

# LNG China

A BI-MONTHLY LNG JOURNAL PUBLICATION

June 2022

## China's financial hub lifts Covid lockdowns but LNG demand stays slow

Shanghai, mainland China's financial hub has started to gradually lift the city's two-month long lockdown from midnight on May 31 – with little impact on LNG import volumes so far. In fact, China's overall LNG imports have fallen 18 percent from January to April 2022, compared to the pre-year period, as record high prices and subdued fuel consumption from manufacturers and industry stifled demand.

Beijing's hard policy against the pandemic – known as 'dynamic clearing' – requires local government to impose strict measures as soon as cases rise into double figures. If imposed in megacities like Shanghai, the effect is a plunge in demand for transportation fuels, and electricity. The effect is most felt in terms of industrial energy demand: In Jiangsu province, north of Shanghai, industrial gas demand plunged 43 percent in April from a year earlier.



Millions were confined to their homes during Shanghai's lockdown

### Torrid start into the year

Chinese gas demand – and LNG in particular – has had a "torrid start to 2022," Wood Mackenzie's Asia Pacific vice chair, Gavin Thompson commented. Already squeezed by slower economic growth and record LNG spot prices, gas

demand barely grew in the first quarter. Though WoodMac still expects China's LNG demand to rise by 10 million tons of LNG this year, imports could fall by up to 4 percent compared to 2021.

In Thompson's view the situation is "bad,

*continued on page 3*

## Guangdong province to step up gas use by 65% through 2025

Industrial coal-to-gas switching and construction of new gas-fired power stations will increase the overall gas use of China's Guangdong province by over 65 percent in the next five years. The provincial regulator forecasts Guangdong's gas consumption to rise from 29 Bcm in 2020 to 48 Bcm by 2025, most of which sourced via a new LNG receiving terminal.

The provincial regulator, Guangdong Development and Reform Commission (GDRC), has singled out natural gas as an important pathway for its energy transition plans. Hence it actively promotes the development of gas-fired power plants and the use of gas in the industrial and transport sector. In contrast, the province wants to limit the construction of new coal-fired power generation capacity and phase out ageing coal power units in order to meet its carbon

neutrality targets.

To meet growing gas demand, Guangdong plans to add LNG regasification and import capacity of around 23.6 million tons per year (mtpa) over the next five years. Currently, the province has six LNG regas terminals with a combined receiving capacity of 18.8 mtpa.

The regulator GDRC specified



Guangdong Danpeng is China's first LNG import terminal

is anticipates that state-owned PipeChina's Shenzhen Diefubei LNG terminal, Chaozhou Huaying LNG terminal, Guangdong Energy's Huizhou LNG terminal, and state-owned CNOOC's Zhuhai LNG

### AGENDA

#### NETBACKS

LNG netbacks still point to Europe, not Asia

2

#### MARKETS

Global regas capacity soars, with China expanding four terminals

3

Chinese banks help finance Plaquemines LNG in the US

3

#### TRADE

Slump in China's LNG imports offset by pipeline gas from Central Asia

5

Nearly half of US LNG exports shipped to Asia, notably S'Korea and China

5

#### LNG UNLIMITED DATA

7-12

*continued page 2*

continued from page 1

but could still get worse – LNG imports have fallen a whopping 16 percent so far this year.” In conjunction with supply disruption in the wake of the Russia/ Ukraine conflict and inflation fears, the latest lockdowns in China exacerbated the commodity prices risk.

As the Shanghai lockdown was extended until the end of May, China’s oil and natural gas demand on the LNG side led to a long Asian balance and forced price parity to Atlantic LNG.

### PetroChina sells off surplus LNG supply

Weak buying activity from China over the past months was one of the key reason for the length in LNG supply in the Pacific Basin, and analysts anticipate prices to

keep trending downwards. In fact, large state-owned Chinese buyers have sold some surplus LNG volumes. State-run Pakistan LNG’s latest tender for two June cargoes, for instance, was awarded to PetroChina International (PCI) at fixed prices of between \$22.5/\$24 per MMBtu, depending on the delivery window, sources told the London-based ship brokerage Poten & Partners. In addition, CNOOC Gas & Power are understood to have sold a May cargo to EGAT of Thailand at around \$23-\$24 per MMBtu.

Shipping data showed that Japan and China were expected to receive around 15 cargoes each through May 29. Going forward, Asia’s LNG demand is expected to trail in Europe’s wake for still

some time as China is slowly turning around its lagging economy.

### Turn to domestic coal

At the same time, record prices for thermal coal and natural gas on global markets impacted China’s electric utilities which lowered their thermal generation output by almost 6 percent in the past two months. Trying to ease fuel cost, China’s central government has introduced measures to boost domestic coal production – as an alternative to imported pipeline gas and LNG – to ensure a stable supply of electricity at an affordable cost.

China’s state planning body NDRC has been diversifying energy imports and is boosting domestic oil, gas and coal production to

keep prices under control. Since March, China’s large state-owned energy importers rushed to buy more thermal coal which today 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.

These policies are seen having an impact on global commodity prices, Wood Mackenzie noted: Increasing domestic coal production in China and less gas-burn in the power sector is gradually feeding through into prices. China’s benchmark Qinhuangdao price, currently around RMB1100/t, has eased off to RMB1000/t in May and is expected to fall further to around RMB700/t by late summer. ■

## LNG netbacks still point to Europe, not Asia

Higher netbacks for shipping LNG to Europe than to China continues to prompt cargo diversions. Analysts expect this trend to continue throughout most of the summer in tight markets, as more liquefaction and export capacity will come onstream “only in the medium term.”

As about two-thirds of global LNG supplies are already contracted, this leaves limited room to increase supplies to Europe – unless it offers higher prices,” analysts at Fitch Rating commented. Europe’s competition with Asia for LNG flows in tight markets will hence keep prices high over the next two years.

Eager to wean itself off Russian gas deliveries, the European Commission has set out plans to reduce imports from Gazprom by two-thirds before the end of this year. The EU plan is “feasible in the medium term,” Fitch commented, if proposed increases in

LNG capacity materialise, while competitive gas prices in Europe keep redirecting LNG from Asia, on top of additional pipeline supply from Algeria, and growing renewables and energy efficiency.

Europe imports about 60 percent of its gas consumption and Russia used to supply a third of that: 152 Bcm by pipeline and 17 bcm as LNG. The search for alternative supply is accelerating over fears that Russia may cut off supplies in reaction to Western sanctions in response to the war in Ukraine. But Fitch underlined Russia’s ability to redirect gas volumes earmarked for Europe is limited, which may deter it from unilateral long-term supply

stoppages. State-dominated Gazprom only exported 3.9 bcm of Russian gas by pipeline and 6.9 bcm as LNG to China in 2020.

The International Energy Agency (IEA), estimates EU gas imports from Russia can be reduced by 50-80 bcm within a year. According to Fitch analysis, “the upper end of the range that assumes all fuel-switching options for power generation (mainly to coal) are fully exercised.”

High gas demand and Europe is expected to support continued, if not rising US LNG exports which



could reach 12.2 billion cubic feet per day (Bcf/d) in 2022, according to projections by the US Energy Administration (EIA). If realized, the United States would surpass Australia and Qatar and become the world’s top LNG exporter. Rampant demand in Europe is forecast to boost US LNG exports by 2.4 Bcf/d this year and 0.5 Bcf/d in 2023. ■

### 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

continued from page 1

terminal phase 2 projects will be completed and ready to start operations by 2025.

To ensure a stable gas supply, Guangdong also plans to build more gas storage facilities notable

in the cities of Guangzhou, Shenzhen, Yangjiang and Chaozhou. The regulator aims for enough gas storage capacity in each region to cover three days of daily demand.

A 1 mtpa gas storage terminal

in Guangzhou Nansha is expected to be ready by early 2023, and Guangdong Energy is building another 2.8 mtpa gas storage terminal in Yangjiang, due operational in 2024. ■

# Global regas capacity soars, with China expanding four terminals

Regasification capacity around the globe has increased by 46 million tonnes per annum last year, reaching 993 mtpa as four new large terminals were brought in operation in Brazil, Croatia, Indonesia and Kuwait while five expansion programmes were completed, four of which in China.

“At least six new markets have started or are scheduled to join the sector as importers in 2022, including Ghana, Hong Kong, El Salvador, the Philippines, Senegal and Vietnam,” France-based International Group of Liquefied Natural Gas Importers (GIIGNL) said in its annual report.

But LNG production has been struggling to keep pace with demand, which sent spot prices soaring.

Despite the ongoing pandemic, LNG imports in 2021 “returned to robust growth,” reaching 372.3 million tonnes, a 4.5 percent increase over 2020. “Asia remained the main demand centre for LNG, growing by 7.1 percent,” GIIGNL analysts commented.

## New capacity comes onstream by 2025

Constraints in liquefaction and export capacity will keep prices

on high levels over the next three years, as analysts do not expect substantial volumes of new capacity in the short run. But by 2025, more than 120 mtpa of new liquefaction capacity are planned to progressively come online, which should partly relieve tensions in the LNG market, GIIGNL analysts forecast.

With 68 new vessels delivered during 2021, the report confirmed the LNG shipping fleet reached

700 vessels, including 48 floating storage and re-gasification units (FSRUs) and 31 LNG bunkering vessels, representing a 9 percent increase in cargo capacity.

“Freight rates remained very strong throughout the year and the orderbook at year-end was remarkably high,” analysts said, anticipating a further 196 new vessels to be delivered by 2025. ■



Sinopec unloads a Q-Max LNG tanker at its Tianjin regas terminal



## Chinese banks help finance Plaquemines LNG in the US

Venture Global’s recent FID on the Plaquemines LNG export plant was partially financed by two Chinese banks. Lenders included the Bank of China and the Industrial and Commercial Bank of China – though the lead banks were Bank of America, Goldman Sachs, ING, JP Morgan, Mizuho, Morgan Stanley and RBC.

Financial close for Venture Global LNG project was the first LNG-related FID in the US since 2019. The Arlington, Virginia-based company also closed the \$13.2 billion project financing for the initial first phase of the Plaquemines plant to produce 13.33 mtpa of LNG. The proceeds of the debt and equity financing fully fund the balance of construction and commissioning of the initial phase.

Plaquemines LNG has all necessary permits in place, project financing is backed by a 20-year Sales and Purchase Agreements for 80 percent of the liquefaction terminal’s full 20 mtpa of final output. The liquefaction plant, under construction on a site some 20 miles south of New Orleans will be served by the associated Gator Express pipeline. ■

# Sonatrach signs \$490 million deal with Sinopec to develop field in Algeria

Algeria’s national energy company Sonatrach has signed a 25-year contract with the Chinese major Sinopec to jointly develop and share production for the Zarzaitine block in Algeria’s eastern Illizi basin. The deal is worth \$490 million and comes in the wake of Sonatrach extending ties with Italy and Spain to boost pipeline gas supplies to the EU.

Turkey, along with EU importers used to receive most of Algeria’s LNG shipments but latest framework contract with China may substantially change matters. Sinopec has been present in Algeria since 2003 and operates with Sonatrach on the contractual perimeter of Zarzaitine with the aim to boost the recovery rate of crude oil and

associated gas.

The new production sharing contracts envisages the recovery and upgrading of hydrocarbons at Zarzaitine. “This work programme includes, in particular, the revamping of the Gas Lift Unit and the drilling of 12 new development wells,” Sonatrach explained, adding: “It also

includes workovers for the replenishment of six existing wells, the connection of new development and maintenance of existing surface facilities, as well as the recovery of flared gas and the reduction of carbon emissions.” ■





# Power Play AWARDS

Presented by **ExxonMobil**

## The 2022 Power Play Awards are finally here!

This year, the Power Play Awards will mark ExxonMobil LNG's fourth year supporting inclusion and diversity by connecting and celebrating women and men across the LNG industry. The key objective behind these awards is to recognize and celebrate the accomplishments of remarkable women and men who uphold the importance of supporting and empowering others in the workplace by demonstrating how a mutually supportive environment can help support great business outcomes across all parts of the LNG value chain.

To help celebrate these leaders, we invite you to **nominate the individuals** you believe are worthy of a Power Play Award:

**The Rising Star** – Outstanding Young Professional

**The Ambassador** – Outstanding Leadership

**The Pioneer** – Outstanding Business, Innovation and/or Technology Contribution



Learn more at  
[www.exxonmobilng.com/Power-Play/Power-Play-Awards](http://www.exxonmobilng.com/Power-Play/Power-Play-Awards)

# LNG

# ExxonMobil

# Slump in China's LNG imports offset by pipeline gas from Central Asia

China's LNG imports tumbled by 33.4 percent in April to their total monthly low in over two years at 4.34 million tons, according to customs data, but the slump in LNG shipments was offset by rising pipeline gas imports from Central Asian states as well as from Russia.

Shipments to China's 22 LNG import terminals fell to 21.68 million tons in January through April, a plunge of 17.3 percent from the 26.22 million total that was logged in over the same period last year, according to the General Administration of Customs.

China is currently upgrading and expanding its LNG import terminal network. Expansion works are underway at existing terminals at Caofeidian, Putian, Qingdao,

Shenzhen and Tianjin which are expected to add around 12 mtpa of regasification capacity by 2023. In addition, new onshore regasification terminals are under construction to add around 30 mtpa of LNG import capacity overall at Binhai, Chaozhou, Guangzhou, Jiaxing, Longkou, Tianjin Nangang, Wenzhou, Yangjiang, Yantai and Zhangzhou by 2024.

It is questionable, however, how much China will utilise all that new

regas and import capacity given that the economics of importing pipeline gas are way more attractive than importing LNG. State-owned Chinese gas buyers have hence tried to maximise import volumes under existing long-term contracts, notably from Russia through Gazprom's 'Power of Siberia Pipeline', in operation since December 2019 as well as from Turkmenistan, Kazakhstan and Uzbekistan.

Chinese customs data show the

country's pipeline natural gas imports during the first four months of 2022 increased by 7.7 percent to 14.28 million tons.

Uzbekistan recently restarted gas exports to China after temporarily halting them at the beginning of 2022 to meet increasing domestic demand. These volumes flow through the Central Asia-China pipeline which originates in Turkmenistan and passes through Uzbekistan and Kazakhstan.

Turkmenistan,

## NEWS NUDGES

### Avenir LNG takes delivery of China-built carrier

Norwegian small-scale project developer Avenir LNG has taken delivery of the "Avenir Achievement" as it expands its small-scale terminal and carrier business. The new-built vessel is the second dual-purpose small-scale carrier of 20,000 cubic metres capacity constructed at the Nantong shipyard in China owned by CIMC Sinopacific Offshore and Engineering.

home to an estimated 50 trillion cubic meters of gas reserves, was China's largest supplier of gas by pipeline in the period January-April followed by Kazakhstan and Uzbekistan. The latter stated on May 18 it plans to slash exports to China by almost 75 percent to 3.3 billion cubic meters, down from the 12.2 bcm transported in 2019 when China's demand had increased.

In light of the global gas shortages, all Central Asian republics announced they intend to increase their domestic gas prices. The prices are currently subsidized by the import revenues received from China and Russia. Turkmenistan, for instance, doubled exports to Russia in 2021 to 10 bcm per year as Gazprom sought to benefit from the very low prices offered. ■

## Selected natural gas infrastructure in China



## Nearly half of US LNG exports shipped to Asia, notably S'Korea and China

US LNG is in high demand as economic activity gathers strength in most countries, while supply constraints push up price volatility. According to IGU's latest Global Gas Report, about 48 percent of US export volumes were delivered to Asia, driven by increasing demand in South Korea and China, though the latter largely prefers pipeline gas to LNG on cost.

Volumes of shipped from US LNG export terminals saw rise in March and April 2021, but then fell again over the summer before rising sharply in the fourth quarter and peaked in December 2021, as Europe's natural gas inventories remained low.

"Overall, LNG exports grew in 2021, with the US leading the way through its year-on-year increase

of 23 million tonnes," said the IGU in a report covering the past two years. Exports from Australia, Qatar and Russia remained stable from 2020 to 2021, while there was a decrease in LNG supplies coming out of Nigeria and from Trinidad & Tobago over the same period.

In contrast to rising energy demand in Japan and South Korea in

the first quarter, China – the world's largest LNG buyer – saw demand nosedive as prolonged regional lockdowns stifled manufacturing and slowed economic growth. Large state-owned Chinese gas importers sought to step up import volumes of pipeline gas from Russia as well as from Kazakhstan, Turkmenistan and Uzbekistan.

"Russia's pipeline export volumes increased by about 4 percent from 2020, with incremental volumes flowing to Germany, Italy, Turkey and especially China, IGU analysts explained. On the supply side, natural gas production in the Middle East also increased, with Iran's pipeline exports to Turkey and Israel's pipeline exports to Egypt growing significantly. ■



# 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](http://www.ChartIndustries.com)  
[LNG@ChartIndustries.com](mailto:LNG@ChartIndustries.com)

**CHART**  
Cooler By Design.®

# Chinese LNG Demand Outlook

There were 1.38mmt of LNG on the water with destinations in China according to our market visibility at the beginning of May. These cargoes had an estimated delivery horizon of 16 June. None of these inbound cargoes had originated in the United States, however, with the majority of 0.72mmt being derived from Australia followed by 0.35mmt from Qatar. Two cargoes totalling 0.15mmt were broadly headed for China but still had to declare destination terminals.

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-Nangang LNG terminal in the greater Beijing/Tianjin area. Concurrently, the East China region was looking to receive roughly 0.48mmt, led by 0.25mmt headed for the Zhejiang LNG terminal. Anticipated LNG deliveries to South China amounted to 0.24mmt. Apparent demand in East China was led by the Fujian 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 Australia's Queensland Curtis LNG via the Maran Gas Chios and the LNG Phecda, which carried a Zeebrugge re-export.

## North China

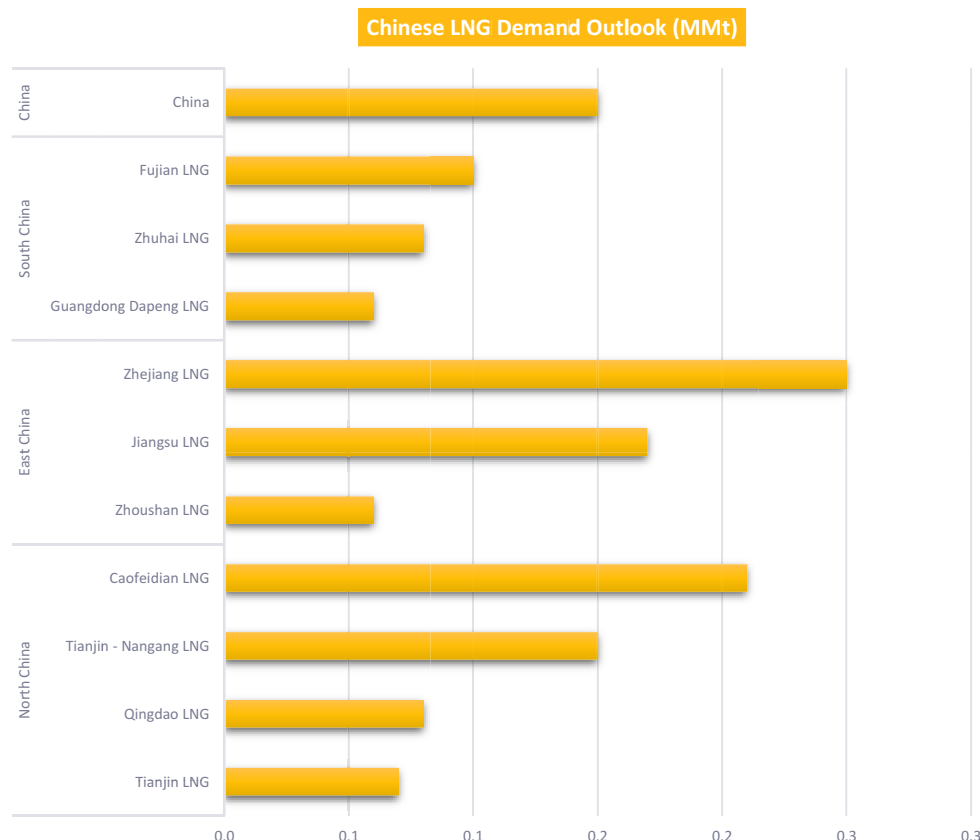
Of total LNG currently en route to China, we are anticipating 0.51mmt to be delivered to North China – comprising the wider Beijing area and China's industrial north – with a delivery horizon of 11 June.

Among the roster of top-three northern Chinese terminals, CNOOC's Tianjin-Nangang LNG was expected to receive 0.15mmt via two cargoes by 5 June. These cargoes were exported by Australia via the Queensland Curtis LNG-derived Cobia LNG and the Australia Pacific LNG-sailed CESI Tianjin.

Current market visibility further indicated 0.21mmt were destined for CNPC's Caofeidian LNG by 10 June, comprising two cargoes from Russia via the Yamal-derived LNG Merak and the Grand Mereya, which carried a Sakhalin-2 cargo. There was also one cargo from Australia aboard the NWS LNG-derived Woodside Charles Allen.

Qingdao LNG, meanwhile, was looking to receive 0.08mmt via one cargo by 11 June. The shipment had sailed from Australia Pacific LNG in Australia via the CESI Wenzhou.

Finally, the Woodside Rogers – sailing from Gorgon LNG with a 0.07mmt cargo –



Source: LNG Unlimited Data

indicated it would arrive at Tianjin LNG on 3 June.

## East China

At the time of writing, we expected the East China region – comprising the wider Shanghai area and Zhejiang province – to receive 0.48mmt by 16 June. Jiangsu LNG is scheduled to receive 0.17mmt by 16 June, our data show, comprising one Qatari shipment via the Q-Max vessel Mekaines and an Australian cargo from NWS LNG via the LNG Dream. Moreover, we were anticipating the Zhejiang LNG terminal to receive 25mmt via three cargoes via the Ras Laffan-derived Q-Flex vessels Onaiza and Al Safliya as well as via the Wheatstone LNG-derived Pan Asia by 16 June. Additionally, we were seeing a cargo of 0.06mmt travelling to the Zhoushan LNG

terminal via the GasLog Skagen, which is due to arrive by 5 June.

## South China

In the south of the country, we were expecting 0.24mmt to be delivered by 9 June. Expected LNG imports in the South China region were led by Fujian LNG, which at the time of writing was expecting two cargoes amounting to 0.12mmt. These shipments were carried by the Ras Laffan-derived Umm Bab and the Tangguh LNG-derived Min Rong. Concurrently, Zhuhai LNG was expecting a cargo of 0.09mmt via the Queensland Curtis LNG-sailed Maran Gas Agamemnon. An additional cargo of 0.06mmt aboard the PFLNG Satu-derived Seri Cemara was headed for Guangdong Dapeng LNG by 6 June.



*Atlas Copco*

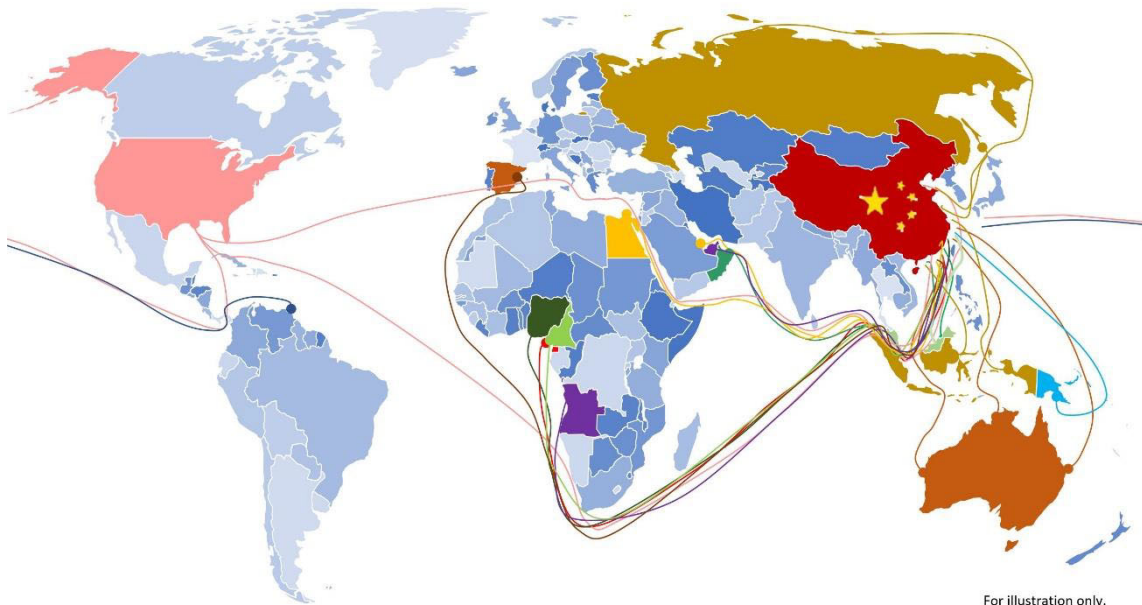


## In LNG, experience matters

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](http://www.atlascopco-gap.com)

# Chinese LNG Demand: April-May



China's monthly LNG offtake in May amounted to 4.93mmt, our data showed, which constituted monthly demand growth of 0.49mmt (11 percent) compared to the 4.44mmt we recorded in April. As such, at 9.37mmt in total, Chinese demand in April and May trailed its two-month equivalent of 9.56mmt in February and March marginally by 0.19mmt (-2 percent). LNG imports in February and March stood at 4.76mmt and 4.80mmt, respectively. However, the slight negative growth notwithstanding, the demand reduction period-on-period in April/May had slowed considerably from the 5.79mmt decrease seen during the previous period of February/March, which came in the wake of high demand growth during December/January. Chinese LNG imports had increased by 0.92mmt (13 percent) to 7.99mmt in December from 7.07mmt in November alongside robust demand of 7.36mmt in January. However, the amount imported during the report period also constituted a significant net decrease of 4.20mmt (-31 percent) over the 13.57mmt we recorded during the April-May 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 62 percent, down 1pp from around 63 percent for the previous report period of February-March.

## Prices

Chinese LNG prices during the report period were reflective of the increased competition by European buyers following Russia's cut in pipeline gas supplies to Poland and Bulgaria in April. They were also an indication of a continued tight market in the Far East, in which spot cargoes still demanded a steep premium as India, for example, maintained high buying activity, our data show. Although parts of China continued to be subject to intermittent lockdowns to combat local outbreaks of coronavirus, these had less impact on the overall trajectory of domestic LNG prices than the continued high levels of landed prices, Chinese customs data for the current report period 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 in March. In the current report period of April/May, the highest privately quoted domestic price had decreased from US\$27/mmBtu in March to US\$23.53/mmBtu on 5 April before settling in between US\$22.14/mmBtu and US\$20.08/mmBtu in May. For the report period overall, the upper and lower price spectrum thus condensed to a relatively narrow range of US\$3.45/mmBtu compared to US\$14.83 in February/March. Whereas in February/March the maximum price stood at US\$27.17/mmBtu with a floor of

US\$12.34/mmBtu, those boundaries had narrowed to US\$23.53/mmBtu and US\$20.08/mmBtu, respectively, in April/May.

Meanwhile, the average domestic price indicated by the National Bureau of Statistics (CNBS) stood at US\$24.37/mmBtu in April (the most recent available full-month dataset by the CNBS), which represents a decrease of US\$1.23/mmBtu (-5 percent) from US\$25.60/mmBtu in March.

Landed LNG prices remained below their peak of around US\$40.38/mmBtu in w/c 6 December last year at peaks of US\$33.24/mmBtu in April and US\$34.55/mmBtu in May, according to our calculations based on Chinese customs data. Notably, landed prices had begun to plummet during the last two days of May to just US\$16.46/mmBtu.

## North China

LNG demand continued to see a substantial decrease in the north of China during the report period, our data indicated at the time of writing, decreasing by 0.67mmt (-21 percent) from 3.19mmt in the two months of February-March to 2.52mmt for the report period of April-May. The largest share of LNG influx into the region during the report period took place via the Tianjin - Nangang LNG terminal. The sum of LNG imports of 2.52mmt in northern China for the period of April-May this year was also behind its equivalent of

3.94mmt in 2021, down by 1.42mmt (-36 percent).

### China's North led by Tianjin-Nangang LNG

Leading the roster of northern terminals by volumes imported, Tianjin-Nangang LNG took in 0.85mmt during the report period of April-May. Nevertheless, this still constituted an offtake decrease of 0.07mmt (-8 percent) from 0.92mmt in the previous two-month period. Imports consisted predominantly of three Russian cargoes from Sakhalin-2 LNG amounting to 0.20mmt. Australia also delivered three cargoes, supplying 0.19mmt. In addition, Qatar's Ras Laffan LNG complex delivered two cargoes totalling 0.17mmt whilst the United States has delivered 0.15mmt to the terminal in April/May. The remaining two shipments totalling 0.14mmt were delivered from Indonesia and Papua New Guinea.

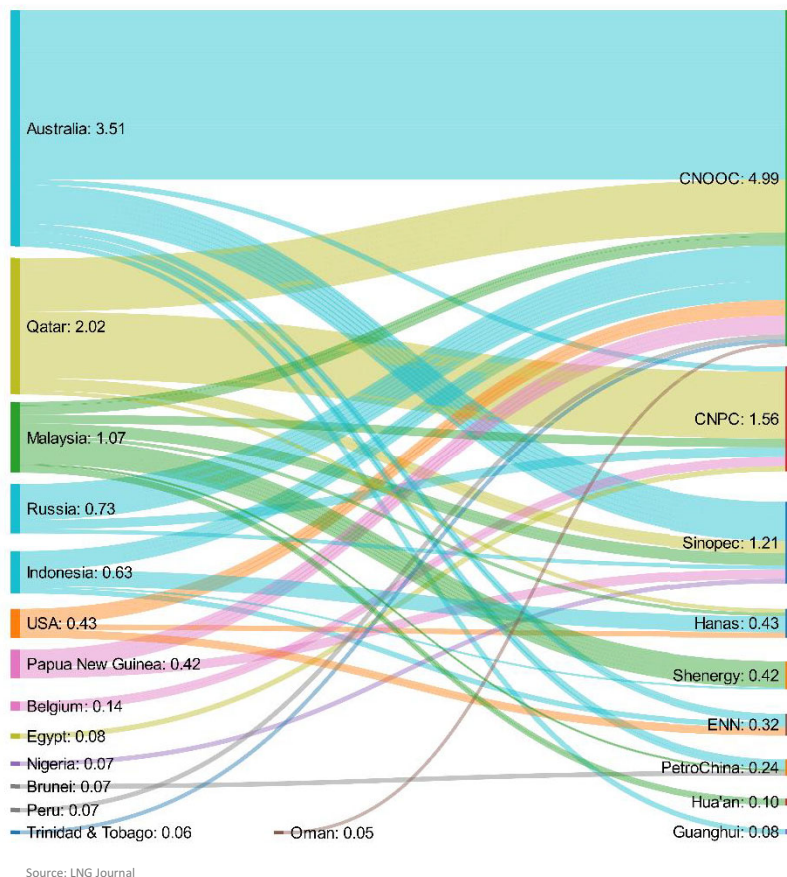
### Qingdao LNG

Imports at Qingdao LNG were the second highest in northern China, even as they had decreased by 0.09mmt (-13 percent) to 0.62mmt in April-May from 0.71mmt in February-March, according to our data. The bulk of imports came from the Australia Pacific LNG plant, amounting to 0.39mmt via five cargoes. Pacific supply was complemented by two PNG LNG exports totalling 0.14mmt and one Qatari shipment of 0.09mmt.

### Caofeidian LNG

Caofeidian LNG, meanwhile, had offtakes amounting to 0.49mmt over the report period compared to 0.80mmt in February-March. The terminal thus saw a decrease in imports of 0.31mmt (-39 percent). Cargoes from the

## Chinese LNG Buyers (MMt)



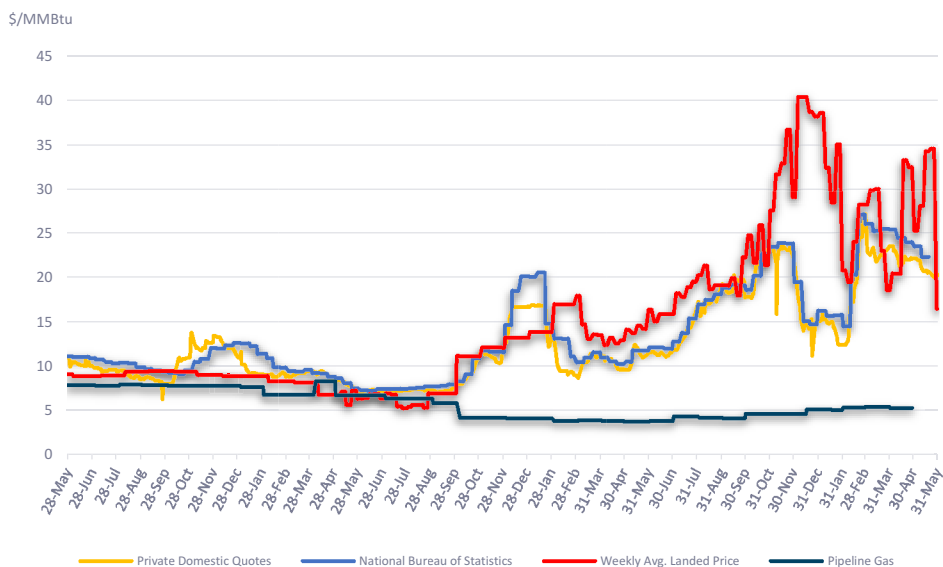
Middle East – namely Qatar - totalled 0.28mmt and thereby represented the majority of LNG shipped to the terminal. There was also a shipment of 0.07mmt each from Russia's Sakhalin-2 LNG and Malaysia LNG during the report period. A single Atlantic Basin shipment of 0.07mmt, meanwhile, came via a Zeebrugge re-export aboard the Cool Voyager.

### Tianjin LNG and Dalian LNG

The remaining two northern terminals – Tianjin LNG and Dalian LNG – imported 0.35mmt and 0.21mmt over the report period, respectively, which in the case of Tianjin LNG stemmed predominantly from Australia with 0.14mmt, which was derived from Queensland Curtis LNG and Australia Pacific LNG. Two shipments totalling 0.12mmt from Malaysia's Bintulu plant completed the scope of Pacific Basin supply. Middle Eastern supply, meanwhile, comprised a cargo of 0.09mmt via the Ras Laffan-derived Q-Flex Al Utouriya.

April-May supply to the Dalian terminal was exclusively sourced from the Pacific Basin, with supply of 0.14mmt coming via a shipment each from NWS LNG and Australia Pacific LNG aboard the Energy Navigator and the CESI Wenzhou, respectively. The roster of cargoes delivered to Dalian was completed by a 0.07mmt Brunei LNG shipment via the Amadi.

## Chinese Gas Prices



Source: LNG Journal, CNBS, GACC, Domestic Traders

## East China

At the time of writing, demand in East China was dominated by the wider Shanghai area, where Jiangsu LNG imported 1.07mmt during the report period. This placed the terminal within the top of China's leading terminals in April-May. Accordingly, it

operated at well above-nameplate capacity. Overall LNG demand in East China, however, had decreased slightly by 0.07mmt (-2 percent) to 3.01mmt from 3.08mmt recorded in February-March.

#### Wider Shanghai area

Meanwhile, the remaining wider Shanghai area – comprising Qidong LNG, Shanghai LNG and the metropolis' peak-shaving facility – imported a total of 0.60mmt over the report period, down 0.43mmt (-42 percent) from the 1.03mmt recorded in February-March. The sub-region's imports were led by the Shanghai LNG terminal, which took in 0.42mmt and thereby decreased imports by 0.23mmt (-35 percent) period-on-period. Shanghai's peak-shaving facility also reduced imports significantly by 0.13mmt (-56 percent) to 0.10mmt period-on-period. The Qidong LNG terminal had also curtailed offtakes by 0.06mmt (-43 percent) to 0.08mmt by the end of May, our data indicate.

#### Zhejiang & Zhoushan LNG

At neighbouring terminals Zhejiang and Zhoushan LNG, imports amounted to 1.02mmt and 0.32mmt, respectively. Together, the two terminals thereby increased imports by 0.41mmt (44 percent) to 1.34mmt from the 0.93mmt recorded in February-March. LNG was mainly supplied by Australia via 12 cargoes totalling 0.76mmt and the United States through three shipments totalling 0.20mmt. 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 – resumed demand growth following a dip during the previous report period, our data indicate. The region's imports amounted to 3.84mmt over the report period, which meant imports were up by 0.55mmt (17 percent) from the 3.29mmt recorded in February-March.

#### 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

1.38mmt, placing it in first place among China's terminals, and before Jiangsu LNG. The terminal had increased its April-May imports by 0.22mmt (19 percent) from 1.16mmt over the previous two-month period. Guangdong Dapeng LNG's average capacity utilisation stood at 122 percent over the report period, which resulted in neighbouring Shenzhen Diefu LNG importing 0.45mmt and pegging its terminal utilisation at 68 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 notable increase in demand by 0.08mmt to 0.50mmt over the report period from 0.42mmt the previous period, which pegged overall capacity utilisation at 89 percent. More than a third of Zhuhai's imports – 0.18mmt – were derived from Qatar's Ras Laffan LNG complex. Concurrently, Pacific Basin deliveries amounted to 0.32mmt, which were supplied by Queensland Curtis LNG, Gladstone LNG, Gorgon LNG and Ichthys LNG in Australia as well as Sakhalin-2 LNG in Russia. No Atlantic Basin cargo found its way to Zhuhai during the report period.

In line with Zhuhai, Jieyang LNG also saw a substantial increase in imports during the April-May period. Full-period offtakes were up by 0.25mmt (62 percent) to 0.65mmt in April-May from 0.40mmt in February-March. Accordingly, Jieyang LNG saw capacity utilisation of 93 percent over the report period compared to 57 percent in February-March. 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 increase in April-May compared to the previous report period of February-March. At 0.43mmt, imports were up 0.15mmt (53 percent) from the 0.28mmt recorded during

the previous period. The terminal's capacity utilisation, therefore, stood at 41 percent. In contrast, Beihai LNG saw lower demand over the report period. Offtakes at the terminal had decreased by 0.03mmt (-11 percent) to 0.24mmt from 0.27mmt in February-March. The terminals' annualised capacity utilisation stood at 48 percent 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 decrease mainly due to lower 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 decreased imports by 0.08mmt (-33 percent) to 0.16mmt in April-May from 0.24mmt in February-March. This was due to a reduction in re-exports from Beihai LNG to the terminal. LNG capacity utilisation on Hainan Island over the report period was thus 32 percent.

| Region | Terminal                | Export Basin |             |         | May 2022 | April 2022 | Rep. Period Utilisation |
|--------|-------------------------|--------------|-------------|---------|----------|------------|-------------------------|
|        |                         | Atlantic     | Middle East | Pacific |          |            |                         |
| North  | Dalian LNG              | -            | -           | 0.15    | 0.15     | 0.06       | 21%                     |
|        | Tianjin - Nangang LNG   | 0.15         | 0.09        | 0.20    | 0.44     | 0.41       | 47%                     |
|        | Qingdao LNG             | -            | -           | 0.31    | 0.31     | 0.31       | 62%                     |
|        | Tianjin LNG             | -            | 0.09        | 0.14    | 0.23     | 0.12       | 29%                     |
|        | Caofeidian LNG          | 0.07         | 0.12        | 0.07    | 0.26     | 0.23       | 45%                     |
| East   | Zhejiang LNG            | 0.08         | 0.23        | 0.32    | 0.63     | 0.39       | 204%                    |
|        | Shanghai (Yangshan)     | -            | -           | 0.15    | 0.15     | 0.27       | 84%                     |
|        | Jiangsu LNG             | 0.07         | 0.42        | 0.14    | 0.63     | 0.44       | 183%                    |
|        | Qidong LNG              | -            | -           | -       | -        | 0.08       | 17%                     |
|        | Zhoushan LNG            | -            | -           | 0.13    | 0.13     | 0.19       | 64%                     |
|        | Shanghai Peak-Shaving   | -            | -           | -       | -        | 0.10       | 10%                     |
| South  | Guangdong Dapeng LNG    | -            | 0.09        | 0.64    | 0.73     | 0.65       | 122%                    |
|        | Fujian LNG              | 0.08         | -           | 0.21    | 0.29     | 0.14       | 41%                     |
|        | Beihai LNG              | 0.07         | -           | 0.05    | 0.12     | 0.12       | 48%                     |
|        | Zhuhai LNG              | -            | 0.09        | 0.14    | 0.23     | 0.27       | 89%                     |
|        | Hainan LNG              | -            | -           | 0.10    | 0.10     | 0.06       | 32%                     |
|        | Jieyang LNG             | -            | -           | 0.29    | 0.29     | 0.36       | 93%                     |
|        | Dongguan LNG            | -            | -           | -       | -        | -          | 0%                      |
|        | Shenzhen Diefu LNG      | 0.07         | -           | 0.15    | 0.22     | 0.23       | 68%                     |
|        | Hainan Transfer Station | -            | -           | 0.02    | 0.02     | 0.01       | 50%                     |
|        | Shenzhen Peak-Shaving   | -            | -           | -       | -        | -          | 0%                      |
| Total  |                         | 0.59         | 1.13        | 3.21    | 4.93     | 4.44       | 62%                     |

## 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 |                                          |

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



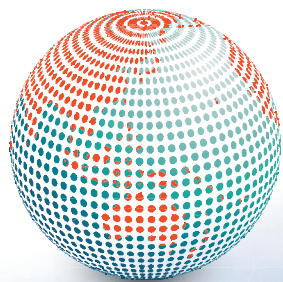
### Subscription Contacts

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



# FLNG & FSRU ASIA

## MAXIMISING FLNG & FSRU OPPORTUNITIES TO MEET THE HEIGHTENED DEMAND FOR LNG



**DAVID BAUTISTA**  
Business Development  
Upstream,  
Crescent Petroleum



**DR. AJAY KUMAR**  
Managing Director,  
*Fox Petroleum*



**HARUO KIKKAWA**  
Project Development  
Manager,  
*GasLog*



**KAUSHAL RAMESH**  
LNG and Power  
Markets Research,  
*Rystad Energy*

**12 SEPTEMBER 2022,**  
**10 am - 3 pm**

Happening alongside the  
FPSO World Congress 2022

[fpsoworldcongress.com](https://fpsoworldcongress.com)



SCAN TO  
DOWNLOAD  
THE EVENT  
BROCHURE

