

LNG China

A BI-MONTHLY LNG JOURNAL PUBLICATION

April 2023

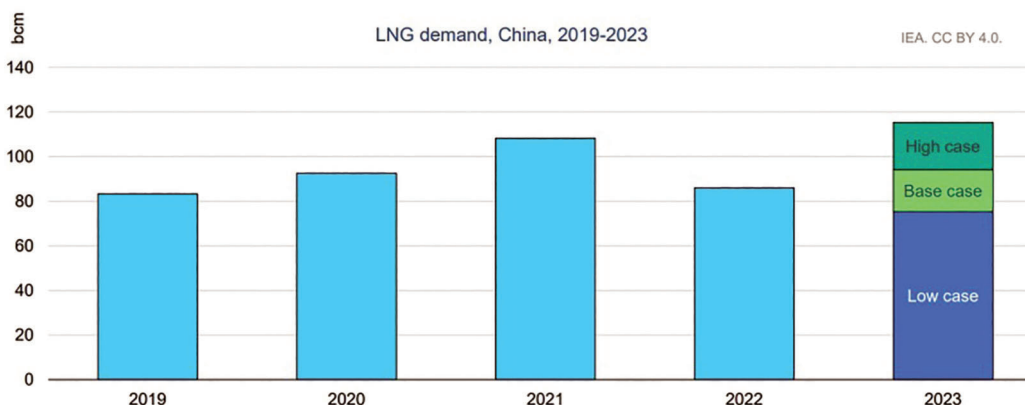
Rebound in Chinese gas demand – a bigger concern for Europe than Russian cut-off

China's great reopening after nearly three years of lockdowns to fight the pandemic is being warily watched. In fact, Europe's gas supplies could be harder hit by a stark rise in China's LNG imports this year than by a loss of all remaining pipeline gas flows from Russia, the International Energy Agency (IEA) warns.

A quick economic rebound can boost China's LNG intake by 35 percent to 115 billion cubic meters (bcm), though the uncertainty range of this forecast is about 40 bcm.

The IEA's bullish scenario sees the country's LNG imports surge by 30 bcm to well above 2021-peaks – more than 28 bcm of Russian gas flows to Europe last year since deliveries via the Nord Stream 1 pipeline were cut off at the end of August. In this event, competition for LNG cargoes could push prices up to the “unsustain-

China's demand for LNG in 2023 presents 40 bcm of demand uncertainty for the global LNG market



able levels” seen last summer, analysts warned.

On the contrary, a rise in China's domestic gas production and higher pipeline imports from Russia, Myanmar and Central Asia could lower the country's LNG demand by 12 percent, or 10 bcm this year to just 75 bcm of net imports. Chinese demand remains “the big unknown,” the IEA cautioned, as much depends on the

speed of China's economic recovery from strict lockdowns which had depressed the country's 2022 net imports by an unprecedented 21 percent, or 22 bcm, compared with a 17 percent, or 16 bcm increase in the previous year.

Lower prices make China return to the spot market

With spot LNG prices in Asia trending lower since the start of the

year, Chinese buyers are returning to short-term markets and imports are set to rise to 5.39 million tons in March, up from 4.96 million tons in February. Attracted by prices near a two-year low of \$13.50/MMBtu in mid-March, down from record averages of US\$40/MMBtu last year, Beijing Gas bought an LNG cargo for delivery in April and CNOOC is understood to have purchased another

continued on page 3



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AGENDA

PROJECTS

China holds back to sign Power-of-Siberia-2 deal, aims for better price **2**

COMPANIES

Sinopec posts fall in profits on weak domestic gas & petchem markets **3**

MARKETS

Japan's LNG imports fall but outnumber those of China **5**

COMPETING FUELS

NDRC controls expansion of China's coal-to-gas switch **6**

LNG UNLIMITED DATA
7-11

continued from page 1

two. Should China's spot purchasing intensify, this could intensify competition for LNG in an already very tight global market.

"If spot LNG prices start competing with the highest levels of contracted LNG – estimated around US\$14-15/MMBtu – we could see some appetite emerging again. But the scale of Chinese economic growth in 2023 as it emerges from the Covid pandemic will be the biggest driver to support LNG demand" said Lucas Schmitt, gas and LNG analyst at Wood Mackenzie.

China is estimated to consume between 385 bcm and 400 bcm of gas this year, at least 6 percent more than in 2022, as new LNG import terminals come into operation and economic recovery drives higher demand from industry and power generators. These new terminals include the 5 mtpa Tianjin

Nangang regas facility of Beijing Gas Group, Guangzhou Gas's 1 mtpa Nansha terminal and the 6 mtpa Chaozhou terminal of the private energy firm Huaying Natural Gas.

Long-term volumes meet most demand

Analysts doubt, however, that China will need much spot LNG volumes to cover its needs given that state-owned gas buyers have substantially increased volumes bought under long-term contracts. With about 13 bcm of new LNG contracts starting delivery in 2023, China's contracted LNG volume is on course to reach nearly 110 bcm this year – substantially higher than projected demand. Nine new LNG term contracts began deliveries in 2023, more than offsetting the two short-term contracts that expired at the end of last year.

The 2022 collapse of Chinese

LNG demand was instrumental in helping Europe boost its LNG inflows by 65 percent, or 65 Bcm to compensate for the loss in Russian volumes. This year, however, European utility buyers have to brace for Chinese state-owned importers to return to the market, though their buying pattern is much more long-term.

Sinopec has signed a US\$60 billion agreement to buy 4 mtpa of LNG from QatarEnergy's North Field East project for 27 years, starting from 2026 – and CNPC is close to entering a similar deal. The growing portfolio of term LNG contracts will make Chinese LNG demand more resilient and less exposed to spot market pricing, IEA analyst noted. And at just under US\$15/MBtu, China's contracted LNG supplies were almost 30 percent cheaper than spot LNG imports during 2022, according to

price data from S&P Global Commodity Insights.

China National Petroleum Corp (CNPC) is also understood to be close to purchasing large quantities of LNG from QatarEnergy over nearly 30 years, similar to the deal struck by Sinopec in November. Sinopec agreed to offtake 4 million tons of LNG from Qatar's North Field expansion over 27 years, insulating China from gas price volatility as its economy recovers. Once signed, it will be the second large offtake accord between Qatar and the world's second largest LNG buyer as China aims to source more natural gas to replace coal in the power sector and reduce carbon emissions. Traders noted the deal would secure long-term supply from a reliable exporter and optimise imports between China's state-owned energy majors. ■

China holds back to sign Power-of-Siberia-2 deal, aims for better price

Though "practically all parameters" for Power-of-Siberia 2 – a new 50 bcm/year gas interconnector to China – are agreed, the Russian President Putin claims, no deal has been signed as China seems to bargain for a better price. Gazprom wants to supply up to 98 bcm of gas by 2030, but analyst doubt China will need all that much.

Putin invited the Chinese leader Xi Jinping to Moscow last week when they also discussed the interconnector. Talks ended with them stating the parties involved "will make efforts to advance work on the study and approval" of project – even though Gazprom began a feasibility study back in 2020 already.

The pipeline route years has been set out years ago but the plan has become more pressing as the state-owned Russian gas com-

pany is seeking to replace parts of the over 80 bcm/year it used to deliver to the European Union before Putin started to wage war on Ukraine. But China is not expected to need additional supplies until after 2030, having just increased domestic gas production and delayed the coal-to-gas switch in power generation in reaction to soaring prices on global commodity markets.

Gazprom seeks to pivot supplies to China

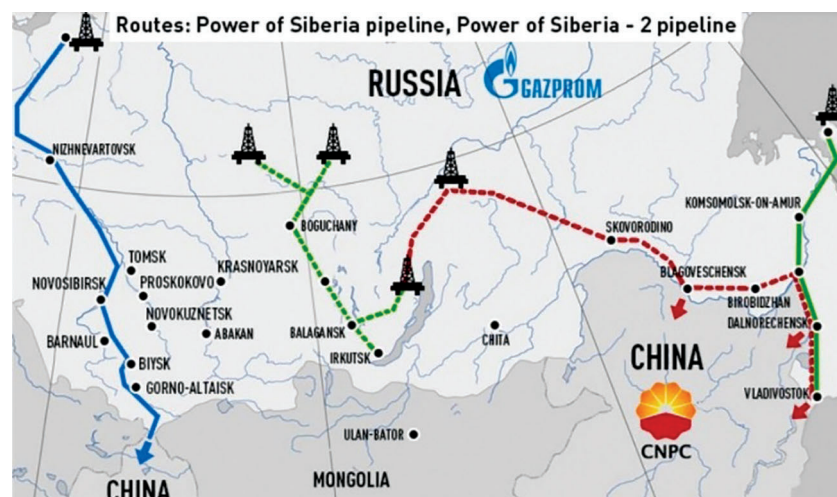
The proposed Power-of-Siberia 2 pipeline would carry natural gas from Russia's huge reserves in the Yamal peninsula in western Siberia over 2,600 km though eastern Mongolia to China's northeast Heilongjiang province. If all goes to plan, the pipeline would supply 50 bcm/y of Russian gas to China – just 5 bcm less than the now dys-

functional Nord Stream 1 pipeline linking Russia with Germany.

But Beijing is holding back given that Gazprom already delivers gas to China through the first Power-of-Siberia pipeline under a 30-year contract, worth some \$400 billion which was concluded in 2019 after hard-fought negotiations on price. The interconnector is anticipated to deliver 22 bcm of gas this year, continuing to ramp

up volumes before reaching its full capacity of 38 Bcm by 2027.

"The original target is for China to import 38 bcm of Russia gas by 2025. Now Russia is saying this will reach 98 bcm by 2030. That is a very big jump, so it pays to be slightly cautious on that," ICIS's China gas analysts Wang Yuanda commented. ■



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Subscription included with
LNG Journal

Sinopec posts fall in profits on weak domestic gas and petchem markets

China Petroleum and Chemical Corp. (Sinopec), one of the world's top 10 oil and gas companies and a significant LNG importer to back up its refining and petrochemical activities, reported a 21 percent increase in annual revenues but net profits dropped by almost the same amount on weak domestic demand.

Sinopec, an importer of LNG cargoes from Queensland in Australia and from nations such as the US and Qatar, said annual revenues soared to 3.31 trillion Chinese yuan (\$483 billion) an increase of 21 percent from the 2.74 trillion yuan (\$399bn) logged in 2021.

However, net profits excluding extraordinary items fell by 20.8 percent to 57.18 billion yuan (\$8.32bn) from 72.22 billion yuan (\$11.24bn) in the previous year as China's energy sector was affected by a fall in domestic sales and higher import prices.

Net cash flow from operating activities tumbled by 48.3 percent to 116.2 billion yuan (\$16.9bn) from 225.1 billion yuan (\$32.7bn) in 2021. Sinopec explained that while Chinese gross domestic product grew by 3 percent year-on-year international oil prices retreated from a major rally and saw wide fluctuations, though ended the year with big increases.

But the Chinese major described demand for petrochemical products and natural gas as "weak" in the domestic market. Sinopec said

that the jump in revenues was mainly attributed to the increase of both realised prices and the sales volume of crude oil and natural gas.

Sales volumes

"In 2022, the segment sold 34.28 million tonnes of crude oil, representing an increase of 0.6 percent over 2021. Natural gas sales volume came to 31.9 billion cubic metres (Bcm), representing an increase of 3.3 percent over 2021," Sinopec said, explaining: "Regasified LNG sales volumes were 21.5 Bcm, representing an increase of 12.5 percent over 2021."

"LNG sales volumes came to 1.42 million tonnes, representing a decrease of 77.0 percent over 2021, as a result of flexible adjustment of sales strategy based on purchase prices and market conditions," it added, specifying the procurement cost of LNG had increased by 12.3 billion yuan (\$1.8bn) year-on-year.

Sinopec's average gas price was 1,816 yuan (\$264) per thousand cubic metres, up 13.1 percent.



Sinopec unloads Q-Max at Tianjin LNG terminal

Regasified LNG prices were up 66.8 percent to 3,535 yuan (\$514) per thousand cubic metres.

Output increases

Natural gas production increased by 4.1 percent to 1,248 billion cubic feet from 1,199 Bcf in the previous year. Based on national statistics, China's domestic consumption of natural gas reached 366.3 billion cubic metres in 2022 which was down by 1.7 percent year-on-year.

After the weak performance in 2022, Sinopec was more optimistic for 2023 with a fast-improving demand landscape. "China's econ-

omy was now expected to recover and demand for natural gas, refined oil products and petrochemical products is expected to grow rapidly," stated Sinopec in its outlook, forecasting: "International oil prices are expected to fluctuate at mid-to-high levels."

Sinopec said its capital expenditure plan for 2023 is to spend 165.8 billion yuan (\$24.1bn), including 74.4 billion yuan in the exploration and production segment, mainly on crude production capacity building in Jiyang and Tahe, natural gas production capacity building in west Sichuan and oil and gas storage and transportation facilities. ■

China's city gas suppliers feel the pinch

Though last year's spike in global gas prices depressed China's overall demand, it also led to recent shortages of the fuel in parts of northern China. Tight regulations of the residential prices do not allow distributor to hand through the higher cost for imported gas to end-customers, so they simply stopped reselling wholesale gas to households in December and January.

Wholesale prices soared in China when city-gas distributors were forced to cover the higher cost of imported supply, caused by the ongoing Russia-Ukraine war. But while industrial-scale power generators turned their back on highly-priced LNG in favour of burning cheaper domestic coal instead, the share of residential gas usage increased.

"City gas is likely to have been

the only segment to have grown in China last year, mainly driven by residential usage and heating from coal-to-gas conversion - as commercial, industrial and power generation demand weakened in tandem with meagre economic growth," economists at the Technology Research Institute of CNPC were quoted in the International Gas Union's monthly gas report. "The share of city gas in overall

consumption expanded from 35.5 percent in 2021 to 37.5 percent in 2022, while the shares of industry, power generation and chemicals all declined," it added.

This year, China's great reopening from Covid-related lockdowns will rekindle the economy and drive up energy consumption. "If

China's economy bounces back strongly, the domestic gas market could be supply-constrained," the IGU warned. ■





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Japan's LNG imports fall, but outnumber those of China

LNG shipments to Japan have fallen by nearly 10 percent as thermal coal was the preferred fuel over gas for power generation. But despite the decline, Japanese LNG imports over the course of 2022 were still large enough to maintain the lead over China, whose imports are recovering slowly after the lifting of strict anti-Covid restrictions.

Japan's LNG imports for February amounted to 6.40 million tonnes, or about 94 cargoes, a 9.9 percent drop from the 7.11 million tons, or 105 cargoes received a year earlier. Costs for these LNG imports came to 761.36 billion yuan (\$5.69bn) – a staggering 12.8 percent more than the 675.13 billion yuan (\$5.05bn) paid in February 2022.

By comparison, shipping data for LNG imports alone for January and February 2023 put China's

cargo deliveries at 11.1 million tons, down by 12.4 percent on official data of 12.68 million tons in the first two months of 2022. While China's LNG imports fell by 18.8 percent to 64.15 million in 2022, the official Japanese LNG import volumes came to 71.99 million tons compared with 74.31 million tons in 2021, showing a fall of 3.1 percent but still enough to easily maintain the lead over China.

Sakhalin-2 covers nearly 10 percent of Japan's LNG imports

With Japan's energy self-sufficiency at only 11 percent and tight LNG markets as China returns, Japan still relies on Russian cargoes from Sakhalin to cover nearly a tenth of its gas demand. Finding a substitute would take "several years," the trade ministry reckons, supporting policies to keep importing gas from Sakhalin-1 and -2, in which

Japanese companies hold stakes.

There is a risk of Japan becoming even more dependent on Russia if gas production and export prospects in the US will not come forward soon," said Takeshi Soda, head of the ministry's petroleum and natural gas division. Mitsui and Mitsubishi have been approved by the Russian government to hold 12.5 percent and 10 percent in the Sakhalin-2 project, helping resource-poor Japan to procure a stable supply of LNG.

To avoid supply shortages, the ministry is taking steps to set up a strategic buffer LNG – similar to Japan's large strategic oil reserves. To fill the strategic reserve, the ministry is counting on Russian cargoes even though the Kremlin called for a change in Sakhalin-2 shareholders in retaliation for Western sanctions against its invasion of Ukraine. If LNG supplies from Russia are lowered or halted before the reserve is filled, Tokyo Gas will seek more volumes from its other long-term offtake agreements, turn to the spot markets and is also considering to ask large customers to lower their gas use. ■



Tanker loading at Sakhalin-II LNG

BP teams up with PetroChina to develop CCUS cluster in Hainan

The British oil and gas major BP has signed an agreement with PetroChina to develop carbon capture and storage (CCUS) projects in China's southern Hainan province. Developments will draw on BP's expertise with the Net Zero Teesside project, a proposed 860 MW combined-cycle power plant in the UK, with all emissions planned to be captured and securely stored.

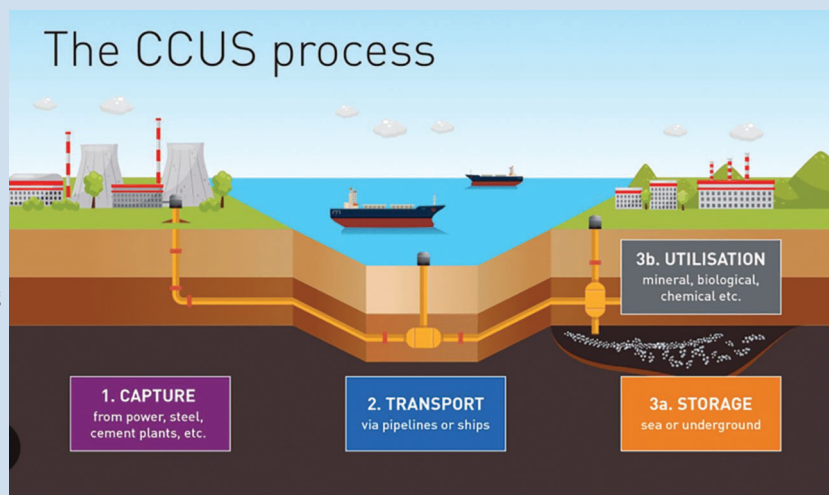
In China, BP wants to apply its CCUS expertise in the context of PetroChina's exploration and production activities in Hainan, where the company produces 6000 barrels per day of oil from

the Fushan oilfield. Plans have been worked out to build CCUS facilities which can capture up to 1 million tonnes per annum of CO₂, expandable to 10 million tpa in future.

BP chief executive Bernard Loone underlined China is increasingly looking for low-carbon energy, but it also needs to be secure and affordable. "That is a complex challenge. We need

different fuels including oil and gas," he said, stressing: "Now

we see real momentum behind CCUS." ■



NDRC vows to control expansion of China's coal-to-gas switch

China's powerful National Development and Reform Commission (NDRC) has carved out a greater role for coal in the country's electricity mix in the face of high gas prices and fluctuating output from renewables. NDRC vowed to strictly control the coal-to-gas switch and 50 GW of a total 106 GW of approved new coal-fired capacity already went into construction.

The world's second largest economy counted on thermal coal to generate 56.2 percent of its electricity in 2022, according to NDRC data, but also significantly increased gas-burn and renewable energy deployment in an effort to reduce emissions. Fluctuating electricity supply from wind and solar, however, made the state planning body lean more on easily dispatchable and comparatively cheap coal-fired plants to shore up China's baseload power supply.

Shift to cheap, domestic fuels

Fearing a repeat of the 2022 power crunch, NDRC wants to en-

hance security of supply by counting on domestic resources. "We will strengthen the basic supporting role of coal [and] take orderly steps to increase advanced coal production while ensuring safety," said NDRC to China's annual gathering of parliament, the National People's Congress.

To shield against high prices for imported gas, especially LNG, the planner vowed to "strictly control the expansion of projects to replace coal with natural gas". China used to import about 40 percent of its gas consumption, mainly through long-term offtake agreements.

Looking ahead, the state plan-

ner wants the Chinese pricing mechanism for natural gas to better reflect the cost of production and procurement. "(We shall) develop sound mechanisms to adjust urban end-user prices of natural

gas in step with procurement costs," NDRC told Parliament with some observers suggesting the country's return to coal may be temporary as the country develops renewables and energy storage. ■



Shanghai's largest coal power station

China to consume one-third of the world's electricity by 2025

As the Chinese economy emerges from strict Covid-restrictions, the Asian powerhouse is forecast to consume one-third of global electricity supply by 2025, up from one quarter ten years earlier. "China will need more electricity than the EU, the US and India combined," said Keisuke Sadamori, the International Energy Agency's (IEA) director of energy markets and security.

Despite headwinds from the energy crisis, growth in the world's electricity demand is set to accelerate from 2 percent during the pandemic to an average of 3 percent over the next three years. The cumulated increase of the world's

electricity demand of about 2 500 Terrawatt-hours (TWh) out to 2025 is more than double Japan's current annual electricity consumption, Sadamori pointed out.

More than 70 percent of the rise in demand will come from China,

India and Southeast Asia, analysts reckon. China leads in terms of absolute growth, up 58 TWh per year through to 2025, while India will have the highest percentage growth (+81 percent), followed by Japan, IEA modelling shows.

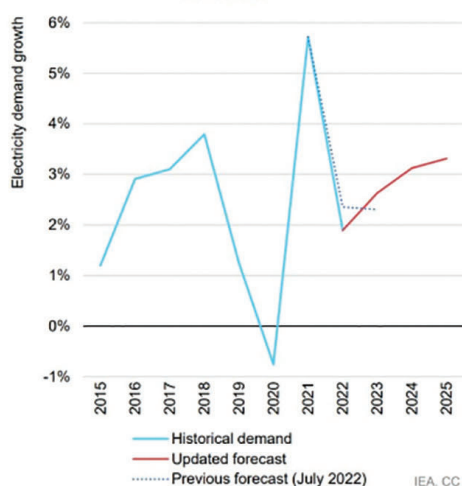
EU electricity demand contracts

In contrast, electricity demand in the EU contracted in 2022 due to an unusually mild winter and as industry scaled back production because of high energy prices and supply disruptions caused by Russia's invasion of Ukraine. The 3.5 percent decrease in EU demand was its second largest percentage decline since the global financial crisis in 2009, with the largest being the exceptional contraction due to the Covid-shock in 2020.

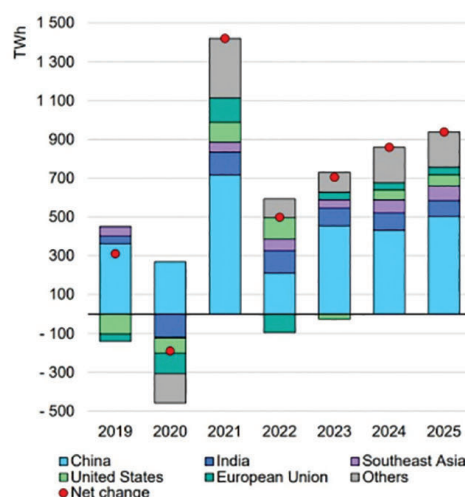
Sharp spikes in gas prices and in turn soaring electricity prices in some markets, particularly in Europe, have ignited a political debate over reforms to power market design. Gas-burn in the European power sector is forecast to fall as the green energy transition progresses, but significant growth in the Middle East is set to partly offset this decrease. ■

Out to 2025, more than 70% of the growth in global electricity demand is set to come from China, India and Southeast Asia combined

Year-on-year relative global change in electricity demand, 2015-2025



Year-on-year change in electricity demand by region, 2019-2025



Chinese LNG Demand Outlook

There were 1.93mmt of LNG on the water with destinations in China according to our market visibility at the time of writing on 29 March. These cargoes had an estimated delivery horizon of 22 April. None of these inbound cargoes had originated in the United States, however, whilst more than a third (0.65mmt) was derived from Qatar followed by 0.59mmt from Australia. One cargo of 0.12mmt was broadly headed for China but still had to declare its destination terminal.

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 and amounted to 0.76mmt, led by Tianjin LNG, which as a destination was followed by the Qingdao LNG terminal. However, we highlight that cargoes tagged with destination 'Tianjin' are frequently arriving at Tianjin-Nangang LNG. Concurrently, the South China region was looking to receive roughly 0.57mmt, led by 0.26mmt headed for the Guangdong Dapeng LNG terminal. Anticipated LNG deliveries to East China amounted to 0.48mmt. Apparent demand there was led by 0.17mmt going to the Zhejiang LNG terminal at the time of writing.

One LNG cargo of 0.12mmt was broadly headed towards China but without specifying an arrival port. The shipment aboard the Q-Max vessel Aamira had sailed from Qatar's Ras Laffan LNG complex.

January Demand Outlook

At the time of writing, we were expecting robust Chinese demand growth in March over February. Our data pointed to full-month imports of 5.58mmt in March compared to 4.99mmt in February, a difference of 0.59mmt (12 percent). Chinese LNG offtakes stood at 4.68mmt and thus trailed their equivalent February demand of 4.99mmt by 0.31mmt (-6 percent) on 28 March. The undeclared cargo aboard the Aamira highlighted above is not expected to arrive in China before mid-April. Our market visibility at the time of writing thus indicated this left 0.90mmt still to be delivered by the end of the month unless delays such as waiting times outside port limits or diversions push some of those cargoes into April.

North China

Of the 0.90mmt still scheduled to arrive in China by end of March, we are anticipating 0.29mmt to be delivered to North China, comprising the wider Beijing area and China's industrial north.

Among the roster of the top-three northern Chinese terminals, Sinopec's

Qingdao LNG was scheduled to receive 0.14mmt via two cargoes by 31 March. These shipments were exported by Australia via the Australia Pacific LNG-derived Grace Acacia and CESI Qingdao.

Market visibility further indicated 0.08mmt were destined for Sinopec's Tianjin LNG by 31 March, comprising a cargo from Malaysia's Malaysia LNG via the Wudang.

Dalian LNG, meanwhile, was expecting the arrival of a Russian cargo of 0.07mmt via the Yamal LNG-sailed Clean Vision before the end of the month. The neighbouring Tianjin-Nangang facility, however, did not have further scheduled imports before the end of March, according to our data at the time of writing.

East China

At the time of writing, we also expected the East China region – comprising the wider Shanghai area and Zhejiang province – to receive 0.13mmt by 31 March. Shanghai LNG and the metropolis' peak-shaving facility were scheduled to receive 0.06mmt, our data showed, comprising one Malaysia LNG shipment via the Seri Angkasa. We were also tracking a Zeebrugge re-export aboard the

Chinese LNG Demand Outlook (MMt)



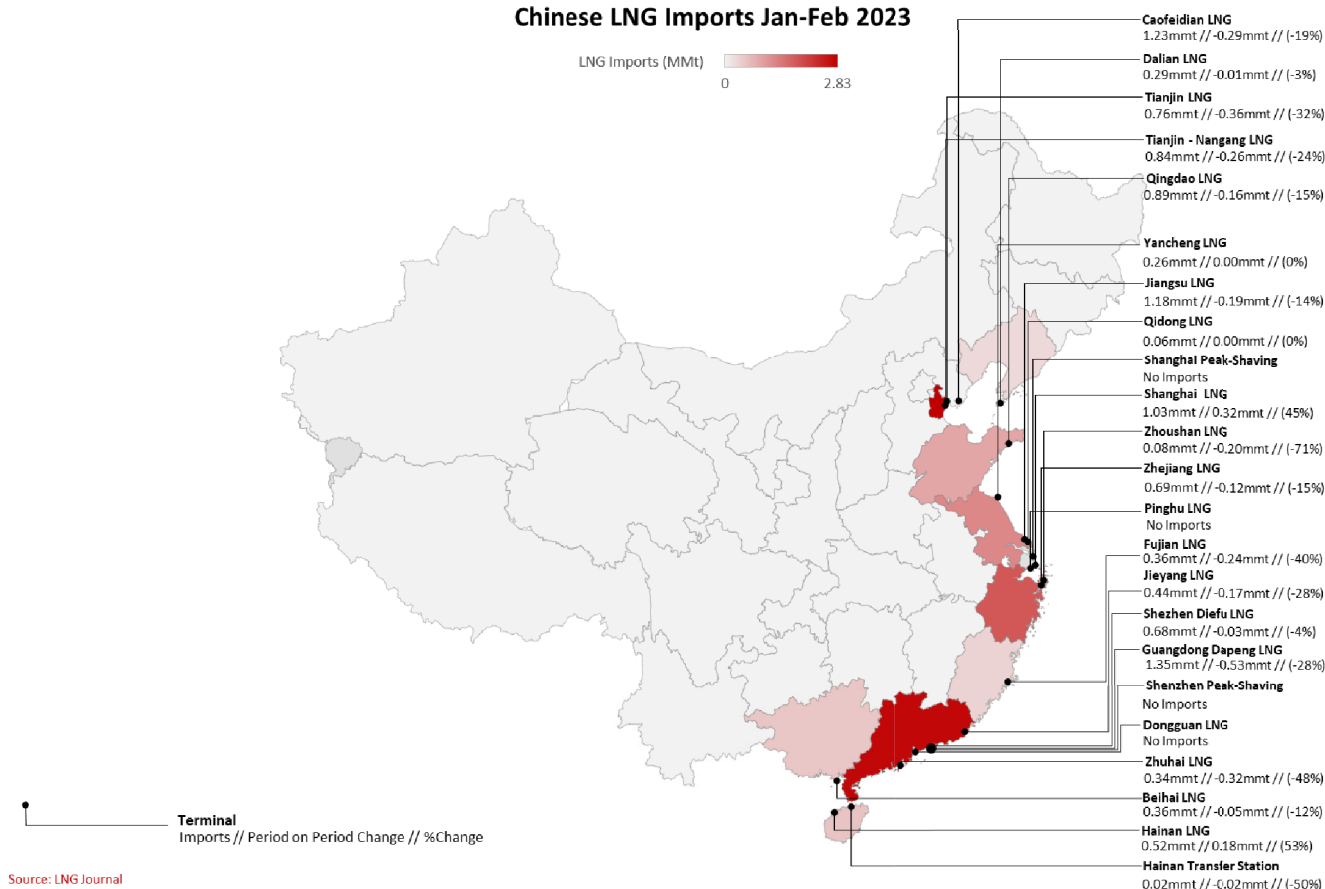
Golar Snow, which was scheduled to arrive at the Jiangsu LNG terminal by month-end to deliver 0.07mmt.

South China

In the south of the country, we were expecting 0.48mmt to be delivered by 31 March. Scheduled LNG imports in the South China region were led by Zhuhai LNG, which at the time of writing was expecting two cargoes totalling 0.14mmt still to arrive before the end of the month. The two shipments were derived from Ras Laffan in Qatar via the Al Zubarah and from Bonny Island LNG in Nigeria via the LNG Lagos II. Concurrently, Jieyang LNG was expecting two cargoes amounting to 0.13mmt via the Tangguh LNG-sailed KMarin Diamond and the Oman LNG-derived Ibra LNG. Beihai LNG, Hainan LNG and Guangdong Dapeng LNG, meanwhile, were still expecting three cargoes totalling 0.21mmt to arrive via the Queensland Curtis LNG-derived Pan Europe, the Pampa Melchorita LNG-sailed Murex and the Brunei-sailed Amali, respectively.

Chinese LNG Demand: January-February 2023

Chinese LNG Imports Jan-Feb 2023



China's monthly LNG offtake in February amounted to 4.99mmt, our data showed, which constituted significant negative monthly demand growth of 1.40mmt (-22 percent) from the 6.39mmt we recorded in January. At 11.38mmt in total, Chinese demand during the reporting period of January and February thus decreased considerably by 2.31mmt (-17 percent) from total imports of 13.69mmt during the preceding two-month period of November and December 2022. China's LNG imports in November and December stood at 6.42mmt and 7.27mmt, respectively. Accordingly, China's annualised LNG import capacity utilisation during the reporting period stood at roughly 72 percent, down 15pp from the previous reporting period of November-December. The amount imported during the reporting period also constituted a notable net decrease of 1.00mmt (-8 percent) from the 12.38mmt we recorded during the January-February period of 2022, which was reflective of a relatively weak economic rebound after more than two years of anti-coronavirus measures. China's economic growth target for 2023 was set at 5 percent this year, the country's lowest in decades. China's industrial profits slumped almost 23 percent during the

reporting period of January-February, according to government statistics.

Prices

Our calculations based on Chinese customs data indicate an ongoing cooling-off of China's landed LNG prices during the reporting period, which peaked at US\$27.58/mmBtu in January and US\$29.01/MMBtu in February. Whilst still high, these not only represented a significant cooldown from prices as high as US\$38.80/mmBtu in December, but they also remained below the high-water mark of US\$49.32/mmBtu in August 2022.

China's economic growth target for 2023 was set at 5 percent this year, the country's lowest in decades. China's industrial profits slumped almost 23 percent during the reporting period of January-February, according to government statistics. Relatively slow economic recovery put significant pressure on domestic LNG prices and thus maintained a sizeable gap in landed prices, Chinese customs data indicate.

Chinese domestic LNG prices continued to trend lower in January and February from

their peak of US\$27/mmBtu in March 2022 and a short spike to US\$23.63/mmBtu in December 2022. In the current reporting period of January/February, the highest privately quoted domestic price had decreased to US\$19.52/mmBtu on 10 January before sliding to around US\$18.30/mmBtu on 1 February. Accordingly, the average Chinese domestic LNG price during the reporting period remained below that of the preceding month of December. The current reporting period's average price stood at US\$17.58/mmBtu compared to US\$20.03/mmBtu for December.

Meanwhile, the average domestic price indicated by the National Bureau of Statistics (CNBS) stood at US\$18.60/mmBtu for February (the most recent available full-month dataset by the CNBS), which represents a decrease of US\$0.90/mmBtu (-5 percent) from US\$19.50/mmBtu in January.

North China

LNG demand decreased considerably in the north of China during the reporting period, with offtakes down by 1.08mmt (-21 percent) from 5.09mmt in the two months of

November-December to 4.01mmt for the reporting period of January-February. The largest shares of LNG influx into the region during the reporting period took place via the Caofeidian LNG terminal. However, the sum of LNG imports of 4.01mmt in northern China for the period of January-February 2023 was still significantly behind its equivalent of 5.08mmt in 2022, down by 1.07mmt (-21 percent).

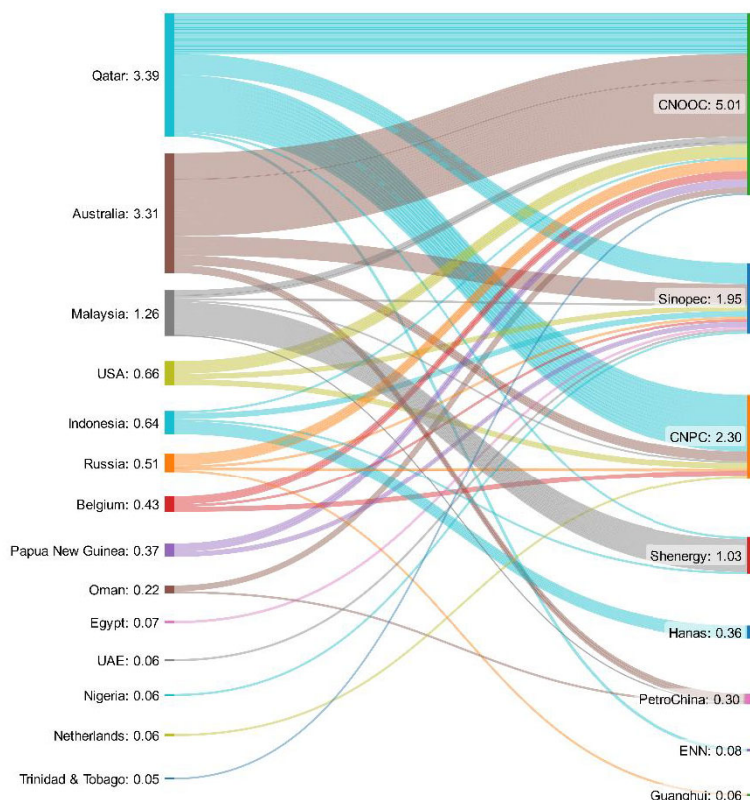
China's North again led by Caofeidian LNG

Leading the roster of northern terminals by volumes imported, Caofeidian LNG took in 1.23mmt during the reporting period of January-February. This constituted a considerable decrease in offtakes by 0.29mmt (-19 percent) compared to the previous two-month period. Imports consisted predominantly of eight Qatari cargoes from Ras Laffan LNG amounting to 0.89mmt. Australia's Gorgon LNG, Malaysia LNG, Sabine Pass LNG in the United States and two re-exports from Rotterdam and Zeebrugge supplied the remaining five cargoes amounting to 0.34mmt.

Tianjin LNG

Imports at Tianjin LNG amounted to 0.76mmt, down 0.36mmt (-32 percent) from 1.12mmt in November-December, according to our data. These imports were led by Qatar's Ras Laffan LNG complex, which supplied 0.19mmt via three cargoes. Additionally, two shipments amounting to 0.09mmt were supplied by Queensland Curtis- and NWS LNG. The remaining seven cargoes stemmed from Corpus Christi LNG in the United States, Das Island, Bonny Island, Malaysia LNG, Bontang in Indonesia, Egypt's Idku LNG and one re-export from Zeebrugge in Belgium.

Chinese LNG Buyers (MMt)



Source: LNG Journal

Tianjin - Nangang LNG

Tianjin - Nangang LNG, meanwhile, had offtakes amounting to 0.84mmt over the reporting period compared to 1.10mmt in November-December. The terminal thus saw an import decrease of 0.26mmt (-24 percent). Cargoes comprised 11 shipments from Australia Pacific LNG amounting to 0.75mmt in addition to one of 0.09mmt from Ras Laffan in Qatar.

Qingdao LNG and Dalian LNG

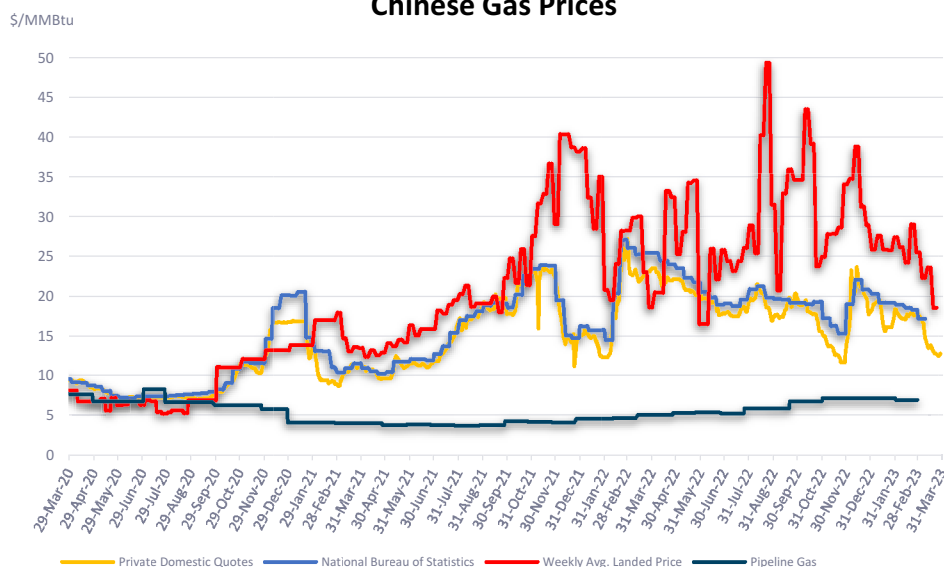
The remaining two northern terminals – Qingdao LNG and Dalian LNG – imported 0.89mmt and 0.29mmt over the reporting period, respectively, which in the case of Qingdao LNG stemmed predominantly from Australia Pacific LNG with 0.38mmt. Six cargoes totalling 0.51mmt from Papua New Guinea, Qatar and the United States completed imports at Qingdao.

January-February supply to the Dalian terminal came mainly from Australia's Queensland Curtis LNG, Gorgon LNG and Australia Pacific LNG, which together accounted for 0.23mmt. Moreover, we recorded a delivery of 0.06mmt from Oman LNG.

East China

At the time of writing, demand in East China was dominated by the wider Shanghai area, where Jiangsu LNG imported 1.18mmt during the reporting period. This placed the terminal third among China's leading terminals in January-February. Accordingly, it operated at well-above nameplate capacity. However, overall LNG demand in East China had remained broadly steady period-on-period at 3.30mmt in January-February compared to the

Chinese Gas Prices



Source: LNG Journal, CNBS, GACC, Domestic Traders

3.35mmt we recorded in November-December.

Wider Shanghai area

The remaining wider Shanghai area – comprising Qidong LNG, Shanghai LNG, the metropolis' peak-shaving facility as well as Yancheng LNG – imported a total of 1.35mmt over the reporting period, up 0.46mmt (52 percent) from the 0.89mmt recorded in November-December on account of higher offtakes at Qidong LNG and Yancheng LNG. Pinghu LNG, however, did not see a conventional LNG import during the reporting period. The Shanghai LNG terminal took in 1.03mmt and thereby boosted imports by 0.32mmt (45 percent) period-on-period.

Zhejiang & Zhoushan LNG

At the neighbouring terminals Zhejiang and Zhoushan LNG, imports amounted to 0.69mmt and 0.08mmt, respectively. Zhejiang LNG's offtakes had thus decreased by 0.12mmt (-15 percent) compared to November-December. Meanwhile, Zhoushan LNG also slashed imports period-on-period by 0.20mmt (-71 percent) to 0.08mmt from 0.28mmt. LNG to Zhejiang LNG was mainly supplied by Australia, with five cargoes totalling 0.37mmt stemming Queensland Curtis LNG, Gladstone LNG and Gorgon LNG. Qatar's Ras Laffan LNG complex also supplied 0.27mmt via three cargoes alongside a shipment of 0.08mmt from Sabine Pass LNG in the United States. Zhoushan's single import of 0.08mmt also came from Ras Laffan in Qatar. Zhoushan is one of the few Chinese 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 clusters surrounding Shenzhen – saw the most significant regional demand decrease during the reporting period of January-February, our data showed. The region's imports amounted to 4.07mmt over the reporting period, which meant they were down by 1.18mmt (-22 percent) from the 5.25mmt recorded in November-December.

Shenzhen terminals

South China's imports were still led by Shenzhen's active terminals – Guangdong Dapeng and Shenzhen Diefu LNG. Dongguan

LNG and the adjacent peak-shaving facility, on the other hand, continued their market absences. The region's most prominent terminal – Guangdong Dapeng LNG (GDLNG) – saw offtakes of 1.35mmt, as usual placing it first among China's terminals. At 1.35mmt, however, the terminal had decreased its January-February imports drastically by 0.53mmt (-28 percent) from 1.88mmt during the previous two-month period. Guangdong Dapeng LNG's average capacity utilisation stood at 119 percent over the reporting period, which resulted in neighbouring Shenzhen Diefu LNG importing 0.68mmt and pegging its terminal utilisation at 102 percent, broadly unchanged period-on-period. Shenzhen Diefu usually steps in when GDLNG's throughput requirements are stretched beyond capacity.

Zhuhai and Jieyang LNG

Zhuhai LNG decreased offtakes by 0.32mmt (-48 percent) to 0.34mmt over the reporting period from 0.66mmt the previous period, which pegged overall capacity utilisation at 61 percent. Unlike during previous reporting periods, the roster of Zhuhai's LNG suppliers had narrowed and only comprised Ras Laffan in Qatar and Sakhalin-2 LNG in Russia. Previously, the terminal's imports also regularly came from Malaysia, Australia, the United States, Equatorial Guinea, Nigeria and Malaysia. Ordinarily, Zhuhai is supplied mainly by Australia with a smaller proportion coming from Qatar.

Alongside Zhuhai, Jieyang LNG also saw a substantial decrease in imports during the January-February period. Full-period offtakes were down by 0.17mmt (-28 percent) to 0.44mmt in January-February from 0.61mmt in November-December. Accordingly, Jieyang LNG saw capacity utilisation of 63 percent over the reporting period compared to 83 percent in November-December. 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 the overall demand decrease in the South China region, Fujian LNG saw offtakes retreat in January-February. At 0.36mmt, imports were down 0.24mmt (-40 percent) from the 0.60mmt recorded during the previous period. The terminal's capacity utilisation, therefore, stood at only 34 percent.

Beihai LNG also saw lower demand over the reporting period. Offtakes at the terminal had decreased by 0.05mmt (-12 percent) to 0.36mmt from 0.41mmt in November-December. The terminals' annualised capacity utilisation stood at 72 percent for the reporting period.

Hainan Island

The remaining two regional LNG terminals – Hainan LNG and the Hainan Transfer Station on Hainan Island – saw a considerable demand increase due to higher activity at the Hainan LNG terminal. Whilst the Transfer Station saw its two-month offtake retreat by 50 percent to 0.02mmt period-on-period, Hainan LNG increased imports by 0.18mmt (53 percent) to 0.52mmt in January-February from 0.34mmt in November-December. The terminal continued to take in supplies from international sources, chiefly from Malaysia but also from the United States, Qatar, Papua New Guinea, Indonesia and Russia. Previously, supply to the terminal was limited to mostly re-exports from Beihai LNG. These re-exports stopped in August last year, our data indicate. LNG capacity utilisation on Hainan Island over the reporting period was thus 104 percent.

Region	Terminal	Export Basin			February 2023	January 2023	Rep. Period Utilisation
		Atlantic	Middle East	Pacific			
North	Dalian LNG	-	-	0.07	0.07	0.22	29%
	Tianjin - Nangang LNG	-	-	0.32	0.32	0.52	47%
	Qingdao LNG	-	0.19	0.23	0.42	0.47	89%
	Tianjin LNG	0.13	0.07	0.2	0.40	0.36	63%
	Caofeidian LNG	-	0.43	-	0.43	0.80	114%
East	Zhejiang LNG	0.08	0.09	0.22	0.39	0.30	138%
	Shanghai (Yangshan)	-	0.06	0.46	0.52	0.51	206%
	Jiangsu LNG	0.15	0.43	-	0.58	0.60	202%
	Qidong LNG	-	-	0.06	0.06	-	13%
	Zhoushan LNG	-	-	-	-	0.08	16%
	Shanghai Peak-Shaving	-	-	-	-	-	0%
	Pinghu LNG	-	-	-	-	-	0%
	Yancheng LNG	0.08	0.06	0.06	0.20	0.06	52%
	Guangdong Dapeng LNG	0.05	0.26	0.24	0.55	0.80	119%
	Fujian LNG	-	-	0.12	0.12	0.24	34%
South	Beihai LNG	-	-	0.07	0.07	0.29	72%
	Zhuhai LNG	-	0.19	-	0.19	0.15	61%
	Hainan LNG	0.08	0.06	0.14	0.28	0.24	104%
	Jieyang LNG	0.14	-	0.01	0.15	0.29	63%
	Dongguan LNG	-	-	-	-	-	0%
	Shenzhen Diefu LNG	0.15	-	0.08	0.23	0.45	102%
	Hainan Transfer Station	-	-	0.01	0.01	0.01	33%
	Shenzhen Peak-Shaving	-	-	-	-	-	0%
	Total	0.86	1.84	2.29	4.99	6.39	72%

Source: LNG Journal

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