95
Casino, Henry & Netherby	Otway Basin	Conventional	121	1.65	2.30	3.10	3.10	4.00	4.35
Otway Gas Project	Otway Basin	Conventional	189	1.90	2.65	3.10	3.35	4.55	4.80
Halladale, Blackwatch & Speculant	Otway Basin	Conventional	26	4.25	4.90	5.40	4.45	5.40	6.30
Minerva	Otway Basin	Conventional	3	1.85	2.10	3.20	3.10	3.50	3.75
Cooper Basin Joint Venture - Developed	Cooper Basin	Conventional	916	2.50	2.95	3.50	3.50	4.50	5.25
Cooper Basin Joint Venture - Undeveloped	Cooper Basin	Conventional		5.50	6.25	6.90	5.60	6.95	9.70
Beach Energy Wet Gas	Cooper Basin	Conventional	10	1.90	2.65	3.10	5.15	5.70	6.50
Southern Comet Ridge	Bowen Basin	CSG	3,907	3.40	4.00	5.70	5.40	6.00	8.70
Middle-North Comet Ridge	Bowen Basin	CSG	452	4.90	6.30	7.90	5.00	6.50	8.40
Middle-North Bowen/ Denison/Mahalo	Bowen Basin	CSG	1,228	5.50	6.40	8.25	5.60	6.70	8.85
Burunga	Bowen Basin	CSG	579	3.50	4.30	6.60	5.00	6.60	8.85
Undulla Nose	Surat Basin	CSG	7,995	2.70	3.65	5.15	4.70	6.05	8.15
Ironbark	Surat Basin	CSG	253	5.35	6.70	8.10	5.45	6.80	8.25
Combabula/Ramyard	Surat Basin	CSG	4,389	3.30	4.20	5.55	5.30	5.90	8.55
Eastern Surat	Surat Basin	CSG	9,867	3.30	5.30	7.10	4.80	6.50	9.20
Middle Surat & Roma Shelf	Surat Basin	CSG	9,260	3.80	5.55	7.40	5.20	6.80	8.50
Surat/Bowen/Denison Conventional	Surat Basin	Conventional	247	4.10	5.85	7.70	4.20	6.25	7.90

* Sole forward costs are presented on a pre development basis. Once comes online and wells are complete best estimate of forward cost is \$2.90.

Source: Gas Production Cost Estimates Eastern Australia ²¹

²¹ ACCC / Core Energy and Resources. Gas Production Cost Estimates Eastern Australia - ACCC Gas Market Inquiry. November 2018. Page 19.

The COVID Commission believes it can achieve cheap gas on the east coast of Australia via the following methods:

1. Increasing the supply of coal seam gas
2. Removing green and red tape
3. Establishing a forward-looking reservation policy
4. Stimulating demand for gas by producing hydrogen with gas
5. “Creating” a market via subsidising supply at priority supply hubs
6. Subsidising pipelines and other infrastructure
7. Reforming the pipeline system
8. Introducing a ‘use it or lose it’ policy for exploration and production leases.

Figure 5: National COVID-19 Coordination Commission Manufacturing Taskforce Interim Report - Gas Market Recommendations



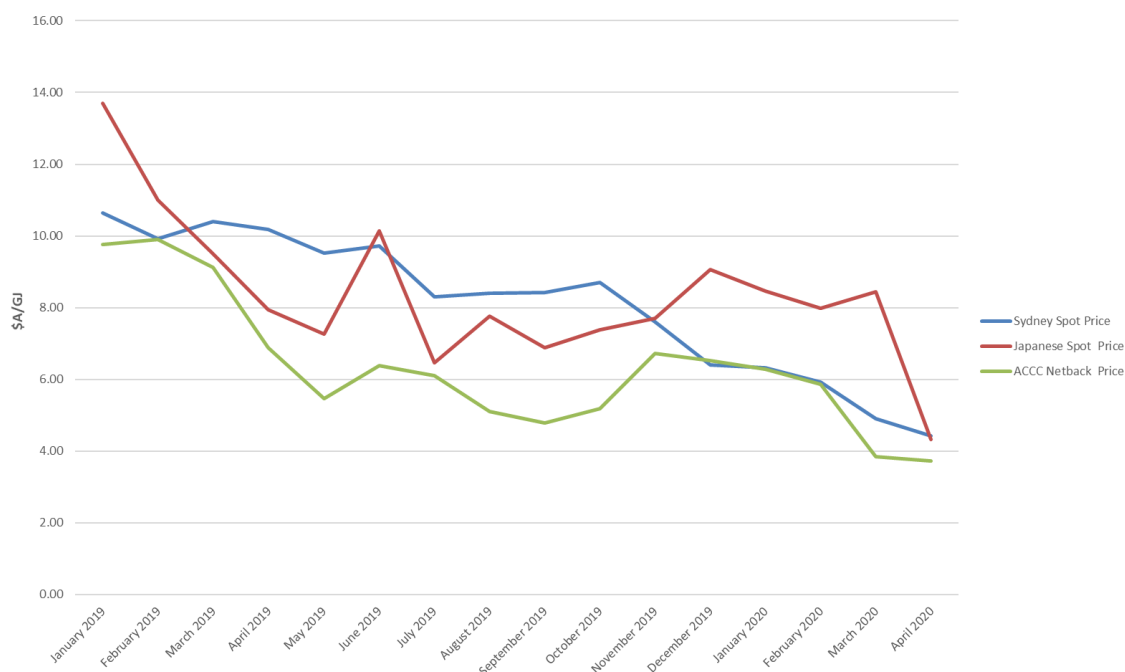
Source: National COVID-19 Coordination Commission Manufacturing Taskforce – Interim Report. Page 19.

1. Increasing the Supply of Coal Seam Gas

We are currently seeing gas projects around the country stall as private investment dries up. Clearly the private sector has withdrawn from increasing supply as they simply cannot make money at current prices for gas *under \$7/GJ* for contracted export gas, and less than \$3/GJ for spot gas, on international markets. Since 2014 we have seen gas supply triple on the east coast of Australia and for very long periods of time gas prices have been above international parity prices.²²

The ACCC netback price is the indicator price that Australia should use to assess domestic gas prices. For substantial periods of 2019, the Australian domestic gas price was not only above the netback price, it was also above the Japanese price for gas. It was cheaper to buy Australian gas in Japan than in Sydney.

Figure 6: Spot Gas Prices in Japan and Sydney and the ACCC Netback Price January 2019 – April 2020



Source: Australian Energy Market Operator (AEMO), Ministry of Economy Trade and Industry (METI), Australian Competition and Consumer Commission (ACCC)

²² See IEEFA. [Towards a Domestic Gas Reserve](#). July 2019.

2. Removing Green and Red Tape

Assessment of any mining/drilling project currently involves assessing the impacts of that project on the environment. The coal seam gas industry *does* impact ground water and surface water.

Up to 101 bores in Chinchilla, Roma and Miles are expected to be affected by CSG activity within the next three years, according to the latest draft Underground Water Impact Report from the Queensland Office of Groundwater Impact Assessment.²³ All will be subject to make-good agreements, where gas companies are obligated to make up for the damage done. The report outlines that in the long-term, an estimated 574 bores will be affected by CSG companies. CSG is a short term industry: 30 years is the expected life of LNG plants, whereas field life is much shorter at 5-10 years. The water impacts however are long term. There is a timing mis-match. The impacts will be around long after the industry is consigned to history. Cutting green tape risks sound assessment of the environmental impacts of gas projects.

3. Establish a Forward Looking Reservation Policy

IEEFA has been advocating for a full domestic gas reserve on existing and future gas production, and our paper *Towards a Domestic Gas Reserve*²⁴ fully explains the rationale. Essentially, for a domestic gas reserve to be effective, it must over supply the domestic market. A future reserve, as proposed by the NCCC, will not achieve this and hence will not be successful in putting downward pressure on gas prices.

Queensland has used a forward looking reservation policy. It has not achieved prices at or below international parity pricing. It has favoured a few large domestic manufacturers and is not available to smaller businesses or domestic customers.

4. Stimulate Demand for Gas by Producing Hydrogen With Gas

The NCCC is looking to “Coordinate with hydrogen development to ensure long-term demand potential (including avoiding demand destruction)”.²⁵ Essentially, it is viewing hydrogen *not* as a low emissions alternative to the greenhouse gas intensive gas industry, but rather as a fuel to stimulate gas demand. Despite every State and Territory in Australia

The NCCC is looking to embed gas in the long term energy future of Australia.

²³ Chinchilla News. [Farmer speaks out about CSG impact on water aquifers](#). 5 July 2019. And, Office of Groundwater Impact Assessment. [Underground Water Impact Report for the Surat Cumulative Management Area](#). July 2019.

²⁴ IEEFA. [Towards a Domestic Gas Reserve](#). July 2019.

²⁵ National COVID-19 Coordination Commission. [Manufacturing Taskforce Interim Report](#). 14 May 2020. Page 19.

having a net zero emissions target by 2050, the NCCC is looking to embed gas in the long term energy future of Australia.

5. “Create” a Market Via Subsidising Supply at Priority Supply Hubs

The NCCC recognises the Australian public has been poorly served by the gas industry. The core reason why a massive increase in gas supply on the east coast of Australia since 2014 has led to higher gas prices is that there is no “market” for gas. A small number of gas companies control the pricing of gas. This “cartel” of producers has ensured Australians pay excessive prices for gas. Numerous ACCC gas enquiry reports and speeches by the Chairperson of the ACCC²⁶ have highlighted the price gouging of the domestic consumer by the gas cartel.

In its latest gas inquiry report²⁷, the ACCC continues to highlight the pricing power of the gas producers:

“Prices offered in the East Coast Gas Market have remained relatively steady, mostly within a range of around \$9–12/GJ. However, domestic price offers have not fallen in line with the decline in LNG netback (export parity) price expectations for 2020. We have also observed some prices offered by producers in Queensland include a fixed price component, on top of an LNG spot price linked component. The divergence of domestic offers from expected LNG prices is a key concern for the ACCC and we will investigate this further in 2020.”

The ACCC also highlighted that high gas prices contributed to the closure of a number of companies and plants:

“RemaPak and Claypave announced in the first quarter of 2019 that they would go into administration, and both are now in liquidation. The trend of companies closing what have become unprofitable regional plants (due to high gas prices) has also continued in the second half of 2019, with Kimberley-Clark closing its western Sydney plant and Norske Skog announcing the sale and closure of its Albury Mill.”

The solution is not to subsidise supply, but rather enact a domestic gas reservation on existing and prospective gas fields for a percentage of gas greater than current domestic consumption.

6. Subsidise Pipelines and Other Infrastructure Through Tax Incentive and Direct Equity in Projects

The NCCC is suggesting that the broader Australian public, already price gouged for years by the gas cartel, should subsidise inefficient investment in otherwise uneconomic infrastructure for the benefit of the gas cartel. The gas industry should not be subsidised any longer.

²⁶ SMH. 'Sense of contempt': ACCC boss slams gas suppliers. March 2019.

²⁷ ACCC. Gas Inquiry 2017-2025 Interim Report. January 2020. Page 1.

7. Reforming the Pipeline System

The NCCC suggests that we should revisit pipeline rates of return and improve access to pipeline services. Pipelines are monopoly assets and their returns are sometimes regulated. In most instances in Australia, pipeline companies are lightly regulated or unregulated. Where exemptions to the National Gas Laws are granted, the spoils for pipeline companies are massive.²⁸ Pipeline companies' returns in Australia are high, and the NCCC is correct in calling for the government to revisit pipeline rates of return and improve access to pipeline infrastructure. Both of these reforms will assist gas prices to fall, but only if they are combined with a full domestic gas reserve. On their own, the savings will accrue to the gas cartel, not to the consumers.

8. Introducing a 'Use It or Lose It' Policy for Exploration and Production Leases

One of the ways in which the gas cartel on the east coast of Australia has successfully manipulated domestic gas prices over many years has been by starving the domestic gas supply. Essentially, the gas cartel already has many permitted fields that they have simply refused to develop for many years. A classic example of this is Shell and PetroChina's Arrow energy gas fields in the Surat Basin (Western Darling Downs) region which were recently given the investment go ahead after many delays.²⁹ A 'use it or lose it' policy has been much talked about in the past, but there simply has not been the political will to force gas companies to develop fields.

The Gas Industry Through the NCCC has its Hands Out For Extensive Government Subsidies

Yet the Industry Is a Very Poor Tax and Royalty Payer

If the NCCC recommendations are followed, the gas industry is looking at receiving substantial subsidies from the federal government. Yet for years, the gas industry has been a very poor contributor to federal income taxes and to royalties both onshore and offshore.

Offshore royalties were replaced with the Petroleum Resources Rent Tax (PRRT). Despite the LNG boom, the government's PRRT take from the industry is set to fall \$450m over the four-year budget estimates, from \$1.4bn annually today. The PRRT expects forecast to decline despite the fact that gas production is forecast to increase.³⁰ Some projects will pay never pay PRRT, ever.

²⁸ Michael West Media. [Gas deal: "a massive transfer of wealth from gas customers to China and Singapore"](#). 13 May 2019.

²⁹ AFR. [Arrow Energy freezes \\$400m Surat gas expansion](#). 26 October 2018.

³⁰ The Australian. [Outdated tax 'gives LNG away for free' to multinationals](#). 9 February 2020.

The Northern Territories Ichthys project will export \$195bn of LNG, LPG and condensate from Darwin over the next three decades. It will pay \$0.00 in PRRT for the privilege.³¹ With budgets under extreme pressure due to the coronavirus pandemic, this should be revisited by the government.

**The income tax take
from the gas industry
has been very poor.**

The income tax take from the gas industry has also been very poor. In 2010, BG Group announced its \$15bn LNG project at Gladstone. It announced it would be a big contributor to the Australian tax base:

"Catherine Tanna, executive vice president of BG Group and managing director of its Australian subsidiary QGC, says the project will increase economic activity in Queensland by \$32 billion over the project's first decade.

"We also expect to pay about \$1 billion a year in federal taxes and a further \$300 million or so each year in royalties to the Queensland government," Ms Tanna said today."³²

Far from the \$1 billion in tax that BG's Tanna said her company would pay, in 2016-17, BG group paid no tax. BG was then taken over by Shell and it too paid no tax in 2016-17.

The other two consortium that own plants at Gladstone are led by Santos and Origin, neither of which paid tax in 2016-17 according to the ATO,³³ There simply has not been the billions of dollars promised for the Queensland and Australian economies.

In the 2014 Queensland budget, petroleum royalties were expected to rise from \$68m in 2013-14 to \$660m by 2016-17 on the back of the boom in coal seam gas. The result was a fraction of the expectation at just \$98m in 2016-17. The royalty take by the Queensland government has been so disappointing that the rate was increased from 10% to 12.5% starting in 2019-20.³⁴ The 2019-20 State budget stated that the estimated actual royalty take from the petroleum sector was \$450m in 2018-19.³⁵ Finally some royalties are being paid, although at a fraction of what was expected.

The tax and royalties contributed to the Commonwealth and State governments by the gas industry have been very poor despite large increases in production in both Western Australia and on the east coast.

³¹ The West Australian. [Inpex will pay nothing to extract oil and gas](#). 15 July 2017.

³² News.com. [BG Group announces \\$15bn LNG project](#). 31 October 2010.

³³ Australian Government Data. [Corporate Tax Transparency](#). 12 December 2019.

³⁴ Queensland Government. [Budget Strategy and Outlook 2019-20](#).

³⁵ Ibid. Page 86.

The gas industry, after years of being a poor tax payer and gouging domestic gas and electricity consumers, continues to have its hand out for large subsidies.

Gas Cannot Lower Emissions

Methane is the greatest threat to the warming climate. If you leak more than 2% to 3% of methane³⁶, it is worse for the climate than coal.

In a [recent Bloomberg story](#), about BP installing new methane leak detectors on new gas producing projects, there was this quote:

“The company said the wider energy industry leaks about 3.2% of the gas it produces, which is probably almost enough to offset the benefit of switching from coal to gas.”

According to GISERA, the gas industry funded arm of the CSIRO, 3% is enough to offset the benefits of switching from coal to gas on a 100 year time frame.³⁷ BP is therefore saying that gas is worse than coal for greenhouse gas emissions.

In April 2020, using new satellite observations and atmospheric inverse modelling, scientists calculated methane emissions from the Permian Basin, which is among the world’s most prolific oil-producing regions and accounts for >30% of total U.S. oil production. The Permian Basin is in Texas and New Mexico. Emissions are **3.7%** of the gross gas extracted in the Permian Basin.³⁸ The high methane leakage rate is likely contributed by extensive venting and flaring, resulting from insufficient infrastructure to process and transport natural gas. Gas from the Permian Basin, one of the U.S.’ oldest and largest gas fields, is worse for greenhouse gases than coal.

**BP is therefore
saying that gas is
worse than coal for
greenhouse gas
emissions.**

³⁶ See IEEFA. [Volkswagen lied about emissions from their vehicles, and the gas industry is also lying about their emissions](#). 5 March 2020. View the link CSIRO Energy. [Whole of Life Greenhouse Gas Emissions Assessment of a Coal Seam Gas to Liquefied Natural Gas Project in the Surat Basin, Queensland, Australia: Final Report for GISERA Project G2](#). July 2019. Page 26: A general consensus has emerged from these studies that climate benefits of natural gas replacing coal are lost where fugitive emissions from all upstream operations are greater than 3% of total production (Alvarez et al 2012; Zavala-Araiza et al 2015). The lower level of 2% was based on a shorter 20 year (Global Warming Potential) time frame as opposed to the 100 year time frame. Sourced from correspondence with Professor Ian Lowe.

³⁷ CSIRO Energy. [Whole of Life Greenhouse Gas Emissions Assessment of a Coal Seam Gas to Liquefied Natural Gas Project in the Surat Basin, Queensland, Australia: Final Report for GISERA Project G2](#). July 2019. Page 26: A general consensus has emerged from these studies that climate benefits of natural gas replacing coal are lost where fugitive emissions from all upstream operations are greater than 3% of total production (Alvarez et al 2012; Zavala-Araiza et al 2015).

³⁸ Science Advances. [Quantifying methane emissions from the largest oil-producing basin in the United States from space](#). 22 April 2020.

Gas will not materially reduce our carbon footprint. In the Energy Technology roadmap the point is made on page 28:³⁹

“According to the International Energy Agency (IEA), switching from coal to gas can provide ‘quick wins’ for global emissions reductions and has the potential to reduce electricity sector emissions by 10 per cent.”

Reduce emissions by 10% compared to the high emitting coal is at best marginal progression towards net zero emissions.

So Many Positive Options for the Commission to Explore

On a positive note, there are so many industries where Australian companies can and do lead the world.

Some examples include medical technology with world beating companies such as ResMed and Cochlear, or the rising domestic IT industry with companies such as Atlassian. There are also the existing globally competitive industries such as Agriculture and Tourism.

None of these industries are represented on the COVID Commission. It is gas dominated and sees gas as the only solution.

Conclusion

As they say, anything can be economic with enough government money. Will the NCCC gas-led reforms provide cheap gas? No. Will they provide a platform for increased gas intensive manufacturing? No. Will they reduce emissions? No. Will they line the pockets of the gas industry? Yes.

³⁹ Department of Industry, Science, Energy and Resources. [Technology Investment Roadmap Discussion Paper](#). May 2020.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Author

Bruce Robertson

Energy Finance Analyst– Gas/LNG Bruce Robertson has been an investment analyst, fund manager and professional investor for over 32 years. He has worked for major domestic and international institutions, including Perpetual Trustees, UBS, Nippon Life Insurance and BT. Bruce is an active participant in the national debate on energy issues in Australia and has been invited to present to a number of government enquiries into the electricity and gas industries.

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