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LNG North America

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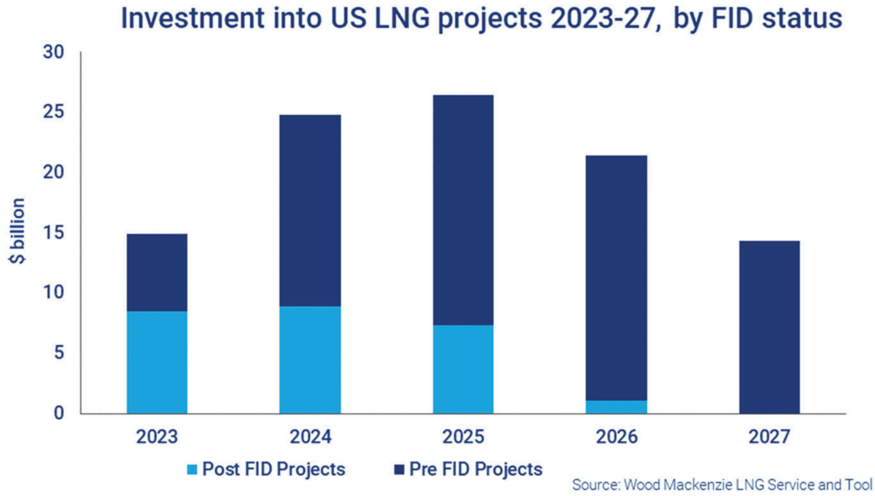
High demand could spur $100 billion in new US LNG projects by 2027

Record prices and the need for energy security is causing a third wave of US LNG projects, with Wood Mackenzie expecting over $100 billion to be invested over the next five years. A staggering 65 mtpa of long-term contracts were signed in 2022, compared with just 18.5 mtpa in the previous year, as utility buyers seek stable supply for power generation.



A flurry of pre-FID liquefaction projects are now either close to or have reached the contracted offtake threshold for raising debt. The third wave would add to the four projects currently under development – Golden Pass, Plaquemines Phase 1, Corpus Christi Stage 2 and NFE's Louisiana Fast LNG – which will contribute nearly 45 mtpa of new US liquefaction and export capacity from 2024.

Giles Farrer, head of Wood Mackenies's gas and LNG asset research, anticipates a series of new FIDs over the course of this year and in 2024. "If the current momentum continues, between 70 mtpa and 190 mtpa could be added to US LNG capacity before the end of the decade which would more than double exports," he noted.

In fact, several developers with fully permitted projects have already signed or are negotiating engineering, procurement and construction (EPC) contracts for their projects. Bechtle has signed contracts with numerous advanced projects while other EPC providers

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Freeport LNG's second tanker berth not available until May

Though the first cargo has left Freeport LNG since its shutdown last summer and a second one is loading, it will take several weeks before the liquefaction plant reaches full processing capacity of 2 billion cubic feet per day (bcf/d). A third storage tanks and a berth for a second LNG tanker will not be available until May, the operator said.

Freeport LNG, with a capacity of 15 million tons of LNG per year (mtpa), has been idled since an explosion and fire at the facility on June 8, 2022, which propelled up gas prices in an already tight market.

Cargo loading at Freeport LNG, Texas

Before the incident, the Texan terminal accounted for 15-20 percent of US LNG exports.

Andrew Kohout, director of the US Federal Energy Regulatory Commission's (FERC) LNG facility reviews, recently approved the start of cooldown procedures and feedgas flows but he reminded operators that additional authorisation was necessary to reinstate loop 1 LNG circulation for loading ships at Freeport's dock 1. Kohout underlined full approvals will only be granted once all facilities are determined to be "fit for service."

So far, FERC permitted the partial restart of two of Freeport's three gas liquefaction units, two storage tanks and a single tanker berth, according to a regulatory filing. Restart of the

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AGENDA

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like McDermott, Kiewit, Zachary and JGC remain cautious, having suffered from major cost overruns in the past.

Striving to access debt financing

Investment in these newly sanctioned projects could total over $100 billion though to 2027, with three-quarters of the total to be spent on pre-FID projects. Farrer pointed out this figure is based on bottom-up estimates of existing EPC costs and project facilities, and factors in cost inflation – ultimately, it depends on how many projects can secure financing and reach financial close.

Most developers are looking to raise debt to shoulder this investment. Project financing will likely cover between 60-80 percent of the required capital while the remainder is funded by equity raises or through the balance sheet.

Despite a “hugely positive” demand outlook for American LNG, risk arises from the stark cost increases for US Gulf Coast projects and major overruns of lead-times as demand for both manpower and services outstrip supply. Developers cannot hand through these rising costs to offtakes as competitive pressure forces them to keep fixed fees low, meaning project returns are tight. WoodMac estimates unlevered internal rates of return (IRRs) as low as 5-6 percent for some projects which makes challenging to secure finance, particularly via equity raises.

Striving to generate upside and make projects more attractive for equity investors and offtakers, developers will seek to rerate LNG trains for higher capacity, debottleneck infrastructure, look for more efficient feedgas procurement and gain access to the potential upside from high commodity prices. ■

EIA slashes Henry Hub forecast on mild weather and growing supply

As gas prices dwindle in a mild winter, the US Energy Information Administration has slashed its 2023 Henry Hub spot price forecast to $3.40/MMBtu on average, down almost 50% from last year. Record dry gas production and delays with the restart of Freeport LNG have caused a supply overhang, with inventories above the five-year average.

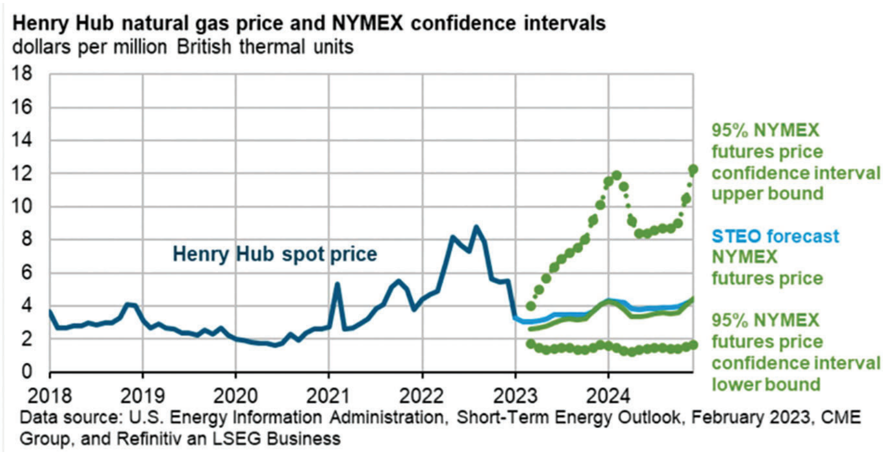
Temperatures across the United States in January were the mildest since 2006, which reduced gas consumption for space heating while production growth has been outpacing demand growth over the past several months, pushing down prices.

Utilisation of US LNG export facilities are expected to be slightly lower in the next few months due to high natural gas stock levels in Europe. But once the Freeport liquefaction terminal will be fully back online, LNG exports are forecast to increase by 11 percent, or 1.2 Bcf/d on an annual basis in 2023 compared with 2022. Freeport LNG, which went offline in June due to a fire, will add over 2 billion cubic feet per day (Bcf/d) of gas demand to the US market once fully operational.

Record dry gas production

On the supply side, dry gas production set a new record at 100.2 billion cubic feet per day (Bcf/d) in January and analysts expect it to hover around this level for most of this year. Rising production and tepid demand build up stocks. Inventories will end the gas withdrawal season (November through March) at more than 1.8 trillion cubic feet (Tcf), some 16% above the five-year average largely due very mild weather. High gas stocks add a further bearish element to prices.

The EIA hence forecasts Henry Hub gas prices to stay below $4.00/MMBtu until December, as supply growth outpaces sluggish demand. In fact, US gas demand is forecast to fall in 2023 due to lower industrial gas consumption as a result of an expected drop in manufacturing, and lower gasburn in the power sector as the renewable build-out accelerates. ■



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third unit will required additional permits, hence the regulator cautioned it could take “a number of months” before the terminal was running at full capacity.

Freeport LNG, founded by billionaire Michael Smith, had touted to resume partial operation in October last year but that assessment proved to be overly optimistic. FERC discovered operator and training shortcomings and Freeport had to agree to set up staffing levels by 30 percent to meet regulatory requirements for a restart.

Length delays have forced large customers including the Japanese utilities JERA, Kansai Electric and Osaka Gas to buy higher-priced alternative supply on the spot market. JERA incurred a 100.2 billion Yen ($772 million) loss in April to December 2022 versus an 18.4 billion Yen profit in the pre-year period, largely due to higher cost for buying spot LNG cargoes in replacement for halted shipments from Freeport LNG. Japan’s largest power producer said it made provisions to secure alternative gas supplies until the end of March, signalling it expects contractual shipments from Freeport to resume after that. ■

Port Arthur LNG tipped to be first in line for FID

Though debt financing has become more costly, market observers believe the dam could break in 2023 and projects with 6.2 Bcf/d of additional capacity could reach financial close. First in line will likely be Sempra with its Port Arthur LNG greenfield project in Texas.

The marketing Phase 1 for the 13.5 mtpa Port Arthur LNG venture has been completed, Sempra said as the project is "now fully subscribed at 10.5 mtpa of definitive, long-term contracts with top-tier counterparties." The US utility recently revised its EPC contract with Bechtel after securing an equity, offtake and gas supply deal with Conoco Philips, in addition to the 7.3 mtpa of firm offtake from Ineos and Engie combined.

In addition, Sempra's Cameron LNG Phase 2 project remains on track for completion of the FEED process this summer.

Another greenfield project, the 8.4 mtpa Commonwealth LNG project in Cameron, Louisiana, has all regulatory permits in place and Australia's Woodside committed to 30 percent of the offtake. Financial close is expected in the first quarter of this year, and modular construction could allow it to be online within three years from FID, in the third quarter of 2026.

NextDecade is also likely to take FID in the first quarter on a three-train 16.2 mtpa portion of its overall 27 mtpa Rio Grande LNG project. Over half of the volume has been committed via long-term contracts. Similarly, Sempra is edging closer to sanction Cameron Phase 2. FEED works are well underway and an FID needs to follow this year if Sempra wants to bring the train into operation as planned in 2027.

A third front-runner, tipped for an early FID this year, is the second phase of Venture Global's Plaquemines (6.7 mtpa) – while others still have to overcome marketing, financing or engineering hurdles. Despite developers' ambitious plans, analysts doubt that all abovementioned ventures will go ahead in 2023.

Render of Port Arthur LNG at Jefferson County, Texas

Tapping US gas for less than $3/MMBtu

Natural gas finds in North America are estimated to total 2,750 trillion cubic feet (Tcf) of which around 1,700–2,000 Tcf could be produced at a cost between $3 and $4 per MMBtu. But this would require investment in new feeder pipelines and buyers committing to 20-year offtake deals, which European buyers are reluctant to do.

"Gas infrastructure development and long-term offtake agreements are fundamental, or there will be higher prices for gas and LNG, which may have spill-over effects for power, fertilizer, and other essential commodities," said Dumitru Dediu, Partner at McKinsey. On the other hand, if strategic pipelines links get build to connect low-cost gas basins to high-demand areas and export terminals, this could bring gas prices from today's high levels around $6 per MMBtu back to about $3 per MMBtu at Henry Hub, reducing inflation. ■

Tellurian pitches for buyers for Driftwood LNG

Tellurian Inc., the developer of the Driftwood LNG export plant in Louisiana, was pitching for buyers at the Indian Energy Week seeking replacement offtakers after it cancelled two sales and purchase agreements with Shell and Vitol.

"The only way India and Indian companies can supply LNG at the lowest possible cost is if they invest equity in a project that allows them to lift the LNG at cost," Driftwood LNG Octávio Simões said at the Indian event, in search for new buyers.

Tellurian cancelled SPAs in September 2022 with Shell and Vitol for 3 million tonnes per annum of LNG each for 10 years. The volumes were to come from the first liquefaction Trains at the venture for which regulatory approvals are in place for 27.6 MTPA of output.

Map of Driftwood LNG in Louisiana

Construction at the Driftwood facility had been beset by delays, though the CEO said the project was now back on track for first gas in 2026. "We have invested about a $1 billion on the site, which is fully under construction. No other competing project is under construction," explained Simões about the development being built by US engineers Bechtel.

The Tellurian project involves constructing 20 mid-scale processing Trains, each with 1.38 mtpa of capacity and built as five blocks of four Trains. The Phase One development would include the first two of these blocks with 11 mtpa of output and two of three planned 235,000 cubic metres storage tanks and the first of three planned loading berths for LNG carriers.

Tellurian also agreed in 2022 to acquire various other natural gas assets located on several thousand additional net acres, which included 44 producing wells. By having its own natural gas production, the company said it could create cash from domestic sales that can be used for further investment and would be an economic hedge in the future for feed-gas purchases. ■


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ExxonMobil to invest in upstream, makes "great progress" on Golden Pass LNG

US oil giant Exxon Mobil is planning large investments in oil and gas upstream to rebalance the market, and is on track for a 2024 start-up of the Golden Pass LNG export plant in Texas. The three liquefaction trains will produce about 16 mtpa of LNG with ExxonMobil and partner QatarEnergy marketing their own volumes.

The first Train is still scheduled to come on stream in 2024, the second Train is expected to follow six-to-eight months later and Train 3 six-to-eight months after that, developers outlined. ExxonMobil also noted its 2022 efforts included the start-up of floating LNG in Mozambique while expansion plans are advancing in Papua New Guinea and Qatar.

Increasing the global natural gas supply is a priority as stress on global demand continues. "Governments take action by approving necessary LNG project permits and looking to remove regulatory obstacles. These efforts will enable additional natural gas supplies to be produced," Exxon Mobil CEO Darren Woods explained, adding: "We are optimistic and confident that LNG will continue to be an important part of our business as we support a lower-emission future."

Arial view of Golden Pass LNG at Sabine Pass, Texas

Spending exceeds earnings

ExxonMobil highlighted it is spending more money to boost oil and gas production than any other US company: "In fact, we invested twice as much to develop global energy resources than we earned ($118 billion invested vs. $55 billion earned) between 2017 and 2021," ExxonMobil said.

In the Permian Basin, oil and gas output was more than doubled over the past four years. "We're currently producing more than 560,000 barrels per day from those operations, and we expect to increase production by another 25 percent this year compared to 2021," the company said, adding plans to reach net-zero emissions (Scope 1 and 2) for unconventional operations by 2023, largely by eliminating routine flaring. ■

NEWS NUDGES

Chevron decarbonises LNG fleet

Chevron has signed an agreement with Sempcorp Marine Repairs & Upgrades to help reduce the carbon-intensity of its LNG fleet operations. The tankers will be retrofitted with new technologies such as a reliquefication system, hull air lubrication and new gas compressors. These measures expected to reduce cargo boil-off, lower fuel consumption and increase volumes of cargo delivered.

Shell's profits double

Global energy major Shell said its adjusted earnings in the final three months of 2022 had more than doubled to $39.9 billion on the back of soaring oil and gas prices in the wake of Russia's invasion of Ukraine. Shell posted its record earnings just days after US-based Exxon Mobil announced annual profits of $55.7 billion. ■

Cheniere makes plans for 23 mtpa of new expansions

Cheniere Energy, the largest US LNG exporter, has specified plans for adding 20 million tonnes per annum more to the Sabine Pass plant in Louisiana and further expanding the Corpus Christi plant in Texas. During the fourth quarter, as well as over the 12 months period, Cheniere cashed in on higher margins and soaring volumes of LNG delivered to Europe.

Fourth quarter revenues staged up to $9.1 billion vs $6.5 billion in the final quarter of 2021, while net income totalled $3.9 billion vs $1.4 billion for the final three months in the previous year. Cheniere said the rise was driven by increased margins per million British thermal units of LNG, higher volumes of LNG delivered and, to a lesser extent, portfolio optimization.

"The year 2022 brought the criticality of natural gas and energy security into focus throughout the world, and we are proud to have made FID on Corpus Christi Stage 3 [in June], which will provide much-needed new LNG volumes to the market beginning in late 2025," Cheniere President and CEO Jack Fusco said.

At Corpus Christi, Cheniere operates three liquefaction trains with 15 mtpa production capacity combined and a further expansion is planned on top of the one already being developed. The recent Stage 3 expansion consists of seven "midscale" trains that will add approximately 10+ mtpa of production capacity, bringing CCL's total nominal capacity to more than 25 mtpa. In June, Cheniere took financial close on the project and issued full notice to proceed to Bechtel to continue construction. In addition, Cheniere is developing an expansion adjacent to the CCL Stage 3 project with two mid-scale Trains that will add a further 3 mtpa.

Works progress on Corpus Christi Stage 3

On the Sabine Pass expansion, Fusco said the project is designed to add 20 mtpa of production capacity, with EPC works to be carried out by Bechtel. The expansion will comprise three large-scale liquefaction Trains, each with capacity of 6.5 mtpa, a boil-off-gas re-liquefaction unit with output of 750,000 tonnes a year and two 220,000 cubic metres capacity storage tanks. ■


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Europe can muddle through without Russia gas, awaits new US LNG supply

A year on from Russia's invasion in Ukraine, confidence is growing that Europe can pull though the next three years without Russian gas until new LNG supply – mainly from the US and Qatar – will become available from 2025 and help prices ease back to 'normal'.

The war and the subsequent cut in Russian pipeline gas deliveries to Europe has made prices spiral which dampened demand and pulled almost every cargo of flexible LNG from around the global into the European market. A year on, the market is now more flexible and fungible but also more volatile as Europe keeps competing with Asia for cargoes.

The quest for self-sufficiency, at a reasonable price, has been a booster shot for the energy transition. The war accelerated the progress towards net zero and game-changing tax incentives, like the US Inflation Reduction Act of 2022 are expected to boost the installation of wind, solar and energy storage capacity in the United States by between 50 percent and 100 percent. Wood Mackenzie anticipates a similar acceleration of investment in CCUS, hydrogen, next-generation nuclear technologies and advanced battery chemistries.

Winners and losers of the energy crisis

Those who fared well during the energy supply crisis in the wake of the ware were big importers of Russian oil ignoring the sanctions, including China and India, who could access heavily discounted crude and products. Gas-producing countries, particularly those connected by pipeline to Europe, benefitted from the EU's quest to source non-Russian gas. As did the US LNG industry, set to double capacity, and Qatar.

Power producers in Europe with high exposure to renewables, hydro and nuclear merchant capacity cashed in on high electricity prices, though analysts cautioned that windfall taxes and market reform may make any gains short-lived.

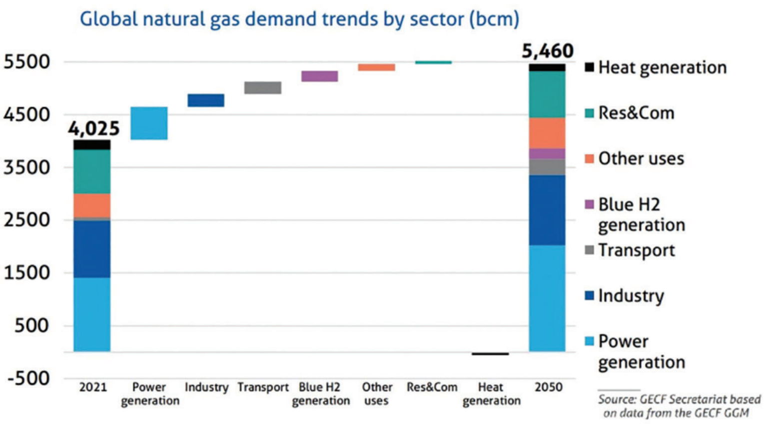
In contrast, consumers in many parts of the world fared badly as they were hit with spiralling prices. Gas importers, including some in Europe that have required government bailouts. Last but not least, Russia fared badly, Flowers underlined, as the country has lost 130 Bcm of annual gas exports to Europe – worth more than $30 billion a year of pre-war revenues that are unlikely ever to be replaced by alternative export options. ■

GEFC expects gas demand to rise 36 percent by 2050

The Gas Exporting Countries Forum (GECF) forecasts natural gas demand will increase by 36 percent to 5,460 billion cubic meters (bcm) in 2050, with power generation accounting for 43 percent of additional volumes. Clean air policies in Europe and the United States are anticipated to make gas overtake coal in around 2025 and become the most utilised fuel just after 2040.

Apart from coal-to-gas switching to curb emissions and fast-ramp gas generation to balance intermittent renewable energy supply, GEFC analysts also see new avenues for natural gas demand, particularly through the growing use as a source for blue hydrogen generation. The transport sector, in particular, could adopt hydrogen fuels - next to its growing electrification.

On the supply side, North America is expected to uphold its position as the world's largest gas producer with regional gas production forecast to grow by 285 bcm to reach 1,420 bcm by 2050. The Middle East will emerge as the world's second-largest gas producer overtaking Eurasia, with output forecast to jump by 520 bcm to 1,190 bcm by 2050.



Africa is seen as only region where gas production growth will more than double, from 260 bcm in 2021 to 585 bcm in 2050. In contrast, Europe's gas production is forecast to fall while Eurasia could add more than 155 bcm to its current production, driven by Russia, which may contribute more than 59 percent of this growth.

Looking at trade flows, global LNG trade is forecast to overtake long-distance pipeline trade by 2026 and reach 1,170 bcm per year by 2050. With pipeline exports to Europe declining and dwindling domestic production in Europe and parts of Asia Pacific, LNG is becoming the preferred natural gas supply source.

In fact, Asia Pacific is seen as the "largest growth engine" contributing to half of the global net demand increase during the outlook period. Analysts expect current share of 72 percent of Asia Pacific in the world's LNG trade will be "sustained over the long term" and account for 67 percent by 2050. Europe, in contrast, will be "the only region to experience an evident declining trend," analysts noted, as implementing the REPowerEU plan is seen to have a strong impact. ■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US LNG: January – February 2023

LNG Journal

- January-February exports at 14.07mmt at the time of writing
- Broadly stable compared to November-December period
- Shipments up 0.22mmt (2pct) over period year-on-year
- Avg. US capacity utilisation at 99pct for the reporting period

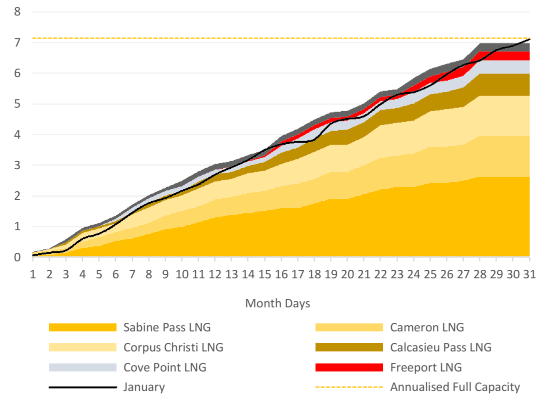
Overall US LNG exports remained high at 14.07mmt during the report period of January-February and remained broadly steady compared to the 14.11mmt shipped during the previous period of November-December. Nevertheless, they still came in 0.22mmt (2pct) above their year-on-year equivalent of 13.85mmt. As a result, export capacity utilisation averaged 99pct for the reporting period, unchanged from the previous period of September-October and up 2pp compared to 97pct during the equivalent period of January-February in 2022.

January exports reached 7.11mmt but decreased to 6.96mmt in February. Part of that decrease is the shorter duration of February, but notably, month-on-month exports were down even as Freeport LNG re-entered the market in February. The Freeport plant had been offline since a fire incident in June 2022. Following the incident, other US LNG plants led by Sabine Pass LNG and Cameron LNG managed to capitalise on strong European demand growth.

Production levels hit capacity and, in some cases, exceeded it by a significant margin as European demand remained high. European destinations now constitute the top five of all destinations for US LNG for the past year. Even as several plants reduced their output, they remained above their nameplate capacity. Only Cove Point LNG dialled back output to below nameplate capacity period-on-period whilst Calcasieu Pass increased production closer to full capacity. However, with Freeport's market re-entry, we are expecting utilisation levels to return to more normal levels during the next reporting period of March-April. Sustained liquefaction significantly above nameplate capacity introduces additional strain on equipment that could lead to outages.

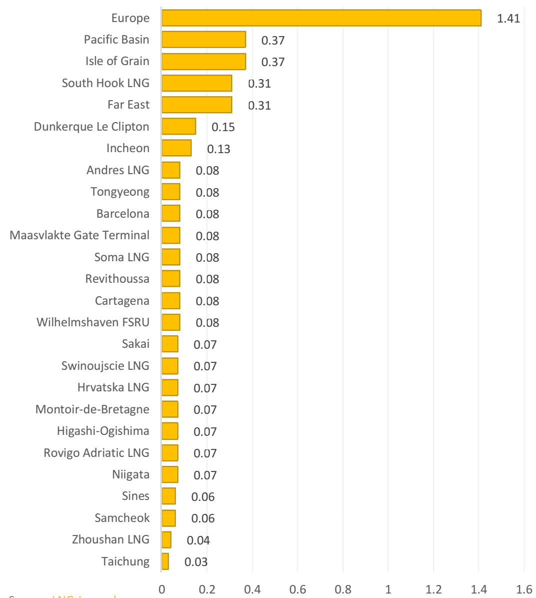
Although gas prices in Europe as well as monthly Henry Hub gas spot prices, as assessed by the EIA, had decreased continuously since September last year, considerable disparity remained. The Henry Hub price decreased by $0.89/mmBtu month-on-month to reach $2.38/mmBtu in February whilst the TTF Day Ahead price was at the approximate equivalent of $14.23/mmBtu at the time of writing.

Cumulative US LNG Exports (MMt)

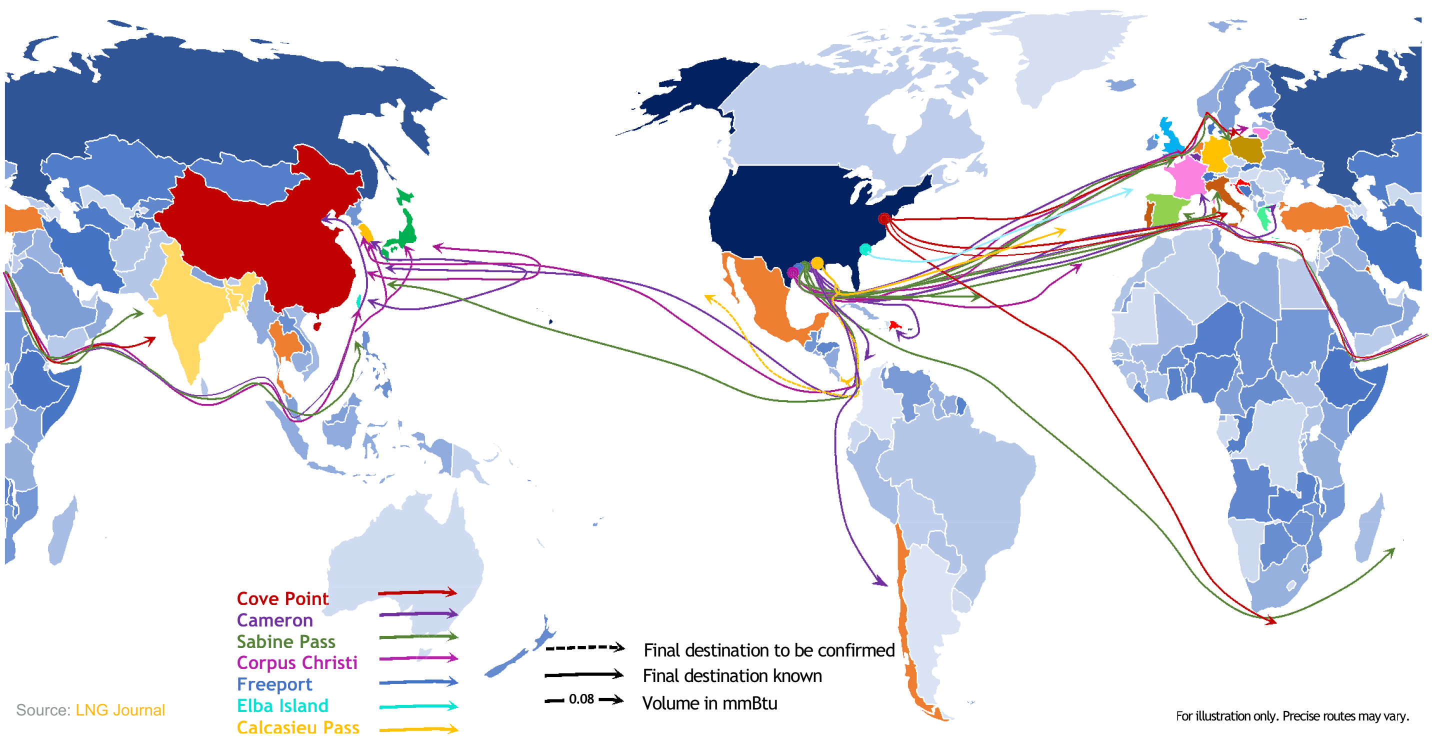


Source: LNG Journal

In-transit LNG w/ Closest Known Destinations (MMt)



Source: LNG Journal



Source: LNG Journal

LNG Journal

US LNG Still in Transit as of 1 March 2023

Plant	Vessel	IMO	Terminal	Schedule	Total
Cameron LNG	BW Lilac	9758076	Cartagena	12-Mar-23	0.08
Cameron LNG	BW Pavilion Aranda	9792606	Isle of Grain	02-Mar-23	0.07
Cameron LNG	Diamond Gas Orchid	9779226	Dunkerque Le Clipton	01-Mar-23	0.07
Cameron LNG	Diamond Gas Sakura	9810020	Niigata	06-Mar-23	0.07
Cameron LNG	Maran Gas Apollonia	9633422	Swinoujscie LNG	17-Mar-23	0.07
Cameron LNG	Marvel Crane	9770438	South Hook LNG	07-Mar-23	0.08
Cameron LNG	Marvel Falcon	9760768	Incheon	18-Mar-23	0.07
Cameron LNG	Marvel Hawk	9760770	Far East	24-Mar-23	0.07
Cameron LNG	Marvel Heron	9770440	Soma LNG	07-Mar-23	0.08
Cameron LNG	WilPride	9627966	Pacific Basin	20-Mar-23	0.06
Cameron LNG	Minerva Chios	9877341	South Hook LNG	01-Mar-23	0.08
Cameron LNG	LNG Enterprise	9874480	Isle of Grain	10-Mar-23	0.08
Cameron LNG	Maran Gas Leto	9682576	Pacific Basin	23-Mar-23	0.07
Cameron LNG	Minerva Amorgos	9885855	Revithoussa	18-Mar-23	0.08
Corpus Christi LNG	Al Safliya	9337963	Far East	09-Mar-23	0.09
Corpus Christi LNG	Amberjack LNG	9845776	Europe	17-Mar-23	0.08
Corpus Christi LNG	Flex Endeavour	9762261	Europe	05-Mar-23	0.07
Corpus Christi LNG	Fuji LNG	9275359	Taichung	25-Mar-23	0.03
Corpus Christi LNG	Maran Gas Alexandria	9650054	Europe	07-Mar-23	0.07
Corpus Christi LNG	Rias Baixas Knutsen	9825568	Dunkerque Le Clipton	05-Mar-23	0.08
Corpus Christi LNG	Ribera del Duero Knutsen	9477593	Isle of Grain	01-Mar-23	0.07
Corpus Christi LNG	Celsius Carolina	9878723	Isle of Grain	11-Mar-23	0.08
Corpus Christi LNG	Hellas Athina	9872999	Europe	10-Mar-23	0.08
Corpus Christi LNG	Adamastos	9879698	Europe	05-Mar-23	0.08
Corpus Christi LNG	Woodside Rees Withers	9810367	South Hook LNG	03-Mar-23	0.08
Cove Point LNG	Castillo de Santisteban	9433717	Pacific Basin	10-Mar-23	0.07
Cove Point LNG	Dorado LNG	9863182	Rotterdam	10-Mar-23	0.08
Cove Point LNG	Energy Glory	9752565	Higashi-Ogishima	18-Mar-23	0.07
Cove Point LNG	Golar Ice	9637325	Pacific Basin	28-Mar-23	0.07
Cove Point LNG	LNG Fukurokuju	9666986	Sakai	13-Mar-23	0.07
Elba Island LNG	Golar Penguin	9624938	Europe	07-Mar-23	0.07
Freeport LNG	Corcovado LNG	9636711	Isle of Grain	18-Mar-23	0.07
Freeport LNG	Kmarin Diamond	9333620	Pacific Basin	08-Mar-23	0.02
Freeport LNG	LNG Rosenrot	9877133	Wilhelmshaven FSRU	03-Mar-23	0.08
Freeport LNG	Prism Agility	9810549	Zhoushan LNG	15-Mar-23	0.04
Freeport LNG	Diamond Gas Victoria	9874466	Far East	27-Mar-23	0.08
Sabine Pass LNG	Adam LNG	9501186	Rovigo Adriatic LNG	14-Mar-23	0.07
Sabine Pass LNG	Energy Endeavour	9854624	Europe	10-Mar-23	0.08
Sabine Pass LNG	GasLog Galveston	9864928	Europe	10-Mar-23	0.08
Sabine Pass LNG	GasLog Sydney	9626273	Hrvatska LNG	08-Mar-23	0.07
Sabine Pass LNG	Hyundai Ecopia	9372999	Samcheok	02-Mar-23	0.06
Sabine Pass LNG	Hyundai Princepia	9761841	Incheon	15-Mar-23	0.06
Sabine Pass LNG	Iberica Knutsen	9326603	Sines	12-Mar-23	0.06
Sabine Pass LNG	K. Mugungwha	9373010	Far East	03-Mar-23	0.07
Sabine Pass LNG	La Mancha Knutsen	9721724	Barcelona	02-Mar-23	0.08
Sabine Pass LNG	SM Eagle	9761827	Tongyeong	10-Mar-23	0.08
Sabine Pass LNG	Stena Crystal Sky	9383900	Europe	03-Mar-23	0.07
Sabine Pass LNG	WilForce	9627954	South Hook LNG	05-Mar-23	0.07
Sabine Pass LNG	LNGShips Athena	9872949	Europe	09-Mar-23	0.08
Sabine Pass LNG	Global Sea Spirit	9880465	Europe	09-Mar-23	0.07
Sabine Pass LNG	Gui Ying	9878888	Europe	12-Mar-23	0.08
Sabine Pass LNG	Clean Cajun	9886732	Europe	07-Mar-23	0.08
Sabine Pass LNG	Global Sealine	9880477	Europe	09-Mar-23	0.08
Sabine Pass LNG	Lech Kaczynski	9922976	Pacific Basin	19-Mar-23	0.08
Calcasieu Pass LNG	Energy Universe	9758844	Europe	12-Mar-23	0.07
Calcasieu Pass LNG	GasLog Georgetown	9864916	Europe	06-Mar-23	0.08
Calcasieu Pass LNG	Maran Gas Andros	9810379	Europe	13-Mar-23	0.08
Calcasieu Pass LNG	Maran Gas Olympias	9732371	Europe	05-Mar-23	0.05
Calcasieu Pass LNG	LNG Endurance	9874492	Andres LNG	06-Mar-23	0.08
Calcasieu Pass LNG	Seapeak Arwa	9339260	Montoir-de-Bretagne	02-Mar-23	0.07
Calcasieu Pass LNG	Clean Energy	9323687	Europe	05-Mar-23	0.06
Grand Total					**4.37**

*Values are based on journey time to date in accordance with draught at departure and in-transit BOR. Eventual journey times will thus affect the final amounts delivered.

Source: LNG Journal

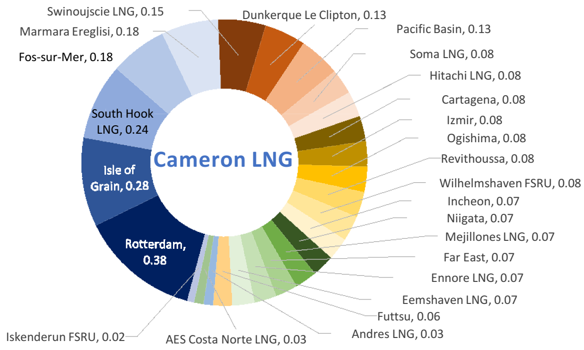
Monthly US LNG Exports (MMt)

Period between 01 January 2023 and 28 February 2023, inclusively

LNG Journal

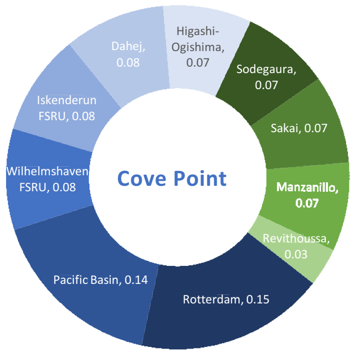
Elba Island LNG

Elba Island LNG produced flat out and exported a total of six cargoes amounting to 0.45mmt in January and February, up 7pct from the 0.42mmt during the November-December period. Elba Island's capacity utilisation, therefore, stood at 108pct for the January-February period compared to 101pct during the previous report period. Notably, none of these January-February shipments went to the Pacific whilst all went to Europe.



Calcasieu Pass LNG

Calcasieu Pass LNG increased its period-on-period exports. The plant shipped 1.53mmt during the reporting period, up 1.33mmt (15pct) from 1.33mmt during the November-December period. Capacity utilisation thus also moved up by 12pp from 80pct in November-December to 92pct in January-February. The bulk of Calcasieu Pass shipments have sailed for Europe during the reporting period.

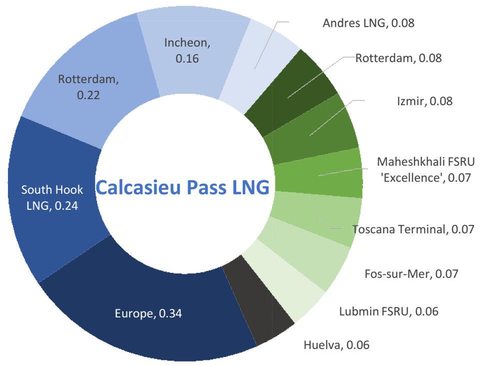


Cameron LNG

Exports from Cameron LNG saw negative period-on-period growth. The plant shipped 2.79mmt in January-February, down 0.45mmt (14pct) from the 3.24mmt recorded during the previous period of November-December. Cameron LNG thereby operated at an average utilisation of 124pct during the reporting period, down 20pp from November-December.

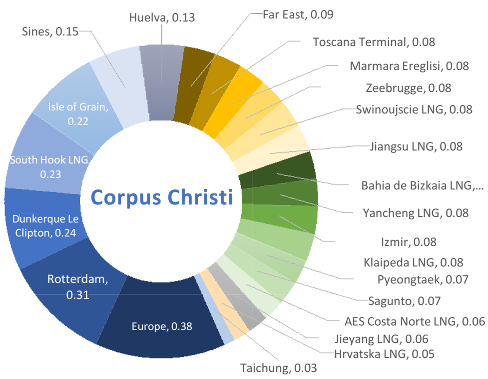
Cove Point LNG

Cove Point LNG also saw exports decrease significantly by 0.26mmt (23pct) to 0.84mmt in January-February from 1.11mmt during the previous period of November-December. In January-February, the plant thus maintained output at below nameplate capacity. Accordingly, utilisation in January and February averaged 88pct, down 28pp from 116pct during the previous period.



Freeport LNG

Freeport LNG returned to the market in February with exports amounting to 0.29mmt, pegging annualised utilisation for the current report period at 13pct. The plant's restart had been delayed several times in 2022 as regulators imposed a catalogue of new safety requirements on the operator. Freeport LNG was shut down in June 2022 due to a fire incident. At the time of writing, the Cool Voyager was preparing to dock at the plant for Freeport's sixth cargo loading since mid-February.

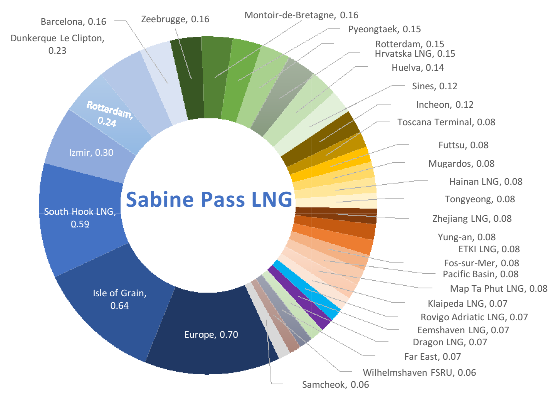


Corpus Christi LNG

Corpus Christi LNG saw continued production at above nameplate capacity. Period-on-period exports were up by 0.19mmt (7pct) compared to the previous report period of November-December. The plant shipped 2.81mmt during January and February, pegging average utilisation at 112pct, up 7pp from the previous period. At the time of writing, the GasLog Warsaw was in the process of loading a cargo whilst the Point Fortin was waiting at the Corpus Christi anchorage.

Sabine Pass LNG

Sabine Pass LNG's exports stood at 5.36mmt for the current report period, pegging capacity utilisation at 129pct. The shipped volumes during January-February thus remained broadly steady period-on-period, down only marginally by 1pct from the 5.39mmt exported during November and December. Sabine Pass' continued high export levels were underpinned by demand in Europe. The plant was loading cargoes onto the GasLog Glasgow, the Magdala and the GasLog Seattle at the time of writing.



Source: LNG Journal

US LNG Exports (MMt) - Reporting Period

LNG Journal

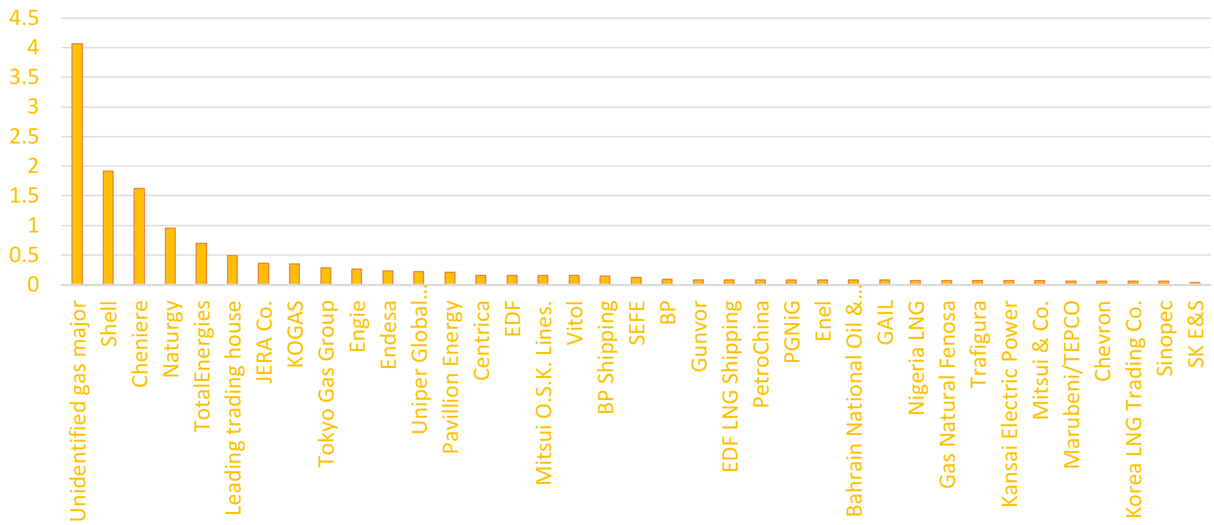
Importers	2022												2023		Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
France	1.02	0.78	1.30	1.43	0.98	0.79	1.09	0.73	1.04	0.93	1.09	0.92	0.60	0.71	13.41
United Kingdom	1.27	0.53	1.16	0.84	0.22	0.07	0.14	0.45	0.97	0.95	1.69	1.61	1.46	1.20	12.56
Spain	1.08	0.82	1.22	0.88	0.96	0.68	0.74	0.62	0.45	0.64	0.52	0.71	0.33	0.47	10.12
Netherlands	0.32	0.64	0.68	0.52	0.64	0.74	0.69	0.99	0.75	0.91	0.45	0.77	0.75	0.63	9.48
South Korea	0.46	0.55	0.43	0.30	0.39	0.54	0.75	0.77	0.42	0.71	0.32	0.52	0.50	0.21	6.87
Turkey	0.87	0.93	0.36	0.13	0.15	0.16	–	–	0.20	0.23	0.67	0.45	0.86	0.20	5.21
Japan	0.43	0.20	0.34	0.28	0.49	0.43	0.37	0.38	0.15	0.21	0.50	0.58	0.37	0.29	5.02
Poland	0.07	0.15	0.08	0.30	0.38	0.30	0.38	0.15	0.30	0.23	0.07	0.27	0.24	0.14	3.06
Italy	0.15	0.20	0.23	0.29	0.46	0.16	0.25	0.26	0.25	–	0.08	0.16	0.16	0.22	2.87
India	0.17	0.15	0.22	0.29	0.20	0.23	0.30	0.22	0.23	0.15	0.22	0.30	0.15	–	2.83
China	–	0.14	0.14	0.23	0.04	0.16	–	0.22	0.24	0.47	0.39	0.15	0.38	0.04	2.60
Taiwan	0.13	0.13	0.22	0.22	0.35	0.13	0.26	0.20	0.21	0.17	0.07	0.19	0.08	0.03	2.39
Belgium	0.29	0.09	0.31	0.16	0.04	0.13	–	0.16	0.23	0.16	–	0.08	0.08	0.16	1.89
Croatia	0.19	0.10	0.06	0.14	0.17	0.16	0.19	0.12	0.17	0.06	0.12	0.13	0.08	0.12	1.81
Greece	0.08	0.20	0.14	0.02	0.32	0.20	0.21	0.28	–	0.08	0.08	0.08	0.03	0.08	1.80
Lithuania	0.08	0.06	0.13	0.31	0.26	0.12	0.18	0.15	0.07	0.15	0.08	0.05	0.15	–	1.79
Portugal	0.06	0.08	0.28	0.16	0.07	0.08	0.15	0.06	0.14	0.15	0.08	0.20	0.14	0.13	1.78
Brazil	0.36	0.23	0.04	0.08	0.37	0.10	0.11	0.24	–	0.08	–	–	–	–	1.61
Europe	–	–	–	–	–	–	–	–	0.05	–	–	0.00	–	1.49	1.54
Dominican Republic	0.12	0.08	0.09	0.08	0.15	0.15	0.16	0.10	0.08	–	–	0.07	0.03	0.08	1.19
Kuwait	–	–	–	0.16	0.29	0.16	0.10	0.15	0.16	0.07	–	–	–	–	1.09
Argentina	–	–	–	0.11	0.20	0.33	0.08	0.02	–	–	–	–	–	–	0.74
Chile	0.06	–	0.07	0.08	0.23	–	0.14	–	0.07	–	–	–	0.07	–	0.72
Pacific Basin	–	–	–	–	–	–	–	–	–	–	–	–	–	0.68	0.68
Singapore	–	0.06	0.15	–	–	0.07	0.15	–	–	0.14	–	–	–	–	0.57
Thailand	0.08	0.09	–	–	0.07	0.15	–	–	0.08	–	–	–	0.08	–	0.55
Germany	–	–	–	–	–	–	–	–	–	–	–	0.16	0.28	0.08	0.52
Panama	0.08	0.08	–	0.05	–	–	–	–	–	–	0.08	0.08	0.09	–	0.46
Bangladesh	–	0.10	0.06	–	0.08	–	–	–	–	–	–	–	0.07	–	0.31
Mexico	–	–	–	–	–	0.05	–	–	–	–	–	0.02	0.07	–	0.14
Colombia	0.06	–	–	–	–	0.05	–	–	–	–	–	–	–	–	0.11
Indonesia	–	0.02	–	–	–	–	–	–	–	0.07	–	–	–	–	0.09
USA	–	–	–	–	–	–	–	–	–	–	–	0.08	–	–	0.08
Pakistan	–	–	–	0.08	–	–	–	–	–	–	–	–	–	–	0.08
Malta	–	0.01	–	–	–	–	–	–	–	–	–	–	0.06	–	0.07
Jamaica	–	–	–	–	–	–	–	–	0.04	–	–	–	–	–	0.04
Finland	–	–	–	–	–	–	–	–	–	–	–	0.02	–	–	0.02
Puerto Rico	–	–	–	–	–	–	–	0.01	–	–	–	–	–	–	0.01
Grand Total	**7.43**	**6.42**	**7.71**	**7.14**	**7.51**	**6.14**	**6.44**	**6.28**	**6.30**	**6.56**	**6.51**	**7.60**	**7.11**	**6.96**	**96.11**

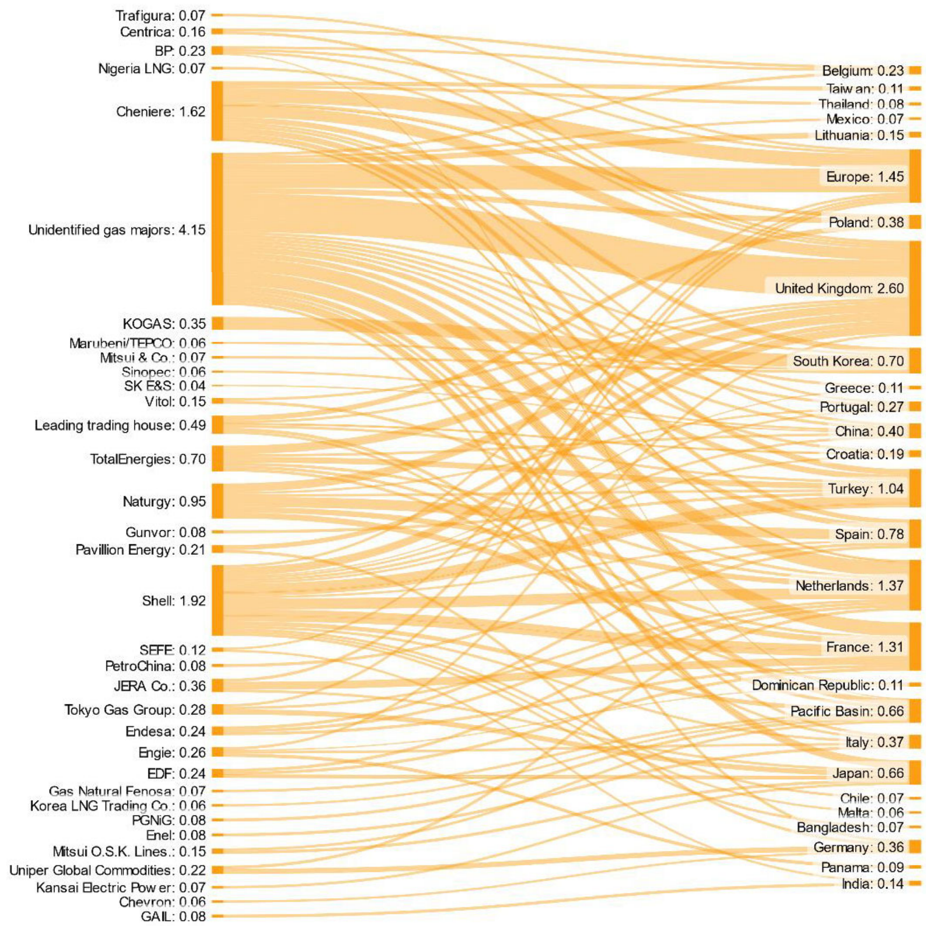
Source: LNG Journal

Est. US LNG Exports by Company (MMt) - Reporting Period

LNG Journal

Est. US LNG Shipments by Company
January-February 2022





In this upcoming feature, we will present US LNG export data by company. It is currently in Beta testing.

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