# LNG

# Who will absorb LNG oversupply?

**S** pot LNG prices have recently bounced up from three-year lows, supported by bullish days on European gas markets and signs of summer demand from Asian buyers. The market has been oversupplied for the past few months, despite China's demand continuing to rise and a jump in deliveries to Europe. Meanwhile, US LNG exports are expected to ramp up over 2H2019. The following is a global view across some of the key importing markets.

# **Softer summer in China?**

Although the spot LNG market into China looks lucrative on paper compared to domestic prices, high LNG terminal stocks and a lack of storage capacity has curtailed spot demand. LNG demand from industrial and chemical sectors has been dented by a raft of monthlong plant safety inspections. While a mild winter, which capped LNG consumption for heating, has also contributed to high LNG terminal stocks.

Spot LNG prices are lower than even the lowest citygate price. Prices at coastal cities are much higher, with Shanghai at around \$8.7/mn Btu. But most domestic city gas companies are unable to profit from the arbitrage, as they lack access to local terminals. Chinese independent buyers Shenergy Group and Guanghui Energy, however, have the ability to buy incremental spot cargoes.

China remains the leading LNG growth market globally and

Spot LNG prices have

years of low prices

Photo: ICIS

recently risen after three

The LNG glut this summer is a hot topic, with key importers facing a variety of options. Some will buy more spot cargoes, while others are constrained by price and capacity. *Ed Cox*, *Ruth Liao* and *Ed Lane* of ICIS report.\*

monthly increases in LNG imports relative to a year ago are likely to continue.

### **Nuclear impact on South Korea**

South Korea's steady drop in LNG imports in 1Q2019 could continue into the summer even as concerns grow about air pollution from coalfired plants and the government cuts taxes on LNG imports. The country's nuclear generation operated at close to 90% of total capacity in early April, following the restart of two reactors at the Hanul nuclear power plant in March, reducing demand for LNG in the power mix. Further nuclear additions are expected over 2H2019.

South Korea relies heavily on coal for power generation and because of the sunk costs in existing plants, the country faces hard choices on pushing the wider use of LNG, even as the world's third-largest importer. Last winter, new regulations came in to reduce the level of particulate matter to cut pollution on particularly bad days. This could see oil and coal power plant generation reduced, with gas stepping in.

### Japan manages oversupply

Shipments to Japan were down by over 2mn tonnes in 1Q2019 due to mild winter demand and higher nuclear power generation, with local end-users facing high stocks at domestic terminals. Although Japanese buyers may buy incremental cargoes ahead of the summer, spot demand is expected to be capped as some utilities expect their inventories could stay high.

Japanese nuclear availability is expected to be up by about 36% year-on-year, from about 49 TWh in 2018 to almost 67 TWh in 2019.

This year will see Japanese buyers become more prominent in the US LNG market. Chubu Electric and Osaka Gas are the two largest marketers from Train 1 at Freeport LNG, with Mitsui and Mitsubishi each taking a third of supply from the Cameron LNG project.

# **Slow progress on Indian terminals**

Meanwhile, India will remain an important source of spot demand, with buyers keen to absorb gas when the price is competitive relative to oil products. But the domestic gas market has slowed and the outlook for additional demand from new import terminals is limited.

Commissioning of the Mundra terminal remains uncertain, with project partners GSPC and Adani working out a concession agreement before the project can proceed to commissioning. The Ennore LNG terminal on India's east coast was commissioned in March, but is not expected to take more than two to three cargoes this year because of limited pipeline connectivity, according to a source from operator Indian Oil.

# **Middle East not yet tempted**

Middle Eastern LNG buyers have not yet been tempted by lower prices, preferring to meet demand with pipeline supply where possible. Kuwait was the biggest regional LNG importer in both 2018 and the year to date. The second-biggest buyer in 2018 was Egypt, but rising domestic production means the country has been selling cargoes via tender rather than buying them.

Jordan restarted imports from Egypt in September 2018 and in January signed a deal to increase flows to meet around half the country's daily gas demand of 9.3mn cm/d, with the other half coming from the existing 1mn t/yLNG supply deal with Shell and modest domestic production. LNG imports have fallen so far in 2019.

Regional gas consumption tends to peak in the third quarter, so there is still time for spot demand to emerge.

### **Europe back in the LNG mix**

Tight spreads between global LNG markets suggest Europe will remain a preferred option for flexible and spot cargoes over the summer. Recent European gas prices have been volatile, driven up and down by coal and carbon pricing. This, in turn, has influenced sentiment globally on LNG with a correlation between gas and LNG likely to continue.

North-west Europe can absorb LNG but domestic storage sites are well stocked and this could limit demand to move gas into storage over the summer. Terminal utilisation rates, especially in the north-west, have been very high so far this year, with limited scope for further increases in some cases.

Utilisation levels in Spain remain among the lowest in Europe. Strong production from Yamal and a rise in Qatari deliveries to north-west Europe offer stern competition for other suppliers.

# Switch to gas generation

Germany's gas-fired power generation is forecast to exceed hard coal power output in 2019.

This is a first for the German power mix and is tied to the recent lower gas prices which have filtered through to the forward curve, in part caused by the level of incoming LNG to European terminals.

Long term, any influence that LNG has on reducing European gas prices could support gas in domestic power mixes. But for this year, in north-west Europe at least, the scope for gas demand to rise substantially is limited.

In southern Europe, early forecasts of a hot summer could support gas demand for power generation in Italy, which may in turn maintain interest in spot supply into the OLT Toscana terminal on the west coast.

Spain has missed out on the surge of LNG seen into other European terminals. Some contract volume with Algeria is now supplied on a flexible basis and has so far this year been absent from the Spanish mix. Possibly this could return, although buyers including Endesa and Iberdrola will soon start to lift from US contractual positions which will offer flexibility. A hot, dry summer could hit hydroelectric generation and bring Spanish gas back into the mix, supporting LNG demand. But Algerian pipe gas flows may also increase.

In the UK, spot opportunities will persist for LNG sellers but the lack of the Rough storage site will limit injection demand over the summer. Longer term, the case for cheap gas and LNG to boost a share in the UK generation mix is strong.

### **High Turkish demand, but obstacles**

Meanwhile. demand for Turkish LNG could break record levels in 2019, as the country is taking advantage of falling global prices and its expanded import capacity while renegotiating supply contracts with Russia via the upcoming TurkStream corridor. However, Turkey's ability to break the record may be held in check by internal market constraints, in the form of government regulated tariffs

In addition, even if the US dollar-denominated price of LNG were to fall further this year, there is a risk that the depreciation of the Turkish lira would make it unaffordable for the Turkish private sector. On top of that, private companies licensed to import spot LNG also have longterm supply contracts with takeor-pay obligations and destination clauses. Unless Turkey succeeds in negotiating the scrapping of these terms in its Russian contracts, Turkish companies could be locked out of the global LNG market.

### Argentina enters peak demand

Argentina's state-run gas distributor IEASA is entering its peak winter demand season, in 2018 importing 2.53mn tonnes between April and September. Demand in 2019 is expected to be similar to the previous year. The Tango floating LNG export project, under charter by Argentina's staterun producer YPF, was recently commissioned and loaded a first cargo. Market sources, however, do not expect regular LNG to be produced until after the end of the southern hemisphere winter, which would be by September or October.

### **Brazil motivated to optimise**

State-run Petrobras could have an appetite to import more spot cargoes, given that prices have become low enough to incentivise optimisation.

In 1Q2019, low rainfall and hot temperatures caused a strain on Brazil's power price, as hydropower generation fell. As a result, Brazil's LNG imports were four times higher in 1Q2019 than in 2018.

Increased domestic gas production has enabled Petrobras to become more self-sufficient, although extended production maintenance periods have spurred occasional spot LNG purchases.

### Mexico to take pipeline gas Increased gas pipeline capacity



Some LNG importers are looking to buy more spot cargoes this year, while others are constrained by price and capacity Photo: ICIS

from the US means that LNG demand from Mexico's staterun utility CFE will eventually be displaced by US imports. But pipeline infrastructure delays continue, particularly around long-haul transportation projects that have encountered right-ofway issues and technical glitches. This means that LNG could still be relied upon in the short to mid-term given that the terminals still provide supply access to imbalances in Mexico's grid. For the first three months of 2019, Mexico imported 832,000 tonnes of LNG, 20% lower than 1Q2018.

LNG imports could be a solution if there are further delays on the construction of the 2.6bn cf/d Sur de TexasTuxpan submarine pipeline, which is to connect south Texas to Veracruz, Mexico.

# **Chile incentivised by low prices**

Low spot prices in the global market have incentivised demand from some buyers such as the Chilean consortium GNL Chile.

Chile is well supplied with long-term contract volume between portfolio seller Shell and members of the GNL Chile consortium. But the low LNG prices have been attractive enough for the consortium to consider buying on the spot market compared to alternative fuels such as oil-fired generation, coal and hydropower generation.

Natural gas makes up about 19% of installed generation capacity, according to Chile's National Energy Commission 2018 figures.

# **Partial cargoes for the Caribbean**

Any LNG appetite this year from Caribbean importers is likely to come as smaller deliveries to meet incremental demand, particularly as partial cargoes. Puerto Rico's EcoElectrica, which typically is supplied by long-term cargoes by Spanish energy company Naturgy and France-based Engie, could be looking for a spot cargo in October, sources have said.

Colombia's consortium Calamari, which purchases for the Cartagena FSRU, is not likely to need any spot LNG given that the company awarded partial deliveries to Naturgy in late 2018. The terminal was installed to bring in LNG during an El Nino year when the country experiences drought conditions and hydropower generation could be curbed.

In Jamaica, utility Jamaica Public Services is supplied through a long-term contract with US developer New Fortress Energy, which, in turn, secured cargoes on a mid-term basis from UK-based Centrica. Sources say New Fortress Energy could be looking for new supply in 2019.

### **Other short-term LNG opportunities**

The disappearance of Egypt from the short-term and spot market has left a demand gap with no equivalent buyer ready to step in. At its peak, Egypt imported almost 7mn tonnes of LNG in 2016, but rising domestic gas production means it has already swung back to being an exporter.

Among new and developing buyers, Bangladesh will provide some opportunity for sellers this year as its second floating import terminal started up in April. The majority of cargoes will be delivered under term deals with Qatar and Oman, but spot demand may emerge.

Meanwhile, Pakistan has tendered for additional cargoes on several occasions but is in discussions with Qatar over a potential increase in term supply. Bahrain joined the importers' club in May, but will have limited requirements.

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