

NEWS RELEASE

Australia's next wave of LNG projects needs to compete to progress

Over US\$50 billion of new LNG projects aiming for sanction

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According to research by Wood Mackenzie, a second wave of LNG investments is building, both in Australia and globally, and these projects need to compete to progress. In Australia, over US\$50 billion worth of LNG projects are targeting final investment decision (FID) over the next three years.

These include Pluto expansion and backfill projects such as Browse, Scarborough, Barossa, Crux and Clio-Acme. Their combined capital expenditure (CAPEX) represent nearly half of Australia's forecast total upstream spend over the next five years.

"Traditionally a high-cost location and with a recent history of big cost blowouts, Australian operators need to have confidence that this round of projects can be delivered on time and on budget, for the next wave of project sanctions to progress," said research director Angus Rodger at the APPEA conference in Brisbane.

Wood Mackenzie has a positive forecast for global LNG demand, which means new supply needs to be sanctioned. An estimated 65 million tons per annum (mmtpa) of new LNG supply will be required by 2025.

But there are a lot of projects targeting that window. From North America to East Africa, Qatar, Russia, Papua New Guinea and Australia, there is a range of pre-FID projects competing for sanction over the next 24 months.

"This has massive implications for Australia's next wave of investments. Lower costs and more brownfield developments this time round suggest Australian projects have a good chance of progressing, and of avoiding the mistakes of the last decade," said Rodger. "But this cannot be taken for granted. Many of these projects carry a multitude of joint-venture (JV), environmental, engineering and sub-surface challenges."

Australia is not unique to experiencing issues with LNG execution. Globally, the whole industry has a long history of poor project delivery. According to Wood Mackenzie, less than 10% of global LNG projects have been completed under budget, and 60% experienced delays to schedules. LNG cost overruns in the previous boom averaged 33%, with Australian projects overrunning by 40%.

"What the last cycle highlighted, particularly in Australia, is that highly complex projects in high-cost locations can produce some serious cost and schedule blowouts," said Rodger. "The inflationary pressure of multiple projects competing for scarce local resources was evident, but seems less likely to be an issue this time round given the reduced scale of investments."

However, are there wider risks? There is a global LNG boom on the cards, with almost 90 mmtpa of LNG expected to take FID over the next two years. CAPEX could hit over US\$200 billion from 2019 through to 2025.

"We believe that although large systemic risks do exist, particularly within LNG EPC sector capacity, the industry is poised for better cost and schedule delivery," said Rodger. There are five key elements supporting this view:

1. The global spread means that local inflationary pressure, such as on manpower, which hit Australia and the US in the previous cycle, will be less.
2. Developers are being more cautious in their approach to construction, with more modularisation and CAPEX phasing.
3. Steel prices globally are expected to ease from recent highs in 2018.
4. We expect competitive bidding from new EPC contract entrants and existing contractors looking to secure work after the recent downturn.
5. The wider upstream industry is not in the midst of a US\$100/bbl-fuelled spending boom, as with the last cycle, which will limit overall upstream inflation.

"Although the industry is showing signs of better execution, many of the Australian fields are located in remote areas, have high levels of containments and face significant JV misalignment issues. As such they do not represent slam dunks. One of the keys will be collaboration – if Australian operators can work together to reduce costs, then these investments stand a much better chance of lowering costs, competing with global portfolios and getting sanctioned," concluded Rodger.

LNG projects have always struggled with delivery. Less than 10% completed under budget, and 60% experienced delays

Project-by-Project Cost Performance



Sharing key to cost of LNG projects to feed Asia

Peter Milne, The West Australian 28 May 2019

As Asian gas demand soars, Australian LNG players wanting to develop new gas fields will need to collaborate to compete against cheaper, earlier projects overseas, according to an independent research analyst.

The analysis points to difficulties for two Woodside projects — the \$US11 billion (\$15.9 billion) Scarborough project to supply gas to a new LNG train at Pluto and the \$US20.5 billion Browse project to fill the North West Shelf LNG plant.

Wood Mackenzie Asia Pacific research director Angus Rodger said global LNG demand was rising with an additional 65 million tonnes a year needed by 2025.

Demand in Asia was growing the fastest, led by China and India.

Speaking in Brisbane yesterday ahead of the oil and gas lobby APPEA's annual conference, Mr Rodger said the Chinese Government's blue-sky policy that aggressively pushed for gas to replace coal was working, with air in Beijing "unbelievably clean compared to what it was just a few years ago".

As gas demand in China rose, development of a domestic shale gas industry had faltered. Production was less than half of what was planned, leaving LNG to meet the shortfall.

Mr Rodger said one risk to LNG demand was if the transition to cleaner energy accelerated and countries went straight from coal to renewables, bypassing gas, but he did not think this was likely. The good news for Australian LNG was demand was not matched by the supply picture.

He said LNG tended to very cyclical with periods of underinvestment and then "everyone jumps into the window at the same time".

Mr Rodger said this year could have more LNG capacity sanctioned than ever, 2020 could be similar and when many projects went ahead at the same time "it gets really really ugly, really really fast".

Typically so-called brownfield projects, such as Scarborough and Browse, which develop new gas but use existing infrastructure, are cheaper than greenfield projects that require everything to be built.

But technical and gas quality challenges made some Australian brownfield projects more expensive than overseas greenfield projects, the Singapore-based analyst said.

He said Qatar, which is adding 32 million tonnes a year of capacity, was one of the cheapest places to build a new LNG train.

Gas in Mozambique, where two projects are due to be sanctioned this year, could be brought to shore without the expense of offshore facilities.

An additional problem for Scarborough, planned to sanction in 2020, and Browse in 2020 or 2021, is their timing in the race for customers, investors and even contractors.

There are few contractors capable of building LNG projects.

“By the time you are to the end of the queue by the end of 2020 ... who are you getting – the D team,” Mr Rodger said.

He said Australian projects must not only be competitive for customers but also for investors, with international companies like Shell having large portfolios of investment opportunities.

Australian projects could cut costs to be competitive if they shared infrastructure, he said.

Chevron Asia Pacific president Nigel Hearne said the Australian LNG industry had spent too much in the past.

“We have overcapitalised our business ... with very little shared infrastructure, instead, we’ve gone with bespoke capital investments ... which have increased costs and could potentially strand resources,” he said.

Mr Hearne, who until last year led Chevron in Australia, said Woodside was heading in the right direction by allowing the North West Shelf LNG plant to process gas from other projects for a toll.

To maintain gas supply to the Gorgon LNG project, Chevron will announce today it has started to drill 11 new wells in the Gorgon and Jansz fields off the North West.