WHAT WILL COVID-19 MEAN FOR LNG?

By Alex Dewar, Juan Vazquez, and Lluis Bori

Already grappling with a supply glut in liquefied natural gas (LNG), global gas companies face fresh challenges due to two seismic events: the COVID-19 pandemic and the global oil price shocks. Together, these developments are set to deepen and lengthen the current imbalance between supply and demand in LNG markets, leading to a lower-for-longer price environment. As a result, up to 8% of global LNG demand could be at risk (more than 25 million tonnes per annum, or MTPA) in the near term while the low-price environment could last another one to two years.

For upstream gas exploration and production companies, LNG producers, and project developers, the new market dynamic will jeopardize future projects and place some companies under significant financial strain. LNG buyers, meanwhile, may be able to capitalize on low prices to improve contract terms and enable switching from coal to gas. Whether they are maximizing the benefits of the glut or mitigating its negative impacts, all players need to re-view their competitiveness and act now to strengthen their market positions in this new environment.

Weakening Demand Will Exacerbate the Market Imbalance

Even before the COVID-19 pandemic, the LNG industry was managing the impact of oversupply. Since 2015, the annual growth in global liquefaction capacity has averaged more than 30 MTPA, increasing LNG supply by around 10% per year. Markets were able to absorb this additional supply until the first quarter of 2019, when slower growth in the Chinese gas market, and a contraction in northeast Asian demand, pushed spot prices from a range of $7 to $11 per million British thermal units (mmbtu) to less than $5 per mmbtu in Europe and Asia.

With 24 MTPA of new liquefaction capacity set to come online in 2020, the global LNG market was likely to continue to be oversupplied. In 2019, Europe was able to
act as a so-called market of last resort, absorbing incremental LNG supply due to declining local gas production and relatively larger storage injections, and by substituting pipeline supply for LNG. As a result, European LNG imports nearly doubled in the winter of 2018 to 2019. But Europe’s ability to reprise this role in 2020 was already challenged by a warmer winter and record-high storage levels.

COVID-19 is set to make the situation significantly worse. By slowing economic activity, the pandemic has curtailed natural-gas demand in China, which was, up to now, the second largest LNG importer and the fastest-growing market for LNG. Even as economic activity in China shows signs of recovery, the annualized rate of growth in the demand for Chinese natural gas is set to halve from previous projections.

Europe and other LNG import markets are looking fragile. A contraction in economic activity will most likely translate into near-term demand impacts in the power generation and industrial sectors. Early indicators in Italy suggest that demand in those sectors may have slowed by more than 10% in affected regions since the implementation of social-distancing measures. While low LNG prices will enable some fuel-switching opportunities in the near term, the structural and seasonal nature of natural-gas demand in many markets, combined with rapidly falling overall energy demand, is likely to limit any upside potential.

While robust LNG market growth is still expected in the medium-to-long term, LNG demand growth is likely to slow significantly this year. Extrapolating from the market impacts already observed in China and Europe indicates that global demand for LNG could flatten or decline by as much as 2% in the short term. This represents an LNG market in 2020 that is as much as 25 MTPA (8%) smaller than the previously projected high case for the year. (See Exhibit 1.)

In response to the outlook of deteriorating demand, LNG suppliers face a growing risk of having to curb production levels. Delays to the startup of new capacity will relieve some market pressures, but LNG producers with high variable costs are likely to be impacted. The US already appears to be affected: some cargoes have been canceled, and capacity utilization at US plants fell to 60% in early March, down from an average of around 90% in 2019.

The Fallout from Declining Prices

Developments in oil markets have added to LNG suppliers’ challenges. Rapidly declining oil demand combined with the failure
of the OPEC+ group to come to an agreement about production cuts in early March—followed subsequently by production increases—resulted in the price of Brent crude oil registering its biggest one-day decline since the 1991 Gulf War. The dramatic drop in price closed the spread between natural-gas spot prices and the prices of the oil-indexed term contracts that govern two-thirds of LNG sales. While oil-indexed contracting previously insulated some LNG suppliers from weaker spot prices, both spot and oil-indexed prices have now fallen below $4 per mmbtu in both Europe and Asia. (See Exhibit 2.)

Lower natural-gas prices are placing upstream gas producers and LNG suppliers under growing pressure. LNG makes up only 11% of global gas supplies. But because it is the marginal source of supply in many markets, and is traded worldwide, low LNG prices have a disproportionate impact on spot prices at natural-gas trading hubs.

That pressure is being felt most acutely in the US. The Henry Hub spot price has largely remained below $2 per mmbtu since January. It recently reached its lowest price since 1995, falling to $1.6 per mmbtu. This is well below the average capital expenditure breakeven price for most gas-focused exploration and production players, which BCG estimates to be between $2 and $2.5 per mmbtu. (See Exhibit 3.) As a result, many of these companies are now facing financial distress. In Europe, the current price environment is also impacting pipeline gas suppliers. Dutch TTF hub prices recently fell below $2.7 per mmbtu, which is at the low end of the typical capex breakeven supply cost for pipeline suppliers.

**How Companies Can Respond**

For the LNG industry, a prolonged supply glut and lower-for-longer price environment will have significant implications. Beyond the near-term financial impact on upstream gas producers and LNG suppliers, development of future liquefaction projects may be at risk as tougher market conditions make it harder to approve new projects in the near term. This will particularly affect US independent project developers, which need upfront customer commitments to secure project financing.

On the flip side, new opportunities will emerge for natural-gas buyers. With a sustained lower LNG price, the case for investments that promote switching from coal to gas is now stronger. LNG spot prices in Asia and Europe are close to parity with coal on a levelized cost-of-energy basis, which will minimize the cost impacts of any fuel switching in the short term.

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**EXHIBIT 2 | Price: Both Spot and Oil-Indexed Prices Are Now Below $4/mmbtu**

[Graph showing price of northwest Asia spot LNG (ANEA) and European spot (TTF) with index ranges for Brent oil.]

*Sources: Argus Media; Bloomberg; GIIGNL; IGU; Refinitiv Eikon; BCG analysis.*

*Note: bbl = barrel of oil; mmbtu = million British thermal units.*

1Based on contracting at 10%-12% of Brent.
Even as natural-gas prices inevitably rise in the future, increasing carbon prices and more extensive air quality regulations are likely to ensure that investments in gas remain competitive.

Companies along the value chain must respond with urgency, review their situation in light of the new market context, and seize opportunities that capture value in both the short term and the long term. They should take the following steps.

**LNG Producers.** The immediate priority for producers in light of COVID-19 is to secure operational continuity. Beyond that, they should take quick steps to prepare for a longer and deeper supply glut. First, they should assess specific market risk exposures in the near term, particularly to buyers or regions that are likely to be more directly affected by the COVID-19 outbreak. They will also need to understand their relative competitiveness versus other producers in the new market environment. Taking advantage of fast-track margin improvement opportunities will be essential for responding to the immediate pressures on profit margins, starting with renegotiating supplier and service contracts. Measures that optimize LNG production and trading, particularly the use of new digital tools and capabilities, are also likely to prove among the most viable options for improving performance in the short term.

Once their businesses have been stabilized, LNG producers can turn their attention toward bolstering marketing capabilities and portfolio moves that strengthen their market position over the medium-to-long term. Given ongoing global LNG oversupply, downstream integration will likely be a priority so that companies can guarantee continued market access. Beyond that, opportunistic M&A may be an option for some players due to the likelihood of distressed divestments.

**LNG Buyers.** While a low-price environment will provide a boost for LNG buyers, they also need to assess their near-term exposure while identifying ways to maximize value over the long term. They should start by reviewing their existing commercial exposure, engaging with suppliers to create as much near-term flexibility as possible so they can manage their own potential demand shocks. At the same time, they should have a clear approach for maximizing value from contracts for the longer term. The current environment provides an opportunity to lock in low-cost supply while improving the terms and
flexibility of contracts. A key lever for buyers in achieving these goals is the access they provide to end markets in a period of oversupply. But to leverage this effectively in negotiations, buyers must first understand the value of their assets and contracts to suppliers under different market scenarios.

**While the full effects of COVID-19 are still coming into focus, it is already clear that the market context for LNG has shifted significantly.** There may well be long-lasting implications for where natural gas is produced, for which LNG projects are developed, and even for investment in new and developing natural-gas value chains. Given the scale of potential impacts and the significant uncertainty that remains today, now is the time for all players across gas value chains to reassess their positioning and options to improve performance in both the near term and the long term.

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