LNG China

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First US LNG shipment in over a year heads to China

The first LNG cargo from the United States for more than a year is heading for the Chinese port Tianjin, east of Beijing, from the Cameron export plant in Louisiana operated by Sempra Energy. If landed at Tianjin, as planned on April 29, the 180,000 cbm cargo could signal the start of a tepid recovery in Chinese gas demand as the country lifts its coronavirus lockdown.

Chinese workers return and manufacturing is resuming, but the economic recovery remains patchy and still needs to translate in a substantial rise in energy demand. The rebound is tepid, our LNG Unlimited data shows, with imports recovering from less than 0,98 million tons (mt) at the height of the pandemic in China in the first week of February to 1,06 mt in the last seven days of February, and further to 1.27 mt in the final week of March.

Cargo to arrive on April 29

Shipping data shows the 'SK Resolute' LNG carrier left the Cameron plant on March 22 and is expected to arrive in Tianjin before the end of next month. The carrier was originally headed for Cristobal, the port on the Panama Canal though changed its destination to Tianjin in China on March 28 – probably due to delivery instructions of a new owner. Now, the 180,000 cubic meters carrier is on course via the Cape of Good Hope round South Africa. That route takes around 36 days from the US Gulf Coast compared with 24 days by transiting the Panama Canal.

If the 'SK Resolute' discharges its cargo in China, as planned, on April 29, it would be the first to be unloaded since March 2019.

Second cargo may follow

So far, only the 'SK Resolute' is seen going to China. Our LNG Unlimited shipping tracker is observing 22 more US cargoes headed for Asia Pacific. Six of them are headed for Japan, two for Taiwan and one for South Korea – based on their past voyage – and some of the remaining twelve cargoes are likely to be re-directed to Europe.

"The odd one out is the 'BW Lilac', which is taking a similar route as the SK Resolute at the moment with scheduled arrival on 22 April," said LNG Unlimited Data analyst Alex Wilk.

continued on page 2

AGENDA

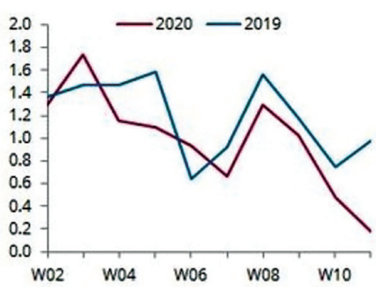
Chinese industrial demand subdued until early April

Though Chinese workers have returned to factories of Airbus, General Motors and Toyota in recent days, many remain shuttered due to coronavirus quarantine measures. The recovery of Chinese gas demand is likely to stay subdued well into March, Energy Aspects says, forecasting a drop in LNG offtake volumes at least until early April.

Despite the current gas demand destruction, analysts remain bullish on China's gas demand for the remainder of this year, provided there is no second outbreak of the virus. "We still think that the political importance of ensuring robust

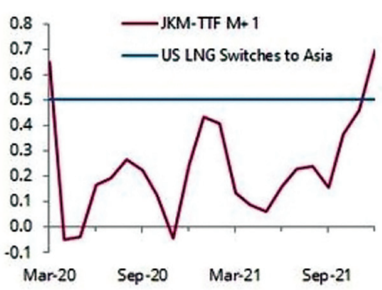
continued on page 2

Chinese weekly LNG imports, Mt



Source: Kpler, Energy Aspects

US LNG market switching, $/mmbtu



Source: CME, Energy Aspects

continued from page 1

"However, reaching China in that time would be very tight, so it is more likely the vessel is going to India instead," he noted. Pakistan has not tendered any spot cargoes with arrival in April so far, all other supplies are coming from Qatar.

Vessel Name	IMO Number	Sailed Date	Import Country	Import Facility	Arrival Date	Nominal Capacity
GasLog Sydney	9626273	24. Feb 20	Taiwan	Yung-An	30. Mrz 20	155.000
Sohshu Maru	9791212	26. Feb 20	Japan	Kawagoe	30. Mrz 20	177.000
Prism Agility	9810549	29. Feb 20	Japan	Himeji	31. Mrz 20	180.000
Maran Gas Agamemnon	9682590	07. Mrz 20	Pacific Basin	Far East	02. Apr 20	174.000
Maran Gas Andros	9810379	07. Mrz 20	Pacific Basin	Far East	07. Apr 20	173.400
Stena Clear Sky	9413327	10. Mrz 20	South Korea	Incheon	08. Apr 20	171.800
Diamond Gas Sakura	9810020	14. Mrz 20	Japan	Ogishima	11. Apr 20	165.000
Prism Brilliance	9810551	14. Mrz 20	Pacific Basin	Far East	14. Apr 20	180.000
Diamond Gas Rose	9779238	17. Mrz 20	Japan	Yokkaichi	30. Apr 20	165.000
WilPride	9627966	18. Mrz 20	Taiwan	Yung-An	21. Apr 20	155.900
Marvel Heron	9770440	20. Mrz 20	Pacific Basin	Far East	20. Apr 20	177.000
Maran Gas Vergina	9732369	21. Mrz 20	Pacific Basin	Far East	21. Apr 20	174.000
Golar Ice	9637325	22. Mrz 20	Pacific Basin	Far East	17. Apr 20	160.000
SK Resolute	9693173	22. Mrz 20	China	Tianjin LNG	28. Apr 20	180.000
BW Lilac	9758076	23. Mrz 20	Pacific Basin	Far East	22. Apr 20	173.400
British Partner	9766530	25. Mrz 20	Pacific Basin	Far East	25. Apr 20	173.400
K. Jasmine	9373008	25. Mrz 20	Pacific Basin	Far East	25. Apr 20	145.878
Marib Spirit	9336749	26. Mrz 20	Pacific Basin	Far East	25. Apr 20	165.500
Hoegh Giant	9762962	27. Mrz 20	Japan	Joetsu LNG	05. Mai 20	165.000
LNG Sakura	9774135	28. Mrz 20	Japan	Japan	25. Apr 20	177.000
Marvel Kite	9760782	28. Mrz 20	Pacific Basin	Far East	30. Apr 20	177.000
British Mentor	9766578	29. Mrz 20	Pacific Basin	Far East	30. Apr 20	173.644

Signs of recovery overrated

Early signs of China's economic recovery were overrated by some analysts in the hope of a quick rebound in oil and gas demand of the world's largest commodities buyer. However, the Shanghai Petroleum & Natural Gas Exchange cautioned that the oversupply situation remains relatively unchanged; hence LNG imports are expected to remain sluggish through April.

Demand destruction is striking. LNG imports growth slumped to 2.3% in January and February, down from 19% in the same period last year. China imported 11.13 million tons of LNG in the first two months of this year, up 2.3% year on year, latest data released by the General Administration of Customs shows.

The Chinese government has resorted to a range of fiscal stimuli to jumpstart economic activity, including cutting electricity tariffs by 5%. Analysts are unimpressed, saying "a V-shaped recovery remains unlikely" and Kpler ship tracking data indicates there will be year-on-year cargo losses in March.

Tough LNG Unlimited Data takes rather bullish views on China's gas demand recovery, other analysts are more cautiously optimistic. Anticipating a "limited resumption of economic activity," Wood Mackenzie says full-year 2020 gas consumption could be between 6 Bcm and 14 Bcm lower. "LNG will bear the brunt of this reduction in domestic gas demand," analysts commented, estimating the downside impact to Chinese LNG demand as between 2.6 million tonnes (mt) 'best case' with recovery by April, and 6.3 mt in a more 'prolonged case' with a slower return to normal.

> "With too much LNG, and nowhere left to place it, it looks like a supply correction is needed to balance the market"
>
> *- Robert Sims, Research Director, Wood Mackenzie*

Fuel demand has faltered, with state-owned energy major CNPC indicating it has fallen by as much as 26% during the first quarter of the year. PetroChina and CNOOC both suspended gas imports, citing force majeure, sparking a legal dispute and calls for compensation from Shell and Total.

Faltering Chinese gas demand could not have come at a worse time for the already oversupplied global LNG market. "With too much LNG, and nowhere left to place it, it looks like a supply correction is needed to balance the market," commented Wood Mackenzie's research director Robert Sims.

Shut-ins of US LNG capacity on the cards

"We are expecting supply response in some markets like Egypt and potentially in Eastern Australia, where the likes of Shell and APLNG could attempt to sell gas into the domestic Queensland gas market. However, it is U.S. Gulf producers who have the highest marginal cost of supply and the most flexibility," he stressed, implying there might be some shut-ins of liquefaction capacity along the Gulf of Mexico. ■

continued from page 1

GDP growth this year and further coal-to-gas boiler switching should provide strong demand growth in H2 20, provided there is no second outbreak of the virus," Energy Aspects said in market note.

LNG North America

Publisher
Stuart Fryer

Editor
Anja Karl
Tel: +44 7733 684682
anja@lngjournal.com

Layout
Vivian Chee
Tel: +44 (0) 20 8995 5540
chee@btconnect.com

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Excess supply left as floating storage

The recent slump in Chinese LNG imports left several cargos stranded in the Pacific Basin, with over 25 cargos counted as being held as floating storage, according to Kpler cargo-tracking data. Ten of these cargoes originate from Australia, seven from Qatar and three from Nigeria.

Cargoes loaded in Asia-Pacific, notably Australia, are unlikely to be shipped all the way to Europe. "The cost of freight would generate an unprofitable netback, given the weakness in European near-curve prices," Energy Aspects said, but noted "there is no financial incentive to store these cargoes in Asia either," given that the JKM near-curve was backwardated into Apr-20 and then in a weak contango through the following summer 2020 months."

Floating LNG storage weakens demand for spot cargoes and will likely keep the prices for JKM Apr-20 and May-20 contracts around the same level as TTF equivalents in Europe. This narrow spread discourages deliveries of any excess cargoes from northeast Asia to the Atlantic Basin.

Trying to accommodate, Qatargas agreed to reschedule some of its long-term contracted shipments to China. Others contractual suppliers are seeking to reinforce their delivery rights. ■

Oil market spat may boost Asia's gas demand for power gen

Though the latest oil price crash hits U.S. upstream companies, for Asian buyers it's a blessing as the pricing of oil-indexed long term gas contracts is bound will come down from late 2020. Sustained lower oil price will substantially lower the price of gas which could prompt large scale coal-to-gas switching for power gen in Japan, South Korea and parts of China.

The price of gas under long-term contracts has been at a premium to hub-priced gas in recent times - but the plummeting oil prices have turned things on its head. "For China, at an oil price of $35/bbl, contracted LNG arrives at a cost lower than domestic wholesale price benchmarks," traders noted.

While China's national oil companies would like to keep the benefits of low-cost gas to compensate for years of import losses, the cost reduction will allow the government in Beijing to push through its policy of lowering gas prices to end-users. Analysts noted this supportive policy helps corona crisis-struck businesses to resume operations. However stimulating substantial coal-to-gas switching in the power sector would require gas prices to fall further.

Gas squeezed out in India

Elsewhere in Asia, gas demand can come under pressure from oil as a competing fuel. Notably in India, analysts suggest "a lower oil price could slow the shift from oil to gas in the industrial sector," as both long and spot LNG prices will compete with fuels like heating oil, LPG and naphtha.

LNG tanker berthing near a power plant

European gas demand and flows will face little impact from even a sustained oil price collapse. Oil-indexed Russian pipeline contracts now account for less than 25% of Gazprom's portfolio and, regardless, the current market share strategy is unlikely to change.

Algerian pipeline contracts into Spain remain fully oil-indexed and have been sitting at take-or-pay levels. "If oil prices remain low, Spanish buyers would take more Algerian piped volumes," Ms Huang said. This would not become a possibility until October 2020 due to the lag on the contract - "but in 2021 it would reduce the space for LNG into Spain by 2 billion cubic metres, placing even more pressure on the over-supplied LNG market."

Gas production plunges

The biggest downside risk from the oil price crash to gas supply is associated with gas production - largely from unconventionals in the United States. "However, it's not an instantaneous effect," analysts said, "as prices are still generally above variable wellhead operating costs."

Most liquefaction projects in the U.S. are supplied from non-associated gas so there's little direct impact. "The greater risk to supply is pre-FID investments," said WoodMac research director Giles Farrer. "Lower oil prices will have several consequences for the sector. These include restricted capital investment budgets, reduced appetite for financing LNG projects with exposure to oil prices.

"US LNG projects selling on a Henry Hub-plus basis will also be perceived as less competitive than oil-indexed LNG," he explained. "As a result, there will be fewer LNG projects taking FID in 2020 and 2021." Projects in Mozambique, Mauritania/Senegal and Australasia will also come under pressure, translating into lower global supply between 2024 and 2027. In contrast, Qatar - with low fiscal breakevens and an ambition to grow LNG market share long term - is expected to continue to push forwards with its North Field expansion plans. ■

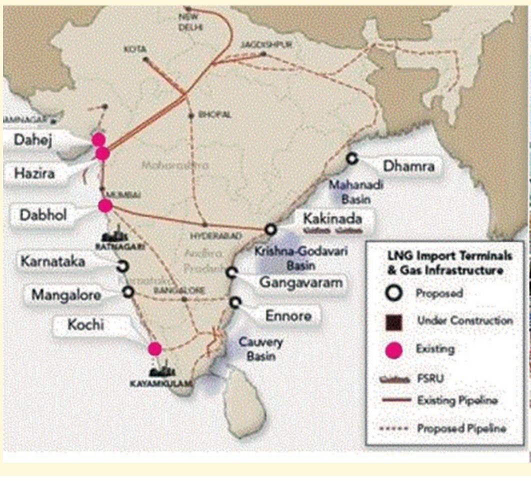
India buyers snap up cheap cargoes

Indian utility buyers have stepped up LNG imports, snapping up distressed cargoes for cheap. Coal-to-gas switching allows Indian power generators to absorb a large share of cargoes left uncommitted as the coronavirus dampens demand in China, and analysts see India's annual LNG imports to rise by up to 15% this year.

Ship-tracking data from Refinitiv Eikon shows that India imported some 2.36 million tonnes of LNG in February, which surpassed an earlier record of 2.3 million tons set in October.

The low spot prices are creating some downstream demand in India, especially from the city-gas sector and for power generation. Some cargoes headed for China have been diverted to India, and a few bargain-hunting Indian buyers have issued tenders for spot cargoes - some even for several months.

Reliance Industries is understood to have issued a tender for five cargoes for April to June delivery, while Gujarat State Petroleum Corp (GSPC) sought nine cargoes for February to April. ■



PetroChina seeks to renegotiate supply contracts

PetroChina, affiliate of state-owned China National Petroleum, recorded a 6 percent rise in annual revenues to 2,520 billion Chinese yuan ($350.8 bn) but net profits fell 14 percent. Hence, the Hong Kong listed company it disclosed plans to renegotiate some gas supply contracts to improve profitability.

Net profit attributable to shareholders dropped to 45.68 billion yuan ($6.45bn), down from 52.59 billion yuan ($7.43 bn) in the previous year, while basic earnings per share came to 0.25 yuan ($0.03).Marketable natural gas output reached 3,910 billion cubic feet, a year-on-year increase of 8.3 percent

In a briefing, Petro China disclosed that it planned to engage in price renegotiations with global natural gas suppliers to control costs and curb losses at its gas import business, without giving other details. The company had declared force majeure on gas imports which were refuted by some suppleirs.

PetroChina's managing company CNPC imports pipeline natural gas from Central Asian countries and Russia as well as imports from projects such as Yamal LNG and from PetroChina LNG agreements.

The Chinese major is also part of Royal Dutch Shell's LNG Canada project under its own name PetroChina and has a stake in the Area 4 reserves in the Rovuma Basin offshore Mozambique with Italian company Eni and ExxonMobil of the US that will underpin their Rovuma LNG project.

Transfer of pipeline assets imminent

PetroChina added that it had not yet reached agreement with China's newly established national pipeline group regarding the transfer of its key pipeline assets. The National Development and Reform Commission in May 2019 released new oil and gas liberalization measures to require facility operators to open up access to their oil and gas infrastructure to free up the flow of natural gas.

The new measures follow the government's announcement earlier in 2019 that it plans to establish a national pipeline company as part of China's move to accelerate the opening up of its markets and to extend the gas network to provide a nationwide alternative to coal.

Key construction project in 2019 was the completion and operation of the northern section of China–Russia East-Route Natural Gas Pipeline, also known as 'Power of Siberia'. PetroChina's Natural Gas and Pipeline division had operating profits of 26.11Bln yuan ($3.68Bln), a y-o-y rise 2.3 percent. "In 2019, sales of natural gas amounted to 259.09 billion cubic metres, up 19.5 percent year-on-year, including domestic sales of natural gas of 171.381 billion cubic metres, and increase of 7.4 percent," it added.

PetroChina's Exploration and Production Division realized an operating profit of 96.09 billion yuan ($13.56 bn) an increase of 30.7 percent. "The oil and gas lifting cost was US$12.11 per barrel, representing a decrease of 1.6 percent year on year," it said in the earnings report. The E&P division worked on complex geological structures, and discovered the Qingcheng oilfield in Changqing, and two gas fields including the shale gas blocks in Sichuan and Bozi-Dabei gas area in Tarim.

In its outlook for the rest of 2020, PetroChina expected geopolitical tensions, uncertainties about the global oil price, climate change issues and the coronavirus pandemic mean more "downward risks' for the global economy." ■

CNOOC posts record gas production and jump in profits

China National Offshore Oil Corp (CNOOC) has seen annual net profits rise almost 16 percent as it achieved record production in 2019.Total net oil and gas production amounted to 506.5 million barrels of oil equivalent, exceeding 500 million Boe for the first time as multiple projects safely commenced production ahead of schedule.

CNOOC said net profits rose by 15.9 percent to 61.05 billion Chinese yuan ($8.6Bln) compared with 52.67 billion yuan ($7.42bn) because of volume growth and effective cost control. Marketing revenues, including LNG imports at its nine regasfication terminals, dropped 13.9 percent to 30.86 billion yuan ($4.34Bln), down from 35.83Bln yuan ($5.05Bln) in the previous year.

In relation to the changed oil market and the plunge in prices, along with other challenges in 2020, CNOOC said it would keep a close watch on changes in the macroeconomics.

CNOOC's appraised Bozhong field holds 200 mcm

The state-backed company disclosed its average realized oil price was US$63.34 per barrel, down 5.8 percent year-over-year. CNOOC's annual natural gas production rose 5.2 percent to 561.3 billion cubic feet, and the average realized gas price was US$6.27 per thousand cubic feet, down 2.2 percent from the previous year.

CNOOC's oil and gas sales revenue reached 197.2 billion yuan ($27.2bn), up 5.7 percent compared with 2018, amid efforts to strengthen exploration and development. During 2019, there were 23 commercial discoveries made and 30 oil and gas bearing structures were successfully appraised.

"The appraisal of Bozhong 19-6 condensate gas fields in offshore China made a breakthrough again, with newly-added proved in-place volume of nearly 200 million cubic metres of oil equivalent," explained the company.

CNOOC also made progress in its overseas exploration and production activities. "Five new discoveries were made in Stabroek block in Guyana, with aggregate recoverable resources of more than 8 billion Boe," said CNOOC.

The reserve replacement ratio for the year reached 144% at an average 10-year reserve live, while total net proved reserves in 2019 exceeded 5 billion Boe.

Annual capital expenditure came to 79.6 billion yuan ($11.2bn), which fully supported the exploration and development activities, Chairman Wang Dongjin concluded. ■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Chinese LNG Demand Outlook

Total of 1.08mmt on the water with a delivery horizon of 28th April, with more than half due in North China. One cargo is likely to mark the first US export to China since March 2019.

North China

Of total LNG at sea, we are currently expecting 0.68mmt to be delivered to North China – comprising the wider Beijing area and China's industrial north – with a current delivery horizon of 28th April.

Current market visibility indicates at least 0.19mmt (27.96%) are destined for PetroChina's Caofeidian LNG by 7th April, with the three cargoes deriving from Australia's Gorgon LNG via the *Stena Crystal Sky* (0.07mmt) and the *Energy Confidence* (0.06mmt) as well as from Russia's Sakhalin-2 LNG via the *Grand Mereya* (0.06mmt).

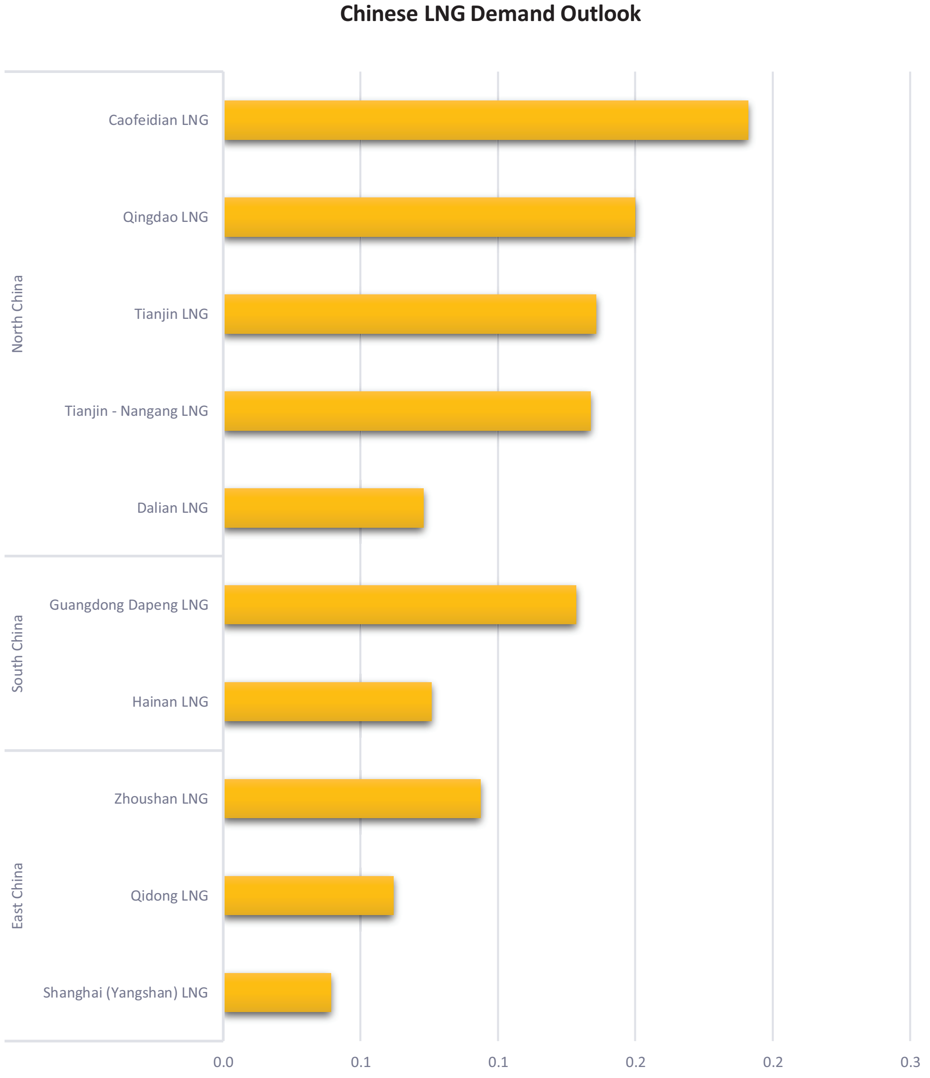
Meanwhile, PetroChina's Dalian LNG is looking to receive 0.07mmt by the second half of April, taking a 10.67% share of LNG headed to the region. The cargo is of Peruvian origin, having been exported by Pampa Melchorita LNG via the *Methane Becki Anne*.

At the North China region's southernmost border, expected deliveries to Qingdao LNG comprise two Australian cargoes via the *Spirit of Hela* (0.07mmt) and the *CESI Qingdao* (0.08mmt), which are scheduled to arrive in the first and second week of April. The cargo aboard the Spirit of Hela derived from Papua New Guinea's PNG LNG whilst the one sailing on the *CESI Qingdao* derives from Australia's APLNG.

First US export to China due at Tianjin in April

Tianjin and Tianjin – Nangang LNG, meanwhile, also looking to receive two cargoes each by 28th April. Notably, the last cargo to arrive within that time frame is the *SK Resolute* carrying a Cameron LNG cargo to Tianjin, our LNG Market Tracker indicates. The trade is likely to mark the first US export to China since March 2019. We highlight that the vessel is not taking the route via the Panama Canal but instead around the Cape of Good Hope, implying opportunities for cargo diversions. Among other cargoes en route, the *La Mancha Knutsen* (0.06mmt) is carrying a Bonny Island cargo to Tianjin LNG whilst the *Grace Acacia* (0.07mmt) is carrying an APLNG cargo to Tianjin-Nangang.

Meanwhile, we expect the *Maran Gas Roxana* to deliver a cargo of 0.07mmt to a yet to be identified terminal in China. The vessel departed APLNG on 29th March and is due to arrive in China on 10th April.



Source: LNG Journal

East China

We currently see the East China region – comprising the wider Shanghai area and Zhejiang province – to receive 0.19mmt by 14th April. The most significant destination is scheduled to be the wider Shanghai area at Zhoushan LNG, which we expect to receive 0.09mmt (48.10%) from Qatar via the Q-Flex *Al Gharrafa*. The buyer of these cargoes is likely to be the ENN Group, one of China few private international LNG buyers. Moreover, we see one Algerian cargo aboard the *Stena Blue Sky* (0.06mmt) due at Qidong LNG on 14th April as well as a Malaysian cargo travelling to Shanghai LNG via the *Polar Spirit*. At the time of writing The *Polar Spirit* was indicating arrival on 31st March. However, Shanghai city's second terminal – a peak-shaving facility in the Pu Dong district – was not expecting a cargo.

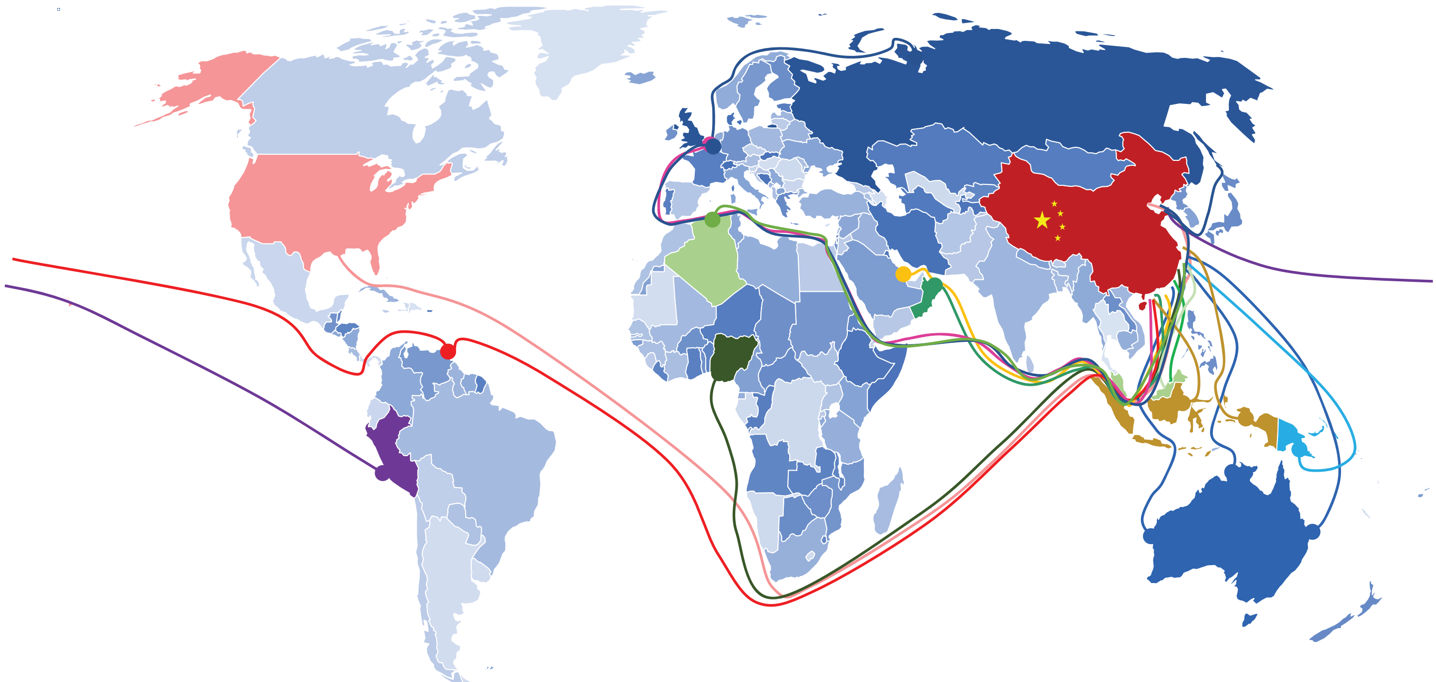
South China

In the south of the country, we are currently expecting 0.20mmt to be delivered by 6th April, led by two NWS LNG cargoes aboard the *Dapeng Sun* (0.06mmt) and the *Dapeng Star*

(0.06mmt). We expect both vessels to arrive at CNOOC's Guangdong Dapeng terminal in the wider Shenzhen area. The *Dapeng Sun* has its arrival scheduled for 6th April whilst the *Dapeng Star* is expected to arrive on 4th April. Meanwhile, the *Pan Africa* was en route to Hainan LNG at the time of writing. The vessel is carrying a Queensland Curtis LNG shipment (0.08mmt) and was due to arrive at Hainan on 30th March. However, the vessel seemed to be running late, suggesting to us an arrival on or around the 31st March.

As such, the expected LNG volumes currently en route to China are relatively small. This is to be expected given the milder climate during winter in the south whilst in the wider Beijing and Shanghai the country has only just begun its recovery from a widespread shutdown due to the coronavirus.

Chinese Demand in February and March



For illustration only.

China's m/m LNG offtake grew by 0.59mmt in March, increasing robustly by 15.7% to 4.38mmt. During the third month of this year, the country thus reimbarked on a demand growth trajectory not seen since December last year. Most of January and all of February were affected by wide-ranging public health measures to counter the country's coronavirus outbreak, which shut down significant parts of the Chinese economy at the time.

Nevertheless, demand in March this year exceeded the demand level seen in March 2019, allowing overall Chinese LNG offtakes to show a relatively small y/y growth of 0.13mmt (3%). This in turn translated into capacity utilisation of 66.27% in March, an increase of roughly 2pp y/y.

However, demand growth went negative in February, which saw a drastic net demand decline of 2.18mmt (-36.6%) m/m. As LNG predominantly fuels China's industrial sector, the extended Chinese New Year holiday season clearly has had a significant impact whilst the subsequent clampdown on industrial and social activity through quarantines further reduced gas demand.

Notably, although the coronavirus outbreak has caught headlines and clearly had an impact, we highlight that Chinese demand usually sees a seasonal reduction from January to February. As such, February demand also declined by 38% m/m in 2019. In our view, the anti-coronavirus measures thus had an increased negative impact but were not solely responsible for the demand reduction in February this year.

Prices

Chinese gas prices were weighed down by lack of demand in February

Reflecting the demand decline due to anti-coronavirus measures, Chinese domestic LNG prices plummeted with privately quoted prices declining from November's peak of $13.42/mmBtu to a low of $8.83/mmBtu in February. Domestic prices continued to dip below the $8.90/mmBtu until early March, when the price slide was halted at $8.898/mmBtu on 3rd March. Domestically traded LNG have since stabilised around $9.10/mmBtu, which is broadly on par with prices seen the second half of January.

Meanwhile, the average price quoted by the National Bureau of Statistics (NBS) stood at $9.78/mmBtu on 28 February and declined to $9.31/mmBtu on 20 March. As such, China's average February LNG price (NBS) of $9.89/mmBtu was 9% lower than that of January, whilst the average price up until 20th March fell further to $9.36/mmBtu, which was 5.35% down m/m.

Nevertheless, we highlight that there is a lag in the statistical data published by the Chinese government whilst domestically traded prices are clearly trending upwards again, indicating demand growth. This is a significant indicator of actual Chinese demand since mere LNG imports are predominantly governed by long-term contracts with relatively little wiggle room to adjust offtakes m/m.

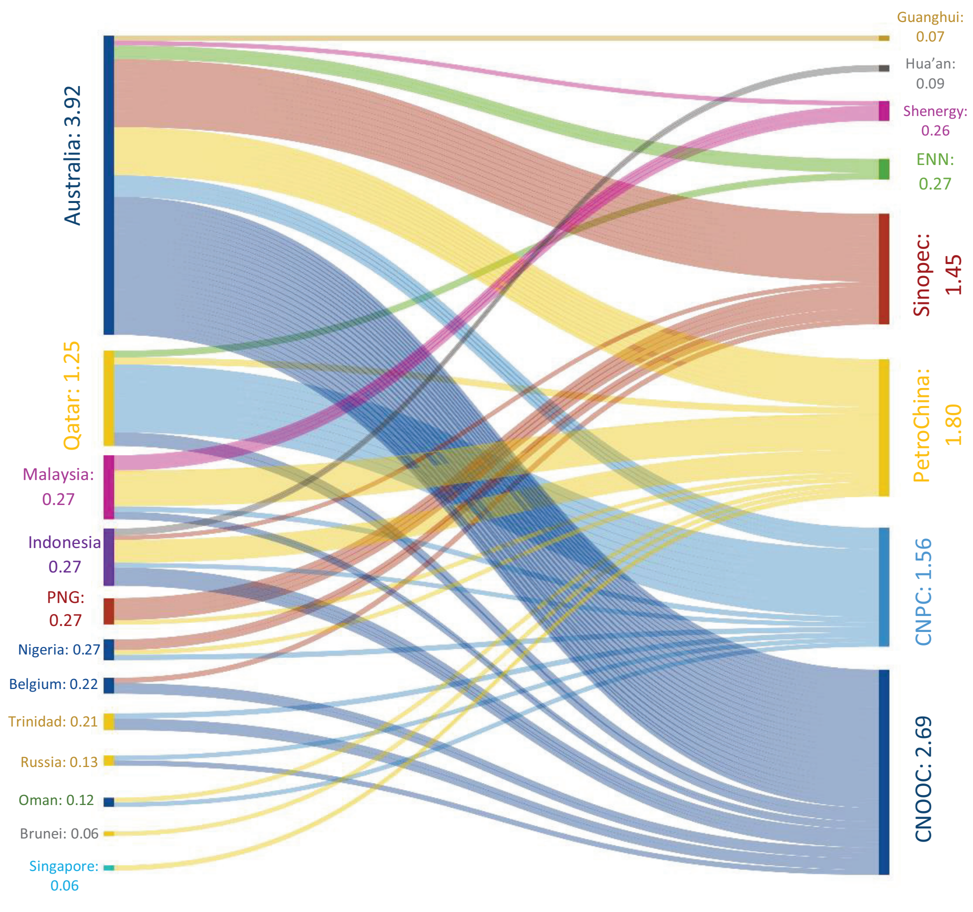
Lower pipeline gas availability has since lent some support to prices

Overall, therefore, China's domestic LNG prices remain subdued but are beginning to receive support from rising domestic demand. This has been aided by less availability of pipeline gas in March. Notably, although Phase I of Russia's Power of Siberia pipeline has been brought into operation in December last year, Gazprom announced a scheduled maintenance programme in the second half of March.

North China

Chinese demand suffered significant monthly decline in the north of the country in February, decreasing by 0.68mmt m/m to 1.81mmt. In January, however, demand growth in the north returned and pushed overall offtakes by 0.14mmt (7.72%) to 1.95mmt.

Chinese LNG Buyers



Source: LNG Journal

China's North led by Tianjin-Nangang LNG

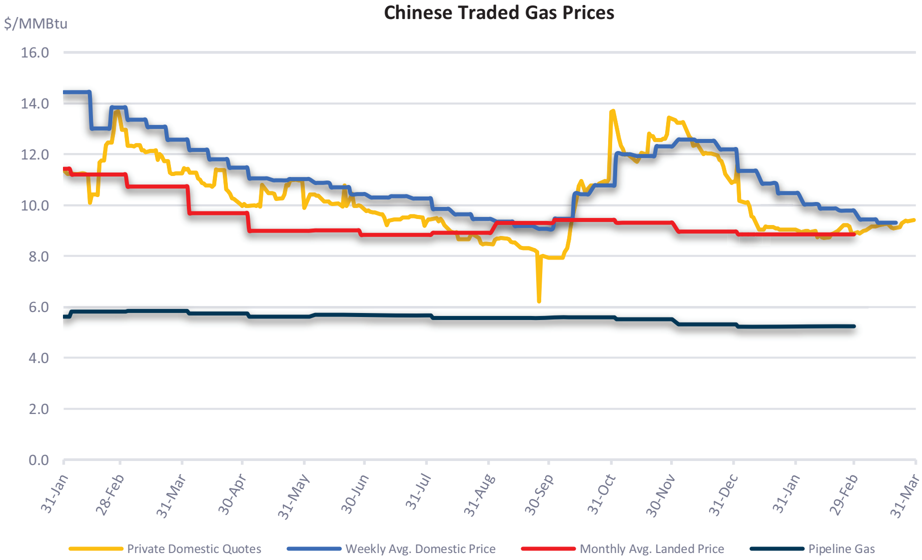
Leading the roster of northern terminals by volume imported, Tianjin-Nangang LNG took in 0.52mmt in March, consisting of three Australian cargoes totalling 0.20mmt that were delivered by the *Grace Acacia* (0.05mmt), the *CESI Wenzhou* (0.08mmt) and the *CESI Beihai* (0.08mmt) between the 8th and the 16th March. Meanwhile, Indonesia delivered one cargo each from its Donggi-Senoro and Tangguh facilities via the *LNG Maleo* (0.04mmt) and the *Tangguh Palung* (0.07mmt), respectively. Malaysia, Russia and a re-export from Zeebrugge made up the remaining three cargoes, which arrived between the 2nd and 29th March via the Trinity Arrow (0.06mmt), the Pskov (0.07mmt) and the LNG Dubhe (0.08mmt), respectively. Tianjin-Nangang LNG thereby increased its monthly LNG offtake by 0.04mmt (8.2%) in March, pegging utilisation at 58%.

Tianjin LNG saw highest m/m regional growth rate in March

Meanwhile, Tianjin LNG saw a significant offtake boost by 0.15mmt (56.6%) from 0.26mmt in February to 0.41mmt in March following broadly steady m/m demand in February.

Australia was the principal supplier of LNG here with March exports amounting to a total of 0.20mmt, all out of the Pilbara region. This dynamic was also observed in February,

Chinese Traded Gas Prices



Source: LNG Journal, CNBS, GACC, Domestic Traders whereby Australia shipped 0.20mmt out of the total of 0.26mmt.

Among March deliveries to Tianjin LNG, the *La Mancha Knutsen* and the *GasLog Gladstone* delivered a total of 0.135mmt from Nigeria's Bonny Island plant whilst the *Pan Americas,* the *Maran Gas Roxana* and the *GasLog Houston* shipped the aforementioned 0.2mmt from Australia. Finally, PNG LNG supplied 0.07mmt via the British Achiever.

Dalian and Qingdao saw offtakes decline in March

The remaining two northern terminals – Dalian LNG and Qingdao LNG – imported 0.28 and 0.50mmt in February, respectively, but which declined to 0.14mmt and 0.44mmt in March. Dalian LNG procured its LNG from Papua New Guinea via the *Beidou Star* (0.07mmt) whilst the Amali delivered a Brunei LNG cargo amounting to 0.06mmt.

Meanwhile, Qingdao had turned to Australia for the majority of its March offtake (0.30mmt) split between four cargoes out of APLNG with two further cargoes supplied by Papua New Guinea aboard the *Papua* (0.07mmt) and the *Gigira Laitebo* (0.07mmt). Notably, Dalian saw relatively low utilisation in January of below 30% whilst Qingdao continued to work flat-out.

East China

Demand in East China was dominated by the wider Shanghai area, where Jiangsu LNG, Qidong LNG, Shanghai LNG and the metropolis' peak shaving terminal imported a total of 0.86mmt in February. Nevertheless, this constituted a significant m/m decline as Qidong LNG in particular took in only 0.01mmt compared to 0.17mmt in January. Moreover, the terminal capacity directly situated in Shanghai also reduced m/m offtakes by 0.06mmt, roughly equivalent to one cargo. At the time of writing in March, demand growth in the area had still not recovered with imports broadly flat m/m. Offtakes at Jiangsu were reduced by roughly 22% to 0.37mmt, which was only compensated by demand growth in Shanghai itself. Overall capacity utilisation for the wider Shanghai area was therefore stuck at around 77% in March.

Zhejiang and Zhoushan scaled up imports

Meanwhile, Zhejiang LNG, which supplies the coastal province of Zhejiang south of Shanghai, imported 0.20mmt in February, down by 0.09mmt (-39%) m/m. Its neighbouring terminal Zhoushan LNG, meanwhile, could not compensate as it had kept imports steady at 0.06mmt February. Notably, Zhoushan is the first large-scale LNG terminal not controlled by one of the 'Big Three' state-owned petrochemical giants PetroChina, Sinopec and CNOOC. However, both terminals reverted to high offtake growth in March, with Zhejiang LNG showing increased demand by 174% to 0.38mmt and Zhoushan departing from its one cargo per month routine to import 0.21mmt, which saw monthly utilisation increase to 153% in Zhejiang LNG's case and to 86% for Zhoushan LNG.

South China

Regional imports in South China – where LNG demand is primarily determined by the southern industrial centre of Shenzhen – saw m/m demand decrease in February in line with the rest of the country, led by Beihai LNG which reduced offtakes by 0.41mmt. Notably, the terminal had not entered the market in March but saw almost full capacity utilisation in January, suggesting ample stock from which to draw from at times of lower overall Chinese demand levels. However, given the first signs of renewed demand growth in March, we anticipate Beihai to return to the market in April.

At the same time, the region's most prominent terminal – Guangdong Dapeng LNG – saw offtakes decline by 0.16mmt whilst its neighbouring Shenzhen Diefu LNG, the Shenzhen Peak-shaving terminal as well as Dongguan LNG reduced total offtakes by 0.09mmt. In March, however, these terminals imported 0.60mmt, thus showing moderate m/m demand growth of 0.03.

Fujian LNG began to return to normal following steep demand decline in February

Further north along the southern coast, at Fujian LNG, March imports began to close the gap that had opened between February and January. Whereas in January imports had stabilised at around 0.24mmt per month, they halved to just 0.12mmt in February. In March, offtakes amounted to 0.18mmt, representing 45% m/m growth and pegging terminal utilisation at 82%.

Zhuhai imported only 0.07mmt in February, whilst Jieyang was absent from the market in both February and March. The 2mtpa Jieyang facility is among the roster of smaller terminals in China and has suffered from frequent periods of inactivity since its commissioning in 2017. At Zhuhai, meanwhile, March did not bring an improvement as the terminal struggled to maintain m/m offtakes with 0.06mmt, which pegged capacity utilisation at 22%.

Hainan Island was relatively quiet

The remaining two regional LNG terminals on Hainan Island – Hainan LNG and the Hainan Transfer Station – also saw demand crash in February. Only the smaller of the two, the Hainan Transfer Station, took in a 0.01mmt cargo via the *Lucia Ambition* in line with usual import pattern observed at the terminal. Hainan's Transfer Station loads LNG onto trucks for transportation further inland to supply local industry. In March, however, the Transfer Station did not receive a cargo, whilst its larger counterpart on the island – Hainan LNG – is due to receive a 0.08mmt QCLNG cargo via the slightly delayed *Pan Africa*. As such, we believe capacity utilisation at the terminal with stand at 30% for March.

Region	Terminal	Export Basin			March	February	% Change m/m	March Utilisation
		Atlantic	Middle East	Pacific				
North	Caofeidian LNG	0.07	0.18	0.19	0.44	0.30	49.8%	82%
	Tianjin LNG	0.14	-	0.28	0.41	0.26	56.6%	69%
	Tianjin - Nangang LNG	0.15	-	0.37	0.52	0.48	8.2%	58%
	Dalian LNG	-	-	0.14	0.14	0.28	-50.3%	28%
	Qingdao LNG	-	-	0.44	0.44	0.50	-11.5%	176%
East	Jiangsu LNG	-	0.22	0.14	0.37	0.47	-22%	125%
	Jieyang LNG	-	-	-	-	-	-	-
	Qidong LNG	-	-	0.06	0.06	0.01	387%	125%
	Shanghai LNG	-	-	0.29	0.29	0.22	31%	117%
	Shanghai Peak-Shaving	-	-	0.12	0.12	0.16	-25%	23%
	Zhejiang LNG	-	0.09	0.29	0.38	0.14	174%	153%
	Zhoushan LNG	-	0.09	0.12	0.21	0.06	248%	86%
South	Beihai LNG	-	-	-	-	0.13	-	-
	Dongguan LNG	-	-	0.04	0.04	0.08	-43%	73%
	Fujian LNG	-	-	0.18	0.18	0.12	45%	82%
	Guangdong Dapeng LNG	-	-	0.50	0.50	0.41	23%	88%
	Hainan LNG	-	-	0.08	0.08	-	-	30%
	Hainan Transfer Station	-	-	-	-	0.01	-	-
	Jieyang LNG	-	-	0.07	0.07	-	-	42%
	Shenzhen Diefu LNG	-	-	-	-	0.06	-	-
	Shenzhen Peak-Shaving	-	-	0.06	0.06	0.03	101%	85%
	Zhuhai LNG	-	-	0.06	0.06	0.07	-13%	22%
	Total	0.36	0.58	3.43	4.38	3.78	15.70%	66%