

Australia sees China's LNG hunger abate as it imports more Russian gas

The Australians, supplying the largest share of China's LNG imports at around 39 percent, expect the People's Republic will import 86 million tons of LNG in 2022 – a slightly slower rate of growth, as Russia ramps up deliveries of rival pipeline gas through the 'Power of Siberia' interconnector. An economic slowdown also reduces China's gas demand for power generation and industrial use.

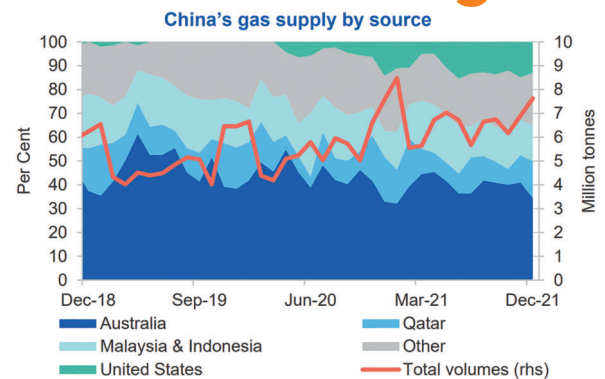
According to the Resources and Energy Quarterly, published by the Australian government's Chief Economist's Office, China's gas demand will increase by around 41 percent in total over the outlook period to 2027, driven by the industrial and residential sectors and ongoing coal-to-gas switching in the electric power sector. LNG demand growth is expected to average 5 percent between 2022 and 2027.

Fuel switching drives demand

China's LNG imports rebounded 4.6 percent in the December quarter 2021, as consumption recovered from a marked slowdown in the September quarter, when high gas prices had

temporarily destroyed demand. But shortages in thermal coal supply and a cold start to the winter made power generators switch fuel, which subsequently boosted gas-burn and demand for regasified LNG.

Throughout 2021, the People's Republic has sought to diversify its gas sources by signing new LNG supply contracts with the US and Qatar, increasing the throughput of gas interconnectors from Russia and Turkmenistan to maximum levels and seeking to secure flexible supplies on the spot market. Still, China imported 80 mtpa of Australian LNG last year –



Source: Bloomberg (2022); National Bureau of Statistics of China (2022) General Administration of Customs

a 20 percent increase from 2020-levels, government statistics show.

Beijing relaxed its macroeconomic policies in recent months in an attempt to revive the economy. But the IMF reduced its forecast for China's GDP growth to 4.8 percent in 2022 and 5.2 percent in 2023 as rising gas and coal prices caused by Russia's invasion of Ukraine also affect China, given its high sensitivity to energy prices.

continued on page 3

Flexible US cargoes allow China to venture into LNG trading

Sizable US LNG supply contracts with destination flexibility are giving Chinese buyers like Sinopec, ENN and China Gas the clout to set up LNG trading desks in Beijing, Singapore and London. Resorting to coal and renewables for power generation at home, as well as CNPC's higher pipeline gas purchases from Russia frees up LNG for sale abroad.

Supply of US LNG and Russian pipeline gas is abundant – in 2021 Chinese buyers sealed contracts for over 10 mtpa of LNG through the mid 2040's with Cheniere Energy and Venture Global. But mounting prices at global gas markets make it more attractive to sell LNG cargoes onwards to desperate European buyers than to use it for power generation at home.

Determined keep energy supply stable and affordable, China's state planning body NDRC claimed that

spiralling global oil and gas prices would be "manageable" as the People's Republic resorts to coal generation and boosts domestic mining. Surplus LNG cargoes delivered to China can hence be traded globally.

Growing mussel in global trade

Unipeq, the trading arm of state-run Sinopec, recently moved two traders to London and one to Sin-



Sinopec loads Q-Max at Tianjin LNG terminal

gapore. LNG currently makes up less than a tenth in Unipeq's turnover – but it will be where the growth is meant to come from in the future.

The growing mussel and impact of Unipeq on global LNG trade

AGENDA

POLICY

China acts to ensure energy supply security at stable prices

2

MARKETS

China's demand unlikely to peak before mid-2040

3

Getting Asia to burn more coal could free up 50 Bcm of LNG

3

PROJECTS

Chinese off-takers help Energy Transfer revive Lake Charles LNG

5

LNG UNLIMITED DATA

7-11

continued page 2

continued from page 1

Australia cashes in on high prices

Australia, on the other hand, stands to benefit from record high oil and gas prices. The government in Cranberry expects resource and energy export earnings will hit a record of \$425 billion in 2021-22. But today's sky-high prices deter buyers and energy exports from Down Under are hence set to ease to around \$370 billion in 2022-23 before declining back to non-crisis levels around 2027, depending on geopolitical events.

Elevated prices for spot LNG weighted on consumption in some emerging economies, but overall Asian demand stayed high. Japan – Australia's best LNG customer after China – imported 73.9 mt of LNG in 2021, though demand is on

a downward trend and imports forecast at just 72 mt this year as the Japanese government strives to implement a shift to renewables and hydrogen in the face of record high prices for fossil fuels.

Analysts anticipate prices for spot LNG and oil-linked contracts will remain high in Asia throughout 2022 and 2023, pushing up Australia's LNG export earnings from \$30 billion in 2020-21 to a staggering \$70 billion this year and further to \$82 billion in 2022-23, as oil-indexed contract prices soar.

Undeterred from high prices, global LNG trade is set to rise by about 4.3 percent this year mainly driven by Europe's quest to secure alternative supply and wean itself off its dependence from Russian pipeline gas. LNG demand will

stay elevated this year, despite declining overall consumption – not least because Europe needs to restock its heavily depleted storage which is currently 38 percent below the five-year average.

According to the Australians, Europe's energy crisis in winter 2021-22 occurred when lower than expected renewable generation coincided with reduced Russian pipeline gas flows and little domestic production. As a result, European gas prices have soared, with average TTF prices up over 400 percent year-on-year.

Projects rush to take FID

Attracted by high prices, a significant pipeline of projects is eager to take FID in 2020 – notably Qatar's North Field South project and

Plaquemines and Corpus Christi Stage 3 in the United States. Analysts expect up to 55 million tonnes of capacity could be sanctioned this year.

America, the world's swing supplier, is particularly active in boosting existing liquefaction capacity or adding new one. Contributing nearly two-third of the world's global supply increase, US LNG export expanded 49 percent last year to 75 mtpa. The rapid increase in exports has been encouraged by the large price differences between the domestic Henry Hub prices and the spot prices in European and Asian markets. Moreover, the US benefits from its location on the Atlantic basin and being able to be a flexible provider into both Asian and European markets," analysts commented. ■

China acts to ensure energy supply security at stable prices

The Chinese government has diversified energy imports and is boosting domestic oil, gas and coal production to keep prices under control. The People's Republic imports more than 70 percent of oil and 40 percent of its natural gas needs from overseas, but claims the impact of spiralling global prices would be "manageable" as it resorts to coal.

Acknowledging the risk of supply disruption after Russia's invasion of Ukraine, China's state planning body NDRC stressed the government had "conditions, ability, confidence and means to ensure a safe and reliable supply of energy."

Boosting fuel stocks and back-up power

To pre-empt supply risks, China has already diversified the sources of its oil and gas imports and rushed

to import more thermal coal which fuels over 60 percent of the country's power plants. Going forward, the NDRC will work to amass 200 million tonnes of government-deployable coal stocks, and add more than 5 billion cubic metres (bcm) of gas storage.

Domestic coal is hoped to bridge any eventual gap in fuel supplies, hence the government approved hundreds of new coal mining projects as well as exten-

sions of existing mines. China's domestic coal production hit a record of 4.07 billion tons last year, and is meant to grow further.

Emergency back-up power will be increased to more than 30 gigawatts (GW) in capacity as the government vows to ensure enough electricity supply to industrial and residential customers. Tight fuel supplied had caused nationwide power

shortages and rolling blackouts in 2021 that hampered industrial growth – something the government wants to avoid this year. ■



PetroChina loads LNG on a truck

continued from page 1

became visible when the firm's large sales tender triggered a 36 percent plunge in Asian spot

prices. Once the news broke, future contracts for March delivery into northeast Asia fell \$9.60, or nearly 30 percent, down to \$23.00 per MMBtu. But markets seemingly overreacted given that Unipeck ultimately found buyers for much less than the 40 LNG cargoes for 2022 delivery it initially sought to sell.

More supply from Russia frees up LNG

Delivery of more comparatively cheap pipeline gas from Russia also boosts China's capability to sell surplus LNG into spot markets.

CNPC in mid-February agreed to buy 10 Bcm of natural gas over 30 years via a new pipeline from Russia's far east. Flows are due to start in two to three years and will add to the 16.5 Bcm already exported via the Power of Siberia pipeline and as LNG from Sakhalin Island.

Playing the arbitrage between oil-indexed long-term supply and spot LNG, Chinese buyers clearly prefer oil-linked pipeline gas. The price of pipeline gas imported by China averages \$6.15 per MMBtu – nearly seven times less than JKM April front-month for LNG cargoes

delivered to Asia at \$42.62 per MMBtu.

Multiple options for importing pipeline gas from Russia and Central Asia, as well as US LNG shipments with destination flexibility and increased storage capacity, allow Chinese traders to divert more and more cargos into spot markets. It remains to be seen if they can rival global trading houses like Trafigura and Vitol in managing price risks, building up shipping capacity and get access to regas terminal in Europe and beyond. ■

LNG China

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

Subscription included with
LNG Journal

China's demand unlikely to peak before mid-2040

Despite targeting Net Zero emissions by 2060, China's gas demand is expected to rise for another two decades before peaking in the mid-2040s at above 660 bcm. Around half of China's demand needs to be covered by imports which poses a massive opportunity for Gazprom, Wood Mackenzie says, considering Europe's demand is currently 520 bcm, and declining fast.

Russia's state-run Gazprom keeps investing in upstream production in Siberia as well as export infrastructure to China – supported by massive loans from Chinese state banks and long-term gas import contracts with China National Petroleum Corporation (CNPC).

"China's gas market is a major prize," said Gavin Thompson, Wood Mac's vice chairman Energy Asia Pacific with reference to peak demand near 662 bcm "Around half of China's demand will be met through imports, though this could be higher if domestic unconventional gas disappoints," he explained.

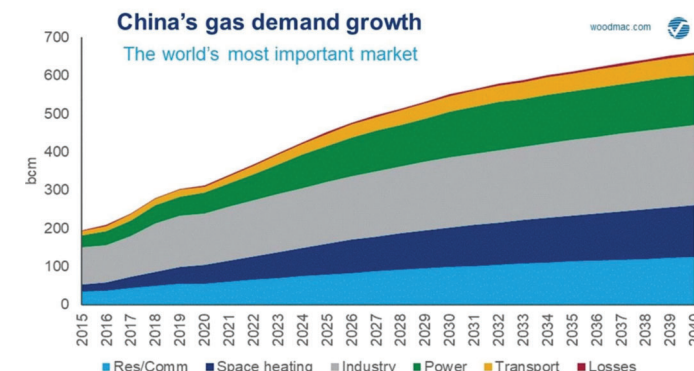
Today, around 7 percent of China's gas demand is met by flows through the 'Power of Siberia' interconnector and Russia LNG, and Gazprom already agreed to boost long-term supplies to CNPC via the so-called Far Eastern route. Once the pipeline reaches full capacity, Russian supplies will grow by 10 billion cubic meters to

a total 48 Bcm, including deliveries via the Power of Siberia gas trunkline.

Power of Siberia's eastern route, supplies gas from the vast Chayandinskoye via the Amur processing plant to northeast China. Deliveries on this trunkline repeatedly exceeded contractual obligations, and are bound to grow further. Russian gas has been flowing to China since December 2, 2019, based on a 30-year sales and purchase agreement for 38 Bcm per year signed back in 2014 between Gazprom and CNPC. Negotiations were hard fought at the time, and supplies are understood to be delivered in a price range of \$350-\$390 per thousand cubic meters.

'Power of Siberia 2' in the making

Pivoting east, Gazprom CEO Alexey Miller underlined the "exceptionally strong mutual trust and partnership between our



countries and companies," referring to CNPC. Gazprom hence proceeded to the pre-investment phase for the 'Power of Siberia 2' pipeline which will deliver Russian gas much closer to industrial regions in eastern China.

A feasibility study was completed for the Soyuz Vostok gas trunkline which will extend the Russia's Power of Siberia 2 gas interconnector in Mongolian territory. This second gas link would make it possible to supply up to 50 Bcm of gas per year to China with first gas anticipated to

arrive in early 2031.

IHS Markit estimates a potentially acceptable border price for Gazprom is between \$2.7 per MMBtu and \$4.7 per MMBtu, excluding export duty. The low end of the range reflects just the cost of gas production in West Siberia and cash Opex to operate the export pipeline, while the higher range reflects the export netback from the European market in West Siberia and the required investment tariff to cover the construction costs for the Power of Siberia-2 pipeline. ■

Getting Asia to burn more coal could free up 50 Bcm of LNG

Persuading Asia to use more coal could free up around 50 Bcm of LNG for Europe's tight gas markets, analysts reckon. This would help Europe get a step closer to meeting the Commission's plan of reducing Russian gas supplies by 102 bcm before year-end, though it would be cheaper if EU power generators switched from gas to coal and nuclear instead.

The International Group of Liquefied Natural Gas Importers (GIIGNL) suggests it seems "challenging" to source enough additional LNG to meet the Commission's RePowerEU targets. If European buyers could snatch up all the new LNG volumes

coming onstream in 2022 in the Atlantic basin, and attract additional cargoes previously routed to Asia, an increase of 32-45.5 bcm "can really happen", said Sindre Knutson, vice president of gas and LNG markets at Rystad Energy.

Global gas liquefaction and export capacity could rise by 22.6 million tons this year, according to GIIGNL estimates, most of which supplied by the United

States. At best, Europe could secure around 12 mt of that, as most volumes are already locked into long-term supply deals to Asia.

"Persuading Asian buyers to use coal and free up LNG," could help, Wood Mackenzie advises, as would maximising Europe's indigenous gas production and pipeline imports. "But this would only be a temporary solution to get through the summer and would leave Europe with perilously low storage volumes going into winter 2022/23 and risks demand disruptions. Winter prices next year could be

higher than 2021/22," principal gas and LNG analysts Kateryna Filippenko warned.

Diverting LNG cargoes, initially destined for Asian markets, could give hard-pressed European buyers access to about 15 bcm of extra LNG from April through October – provided enough import capacity is kept available. But how much gets diverted will hinge on Europe's willingness to play higher prices than China and the rest of Asia. Benchmark Dutch TTF gas prices have traded at a premium to their rival Asian hub, the JKM, at most days of the year. ■



Coal transported by train to a Chinese power station



Atlas Copco



In LNG, experience matters

The LNG industry is constantly evolving, and we can help you lead the way. We provide custom-engineered compression and expansion technology that boosts your productivity throughout the LNG value chain. For over 40 years we have engineered advanced process equipment that delivers maximum efficiency in modular, compact packaging. We offer end-to-end centrifugal compressors, screw compressors, turboexpanders, Compander™ and centrifugal fluid pumps customized for every LNG application, from small scale to large scale, onshore and off.

Learn more at www.atlascopco-gap.com

Chinese offtakers help Energy Transfer revive Lake Charles LNG project

The almost forgotten Lake Charles LNG export project in Louisiana has been revived by Energy Transfer, owner of assets in the Permian and Haynesville Shale, thanks to two sales and purchase agreements with ENN Group of China.

Under the two SPAs, Energy Transfer is expected to supply 1.8 million tonnes of LNG to ENN's natural gas subsidiary and 900,000 tonnes of LNG to the ENN Energy unit per annum on a free-on-board (FOB) basis.

Price linked to Henry Hub plus surcharge

Energy Transfer said the purchase price was indexed to the Henry Hub benchmark plus a fixed liquefaction charge. Both SPAs are for a term of 20 years and first deliveries are expected to commence as early as 2026.

The SPAs will become fully effective upon the satisfaction of the condition precedent by Energy Transfer's plan and final investment decision (FID) to transform the existing Lake Charles LNG import terminal into an export plant.

Aiming to take FID by year-end

Execution of the two deals with Chinese offtakers will help move the Lake Charles project towards FID. "We are experiencing strong

demand for long-term offtake contracts for Lake Charles LNG and we are optimistic that we will be in a position to take a positive FID by year-end," said Energy Transfer's President Tom Mason. The project will likely be financed primarily through infrastructure funds and strategic partners, with Lake Charles LNG retaining an equity stake and operatorship of the liquefaction facility.

Zheng Hongtao, President of ENN's natural gas unit said "signing of these long-term SPAs will expand our resource channels and improve our gas supply capacity to meet the rapidly growing demand in the domestic market." ENN has an annual LNG distribution capacity of over 10 bcm and runs China's first large-scale private LNG terminal, the Zhoushan LNG facility south of Shanghai.

Almost forgotten venture

Analysts noted that the Lake Charles liquefaction and export venture was "the ghost LNG project of North America where nothing ever moved since 2015 on the

regulatory front."

The Lake Charles LNG import terminal was once part of assets of BG Group of the UK and was acquired by Shell as a joint venture involving Energy Transfer had already made significant advances on the permit front before sliding to a halt. The Federal Energy Regulatory Commission (FERC) has issued draft permits for the Lake Charles transformation and to produce 16.5 million tonnes per annum of LNG.

Energy Transfer had acquired the Lake Charles terminal in mid-2011 with the takeover of Southern Union Co. for \$7.9 billion. The new liquefaction plant will be built on a brownfield site of a former regas facility and will capitalize on four existing LNG storage tanks, two deep water berths and other LNG infrastructure. The Lake Charles project also benefits from its direct connection to Energy Transfer's existing gas pipelines which allow it to directly source gas from the Haynesville, the Permian and the Marcellus Shale.

Lake Charles LNG



Source: Energy Transfer LNG

NEWS NUDGES

Rio Grande China deal

NextDecade, developer of the of Rio Grande LNG project along the Brownsville Ship Channel, has executed a binding Heads of Agreement with Guangdong Energy Group for the supply of LNG cargoes for a 20-year term. The Rio Grande project has ultimate plans and permits to produce up to 27 mtpa of LNG from five liquefaction Trains.

The accord proposes Guangdong Energy will purchase up to 1.5 mtpa of LNG indexed to US benchmark Henry Hub natural gas price. The LNG supply will initially be from Train one of Rio Grande LNG, which is expected to start commercial operations in 2026.

Peru sends cargoes to Asia

Peru's LNG exports in March are heading for the North Asian markets of China and South Korea, according to data from energy company PeruPetro. Four vessels have left the Pampa Melchorita liquefaction plant on the Pacific Coast of Peru with three headed for South Korea on the 173,540 cubic metres capacity carrier "Megara", the 135,400 cbm capacity carrier "Madrid Spirit" and on the 173,400 cbm capacity vessel "Sevilla Knutsen".

Asian LNG strategy

Japanese LNG and energy engineering company JGC Holdings Corp. has renamed its subsidiary in Singapore JGC Asia Pacific Pte Ltd as a regional headquarters for five countries as the company pursues contract wins in LNG receiving terminals, gas-fired thermal power and other projects, including renewables. "The Singapore company will take on the new role of Asia-Pacific regional headquarters and serve as a base for project execution in Singapore and nearby countries, supporting activities in the Philippines, Indonesia, Vietnam and Malaysia," said JGC.



CLEAN & SUSTAINABLE COOLER BY DESIGN®

Chart is at the forefront of the transition

to a low carbon future through technology, equipment and services delivering hydrogen, LNG and biogas for energy and transportation. Our carbon capture technology also removes harmful pollutants including SOx, NOx and mercury.

www.ChartIndustries.com
LNG@ChartIndustries.com

CHART
Cooler By Design.®

Chinese LNG Demand Outlook

There were 1.15mmt of LNG on the water with destinations in China according to market visibility at the beginning of April. These cargoes had an estimated delivery horizon of 4 May. Two cargoes totalling 0.15mmt were broadly headed for China but still had to declare destination terminals. Only one of these inbound cargoes was derived from the United States, however, with the majority of 0.44mmt being derived from Australia followed by 0.40mmt from Qatar.

Most LNG cargoes still in transit at the time of writing and with scheduled arrivals at specified ports in China were due to arrive in North China led by Caofeidian LNG. This was followed by the Tianjin LNG terminal in the greater Beijing/Tianjin area. Concurrently, the South China region was looking to receive roughly 0.27mmt, led by 0.20mmt headed for the Guangdong Dapeng LNG terminal. Anticipated LNG deliveries to East China amounted to 0.21mmt. Apparent demand in East China was led by the Jiangsu LNG terminal at the time of writing.

Two cargoes amounting to 0.15mmt of loaded LNG were also headed towards China but without specifying an arrival port. These shipments had sailed from Qatar's Ras Laffan LNG complex via the Q-Flex Al Bahiya and the Freeport LNG-derived GasLog Shanghai.

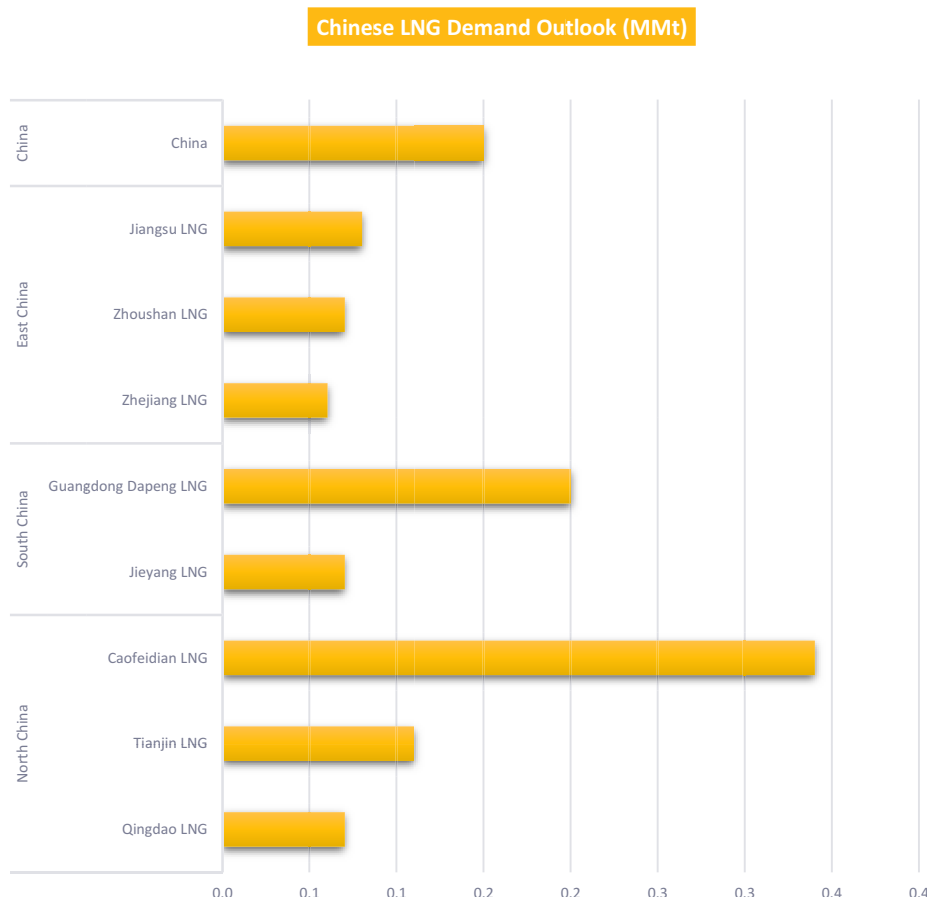
North China

Of total LNG currently en route to China, we are anticipating 0.52mmt to be delivered to North China – comprising the wider Beijing area and China's industrial north – with a delivery horizon of 19 April.

Among the roster of top-three northern Chinese terminals, Sinopec's Tianjin LNG was expected to receive 0.11mmt via two cargoes by 11 April. These cargoes were exported by Australia and Malaysia. The Australian cargo was shipped aboard the Australia Pacific LNG-derived Grace Acacia whilst the Malaysian shipment travelled aboard the Malaysia LNG-derived Seri Amanah.

Current market visibility further indicated 0.34mmt were destined for CNPC's Caofeidian LNG by 19 April, comprising two cargoes from Qatar via the Q-Max Lijmiliya and the Al Bidda. There was also one cargo each from Australia, Malaysia and Peru aboard the Tangguh Sago, the Seri Camellia and the SCF Melampus, respectively. These three cargoes totalled 0.18mmt.

Qingdao LNG, meanwhile, was looking to receive 0.07mmt via one cargo by 13 April. The shipment had sailed from Australia Pacific LNG in Australia via the CESI Tianjin.



Source: LNG Unlimited Data

East China

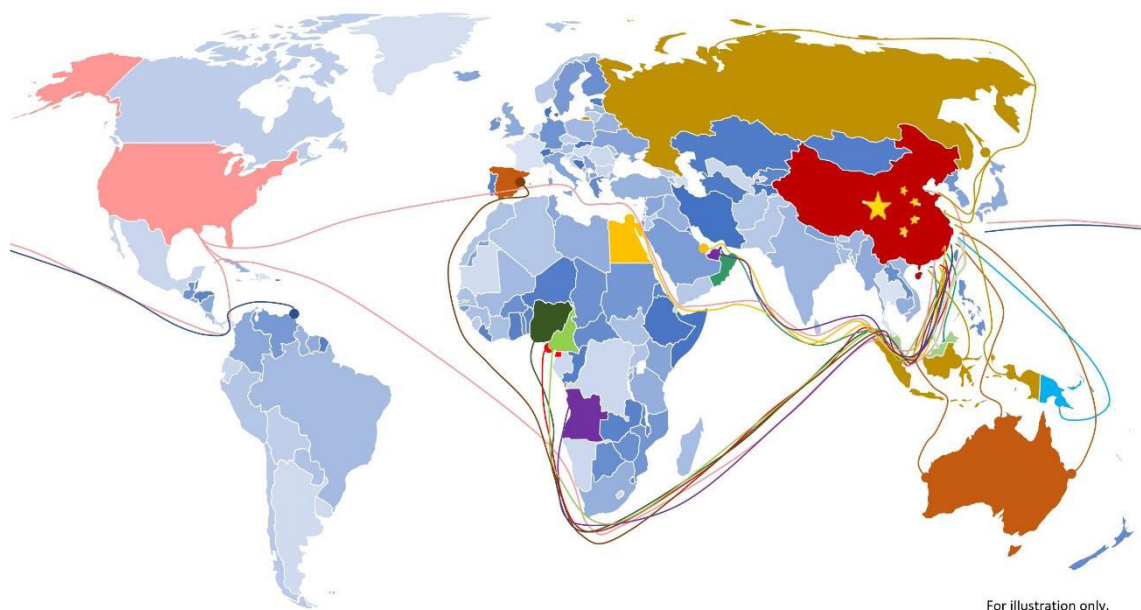
At the time of writing, we expected the East China region – comprising the wider Shanghai area and Zhejiang province – to receive 0.21mmt by 9 April. Jiangsu LNG is scheduled to receive 0.08mmt by 5 April, our data show, comprising one Qatari shipment via the Q-Flex vessels Mesaimeer. Moreover, we were anticipating the Zhejiang LNG terminal to also receive a 0.06mmt cargo by 5 April via the Queensland Curtis LNG-derived GasLog Greece. Additionally, we were seeing a cargo of 0.07mmt travelling to the Zhoushan LNG terminal via the WilForce, which is due to arrive by 9 April.

South China

In the south of the country, we were expecting 0.27mmt to be delivered by 13 April. Expected LNG imports in the South China region were led by Guangdong Dapeng LNG, which at the time of writing was expecting three cargoes amounting to 0.20mmt. These shipments had sailed from NWS LNG in Australia via the Dapeng Star as well as the PNG LNG-derived British Mentor and the Ras Laffan-sailed Al Ruwais.

An additional three cargo of 0.07mmt aboard the Australia Pacific LNG-derived CESI LianYungAng was headed for Jieyang LNG by 5 April.

Chinese LNG Demand: February-March



China's monthly LNG offtake in March amounted to 4.80mmt, our data indicated, which constituted broadly steady monthly demand compared to the 4.76mmt we recorded in February. However, Chinese demand in March and February considerably lacked behind imports during the previous report period of January and December, where LNG imports stood at 7.36mmt and 7.99mmt, respectively. As such, the subdued demand during the current report period of February-March comes in the wake of high demand growth during the previous report period. Chinese LNG imports had increased by 0.92mmt (13 percent) to 7.99mmt in December from 7.07mmt in November alongside high demand and a resulting tight market in the Far East. However, these imports had subsequently decreased by 0.63mmt (-8 percent) to 7.36mmt in January. The demand reduction morphed into a demand slump in the report period of February-March 2022 compared to the previous two-month report period of December-January, decreasing by 5.79mmt (-38 percent) from 15.35mmt to 9.56mmt. The amount imported during the report period also constituted a significant net decrease of 1.28mmt (-12 percent) over the 10.84mmt we recorded during the February-March period of 2021, which is reflective of the extremely tight market and commensurate high prices in the Far East. Accordingly, China's annualised LNG import capacity during the report period stood at roughly 63 percent,

down 39pp from around 102 percent for the previous report period of December-January.

Prices

Chinese LNG prices during the report period were reflective of the rise in Brent following Russia's invasion of Ukraine. They were also an indication of a continued tight market in the Far East, in which spot cargoes still demanded a steep premium as South Korea, for example, increased its buying activity, our data show. There was a brief period of relatively low demand – and domestic prices – surrounding the Chinese Spring Festival in early February but these rebounded quickly. Although parts of China continue to be subject to intermittent lockdowns to combat local outbreaks of coronavirus, these have had relatively little bearing on LNG prices, Chinese customs data suggest.

After domestic LNG prices had plummeted in December, they began to climb again by the middle of January to reach new highs of up to US\$27/mmBtu during the report period. Previously, privately quoted domestic prices had decreased from a high of around US\$23.60/mmBtu on 15 November to US\$11.14/mmBtu on 24 December before settling in between US\$12.34/mmBtu and US\$15.95/mmBtu in January. The price range expanded to US\$26.55/mmBtu in February and to US\$27.17/mmBtu in March whilst the floor remained at US\$12.34/mmBtu during both months. In February, domestic prices

were at an average of US\$18.54/mmBtu whilst the average increased to US\$23.07/mmBtu in March.

Meanwhile, the average domestic price indicated by the National Bureau of Statistics (CNBS) stood at US\$25.60/mmBtu in March, which represents an increase of US\$5.62/mmBtu (28 percent) from US\$19.98/mmBtu in February and an increase of US\$9.77/mmBtu (62 percent) from US\$15.83/mmBtu in January.

Landed LNG prices had climbed down from their peak of around US\$40.38/mmBtu in w/c 6 December last year to an average of US\$33.01/mmBtu in January and US\$23.50/mmBtu in February, according to our calculations based on Chinese customs data. However, prices had returned to growth by mid-February to peak at US\$27.07/mmBtu that month and at US\$29.99/mmBtu in March before falling back to US\$22.98/mmBtu at the time of writing.

North China

LNG demand saw a substantial decrease in the north of China during the report period, our data indicated at the time of writing, decreasing by 3.29mmt (51 percent) from 6.48mmt in the two months of December-January to 3.19mmt for the report period of February-March. The largest share of LNG influx into the region during the report period took place via the Tianjin - Nangang LNG

terminal. The region thereby reverted to period-on-period demand decrease following significant growth during the previous report period. The sum of LNG imports of 3.19mmt in northern China for the period of February-March this year was also behind its equivalent of 3.75mmt in 2021, down by 0.56mmt (-15 percent).

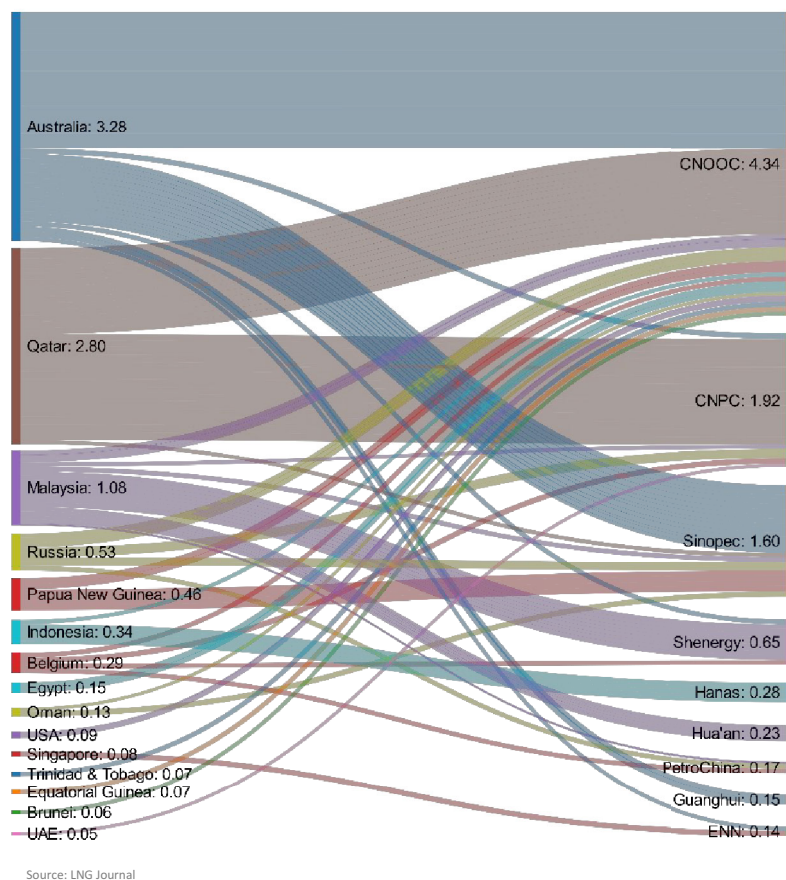
China's North led by Tianjin-Nangang LNG

Leading the roster of northern terminals by volumes imported, Tianjin-Nangang LNG took in 0.92mmt during the report period of February-March. This constituted a significant offtake decrease of 0.43mmt (-32 percent) from 1.35mmt in the previous two-month period. Imports consisted predominantly of four Qatari cargoes amounting to 0.36mmt. Australia also delivered four cargoes, supplying 0.30mmt. In addition, Malaysia LNG delivered two cargoes totalling 0.11mmt. The remaining two shipments totalling 0.15mmt were delivered from the United States and Papua New Guinea.

Caofeidian LNG

Caofeidian LNG, meanwhile, had offtakes amounting to 0.80mmt over the report period compared to 1.80mmt over December-January. The terminal thus saw a decrease in imports of 1.00mmt (56 percent). Cargoes from the Middle East totalled 0.58mmt and thereby represented more than two-thirds of LNG shipped to the terminal. Qatar exported 0.53mmt to Caofeidian LNG during the report period, inter alia via Q-Max vessel Rasheeda. There was also a single shipment from the UAE's Das Island plant via the Umm Al Ashtan during the report period.

Chinese LNG Buyers (MMt)



A single Atlantic Basin shipment of 0.08mmt, meanwhile, came via a Zeebrugge re-exports aboard the Yamal Spirit. Finally, Caofeidian LNG's imports from the Pacific Basin amounted to 0.14mmt, comprising a cargo each from Australia's Australia Pacific LNG and a shipment from Malaysia LNG via the CESI Gladstone and the Seri Cemara, respectively.

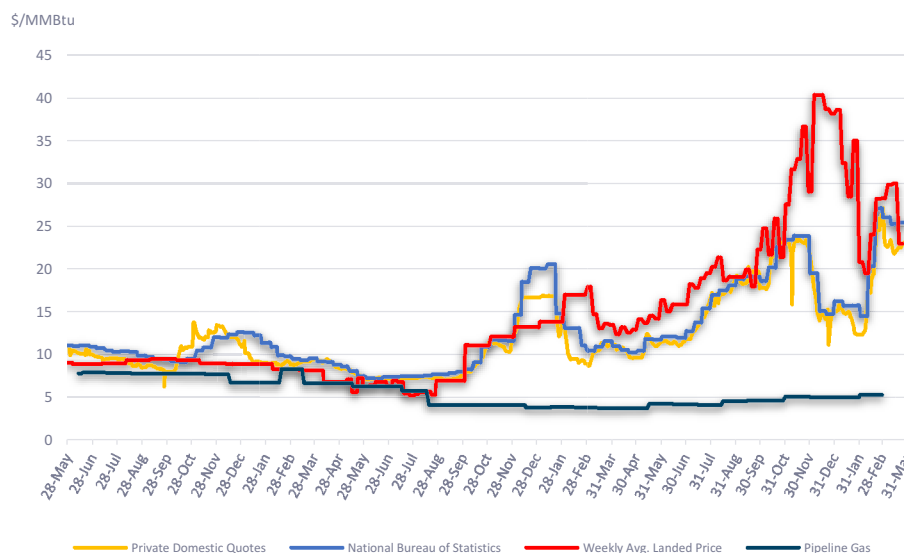
Qingdao LNG

Imports at Qingdao LNG were the third highest in northern China, even as they had been slashed by 0.53mmt (-43 percent) to 0.71mmt in February-March from 1.24mmt in December-January, according to our data. The bulk of imports came from the Australia Pacific LNG plant, amounting to 0.41mmt via six cargoes. Pacific supply was complemented by four PNG LNG exports. However, in contrast to the previous report period, Qingdao did not see shipments from Indonesia, Malaysia or the United States. As during the previous report period, Qingdao LNG also did not import LNG from the Middle East.

Tianjin LNG and Dalian LNG

The remaining two northern terminals – Tianjin LNG and Dalian LNG – imported 0.62mmt and 0.14mmt over the report period, respectively, which in the case of Tianjin LNG stemmed predominantly from Australia with 0.29mmt, all of which was derived from Queensland Curtis LNG. Two shipments totalling 0.12mmt from Russia's Sakhalin-2 LNG as well as a 0.07mmt export from PFLNG Dua in Malaysia completed the scope of Pacific Basin supply.

Chinese Gas Prices



Middle Eastern supply, meanwhile, comprised two cargoes totalling 0.14mmt via the Oman LNG-derived Aristos I and the Ras Laffan-derived Al Thakhira.

February-March supply to the Dalian terminal was exclusively sourced from the Atlantic Basin, with supply of 0.07mmt coming via a shipment from Russia's Yamal LNG aboard the Yari LNG. The cargo was transferred onto the vessel from the ice-breaking carrier Vladimir Rusanov at Murmansk in January for onward transportation via Suez. Atlantic Basin supply to Dalian also extended to a Zeebrugge re-export of 0.07mmt via the Clean Vision.

East China

At the time of writing, demand in East China was dominated by the wider Shanghai area, where Jiangsu LNG imported 1.12mmt during the report period. This placed the terminal among China's leading terminals in February-March. Accordingly, it operated at well above-nameplate capacity. Overall LNG demand in East China, however, had decreased drastically by 1.04mmt (-25 percent) to 3.08mmt from the 4.12mmt recorded in December-January.

Wider Shanghai area

Meanwhile, the remaining wider Shanghai area – comprising Qidong LNG, Shanghai LNG and the metropolis' peak-shaving facility – imported a total of 1.03mmt over the report period, down 0.79mmt (-43 percent) from the 1.82mmt recorded in December-January. The sub-region's imports were led by the Shanghai LNG terminal, which took in 0.65mmt and thereby decreased imports by 0.33mmt (-34 percent) period-on-period. Shanghai's peak-shaving facility also reduced imports relatively significantly by 0.03mmt (-12 percent) to 0.23mmt period-on-period. However, the Qidong LNG terminal had curtailed offtakes most drastically by 0.43mmt (-74percent) to 0.15mmt by the end of March, our data indicate.

Zhejiang & Zhoushan LNG

At neighbouring terminals Zhejiang and Zhoushan LNG, imports amounted to 0.79mmt and 0.14mmt, respectively. Together, the two terminals thereby decreased imports by 0.32mmt (-24 percent) to 0.93mmt from the 1.81mmt recorded in December-January. LNG was mainly supplied by Australia via eight cargoes totalling 0.45mmt and Qatar through two shipments totalling 0.18mmt. Zhoushan LNG is one of the few LNG import terminals not

controlled by one of the state-owned petrochemical giants PetroChina, Sinopec and CNOOC.

South China

Regional imports in South China – where LNG demand is primarily determined by the southern industrial centre of Shenzhen – did not continue with the demand growth seen during the previous report period, our data indicate. The region's imports had amounted to 3.29mmt over the report period, which meant imports were down by 1.46mmt (-31 percent) from the 4.75mmt recorded in December-January.

Shenzhen terminals

South China's imports were led by Shenzhen's four terminals – Guangdong Dapeng, Shenzhen Diefu, Dongguan LNG and the adjacent peak-shaving facility. The region's most prominent terminal – Guangdong Dapeng LNG (GDLNG) – saw offtakes of 1.16mmt, placing it in first place among China's terminals, and before Jiangsu LNG. The terminal nevertheless cut its February-March imports by 0.21mmt (-15 percent) from 1.37mmt over the previous two-month period. Factories in Shenzhen had been subject to a coronavirus lockdown during the winter period, according to a manufacturer of PC case parts. Still, Guangdong Dapeng LNG's average capacity utilisation stood at 102 percent over the report period, which resulted in neighbouring Shenzhen Diefu LNG importing 0.49mmt and pegging its terminal utilisation at 74 percent. Shenzhen Diefu usually steps in when GDLNG is stretched beyond capacity. However, we did not record LNG deliveries to either Dongguan LNG or the Shenzhen Peak-shaving terminal.

Zhuhai and Jieyang LNG

Zhuhai LNG saw a significant decrease in demand by 0.16mmt to 0.42mmt over the report period from 0.58mmt the previous period, which pegged overall capacity utilisation at 73 percent. More than half of Zhuhai's imports were derived from Qatar's Ras Laffan LNG complex. Concurrently, the Pacific Basin supply amounted to only 0.11mmt, which was supplied by Queensland Curtis LNG in Australia and Sakhalin-2 LNG in Russia. The remaining import of 0.07mmt stemmed from Equatorial Guinea's EG LNG.

In line with Zhuhai, Jieyang LNG also saw a substantial decrease in imports during the February-March period. Full-period offtakes

were down by 0.31mmt (-44 percent) to 0.40mmt in February-March from 0.71mmt in December-January. Accordingly, Jieyang LNG only saw capacity utilisation of 57 percent over the report period compared to full utilisation in December-January. The terminal has ascended to become an important indicator of Chinese LNG demand since the inauguration of China's state-owned China Oil and Gas Pipeline Network (also known as PipeChina) last year. PipeChina links the Jieyang terminal to Guangdong Province's existing pipeline network and further to China's massive West-East II and III trunklines. Between its commissioning in 2017 and the launch of PipeChina, the terminal had suffered from frequent periods without shipments arriving because its send-out options were mostly limited to truck loadings.

Fujian and Beihai LNG

In line with most other terminals in the South China region, Fujian LNG saw demand decrease in February-March compared to the previous report period of December-January. At 0.28mmt, imports were down 0.34mmt (-55 percent) from the 0.62mmt recorded during the previous period. The terminals capacity utilisation, therefore, stood at only 27 percent. Meanwhile, Beihai LNG also saw significantly lower demand over the report period by curtailing offtakes by 0.19mmt (-41 percent) to 0.27mmt in February-March from 0.46mmt in December-January. The terminals' annualised capacity utilisation stood at 54percent for the report period.

Hainan Island

The remaining two regional LNG terminals – Hainan LNG and the Hainan Transfer Station on Hainan Island – saw a significant demand increase mainly due to higher activity at the Hainan LNG terminal. Whilst the Transfer Station saw its two-month offtake remain steady at 0.03mmt compared to the previous period, Hainan LNG grew imports by 0.07mmt (41 percent) to 0.24mmt in February-March from 0.17mmt in December-January. This was due to an increase in re-exports from Beihai LNG to the terminal as well as a partial discharge of a Sabine Pass LNG cargo via the Golar Maria in February. LNG capacity utilisation on Hainan Island over the report period was thus 48 percent.

Region	Terminal	Export Basin			March 2022	February 2022	Rep. Period Utilisation
		Atlantic	Middle East	Pacific			
North	Dalian LNG	-	-	-	0.00	0.14	14%
	Tianjin - Nangang LNG	0.07	0.18	0.21	0.46	0.46	51%
	Qingdao LNG	-	-	0.28	0.28	0.43	71%
	Tianjin LNG	-	0.08	0.11	0.19	0.43	51%
	Caofeidian LNG	0.08	0.13	0.08	0.29	0.51	74%
East	Zhejiang LNG	-	0.24	0.24	0.48	0.31	158%
	Shanghai (Yangshan)	-	-	0.35	0.35	0.30	130%
	Jiangsu LNG	0.14	0.45	-	0.59	0.53	192%
	Qidong LNG	-	-	0.08	0.08	0.07	32%
	Zhoushan LNG	-	-	0.08	0.08	0.06	28%
	Shanghai Peak-Shaving	-	-	0.1	0.10	0.13	23%
South	Guangdong Dapeng LNG	-	0.21	0.36	0.57	0.59	102%
	Fujian LNG	-	-	0.16	0.16	0.12	27%
	Beihai LNG	-	-	0.14	0.14	0.13	54%
	Zhuhai LNG	0.07	0.15	0.11	0.33	0.09	75%
	Hainan LNG	-	-	0.12	0.12	0.12	48%
	Jieyang LNG	-	-	0.23	0.23	0.17	57%
	Dongguan LNG	-	-	-	-	-	0%
	Shenzhen Diefu LNG	0.07	0.05	0.21	0.33	0.16	74%
	Hainan Transfer Station	-	-	0.02	0.02	0.01	50%
	Shenzhen Peak-Shaving	-	-	-	-	-	0%
Total		0.43	1.49	2.88	4.80	4.76	63%

LNG Journal Subscription Package

LNG Journal is a ten-in-one subscription product with end-to-end insight into liquefied natural gas. The LNG Journal platform includes:

LNG JOURNAL	Monthly Online + optional print magazine
LNG UNLIMITED	Online every Tuesday
GAS TO POWER JOURNAL	Online every Friday
LNG MARKET TRACKER	Online every Wednesday
LNG SHIPPING NEWS	Online every second Thursday
LNG MONTHLY MARKETS	Online Monthly
LNG CHINA	Online every second month
LNG NORTH AMERICA	Online every second month
LNG FUELLING	Online every quarter
DAILY UPDATES and Newsletters	



Subscription Contacts

For new subscriptions or general subscription queries please contact:
 Stephan Venter
 +44 207 017 3407
 venter@lngjournal.com

To renew an existing subscription or to upgrade your package, please contact:
 Gabi Weck
 gabi@lngjournal.com

Sign up now for an Online Subscription from only US\$1095; €835 or £755

Discount options are available for multi-users

Contact us for more information or to arrange a free trial



Gastech

Gastech Hydrogen

EXHIBITION & CONFERENCE
FIERA MILANO, ITALY 5-8 SEPTEMBER 2022

Under the patronage of

Ministry of Ecological
Transition

Ministry of Foreign
Affairs



Look towards a brighter energy future at Gastech Milan 2022

Be a part of the conversation to enable a low-carbon and affordable energy future for all at Gastech's 50th anniversary. Showcase your technologies to the world and exhibit at the leading natural gas, LNG, hydrogen and low-carbon solutions event, Gastech Milan, 2022.

40,000+
Attendees

1,000+
Exhibitors

600+
Speakers

4,000+
Delegates

24
International
country pavilions

Book your stand today by visiting
gastechevent.com/exhibit,
call +44 (0) 20 4551 1602 or
email sales@gastechevent.com

[in](#) [@](#) [f](#) [t](#) @gastechevent #Gastech

Host Region



Host City



Host Venue



Organised By

