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LNG Outlook 2018

Growth and resilience

For many LNG suppliers, liquefaction capacity holders and LNG traders, 2017 is ending on a high: the winter market of 2017/18 looks unexpectedly tight, with Asian LNG prices close to USD 10/MMBtu and oil prices on the rise. The global LNG market readily absorbed around 30 mt of additional supply in 2017, leading some in the industry to question the notion of oversupply that lasts into the early 2020s. Will the current confident market sentiment be sustainable as we move through 2018?

A few planned liquefaction projects have concluded long-term LNG supply/capacity agreements recently, demonstrating that deals can still be done, even in the current market environment, and some LNG project FIDs may not be far away. However, the rate of LNG supply growth will increase further in 2018, with nearly 40 mt of additional LNG supply entering the market. Will China, with its mind set on cleaning up its skies by switching from coal to gas, come once again to the market's rescue, or will 2018 be the year when the long-anticipated LNG glut finally hits?

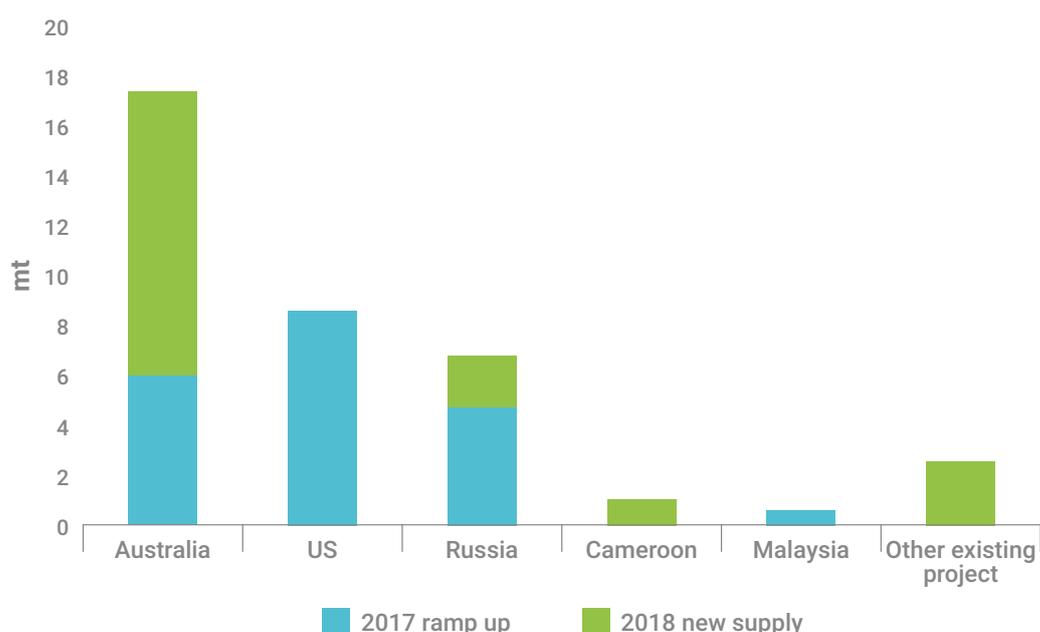
Additional LNG supply in 2018

Out of the additional 37 mt of LNG Gas Strategies expects to be produced in 2018, liquefaction projects commissioned in 2017 – Malaysia LNG Train 9, Sabine Pass Trains 3 and 4 and Cove Point in the US, Yamal LNG Train 1, Malaysia’s Petronas FLNG, and Wheatstone LNG Train 1 and Gorgon Train 3 in Australia – are expected to contribute approximately 20 mt.

New liquefaction trains scheduled for start-up in 2018 – Ichthys Trains 1 and 2, Prelude and Wheatstone LNG Train 2 in Australia, Yamal LNG Train 2 and Cameroon FLNG – are forecast to contribute 15 mt, although this assumes all of them starting up according to plan.

The remainder of the additional supply is forecast to come from production increases in existing projects that are currently operating below their nameplate capacity.

Ramp up of supply in 2018 by country



Source: Gas Strategies

FIDs: In the shadow of Qatar

One of the big announcements of 2017, following the decision to end the moratorium on the development of the giant North Field in Qatar, was that Qatar intends to expand existing LNG supply capacity from around 80 mtpa to over 100 mtpa by 2024.

This expansion/debottlenecking project will likely be the lowest cost of any planned LNG supply additions globally. Qatar, thanks to the scale of its portfolio, could also market

additional supply on more flexible commercial terms – shorter duration contracts, variety of price indexations – which other new, smaller projects may not be able to compete with.

While firm details remain limited, the prospect of the Qatar expansion is likely to pose a formidable competitive challenge to other new LNG supply projects.

Likely FIDs

Finding buyers for long-term supply agreements in a tough competitive environment will remain the biggest challenge for new supply projects in 2018, and will be the biggest single factor limiting new FIDs.

The business model of the current crop of US LNG export projects places all of the market risk with the offtakers. In an increasingly uncertain LNG market, buyers are starting to resist taking this risk in signing new long-term contracts under these terms. New LNG supply projects are starting to take note and some, not just those in the US, are exploring more innovative commercial structures which spread the market risk across the value chain more evenly.

Despite the challenges, some new supply projects may make it to FID in the coming year. The Fortuna floating LNG (FLNG) project in Equatorial Guinea looks set to be the first one to take FID in 2018, with Gunvor LNG selected as offtaker in August 2017 for its full 2.2 mtpa of capacity.

Across the Atlantic, Corpus Christi LNG Train 3 in Texas is also likely to take FID in 2018, which Cheniere CEO Jack Fusco said in November 2017 was the company's number one priority. The project already has an offtake agreement in place with EDP, and discussions are ongoing with China's CNPC for another deal that could get the expansion project over the line in 2018.

A dark horse in the race to take FID, possibly in late 2018, could be Jordan Cove LNG in Oregon. Unlike most US LNG projects, both planned and under construction, the 7.8 mtpa planned facility is located on the US west coast, providing a strategic advantage for LNG sales into Asia. It has two preliminary offtake agreements in place with Japanese buyers for approximately half its capacity. It has had problems with FERC approval in the past, but the project developers hope to receive approval in November 2018.

Another project that could take FID in 2018 is the Iranian FLNG project. The National Iranian Oil Company (NIOC) signed a gas supply agreement with IFLNG, jointly owned by Iran's Khark Gas Refining Company and Norway's Helma, who will charter the Caribbean FLNG unit from Exmar.

Exmar has been struggling to find a home for the FLNG unit following the termination of an agreement to liquefy gas production in Colombia. The unit will reportedly be delivered to Iran in mid-2018 meaning that, in theory, LNG production could begin in early 2019.

The volume produced from the project (0.5 mtpa), although relatively small, would represent a bold first step for Iran's LNG industry and a clear intention that NIOC will continue to seek ways around US sanctions, which have so far limited its access to liquefaction technology.

Projects to watch

Two projects that are unlikely to take FID, but could build momentum in 2018, are Venture Global's Calcasieu Pass in the US Gulf and Anadarko's onshore Mozambique facility.

With LNG sales proving the biggest challenge to taking FID for any LNG supply project, Calcasieu Pass has had some early success, with agreements in place with Shell and Edison totalling over 2 mtpa. It does not yet have FERC approval and will need to sell at least another 6-8 mtpa before taking FID. If it can conclude another agreement in the first half of 2018, it will edge closer to achieving that.

In Mozambique – where the Eni-led Coral South FLNG project was the only liquefaction project to reach FID in 2017 – the first, 12 mtpa phase of Anadarko's onshore LNG facility has gathered pace, with marine concessions signed by the government and, more importantly, a 2.6 mtpa LNG SPA agreed with Thailand's PTT, subject to government approval. Anadarko has also announced that USD 150 million of spending has been committed to the project in 2018 for site preparations.

Increasing liquidity and commoditisation

A major trend Gas Strategies expects to play out in 2018 is the increasing commoditisation of LNG.

LNG supply growth led to an increase in LNG spot trading liquidity in 2017. Recent figures from the Intercontinental Exchange (ICE), for example, show that JKM swaps have continued strong levels of growth through 2017 and by July over 70 cargoes had cleared through ICE, which roughly amounts to a volume of 4 mt of LNG.

Through the winter period swaps have maintained robust growth, indicating the increased liquidity and commoditisation of the LNG market. Gas Strategies sees this trend continuing, and maybe even accelerating, in 2018, as the rate of LNG supply growth increases and increasing volumes of LNG are sold on a spot and short-term basis.

Another indicator of increased commoditisation is the growing role of trading houses such as Gunvor, Trafigura and Vitol.

Trafigura has invested in an FSRU project in Pakistan, which started up at the end of 2017, and has signalled that it will invest in an additional floating terminal in Pakistan in 2018.

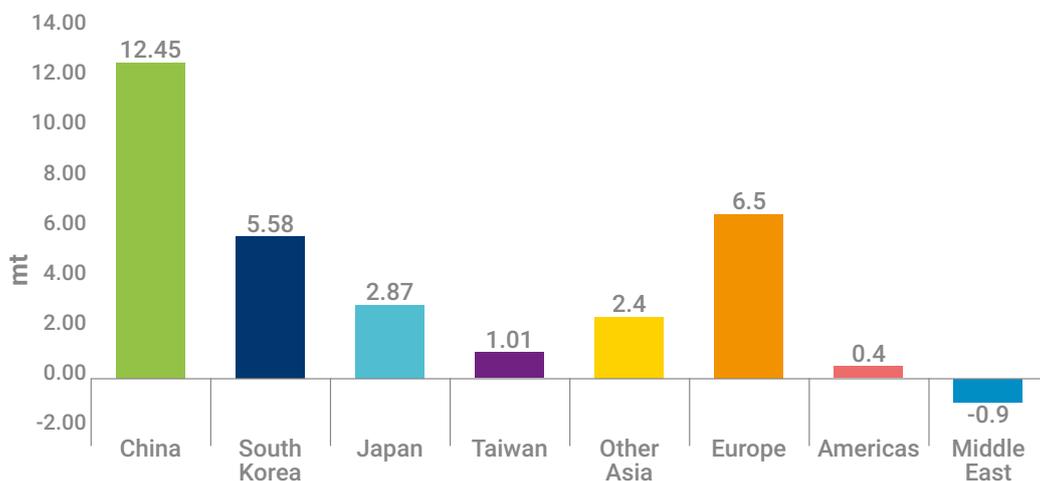
Gas Strategies expects to see traders continuing to challenge the status quo, particularly by taking short positions to create new market opportunities, and finding more innovative ways to manage project risks. This will force incumbent LNG players, some of whom have been slow to react to the commoditisation of the industry, to urgently re-evaluate their role in the market.

Gas-hungry Asia

The LNG market looks set to be very tight in the winter of 2017/2018, something that was not expected at the start of the year.

Following a strong government push to improve air quality in major cities, China alone looks set to absorb as much as 40% of the increase in LNG supply globally in 2017, with Chinese LNG demand predicted to finish 2017 up by around 12 mt on the year before.

Preliminary estimates for LNG demand increase in 2017



Source: Gas Strategies

Millions of homes in China are being connected to the gas grid for the first time in order to remove coal-fired boilers in the residential sector. Gas is also displacing coal in industrial applications such as the manufacture of ceramics and cement. Despite the huge increase in LNG imports in China in 2017, there are still fears of a gas shortage this coming winter.

While Chinese LNG demand growth has staved off any fall in LNG spot prices in 2017, it is unclear how long this can provide a back stop for the continuing increase in LNG supply.

The first real test of the LNG market's ability to absorb the expected 2018 surge in output is likely to come in Q2, following the ramp up of a number of supply projects which started up in the second half of 2017, and the fall in LNG demand, which is generally seen following the end of the northern hemisphere winter.

A fall in spot LNG prices in 2018 could be especially steep if production of the 30 Tcf Zohr field in Egypt starts up as expected at the end of 2017 and Egyptian LNG demand begins to fall away rapidly in Q1 '18.

Balancing act

But there are several factors that could keep the market in balance in 2018.

For example, Indian LNG demand has proven to be very price sensitive. Having increased by around 30% in 2016 on the back of low LNG spot prices, LNG demand in India has been flat in 2017. A fall in LNG prices could again stimulate further demand.

Efforts to reduce smog and increase air quality, particularly in the New Delhi region, where the use of petroleum coke was banned in November, are also beginning to gain traction. Raising awareness about the need to clean the environment in India could begin to tip the balance in favour of gas in India in 2018, superseding buyers' tendency to opt for the cheapest fuel available.

But the growth in the number of importing countries seems likely to slow in 2018, with Bangladesh expected to be the only new importer, bringing the number of importing countries to 40 when its 3.75 mtpa FSRU-based project starts up the second quarter.

Political say

The tight LNG market in winter 2017/18 has been largely driven by Chinese government policy in recent years. Gas Strategies sees that politics could continue to have a big role in influencing demand and spot prices through the course of 2018, as well as determining the pace at which the LNG market rebalances.

The pace at which the Chinese government and state-owned companies can increase the share of gas in the domestic market is one key variable, but Chinese policies to limit

domestic coal production have also pushed up international coal prices and increased gas demand in Europe.

Domestic gas pricing policy in South Asia – most notably India – could heavily impact LNG demand in the region, and the speed at which nuclear output in Japan will increase continues to be overestimated.

The above factors will affect supply and demand in 2018. At the same time, Gas Strategies sees a lack of capability in state institutions and governments holding back developments in new LNG markets, which have the potential to help balance the market in the medium-term.

Many LNG suppliers have, for example, been attracted by proposed LNG-to-power projects in countries such as Brazil, Cyprus, Morocco and South Africa, but very few projects have advanced. Several LNG suppliers and project developers have failed to appreciate the requirement to navigate domestic politics and work with state sponsors to define projects which are deliverable. The outlook for many planned LNG-to-power projects looks bleak as a result.

A resilient outlook

2017 was a relatively uneventful year for the LNG industry, with around 30 mt of additional LNG supply absorbed by the market with minimal disruption and, unsurprisingly, limited FIDs on new LNG projects.

2018 is likely to be more dramatic, and the betting is that the market will suffer severe indigestion in absorbing the 40 million tonnes of extra LNG that it will have to swallow. In consequence, it is likely that the LNG market will swing out of its current tight supply situation in Q2 '18 and spot LNG prices will average the year well below 2017 prices.

But previous prognostications of a severely distressed LNG market in 2018 now seem less likely to be proven right, given the experience of 2016 and 2017. Indeed, it now also seems possible that 2018 may pass without any dramatic price drops, and without US capacity being shut in – which will be a key indicator of an over-supplied market. If this alternative scenario comes to pass, it will be a really remarkable result, showing the flexibility of the markets to absorb new supply.

In terms of innovation, regular deliveries from Yamal LNG are expected in 2018. This will be an important milestone for the LNG industry, as the project is expected to start regular direct LNG deliveries to Asian markets through the Northern Sea Route using its newly commissioned ice-breaking LNG tankers.

While it is notoriously difficult to predict the timing of FID on new projects, the prospects for FIDs on new liquefaction capacity do seem to be improving – for some projects at least. However, continuing caution on pricing will bear down on the deals that get done during 2018.

Although Gas Strategies does not see any FID commitments to any greenfield mega-projects, such as those in Mozambique or the US, in 2018, construction works could start on around 15 mtpa or new liquefaction capacity: Fortuna FLNG, Corpus Christi and the first wave of Qatari expansion.

And given that 15 mtpa is roughly the amount of new capacity that is needed annually to sustain the expected long-term industry average growth rate over the next decade, this level of new FIDs would show the ability of the industry to maintain the required investment run rate despite very tough market conditions. That, in itself, will be a very encouraging sign of the health of the LNG industry.



Consulting

+44 (0) 20 7332 9900
consult@gasstrategies.com



Alphatania Training

+44 (0) 20 7332 9900
training@gasstrategies.com



Information Services

+44 (0) 20 7332 9976
subscriptions@gasstrategies.com