Ciaran Roe Global Director - LNG

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Dear ACCC,

S&P Global Platts appreciates the opportunity to provide feedback on some of the issues raised in the ACCC review of the LNG netback price series paper published March 18, 2021. Platts would further like to offer some views on how the LNG market has developed internationally since the netback series was launched.

Forward Curve Length

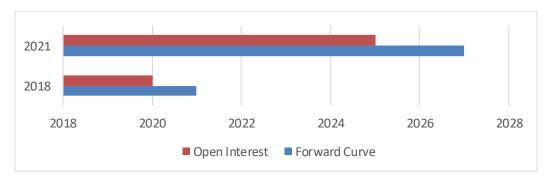
When the ACCC LNG netback price was launched in late-2018, the Platts JKM forward curve was tradeable to end-2021, with open interest (OI) into the 2020 months. In March 2021, JKM's forward curve was tradeable until end-2027, and open interest was present until end-2025.

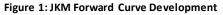
Furthermore, in the cash-settled futures market, when ACCC launched its netback series the record volume traded in a month was around 2 million mt; in the latest record month, January 2021, over 17 million mt was traded on the JKM cash-settled futures.

Full-year 2017 traded volume in JKM derivatives amounted to 9.66 million mt; in 2020 this figure came to circa 160 million mt-- more than twice the volume of Australia's LNG exports in 2020.

Beyond the forward curve for cash-settled futures, options contracts have been launched since 2018 that settle against JKM. These have started to trade significantly, with around 17,000 lots being traded on one exchange in December 2020.

In short, JKM derivatives and the associated forward curves have matured in the last two years to become significantly more liquid and deeper, and provide price transparency across many years into the future.





Source: Intercontinental Exchange



LNG Price

Australia's LNG exporters' opportunity cost is fundamentally tied to the price available in Northeast Asia. This has been reflected in the ACCC's pricing approach to the netback since 2018.

Australia's LNG exporters are exposed to the demand pull of NE Asia, the largest importing region for LNG globally by some measure. Indeed, Japan, Korea, China & Taiwan account for 95% or more of Australia's exports in a given month. Australia's proximity to NE Asia provides its LNG producers with a freight advantage compared to other shippers; it also means that NE Asia is the market that fundamentally determines how much LNG Australia exports.

On the Australia gas buyers' side, NE Asia LNG prices are already referred to in negotiations with suppliers, and this linkage will likely strengthen once LNG is imported to the East Coast itself and (cargo-to-cargo price competition is established.

If NE Asia is the market which East Australia must compete with for the marginal molecule of gas, that begs the question: which benchmark represents LNG prices in NE Asia?

Duration	Contract	Volume	Pricing basis
2023-2038	Tellurian-Total SPA	1.0-2.5 MTPA	JKM
2020-2035	EOG-Cheniere feed-gas	0.85 MTPA	JKM
2020-2035	Apache-Cheniere feed-gas	0.85 MTPA	JKM
10 years	DGI-Santos SPA	1.5 MTPA	JKM
2021-2024	2x Reliance BP gas supply tender	7.5 + 5.5 mil scmd	JKM
2021-2023	Arcelor Mittal Nippon Steel	30 TBtu/year	JKM/flat price
2021-2022	ENN buy tender	4 cargoes/year	JKM
2021-2022	BP-ENN (R-LNG)	0.3 MTPA	JKM
2021-2022	BP-Foshan Gas (R-LNG)	0.85 MTPA	JKM
2021-2022	Woodside Pluto sell-tender	6 cargoes	JKM/Brent
2021-2022	Unipec buy-tender	Over 40 cargoes	JKM/Brent/Flat price
2021-2022	ENN buy-tender	Up to 8 cargoes	JKM/Brent
2021	Tangguh Feb-Sepsell-tender	13 cargoes	JKM
2021	GSPC	3 cargoes	JKM
2021	CPC Jan-Feb buy-tender	Atleast 5 cargoes	JKM
2021	CPC buy-tender	12 cargoes	JKM
2020-2023	Guangdong Energy buy-tender	16 cargoes	JKM
2020-2022	PTT Singapore buy-tender	32 cargoes	JKM
2020-2021	3 x GSPC buy-tenders	15 cargoes	JKM
2020-2021	Sinopec Great Wall Nov-Mar buy-tender	10-12 cargoes	JKM
2020-2021	2 x Sakhalin LNG sell-tenders	12 cargoes	JKM

Figure 2: Examples of short-, mid- & long-term contracts & tenders from 2021

Source: Platts, company statements

S&P Global Platts The table above gives an indication of the growing usage of JKM in short, medium- and long-term contracts for LNG. Besides its use in LNG contracts, JKM has also been adopted in downstream and upstream markets — for pipeline gas contracts in China, domestic gas agreements in India, as well as feed-gas supply contracts in the US.

For spot benchmarking purposes, it is our understanding that JKM is widely used in index-linked transactions. In 2020, the number of JKM-linked bids, offers and trades published in the Platts Marketon-Close price assessment process, which is used to underpin JKM's determination, increased 33% yearon-year to over 250.

The oil slope pricing structure continues to be prevalent in the Asia Pacific region in long-term contracts. These slopes, however, track the implied JKM forward curve slope closely. Therefore, while a slope to oil is the basis of contractual settlement, these LNG contract prices are, in fact, being signed based on an outlook of LNG supply and demand fundamentals that is reflected by the value of forward LNG prices.

Hence regardless whether it is a long-term or a short-term contract, the LNG spot price is critical in determining the contract's settlement level, at least at the point of agreement.

However, the oil slope that corresponds with the JKM forward curve at the point of contract agreement does not keep up with LNG pricing dynamics as the contract comes to fruition. The chart below demonstrates this, where the price of a 13.5% oil slope – common to long term contracts a few years ago – quickly lost relevance with LNG spot market price development.

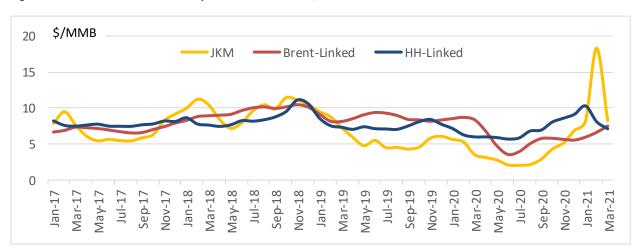


Figure 3: Northeast Asia LNG contract prices over 2017 to Q1, 2021

Source: Platts. NOTE: Brent-linked LNG price is 13.5% of Brent price. HH-linked LNG price is (HH*1.15) +\$3.00/MMBtu + Platts daily assessment of "LNG US Gulf- Japan/Korea Freight cost \$/MMBtu".

The imbalances between the long-term contracts and spot prices have had a significant effect on market dynamics, including on Australia's LNG producers. Spot availability tends to be constrained when spot prices are below the short-run marginal cost (SRMC) and increases when SRMC is surpassed by spot prices. In the market itself, the term market regularly interacts with the spot market in other ways: with



term cargoes being slotted into spot sales and purchases or vice versa, depending on which is the more profitable option.

LNG prices in Northeast Asia have distinct fundamentals which are different to the landlocked gas hubs in Europe and the U.S. Correlation can temporarily increase, especially in periods of oversupply – when Asian LNG prices tend to have a "floor" of European LNG import prices. The landlocked US gas hubs have considerably less interaction with international LNG prices. Even though the US is increasingly the swing supplier of LNG to global markets, it is not at present the price-setter because of the significant volumes of LNG coming from other sources with flexibility into both LNG basins (APAC and Atlantic), such as Russia and Qatar.

In summary, since the netback was launched, the JKM benchmark has become increasingly embedded in the global LNG market. NE Asia spot prices and the associated forward curve are increasingly referenced to determine the oil slopes often used in long-term contracts. As the LNG market continues to evolve rapidly, the signs are clear that the commodity's spot price is emerging as the driving force behind prices in all contract types. With the market's volume growing significantly further in the coming years, this effect is likely to be compounded as the signals of the LNG market's fundamentals become clearer still.

Summary

In conclusion, ACCC's review of its netback price series provides an important opportunity to take stock of how the APAC LNG and gas markets have evolved in the last two and a half years. The aims of the netback review are to increase the transparency and efficiency of these markets. Furthermore, the price with the greatest influence on planned import capacity along the East Coast would be the NE Asia LNG spot market. ACCC's LNG netback price has provided buyers and sellers with valuable insight into the price conditions of Australia's gas market relative to its closest major competing market. Continuing with this approach will further drive transparency and efficient market development in Australia, as the two markets become further integrated and interconnected.

Platts would like to thank the ACCC for considering these comments as part of your review process. If you have questions or queries about any of the content provided above, please do not hesitate to get in touch with us.

Best regards,

Ciaran Roe

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