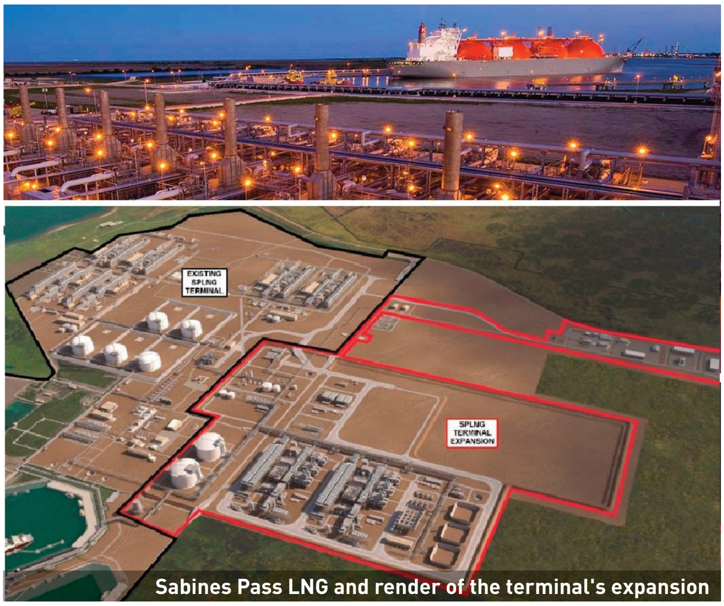
Includes: Market Tracker Data

LNG North America

A BI-MONTHLY LNG JOURNAL PUBLICATION March 2024

Cheniere, Sempra press ahead with LNG expansions despite permitting pause

Jack Fusco, CEO of the US LNG exporting giant Cheniere is going "full steam ahead" with the company's Corpus Christi and Sabine Pass expansion projects, vowing President Joe Biden's move to pause non-FTA permits will "not materially impact timelines." Sempra Infrastructure, similarly, remains confident on the merits of its proposed LNG ventures as they will be linked to carbon sequestration.



Sabines Pass LNG and render of the terminal's expansion

In a controversial move, President Biden had halted pending decisions on LNG exports to countries that the US does not have a Free Trade Agreement with (non-FTA), giving the Department of Energy (DOE) "time to take a hard look at the impacts of LNG exports on energy costs for American consumers and our environment." Industry lambasted the decision taken in an election year, though Energy Secretary Jennifer Granholm was quick to point out "it's only a month-long pause. It's not a ban."

Ramifications of the regulatory review are deemed far-reaching: Though the US government claims only four projects with pending export approvals are directly affected by the pause, analysts warned it also affects many projects which under their current DOE approval aim for first LNG exports before 2027. Currently, almost 90 mtpa of planned liquefaction and export capacity would need non-FTA approval – and without such permit, projects struggle to sign on sufficient firm offtake to secure debt financing and reach financial close.

Determined to press ahead, Cheniere plans to file an application with the Federal Energy Regulatory Commission (FERC) before the end of March for a 20 mtpa

continued on page 2

Henry Hub spot price forecast as low as $2.40/MMBtu until end-March

Natural gas spot prices at the US benchmark Henry Hub stay low at around $2.40/MMBtu through February and March as LNG exports are set to decline, government analysts forecast.

Spot prices had jumped to $13.20/MMBtu in mid-January, when severely cold weather pushed up gas demand for space heating and power generation. But the warmth in February almost fully erased the impact of the cold observed from Winter Storm Heather, with analysts forecasting a "flat Mar-24–Apr-24 spread."

Demand	**136.6**	**(12.5)**	↓	**Supply**	**108.5**	**4.2**	↑
Storage change	(28.1)	*16.6*	↑	**Weekly storage (196) bcf**			
Week ending: Fri - 2 Feb 24							
Power	32.8	*(1.9)*	↓	Dry gas	102.6	*2.4*	↑
ResCom	34.4	*(13.3)*	↓	Net Canada	5.5	*(2.5)*	↓
Industrial	24.0	*(1.1)*	↓	LNG send-out	0.1	-	↓
Other	9.9	*(0.1)*	↓				
To Mexico	5.7	*0.2*	↑				
LNG Exports	14.4	*0.9*	↑				
Demand	**121.3**	**(15.3)**	↓	**Supply**	**108.4**	**(0.1)**	↓
Storage change	(12.9)	*15.2*	↑	**Weekly storage (90) bcf**			

Source: Energy Aspects

Exports are expected to fall "due to a partial outage at the Freeport LNG facility that began towards the end of January and that Freeport expects will last about a month," US Energy Information Administration (EIA) stated.

continued on page 5

AGENDA

continued from page 1, top story

expansion of its Sabine Pass terminal in Louisiana, CEO Fusco said in the company's quarterly earnings call. Cheniere is already in an early filing stage with FERC for its Sabine Pass Midscale 8 and 9 project – but once the expansion gets approved by the energy regulator, it would also be subject to the moratorium on export permits and the more stringent DOE review.

The Corpus Christi mid-scale Trains 8 and 9 expansion in Texas, meanwhile, should commence preliminary shipments before the end of this year, Fusco vowed, before "meaningful LNG production" of the new Trains with 15 mpta capacity combined will be reached in 2025. The Cheniere CEO disclosed he just received a letter of determination from the Pipeline and Hazardous Materials Safety Administration (PHMSA) which keeps him confident that "previous timelines won't be materially impacted and we will maximize the efficiency [during construction] with having Bechtel on site already through Stage 3."

Four projects directly affected

Sempra's Port Arthur expansion in Texas, in contrast, is directly hit by the suspension on non-FTA permits. The proposed Trains 3 and 4 would be capable of producing up to 13.5 mtpa and applied for DOE approval already in September last year. Once in place, the Phase 2 expansion would take Port Arthur's total liquefaction capacity to approximately 26 mtpa. Staying optimistic, Sempra singled out the merits of LNG exports in displacing more carbon-intense fossil fuels abroad and underlined it will mitigate emissions from the liquefaction process via the Titan Carbon Sequestration project at Port Arthur as well as via the Hackberry Carbon Sequestration project near its Cameron LNG terminal in Louisiana. The captured CO2 would be compressed and permanently stored in a saline aquifer.

Commonwealth LNG had been waiting for over 14 months for a non-free trade permit for its 9.3 mtpa LNG export facility in Cameron, Louisiana. The developer had written to President Biden in January to help expedite the approval process as the project secured firm offtake for about half of its capacity and was aiming for financial close this year. Now, with the permitting pause in place, FID and start of construction has been pushed back to the first half of 2025.

The Lake Charles LNG venture is also directly impacted by Biden's permitting pause. Energy Transfer re-applied for new and expedited export license in mid-August last year after its original permit expired and DOE refused a three-year extension of the license. The Dallas-based developer has been going after the multi-billion-dollar project since 2012 and had to admit in its latest filing it was unable to meet the construction deadline before the existing LNG export license expires in 2025. The company blamed "unplanned delays," especially due to a decision to add a carbon capture and sequestration unit to the plant. In terms of offtake, Energy Transfer's CEO Tom Long pointed out Lake Charles LNG made "substantial progress" as evidenced by six SPAs for some 7.9 mtpa – about half of the terminal's FERC-approved 16.45 mpta liquefaction capacity. Now, Energy Transfer is hoping to get a new export license that would give it seven more years to get the project in Louisiana over the finishing line.

Rival Magnolia LNG, an 8.8 mtpa project developed by Glenfarne Group, also refiled for an export permit in March last year but the company did not disclose details on dates and progress of the venture. Magnolia had already sought and received an extension of time until April 2026 and noted the new application will be evaluated under DOE's new carbon management policies. In its application, Glenfarne pointed out Magnolia LNG's access to consistently low-priced feed gas from the significant resources along the Gulf Coast, specifically the Haynesville basin, as well as the utilized low-emission OSMR-liquefaction technology.

US permitting pause feared to squeeze supply

JERA, Japan's largest LNG importer and power generator, as well as the German utilities Uniper, EnBW and state-owned SEFE warn President Biden's temporary pause on permits for American LNG exports could undermine the world's energy security. Chinese buyers fear the suspension of US LNG permits could force them to return to the spot market as nearly 10 million tons per annum (mtpa) of contracted volumes are at risk of arriving late.

Seven Chinese companies – ENN, PetroChina, Foran, China Gas, Guangzhou Development Group, Zheijang Energy and Hong Kong & China Gas – in 2022 and 2023 signed ten sales and purchase agreement with a combined 9.6 mtpa with American LNG suppliers. The buyers now fear to lose parts of these contracted volumes as some of the shelved US LNG export might be abandoned further out.

Similarly, SEFE and JERA are concerned about the timeline of their first LNG purchases from Venture Global's Calcasieu Pass 2 plant, one of many stalled projects. The regional power producer EnBW signed a contract to import 0.75 mtpa while SEFE agreed to offtake 2.25 mtpa from Calcasieu Pass 2. Over in Japan, both Inpex and JERA signed 20-year contracts for around 1 mtpa from Venture Global's contested LNG project. In the UK, Grain LNG recently signed a binding long-term terminal use agreement giving Venture Global access to 3 mtpa of LNG storage and regas capacity at the Isle of Grain terminal for sixteen years starting from 2029.

While Asian and European gas importers worry how to replace contracted US LNG and fear rising prices due to volume shortages, analysts are less concerned: "The EU will become a declining gas consuming region, the signals are downward," said Anne-Sophie Corbeau, a researcher at Columbia University's Center on Global Energy Policy (CGEP). "Between growing biomethane, Norwegian gas, some African gas, Azeri gas and declining production, we might just see eventually a progressive decline of our LNG demand, especially post 2030 – and this is precisely for that period that the Biden decision would matter," she explained. ■

Construction-progresses on Sempra's Port Arthur LNG terminal

LNG North America

Publisher
Stuart Fryer

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

Layout
Vivian Chee
chee@thedigitalship.com

Advertising
David Jeffries
Tel: +44 (0) 20 8150 5293
djeffries@lngjournal.com

Subscription included with
LNG Journal

North American Large-Scale LNG Export Projects with Non-FTA Export Authority from DOE

	Project	Volume (Bcf/d)			Initial Operation (or est.)	Construction Status
		Authorized	Under Construction Pursuant to a final investment decision (FID)	Operating		
1	Sabine Pass | Cameron, LA	4.55	0	4.55	Feb. 2016	Operating
2	Cove Point LNG | Calvert City, MD	0.77	0	0.77	Mar. 2018	Operating
3	Cameron | Hackberry, LA	3.53	0	2.12	May 2019	3 trains operating
4	Corpus Christi | Corpus Christi, TX	3.99	1.59	2.4	Dec. 2018	3 trains operating Stage 3 Under construction
5	Elba Island | Chatham County, GA	0.36	0	0.36	Sep. 2019	Operating
6	Freeport | Quintana Island, TX	3.10	0	2.38	Sep. 2019	3 trains operating
7	Golden Pass| Sabine Pass, TX	2.57	2.57	0	Late 2024 (est.)	Under construction
8	Venture Global Calcasieu Pass | Cameron, LA	1.70	0	1.70	Mar. 2022	Operating
9	Lake Charles | Lake Charles, LA	2.33	0	0	N/A	Pending FID
10	Delfin | Gulf of Mexico	1.80	0	0	N/A	Pending FID
11	Port Arthur | Port Arthur, TX	1.91	1.91	0	2027 (est.)	Under construction
12	Driftwood | Calcasieu Parish, LA	3.88	0	0	N/A	Pending FID
13	Gulf LNG | Jackson County, MS	1.53	0	0	N/A	Pending FID
14	Venture Global Plaquemines | Plaquemines Parish, LA	3.40	3.40	0	Mid-2024 (est.)	Under construction
15	Rio Grande LNG | Brownsville, TX	3.61	2.10	0	2027 (est.)	Under construction
16	Texas LNG | Brownsville, TX	0.56	0	0	N/A	Pending FID
17	Alaska LNG | Kenai Peninsula, AK	2.55	0	0	N/A	Pending FID
	U.S. TOTAL	**42.14**	**11.57**	**14.28**		
18	Pieridae Energy (USA) Ltd. | Nova Scotia, Canada	0.80	0	0	*N/A*	Pending FID
19	Mexico Pacific Limited| Sonora, Mexico	1.7	0	0	*N/A*	Pending FID
20	Energia Costa Azul | Ensenada, Mexico	2.18	0.44	0	2025 (est.)	Phase 1 Under construction Phase 2 FID Pending
21	Epcilon LNG | Sonora, Mexico	1.08	0	0	N/A	Pending FID
22	Vista Pacifico LNG | Sinaloa, Mexico	0.55	0	0	N/A	Pending FID
	NORTH AMERICA TOTAL	**48.45**[3]	**12.01**	**14.28**		

[3] Approved amounts listed here do not include non-FTA authorizations issued to small-scale facilities, which brings the total to 48.6 Bcf/d. Additional small-scale authorizations issued specifically under DOE's Small-Scale Rule are not additive to the cumulative total.

Tellurian secures debt deal to back Haynesville Shale asset sale

Tellurian has agreed to altering the terms of certain debt to have short-term liquidity for completing the sale of its upstream asset. "This amendment to our debt agreement is pivotal towards establishing a sustainable capital structure and accelerating our strategic priority, Driftwood LNG," explained CEO Octávio Simões.

It has been a busy February for Tellurian as it was exploring the sale of Haynesville Shale basin upstream natural gas assets, supported by the investment bank Lazards. At Haynesville Shale, Tellurian's assets include159 producing wells, spread over 31,149 net acres. But the Houston-based company concluded there were alternative gas supply strategies available to Tellurian from various basins and its ownership of upstream gas wells was not necessary at this stage of Driftwood LNG's development.

On the regulatory front, Tellurian was told in mid-February that the US Federal Energy Regulatory Commission (FERC) had issued an extension to its order authorizing the construction of Tellurian's plant. As extended, the order requires construction to be completed by April 18, 2029.

Tellurian applied for the extension back in 2023 to ensure it had enough time to complete the construction of all five LNG Trains for the facility with a nameplate capacity of 27.6 mtpa together with is main contractor Bechtel. ■

Driftwood LNG site at the end of December 2023

Sempra seals structured finance deal with JBIC

Sempra Infrastructure, a part of the US utility Sempra and whose projects included Cameron LNG in Louisiana, Port Arthur LNG in Texas and Costa Azul LNG in Mexico, has signed a collaboration accord with the state-backed Japan Bank for International Cooperation (JBIC) covering future financial structuring opportunities.

The memorandum is aimed at advancing Sempra's LNG projects and improve the global energy supply chain through LNG and other decarbonization efforts in both the US and Japan.

Sempra noted that it had partnered in various ways with Japanese companies for many years. "More recently, these partnership efforts are reflected in Sempra Infrastructure's Cameron LNG facility and a recently announced strategic collaboration with a Japanese consortium, which calls for an evaluation of potential enhancements of the energy supply chain through e-natural gas," the company said.

In addition, Sempra is developing the Hackberry Carbon Sequestration Project, which contemplates the participation of two Japanese companies. Both development projects are in close geographical proximity to the Cameron LNG facility. ■

Warren Buffett raises investment in Chevron to nearly $20 billion

Celebrity investor Warren Buffett's Berkshire Hataway has increased its stake in Chevron by over 15.84 million shares to a holding of almost 7 percent of the oil major's outstanding shares. The shares were bought at an average price of $149.16 each and were valued at $18.80 billion, Berkshire Hataway disclosed.

Buffett's other main energy investment is Occidential Petroleum, which forms 4.19 percent of the Berkshire Hathaway portfolio and the firm also has a huge stake in Apple. "The Oracle of Omaha," as Buffett is nicknamed, turned to Chevron though the company recently reported annual net profits of $21.41 billion, down from $35.60 billion in the previous year.

Chevron's LNG projects advance, notable Gorgon Stage 2 in Western Australia where the oil major recently achieved first natural gas production. Together with partners, Chevron also reached FID to build a third gathering pipeline that is expected to increase natural gas production capacity at the Leviathan gas field and a future LNG hub offshore Israel.

Assets in the Permian Basin helped underpin earnings: Chevron posted an increase in its Permian production by 10 percent in 2023 with US quarterly output coming to 1.16 million barrels per day compared with 895,000 barrels per day, helped by the 2023 acquisition of US independent oil and gas company PDC Energy. The Houston-based major is also paying $53 billion for Hess, giving it access to oil discoveries in the South American nation of Guyana as well as more US shale assets in the Bakken Shale Basin of North Dakota. ■

Prices for US LNG plunge, with dearest volumes coming from Calcasieu Pass

Average US LNG export prices on a free-on-board (FOB) basis, including all costs of the LNG up to the point of export as well as commodity costs and liquefaction fees, dropped by 45 percent in December 2023 to $6.68/mmBtu from $12.19/ MMBtu a year earlier, the Department of Energy's latest liquefied natural gas and pipelines export data shows.

Cargoes from the Calcasieu Pass liquefaction plant cost the most at $11.53/MMBtu in December last year compared with $11.29/MMBtu in the previous month of November and $27.26/MMBtu in December 2022. Second highest were prices from the Corpus Christi facility at $6.79/MMBtu in December versus $7.53/MMBtu in the previous month and $10.60 in December 2022.

Cove Point in Maryland reaped an average price of $6.75/MMBtu in December, down from $7.10 in the previous month, while Sabine Pass plant prices were fourth highest in December at $6.15/ MMBtu versus $6.56 in November.

Freeport LNG plant had a December price of $5.98/MMBtu, while cargoes from the Elba Island plan in Georgia cost $5.62/MMBtu and the Cameron LNG in Louisiana had the lowest average prices in December of $5.31/MMBtu.

Most cargoes headed to the Netherlands

The Top 10 recipients of US LNG deliveries in the January-to-December 2023 period by number of cargoes were: the Netherlands (169 cargoes), France (159), the UK (135), Japan (92), Spain (88), South Korea (82), Germany (65), Italy (60), China (59) and India (47).

The number of cargoes exported in December 2023 from each of the seven export facilities came to 43 cargoes for Sabine Pass in Louisiana, Freeport, Texas (22), Cameron, Louisiana (22), Corpus Christi, Texas (18) Calcasieu Pass, Louisiana (16), Cove Point, Maryland ((8) and Elba Island, Georgia (6), figures from the DoE's February 2024 report show.

Pipeline gas exports on the up

More US natural gas is also exported by pipeline: Flows to Mexico to Mexico in December increased by 10.1 percent from a year ago. The average price of the pipeline gas flows to Mexico in December came to $2.43 per MMBtu, down from $6.00 per MMBtu in December 2022 and lower than the November 2023 price of $2.48 per MMBtu, analysts noted.

In contrast, pipeline gas exports to Canada in December fell by 12.8 percent to 111.9 Bcf year-on-year, while imports from Canada came to 283.5 Bcf, resulting in 171.6 Bcf of net imports. Imports of Canadian pipeline gas cost on average $2.61/MMBtu versus $9.20 per MMBtu in December 2022 and $2.74 per MMBtu in November 2023. ■

Venture Global's Calcasieu Pass terminal south of the city of Lake Charles in Louisiana

continued from page 1

Meanwhile, domestic gas consumption is set to fall due to 4 percent fewer heating degrees days in February and March, though there is strong demand from the power sector which was instrumental for pushing US total gas consumption to more than 118 Bcf/d in January, a new monthly record. Still, inventories stay above the five-year average amid mild weather and are expected to end this winter heating season (November–March) at about 1,910 Bcf, which would be 15 percent more than average.

Haynesville output may be choked off

In-basin Haynesville prices are anticipated having to fall below $1.50/MMBtu for producers to start shutting in more productive wells, which would require Henry Hub cash and prompt contracts at $1.80/MMBtu. The forward curve is easing close to a level where "dry-gas production may be choked off in the shoulder season to help with the supply-demand imbalance," Energy Aspects suggested.

Analysts brand-marked 0.2 bcf/d of Haynesville output as "uneconomic even at $2/MMBtu" as these volumes stem largely from older, less-efficient wells. The forward curve for the second quarter of 2024, however, is still at $2.25/MMBtu – above what analysts believe would result in large production cuts. Looking back at the second quarter of 2023, when cash prices of $2.12/MMBtu were realised which meant that dry gas exploration and production was deferred. Chesapeake even cut back 50–75 mmcf/d of Appalachia gas output, even though this oil-rich basin has more favourable well economics.

After that peak, prices fell to a monthly low of $2.15/MMBtu on January 23 but but government analysts reckon "volatility could return if severely cold weather emerges, even for a short period." ■


CHART®
NEXUS OF CLEAN™
"Chart's vision is to be the global leader in the design, engineering and manufacturing of cryogenic process technologies and equipment for the Nexus of Clean™ — clean power, clean water, clean food and clean industrials, regardless of molecule."
JILL EVANKO / CEO / CHART INDUSTRIES
CLEAN
CLEAN
CLEAN
CLEAN
CHART DELIVERS CLEAN SOLUTIONS FOR
Power
Water
Food
Industrials
Learn more at chartindustries.com

Gas stays vital for US dispatchable power despite growing LNG exports

Gas-burn in the United States has set new records and will remain the lead source of dispatchable power generation in 2024 in the face of the second wave of LNG export projects. Production surged and bloated inventories, hence there is ample supply for Plaquemines LNG Phase 1 and Corpus Christi Stage 2 to potentially get first feedgas flows this summer.

Both US and Canadian gas production soared in 2023, leaving a significant which storage surplus heading into the new year which made Henry Hub gas prices collapse over $1/MMBtu from November 2023 highs. Discussions arise whether to expand storage capacity, as inventories entered the New Year near a 10 percent surplus to five-year averages and analysts this irdea to crop back up in the second half of 2024 should turbulent pricing reappear.

"As the size of North America's gas market has ballooned in recent years, storage capacity expansions have not kept up," said Daniel Myers, Wood Mackenzie's senior research analyst. With current US stocks just providing enough gas for 25 days of full demand, he warned this "may soon expose the market to even more volatile price fluctuations in the years ahead.

Natural gas demand for power generation will stay resilient, as low prices for the fuel have incentivized continued high, economic coal-to-gas switching. Renewables accelerated adoption has altered the role of gas power stations from being dispatched for mid-merit towards a key source of peakload power.

Materialising LNG export growth

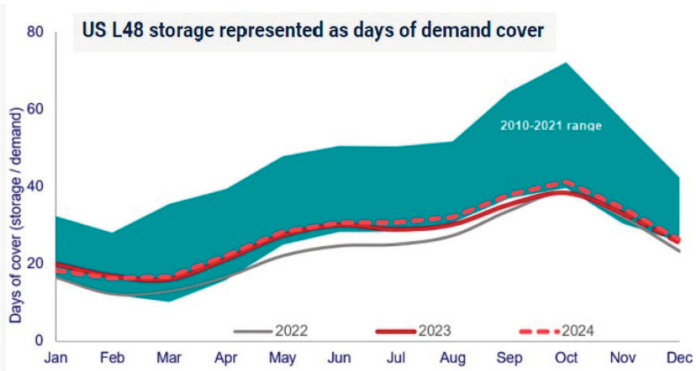
With first feedgas flows to both Plaquemines LNG Phase 1 in eastern Louisiana and the Corpus Christi Stage 3 expansion in Texas set to begin this summer, market participants are anxiously awaiting the onset of a second wave of LNG export projects. And though Golden Pass LNG pushed back the timeline for first exports to the first half of 2025, commissioning flows are still expected for later this year.

Moreover, LNG Canada is racing to begin commissioning and start-up activities this year. "This, and Altamira FLNG's startup in in Mexico in early 2024, provide a reminder that the US will not be the only North American LNG exporter for much longer," Myers commented.

Related gas infrastructure helps underpin future production growth and exports. Completion of the long-contested Mountain Valley Pipeline (MVP), expected in the first half of 2024, may well end the regime of Northeast pipeline development that had guided production expansion between 2017 and the early 2020s. Instead, analysts reckon "the market will turn its attention to developing infrastructure through the friendlier regulatory environment of intrastate pipeline projects in Texas and Louisiana."

In 2024 alone, over 4 billion cubic feet per day (bcf/d) of intrastate pipeline developments are targeted to unlock Haynesville supply in Louisiana. In the Permian, the 2.5 bcf/d Matterhorn Express will join Whistler (0.5 bcf/d) and Permian Highway (0.55 bcf/d) compression expansions from late this year to ease pressure on Waha and allow for further associated gas growth out of West Texas.

Investment in renewable natural gas, or biomethane, attracts high interest but produced volume is still relatively small compared to traditional natural gas. If demand-side contracting finally gains momentum, RNG could help decarbonise decentralised power stations and hard-to-abate industries. ■



Source: Wood Mackenzie North America gas short-term outlook – November 2023

Delay in Qatari LNG shipments heralds demand for spot cargoes

QatarEnergy's LNG shipments to Europe are delayed as carriers since mid-January take the longer route around the Cape of Good Hope to avoid attacks when crossing the Red Sea to reach the Suez Canal. European importers may well have to balance missing volumes from delayed Qatari deliveries by buying some US spot cargoes instead.

Though the emirate's LNG production "continues uninterrupted," QatarEnergy conceded the Red Sea conflict "may impact the scheduling of some deliveries as they take alternative routes." For European utilities, an extended re-routing of vessels poses a supply risk, Rystad Energy warns, although the price impact will be delayed until Europe's gas storage has been drawn down sufficiently.

Re-routing of Qatari vessels through the Cape of Good Hope adds around 12.5 days to the voyage each way at 16 knots which could require an additional 15-20 vessels to deliver the same volume over the year, Rystad analysts calculated, warning this could alter the bearish sentiment on the shipping market. Spot charter rates dropped 23 percent across the month (two-stroke, East of Suez) and it will take an increase in LNG prices before charter rates increase.

Around 15.5 million tonnes of LNG were sent through the Red Sea from the Middle East to Europe in 2023- a crucial 12.9 percent of the continent's LNG supply last year, according to Rystad data. Analysts at ING bank even say Qatari gas supplies last year amounted to a bit more than 20 bcm, or 16 percent of total European LNG imports. And as US LNG exports have surged, more cargoes used to take this route to Asia considering the current constraints through the Panama Canal due to dry weather. ■


Fast solutions for your LNG Storage
& Transportation needs.
UNITED HEAVY LIFT
UHL FLASH
MADEIRA
We can build your small-scale LNG terminal
or peak-shaving plant within 18 months.

US LNG: January – February 2024

LNG Journal

- January-February exports at 16.07mmt at the time of writing
- Down by 1.38mmt (-8pct) from November-December period
- Shipments up 1.98mmt (14pct) over period year-on-year
- Avg. US capacity utilisation at 104pct for the report period

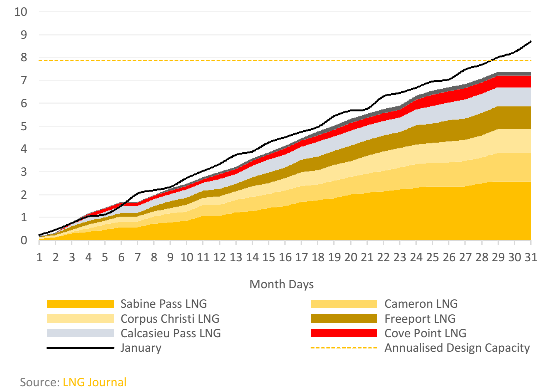
Overall US LNG exports decreased noticeably by 1.38mmt (-8pct) to 16.07mmt during the report period of January-February from the 17.45mmt shipped during the previous two-month period of November-December. They nevertheless still came in 1.98mmt (14pct) above their year-on-year equivalent of 14.09mmt. As a result, US LNG capacity continued to produce flat out during the report period, with annualised capacity utilisation at 104pct. This, however, represented a decrease of 9pp from the 112pct we calculated for the previous report period. It was nevertheless up 13pp from the 91pct utilisation during the January-February period of 2023.

Exports in January reached 8.70mmt but decreased to 7.37mmt in February. A driving force in that reduction were export decreases of 0.37mmt, 0.29mmt and 0.25mmt at Freeport LNG, Cameron LNG and Corpus Christi LNG, respectively, as well as a total export reduction of 0.42mmt among the remaining US plants. Nevertheless, February's month-on-month reduction notwithstanding, the month's exports were still considerably higher than their 2023 equivalent of 6.98mmt due to the ramp up of output at Freeport LNG and Calcasieu Pass LNG. Freeport LNG had been offline between early June 2022 and mid-February 2023 due to a fire incident and subsequent repairs.

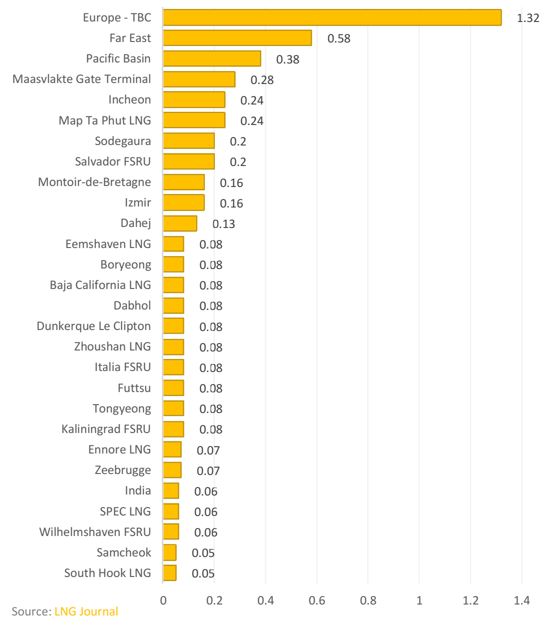
European demand was trending lower during the current report period. European offtakes during January-February accounted for 10.06mmt (62pct) of total US LNG exports whilst in November-December that figure stood at 11.98mmt (69pct). Data by GIE shows European inventories had an average fill level of roughly 61pct at the end of February, with Germany reporting gas storage to be 69pct full. Spain's storage was more than 70pct full whilst Portugal's was filled almost to capacity at the time of writing. Among major European gas consumers, only the United Kingdom showed inventory levels below 62pct.

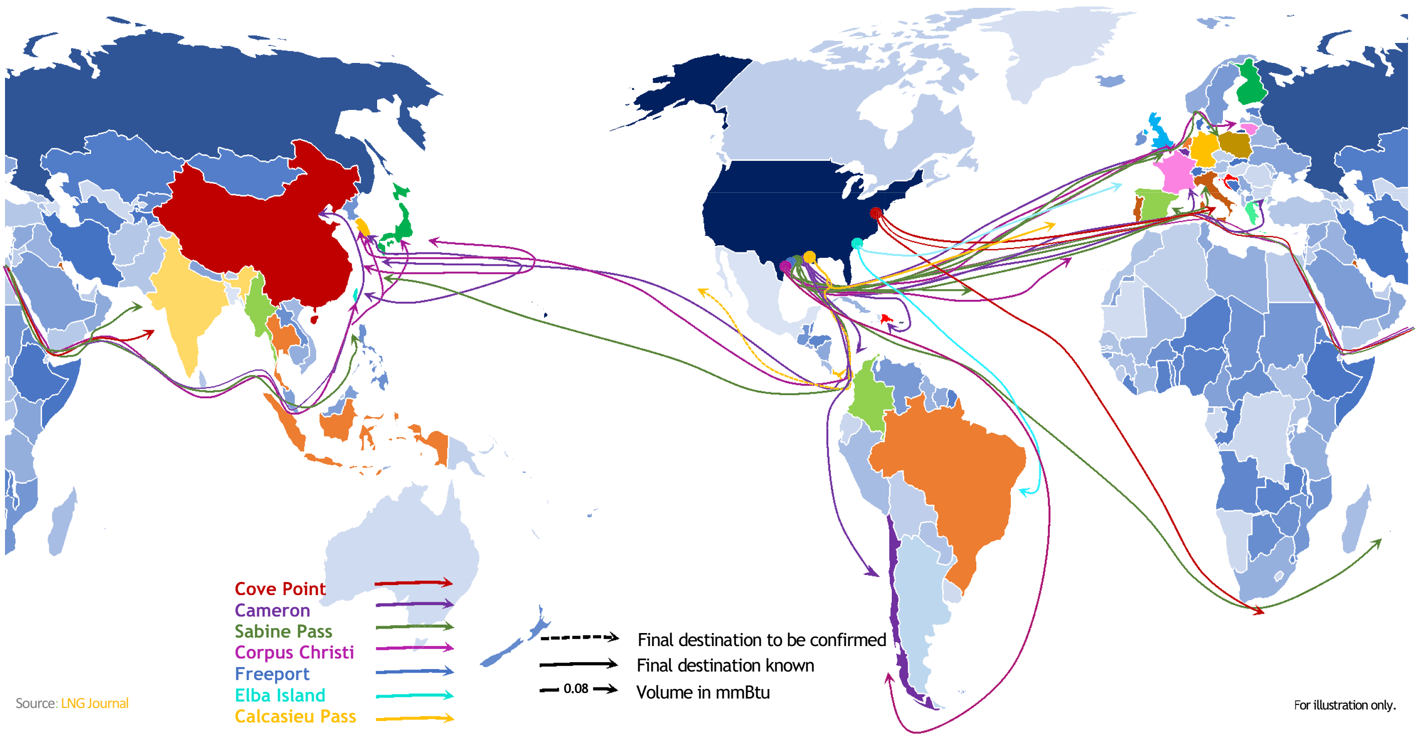
Full European gas stocks were instrumental in pushing down gas prices in Europe, with the TTF spot price at the end of February stood at EUR25.11/MWh, roughly equivalent of US$7.96/mmBtu. Meanwhile, the monthly Henry Hub gas spot prices, as assessed by the EIA, had climbed to US$3.18/mmBtu from its floor of US$2.15/mmBtu in May.

Cumulative US LNG Exports (MMt)



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





LNG Journal

US LNG Still in Transit as of 29 February 2024

Plant	Vessel	IMO	Terminal	Schedule	Total
Cameron LNG	Diamond Gas Orchid	9779226	Far East	29-Apr-24	0.06
Cameron LNG	Diamond Gas Sakura	9810020	Sodegaura	27-Mar-24	0.07
Cameron LNG	GasLog Seattle	9634086	Europe	16-Mar-24	0.07
Cameron LNG	Golar Crystal	9624926	Europe	06-Mar-24	0.07
Cameron LNG	Maran Gas Vergina	9732369	South Hook LNG	10-Mar-24	0.05
Cameron LNG	Marvel Crane	9770438	Incheon	16-Mar-24	0.08
Cameron LNG	Marvel Falcon	9760768	Zeebrugge	14-Mar-24	0.07
Cameron LNG	Marvel Kite	9760782	Pacific Basin	17-Mar-24	0.08
Cameron LNG	Marvel Swan	9880192	Far East	15-Mar-24	0.08
Cameron LNG	Sevilla Knutsen	9414632	Ennore LNG	02-Mar-24	0.07
Cameron LNG	Shinshu Maru	9791200	Incheon	10-Mar-24	0.08
Cameron LNG	Cobia LNG	9869306	Baja California LNG	01-Mar-24	0.08
Cameron LNG	LNG Enterprise	9874480	Europe	01-Mar-24	0.08
Cameron LNG	LNG Endurance	9874492	Far East	07-Apr-24	0.08
Cameron LNG	Seapeak Vancouver	9721401	Salvador FSRU	02-Mar-24	0.08
Cameron LNG	LNG Bonny II	9692002	Europe	14-Mar-24	0.07
Cameron LNG	New Apex	9929106	Montoir-de-Bretagne	06-Mar-24	0.08
Corpus Christi LNG	Energy Pacific	9854612	Europe	15-Mar-24	0.07
Corpus Christi LNG	Flex Constellation	9825427	Pacific Basin	10-Mar-24	0.07
Corpus Christi LNG	GasLog Wales	9853137	Dunkerque	08-Mar-24	0.08
Corpus Christi LNG	Gaslog Warsaw	9816763	Dahej	01-Apr-24	0.05
Corpus Christi LNG	Rias Baixas Knutsen	9825568	Rotterdam	14-Mar-24	0.08
Corpus Christi LNG	Adamastos	9879698	Eemshaven LNG	04-Mar-24	0.08
Corpus Christi LNG	Woodside R. Withers	9810367	Europe	04-Mar-24	0.08
Corpus Christi LNG	Global Sealine	9880477	Europe	05-Mar-24	0.08
Corpus Christi LNG	Gordon W. Knutsen	9946374	Dahej	13-Mar-24	0.08
Cove Point LNG	Energy Glory	9752565	Sodegaura	12-Mar-24	0.07
Cove Point LNG	GasLog Sydney	9626273	Sodegaura	28-Mar-24	0.06
Cove Point LNG	Traiano Knutsen	9854765	Italia FSRU	20-Mar-24	0.08
Cove Point LNG	Gui Ying	9878888	Map Ta Phut LNG	28-Mar-24	0.08
Cove Point LNG	GAIL Urja	9949027	Dabhol	03-Mar-24	0.08
Freeport LNG	Aristidis I	9862906	Map Ta Phut LNG	24-Mar-24	0.08
Freeport LNG	Bushu Maru	9796793	Futtsu	12-Apr-24	0.08
Freeport LNG	BW Pavilion Aranda	9792606	SPEC LNG	03-Mar-24	0.06
Freeport LNG	BW Pavilion Leeara	9640645	Europe	05-Mar-24	0.06
Freeport LNG	Diamond Gas Met.	9862487	Boryeong	02-Apr-24	0.08
Freeport LNG	Prism Agility	9810549	Zhoushan LNG	07-Apr-24	0.08
Freeport LNG	Prism Brilliance	9810551	Samcheok	06-Mar-24	0.05
Freeport LNG	Grace Freesia	9903920	Pacific Basin	16-Mar-24	0.08
Freeport LNG	Celsius Geneva	9945435	Izmir	10-Mar-24	0.08
Sabine Pass LNG	Cadiz Knutsen	9246578	Wilhelmshaven FSRU	14-Mar-24	0.06
Sabine Pass LNG	Celsius Canberra	9864796	Europe	22-Mar-24	0.08
Sabine Pass LNG	Flex Rainbow	9709037	Far East	18-Mar-24	0.07
Sabine Pass LNG	La Mancha Knutsen	9721724	Rotterdam	06-Mar-24	0.07
Sabine Pass LNG	La Seine	9845764	Europe	13-Mar-24	0.08
Sabine Pass LNG	Maran Gas Lindos	9627502	India	11-Mar-24	0.06
Sabine Pass LNG	Methane J. Elizabeth	9307190	Far East	22-Mar-24	0.06
Sabine Pass LNG	Pan Americas	9750232	Europe	07-Mar-24	0.07
Sabine Pass LNG	Rioja Knutsen	9721736	Rotterdam	01-Mar-24	0.06
Sabine Pass LNG	SM Eagle	9761827	Tongyeong	25-Mar-24	0.08
Sabine Pass LNG	Stena Crystal Sky	9383900	Europe	05-Mar-24	0.07
Sabine Pass LNG	Aristarchos	9862918	Europe	14-Mar-24	0.08
Sabine Pass LNG	MOL Hestia	9885996	Kaliningrad FSRU	07-Mar-24	0.08
Sabine Pass LNG	Flex Volunteer	9862463	Europe	07-Mar-24	0.08
Sabine Pass LNG	LNG Endeavour	9893606	Izmir	07-Mar-24	0.08
Sabine Pass LNG	Global Sea Spirit	9880465	Far East	17-Mar-24	0.07
Sabine Pass LNG	LNGShips Empress	9875800	Montoir-de-Bretagne	04-Mar-24	0.08
Sabine Pass LNG	Asklipios	9884021	Pacific Basin	30-Mar-24	0.08
Sabine Pass LNG	Orion Sea	9889904	Far East	02-Mar-24	0.08
Sabine Pass LNG	Clean Cajun	9886732	Far East	04-Mar-24	0.08
Sabine Pass LNG	Elisa Aquila	9884473	Incheon	31-Mar-24	0.08
Sabine Pass LNG	Clean Copano	9886744	Map Ta Phut LNG	09-Mar-24	0.08
Sabine Pass LNG	Cool Rider	9333591	Salvador FSRU	12-Mar-24	0.07
Sabine Pass LNG	Global Energy	9845013	Europe	03-Mar-24	0.08
Calcasieu Pass LNG	BW Pavilion Vanda	9640437	Europe	05-Mar-24	0.05
Calcasieu Pass LNG	Energy Universe	9758844	Rotterdam	13-Mar-24	0.07
Calcasieu Pass LNG	Global Star	9859741	Europe	06-Mar-24	0.08
Calcasieu Pass LNG	Maran Gas Amorgos	9887217	Europe	10-Mar-24	0.07
Calcasieu Pass LNG	Seapeak Magellan	9342487	Pacific Basin	18-Mar-24	0.07

*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.

Monthly US LNG Exports (MMt)

Period between 01 January 2024 and 29 February 2024, inclusively

LNG Journal

Elba Island LNG

Elba Island LNG produced at annualised nameplate capacity utilisation of 95pct and exported a total of five cargoes amounting to 0.39mmt during the report period of January and February. This was down 0.17mmt (-30pct) from the 0.56mmt shipped during the November-December period. Elba Island's annualised capacity utilisation for the report period, therefore, was also down by 39pp to 95pct from 134pct during the previous report period. Notably, the share of the plant's January-February shipments that went to Europe stood at 0.23mmt, equating to 59pct of total LNG shipped. Only one cargo went to the Pacific.

Calcasieu Pass LNG

Calcasieu Pass LNG decreased its period-on-period exports. The plant shipped 1.78mmt during the report period, down 0.13mmt (-7pct) from 1.91mmt during the November-December period. Annualised capacity utilisation thus also moved down by 5pp from 101pct in November-December to 96pct in January-February. Almost two thirds of Calcasieu Pass shipments sailed for Europe during the report period with most of that share arriving in the United Kingdom. At the time of writing, the Energy Fidelity was loading a cargo at the plant.

Cameron LNG

Exports from Cameron LNG saw slight period-on-period growth. The plant shipped 2.79mmt in January-February, up 0.06mmt (2pct) from the 2.73mmt recorded during the previous period of November-December. Cameron LNG thereby operated at an annualised capacity utilisation of 114pct for the report period. This was up 5pp from 109pct in November-December. At the time of writing, the BW Pavilion Aranthera was approaching the plant for a cargo loading.

Cove Point LNG

Cove Point LNG increased exports period-on-period, with shipments up by 0.07mmt (7pct) to 1.02mmt in January-February from 0.95mmt during the previous period of November-December. In January-February, the plant thus saw output well above annualised nameplate capacity at 118pct, which was up 10pp from 108pct during the previous period.

Freeport LNG

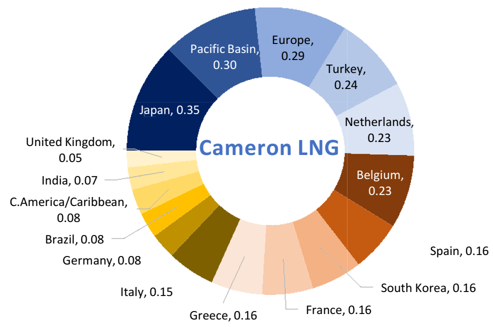
Freeport LNG significantly reduced its LNG exports during the report period by 0.48mmt (-17pct) with exports amounting to 2.35mmt, pegging annualised capacity utilisation for the January-February period at 93pct. During the previous report period of November-December, Freeport's LNG exports amounted to 2.83mmt, indicating annualised capacity utilisation of 110pct. Freeport LNG was shut down in early June 2022 due to a fire incident and only resumed exports in mid-February 2023 but ramped up output quickly. At the time of writing, the Bushu Maru was loading a cargo at the plant.

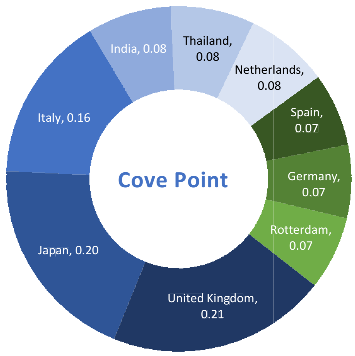
Corpus Christi LNG

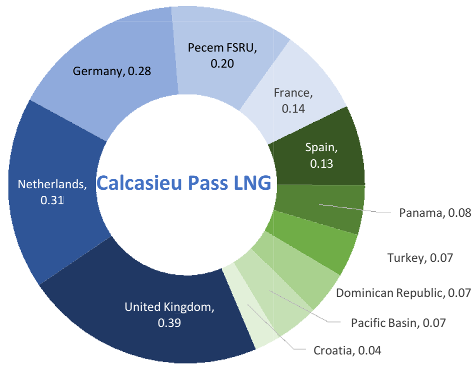
Corpus Christi LNG saw production slide once more in January-February after a period-on-period increase in November-December. In January-February, exports were down by 0.34mmt (-13pct) to 2.35mmt from 2.69mmt in November-December. The plant's January-February shipments of 2.35mmt pegged report period utilisation at 95pct, down 12pp from the previous period. At the time of writing, the Maran Gas Marseille was approaching the plant to load a cargo.

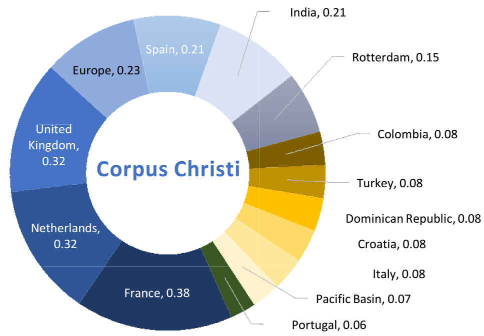
Sabine Pass LNG

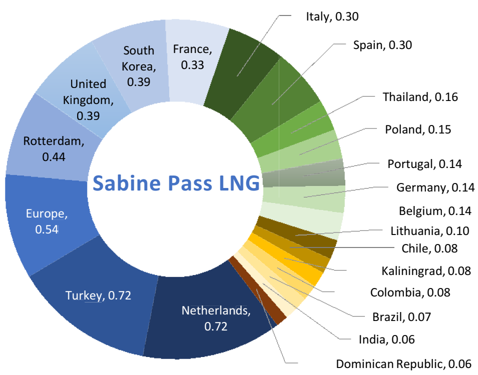
Sabine Pass LNG's exports stood at 5.39mmt for the current report period, pegging capacity utilisation at 109pct, down 6pp period-on-period. The shipped volumes during January-February thus decreased by 0.39mmt (-7pct) from the 5.78mmt exported during November and December. Sabine Pass LNG's exports continued to be underpinned by shipments to Europe, followed by flows to the Far East and Pacific. The plant was loading LNG onto the Clean Resolution, the Castillo de Merida and the Maran Gas Troy at the time of writing.











Source: LNG Journal

US LNG Exports (MMt) - Report Period

LNG Journal

Importers	2023 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2024 Jan	Feb	Total
Netherlands	0.75	0.95	1.35	1.27	1.48	0.98	1.15	1.13	0.91	1.02	0.78	0.98	0.91	0.91	14.57
France	0.60	0.97	0.67	1.23	1.08	0.99	0.48	0.69	0.68	1.15	1.31	0.91	0.69	0.93	12.38
United Kingdom	1.46	1.50	1.41	1.64	0.54	–	–	0.08	0.15	0.61	1.07	1.22	0.93	0.57	11.18
Japan	0.37	0.29	0.46	0.30	0.66	0.59	0.95	0.67	0.70	0.43	0.57	0.57	0.42	0.28	7.26
Spain	0.33	0.62	0.92	0.30	0.29	0.31	0.77	0.42	0.24	1.08	0.30	0.33	0.82	0.21	6.94
South Korea	0.50	0.52	0.30	0.55	0.26	0.29	0.45	0.75	0.52	0.59	0.56	0.74	0.45	0.39	6.87
Italy	0.16	0.36	0.39	0.38	0.41	0.31	0.32	0.47	0.48	0.16	0.48	0.45	0.54	0.15	5.06
Turkey	0.86	0.35	0.23	0.30	–	–	–	0.04	0.12	0.14	0.69	0.83	0.95	0.39	4.90
Germany	0.28	0.13	0.37	0.52	0.28	0.33	0.39	0.47	0.36	0.37	0.30	0.46	0.30	0.27	4.83
India	0.15	0.28	0.22	0.31	0.17	0.32	0.47	0.37	0.55	0.28	0.16	0.38	0.24	0.26	4.16
China	0.38	0.04	0.08	0.07	0.12	0.44	0.78	0.32	0.24	0.39	0.55	0.31	–	0.08	3.80
Poland	0.24	0.14	0.16	0.16	0.39	0.40	0.08	0.24	0.23	0.40	0.23	0.22	0.22	0.08	3.19
Belgium	0.08	0.24	0.21	0.05	0.08	0.16	–	0.08	0.19	0.54	0.22	0.31	0.30	0.15	2.61
Taiwan	0.08	0.10	0.22	0.19	0.23	0.14	0.29	0.29	0.26	0.14	0.13	0.14	0.15	–	2.36
Dominican Republic	0.03	0.08	0.03	0.14	0.24	0.15	0.17	0.23	0.15	0.15	0.18	0.07	0.23	0.06	1.91
Portugal	0.14	0.13	0.16	0.13	0.24	0.08	0.23	0.16	0.13	0.16	0.08	0.06	0.14	0.06	1.90
Thailand	0.08	0.02	0.08	0.08	–	0.08	0.15	0.31	–	0.15	0.16	0.08	0.16	0.16	1.51
Croatia	0.08	0.12	0.07	0.08	0.02	–	0.21	0.08	0.23	–	0.23	0.05	0.20	–	1.37
Europe - TBC	–	–	–	–	–	–	–	–	–	–	–	–	–	1.32	1.32
Lithuania	0.15	–	0.07	0.07	0.15	–	0.15	0.15	0.22	0.15	–	0.07	0.02	0.08	1.28
Brazil	–	–	0.05	0.06	0.05	0.30	–	0.07	0.12	0.10	0.08	0.08	0.16	0.07	1.14
Greece	0.03	0.12	0.04	0.09	0.16	0.08	–	0.10	0.08	–	–	0.25	0.16	–	1.11
Colombia	–	–	–	–	0.10	–	–	0.07	0.15	0.16	0.09	0.16	0.16	0.14	1.03
Pacific Basin - TBC	–	–	–	–	–	–	–	–	–	–	–	–	0.23	0.73	0.96
Argentina	–	0.02	0.02	0.21	0.32	0.26	0.11	–	–	–	–	–	–	–	0.94
Finland	–	–	0.14	–	0.15	0.05	0.07	0.16	0.16	–	0.08	0.07	–	–	0.88
Chile	0.07	–	0.11	–	0.15	0.12	0.21	–	0.08	–	–	–	0.08	–	0.82
Kuwait	–	–	–	0.08	0.08	0.22	0.15	0.07	0.16	–	–	–	–	–	0.76
Singapore	–	–	–	–	–	0.22	–	0.07	0.19	0.07	–	–	0.08	–	0.63
Panama	0.09	–	0.06	–	0.08	–	0.08	–	0.08	–	0.07	0.08	0.08	–	0.62
Bangladesh	0.07	–	–	–	0.08	0.08	–	0.15	–	–	0.08	0.07	–	–	0.53
Mexico	0.07	–	–	–	–	–	–	–	–	0.08	–	–	–	–	0.15
Philippines	–	–	–	–	–	–	–	–	–	0.06	0.08	–	–	–	0.14
OPT LNG Hub	–	–	–	–	–	–	0.04	–	–	–	–	–	0.08	–	0.12
Jamaica	–	–	–	–	–	–	0.04	–	0.08	–	–	–	–	–	0.12
Jordan	–	–	–	–	–	–	0.08	–	–	–	–	–	–	–	0.08
Kaliningrad	–	–	–	–	–	–	–	–	–	–	–	–	–	0.08	0.08
Pakistan	–	–	–	–	–	–	–	–	–	–	–	0.08	–	–	0.08
Malta	0.06	–	–	–	–	–	–	–	–	–	–	–	–	–	0.06
Puerto Rico	–	–	–	–	–	–	–	–	–	0.06	–	–	–	–	0.06
Indonesia	–	–	–	–	–	–	0.04	–	–	–	–	–	–	–	0.04
Grand Total	**7.11**	**6.98**	**7.82**	**8.21**	**7.81**	**6.90**	**7.86**	**7.64**	**7.46**	**8.44**	**8.48**	**8.97**	**8.70**	**7.37**	**109.75**

Source: LNG Journal

Gastech

Hydrogen | Climatetech

EXHIBITION & CONFERENCE

GEORGE R BROWN CONVENTION CENTER | HOUSTON | 17-20 SEPTEMBER 2024

Gastech Houston 2024

BOOK A STAND

Transforming energy through vision, innovation and action

Gastech is the largest energy exhibition and conference for natural gas, LNG, hydrogen, climate technologies, low-carbon solutions and energy manufacturing - providing the defining answers of the coming decades as the world decarbonizes its energy system.

Gastech 2024 show floor features include:

Hydrogen zone

Accelerating hydrogen's role in the global energy mix

Climatetech zone

Decarbonizing the energy value chain

Shipping and Marine zone

Investing in LNG infrastructure and decarbonizing the marine value chain

50,000	800	20	5,000	1,000	500	125
Attendees	Exhibitors	International country pavilions	Delegates	Speakers	Ministers and global energy CEOs	Countries represented

Host City: Houston

Supported by: Bilateral Chamber bilateralchamber.org

Organized by: dmg::events

gastechevent.com

@gastechevent #Gastech