

# Gas market challenges

– *What does it mean for WA?*

**JCIPP, May 2018**

## Issues to be addressed in this presentation:

- Is our gas market in crisis?
- Gas market challenges
- Underlying causes
- National policy response
- What are the implications for WA?
- WA LNG exports
- WA to east coast pipeline
- Regas terminal

- Manufacturing industry particularly vocal about power prices
- State-wide blackout in South Australia
- Tesla battery storage in place
- Federal/state public disagreement
- Gas industry chiefs summoned to Canberra (twice)
- Power industry chiefs summoned to Canberra (twice)

major benefits.

First, it is simpler than the outdated US corporate tax system, which unusually tries to tax foreign profits, has differing depreciation rules and byzantine international transfer pricing.

These deadweight costs enrich lawyers and accountants, but divert human capital into relatively unproductive tax game playing.

Under the destination-based cash-flow BAT, companies simply add up their domestic sales and deduct their local costs at the end of the financial year, and ignore offshore revenues and expenses for US tax purposes.

Trump wants.

Fourth, the cash flow aspect via immediate write-off of capital expenditure would promote business investment, while the denial of interest deductibility removes the current tax bias for debt.

Fifth, the BAT would raise \$US1 trillion over a decade – helping fund tax reforms – because the US imports more than it exports and due to an anticipated sharp appreciation in the US dollar.

While the tax may appear protectionist, in economic theory the greenback would spike 25 per cent for a 20 per cent tax rate, due to an associated increase in demand for the US currency.

Commerce last week that based on empirical evidence he was convinced the currency would adjust quickly. He also flagged transitional rules to smooth any disruptions.

Assuming a US-dollar spike, big losers would be Americans holding assets overseas and foreigners who have borrowed in US dollar debt.

Winners would be foreigners holding US-dollar assets who would receive a windfall wealth transfer.

Politically, this is tricky, because American asset owners would effectively subsidise foreign owners.

Due to a likely lag in full currency

experience an offsetting rise in their currencies.

Nasarro suggested countries with a higher VAT that the US has large trade deficits with, could be slugged with a BAT.

Worryingly, that sounds more like a targeted protectionist border tax that Trump is threatening, or bastardised version of the authentic BAT reform Republicans are championing.

In any border tax the details will be critical in assessing if it's protectionism or reform.

John Kahor is US correspondent for The Australian Financial Review in Washington.

## Disruption and market failure squandering our golden age of gas

Energy  
**Australia should be in the middle of a golden age of clean, efficient gas, instead regulations have meant price hikes and shortages.**



Jeanette Roberts

The past decade has been the golden age of gas. Once a nuisance in the search for oil, flared for many years (not in Australia), gas is now recognised as a clean source of energy, contributing 21 per cent of the world's energy supply.

The gas sector in Australia has been a national triumph – \$200 billion has been invested in seven new greenfield liquefied natural gas (LNG) plants over the past decade. As these plants come on stream, Australia is becoming a major world LNG exporter. We are proud to have the world's first LNG plants supplied by coal seam gas, and the world's first large-scale floating LNG production facility.

These triumphs were lauded and celebrated at last year's LNG 18 conference in Perth.

But the gas market up and down the east coast is experiencing severe disruption and market failure. Industrial gas users must compete against exporters for gas supply. Big domestic users remain concerned about potential shortfall and high prices.

Natural gas is essential for Australian manufacturing. Almost one-third of the gas consumed in Australia is used in manufacturing, an industry of \$100 billion, employing 800,000 Australians.

Australia has vast gas reserves. Many of these reserves are located offshore and far from population centres. The LNG industry has been vital in providing the means to commercialise these resources.

We are proud of the LNG industry we have developed and the export opportunities created for Australia. We stand on the world stage along with other major LNG exporters.

Yet, shortages and turmoil persist in the east coast gas markets.

Since the start of last year, Victorian and Cooper Basin gas has been regularly used to supply the new LNG plants in Queensland. This has been draining southern gas supplies and forcing competition with export markets. Southern domestic users are complaining of an inability to access gas at a reasonable price.

Major shifts have been under way locally and internationally in the operating environment for oil and gas.

The continued low oil price, and the transition from construction to operations in LNG, is driving a leaner, more efficient industry.

The 2016 report of the Australian Competition and Consumer Commission (ACCC) found that "new supplies from new producers are vital to promote competition and to ensure supply into the future".

Moratoria and regulatory restriction on gas exploration are now in place in Northern Territory, Victoria, New South Wales and Tasmania. The ACCC recommends that states and territories consider gas developments case by case, rather than applying blanket moratoria.

Victoria has imposed a five-year

moratorium on developing any onshore gas reserves, regardless of whether hydraulic fracturing is required. Victoria has benefited from a safe, successful onshore conventional gas industry for 20 years.

Victorian gas production will peak this year, resulting in increased transport costs, higher gas prices, and possible shortages to the 2.2 million households in Victoria that rely on gas, more customers than in any other state.

A properly functioning gas market should be able to avoid the energy crisis we saw in South Australia last year.

Some would say that the severe weather, coinciding with the planned outage of the Heywood Interconnector to Victoria, and higher than expected gas prices, was bad luck. Nevertheless this market failure, requiring government intervention, was an extraordinary series of events.

Power producers blame the price of gas and lack of opportunity in the market to justify mothballing generation facilities. South Australia is lobbying for another link to the main grid on the eastern seaboard.

Nevertheless Australia should not be a country that faces such challenges.

We need to recognise this market failure and take proactive steps to address the underlying issues.

More than anything else, business requires certainty. No business can commit an investment without clarity on the fiscal and regulatory environment in which it will

operate. The gas industry requires certainty from government and regulators, in order to make the long-term investment required to ensure supply is available.

These are major investments, amortised over many decades, and competing internationally for capital. Without clarity and confidence, business will choose to invest elsewhere.

Market regulators must continue to deliver independent, expert and robust oversight of the industry. The gas industry welcomes this oversight and assurance.

However, the regulatory process must be efficient, effective and, most important, transparent.

But the overall answer is loads more gas. This can only be achieved by investment in exploration and development of reserves. Moratoria, uncertainty, lack of transparency and ineffective regulation all serve to ensure that investment capital moves elsewhere.

We were the lucky country, then the clever country.

We now need to be the pragmatic, astute country, to ensure we can all reap the benefit of the golden age of gas.

Jeanette Roberts has more than 35 years' international experience in the oil and gas industry working with operators, FEED specialists and EPC contractors. She has been involved in policy development at state and Commonwealth level.

SAE 07/04/16

AFR, 31<sup>st</sup> January  
2017

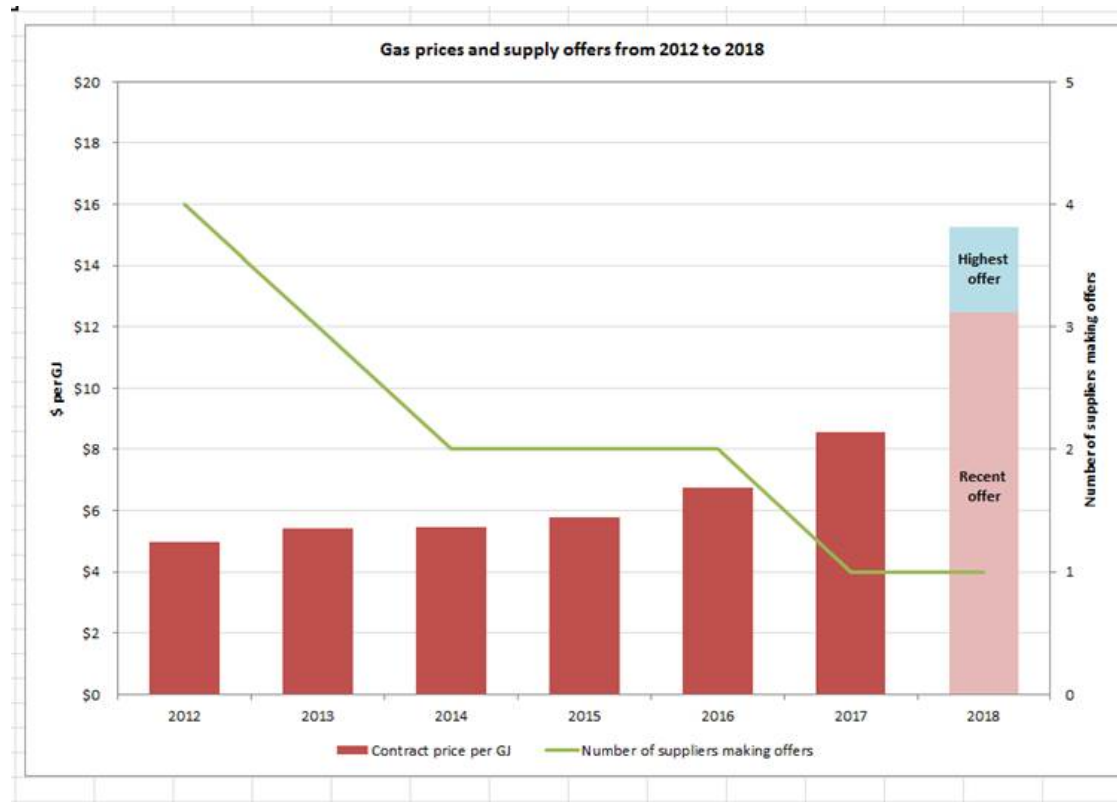
## Vocal commentary about sharp increases in power prices:

The Sydney Morning Herald article titled "Businesses face power price hikes of up to 200 per cent" by Cara Waters, dated 16 January 2018. The article discusses the impact of power price increases on businesses, specifically mentioning ANCA in the outer Melbourne suburb of Baywater. It notes that ANCA is an increasingly rare cohort of Australian manufacturers. The article also mentions that the precision tool manufacturer employs more than 1000 staff globally, with 450 in Australia, and turned over \$180 million last year. It states that when its power supply contracts were up for renewal, co-founder Pat Boland was in for a nasty shock. A photo shows Pat Boland in a workshop setting.

The "make it cheaper" website article titled "Energy Price Hikes Set To Continue In 2018" dated Dec 21. The article states that Australia's largest energy retailer AGL has announced plans to increase power prices in the new year. This comes on the back of recent predictions from EnergyAustralia and Origin Energy, who recently foreshadowed new year default power price hikes of 14.4 to 14.5 percent. AGL has revealed that consumers will be faced with an average standing offer increase of around 9.5 percent from January 1, 2018. However, the company maintains that many of its standing offer customers will be protected from next year's rise due to additional discounts. The article includes a photo of a lightbulb and a line graph.

Environment News article titled "Wholesale electricity prices up in Victoria since Hazelwood power station closure" by Dan Harrison, updated 29 Mar 2018, 4:17pm. The article features a photo of the Hazelwood power station. It discusses the impact of the station's closure on electricity prices and the environment. A photo shows a blue whale sighting near the station. The article also mentions that the closure slashed Victoria's climate pollution by about 10 per cent. A photo shows a blue whale sighting near the station. The article also mentions that the closure slashed Victoria's climate pollution by about 10 per cent. A photo shows a blue whale sighting near the station.

## And some evidence



Source: ACCC



# Blackout in South Australia

- Wednesday September 28, 2016 - state-wide blackout in South Australia
- Severe weather coincided with a planned outage of the Heywood interconnector pipeline to Victoria
- Chaos prevailed



In response, the South Australian government invested in the world's largest lithium-ion battery storage installation

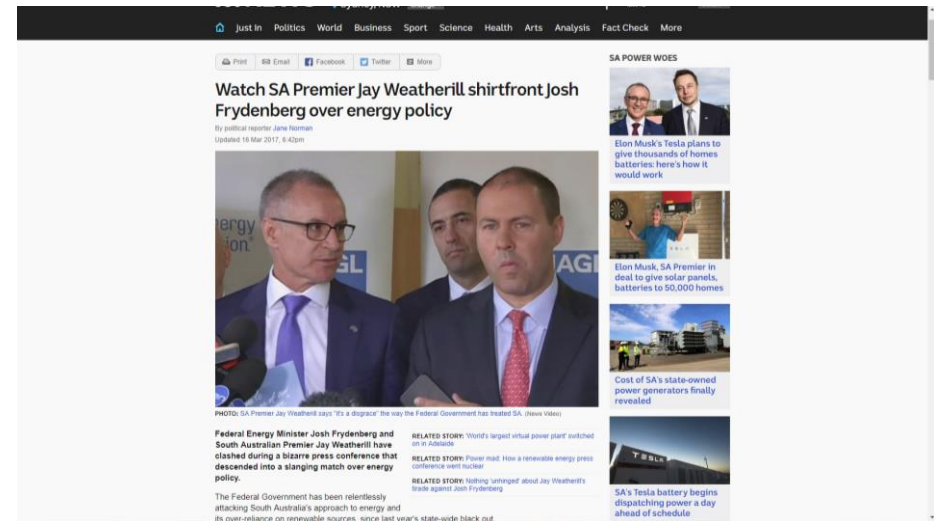




"Is this a bit awkward?", Mr Frydenberg is asked. "It's about to be," Mr Weatherill whispers.

"It is the most anti-South Australian Commonwealth government in living history."

Mr Frydenberg later described Mr Weatherill's actions as "unbecoming, childish and unacceptable".



- In the long term, supply issues can only be solved by access to resources.
- There is plenty of gas in the ground.
- In Victoria alone, there are sufficient reserves to meet the east coast demand for 200 years.
- Bans and moratoria are in place in Victoria, New South Wales, Western Australia and Tasmania
- Exploration is at a thirty-year low
- The gas industry has been warning for many years that exploration restrictions will eventually result in shortages
- Now that time has come
- However, if the restrictions were lifted today, there would still be many years before gas is available to the market.

## Gas industry chiefs twice called to Canberra

- Threats to impose export restrictions
- Gas companies provided assurances that they will increase domgas supply (to the east coast)



Home / News

Aug 3 2017 at 10:00 PM  
Updated Aug 3 2017 at 10:00 PM

☆ Save article

My Saved Articles

Print

License article

## First gas, now power: Malcolm Turnbull calls electricity bosses to Canberra

✉ G+ f t in



Consumers must ask more questions about the politics of power. AP



by Phillip Coorey

Prime Minister Malcolm Turnbull has ramped up his government's intervention in the energy market by summoning electricity bosses to Canberra next week to demand they give customers the information they need to reduce their power costs.

In a letter sent yesterday to seven retail electricity chief executives plus the Australia Energy Council, the Prime Minister said the companies' various hardship programs available to customers who struggle to pay

### Latest Stories



'Help the reef adapt to climate change'

14 mins ago



Comyn's job just got a whole lot harder

14 mins ago



Primewest sells Adelaide A-grade building for \$35m

8 mins ago

[More](#)

Start your search today.

Find out more

Advertisement

## Is the WA market different?

- *Yes and no*
- 15% domestic gas (domgas) reservation in WA
- Policy was resisted by gas companies for many years, but is now welcomed
- Domgas market is small due to population size and spread
- LNG still the main game





## Worldwide LNG Flows 2012



Source: Timera Energy

- Commonwealth funded study on WA to east coast gas pipeline
- Technically feasible, plenty of international analogues
- Very unlikely to be commercially viable

BUSINESS

## WA to east coast gas pipeline takes leap forward

By Cole Latimer  
30 October 2017 – 3:36pm

f t v A A A

A proposed pipeline connecting the West Australian gas markets to the east coast has taken a major step forward, but its future remains in doubt as other gas supply plans challenge its construction.

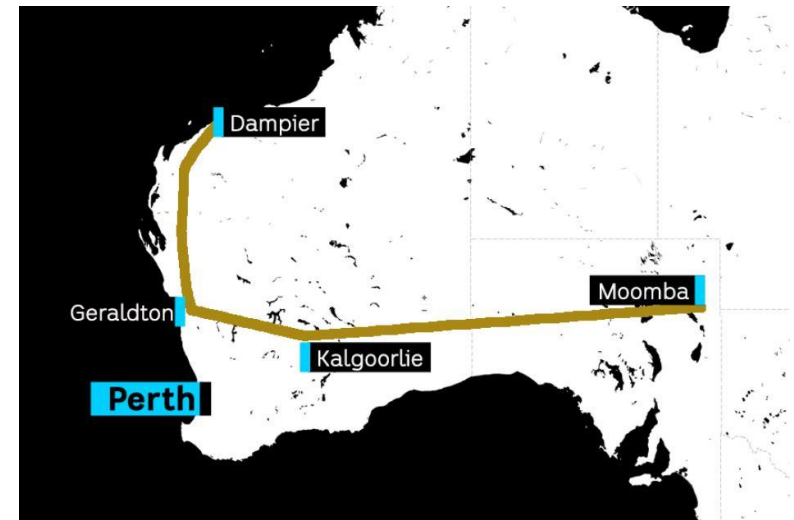
ACIL Allen, working in partnership with engineering firm GHD, has been contracted by the federal government to carry out a pre-feasibility study on the West-East Gas Pipeline, which will link to the two gas markets. The study is due to be completed by March.



A deal is struck with Australia's three biggest gas companies, but it's not all good news for consumers.

# WA to east coast pipeline

- Feasibility study underway with GHD and Acil Allen
- Former Premier Barnett vocal supporter
- Current Premier McGowan using as leverage for greater GST share
- Woodside supportive – a good opportunity for them to sell gas



# WA to east coast pipeline

- Very long lead time
- Large distances, remote routing
- Logistics very challenging
- Proposed routing –  
Dampier-Geraldton-  
Kalgoorlie-Perth
- Distance approx 4,000 km



# WA to east coast pipeline

## Technical analogues:

### Nabucco pipeline

- Azerbaijan to Austria
- Distance approx 3,800 km



### Power of Siberia pipeline:

- Irkutsk and Yakutia to Russian far east
- Distance approx 3,000 km
- Currently under construction
- Would be an excellent analogue
- However Russian sanctions will limit how Australia can leverage this experience





# WA to east coast pipeline

## Technical analogues:

### Nord Stream

- Russia to Germany
- Distance 1,224 km
- Offshore rather than onshore



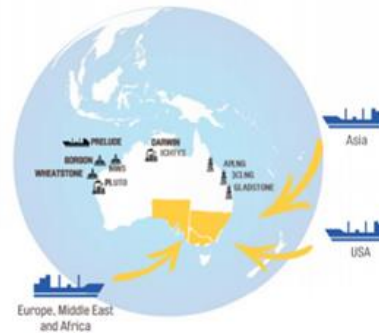
## European gas grid

- Very complex network



- AGL developing LNG regas terminal
- Technically relatively simple
- LNG regas terminals in Indonesia, including Bali, despite Indonesia being a major LNG producer (like Australia)

## LNG import facility a fourth option of interest



- > AGL investing \$17M to ready project for final investment decision in 2018-19
- > Potential development cost of \$200-300M
- > A number of sites identified
- > Terminal could be available by 2021
- > Regulatory and community engagement to commence in early 2017



- LNG regas terminal could be established very quickly
- Various options for technology:
  - Traditional onshore facility
  - Nearshore eg Adriatic LNG
  - FSRU – floating storage and regas unit



## Technical analogues

### JSK

- Floating regas unit and floating storage unit on Bali



### Independence LNG

- Floating storage and regas unit
- Klaipeda port Lithuania



## Technical analogues

### KRK LNG import terminal

- Floating storage and regas in Croatia
- Project under development – startup 2019



### Hoegh LNG

- Currently building 8 FSRUs at Hyundai yard in Korea





- Despite, until recently, strong industry resistance, domgas reservation has worked in WA
- But in all jurisdictions, increasing supply is the long term solution
- In WA, this means supporting development of major offshore fields such as Browse and Scarborough
- Realistically that cannot be achieved without significant investment of foreign capital

- Onshore development is also important for WA
- The WA fracking inquiry is unnecessary.
- Countless inquiries have concluded that properly managed fracking is safe
- The NT inquiry came to the same conclusion recently

- Gas investment enables economic prosperity for WA
- There is an opportunity to support McGowan's mantra of local content, local jobs and local gas.
- The real prize is in the Inspection Maintenance and Repair (IMR) services that support the 40+ year field life
- We need a competitive cost base, particularly relative to Singapore



- But in the local jobs debate, let's not focus on low level skills.
- Let's focus on world class skills and technology that we can export to the world
- We want our local jobs to be skilled, professional, world class
- That enables opportunities right across the economy

