

Oil indexation: the virus behind LNG disruptions

The coronavirus pandemic contributed to the global LNG glut, but is far from its sole cause. Oil indexation is increasingly an obstacle to efficiently balancing demand and supply, writes Abache Abreu

The spread of coronavirus across the world has generated an unprecedented global health and economic crisis, and presented the LNG and energy industries with a demand shock like no other in history.

It has severely disrupted global LNG trade flows and fundamentals, derailed project investment plans amid uncertainty over the length and depth of the crisis, and could impact the role gas and LNG may play in clean energy transitions.

But the chronic epidemic destabilizing LNG markets and causing disruptions across supply chains predates the coronavirus outbreak. This virus has been around for much longer, gaining strength over time, and has become particularly disruptive at times of supply and demand shocks.

Oil indexation, which still dominates Asia's long-term LNG pricing, has not only hindered the ability of buyers to resell unwanted volumes to other end users with appetite for opportunistic purchases when faced with falling demand, high stocks and limited gas storage. It has also made supply less responsive to demand shocks and falling prices.

Unresponsive supply

Export facilities across Australia, Qatar, Indonesia, Malaysia and Russia, which supply China with long-term oil-indexed LNG contracts, ran at an average utilization rate of more than 90% in the first quarter 2020, according to S&P Global Platts Analytics. This came despite China's struggle to keep up with deliveries and low demand elsewhere, adding to Asia's supply glut and pushing spot prices even lower.

In the wider Asia Pacific region, which represents nearly 60% of Asia's LNG supplies, export facilities ran

at 88% in Q1, a five percentage point increase year on year, despite limited demand growth: import terminal utilization in the region only grew 1 percentage point on year in Q1 2020.

Australian exporters, which account for almost half of China's total LNG imports, said the virus outbreak has had limited impact on their operations given their low exposure to spot markets. A similar statement was made by Russia's Novatek, which also supplies China with oil-indexed LNG contracts.

Meanwhile, disruptions in Asian LNG trade flows have been widespread. Lockdowns in China and India resulted in tens of contractual cargoes being delayed, diverted or turned into distressed floating storages awaiting alternative buyers at significant commercial losses.

The meltdown in crude oil prices in March only worsened the situation. As the oil price slump is yet to filter into LNG contracts – generally linked to Brent prices over the three months preceding the delivery month – suppliers of oil-indexed LNG contracts have had another incentive to maintain high operating rates, a trend that is deepening the supply glut.

Oil-indexed LNG exporters such as QatarGas, Brunei LNG, Gorgon, Australia Pacific LNG and North West Shelf have reportedly deferred maintenance schedules to later this year or next, citing financial and manpower considerations, but the incentive to maintain output ahead of a price slump is too great to ignore.

Buying patterns

And while contracted volumes have been left stranded in Asia-Pacific waters, some of the same Chinese and Indian importers impacted by national lockdowns, demand contractions and force majeure declarations have returned to the spot market, where prices are yet to find a floor.

The incentive for buyers to postpone contractual deliveries is as strong as that of sellers to boost prompt supplies.

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Platts Dated Brent prices averaged \$55.441/b in February and \$31.829/b in March. Assuming April average prices at \$35/b and an oil slope of 13.5%, a buyer would pay \$5.50/MMBtu for a May cargo versus \$8.37/MMBtu for a March delivery.

This delay would result in a drop in the cost of a standard-size 3.4Tbtu cargo of approximately \$10 million, which is more than the price of a spot cargo.

Platts JKM, the benchmark for LNG deliveries into northeast Asia, plunged to an all-time low of \$2.263/MMBtu April 1 – the equivalent of \$7.7 million. The average for May deliveries by expiry was \$2.795/MMBtu, and Platts Analytics expects the benchmark to remain below \$3/MMBtu through October.

Disruptive force of oil-indexation grows as Brent-LNG price correlation dilutes



Note: Oil-indexed LNG contract prices assume a 50 cent/MMBtu constant and 13.5% slope to average Brent prices for the three months preceding delivery
Source: S&P Global Platts



When the price isn't right

Oil indexation creates a disparity between expected delivered prices when contracts are originally signed and LNG market-based pricing when deliveries begin.

The market shock of coronavirus has put a spotlight on the inadequacy of oil indexation to price a product that is increasingly commoditized, and reliant on LNG market-based pricing for trading, risk management and investment decisions.

And the disruptive force of oil indexation can only increase in the long run, as the correlation between Brent and LNG prices dilutes further. Significant additions of elastic LNG supply and demand are boosting spot liquidity and benchmark robustness, while downstream markets in Asia are becoming more competitive and exposed to global LNG fundamentals and prices.

Oil indexation has made supply less responsive to demand shocks and falling prices

However, the break from oil indexation is not the endgame. For stakeholders to navigate and survive supply and demand shocks, market-reflective pricing will need to be accompanied by a solid risk strategy at both ends of the supply chain.

The sector will also need as initiatives to build liquidity further, standardize trading practices, improve the industry's financial architecture and enhance transparent LNG price formation mechanisms. ■