



The Australian Industry Group
Level 2, 441 St Kilda Road
Melbourne VIC 3004
PO Box 7622
Melbourne VIC 3004
Australia
ABN 76 369 958 788

21 August 2020

Inquiry and Advisory Committee – Crib Point
Planning Panels Victoria
cribpoint.IAC@delwp.vic.gov.au

SUBMISSION TO THE CRIB POINT INQUIRY AND ADVISORY COMMITTEE

The Australian Industry Group (Ai Group) welcomes the chance to make a submission to the Crib Point Inquiry and Advisory Committee (IAC) on the proposed Crib Point gas import jetty and gas pipeline project (the Project). Our members are businesses of all sizes in Victoria and Australia-wide across many sectors, including manufacturing, construction, technology, logistics, defence, energy and more. Many use gas directly and all are impacted by the role that gas plays in setting electricity prices and guaranteeing electricity supply. While all the environmental and social issues addressed in the Environment Effects Statement (EES) are important, our submission addresses the gas market and climate policy contexts to the Project.

In brief, our submission is that the Project will be a helpful and low-risk component of a wider strategy to moderate risks to gas users; and that the Project is not inconsistent with a successful Victorian and Australian transition to net zero emissions by 2050.

Gas market context – general analysis

Before the COVID-19 pandemic Eastern Australia's export-dominated gas market was expected to sustain wholesale gas prices of \$8-\$12 per gigajoule over the long term, rather than the historic \$3-\$4/GJ average. This reflected both the rise in production and transport costs as cheaper conventional supply was replaced by more remote coal seam gas without associated oil, and the expected range of parity with exports to East Asia. The latter historically reflected a link to oil prices. In recent years a more competitive market for Liquefied Natural Gas (LNG) may have started to weaken this link.

Oil prices have collapsed in the face of excessive supply, price wars and the steep decline in personal transport and aviation during the pandemic. International spot gas prices have likewise plunged, and many LNG customers appear to be rejecting cargoes. With excess local supply and lower export parity, Eastern Australian spot gas prices have fallen to around \$4-\$4.5/GJ. Firm contract prices have not fallen as far – early feedback is around \$6-\$7/GJ and terms of no more than 1-2 years, since suppliers hope for a price recovery and do not wish to lock in lower prices now.

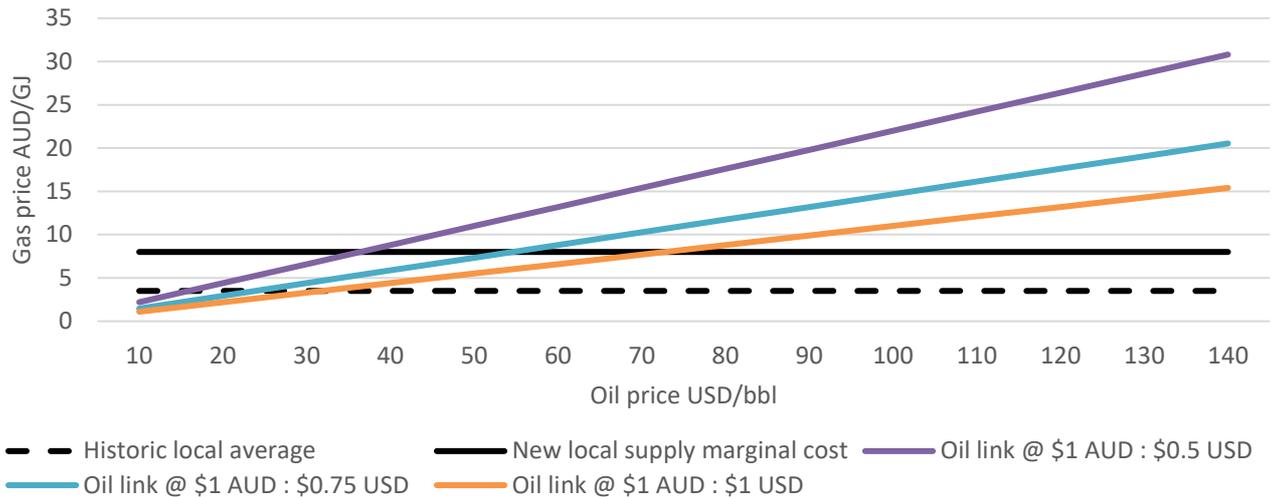


Figure 1 - Relationship of international oil prices and Eastern Australian gas prices at indicative exchange rates (Ai Group)¹

There is every reason to expect that gas prices will recover eventually to the previously expected \$8-\$12 range. Existing supply is declining, and new supply must at least expect to recover its production and transport costs. Eastern Australia’s geology has not improved: unconventional gas resources largely have no oil, require numerous and frequently replaced wells to extract, and are mostly distant from existing demand centres. LNG export capacity is large enough to potentially absorb much more supply, making the export price critical to the price expected from domestic customers. International oil and gas prices are likely to normalise in coming years as supply exits and demand recovers with economies (and oil prices have already partly rebounded from the lows of early 2020). Economic recovery investments are very unlikely to alter these fundamentals.

Eastern Australia could face even higher gas prices if supply falls short of demand. Conventional oil and gas production in the Bass Strait is declining fast; unconventional production requires regular investment to sustain; and the global oil and gas industry is slashing exploration and development budgets to survive. Pre-crisis the Australian Energy Market Operator modelled a growing gap between expected demand and committed supply over the next few years. Some of the anticipated supply investment may now be cancelled or significantly deferred.

In short gas is very unlikely to remain cheap in Eastern Australia, and there is significant risk of a fresh price crunch where prices surge above export parity – as we saw in 2017.

Ai Group’s recommendations to policymakers in our forthcoming paper *Post Pandemic Policy: Climate and Energy* include the following elements related to gas:

- inform economic policy and reform across multiple portfolios by adopting a clear, agreed and national vision for successful transition to net zero emissions. Setting that vision will help the development of robust and pro-competitive strategies for gas, electricity and a broader clean economy.
- Adopt a gas strategy that includes:
 - facilitation of new supply options that make long-term sense;
 - expansion of alternative fuels including biogas and hydrogen;

¹ In the past decade international oil prices have ranged from over USD\$100/bbl. (in 2014) to below USD\$20/bbl. (in early 2020). Oil major BP [recently reduced](#) long-term oil price expectation to around USD\$55/bbl.; if realised and if oil-linkage remains an important basis of gas pricing in East Asia and Eastern Australia, this would imply Eastern Australian gas prices around AUD\$8-12/GJ, depending on prevailing exchange rates.

- a heavy focus on demand reduction through gas efficiency and electrification; and
- continued policy reform to promote a competitive and secure local market.

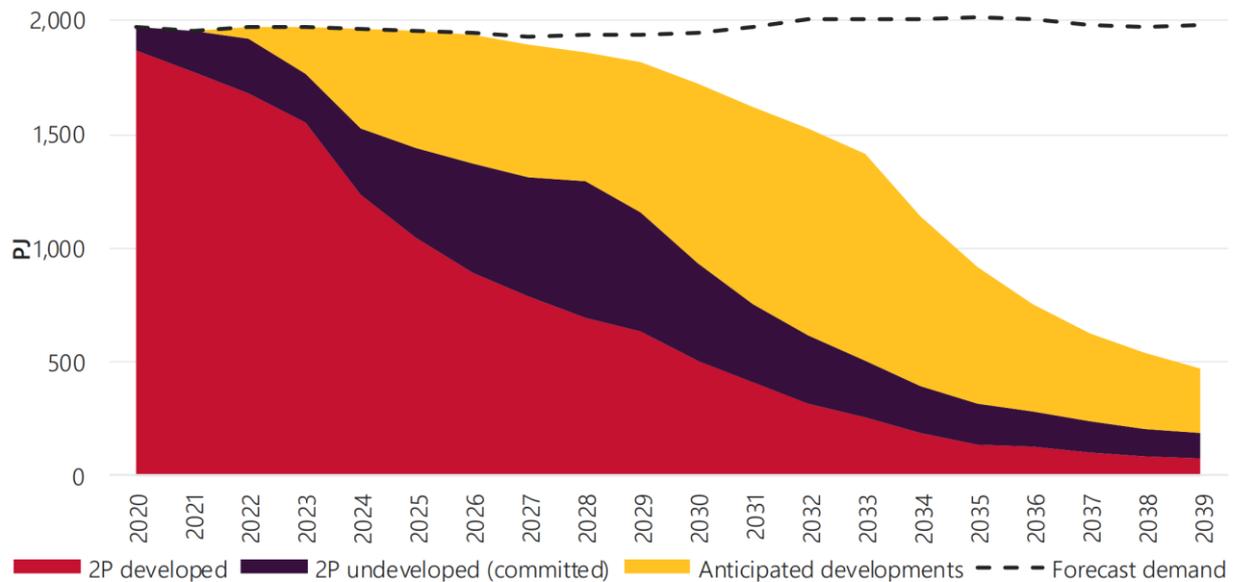


Figure 2 - Projected eastern and south-eastern Australia gas production (export LNG and domestic) – existing projects, and committed and anticipated developments; Central scenario, 2020-39 (AEMO)

Gas market context – impacts of the Project

In the context described above, Ai Group considers that the Project, along with other potential LNG import terminals, would make a very useful contribution to better outcomes for Eastern Australian energy users across price, security and flexibility.

Price

On average we anticipate that future Eastern Australian wholesale gas prices will broadly reflect movements in East Asian gas prices, due to the immense Queensland export terminals whose contracted obligations and spare capacity dwarf domestic demand. However, there are two ways in which prices might depart from this export parity level, both of which the Project may assist.

Firstly there is the risk that local supply is not sufficient to meet expected demand, which would see either local prices bid up to a level sufficient to destroy enough demand to balance the market; or the invocation of emergency export control powers (if they do not lapse in 2023). The latter is an important safeguard, but invocation has significant costs and would be damaging if sustained. This scarcity scenario can be averted with a combination of new supply and demand reduction. The availability of up to 160 petajoules (PJ) per year through the Project would make a major contribution to this strategy; the Eastern Australian domestic gas market comprises around 500PJ/yr of purely domestic demand and around 1500PJ/yr of export demand.

Secondly, Eastern Australia’s gas market currently has only a one-way link to East Asian gas markets: producers expect to make at least as much from domestic customers as the opportunity cost of not supplying to export customers instead, but face no competition from international suppliers. Thus export parity is currently a floor under local prices, but not a ceiling. While on average we expect local and East Asian prices to be similar, at times of low international demand and high supply we may see prices overseas that are lower than locally – even lower than the marginal production and transport cost of local supply. That appears to be the case right now; the Australian Competition and Consumer Commission has complained that local wholesale gas prices are well above their metric for the ‘netback’ price of gas exported to East Asia. The Project, as a substantial and flexible source of gas from outside the Eastern Australian market, can help to cap prices at international levels.

It is important to note that the value of the Project lies in limiting future risks of excessive prices, and we do not expect LNG imports, or any other development, to return local prices to their low historic levels. While temporary supply gluts and associated low prices are possible, producers and importers are price-responsive and will scale back activity if it does not provide adequate returns.

Security

As depicted in Figure 2 - Projected eastern and south-eastern Australia gas production (export LNG and domestic) – existing projects, and committed and anticipated developments; Central scenario, 2020-39 (AEMO) Figure 2 above, already-developed Eastern Australian gas supply is projected by the Australian Energy Market Operator to decline dramatically over the coming decade, reflecting the depletion of gas in already-tapped formations beneath the Bass Strait and onshore in South Australia and Queensland. In pre-pandemic projections further committed and uncommitted but anticipated developments were expected to be enough to cover the gap with demand through to the middle of this decade, with a gradually growing gap beyond that time representing both a risk to gas users and an opportunity for further investment in supply and demand reduction.

Since those projections were made there has been a deep reduction in global oil prices. While prices are recovering, it is likely that their long term average will be lower than previously expected in light of the effects of the pandemic on transport and telework, and the transition to electric vehicles. The global oil and gas sector has responded by slashing investment, particularly in exploration and development of new resources. The experience of many previous oil crashes suggests that the effects of this reduction will be felt for years, and are likely to lead to tight markets down the track. Eastern Australia's gas supply future may now be significantly worse than projected earlier this year.

In this context the Project's potential 160 PJ/yr of gas supply would make an important contribution to Eastern Australian supply adequacy, particularly as part of a wider supply and demand side strategy. This supply option puts much less capital at risk than development of new Australian gasfields – the regasification ship is relatively cheap to acquire and easy to send overseas if conditions change, and relatively little additional onshore infrastructure is required. Thus this supply option is much more likely to go ahead than the more marginal new domestic production projects included in the AEMO projection.

Flexibility

While this submission has referenced AEMO's supply and demand projections, in truth there is considerable uncertainty about the future of the Eastern Australian gas market.

On the supply side, anticipated developments may fail to eventuate (whether because of investment appetite, or as in the unsuccessful Dory project, unfavourable geology); and existing supply may encounter problems, as seen in the more-rapid-than-expected decline of Bass Strait fields or, more catastrophically, the Longford gas processing plant explosion of 1998.

On the demand side, gas requirements could be lower than expected with an acceleration of efforts to improve energy efficiency, electrify where appropriate, and develop alternate supply of biogas and hydrogen; Ai Group is urging these steps on all Australian governments but it is too early to be confident of their adoption. Alternately, demand could be higher – for instance if gas-fired electricity generation increases as a result of the closure of coal generators and the need for flexible resources to complement variable renewables.²

² The relative economics of existing coal generators, new and existing gas-fired mid-merit generators, and new renewables mean that gas is not likely to displace the others as a source of bulk energy, though increased utilisation of existing gas generators may be very important in the aftermath of sudden retirements. Gas-fired peaking generators are currently the most important source of flexibility in the National Electricity Market, but will increasingly compete with demand response, pumped hydro energy storage, batteries and other options; it is not clear which will dominate over time.

In addition the flexible role of gas-fired electricity generation in meeting seasonal peaks, firming renewables and substituting for unavailable generators requires comparable flexibility in the supply of gas.

The Project has substantial flexibility which makes it a useful response to uncertainty and variability in future gas needs. The potential maximum import capacity is 160 PJ/yr and this properly forms the basis of the maximum impacts considered in the EES. However, Ai Group understands that the business case for the Project is not built around an assumption of full utilisation, but instead allows considerable scope to raise utilisation when circumstances (such as seasonal demand peaks) require it.

Overall, it is reasonable to expect that the Project will moderate risks to price and security that face Eastern Australian gas users, particularly in light of the uncertainty and fundamental change that characterise our energy systems today.

Climate policy context – general analysis

Australia’s overall greenhouse gas emissions appear to have levelled off in recent years after earlier falls, with a cleaner electricity sector and drought-struck agriculture offset by growing emissions from transport and the LNG industry. Future emissions projections have been repeatedly revised down as past assumptions about economic growth rates, the energy intensity of growth and the emissions intensity of new energy have changed. Prior to the pandemic it was still likely that projections would reduce further with additional technological and economic change, and if new State or Federal policies were introduced. However, Australia appeared set to rely heavily on the carryover of old Kyoto Protocol credits to bridge the gap between projected emissions and the carbon budget associated with our current national commitment to reduce emissions to 26-28% below 2005 levels by 2030. And extrapolating forward from that target trajectory, Australia was far off course to the widely supported goal of net zero emissions by 2050.

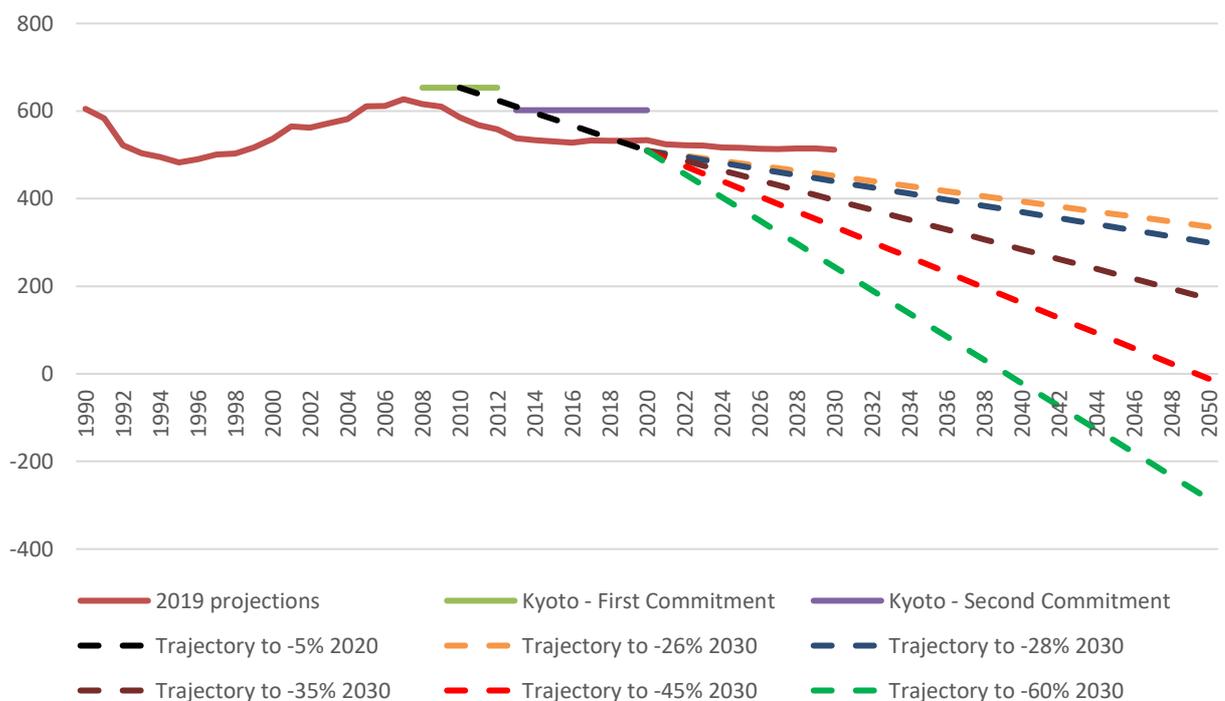


Figure 3 - Australian emissions, projections and alternative targets (DISER, Ai Group)

The pandemic has radically reduced emissions from personal transport and aviation; beyond the public health crisis it is plausible that videoconferencing and work-from-home will be a new normal

for many people and that transport demand will not fully recover. Power emissions are down further, though more from the continuing rollout of renewables than from so-far only slightly lower demand. A pandemic recession will reduce many sources of emissions, though our declining emissions intensity means the general fall in emissions will be much less than the fall in overall economic activity.

While the Commonwealth's reliance on Kyoto credit carryover may not be tenable, faster than expected economic change; the impacts of the pandemic; and growing State action are likely to be significant. The net effect is that it is plausible that Australia will meet its current self-defined national emissions budget to 2030.

However, there are at least three reasons for continued concern and focus on emissions. Firstly, much of the current fall in emissions is temporary and will be reversed as the domestic and international economies recover. Emissions may even rise above 'business as usual' levels if we experience elevated 'catch-up' growth or Australian and East Asian recovery investments drive demand for high-emissions activities.

Secondly Australia's overriding climate challenges are to avoid as much climate change as possible, by encouraging a global transition to net zero emissions by 2050; to adapt to the serious impacts of the climate change we can't avoid; and to ensure competitiveness, prosperity and fairness while doing so. Many economic sectors still lack a clear transition pathway, and a temporary emissions slump does not bring them any closer. Our climate adaptation challenge is also large and growing, as emphasised by a horror 2019-20 summer of heatwaves, fires and coral bleaching.

Thirdly there is a risk that the pandemic and recession cause emissions policies to lose traction and fail to drive long-term abatement, increasing costs through missed opportunities, stranded assets and the lock-in of higher emissions. Existing reform processes, such as efforts to update the national Safeguard Mechanism and consider crediting below-baseline emissions, are understandably likely to be delayed. Many businesses, investors and governments will be cautious about investment given lost income and economic uncertainty. Policy-makers may bank temporary emissions reductions and relax, rather than using them as a platform for deeper transition; this is particularly likely if we focus on interim 2030 goals rather than the long-term drive for net zero emissions. Consequently, Australia would lose precious time and risk the misallocation of investment. The costs could be severe, whether they fall on investors or all Australians.

In light of the above, Ai Group's recommendations to policymakers in our forthcoming paper *Post Pandemic Policy: Climate and Energy* include the following elements related to emissions:

- the adoption of a national net zero by 2050 emissions goal and a major push on gas demand reduction as outlined above;
- build a broader clean economy by:
 - developing clear and practical transition pathways across all sectors;
 - ramping up platforms for supporting clean economy innovation and cost reduction;
 - building a policy suite to drive mass take-up when improved technologies and practices are ready; and
 - managing risks to our existing exports through economic hedges, a more diverse economy and fair transition and opportunity for communities, workers and supply chains.

Climate policy context – impacts of the Project

The extent and duration of the role of natural gas in a successful transition to net zero emissions is much debated. There are significant emissions in current worldwide production, transport and usage of gas. On the other hand gas is also often an option with more moderate emissions than the practical alternatives; it can play a role in supporting the growth of zero-emissions technologies, including not just renewable electricity but biogas and clean hydrogen; and there are options to reduce gas emissions through efficiency, leak reduction, and carbon capture and storage (CCS).

There is genuine uncertainty about how all this may play out. In 2018 the Intergovernmental Panel on

Climate Change (IPCC), the key source of advice to the world's governments on the state of knowledge about climate change, released a major [Special Report on Global Warming of 1.5°C](#). This included a comprehensive assessment of 85 scenarios for global development consistent with no more than 1.5°C published by integrated assessment modellers around the world. The median outcome for gas in these models was a 40% decline in worldwide consumption between 2020 and 2050, but this covered a range of modelled outcomes stretching from an 88% decline to an 85% increase.³ No modelled scenarios assessed by the IPCC found that eliminating gas consumption for energy by 2050 would be economically efficient. But the ways in which gas was expected to be used shifted significantly, with substantial use of CCS.

Understanding of the role of gas will continue to evolve, and we may see some improvements in this regard in the next major Assessment Report from the IPCC, expected in stages in 2021-22. However, in these circumstances the Project is a useful way to support the security of gas supply now and retain the flexibility for a range of scenarios for future gas demand. The regasification vessel is easily relocatable and does not commit large amounts of capital that risk stranding in a scenario where even more rapid reductions in emissions and gas consumption are required. As the EES highlights, the emissions associated with the Project itself, even at a maximum rate of utilisation, are not large in the context of Victoria's existing emissions. While the challenges of achieving net zero emissions by 2050 are significant, they are not greatly affected by the presence or absence of the Project.

It is reasonable to pursue an energy and emissions strategy that both supports favourable new supply options like the Project, and supports steps to reduce gas demand. While climate policy debate often focusses on the merits of high-profile fossil fuel supply projects, in a world awash with fossil fuel resources, changes on the demand side are likely to be much more significant. The remark often attributed to former Saudi Oil Minister Sheik Ahmed Zaki Yamani is relevant: "The Stone Age didn't end because they ran out of stones."

Conclusion

Ai Group considers that the Project would make a significant and useful contribution to reducing price and security risks to Eastern Australian gas users, while not being inconsistent with a successful and necessary transition to net zero emissions by 2050.

Ai Group's adviser Tennant Reed (tennant.reed@aigroup.com.au, 0418 337 930) is the best point of contact for any questions on this submission. He is also available to speak to this submission in the Public Hearing.

Sincerely yours,

Innes Willox

Chief Executive

³ See table 2.6 in <https://www.ipcc.ch/sr15/chapter/chapter-2/>.