
The LNG industry

GIIGNL Annual Report



2022



Profile

GIIGNL is a non-profit organisation whose objective is to promote the development of activities related to LNG: purchasing, importing, processing, transportation, handling, regasification and its various uses.

The Group constitutes a forum for exchange of information and experience among its 84 members in order to enhance the safety, reliability, efficiency and sustainability of LNG import activities and in particular, the operation of LNG import terminals.



© GIIGNL - International Group of Liquefied Natural Gas Importers
All data and maps provided in this publication are for information purposes and shall be treated as indicative only.
Under no circumstances shall they be regarded as data or maps intended for commercial use. Reproduction of the contents of this publication in any manner whatsoever is prohibited without prior consent of the copyright owners.

Acknowledgements

We wish to thank all member companies for their contribution to the report and the following international experts for their comments and suggestions:

- Cybele Henriquez – Cheniere Energy
- Najla Jamoussi – Cheniere Energy
- Sarah Holden – Clarksons
- Oliver Stavrinidis – Clarksons
- Laurent Hamou – Elengy
- Luis Ignacio Parada – Enagás
- María Ángeles de Vicente – Enagás
- Paul-Emmanuel Decroës – Engie
- Oliver Simpson – Excelerate Energy
- Dimitris Alexiou – Excelerate Energy
- Andy Flower – Flower LNG
- Mathias Borgnes – Høegh LNG
- Thomas Thorkildsen – Høegh LNG
- Gavin Stevens – MOL
- Carlos Humphrey – Naturgy Energy Group
- Mayumi Ikeda – Tokyo Gas
- Laurent Chaveron – TotalEnergies
- Xinyi Zhang – TotalEnergies

The LNG industry in 2021



Jean Abiteboul
President

Dear Colleagues,

In 2021, natural gas markets were characterized by persistent supply constraints and fast recovering demand, which put strong upward pressure on LNG prices and highlighted the interdependence and vulnerability of energy supply chains. The looming price volatility has been exacerbated in February 2022 by the Russia-Ukraine conflict, and the current European energy crisis proves to be a stark reminder of LNG's vital role in ensuring energy security and economic stability. Governments and public institutions are becoming increasingly involved in the LNG business, and we will monitor the consequences of this paradigm shift over the course of the coming year. During 2021, LNG imports returned to robust growth, reaching 372.3 MT, a 4.5% increase over 2020. Asia remained the main demand center for LNG, growing by 7.1%. Strong economic recovery in China, rising natural gas demand for power generation in South Korea, lower than expected pipeline gas supplies to Europe and reduced availability of hydropower in Brazil contributed to the significant increase in global LNG demand. China overtook Japan as the world's top LNG importing country, recording a 15% annual growth. On the supply side, the United States added 22.3 MT of new volumes to the market, recording a 49.8% rise in exports and becoming Europe's leading LNG supplier.

With 68 new vessels delivered during the year, the LNG shipping fleet reached 700 vessels, including 48 FSRUs and 31 LNG bunkering vessels, representing a 9% increase in cargo capacity. Freight rates remained very strong throughout the year and the orderbook at year end was remarkably high, with 196 units to be delivered by 2025.

Global regasification capacity rose by 46 MTPA last year, reaching 993 MTPA. Four new large-scale terminals were brought in operation in Brazil, Croatia, Indonesia and Kuwait. Five expansion programs were completed, four of which in China and one in Japan. Croatia became the 44th LNG importing market, while at least 6 new markets could start importing in 2022, in El Salvador, Ghana, Hong Kong, Philippines, Senegal and Vietnam.

In the meantime, LNG production has been struggling to keep pace with demand, which sent spot LNG prices upwards. While 7.4 MTPA of new capacity came onstream, 5 MTPA of which in the United States, global LNG exports were affected by unscheduled maintenance and shortfalls in feedgas. Increased output from the US, Egypt, Malaysia and Russia was partly offset by lower exports from Angola, Indonesia, Nigeria, Norway, Peru and Trinidad. In 2021, only two FIDs were taken, the North Field East expansion project in Qatar, which will add 33 MTPA of liquefaction capacity from 2025, and Pluto LNG Train 2 in Australia, for 5 MTPA. By 2025, more than 120 MTPA of new liquefaction capacity are planned to progressively come online, which should partly relieve tensions in the LNG market.

In an environment marked by geopolitical tensions, risks of energy shortages and price volatility, last year saw a strong return of long-term contracts. Asian buyers, notably Chinese NOCs and independent importers played a leading role in securing new term purchases from the US, Qatar and Russia.

In the future, the much-needed substitution of coal and polluting liquid fuels as well as the geographical mismatch between natural gas production and

consumption regions will generate significant additional LNG demand. While many economies in the world are facing rising energy bills and energy supply security issues, LNG has clear potential to support economic growth and the achievement of net zero carbon ambitions, provided that additional investments in all stages of the natural gas and LNG supply chains are made to meet expected demand growth.

The LNG industry is also continuing its efforts to reduce the carbon footprint of the LNG supply chain and drive transparency on greenhouse gas emissions, including methane. In this regard, GIIGNL published in 2021 the first holistic framework to monitor, report, verify and offset GHG emissions from LNG cargoes.

In an environment dominated by energy security issues and decarbonization commitments, LNG is a proven, clean and flexible solution, which is uniquely placed to meet sustainability challenges while enhancing competitiveness and energy resilience. As the International Association of LNG Importers, GIIGNL remains committed to promote dialogue and share experience to ensure a stable, flexible, affordable and sustainable access to LNG imports for the benefit of all.

Jean Abiteboul
President

Key figures 2021

372.3 MT

imported vs. 356.1 MT in 2020

+4.5%

growth vs. 2020

19

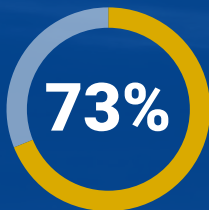
exporting
countries

44

importing
markets

7

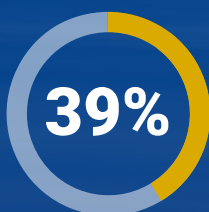
new LNG regasification
terminals



of global LNG
demand in Asia

993 MTPA

total regasification capacity*



of global LNG volumes
supplied from the
Pacific Basin

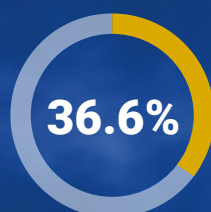
462 MTPA

total liquefaction capacity*

* At the end of 2021

136.3 MT

imported on a spot or
short-term* basis or
36.6% of total trade



Contents

Key Figures	4
LNG trade in 2021	6
Contracts signed in 2021	8
Medium-term and long-term contracts in force in 2021	12
LNG shipping	20
LNG imports in 2021	36
Liquefaction plants	44
Regasification terminals	52
Retail LNG in 2021	65
World LNG Maps	66
About GIIGNL	70

*Quantities delivered under contracts of a duration of 4 years or less

LNG trade in 2021

In 2021, global LNG imports reached **372.3 million tons (MT)**, increasing by 16.2 MT compared with the previous year. The post-lockdowns economic recovery and continued coal-to-gas switch resulted in a surge in LNG imports, although the annual growth rate (+4.5%) remained far from pre-pandemic levels. The recovery has been uneven across regions, with Asia recording the highest growth – led by China which overtook Japan as the world's leading LNG importer – while Europe struggled to attract LNG cargoes throughout most of the year.

Croatia joined the rank of LNG importers. 44 markets imported LNG volumes, from 19 exporting countries.

US LNG growth outpaces global LNG growth

In 2021, incremental LNG supply from the United States (+22.3 MT) accounted for more than the total global incremental supply (+16.2 MT). Imports from the United States grew by 49.8%, thanks to the ramp-up of five large liquefaction projects commissioned in 2020 (Cameron LNG Trains 2 and 3, Corpus Christi LNG Train 3, Freeport LNG Trains 2 and 3) as well as to the commissioning of Sabine Pass Train 6 in 2021. New supply was also added, but to a much lesser extent, by Egypt (+5.2 MT), Algeria (+1.2 MT), Malaysia (+1.1 MT) and Australia (+0.8 MT). Besides Sabine Pass Train 6, other supply additions in 2021 included Yamal Train 4, PFLNG Dua in Malaysia and the restart of operations of Damietta in Egypt.

The greatest declines in LNG exports were recorded by Nigeria (-4.1 MT) due to maintenance issues, Trinidad and Tobago (-3.9 MT) due to lack of feedgas and Norway (-2.9 MT) due to delays in the restart of operations at Snøhvit after the technical incident which occurred in 2020.

The Atlantic Basin and the Middle East experienced growth in 2021, adding +17.9 MT and +0.6 MT respectively. Similarly to 2020, the Pacific Basin continued to show a decline in LNG exports in 2021 (-2.3 MT). The Pacific Basin remains the largest source of LNG supplies to the global market with 143.9 MT or 38.6%, closely followed by the Atlantic Basin with 135.2 MT or a 36.3% market share, and the Middle East with 93.2 MT, a 25% market share. Supply from the Middle East increased from 92.6 MT to 93.2 MT, a +0.6% increase.

As production from the US continues to increase, the gap between supply from the Pacific Basin and the Atlantic Basin has substantially narrowed from 28.8 MT in 2020 to only 8.6 MT in 2021.

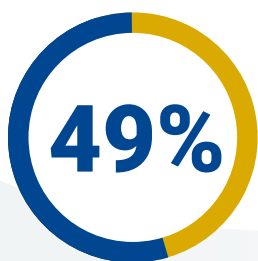
Among LNG supplying countries, Australia and Qatar are still leading the pack, with 78.5 MT and 77 MT respectively. Third, the United States supplied 67 MT of LNG in 2021 and could become the world's leading LNG supplier in 2022. The Russian Federation came fourth with 29.6 MT, followed by Malaysia with 25 MT. Australia, Qatar, and the United States accounted together for 59.8% of global LNG supply.

Asian demand growth exceeds global LNG supply growth

Asia continues to be the leading importing region with a 73.2% share of global LNG imports, up from 71.4% in 2020. Asian LNG imports grew by 7.1% in 2021, reaching 272.5 MT. Imports rose in all Asian countries except India, Japan, Malaysia and Singapore. India experienced the greatest decrease in LNG imports (-2.6 MT or -9.8%) due to the high spot LNG prices and to the increase in domestic gas production, which led Indian gas consumers to import less LNG through the first three quarters of the year. This had a notable impact in spot imports which recorded a steady decline from March 2021 onwards.

China overtook Japan as first LNG importer globally. The country experienced the world's highest growth rate in terms of imported volumes i.e. +10.4 MT or +15%, totaling 79.3 MT at year-end. Record imports were driven by the robust economic recovery as well as the growth in gas for power generation and coal to gas switching. In order to avoid the situation of winter 2020/2021, Chinese buyers procured LNG ahead of the winter season to comply with storage requirements and anticipate high demand.

LNG imports into Japan remained relatively stable, recording a slight decline of 0.1 MT or -0.1%. The decline can be explained by the continuation of restrictions throughout most of 2021, which included restrictions on commercial activities, as well as a decrease in gas-fired power generation to the benefit of nuclear generation.



of US volumes delivered to Asia, 32% to Europe, 18% to Americas, 1% to the Middle East

18%

of global LNG volumes imported from the US.

+15%

Increase in Chinese LNG imports, compared with + 12% in 2020.

South Korea experienced a strong growth in LNG imports (+6.1 MT or +15%), notably due to a greater gas demand for the power sector and for industrial consumption. The demand growth was exacerbated by the cold weather and the recovery from the pandemic. Maintenance in nuclear generation and the implementation of sustainable governmental policies which resulted in a decline in coal consumption also contributed to gas demand growth.

Other Asian countries have also seen important increases in their LNG consumption: in Taiwan, imports grew by 9.5% (+1.7 MT) due to an increase in gas-fired power generation following the planned outages of hydro, coal and nuclear plants. Other Asian countries which increased their LNG imports in 2021 are: Thailand (+0.9 MT), Bangladesh (+0.9 MT), Pakistan (+0.8 MT), and Indonesia (+0.6 MT), mostly due to the decline of domestic gas production and to post-Covid recovery.

Europe in competition with Asia and Latin America

Constrained by dwindling domestic gas production, high demand due to lower temperatures, along with lower than expected additional pipeline deliveries from Russia which brought storage levels to record lows, Europe suffered an unusual situation in 2021, when high JKM / TTF price differential made flexible LNG volumes go preferably to Asia instead of Europe throughout most of the year. This situation worsened until the last quarter of 2021 and Europe's difficulty to fill in its underground storages forced demand to adjust through a reduction in industrial consumption and gas-to-coal switching. Overall, Europe's net LNG imports decreased by 8% in 2021 totaling 75.1 MT, a decrease of 6.5 MT compared to 2020. The United Kingdom (-2.4 MT or -17.8%) and Italy (-2.2 MT or -24.1%) recorded the largest declines, whereas Croatia imported LNG for the first time (1.2 MT).

Imports into the American region increased by 36.3% (+4.8 MT), reaching 18 MT in 2021. Mexican imports recorded the largest drop -67.5% or -1.3 MT, as the country is continuing its trend towards becoming less reliant on LNG imports. Other countries in the American region experiencing significant decreases include the United States with -0.5 MT or -52.7% and Colombia with -0.3 MT or -85%. The draught experienced in Brazil – highly dependent on hydropower generation – and the inability to increase domestic production to meet demand, led to an increase in LNG imports following the start-ups of two LNG-to-power projects at Sergipe and Port of Açu. Brazil recorded the highest increase in the region in both in terms of volumes and percentage (+4.6 MT or +193%), amounting to a total of 7 MT of LNG imported. The country became the leading importer in South America, followed by Chile (3.1 MT) and Argentina (2.5 MT). The latter experienced a growth in LNG imports (+1.2 MT or 85%) due to reduced imports from Bolivia and lower domestic production. Other Caribbean islands like Puerto Rico (+0.6 MT or +62.8%) or the Dominican Republic (+0.3 MT or +26.1%), have also experienced large increases in LNG imports, due to an increase in the use of natural gas for power generation, as an alternative to more polluting liquid fuels.

In the Middle East, LNG imports slightly decreased compared to 2020 (-0.2 MT). Israel and the UAE experienced declines in their LNG imports, whereas Jordan did not import any cargo in 2021. Kuwait saw the greatest increase, +1.3 MT or +31.3%, with the Al-Zour LNG terminal becoming operational in 2021.

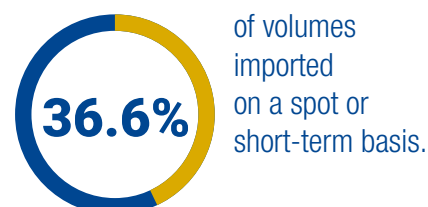
Spot and short term imports pressured by high spot prices in Asia and Europe

In 2021, spot and short-term transactions reached 136.3 MT (-6.2 MT or -4.4% compared with the previous year). This volume represented 36.6% of total trade, compared with 40% in 2020. High spot LNG prices in

Asia and Europe discouraged to a certain extent the resort to spot LNG procurement. This was particularly blatant in price sensitive countries like India (-6.1 MT). The United States consolidated its position as the leading exporter of spot and short-term LNG, accounting for almost one third (32.2%) of the volumes, followed by Australia with a 18.7% market share. Following the restart of exports from Damietta, Egypt was also a significant provider of spot and short-term volumes during the year (+4 MT). On the contrary, Nigeria (-7.1 MT) and Trinidad and Tobago (-3.2 MT) recorded substantial declines.

"True" spot volumes (i.e., volumes delivered within three months from the transaction date) reached 31% of total imports in 2021 or 116 MT, compared with 35% of total imports in 2020 (125 MT).

In 2021, re-exports of LNG increased to 3.5 MT compared with 2.6 MT in 2020. In 2021, 14 countries re-exported LNG and 26 countries received re-exported volumes. Europe – led by Spain, which was the largest re-exporter (1 MT), followed by France (0.7 MT) and the Netherlands (0.6 MT) – accounted for 67% of the re-exported volumes (2.3 MT). Asia, driven by India, China and Bangladesh, was the main destination for the reloaded volumes from Europe.

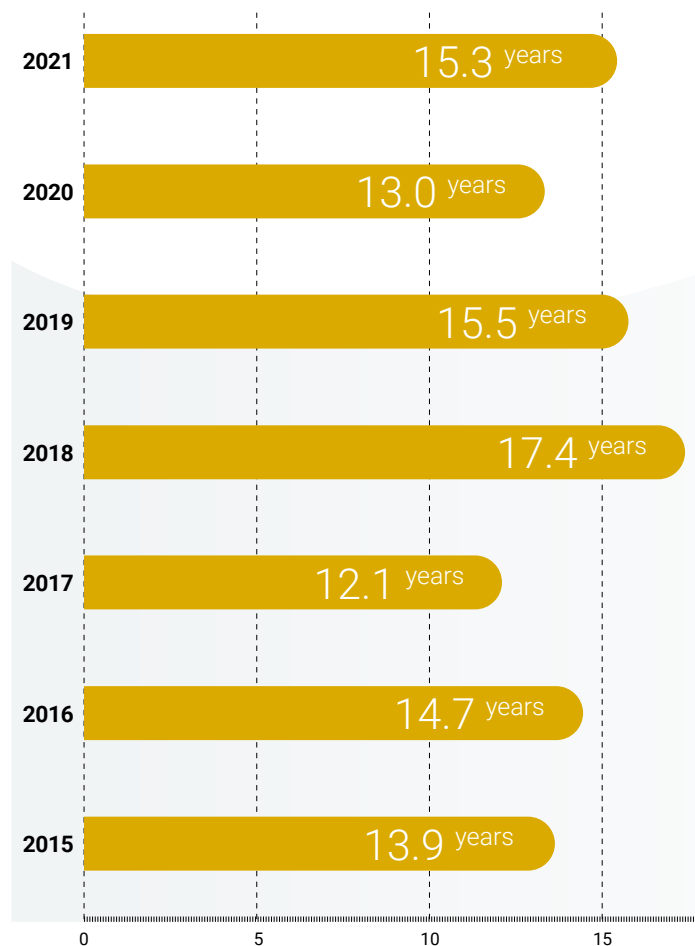


Contracts signed in 2021

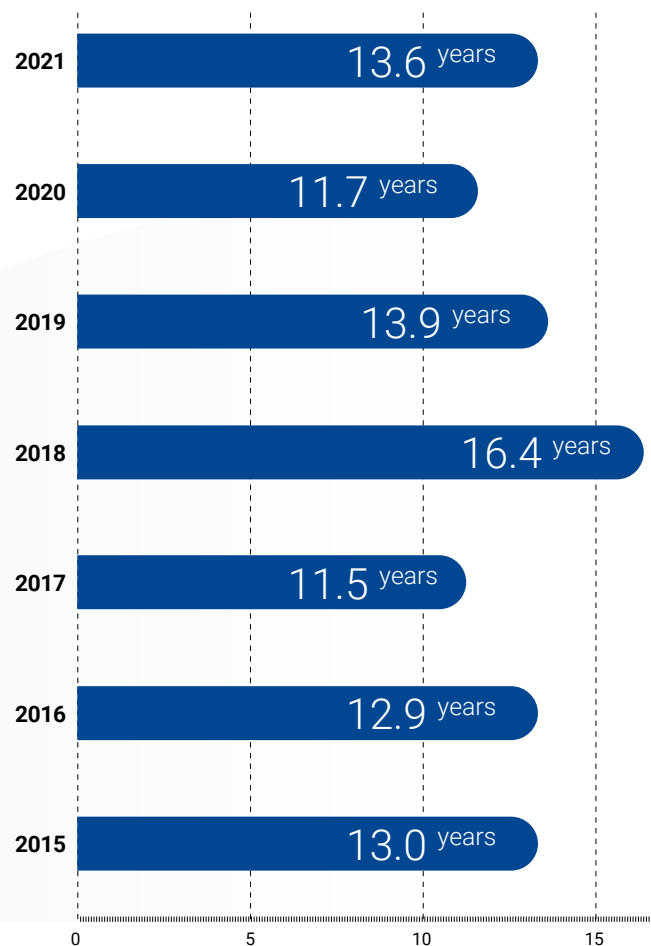
Export Country	Import market	Seller	Buyer	ACQ (MTPA)	Start date	Duration	Delivery Format	Comments
LONG & MEDIUM TERM CONTRACTS (> 4 YEARS)								
BP Portfolio	China	BP	Guangzhou Gas	0.65	2022	12	DES	
BP Portfolio	China	BP	Shenzhen Gas	0.3	2023	10	DES	To supply regasified LNG through Guangdong Dapeng LNG terminal
BP Portfolio	China	BP	SPIC (State Power Investment Corp)	0.2	2023	10	DES	To supply regasified LNG through Guangdong Dapeng LNG terminal
BP Portfolio	Singapore	BP	Pavilion Energy	0.8	2024	10	DES	
Canada/Woodfibre LNG	Multiple	Pacific Energy	BP Gas Marketing	0.75	2025	15	FOB	
Chevron Portfolio	Japan	Chevron	Hokkaido Gas	0.1	2022	5	DES	Approximately 0.5 MT over 5 years from April 2022 to March 2027
Chevron Portfolio	Singapore	Chevron	Pavilion Energy	0.5	2023	6	DES	
France TotalEnergies	France	TotalEnergies	MSC Cruises	0.05	2022	10	DES	For bunkering in Marseille from January 2022 to December 2031
New Fortress Energy Portfolio	Brazil	New Fortress Energy	Norsk Hydro	0.57	2022	15	DES	Gas supply agreement: to supply regasified LNG through Barcarena terminal
New Fortress Energy Portfolio	Brazil	New Fortress Energy	Unigel	0.8	2022	5	DES	Gas supply agreement: to supply regasified LNG through Sergipe/Suape terminals
New Fortress Energy Portfolio	Mexico	New Fortress Energy	CFEnergia	0.28	2022		DES	Gas supply agreement: to supply regasified LNG through Pichilingue terminal
Nigeria Bonny Island	Nigeria	Nigeria LNG	Asiko Power, Bridport Energy, Gas-Plus Synergy	1.1		10		
Petronas Portfolio	China	Petronas	CNOOC	2.2		10	FOB/DES	
Qatar	Bangladesh	Qatar Energy	Vitol	1.25	2021	10	DES	Start late 2021
Qatar	China	Qatar Energy	CNOOC	3.5	2022	15		
Qatar	China	Qatar Energy	Guangdong Energy	1	2024	10	DES	Delivered to Dapeng and Zhuhai terminals
Qatar/QatarGas I	China	Qatar Energy	Shell	1	2022	10	DES	
Qatar	China	Qatar Energy	Sinopec	2	2022	10	DES	Start January 2022
Qatar	China	Qatar Energy	Suntien Green (S&T International)	1	2022	15	DES	Delivered to Tangshan Suntien terminal
Qatar	Pakistan	Qatar Energy	Pakistan State Oil	3	2022	10	DES	
Qatar	South Korea	Qatar Energy	KOGAS	2	2025	20	DES	From January 2025 to December 2044
Qatar	Taiwan	Qatar Energy	CPC	1.25	2022	15	DES	From January 2022 to December 2036
Russia/Arctic LNG 2	China	Arctic LNG 2	CNOOC	1.98	2023	20	FOB	FOB Murmansk/FOB Kamchatka
Russia/Arctic LNG 2	China	Arctic LNG 2	CNPC	1.98	2023	20	FOB	FOB Murmansk/FOB Kamchatka
Russia/Arctic LNG 2	Japan	Arctic LNG 2	Japan Arctic LNG	1.98	2023	20	FOB	FOB Murmansk/FOB Kamchatka
Russia/Arctic LNG 2	Asia/Europe	Arctic LNG 2	Novatek	11.2	2023	20	FOB	FOB Murmansk/FOB Kamchatka
Russia/Arctic LNG 2	Portfolio	Arctic LNG 2	TotalEnergies	1.98	2023	20	FOB	FOB Murmansk/FOB Kamchatka
Russia/Arctic LNG 2 Novatek Portfolio	China	Novatek	Shenergy	0.2	2024	15	DES	
Shell Portfolio	China	Shell	CNPC (PetroChina)		2021	5		LNG supplied is carbon neutral
Singapore/SLNG Pavilion Portfolio	China	Pavilion Energy	Zhejiang Hangjiixin Clean Energy	0.5	2023		FOB	
TotalEnergies Portfolio	China	TotalEnergies	Shenergy	1.4	2021	20	DES	From July 2021 to July 2041
TotalEnergies Portfolio	India	TotalEnergies	Arcelor Mittal Nippon Steel	0.5	2022	5	DES	From January 2022 to December 2026

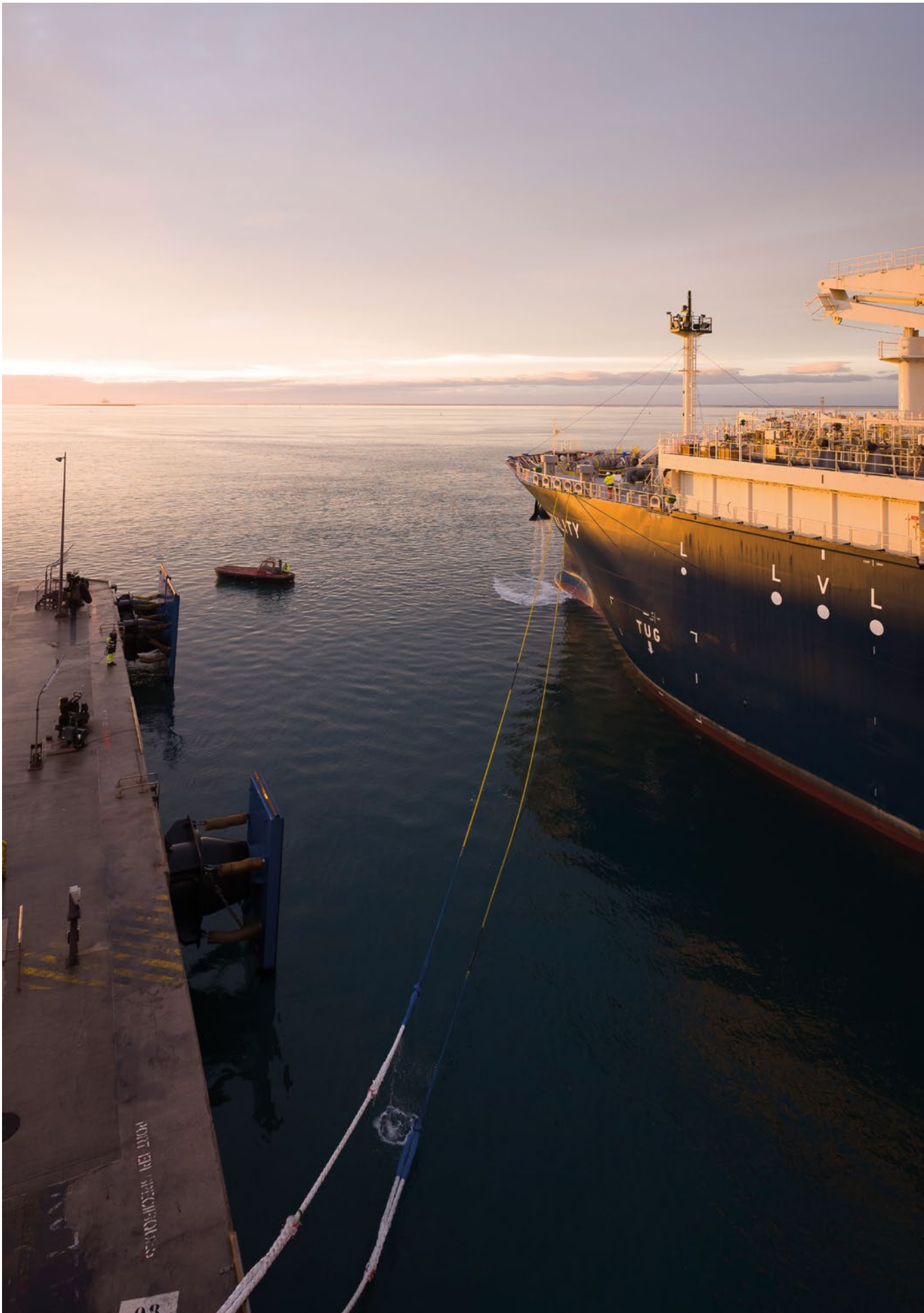
Export Country	Import market	Seller	Buyer	ACQ (MTPA)	Start date	Duration	Delivery Format	Comments
Trinidad & Tobago Point Fortin	Mexico	BP	Sempra LNG		2021		DES	Evergreen Ex-ship MSPA with no firm ACQ starting in April 2021, LNG sourced from Atlantic LNG and delivered to ECALNG
United States Cheniere Portfolio	China	Cheniere	Foran Energy	0.3	2023	20	DES	Start January 2023
United States/Calcasieu Pass	Portfolio	Venture Global	PGNiG	0.5	2023	20	FOB	
United States/Corpus Christi	Multiple	Cheniere	Glencore	0.8	2023	13	FOB	Start April 2023
United States/Corpus Christi	Multiple	Cheniere	Sinochem	1.8	2022	17.5	FOB	Start July 2022; Initial volume 0.9 MTPA in 2022, which increases to 1.8 MTPA
United States/Corpus Christi	Portfolio	Cheniere	ENGIE	0.9	2021	20	FOB	Started in September 2021
United States/Driftwood LNG		Tellurian	Shell	3	2026	10	FOB	
United States/Driftwood LNG	Portfolio	Tellurian	Gunvor	3	2026	10	FOB	
United States/Driftwood LNG	Portfolio	Tellurian	Vitol	3	2026	10	FOB	
United States Plaquemines LNG	China	Venture Global	Sinopec	2.8	2024	20	FOB	Start with commercial operations of Plaquemines Phase 1
United States Plaquemines LNG	China	Venture Global	Sinopec	1.2	2024	20	DPU	Start with commercial operations of Plaquemines Phase 1
United States Plaquemines LNG	Multiple	Venture Global	CNOOC	2	2026	20	FOB	
United States Plaquemines LNG	Portfolio	Venture Global	PGNiG	1.5	2024	20	FOB	
United States/ Sabine Pass, Corpus Christi Cheniere Portfolio	Multiple	Cheniere	ENN (Singapore)	0.9	2022	13	FOB	From July 2022 to June 2035
Woodside Portfolio	Asia	Woodside	RWE	0.84	2025	7		
SHORT TERM CONTRACTS (≤ 4 YEARS)								
ENGIE Portfolio	Puerto Rico	ENGIE	Naturgy Energy Group	0.35	2021	2	DES	From October 2021 to September 2023. Based on a prior contract allocated to Naturgy by Ecoeléctrica.
Trinidad & Tobago BP Portfolio		BP	Naturgy Energy Group	0.33	2021	3	FOB	From October 2021 to September 2024
United States/Calcasieu Pass	China	Venture Global	Unipet, subsidiary of Sinopec	1	2023	3	FOB	Start March 2023 or CP commercial operation date
United States/Calcasieu Pass	Multiple	Venture Global	CNOOC	0.5	2023	3	FOB	
MEMORANDUMS OF UNDERSTANDING								
United States Commonwealth LNG	Bangladesh	Commonwealth LNG	Summit Oil and Shipping	1		20	DES	
United States/Mexico CLNG, ECALNG	Portfolio	Sempra LNG, IEnova	PGNiG	2				Replaces SPA Sempra/PGNiG from Port Arthur for 2 MTPA FOB
HEADS OF AGREEMENT								
Australia/NWS	Portfolio	Beach Energy	BP	0.75	2023	5	FOB	Start mid-2023; From Stage 2 of the Waitsia gas project
Russia/Arctic LNG 2 Novatek Portfolio	East Asia	Novatek Gas & Power Asia	Glencore	0.5			DES	>0.5 MTPA
Russia/Arctic LNG 2 Novatek Portfolio	China	Novatek Gas & Power Asia	Zhejiang Energy	1		15	DES	Up to 1 MTPA. SPA signed in January 2022

VOLUME WEIGHTED AVERAGE DURATION OF LONG & MEDIUM TERM CONTRACTS



AVERAGE DURATION OF LONG & MEDIUM TERM CONTRACTS





Medium-term and long-term contracts in force in 2021*

Export Country	Loading Point	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
ATLANTIC BASIN								
Algeria	Skikda-Bethioua	Sonatrach	Botaş	4	1994	2024	DES	ACQ 1994 - 2014: 3.2 MTPA; 2015 - 2024: 4 MTPA
	Skikda-Bethioua	Sonatrach	Cepsa Gas	0.77	2002	2022	DES	
	Skikda-Bethioua	Sonatrach	DEPA	0.34	2000	2022	CIF	
	Skikda-Bethioua	Sonatrach	Enel	0.6	2001	2021	DES	Delivery under the "GDF SUEZ / Enel" swap agreement
	Skikda-Bethioua	Sonatrach	ENGIE	1.5	1972		DES	Contract extended, duration not disclosed
	Skikda-Bethioua	Sonatrach	TotalEnergies	2	1972	2023	DES	
Cameroon	Kribi FLNG	SNH	Gazprom	1.2	2018	2026	FOB	
Egypt	Damietta	SEGAS	BP	1	2005	2025	FOB	
	Damietta	SEGAS	ENI	2.5	2005	2030	FOB	Former Union Fenosa Gas contract
	Idku	ELNG T1	TotalEnergies	3.6	2005	2025	FOB	
	Idku	ELNG T2	Shell	3.6	2006	2026	FOB	
Equatorial Guinea	Punta Europa	EGLNG	Shell	3.4	2007	2024	FOB	
Nigeria	Bonny Island	Nigeria LNG T1 & 2	Botaş	0.91	1999	2021	DES	
	Bonny Island	Nigeria LNG T1 & 2	Enel	2.1	2001	2021	DES	
	Bonny Island	Nigeria LNG T1 & 2	Naturgy Energy Group	1.17	1999	2021	DES	
	Bonny Island	Nigeria LNG T1 & 2	TotalEnergies	0.33	1999	2021	DES	
	Bonny Island	Nigeria LNG T1-3	ENI	1.5	2021	2031		
	Bonny Island	Nigeria LNG T1-3	Galp Trading SA	1	2021	2031	DES	
	Bonny Island	Nigeria LNG T1-3	TotalEnergies	0.75	2021	2031	DES	From Oct 2021 to Sep 2031
	Bonny Island	Nigeria LNG T1-3	TotalEnergies	0.75	2021	2031	FOB	
	Bonny Island	Nigeria LNG T1-3	TotalEnergies	0.375	2021	2031	DES	
	Bonny Island	Nigeria LNG T1-3	Vitol	0.5	2021	2031	DES	
	Bonny Island	Nigeria LNG T3	Galp Energia	0.73	2003	2023	DES	
	Bonny Island	Nigeria LNG T3	Naturgy Energy Group	1.99	2002	2023	DES	
	Bonny Island	Nigeria LNG T4 & 5	Endesa	0.75	2006	2026	DES	
	Bonny Island	Nigeria LNG T4 & 5	ENI	1.15	2007	2027	DES	
	Bonny Island	Nigeria LNG T4 & 5	Galp Energia	1.42	2006	2026	DES	
	Bonny Island	Nigeria LNG T4 & 5	Pavilion Energy	0.38	2007	2027	DES	
	Bonny Island	Nigeria LNG T4 & 5	Shell	2.3	2006	2026	DES	
	Bonny Island	Nigeria LNG T4 & 5	Shell	1.13	2006	2026	DES	
	Bonny Island	Nigeria LNG T4 & 5	TotalEnergies	0.23	2006	2029	DES	
	Bonny Island	Nigeria LNG T6	Shell	3.1	2008	2027	DES	
	Bonny Island	Nigeria LNG T6	TotalEnergies	0.9	2008	2029	DES	
Norway	Hammerfest	-	RWE Supply & Trading	0.12	2010	-	FOB	0.06-0.12 MTPA; until depletion
	Hammerfest	Equinor	Equinor	1.75	2007	2021	DES	
	Hammerfest	Equinor	Pavilion Energy	1.13	2006	2026	DES	Pavilion Energy novation of Iberdrola contract
	Hammerfest	Neptune Energy	TotalEnergies	0.5	2007	-	FOB	Until depletion
	Hammerfest	TotalEnergies	TotalEnergies	0.7	2007	-	FOB	Until depletion
Russia	Sabetta	Yamal LNG	CNPC	3	2018	2038	DES	
	Sabetta	Yamal LNG	Gazprom Marketing & Trading	2.9	2018	2038	FOB	for 20+ years; at Zeebrugge transshipment point
	Sabetta	Yamal LNG	Naturgy Energy Group	2.5	2018	2038	DES	
	Sabetta	Yamal LNG	Novatek	2.5	2018	2038	FOB	
	Sabetta	Yamal LNG	TotalEnergies	4	2018	2032	FOB	

(*) Duration above 4 years

Export Country	Landing Point	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
Trinidad & Tobago	Point Fortin	Atlantic LNG T2 & 3	BP	0.85	2002	2021	FOB	
	Point Fortin	Atlantic LNG T2 & 3	EDP	0.74	2003	2023	FOB	Naturgy/EDP swap: Naturgy buys 0.74 MTPA on a FOB basis in 2021
	Point Fortin	Atlantic LNG T2 & 3	ENGIE	0.35	2002	2023	FOB	
	Point Fortin	Atlantic LNG T2 & 3	Naturgy Energy Group	0.65	2003	2023	FOB	
	Point Fortin	Atlantic LNG T2 & 3	Shell	1.7	2003	2023	FOB	
	Point Fortin	Atlantic LNG T2 & 3	Shell	2	2006	2023	FOB	
	Point Fortin	Atlantic LNG T4	BP	2.5	2006	2026	FOB	
	Point Fortin	Atlantic LNG T4	Shell	1.5	2006	2026	FOB	
	Point Fortin	Atlantic LNG T4	Shell	1.15	2014	2026	FOB	
United States	Cameron	Cameron LNG	Mitsubishi	4	2019	2039	Tolling	
	Cameron	Cameron LNG	Mitsui	4	2019	2039	Tolling	
	Cameron	Cameron LNG	TotalEnergies	4	2019	2039	Tolling	
	Cameron	Diamond Gas International	Toho Gas	0.2	2020	2038	DES	3 cargoes per year
	Cameron	Diamond Gas International	Tokyo Gas	0.2	2020	2039	DES	3 cargoes per year
	Cameron	Mitsui	Toho Gas	0.3	2019	2039	DES	
	Cameron	Mitsui	Tokyo Gas	0.52	2020	2040	DES	8 cargoes per year
	Cameron	Mitsui	TotalEnergies	0.5	2019	2029	FOB	
	Cameron	TotalEnergies	CPC	0.8	2019	2038	DES	
	Cameron	TotalEnergies	Marubeni	0.5	2019	2039	FOB	
	Cameron	TotalEnergies	Tohoku Electric	0.27	2018	2038	DES	
	Corpus Christi	Cheniere	Cheniere Marketing	*	2019	-	FOB	*Excess from Corpus Christi
	Corpus Christi	Cheniere	EDF	0.77	2020	2040	FOB	Option to extend for 10 years
	Corpus Christi	Cheniere	EDP	0.77	2020	2040	FOB	Option to extend for 10 years
	Corpus Christi	Cheniere	Endesa	2.25	2019	2039	FOB	
	Corpus Christi	Cheniere	ENGIE	0.9	2021	2041	FOB	Started in Sep 2021
	Corpus Christi	Cheniere	Naturgy Energy Group	1.5	2020	2040	FOB	Option to extend for 10 years
	Corpus Christi	Cheniere	Iberdrola	0.8	2019	2040	FOB	Back-to-back sale to Pavilion Energy
	Corpus Christi	Cheniere	Pertamina	0.76	2020	2040	FOB	Option to extend for 10 years
	Corpus Christi	Cheniere	Pertamina	0.76	2019	2039	FOB	
	Corpus Christi	Cheniere	Woodside	0.85	2020	2040	FOB	Option to extend for 10 years
	Cove Point	GAIL GLOBAL (USA) LNG	GAIL	2.3	2018	2038	FOB	
	Cove Point	Pacific Summit Energy	Kansai Electric	0.8	2018	2037	FOB	
	Cove Point	ST Cove Point	Pacific Summit Energy	0.9	2018	2037	FOB	
	Cove Point	ST Cove Point	Tokyo Gas	1.4	2018	2038	FOB	
	Elba Island	Elba Island	Shell	2.5	2020	2040	FOB	
	Freeport	Freeport LNG	BP	4.4	2020	2040	Tolling	
	Freeport	Freeport LNG	JERA	2.3	2019	2039	Tolling	Inherited from Chubu in 2016
	Freeport	Freeport LNG	Osaka Gas	2.3	2019	2039	Tolling	
	Freeport	Freeport LNG	SK E&S	2.2	2020	2040	Tolling	
	Freeport	Freeport LNG	TotalEnergies	2.2	2020	2040	Tolling	
	Sabine Pass	Cheniere	Centrica	1.75	2019	2039	FOB	
	Sabine Pass	Cheniere	Cheniere Marketing	*	2016	-	FOB	*Excess from Sabine Pass
	Sabine Pass	Cheniere	GAIL	3.5	2018	2038	FOB	
	Sabine Pass	Cheniere	KOGAS	3.5	2017	2037	FOB	Kogas resells 0.7 MTPA to TotalEnergies
	Sabine Pass	Cheniere	Naturgy Energy Group	3.5	2017	2037	FOB	
	Sabine Pass	Cheniere	Shell	5.5	2016	2036	FOB	Revised in 2012 (2 MTPA added to 3.5)

(*) Duration above 4 years

Medium-term and long-term contracts in force in 2021*

Export Country ▼	Loading Point ▼	Seller ▼	Buyer ▼	ACQ (MTPA) ▼	Start date ▼	End date ▼	Delivery Format ▼	Comments ▼
United States	Sabine Pass	Cheniere	TotalEnergies	2	2019	2039	FOB	
		Cheniere	TotalEnergies	0.8	2018	2023	DES	TotalEnergies novation of ENGIE contract. 0.72-0.8 MTPA: delivery of 12 cargoes per year to Montoir-de-Bretagne
MIDDLE EAST								
Oman	Qalhat	Oman LNG	BP	1.13	2018	2024	FOB	
	Qalhat	Oman LNG	Itochu	0.7	2006	2025	FOB	
	Qalhat	Oman LNG	KOGAS	4.06	2000	2024	FOB	
	Qalhat	Oman LNG	Osaka Gas	0.66	2000	2024	FOB	
	Qalhat	Qalhat LNG	Naturgy Energy Group	1.65	2006	2025	DES	Former Union Fenosa Gas contract
	Qalhat	Qalhat LNG	Osaka Gas	0.8	2009	2026	FOB	
Qatar	Ras Laffan	Qatar Energy	Vitol	1.25	2021		DES	Start late 2021
	Ras Laffan	Qatargas I	Chugoku Electric, JERA, Kansai Electric, Osaka Gas, Toho Gas, Tohoku Electric, Tokyo Gas	2	1998	2021	DES	Inherited from Chubu in 2016
	Ras Laffan	Qatargas I	JERA	4	1997	2021	DES	Inherited from Chubu in 2016
	Ras Laffan	Qatargas I	JERA	1	2012	2021	DES	Inherited from TEPCO in 2016
	Ras Laffan	Qatargas I	Naturgy Energy Group	0.75	2005	2024	DES	
	Ras Laffan	Qatargas I	Naturgy Energy Group	0.75	2006	2025	FOB	
	Ras Laffan	Qatargas I	Shizuoka Gas	0.2	2016	2021	DES	Tripartite SPA (Qatar Liquefied Gas, JERA and Shizuoka Gas)
	Ras Laffan	Qatargas II T1	Pakistan State Oil	3.75	2016	2031	DES	
	Ras Laffan	Qatargas II T1/T2	PetroChina	3.4	2018	2040	DES	
	Ras Laffan	Qatargas II T2	TotalEnergies	1.85	2009	2034	DES	
	Ras Laffan	Qatargas II T2	TotalEnergies	1.5	2009	2034	DES	
	Ras Laffan	Qatargas II T2	TotalEnergies	1.85	2009	2034	DES	
	Ras Laffan	Qatargas III	CNOOC	2	2011	2035	DES	
	Ras Laffan	Qatargas III	JERA	0.7	2013	2028	DES	Inherited from Chubu in 2016
	Ras Laffan	Qatargas III	Kansai Electric	0.5	2013	2027	DES	
	Ras Laffan	Qatargas III	PGNiG	1.1	2015	2034	DES	
	Ras Laffan	Qatargas III	PGNiG	0.9	2018	2034	DES	
	Ras Laffan	Qatargas III	PTT	2	2015	2034	DES	
	Ras Laffan	Qatargas III	RWE Supply & Trading	1.1	2017	2024	DES	
	Ras Laffan	Qatargas III	Tohoku Electric	0.18	2016	2030	DES	
	Ras Laffan	Qatargas IV	Centrica	2	2014	2023	DES	Extension of the previous 4.5-year contract; Nominal quantity (ACQ) 2014/2018: 3 MTPA; 2019/2023: 2 MTPA
	Ras Laffan	Qatargas IV	OMV	1.1	2019	2024	DES	
	Ras Laffan	Qatargas IV	PetroChina	3	2011	2036	DES	
	Ras Laffan	Qatargas IV	Petronas	1.1	2014	2023	DES	Extension of the previous 5-year contract; Nominal quantity (ACQ) 2014/2018: 1.14 MTPA; 2019/2023: 1.1 MTPA
	Ras Laffan	Qatargas IV	Shell	1.1	2019	2023	DES	Jan 2019 - Dec 2023
	Ras Laffan	Qatargas IV	Shell	1	2020		DES	Destination Kuwait; duration not disclosed
	Ras Laffan	RasGas I	Endesa	0.75	2005	2025	DES	
	Ras Laffan	RasGas I	KOGAS	4.92	1999	2024	FOB	
	Ras Laffan	RasGas II	Petronet LNG	5	2004	2028	FOB	
	Ras Laffan	RasGas II	Petronet LNG	2.5	2009	2028	FOB	
	Ras Laffan	RasGas II T2	Edison	4.6	2009	2034	DES	
	Ras Laffan	RasGas II T3	CPC	3	2008	2032	FOB	
	Ras Laffan	RasGas II T3	EDF Trading	3.4	2007	2027	DES	
	Ras Laffan	RasGas II T3	ENI	2.05	2007	2027	DES/FOB	Former Distrigas contract
	Ras Laffan	RasGas III	GAIL, IOCL, BPCL and GSPC	1	2016	2028	CFR	Former buyer: Petronet LNG

(*) Duration above 4 years

Export Country	Loading Point	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
Qatar	Ras Laffan	RasGas III T1	EDF Trading	2	2017	2021	DES	
	Ras Laffan	RasGas III T1	KOGAS	2.1	2007	2026	DES	
	Ras Laffan	RasGas III T2	CPC	1.5	2013	2032	DES	
	Ras Laffan	RasGas III T2	KOGAS	2	2012	2032	DES	
	Ras Laffan	RasGas III T2	Petrobangla	2.5	2018	2033	DES	
Yemen	Balhaf	Yemen LNG T1 & 2	TotalEnergies	2	2009	2029	DES	
	Balhaf	Yemen LNG T2	TotalEnergies	2.55	2009	2029	FOB	
PACIFIC BASIN								
Australia	Ashburton North (Wheatstone)	Chevron	JERA	0.4	2017	2036	DES	Inherited from TEPCO in 2016
	Ashburton North (Wheatstone)	Chevron, Kufpec, Woodside	JERA	3.3	2017	2036	DES	Inherited from TEPCO in 2016; Nominal quantity (ACQ) 2017-2018: 1.7 MTPA; 2018-2027: 3.3 MTPA
	Ashburton North (Wheatstone)	Chevron, Kufpec, Woodside	JERA	0.9	2017	2036	FOB	Inherited from TEPCO in 2016
	Ashburton North (Wheatstone)	Chevron, Kufpec, Woodside	JERA	1	2017	2036	FOB	Inherited from Chubu in 2016; Nominal quantity (ACQ) 2018 0.4 MTPA; 2019: 0.7 MTPA; 2020: 0.8 MTPA; from 2021: 1 MTPA
	Ashburton North (Wheatstone)	Chevron, Kufpec, Woodside	Kyushu Electric	0.83	2017	2036	FOB	0.7 MTPA + 0.13 MTPA
	Ashburton North (Wheatstone)	Chevron, Kufpec, Woodside	Tohoku Electric	0.92	2017	2036	DES	
	Ashburton North (Wheatstone)	PE Wheatstone	JERA	0.7	2017	2036	DES	Inherited from TEPCO in 2016; Nominal quantity (ACQ) 2017-2018: 0.5 MTPA; 2018-2027: 0.7 MTPA
	Barrow Island (Gorgon LNG)	Chevron	ENEOS Corporation	0.3	2015	2030	DES	
	Barrow Island (Gorgon LNG)	Chevron	GS Caltex	0.5	2016	2036	DES	
	Barrow Island (Gorgon LNG)	Chevron	JERA	1.44	2015	2039	FOB/DES	Inherited from Chubu in 2016
	Barrow Island (Gorgon LNG)	Chevron	Kyushu Electric	0.3	2015	2029	DES	
	Barrow Island (Gorgon LNG)	Chevron	Osaka Gas	1.5625	2014	2039	FOB	
	Barrow Island (Gorgon LNG)	Chevron	SK Group	0.83	2017	2021	FOB	4.15 MTPA over a 5-year period
	Barrow Island (Gorgon LNG)	Chevron	Tokyo Gas	1.25	2016	2039	FOB	1.1 MTPA + 0.15 MTPA
	Barrow Island (Gorgon LNG)	ExxonMobil	PetroChina	2.25	2016	2036	DES	
	Barrow Island (Gorgon LNG)	ExxonMobil	Petronet LNG	1.425	2016	2036	DES	
	Barrow Island (Gorgon LNG)	Shell	BP	0.5	2016	2036	FOB	
	Curtis Island	GLNG	KOGAS	3.5	2016	2036	FOB	
	Curtis Island	GLNG	Petronas	3.5	2015	2035	FOB	
	Curtis Island	QCLNG	CNOOC	3.6	2014	2034	DES	
	Curtis Island	QCLNG	Shell	3.8	2014	2034	FOB	
	Curtis Island	QCLNG	Tokyo Gas	1.2	2015	2035	DES	
	Curtis Island (APLNG)	APLNG	Kansai Electric	1	2016	2035	FOB	
	Curtis Island (APLNG)	APLNG	Sinopec	7.6	2016	2036	FOB	
	Darwin	Ichthys LNG	CPC	1.75	2018	2032	DES	
	Darwin	Ichthys LNG	INPEX	0.9	2018	2032	FOB	
	Darwin	Ichthys LNG	JERA	0.49	2018	2032	FOB	Inherited from Chubu in 2016
	Darwin	Ichthys LNG	JERA	1.05	2018	2032	FOB	Inherited from TEPCO in 2016
	Darwin	Ichthys LNG	Kansai Electric	0.8	2018	2032	FOB	
	Darwin	Ichthys LNG	Kyushu Electric	0.3	2018	2032	FOB	

(*) Duration above 4 years

Medium-term and long-term contracts in force in 2021*

Export Country	Loading Point	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
Australia	Darwin	Ichthys LNG	Osaka Gas	0.8	2018	2032	FOB	
	Darwin	Ichthys LNG	Toho Gas	0.28	2018	2032	FOB	
	Darwin	Ichthys LNG	Tokyo Gas	1.05	2018	2032	FOB	
	Darwin	Ichthys LNG	TotalEnergies	0.9	2018	2033	FOB	
	Darwin	Santos, ENI, INPEX, JERA, Tokyo Gas	JERA, Tokyo Gas	3	2006	2022	FOB	Inherited from TEPCO in 2016
	Pluto	Pluto LNG	Kansai Electric	2	2011	2025	FOB/DES	1.75-2 MTPA
	Pluto	Pluto LNG	Tokyo Gas	1.5	2012	2025	FOB/DES	
	Prelude	INPEX	JERA	0.56	2019	2025	DES	Inherited from TEPCO in 2016, from INPEX equity volumes
	Prelude	INPEX	Shizuoka Gas	0.07	2019	2025	DES	From INPEX equity volumes
	Prelude	KOGAS	KOGAS	0.36	2019	-	FOB	
	Prelude	OPIC Australia	CPC	0.18	2019	-	FOB	
	Prelude	Shell	Shell	2.43	2019	-	FOB	
	Withnell Bay	Woodside, Shell, BHP, BP Australia, Chevron, Japan Australia LNG (Mitsubishi & Mitsui)	Chugoku Electric	1.43	2009	2021	DES	
	Withnell Bay		GDLNG	3.3	2006	2031	FOB	
	Withnell Bay		JERA	0.3	2009	2024	DES	Inherited from TEPCO in 2016
	Withnell Bay		JERA	0.6	2009	2029	DES	Inherited from Chubu in 2016
	Withnell Bay		Kansai Electric	0.93	2009	2024	DES	0.5-0.93 MTPA
	Withnell Bay		Kansai Electric	0.2	2009	2024	DES	0.2-0.44 MTPA
	Withnell Bay		Kyushu Electric	0.7	2009	2023	FOB	
	Withnell Bay		Kyushu Electric	0.5	2006	2021	DES	
	Withnell Bay		Osaka Gas	1	2004	2033	FOB	
	Withnell Bay		Shizuoka Gas	0.13	2004	2029	FOB	
	Withnell Bay		Toho Gas, Tokyo Gas	1.37	2004	2029	FOB	
	Withnell Bay		Tokyo Gas	0.53	2017	2024	DES	
Brunei	Lumut	Brunei LNG	JERA, Osaka Gas, Tokyo Gas	3.4	2013	2023	DES	Inherited from TEPCO in 2016
	Lumut	Brunei LNG	Petronas	0.9	2013	2023	DES	
	Lumut	Brunei LNG	Shell	0.8	2013	2023	FOB	
Indonesia	Bontang	Pertamina	Nusantara Regas	0.8	2012	2022	FOB	2016-2020: 1 MTPA; 2021-2022: 0.8 MTPA
	Bontang	Pertamina	PPT ETS	0.8	2019	2025	FOB	Start Aug. 2019
	Bontang	Pertamina, ENI Muara bakau	ENI	1	2017	2027	FOB	Nominal quantity (ACQ) 2011-2015: 3 MTPA; 2016-2020: 2 MTPA
	Bontang	Pertamina, ENI Muara bakau	Pertamina	1.4	2017	2024	FOB	
	Bontang	Pertamina, IDD Chevron	Pertamina	0.06	2016	2021	FOB	Additional 0.2 MT agreed for 2022
	Donggi-Senoro	PT Donggi-Senoro LNG	JERA	1	2015	2027	DES	Inherited from Chubu in 2016
	Donggi-Senoro	PT Donggi-Senoro LNG	KOGAS	0.7	2015	2027	FOB	
	Donggi-Senoro	PT Donggi-Senoro LNG	Kyushu Electric	0.3	2015	2027	DES	
	Tangguh	Tangguh PSC Contractor Parties	CNOOC	2.6	2009	2033	FOB	
	Tangguh	Tangguh PSC Contractor Parties	Kansai Electric	1	2014	2035	DES	
	Tangguh	Tangguh PSC Contractor Parties	PLN	2.49	2015	2033	DES	44 cargoes per year
	Tangguh	Tangguh PSC Contractor Parties	Posco	0.55	2005	2024	DES	
	Tangguh	Tangguh PSC Contractor Parties	Sempra LNG	3.7	2008	2029	DES	3.4 MTPA divertible
	Tangguh	Tangguh PSC Contractor Parties	SK E&S	0.6	2006	2026	DES	
	Tangguh	Tangguh PSC Contractor Parties	Tohoku Electric	0.12	2010	2024	DES	

(*) Duration above 4 years

Export Country	Loading Point	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
Malaysia	Bintulu	Malaysia LNG	Hokkaido Electric Power	0.13	2018	2028	DES	
	Bintulu	Malaysia LNG	Hokuriku Electric	0.4	2018	2028	DES	
	Bintulu	Malaysia LNG	Osaka Gas	0.8	2009	2023	DES	
	Bintulu	Malaysia LNG	Tokyo Gas	0.5	2018	2031	FOB/DES	Nominal quantity (ACQ) 2018-2023: up to 0.5 MTPA; 2024-2031: up to 0.9 MTPA
	Bintulu	Malaysia LNG Dua	ENEOS Corporation	0.38	2015	2025	DES	
	Bintulu	Malaysia LNG Dua	Gas Bureau, City of Sendai	0.16	2018	2027	DES	
	Bintulu	Malaysia LNG Dua	JERA	0.4	2011	2031	DES	Inherited from Chubu in 2016
	Bintulu	Malaysia LNG Dua	Shizuoka Gas	0.33	2016	2025	DES	
	Bintulu	Malaysia LNG Dua	Tohoku Electric	0.37	2016	2026	DES	
	Bintulu	Malaysia LNG Dua	Tokyo Gas	0.9	2015	2025	DES	
	Bintulu	Malaysia LNG Satu	Hiroshima Gas	0.1	2016	2031	FOB	
	Bintulu	Malaysia LNG Satu	Saibu Gas	0.45	2014	2028	DES	
	Bintulu	Malaysia LNG Satu	Shikoku Electric	0.36	2010	2025	DES	
	Bintulu	Malaysia LNG Tiga	CNOOC	3	2009	2029	DES	
	Bintulu	Malaysia LNG Tiga	Japan Petroleum Exploration Co.	0.48	2002	2021	DES	
	Bintulu	Malaysia LNG Tiga	KOGAS	2	2008	2028	DES	
	Bintulu	Malaysia LNG Tiga	Osaka Gas, Toho Gas, Tokyo Gas	0.8	2004	2024	DES/FOB	
	Bintulu	Malaysia LNG Tiga	Toho Gas	0.4	2007	2027	DES	
	Bintulu	Malaysia LNG Tiga	Tohoku Electric	0.5	2005	2025	DES	
Papua New Guinea	Port Moresby	PNG LNG	BP Singapore	0.45	2018	2023	DES	2018-2021: 0.45 MTPA; 2022-2023: 0.9 MTPA
	Port Moresby	PNG LNG	CPC	1.2	2014	2033	DES	
	Port Moresby	PNG LNG	JERA	1.8	2014	2034	DES/FOB	Inherited from TEPCO in 2016
	Port Moresby	PNG LNG	Osaka Gas	1.5	2014	2034	DES/FOB	
	Port Moresby	PNG LNG	Sinopec	2	2014	2034	DES	
Peru	Pampa Melchorita	Peru LNG	Shell	4.2	2014	2028	FOB	
Russia	Prigorodnoye	Sakhalin Energy Investment	CPC	0.75	2017	2022	DES	
	Prigorodnoye	Sakhalin Energy Investment	Gazprom Global LNG	1	2009	2028	DES	
	Prigorodnoye	Sakhalin Energy Investment	Hiroshima Gas	0.21	2008	2028	FOB	
	Prigorodnoye	Sakhalin Energy Investment	JERA	1.5	2009	2029	FOB	Inherited from TEPCO in 2016
	Prigorodnoye	Sakhalin Energy Investment	JERA	0.5	2011	2026	DES	Inherited from Chubu in 2016
	Prigorodnoye	Sakhalin Energy Investment	KOGAS	1.5	2008	2028	FOB	
	Prigorodnoye	Sakhalin Energy Investment	Kyushu Electric	0.5	2009	2031	DES	
	Prigorodnoye	Sakhalin Energy Investment	Osaka Gas	0.2	2008	2031	FOB	
	Prigorodnoye	Sakhalin Energy Investment	Saibu Gas	0.065	2014	2027	DES	
	Prigorodnoye	Sakhalin Energy Investment	Shell	1	2009	2028	DES	
	Prigorodnoye	Sakhalin Energy Investment	Toho Gas	0.5	2009	2033	DES	
	Prigorodnoye	Sakhalin Energy Investment	Tohoku Electric	0.42	2010	2030	FOB	
	Prigorodnoye	Sakhalin Energy Investment	Tokyo Gas	1.1	2009	2031	FOB	

(*) Duration above 4 years

Portfolio contracts

Export Country	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
BP Portfolio	BP	AES	0.75	2003	2023	DES	Related to BP/ALNG T2 & 3 contract; Sourced from Point Fortin
	BP	CNOOC	1	2019	2039	DES	
	BP	CNOOC	0.5	2019	2034	FOB	
	BP	CPC	0.75	2017	2021	DES	
	BP	Glencore	0.39	2020	2025	DES	Start late 2020
	BP	JERA	1.2	2017	2034	DES	Inherited from TEPCO in 2016
	BP	JERA	0.5	2012	2028	DES	Inherited from Chubu in 2016
	BP	Kansai Electric	0.5	2017	2032	DES	
	BP	Kansai Electric	*	2015	2038	DES	Total maximum quantity of LNG during contract duration : approx 13 MT
	BP	Pavilion Energy	0.4	2020	2040	DES/FOB	
	BP	PTT	1	2017	2037	DES	
Centrica Portfolio	BP	Sempra LNG	*	2021		DES	Evergreen Ex-ship MSPA with no firm ACQ starting in April 2021, LNG sourced from Atlantic LNG and delivered to ECALNG
	Centrica	PGNiG	0.13	2018	2023	DES	Up to 9 cargoes; Sourced from Sabine Pass
Cheniere Portfolio	Cheniere	CPC	2	2021	2045	DES	
	Cheniere	PetroChina	1.2	2018	2043	FOB	Two SPAs with an aggregate volume of ~1.2 MTPA. A portion began in 2018, the balance will begin in 2023. Both continue through 2043. Sourced from Corpus Christi
	Cheniere	PGNiG	0.13	2019	2043	DES	0.13 MTPA in 2019-2022; 1.45 MTPA starting from 2023
	Cheniere	Trafigura	1	2019	2034	FOB	
	Cheniere	Vitol	0.7	2018	2033	FOB	
Chevron Portfolio	Chevron	CPC	1.12	2017	2022	DES	
	Chevron	ENN	0.64	2018	2028	DES	
	Chevron	GS Caltex		2019			Start Oct. 2019
	Chevron	JOVO	0.5	2018	2023	DES	
ENI Portfolio	ENI	Pakistan LNG Limited	0.75	2017	2032	DES	
	ENI	Pavilion Energy	0.5	2012	2025	DES	Pavilion Energy novation of Iberdrola contract
	ENI	Uniper	0.58	2007	2022	DES	
Equinor Portfolio	Equinor	Litgas	0.256	2015	2025	DES	
Gazprom Portfolio	Gazprom	GAIL	2.5	2018	2041		Renegotiated in 2018 (extended)
Gunvor Portfolio	Gunvor	Pakistan LNG Limited	0.78	2017	2022	DES	60 cargoes in total (12 per year) - New MT contract
JERA Portfolio	JERA	Centrica	0.5	2019	2024	DES	Flexible sales arrangement
	JERA	INPEX	*	2013	2024	DES	*Total quantity of LNG during contract duration: 19 cargoes. Inherited from Chubu in 2016
	JERA	Shizuoka Gas	0.26	2014	2032	DES	Inherited from TEPCO in 2016
Kansai Electric Portfolio	Kansai Electric	Hokkaido Electric Power	0.2	2018	2028	DES	
KOGAS Portfolio	Kansai Electric	TotalEnergies	0.4	2018	2023	FOB	Sourced from Cove Point
	KOGAS	TotalEnergies	0.7	2017	2037	FOB	Sourced from Sabine Pass
Kyushu Electric Portfolio	Kyushu Electric	Nippon Gas	0.05	2016	2031	DES	
Mitsui Portfolio	Mitsui	Hokkaido Gas	0.2	2019	2028	DES	3 cargoes per year + carbon neutral LNG supply agreement signed in 2021
	Mitsui	Kuwait Petroleum Corporation	1.5	2020	2035	DES	
Naturgy Portfolio	Naturgy Energy Group	Endesa	0.75	2016	2036	DES	Sourced from Sabine Pass
	Naturgy Energy Group	BHP Billiton	0.5	2016	2021	DES	
	Naturgy Energy Group	Puerto Rico Electric Power Authority (PREPA)	1.47	2020	2032	DES	
	Naturgy Energy Group	Repsol	0.7	2016	2036	FOB	
	Novatek	Gunvor	0.5	2018	2038	FOB	
Novatek Portfolio	Novatek	Shell	0.9	2019	2041	FOB	At Montoir transshipment point. Sourced from Yamal LNG
	Novatek	TotalEnergies	1	2018	2041	DES	Inherited from ENGIE; for transshipment at Montoir. Sourced from Yamal LNG
Oman Trading Portfolio	Oman Trading International	Petrobangla	1	2019	2029	DES	
Origin Energy Portfolio	Origin Energy Limited	ENN	0.28	2018	2028	DES	
Osaka Gas Portfolio	Osaka Gas	Hiroshima Gas	0.13	2016	2031	DES	0.05-0.13 MTPA
	Osaka Gas	Nippon Gas	0.08	2006	2034	DES	
	Osaka Gas	Shizuoka Gas	0.3	2015	2034	DES	
	Osaka Gas	Uniper	1	2019	2039	FOB	Sourced from Freeport
Pavilion Portfolio	Pavilion Energy	BP	0.38	2012	2021		Before 2020 under Iberdrola Portfolio
	Pavilion Energy	Glencore	0.72	2012	2026	DES	Before 2020 Iberdrola/Ørsted contract
Pertamina Portfolio	Pertamina	TotalEnergies	0.4	2020	2030	FOB	Sourced from Corpus Christi
	Pertamina	Petronas		2020	2025	DES/FOB	MSPA; From Jan 2020 to Jan 2025
	Pertamina	Posco		2019	2024	FOB/DES	MSPA; Start Dec. 2019

(*) Duration above 4 years

Export Country	Seller	Buyer	ACQ (MTPA)	Start date	End date	Delivery Format	Comments
Petronas Portfolio	Petronas	JOVO	0.5	2016	2023	DES	
	Petronas	KOMIPO	0.24	2020	2025	DES	Sourced from Malaysia LNG
	Petronas	PTT	1.2	2017	2032	DES	
	Petronas	S-Oil	0.7	2018	2033	DES	Sourced from Malaysia LNG
	Petronas	Toho Gas	0.54	2017	2027	DES	7-9 cargoes per year: 0.42 to 0.54 MTPA
Shell Portfolio	Shell	BBE	0.8	2003	2023		
	Shell	CFE	3.08	2011	2027	DES	
	Shell	CNOOC	5	2015	2035	DES	Sourced from Australia and USA
	Shell	CPC	2	2017	2036	DES	
	Shell	DUSUP	1	2010	2025	DES	
	Shell	ENEOS Corporation	0.2	2015	2031	DES	Sourced from Nigeria, Russia and Australia
	Shell	GNL Chile	3	2009	2030	DES	Includes the contract with Enel Chile (subsidiary of Enel Group)
	Shell	GSPC	1.3	2015	2034	DES	Up to 2.5 MTPA
	Shell	JERA	0.72	2014	2034	DES	Inherited from Chubu in 2016, maximum 12 cargoes per year
	Shell	JERA	0.35	2014	2034	DES	Inherited from Chubu in 2016 by JERA; and from BG by Shell; 122 cargoes for the contract duration
	Shell	KOGAS	3.64	2013	2038	DES	
	Shell	Kuwait Petroleum Corporation		2020	2034	DES	
	Shell	MFGK Croatia	0.2	2021	2027	DES	0.25 Bcma delivered to Krk terminal for export to Hungary
	Shell	Naturgy Energy Group	1.16	2006	2023	DES	
	Shell	Osaka Gas	0.8	2012	2038	DES	
	Shell	PetroChina	2	2016	2036	DES	
	Shell	PetroChina		2021	2026		LNG supplied is carbon neutral
	Shell	PTT	1	2017	2032	DES	
	Shell	Singapore LNG	3	2013	2033	DES	
	Shell	SOCAR	0.3	2016	2026	DES	
	Shell	Tokyo Gas	0.5	2020	2030	DES	HoA; Start Apr. 2020
	Shell	TotalEnergies	0.4	2014	2021	DES	
Tokyo Gas Portfolio	Tokyo Gas	Hokkaido Gas	0.4	2012	2023	DES	0.3-0.4 MTPA
	Tokyo Gas	Saibu Gas	0.3	2014	2029	DES	
	TotalEnergies	AES (Dominican Republic)	0.7	2017	2029	DES	
TotalEnergies Portfolio	TotalEnergies	AES (Panama)	0.4	2018	2028	DES	
	TotalEnergies	Chugoku Electric	0.27	2019	2036	DES	
	TotalEnergies	CMA CGM	0.27	2021	2031		
	TotalEnergies	CMA CGM	0.29	2020	2031		Start Nov 2020; Rotterdam (Gate)
	TotalEnergies	CNOOC	1.5	2010	2029	DES	Extension to 1.5 MTPA as of 2020
	TotalEnergies	Engie Energia Chile	0.27	2012	2026	DES	
	TotalEnergies	Engie Energia Chile	0.2	2018	2032	DES	
	TotalEnergies	ENN	0.5	2019	2028	DES	
	TotalEnergies	Guanghui Energy	0.7	2020	2030	DES	Start Jun. 2020
	TotalEnergies	INPEX	0.2	2018	2032	DES	
	TotalEnergies	Kansai Electric	0.4	2018	2023	DES	
	TotalEnergies	KOGAS	2	2014	2031	DES	
	TotalEnergies	Pavilion Energy	0.14	2018	2027	FOB	
	TotalEnergies	Pertamina	0.4	2020	2035	DES	1 MTPA starting from 2024
	TotalEnergies	Shell	0.53	2019	2023	DES	
	TotalEnergies	Shenergy	1.4	2021	2041	DES	From July 2021 to July 2041
Vitol Portfolio	Vitol	KOMIPO	0.4	2015	2024		
Woodside Portfolio	Woodside	RWE Supply & Trading	0.6	2017	2022	DES	0.3-0.6 MTPA
	Woodside	Uniper	0.9	2021	2034	DES	1.8 MTPA starting from April 2026
	Woodside Trading Singapore	Pertamina	0.6	2019	2039	DES	0.6-1.1 MTPA; provisions to increase up to 1.1 MTPA from 2024 to 2038

(*) Duration above 4 years

LNG shipping

700
vessels at the
end of 2021

The total LNG tanker fleet consisted of **700 vessels** at the end of 2021. It included 48 FSRUs and 64 vessels (31 LNGBVs + 33 LNG carriers) of less than 50,000 cubic meters. Total cargo capacity at the end of 2021 stood at 104.1 million cubic meters. Total operational capacity (vessels known to be in service) amounted to 103.0 million cubic meters.

In 2021, the average spot charter rate for a 160,000 cubic meter LNG carrier stood at around \$89,200/day, compared to an average of around \$59,300/day in 2020.

A total of 68 vessels were delivered in 2021, compared with 47 vessels in 2020.

The number of new orders reached a total of 111 units, which included 3 FSRUs and 15 vessels (13 LNGBVs + 2 LNG carriers) of less than 50,000 cubic meters compared with 40 new orders in 2020. At the end of 2021, the orderbook consisted of 196 units (29.6 million cubic meters) including 5 FSRUs and 25 vessels (22 LNGBVs + 3 LNG Carriers) of less than 50,000 cubic meters. The orderbook represented 28% of the existing LNG carrier fleet. 44 of the units on order were scheduled for delivery in 2022. It included 1 FSRU and 11 vessels (10 LNGBVs + 1 LNG carrier) of less than 50,000 cubic meters.

LNG VESSELS SCRAPPED IN 2021

7 ships were demolished during the year:

Built	Vessel Name	IMO Number	Type	Capacity (m³)	CCS*	Owner	Builder	Manager
1981	Ramdane Abane	7411961	LNG Carrier	126,130	Membrane	Hyproc Shipping Co.	Ch. de l'Atlantique	Hyproc Shipping Co.
1980	Caribbean Energy (ex Gaea)	7619575	LNG Carrier	126,530	Moss	Sinokor Merchant	General Dynamics	Sinokor Ship Mngt
1980	South Energy (ex LNG Edo)	7619587	LNG Carrier	126,530	Moss	Sinokor Merchant	General Dynamics	Sinokor Ship Mngt
1983	Baltic Energy (ex Wilpower)	8013950	LNG Carrier	125,660	Moss	Sinokor Merchant	KHI	Sinokor Ship Mngt
1983	North Energy (ex Wilenergy)	8014409	LNG Carrier	125,542	Moss	Sinokor Merchant	MHI	Sinokor Ship Mngt
1984	Mediterranean Energy (ex Wilgas)	8125832	LNG Carrier	125,631	Moss	Sinokor Merchant	MHI	Sinokor Ship Mngt
1997	Puteri Firus	9030840	LNG Carrier	130,405	Membrane	MISC	Ch. de l'Atlantique	EagleStar Shipmgmt

LNG CARRIERS LAID-UP, IDLE OR OTHERWISE OUT OF SERVICE AT THE END OF 2021

8 vessels were laid-up, idle or otherwise out of service at the end of the year. In addition, 1 vessel was idle, awaiting conversion:

Built	Vessel Name	IMO Number	Type	Capacity (m³)	CCS*	Owner	Builder	Manager
2006	LNG Unity (ex Provalys)	9306495	LNG Carrier	154,472	Membrane	Karpowership	Aker Yards	Karpowership

LNG CARRIERS DELIVERED IN 2021

68 ships were delivered during the year, including 5 FSRUs and 10 ships (8 LNGBVs and 2 LNG Carriers) of less than 50,000 cubic meters. The average capacity of vessels delivered (excluding FSRUs and ships of less than 50,000 cubic meters) amounted to 174,897 cubic meters.

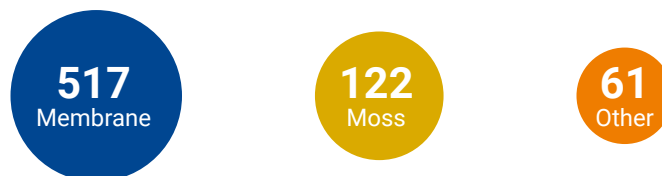
Built	Vessel Name	IMO Number	Type	Capacity (m³)	CCS*	Owner	Builder	Manager
2021	Avenir Accolade	9830903	LNGBV/LNGC	7,500	Other	Avenir LNG	Keppel Nantong	Golar Management
2021	Avenir Aspiration	9868962	LNGBV/LNGC	7,500	Other	Avenir LNG	CIMC SOE	Hoegh LNG
2021	Avenir Allegiance	9886756	LNGBV/LNGC	20,000	Membrane	Shanghai SSPG Energy	CIMC SOE	PG Shipmanagement
2021	Bergen LNG	9436159	LNGBV	850	Other	Bergen Tankers	Westcon Shipyards	Bergen Tankers
2021	Optimus	9870472	LNGBV	6,000	Other	Infotrar	Damen Yichang	Damen Gorinchem
2021	Dmitry Mendeleev	9888182	LNGBV	5,800	Other	Gazpromneft Shipping	Keppel Nantong	Gazpromneft Shipping
2021	Gas Vitality	9909285	LNGBV	18,600	Membrane	MOL	Hudong Zhonghua (HZ)	MOL LNG Transport (E)
2021	Clean Canaveral (Polaris)	(9944443)	LNGBV	5,500	Other	Polaris New Energy	Fincantieri Bay	Polaris New Energy
2021	Minerva Psara	9854363	LNG Carrier	173,400	Membrane	Minerva Gas	Daewoo (DSME)	WSM Malaysia
2021	Minerva Limnos	9854375	LNG Carrier	173,400	Membrane	Minerva Gas	Daewoo (DSME)	B. Schulte (Hellas)
2021	Energy Endeavour	9854624	LNG Carrier	173,400	Membrane	Alpha Gas	Daewoo (DSME)	Alpha Gas

Built ▼	Vessel Name ▼	IMO Number ▼	Type	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2021	Energy Integrity	9859739	LNG Carrier	173,400	Membrane	Alpha Gas	Daewoo (DSME)	Alpha Gas
2021	Global Star	9859741	LNG Carrier	173,400	Membrane	Nakilat Maran JV	Daewoo (DSME)	Nakilat Shipping
2021	Flex Freedom	9862308	LNG Carrier	173,400	Membrane	FLEX LNG	Daewoo (DSME)	FLEX Fleet Mngt.
2021	Flex Volunteer	9862463	LNG Carrier	174,000	Membrane	FLEX LNG	Hyundai Samho HI (HSHI)	FLEX Fleet Mngt.
2021	Flex Vigilant	9862475	LNG Carrier	174,000	Membrane	FLEX LNG	Hyundai Samho HI (HSHI)	FLEX Fleet Mngt.
2021	Aristidis I	9862906	LNG Carrier	174,000	Membrane	Capital Gas Carrier	Hyundai HI (Ulsan)	B. Schulte (UK)
2021	Aristarchos	9862918	LNG Carrier	174,000	Membrane	Capital Gas Carrier	Hyundai HI (Ulsan)	B. Schulte (UK)
2021	Attalos	9862920	LNG Carrier	174,000	Membrane	Capital Gas Carrier	Hyundai HI (Ulsan)	B. Schulte (UK)
2021	Celsius Canberra	9864796	LNG Carrier	180,000	Membrane	Celsius	Samsung HI (SHI)	Celsius Tech
2021	Gaslog Galveston	9864928	LNG Carrier	174,000	Membrane	GasLog	Samsung HI (SHI)	GasLog LNG Services
2021	Cool Racer	9869265	LNG Carrier	174,000	Membrane	Thenamaris	Hyundai HI (Ulsan)	Thenamaris LNG
2021	Cobia LNG	9869306	LNG Carrier	174,000	Membrane	TMS Cardiff Gas	Hyundai HI (Ulsan)	TMS Cardiff Gas
2021	Minerva Kalymnos	9869942	LNG Carrier	174,000	Membrane	Minerva Gas	Samsung HI (SHI)	B. Schulte (Hellas)
2021	LNG Adventure	9870159	LNG Carrier	174,000	Membrane	NYK	Samsung HI (SHI)	Gazoccean (NYK)
2021	SCF Timmerman	9870525	LNG Carrier	173,400	Membrane	Sovcomflot	Hyundai Samho HI (HSHI)	SCF Mngt Dubai
2021	LNGShips Manhattan	9872901	LNG Carrier	174,000	Membrane	TMS Cardiff Gas	Hyundai HI (Ulsan)	TMS Cardiff Gas
2021	LNGShips Athena	9872949	LNG Carrier	174,000	Membrane	TMS Cardiff Gas	Hyundai HI (Ulsan)	TMS Cardiff Gas
2021	Hellas Diana	9872987	LNG Carrier	173,400	Membrane	Latsco Shipping	Hyundai Samho HI (HSHI)	Latsco Marine Mngt
2021	Hellas Athina	9872999	LNG Carrier	173,400	Membrane	Latsco Shipping	Hyundai Samho HI (HSHI)	Latsco Marine Mngt
2021	BW Lesmes	9873840	LNG Carrier	174,000	Membrane	BW LNG	Daewoo (DSME)	BW Fleet Mngt
2021	BW Helios	9873852	LNG Carrier	174,000	Membrane	BW LNG	Daewoo (DSME)	BW Fleet Mngt
2021	Ravenna Knutsen	9874040	LNG Carrier	30,117	Other	Knutsen OAS Shipping	Hyundai Mipo	Knutsen OAS Shipping
2021	Diamond Gas Crystal	9874454	LNG Carrier	174,000	Membrane	MISC NYK Mitsubishi JV	Hyundai Samho HI (HSHI)	NYK LNG Shipmngt.
2021	Diamond Gas Victoria	9874466	LNG Carrier	174,000	Membrane	MISC NYK Mitsubishi JV	Hyundai Samho HI (HSHI)	NYK LNG Shipmngt.
2021	LNG Enterprise	9874480	LNG Carrier	174,000	Membrane	NYK	Samsung HI (SHI)	Gazoccean (NYK)
2021	LNG Endurance	9874492	LNG Carrier	174,000	Membrane	NYK	Samsung HI (SHI)	Gazoccean (NYK)
2021	Isabella	9874820	LNG Carrier	174,129	Membrane	Maran Gas Maritime	Daewoo (DSME)	Maran Gas Maritime
2021	LNGShips Empress	9875800	LNG Carrier	174,000	Membrane	TMS Cardiff Gas	Samsung HI (SHI)	TMS Cardiff Gas
2021	Gaslog Wellington	9876660	LNG Carrier	180,000	Membrane	GasLog	Samsung HI (SHI)	GasLog LNG Services
2021	Gaslog Winchester	9876737	LNG Carrier	180,000	Membrane	GasLog	Samsung HI (SHI)	GasLog LNG Services
2021	LNG Rosenrot	9877133	LNG Carrier	180,000	Membrane	MOL	Daewoo (DSME)	MOL LNG Transport (E)
2021	Gail Bhuvan	9877145	LNG Carrier	180,000	Membrane	MOL	Daewoo (DSME)	MOL LNG Transport (A)
2021	Minerva Chios	9877341	LNG Carrier	174,000	Membrane	Minerva Gas	Samsung HI (SHI)	WSM Malaysia
2021	Celsius Charlotte	9878711	LNG Carrier	180,000	Membrane	Celsius	Samsung HI (SHI)	Celsius Tech
2021	Celsius Carolina	9878723	LNG Carrier	180,000	Membrane	Celsius	Samsung HI (SHI)	Celsius Tech
2021	Mu Lan	9878876	LNG Carrier	174,000	Membrane	CSSC Shipping	Hudong Zhonghua (HZ)	B. Schulte (Hellas)
2021	Gui Ying	9878888	LNG Carrier	174,000	Membrane	CSSC Shipping	Hudong Zhonghua (HZ)	B. Schulte (Hellas)
2021	Yiannis	9879674	LNG Carrier	174,000	Membrane	Maran Gas Maritime	Daewoo (DSME)	Maran Gas Maritime
2021	Adamastos	9879698	LNG Carrier	174,000	Membrane	Capital Gas Carrier	Hyundai HI (Ulsan)	Capital Ship Management
2021	Marvel Swan	9880192	LNG Carrier	174,000	Membrane	Navigare Capital	Samsung HI (SHI)	Pronav
2021	Global Sea Spirit	9880465	LNG Carrier	174,000	Membrane	Nakilat Maran JV	Daewoo (DSME)	Nakilat Shipping
2021	Energy Intelligence	9881201	LNG Carrier	173,400	Membrane	Alpha Gas	Daewoo (DSME)	Alpha Gas
2021	Maran Gas Kalymnos	9883742	LNG Carrier	173,400	Membrane	Maran Gas Maritime	Daewoo (DSME)	Maran Gas Maritime
2021	Asklipios	9884021	LNG Carrier	174,000	Membrane	Capital Gas Carrier	Hyundai HI (Ulsan)	Capital Ship Management
2021	Grace Emilia	9884174	LNG Carrier	174,000	Membrane	NYK	Hyundai Samho HI (HSHI)	NYK LNG Shipmngt.
2021	MOL Hestia	9885996	LNG Carrier	180,000	Membrane	MOL	Daewoo (DSME)	Northern Marine Mngt
2021	Maran Gas Amorgos	9887217	LNG Carrier	174,000	Membrane	Maran Gas Maritime	Daewoo (DSME)	Maran Gas Maritime
2021	Prism Courage	9888481	LNG Carrier	180,000	Membrane	SK Shipping	Hyundai HI (Ulsan)	SK Shipping
2021	Maran Gas Ithaca	9892717	LNG Carrier	174,000	Membrane	Maran Gas Maritime	Daewoo (DSME)	Maran Gas Maritime
2021	LNG Endeavour	9893606	LNG Carrier	174,000	Membrane	NYK	Samsung HI (SHI)	Gazoccean (NYK)
2021	Vivirt City LNG	9895238	LNG Carrier	174,000	Membrane	H-Line Shipping	Hyundai Samho HI (HSHI)	H-Line Shipping
2021	Hong Li	9909613	LNG Carrier	9,500	Other	Tianjin SW Maritime	Huangpu Wenchong	Tianjin SW Maritime
2021	LNGT Powership Africa	9043677	FSRU	127,386	Moss	KARMOL	Sembcorp	MOL LNG Transport (E)
2021	BW Tatiana (ex Gallina)	9236626	FSRU	137,001	Membrane	BW Gas Invenergy JV	Keppel Shipyard	BW Fleet Mngt
2021	Ertugrul Gazi	9859820	FSRU	170,000	Membrane	Botas	Hyundai HI (Ulsan)	WSM Malaysia
2021	Transgas Power	9861809	FSRU	174,000	Membrane	Dynagas	Hudong Zhonghua (HZ)	Dynagas
2021	Transgas Force	9861811	FSRU	174,000	Membrane	Dynagas	Hudong Zhonghua (HZ)	Dynagas

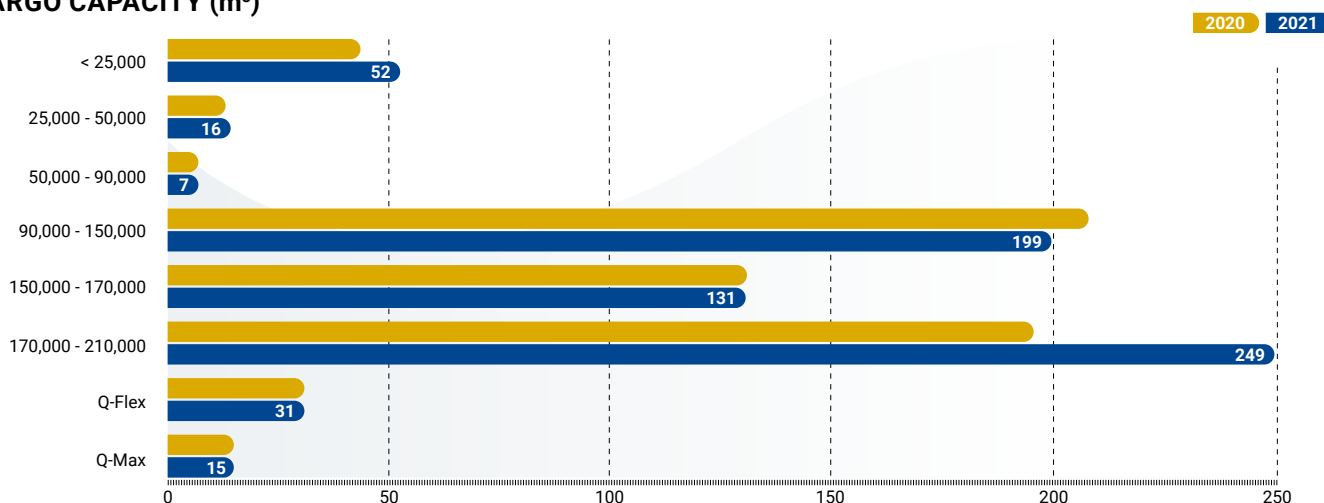
LNG fleet statistics

At the end of 2021, the fleet could be classified as follows:

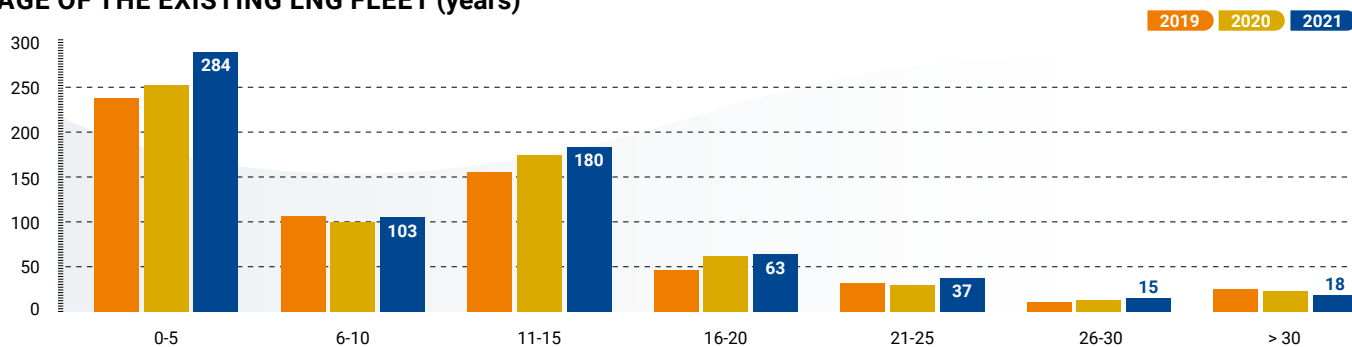
CONTAINMENT SYSTEM



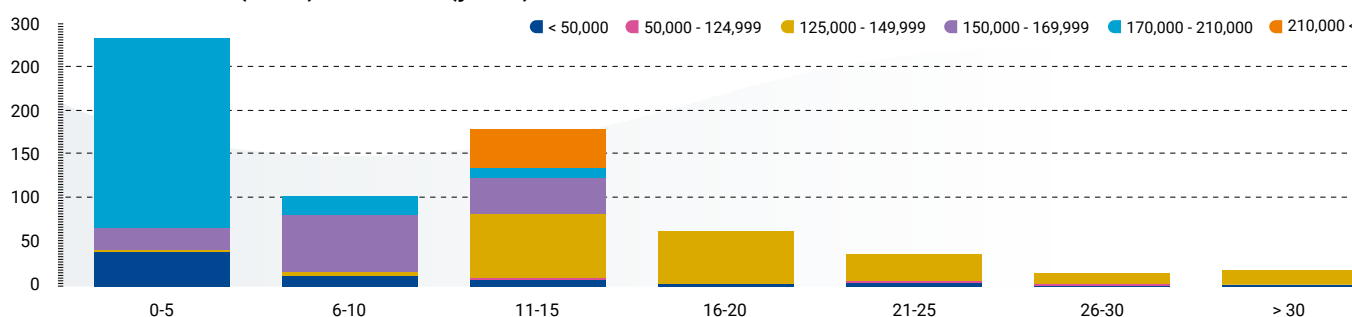
CARGO CAPACITY (m³)



AGE OF THE EXISTING LNG FLEET (years)



CARGO CAPACITY (in m³) AND AGE (years)



FSRU fleet

The total FSRU fleet consisted of **48 units** at the end of 2021. Total FSRU cargo capacity at the end of 2021 stood at around 7.1 million cubic meters.

The orderbook comprised 5 FSRUs, 1 of which was scheduled for 2022 delivery.

FSRU FLEET AT THE END OF 2021

Built/ Converted	Vessel Name	Storage Capacity (m³)	CCS*	Nominal Send-out Capacity (MTPA)	Owner	Builder	Location
1977/2010	Golar Freeze	125,000	Moss	3.6	New Fortress Energy	Keppel Shipyard	Old Harbour, Jamaica
1977/2012	Nusantara Regas Satu (ex Khannur)	125,000	Moss	3.0	New Fortress Energy	Jurong Shipyard	Nusantara, Indonesia
1981/2008	Golar Spirit	129,000	Moss	1.8	New Fortress Energy	Keppel Shipyard	Laid up
2003/2013	FSRU Toscana (ex Golar Frost)	137,500	Moss	2.8	OLT Offshore	Drydocks World Dubai	Toscana, Italy
2004/2009	Golar Winter	138,000	Membrane	3.8	New Fortress Energy	Keppel Shipyard	Pecem, Brazil
2005	Excellence	138,000	Membrane	3.8	Excelerate Energy	DSME	Moheshkhali, Bangladesh
2005	Excelsior	138,000	Membrane	3.5	Excelerate Energy	DSME	Hadera, Israel
2006	Summit LNG (ex Excelerate)	138,000	Membrane	3.8	Excelerate Energy	DSME	Summit LNG, Bangladesh
2008	Explorer	150,900	Membrane	6.0	Excelerate Energy	DSME	Jebel Ali, Dubai, UAE
2009	Express	151,000	Membrane	3.8	Excelerate Energy	DSME	Ruwais, Abu Dhabi, UAE
2009	Exquisite	150,900	Membrane	4.8	Nakilat-Excelerate Energy	DSME	Port Qasim Karachi, Pakistan
2009	Neptune (ex GDF Suez Neptune)	145,130	Membrane	3.7	Höegh LNG	SHI	LNGC
2010	Cape Ann (ex GDF Suez Cape Ann)	145,130	Membrane	3.7	Höegh LNG	SHI	Tianjin, China
2010	Exemplar	150,900	Membrane	4.8	Excelerate Energy	DSME	LNGC
2010	Expedient	150,900	Membrane	5.2	Excelerate Energy	DSME	GNL Escobar, Argentina
2014	Experience	173,400	Membrane	6.0	Excelerate Energy	DSME	Guanabara Bay, Brazil
2014	Golar Eskimo	160,000	Membrane	3.8	New Fortress Energy	SHI	Aqaba, Jordan
2014	Golar Igloo	170,000	Membrane	5.8	New Fortress Energy	SHI	Mina Al Ahmadi, Kuwait
2014	Höegh Gallant	170,000	Membrane	2.8	Höegh LNG	HHI	Old Harbour, Jamaica
2014	Independence	170,000	Membrane	2.9	Höegh LNG	HHI	Klaipeda, Lithuania
2014	PGN FSRU Lampung	170,000	Membrane	2.7	Höegh LNG	HHI	Lampung LNG, Indonesia
2015	BW Singapore	170,000	Membrane	5.7	BW Gas	SHI	Sumed, Egypt
2015	Golar Tundra	170,000	Membrane	5.5	Golar LNG	SHI	LNGC
2016	Höegh Grace	170,000	Membrane	2.8	Höegh LNG	HHI	Cartagena, Colombia
2017	BW Integrity	170,000	Membrane	5.0	BW Gas	SHI	Port Qasim GasPort, Pakistan
2017	Höegh Giant	170,000	Membrane	3.7	Höegh LNG	HHI	Jaigarh, India
2017	MOL FSRU Challenger	263,000	Membrane	4.1	MOL	DSME	LNGC (Hong Kong)
2017	S188 (ex Exmar FSRU)	25,000	Other	4.6	Exmar Offshore	Wison Zhoushan	Laid up (Eemshaven, Netherlands)
2018	Golar Nanook	170,000	Membrane	5.5	New Fortress Energy	SHI	Sergipe, Brazil
2018	Höegh Esperanza	170,000	Membrane	3.7	Höegh LNG	HHI	LNGC
2018	Höegh Gannet	170,000	Membrane	5.7	Höegh LNG	HHI	LNGC (Santos, Brazil)
2018	Karunia Dewata	26,000	Other	0.4	JSK Group	PaxOcean Zhoushan	Benoa, Indonesia
2018	Marshal Vasilievskiy	174,000	Membrane	2.0	Gazprom	HHI	Kaliningrad, Russia
2009/2019	BW Paris (ex BW GDF Suez Paris)	162,500	Membrane	4.2	BW Gas	Keppel Shipyard	LNG (Philippines)
2019	BW Magna	173,400	Membrane	5.7	BW Gas	DSME	Port Açu, Brazil
2019	Höegh Galleon	170,000	Membrane	3.7	Höegh LNG	SHI	LNGC (Port Kembla, Australia)
2019	Turquoise (ex Turkey FSRU)	170,000	Membrane	5.7	Kolin Construction	HHI	Etki, Turkey
2020	Excelerate Sequoia	173,400	Membrane	6.0	Maran Gas Maritime	DSME	Bahia, Brazil
2016/2020	FSRU Hua Xiang(ex. Hua Xiang 8)	14,000	Other	0.1	Zhejiang Huaxiang	Fengshun Ship Hvy	Amurang, Indonesia
2020	FSRU Jawa Satu	170,000	Membrane	2.4	PT Jawa Satu Regas	SHI	Java, Indonesia
2005/2020	LNG Croatia (ex Golar Viking)	140,208	Membrane	1.9	LNG Hrvatska	Huarun Dadong	Kirk, Croatia
2020	Torman	28,000	Other	2.0	Gasfin Development	Jiangnan SY Group	Tema LNG, Ghana
2020	Vasant 1	180,000	Membrane	5.0	Swan Energy	HHI	Jafrabad , India
2003/2021	BW Tatiana (ex Gallina)	137,001	Moss		BW Gas Invenergy JV	Keppel Shipyard	El Salvador
2021	Ertugrul Gazi	170,000	Membrane	4.1	BOTAS	HHI	Dörtöyl, Turkey
1994/2021	LNGT Powership Africa (ex Dwiputra)	127,386	Moss		KARMOL	Sembcorp	Senegal
2021	Transgas Force	174,000	Membrane		Dynagas	HZ	LNGC
2021	Transgas Power	174,000	Membrane		Dynagas	HZ	LNGC

FSRU ORDERBOOK AT THE END OF 2021

Built	Vessel Name	Storage Capacity (m³)	CCS*	Nominal Send-out Capacity (MTPA)	Owner	Builder	Location
1991/2022	LNGT Powership Asia (ex NW Shearwater)	127,500	Moss		KARMOL	Sembcorp	Brazil
2002/2023	ETVFA Prometheas(ex Galea)	136,967	Moss		DEFA	COSCO HI (Shanghai)	Cyprus
2010/2023	TBN (ex Gaslog Chelsea)	153,000	Membrane		Gaslog	Keppel Shipyard	Greece
1994/2023	TBN (ex LNG Vesta)	127,547	Moss		KARMOL	Keppel Shipyard	Mozambique
2023	TBN	170,000	Membrane		Wison Offshore	Wison (Nantong)	

LNG carrier fleet

more than 50,000 cubic meters

The total LNG carrier fleet (more than 50,000 cubic meters) consisted of **588 vessels** at the end of 2021.

The orderbook comprised 166 vessels, 32 of which were scheduled for 2022 delivery.

Built ▼	Vessel Name ▼	Capacity (m ³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
1977	LNG Aquarius	126,300	Moss	Hanochem Shpg	General Dynamics	PT. Humolco LNG Indonesia
1978	Bering Energy	126,400	Moss	Sinokor Merchant	General Dynamics	Sinokor Ship Mngt
1978	Gulf Energy	126,300	Moss	Sinokor Merchant	General Dynamics	Sinokor Ship Mngt
1978	LNG Capricorn	126,300	Moss	Nova Shpg & Log	General Dynamics	Nova Carriers
1979	Coral Energy	126,400	Moss	Sinokor Merchant	General Dynamics	Sinokor Ship Mngt
1979	LNG Taurus	126,300	Moss	Nova Shpg & Log	General Dynamics	Nova Carriers
1979	Ocean Quest	126,540	Membrane	Hong Kong LNG	Newport News SB	OSM Maritime
1983	Adriatic Energy	125,568	Moss	Sinokor Merchant	MHI	Synergy Maritime
1989	Grace Energy	127,590	Moss	Sinokor Merchant	MHI	WSM Singapore
1989	LNG Maleo	127,708	Moss	MOL	Mitsui SB (Chiba)	MOL LNG Transport
1989	Northwest Sanderling	127,525	Moss	Aust LNG Ship Op	MHI	STASCO (Shell)
1990	Ekaputra 1	137,012	Moss	Humpuss Intermoda	MHI	PT. Humolco LNG Indonesia
1990	Northwest Snipe	127,747	Moss	Aust LNG Ship Op	Mitsui SB (Chiba)	STASCO (Shell)
1993	Arctic Spirit	89,880	Other	Seapeak	I.H.I.	Teekay Shpg. (Gla)
1993	Northwest Sandpiper	127,500	Moss	Aust LNG Ship Op	Mitsui SB (Chiba)	STASCO (Shell)
1993	Polar Spirit	89,880	Other	Seapeak	I.H.I.	Teekay Shpg. (Gla)
1994	Al Khaznah	135,496	Moss	National Gas Shpg.	Mitsui SB (Chiba)	ADNOC Logistics
1994	Hyundai Utopia	125,182	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
1994	Northwest Stormpetrel	127,606	Moss	Aust LNG Ship Op	MHI	STASCO (Shell)
1994	Puteri Intan	130,405	Membrane	MISC	Ch. de l'Atlantique	EagleStar Shipmngmt
1994	Shahamah	135,496	Moss	National Gas Shpg.	KHI	ADNOC Logistics
1994	YK Sovereign	127,125	Moss	SK Shipping	HHI	SK Shipping
1995	Ghasha	137,514	Moss	National Gas Shpg.	Mitsui SB (Chiba)	ADNOC Logistics
1995	HL Pyeong Taek	130,600	Membrane	H-Line Shipping	HHIC	H-Line Shipping
1995	Ish	137,540	Moss	National Gas Shpg.	MHI	ADNOC Logistics
1995	Puteri Delima	130,405	Membrane	MISC	Ch. de l'Atlantique	EagleStar Shipmngmt
1995	Puteri Nilam	130,405	Membrane	MISC	Ch. de l'Atlantique	EagleStar Shipmngmt
1996	Al Khor	137,354	Moss	QatarEnergy	MHI	NYK LNG Shipmngt.
1996	Al Zubarah	137,573	Moss	QatarEnergy	Mitsui SB (Chiba)	MOL LNG Transport
1996	Hyundai Greenpia	125,000	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
1996	Mrawah	137,000	Moss	National Gas Shpg.	Kvaerner Masa	ADNOC
1996	Mubaraz	137,000	Moss	National Gas Shpg.	Kvaerner Masa	ADNOC

Built ▼	Vessel Name ▼	Capacity (m ³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
1996	Puteri Zamrud	130,405	Membrane	MISC	Ch. de l'Atlantique	EagleStar Shipmngmt
1997	Al Hamra	137,000	Moss	National Gas Shpg.	Kvaerner Masa	ADNOC
1997	Al Rayyan	135,358	Moss	QatarEnergy	KHI	K-Line Energ Mgmt
1997	Al Wajbah	137,354	Moss	QatarEnergy	MHI	MOL LNG Transport
1997	Portovenere	65,000	Membrane	MISC	Fincantieri Sestri	EagleStar Shipmngmt
1997	Umm Al Ashtan	137,000	Moss	National Gas Shpg.	Kvaerner Masa	ADNOC
1998	Al Wakrah	135,358	Moss	QatarEnergy	KHI	MOL LNG Transport
1998	Broog	135,466	Moss	QatarEnergy	Mitsui SB (Chiba)	NYK LNG Shipmngt.
1998	Lerici	65,000	Membrane	MISC	Fincantieri Sestri	EagleStar Shipmngmt
1998	Zekreet	135,420	Moss	QatarEnergy	Mitsui SB (Chiba)	K-Line Energ Mgmt
1999	Al Bidda	135,279	Moss	QatarEnergy	KHI	MOL LNG Transport
1999	Doha	137,354	Moss	QatarEnergy	MHI	NYK LNG Shipmngt.
1999	HL Muscat	138,200	Membrane	H-Line Shipping	HHIC	H-Line Shipping
1999	Hyundai Technopia	135,000	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
1999	SK Summit	138,000	Membrane	SK Shipping	DSME	SK Shipping
2000	Al Jasra	137,100	Moss	QatarEnergy	MHI	NYK LNG Shipmngt.
2000	Golar Mazo	136,867	Moss	New Fortress Energy	MHI	Golar Management
2000	HL Ras Laffan	138,214	Membrane	H-Line Shipping	HHIC	H-Line Shipping
2000	HL Sur	138,333	Membrane	H-Line Shipping	HHIC	H-Line Shipping
2000	Hyundai Aquapia	135,000	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
2000	Hyundai Cosmopia	135,000	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
2000	Hyundai Oceanpia	135,000	Moss	Hyundai LNG Shipping	HHI	Hyundai LNG Shipping
2000	K. Acacia	138,017	Membrane	Korea Line LNG	DSME	KLC SM
2000	K. Freesia	135,256	Membrane	Korea Line LNG	DSME	KLC SM
2000	LNG Jamal	135,333	Moss	NYK	MHI	NYK LNG Shipmngt.
2000	SK Splendor	138,375	Membrane	SK Shipping	SHI	SK Shipping
2000	SK Stellar	138,375	Membrane	SK Shipping	SHI	SK Shipping
2000	SK Supreme	138,200	Membrane	SK Shipping	SHI	SK Shipping
2001	Sohar LNG	137,248	Moss	Oman Shipping Co	MHI	Oman Ship Mngt
2002	Abadi	136,912	Moss	Brunei Gas Carriers	MHI	Brunei Gas Carriers
2002	Excalibur	138,034	Membrane	Exmar	DSME	Exmar Shipmngt
2002	Hispania Spirit	140,500	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2002	LNG Rivers	137,231	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2002	LNG Sokoto	137,231	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2002	Puteri Delima Satu	137,100	Membrane	MISC	Mitsui SB (Chiba)	EagleStar Shipmngmt
2002	Puteri Intan Satu	137,489	Membrane	MISC	MHI	EagleStar Shipmngmt

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2002	Trader	138,000	Membrane	Lloyds Ind. Leasing	SHI	K Line LNG Shpg.
2003	BW Boston	138,059	Membrane	BW LNG	DSME	BW Fleet Mngt
2003	BW Everett	138,028	Membrane	BW LNG	DSME	BW Fleet Mngt
2003	Castillo de Villalba	138,183	Membrane	Elcano	IZAR (Puerto Real)	Elcano
2003	Catalunya Spirit	138,000	Membrane	Seapeak	IZAR (Sestao)	Teekay Shpg. (Gla)
2003	Energy Frontier	147,599	Moss	Tokyo LNG Tanker Co.	KHI	MOL LNG Transport
2003	Golar Arctic	140,648	Membrane	Golar LNG	DSME	Golar Management
2003	LNG Bayelsa	137,500	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2003	Merchant	138,283	Membrane	Sinokor Merchant	SHI	WSM Malaysia
2003	Methane Princess	138,000	Membrane	New Fortress Energy	DSME	Golar Management
2003	Pacific Notus	137,006	Moss	TEPCO	MHI	NYK LNG Shipmngt.
2003	Puteri Nilam Satu	137,585	Membrane	MISC	MHI	EagleStar Shipmngmt
2003	Singapore Energy	138,287	Membrane	Sinokor Merchant	SHI	WSM Malaysia
2003	SK Sunrise	138,306	Membrane	I.S. Carriers SA	SHI	Iino Marine Service
2004	Berge Arzew	138,088	Membrane	BW LNG	DSME	BW Fleet Mngt
2004	Bilbao Knutsen	138,000	Membrane	Knutsen OAS Shipping	IZAR (Sestao)	Knutsen OAS Shipping
2004	Cadiz Knutsen	138,826	Membrane	Knutsen OAS Shipping	IZAR (Puerto Real)	Knutsen OAS Shipping
2004	Disha	136,026	Membrane	India LNG Transport	DSME	Shpg Corp of India
2004	Dukhan	137,661	Moss	MOL	Mitsui SB (Chiba)	MOL LNG Transport (E)
2004	Fuji LNG	149,172	Moss	TMS Cardiff Gas	KHI	TMS Cardiff Gas
2004	Fuwairit	138,000	Membrane	MOL	SHI	MOL LNG Transport (E)
2004	Galicia Spirit	140,624	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2004	Gemmata	136,985	Moss	STASCO (Shell)	MHI	STASCO (Shell)
2004	Hongkong Energy	138,000	Membrane	Sinokor Merchant	DSME	WSM Malaysia
2004	Lalla Fatma N'Soumer	147,845	Moss	Algeria Nippon Gas	KHI	Hyproc Shipping Co.
2004	LNG Akwa Ibom	141,038	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2004	LNG River Orashi	145,914	Membrane	BW LNG	DSME	BW Fleet Mngt
2004	Madrid Spirit	138,000	Membrane	Seapeak	IZAR (Puerto Real)	Teekay Shpg. (Gla)
2004	Methane Kari Elin	138,209	Membrane	STASCO (Shell)	SHI	STASCO (Shell)
2004	Milaha Ras Laffan	138,270	Membrane	Qatar Shipping	SHI	Pronav Ship Mngt
2004	Puteri Firus Satu	137,617	Membrane	MISC	MHI	EagleStar Shipmngmt
2004	Puteri Zamrud Satu	137,100	Membrane	MISC	Mitsui SB (Chiba)	EagleStar Shipmngmt
2004	Raahi	136,026	Membrane	India LNG Transport	DSME	Shpg Corp of India
2005	Al Deebe	145,130	Membrane	MOL	SHI	MOL LNG Transport (E)
2005	Al Thakhira	145,130	Membrane	K-Line	SHI	K Line LNG Shpg.
2005	Energy Advance	147,624	Moss	Tokyo LNG Tanker Co.	KHI	MOL LNG Transport
2005	LNG Adamawa	142,656	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2005	LNG Cross River	141,000	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2005	LNG Enugu	145,914	Membrane	BW LNG	DSME	BW Fleet Mngt
2005	LNG Oyo	145,842	Membrane	BW LNG	DSME	BW Fleet Mngt
2005	LNG Pioneer	138,000	Membrane	Jovo Group	DSME	Fleet Management
2005	Lusail	145,000	Membrane	NYK	SHI	NYK LNG Shipmngt.
2005	Maran Gas Asclepius	145,822	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2005	Nizwa LNG	147,684	Moss	Oman Shipping Co	KHI	Oman Ship Mngt
2005	Puteri Mutiara Satu	137,100	Membrane	MISC	Mitsui SB (Chiba)	EagleStar Shipmngmt
2005	Salalah LNG	145,951	Membrane	Oman Shipping Co	SHI	Oman Ship Mngt
2005	Seri Alam	145,572	Membrane	MISC	SHI	EagleStar Shipmngmt
2005	Umm Bab	145,000	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2006	Al Marrouna	149,539	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2006	Arctic Discoverer	142,612	Moss	K-Line	Mitsui SB (Chiba)	K Line LNG Shpg.
2006	Arctic Lady	147,208	Moss	Hoegh LNG	MHI	Hoegh LNG Fleet M.
2006	Arctic Princess	147,835	Moss	Hoegh LNG	MHI	Hoegh LNG Fleet M.
2006	Arctic Voyager	142,929	Moss	K-Line	KHI	K Line LNG Shpg.
2006	Energy Progress	147,558	Moss	MOL	KHI	MOL LNG Transport
2006	Global Energy	74,130	Membrane	TotalEnergies	Aker Yards	Gazcocean (NYK)
2006	Golar Grand	145,879	Membrane	New Fortress Energy	DSME	Golar Management
2006	Golar Maria	145,700	Membrane	New Fortress Energy	DSME	Golar Management
2006	Iberica Knutsen	138,120	Membrane	Knutsen OAS Shipping	DSME	Knutsen OAS Shipping
2006	Ibra LNG	147,100	Membrane	Oman Shipping Co	SHI	Oman Ship Mngt
2006	Ibri LNG	147,384	Moss	Oman Shipping Co	MHI	Oman Ship Mngt
2006	LNG Benue	145,842	Membrane	BW LNG	DSME	BW Fleet Mngt
2006	LNG Dream	145,000	Moss	Osaka Gas	KHI	NYK LNG Shipmngt.
2006	LNG Lokoja	149,600	Membrane	BW LNG	DSME	BW Fleet Mngt
2006	LNG River Niger	141,000	Moss	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2006	LNG Unity	154,472	Membrane	TotalEnergies	Aker Yards	Synergy Maritime
2006	Methane Jane Elizabeth	145,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2006	Methane Lydon Volney	145,000	Membrane	GasLog	SHI	GasLog LNG Services
2006	Methane Rita Andrea	145,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2006	Milaha Qatar	145,130	Membrane	Qatar Shipping	SHI	Pronav Ship Mngt
2006	Prima Carrier (ex Pacific Eurus)	136,942	Moss	PT Prima Ocean Nusantara	MHI	B. Schulte (UK)
2006	Seri Amanah	145,000	Membrane	MISC	SHI	EagleStar Shipmngmt
2006	Seri Anggun	145,731	Membrane	MISC	SHI	EagleStar Shipmngmt
2006	Seri Angkasa	145,000	Membrane	MISC	SHI	EagleStar Shipmngmt
2006	Simaisma	145,700	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2006	Stena Blue Sky	145,819	Membrane	Stena Bulk	DSME	Northern Marine Mngt

LNG carrier fleet

Built ▼	Vessel Name ▼	Capacity (m ³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2007	Al Areesh	148,786	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2007	Al Daayen	148,853	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2007	Al Gattara	216,224	Membrane	Qatar Gas (Nakilat)	HHI	Nakilat Shipping
2007	Al Jassasiya	145,700	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2007	Al Ruwais	210,100	Membrane	Schulte Group	DSME	Pronav Ship Mngt
2007	Al Safliya	210,134	Membrane	Schulte Group	DSME	Pronav Ship Mngt
2007	Cheikh El Mokrani	74,365	Membrane	Hyproc Shipping Co.	Universal SB (Tsu)	Hyproc Shipping Co.
2007	Clean Energy	149,700	Membrane	Dynagas LNG Partners	HHI	Dynagas
2007	Ejnan	145,000	Membrane	NYK	SHI	NYK LNG Shipmngt.
2007	Grace Acacia	149,786	Membrane	NYK	HHI	NYK LNG Shipmngt.
2007	Grace Barleria	149,700	Membrane	NYK	HHI	NYK LNG Shipmngt.
2007	Grand Elena	145,580	Moss	Sovcomflot	MHI	NYK LNG Shipmngt.
2007	Kmarin Emerald (ex British Emerald)	154,983	Membrane	BP Shipping	HHI	BP Shipping
2007	LNG Alliance	154,472	Membrane	TotalEnergies	Aker Yards	Gazoocean (NYK)
2007	LNG Borno	149,600	Membrane	NYK	SHI	NYK LNG Shipmngt.
2007	LNG Kano	149,600	Membrane	BW LNG	DSME	BW Fleet Mngt
2007	LNG Ogun	149,600	Membrane	NYK	SHI	NYK LNG Shipmngt.
2007	LNG Ondo	148,300	Membrane	BW LNG	DSME	BW Fleet Mngt
2007	Maran Gas Coronis	145,700	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2007	Methane Alison Victoria	145,127	Membrane	GasLog Partners	SHI	GasLog LNG Services
2007	Methane Heather Sally	145,127	Membrane	GasLog Partners	SHI	GasLog LNG Services
2007	Methane Nile Eagle	145,144	Membrane	STASCO (Shell)	SHI	GasLog LNG Services
2007	Methane Shirley Elisabeth	145,127	Membrane	GasLog Partners	SHI	GasLog LNG Services
2007	Neo Energy	149,700	Membrane	Tsakos Energy Nav	HHI	HMM Ocean Service
2007	Ob River	149,700	Membrane	Dynagas LNG Partners	HHI	Dynagas
2007	Seri Ayu	145,894	Membrane	MISC	SHI	EagleStar Shipmngt
2007	Seri Bakti	152,300	Membrane	MISC	MHI	EagleStar Shipmngt
2007	Seri Begawan	152,300	Membrane	MISC	MHI	EagleStar Shipmngt
2007	Sestao Knutsen	138,114	Membrane	Knutsen OAS Shipping	CNN - La Naval	Knutsen OAS Shipping
2007	Symphonic Breeze	147,608	Moss	K-Line	KHI	K Line LNG Shpg.
2007	Tembek	216,000	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2008	Al Aamriya	210,168	Membrane	Nakilat, JC	DSME	MOL LNG Transport (E)
2008	Al Ghariya	210,100	Membrane	Schulte Group	DSME	Pronav Ship Mngt
2008	Al Garrafa	216,224	Membrane	Qatar Gas (Nakilat)	HHI	Nakilat Shipping
2008	Al Ghuwairiya	263,249	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2008	Al Hamla	216,000	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2008	Al Huwaila	217,000	Membrane	Seapeak	SHI	Teekay Shpg. (Gla)
2008	Al Kharsaah	217,000	Membrane	Seapeak	SHI	Teekay Shpg. (Gla)
2008	Al Khuwair	217,000	Membrane	Seapeak	SHI	Teekay Shpg. (Gla)
2008	Al Oraiq	210,100	Membrane	Nakilat, JC	DSME	K Line LNG Shpg.
2008	Al Sahla	216,200	Membrane	Nakilat, JC	HHI	NYK LNG Shipmngt.
2008	Al Shamal	217,000	Membrane	Seapeak	SHI	Teekay Shpg. (Gla)
2008	Al Thumama	216,200	Membrane	Nakilat, JC	HHI	NYK LNG Shipmngt.
2008	Al Utouriya	215,000	Membrane	Nakilat, JC	HHI	NYK LNG Shipmngt.
2008	Alto Acrux	147,798	Moss	TEPCO	MHI	NYK LNG Shipmngt.
2008	Amur River	149,743	Membrane	Dynagas LNG Partners	HHI	Dynagas
2008	Arwa Spirit	165,500	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2008	British Sapphire	155,000	Membrane	BP Shipping	HHI	BP Shipping
2008	Bu Samra	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2008	Cheikh Bouamama	75,558	Membrane	Hyproc Shipping Co.	Universal SB (Tsu)	Hyproc Shipping Co.
2008	Dapeng Moon	147,210	Membrane	CLNG	HZ	CLNG
2008	Dapeng Sun	147,236	Membrane	CLNG	HZ	CLNG
2008	Duhail	210,100	Membrane	Schulte Group	DSME	Pronav Ship Mngt
2008	Energy Navigator	147,558	Moss	Tokyo LNG Tanker Co.	KHI	MOL LNG Transport
2008	Fraiha	210,100	Membrane	Nakilat, JC	DSME	MOL LNG Transport (E)
2008	Grace Cosmos	149,700	Membrane	NYK	HHI	Gazoocean (NYK)
2008	Grand Aniva	145,580	Moss	Sovcomflot	MHI	SCF Mngt Dubai
2008	Grand Mereya	145,964	Moss	MOL	Mitsui SB (Chiba)	MOL LNG Transport
2008	Hyundai Ecopia	149,700	Membrane	HMM Co., Ltd	HHI	HMM Ocean Service
2008	K. Jasmine	145,877	Membrane	Korea Line LNG	DSME	KLC SM
2008	K. Mugungwha	151,812	Membrane	Korea Line LNG	DSME	KLC SM
2008	Kmarin Diamond (ex British Diamond)	155,046	Membrane	BP Shipping	HSHI	BP Shipping
2008	LNG Barka	155,982	Moss	Oman Shipping Co	KHI	NYK LNG Shipmngt.
2008	LNG Ebisu	147,546	Moss	MOL	KHI	MOL LNG Transport
2008	LNG Imo	148,300	Membrane	BW LNG	DSME	BW Fleet Mngt
2008	LNG Kolt	153,595	Membrane	Pan Ocean	HHIC	POS SM Co Ltd
2008	Marib Spirit	165,500	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2008	Methane Spirit	165,500	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2008	Mozah	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2008	Murwab	210,100	Membrane	Nakilat, JC	DSME	MOL LNG Transport (E)
2008	Seri Balhaf	157,721	Membrane	MISC	MHI	EagleStar Shipmngt
2008	Seri Bijaksana	152,888	Membrane	MISC	MHI	EagleStar Shipmngt
2008	Tangguh Batur	145,700	Membrane	Sovcomflot	DSME	NYK Shipmngt. Pte.
2008	Tangguh Foja	155,641	Membrane	K-Line	SHI	K-Line Energ Mgmt
2008	Tangguh Hiri	154,971	Membrane	Seapeak	HHI	Teekay Shpg. (Gla)

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2008	Tangguh Jaya	155,641	Membrane	K-Line	SHI	K-Line Energ Mgmt
2008	Tangguh Towuti	145,700	Membrane	Sovcomflot	DSME	NYK Shipmngt. Pte.
2008	Trinity Arrow	154,982	Membrane	K-Line	Koyo Dock	K Line LNG Shpg.
2008	Tristar Ruby	155,000	Membrane	Tristar Energy	HHI	WSM Malaysia
2008	Umm Al Amad	210,100	Membrane	Nakilat, JC	DSME	K Line LNG Shpg.
2008	Umm Slal	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Al Dafna	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Al Ghashamiya	217,000	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Al Karaana	210,191	Membrane	Qatar Gas (Nakilat)	DSME	STASCO (Shell)
2009	Al Kharaitiyat	216,200	Membrane	Qatar Gas (Nakilat)	HHI	Nakilat Shipping
2009	Al Khattiya	210,196	Membrane	Qatar Gas (Nakilat)	DSME	STASCO (Shell)
2009	Al Mafyar	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Al Mayeda	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Al Nuaman	210,184	Membrane	Qatar Gas (Nakilat)	DSME	STASCO (Shell)
2009	Al Rekayyat	216,200	Membrane	Qatar Gas (Nakilat)	HHI	Nakilat Shipping
2009	Al Sadd	210,100	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2009	Al Samriya	261,700	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2009	Al Sheehaniya	210,166	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2009	Aseem	155,000	Membrane	India LNG Transport	SHI	Shpg Corp of India
2009	BW Brussels	162,400	Membrane	BW LNG	DSME	BW Fleet Mngt
2009	Cygnus Passage	147,200	Moss	Cygnus LNG Shipping	MHI	NYK LNG Shipmngt.
2009	Dapeng Star	147,210	Membrane	CLNG	HZ	CLNG
2009	Energy Confidence	153,000	Moss	Tokyo LNG Tanker Co.	KHI	NYK LNG Shipmngt.
2009	Lijmiliya	261,700	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2009	LNG Jupiter	155,999	Moss	NYK	KHI	NYK LNG Shipmngt.
2009	Magellan Spirit	165,500	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2009	Mekaines	267,335	Membrane	Qatar Gas (Nakilat)	SHI	Nakilat Shipping
2009	Mesaimeer	216,200	Membrane	Qatar Gas (Nakilat)	HHI	Nakilat Shipping
2009	Min Lu	147,210	Membrane	CLNG	HZ	CLNG
2009	Min Rong	147,000	Membrane	CLNG	HZ	CLNG
2009	Onaiza	210,100	Membrane	Qatar Gas (Nakilat)	DSME	Nakilat Shipping
2009	Pacific Enlighten	147,200	Moss	TEPCO	MHI	NYK LNG Shipmngt.
2009	Seri Balqis	157,611	Membrane	MISC	MHI	EagleStar Shipmngt
2009	Shagra	267,335	Membrane	Qatar Gas (Nakilat)	SHI	STASCO (Shell)
2009	Taitar No. 1	147,362	Moss	Nimic Ship Mgmt	MHI	Nimic Ship Mgmt
2009	Taitar No. 2	147,500	Moss	Nimic Ship Mgmt	KHI	Nimic Ship Mgmt
2009	Tangguh Palung	155,642	Membrane	K-Line	SHI	K-Line Energ Mgmt

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2009	Tangguh Sago	154,971	Membrane	Seapeak	HSHI	Teekay Shpg. (Gla)
2009	Trinity Glory	154,999	Membrane	K-Line	Koyo Dock	Pronav Ship Mngt
2009	Woodside Donaldson	165,936	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2010	Aamira	267,335	Membrane	Qatar Gas (Nakilat)	SHI	STASCO (Shell)
2010	Al Bahiya	210,185	Membrane	Qatar Gas (Nakilat)	DSME	STASCO (Shell)
2010	Barcelona Knutsen	173,400	Membrane	Knutsen OAS Shipping	DSME	Knutsen OAS Shipping
2010	Castillo de Santisteban	173,673	Membrane	Elcano	STX SB (Jinhae)	Elcano
2010	GasLog Chelsea	153,000	Membrane	GasLog	HHIC	GasLog LNG Services
2010	GasLog Savannah	155,000	Membrane	GasLog	SHI	GasLog LNG Services
2010	GasLog Singapore	155,000	Membrane	GasLog	SHI	GasLog LNG Services
2010	Gigira Laitebo	155,000	Membrane	MOL	HHI	MOL LNG Transport (E)
2010	Meridian Spirit	165,772	Membrane	Malt LNG	SHI	Teekay Shpg. (Gla)
2010	Methane Becki Anne	170,678	Membrane	GasLog Partners	SHI	GasLog LNG Services
2010	Methane Julia Louise	170,000	Membrane	Lepta Shipping	SHI	GasLog LNG Services
2010	Methane Mickie Harper	170,000	Membrane	Meiji Shipping	SHI	STASCO (Shell)
2010	Methane Patricia Camila	170,000	Membrane	Meiji Shipping	SHI	STASCO (Shell)
2010	Point Fortin	154,914	Membrane	Trinity LNG Carrier	Koyo Dock	MOL LNG Transport (E)
2010	Rasheeda	267,335	Membrane	Qatar Gas (Nakilat)	SHI	STASCO (Shell)
2010	Ribera Del Duero Knutsen	173,400	Membrane	Knutsen OAS Shipping	DSME	Knutsen OAS Shipping
2010	Sevilla Knutsen	173,400	Membrane	Knutsen OAS Shipping	DSME	Knutsen OAS Shipping
2010	Spirit of Hela	173,010	Membrane	MOL	HSHI	MOL LNG Transport (E)
2010	Taitar No. 3	147,366	Moss	Nimic Ship Mgmt	MHI	Nimic Ship Mgmt
2010	Taitar No. 4	147,546	Moss	Nimic Ship Mgmt	KHI	Nimic Ship Mgmt
2010	Valencia Knutsen	173,400	Membrane	Knutsen OAS Shipping	DSME	Knutsen OAS Shipping
2010	Zarga	267,335	Membrane	Qatar Gas (Nakilat)	SHI	STASCO (Shell)
2011	Amali	148,000	Membrane	Brunei Shell Tankers	DSME	Brunei Gas Carriers
2011	Arkat	147,228	Membrane	Brunei Gas Carriers	DSME	Brunei Gas Carriers
2011	Energy Horizon	177,441	Moss	Tokyo LNG Tanker Co.	KHI	NYK LNG Shipmngt.
2011	Lobito	160,276	Membrane	MINT LNG	SHI	Teekay Shpg. (Gla)
2011	Malanje	160,276	Membrane	MINT LNG	SHI	NYK LNG Shipmngt.
2011	Sonangol Benguela	160,500	Membrane	Sonangol	DSME	Chevron Shpg Co
2011	Sonangol Etosha	160,786	Membrane	Sonangol	DSME	Chevron Shpg Co
2011	Sonangol Sambizanga	160,785	Membrane	Sonangol	DSME	Chevron Shpg Co
2011	Soyo	160,276	Membrane	MINT LNG	SHI	Teekay Shpg. (Gla)
2011	Stena Clear Sky	173,593	Membrane	Stena Bulk	DSME	Northern Marine Mngt

LNG carrier fleet

Built ▼	Vessel Name ▼	Capacity (m ³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2011	Stena Crystal Sky	173,611	Membrane	Stena Bulk	DSME	Northern Marine Mngt
2012	Cubal	160,276	Membrane	MINT LNG	SHI	NYK LNG Shipmngt.
2012	Shen Hai	147,210	Membrane	CLNG	HZ	CLNG
2013	Arctic Aurora	154,899	Membrane	Dynagas LNG Partners	HHI	Dynagas
2013	Cool Voyager	160,372	Membrane	Thenamaris	SHI	Thenamaris LNG
2013	GasLog Santiago	155,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2013	GasLog Seattle	155,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2013	GasLog Shanghai	155,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2013	GasLog Skagen	155,000	Membrane	GasLog	SHI	GasLog LNG Services
2013	GasLog Sydney	155,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2013	Golar Celsius	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2013	Golar Seal	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2013	Grace Dahlia	177,630	Moss	NYK	KHI	NYK LNG Shipmngt.
2013	Lena River	155,165	Membrane	Dynagas LNG Partners	HHI	Dynagas
2013	Wilforce	156,007	Membrane	Awilco LNG	DSME	Awilco LNG Technical
2013	Wilpride	156,007	Membrane	Awilco LNG	DSME	Awilco LNG Technical
2013	Woodside Goode	159,662	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2013	Woodside Rogers	160,668	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2013	Yenisei River	155,000	Membrane	Dynagas LNG Partners	HHI	Dynagas
2014	Adam LNG	161,870	Membrane	Oman Shipping Co	HHI	Oman Ship Mngt
2014	Amani	154,800	Membrane	Brunei Gas Carriers	HHI	Brunei Gas Carriers
2014	Asia Energy	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2014	Asia Vision	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2014	Clean Ocean	161,881	Membrane	Dynagas	HHI	Dynagas
2014	Clean Planet	161,814	Membrane	Dynagas	HHI	Dynagas
2014	Cool Runner	160,000	Membrane	Thenamaris	SHI	Thenamaris LNG
2014	Corcovado LNG	160,106	Membrane	TMS Cardiff Gas	DSME	TMS Cardiff Gas
2014	Esshu Maru	155,300	Moss	Trans Pacific Shipping 2 Ltd.	MHI	MOL LNG Transport
2014	GasLog Saratoga	155,000	Membrane	GasLog	SHI	GasLog LNG Services
2014	Golar Bear	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2014	Golar Crystal	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2014	Golar Frost	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2014	Golar Glacier	162,000	Membrane	New Fortress Energy	HSHI	Golar Management
2014	Golar Penguin	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2014	Kita LNG	160,118	Membrane	TMS Cardiff Gas	DSME	TMS Cardiff Gas
2014	LNG Venus	155,873	Moss	MOL	MHI	MOL LNG Transport
2014	Maran Gas Apollonia	161,870	Membrane	Maran Nakilat	HSHI	Maran Gas Maritime
2014	Maran Gas Delphi	159,800	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2014	Maran Gas Efessos	159,800	Membrane	Maran Nakilat	DSME	Maran Gas Maritime
2014	Maran Gas Posidonia	161,870	Membrane	Maran Nakilat	HSHI	Maran Gas Maritime
2014	Pacific Arcadia	147,200	Moss	NYK	MHI	NYK LNG Shipmngt.
2014	Palu LNG	160,000	Membrane	TMS Cardiff Gas	DSME	TMS Cardiff Gas
2014	Pskov	170,200	Membrane	Sovcomflot	STX SB (Jinhae)	SCF Mngt Dubai
2014	Seishu Maru	155,300	Moss	Trans Pacific Shipping 1 Ltd.	MHI	NYK LNG Shipmngt.
2014	Solaris	155,000	Membrane	GasLog Partners	SHI	STASCO (Shell)
2014	Velikiy Novgorod	170,567	Membrane	Sovcomflot	STX SB (Jinhae)	SCF Mngt Dubai
2014	Yari LNG	160,000	Membrane	TMS Cardiff Gas	DSME	TMS Cardiff Gas
2015	Amadi	154,800	Membrane	Brunei Gas Carriers	HHI	Brunei Gas Carriers
2015	Asia Endeavour	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2015	Asia Excellence	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2015	Beidou Star	172,000	Membrane	MOL	HZ	MOL LNG Transport (E)
2015	BW Pavilion Leeara	161,870	Membrane	BW LNG	HHI	BW Fleet Mngt
2015	BW Pavilion Vanda	161,870	Membrane	BW LNG	HHI	BW Fleet Mngt
2015	Clean Horizon	161,870	Membrane	Dynagas	HHI	Dynagas
2015	Cool Explorer	161,352	Membrane	Thenamaris	SHI	Thenamaris LNG
2015	Energy Atlantic	159,924	Membrane	Alpha Gas	STX SB (Jinhae)	Alpha Gas
2015	GasLog Salem	155,000	Membrane	GasLog	SHI	GasLog LNG Services
2015	Golar Ice	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2015	Golar Kelvin	162,000	Membrane	New Fortress Energy	HSHI	Golar Management
2015	Golar Snow	160,000	Membrane	New Fortress Energy	SHI	Golar Management
2015	LNG Bonny II	176,809	Membrane	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2015	LNG Finima II	174,900	Membrane	Bonny Gas Transport	SHI	NLNG Ship Mngt
2015	LNG Jurojin	155,300	Moss	MOL	MHI	MOL LNG Transport
2015	LNG Port Harcourt II	174,900	Membrane	Bonny Gas Transport	SHI	NLNG Ship Mngt
2015	Maran Gas Alexandria	161,870	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2015	Maran Gas Lindos	159,800	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2015	Maran Gas Mystras	159,800	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2015	Maran Gas Sparta	161,870	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2015	Maran Gas Troy	159,800	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2015	Papua	172,000	Membrane	MOL	HZ	MOL LNG Transport (E)
2015	SCF Melampus	170,200	Membrane	Sovcomflot	STX SB (Jinhae)	SCF Mngt Dubai
2015	SCF Mitre	170,200	Membrane	Sovcomflot	STX SB (Jinhae)	SCF Mngt Dubai
2015	Southern Cross	172,000	Membrane	MOL	HZ	MOL LNG Transport (E)
2016	CESI Gladstone	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2016	Christophe de Margerie	172,845	Membrane	Sovcomflot	DSME	SCF Mngt Dubai

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2016	Clean Vision	162,000	Membrane	Dynagas	HHI	Dynagas
2016	Creole Spirit	173,545	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2016	GasLog Geneva	174,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2016	GasLog Gibraltar	174,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2016	GasLog Glasgow	174,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2016	GasLog Greece	174,000	Membrane	GasLog Partners	SHI	GasLog LNG Services
2016	Kumul	172,000	Membrane	MOL	HZ	MOL LNG Transport (E)
2016	La Mancha Knutsen	176,300	Membrane	Knutsen OAS Shipping	HHI	Knutsen OAS Shipping
2016	LNG Abalamabie	174,900	Membrane	Bonny Gas Transport	SHI	Northern Marine Mngt
2016	LNG Abuja II	174,900	Membrane	Bonny Gas Transport	SHI	Northern Marine Mngt
2016	LNG Fukurokuju	165,134	Moss	KEPCO	KHI	MOL LNG Transport
2016	LNG Lagos II	176,809	Membrane	Bonny Gas Transport	HHI	Nigeria LNG Ltd.
2016	LNG Mars	155,693	Moss	MOL	MHI	MOL LNG Transport
2016	LNG Saturn	155,300	Moss	MOL	MHI	MOL LNG Transport
2016	Maran Gas Achilles	174,000	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2016	Maran Gas Agamemnon	174,000	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2016	Maran Gas Amphipolis	173,479	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2016	Maran Gas Hector	174,000	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2016	Maran Gas Leto	174,000	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2016	Maran Gas Pericles	175,069	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2016	Maran Gas Vergina	174,364	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2016	Maria Energy	174,000	Membrane	Tsakos Energy Nav	HHI	Tsakos Hyundai Mgmt
2016	Oak Spirit	173,545	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2016	Prachi	173,323	Membrane	India LNG Transport	HHI	Shpg Corp of India
2016	Rioja Knutsen	176,300	Membrane	Knutsen OAS Shipping	HHI	Knutsen OAS Shipping
2016	Seri Camellia	150,200	Moss	MISC	HHI	EagleStar Shipmngmt
2016	Tessala	171,800	Membrane	ITOCHU Corp	HHI	Hyproc Shipping Co.
2017	Asia Integrity	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2017	Asia Venture	160,000	Membrane	Chevron Transport	SHI	Chevron Transport
2017	Bishu Maru	165,287	Moss	K-Line	KHI	K-Line Energ Mgmt
2017	Boris Vilkitsky	172,636	Membrane	Dynagas	DSME	Dynagas
2017	CESI Beihai	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2017	CESI Qingdao	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2017	CESI Tianjin	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2017	Eduard Toll	172,652	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2017	Fedor Litke	172,636	Membrane	Dynagas	DSME	Dynagas

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2017	Hyundai Peacepia	174,000	Membrane	Hyundai LNG Shipping	DSME	Hyundai LNG Shipping
2017	Hyundai Princepia	174,000	Membrane	Hyundai LNG Shipping	DSME	Hyundai LNG Shipping
2017	Macoma	173,545	Membrane	Seapeak	DSME	STASCO (Shell)
2017	Maran Gas Olympias	173,638	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2017	Maran Gas Roxana	173,615	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2017	Maran Gas Ulysses	175,069	Membrane	Maran Gas Maritime	HSHI	Maran Gas Maritime
2017	Murex	173,545	Membrane	Seapeak	DSME	STASCO (Shell)
2017	Ougarta	171,800	Membrane	ITOCHU Corp	HHI	Hyproc Shipping Co.
2017	Pan Asia	174,000	Membrane	Seapeak	HZ	Teekay Shpg. (Gla)
2017	Seri Cempaka	150,200	Moss	MISC	HHI	EagleStar Shipmngmt
2017	Seri Cenderawasih	150,200	Moss	MISC	HHI	EagleStar Shipmngmt
2017	SK Audace	180,000	Membrane	SK & Marubeni JV	SHI	SK Shipping
2017	SM Eagle	174,263	Membrane	Korea Line LNG	DSME	KLC SM
2017	SM Seahawk	174,263	Membrane	Korea Line LNG	DSME	KLC SM
2017	Torben Spirit	173,545	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2018	Baharain Spirit	180,000	Membrane	Seapeak	DSME	Teekay Shpg. (Gla)
2018	Boris Davydov	172,636	Membrane	Dynagas	DSME	Dynagas
2018	British Achiever	173,644	Membrane	BP Shipping	DSME	BP Shipping
2018	British Contributor	173,644	Membrane	BP Shipping	DSME	BP Shipping
2018	British Partner	173,644	Membrane	BP Shipping	DSME	BP Shipping
2018	BW Lilac	174,284	Membrane	BW LNG	DSME	BW Fleet Mngt
2018	BW Tulip	174,284	Membrane	BW LNG	DSME	BW Fleet Mngt
2018	Castillo de Caldelas	178,817	Membrane	Elcano	Imabari SB Saijo	Elcano
2018	Castillo de Merida	178,817	Membrane	Elcano	Imabari SB Saijo	Elcano
2018	CESI Lianyungang	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2018	CESI Wenzhou	174,323	Membrane	China Energy Shpg	HZ	China Energy Mngt
2018	Diamond Gas Orchid	165,000	Moss	NYK	MHI	NYK LNG Shipmngt.
2018	Diamond Gas Rose	165,000	Moss	NYK	MHI	NYK LNG Shipmngt.
2018	Energy Liberty	166,571	Other	MOL	JMU Tsu Shipyard	MOL LNG Transport
2018	Enshu Maru	165,257	Moss	K-Line	KHI	K-Line Energ Mgmt
2018	Flex Endeavour	173,400	Membrane	Hyundai Glovis	DSME	FLEX Fleet Mngt.
2018	Flex Enterprise	173,400	Membrane	Hyundai Glovis	DSME	FLEX Fleet Mngt.
2018	Flex Rainbow	174,000	Membrane	FLEX LNG	SHI	FLEX Fleet Mngt.
2018	Flex Ranger	174,101	Membrane	FLEX LNG	SHI	FLEX Fleet Mngt.
2018	GasLog Genoa	174,000	Membrane	GasLog	SHI	GasLog LNG Services
2018	GasLog Hong Kong	174,000	Membrane	GasLog	HHI	GasLog LNG Services
2018	GasLog Houston	174,000	Membrane	GasLog	HHI	GasLog LNG Services
2018	Georgiy Brusilov	172,636	Membrane	Dynagas	DSME	Dynagas
2018	Kinisis	174,000	Membrane	Chandris (Hellas)	DSME	K Line LNG Shpg.
2018	LNG Juno	180,000	Moss	MOL	MHI	MOL LNG Transport
2018	LNG Sakura	177,582	Moss	KEPCO	KHI	NYK LNG Shipmngt.

LNG carrier fleet

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2018	LNG Schneeweisschen	180,125	Membrane	MOL	DSME	MOL LNG Transport (E)
2018	Magdala	173,545	Membrane	Seapeak	DSME	STASCO (Shell)
2018	Maran Gas Spetses	173,554	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2018	Marvel Eagle	156,265	Moss	MOL	KHI	MOL LNG Transport
2018	Marvel Falcon	174,000	Membrane	NYK	SHI	NYK Shipmngt. Pte.
2018	Marvel Hawk	174,000	Membrane	Schulte Group	SHI	B. Schulte (UK)
2018	Megara	173,545	Membrane	Seapeak	DSME	STASCO (Shell)
2018	Myrina	173,545	Membrane	Seapeak	DSME	STASCO (Shell)
2018	Oceanic Breeze	155,671	Moss	K-Line	MHI	K-Line Energ Mgmt
2018	Pacific Breeze	183,352	Moss	K-Line	KHI	K-Line Energ Mgmt
2018	Pacific Mimosa	155,727	Moss	NYK	MHI	NYK LNG Shipmngt.
2018	Pan Americas	174,000	Membrane	Seapeak	HZ	Teekay Shpg. (Gla)
2018	Pan Europe	174,000	Membrane	Seapeak	HZ	Teekay Shpg. (Gla)
2018	Patris	174,000	Membrane	Chandris (Hellas)	DSME	K Line LNG Shpg.
2018	Rudolf Samoylovich	172,567	Membrane	Seapeak CLNG JV	DSME	Teekay Shpg. (Gla)
2018	Sean Spirit	174,162	Membrane	Seapeak	HSHI	Teekay Shpg. (Gla)
2018	Seri Camar	150,200	Moss	MISC	HHI	EagleStar Shipmngt
2018	Seri Cemara	150,200	Moss	MISC	HHI	EagleStar Shipmngt
2018	SK Resolute	180,082	Membrane	SK & Marubeni JV	SHI	SK Shipping
2018	SK Serenity	174,117	Membrane	SK Shipping	SHI	SK Shipping
2018	SK Spica	174,117	Membrane	SK Shipping	SHI	SK Shipping
2018	Vladimir Rusanov	172,658	Membrane	Arctic LNG	DSME	MOL LNG Transport (E)
2018	Vladimir Vize	172,658	Membrane	Arctic LNG	DSME	MOL LNG Transport (E)
2019	Adriano Knutsen	179,981	Membrane	Knutsen OAS Shipping	HHI	Knutsen OAS Shipping
2019	British Listener	173,644	Membrane	BP Shipping	DSME	BP Shipping
2019	British Mentor	173,644	Membrane	BP Shipping	DSME	BP Shipping
2019	British Sponsor	173,644	Membrane	BP Shipping	DSME	BP Shipping
2019	Bushu Maru	180,000	Moss	NYK	MHI	NYK LNG Shipmngt.
2019	BW Pavilion Aranda	173,400	Membrane	BW LNG	DSME	BW Fleet Mngt
2019	Diamond Gas Sakura	165,000	Moss	NYK	MHI	NYK LNG Shipmngt.
2019	Energy Glory	166,686	Other	NYK	JMU Tsu Shipyard	NYK LNG Shipmngt.
2019	Energy Innovator	166,571	Other	MOL	JMU Tsu Shipyard	MOL LNG Transport
2019	Energy Universe	166,637	Other	MOL	JMU Tsu Shipyard	MOL LNG Transport
2019	Flex Constellation	173,400	Membrane	FLEX LNG	DSME	FLEX Fleet Mngt.
2019	Flex Courageous	173,400	Membrane	FLEX LNG	DSME	FLEX Fleet Mngt.
2019	GasLog Gladstone	174,000	Membrane	GasLog	SHI	GasLog LNG Services
2019	GasLog Warsaw	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2019	Georgiy Ushakov	172,652	Membrane	Seapeak CLNG JV	DSME	Teekay Shpg. (Gla)
2019	LNG Dubhe	174,000	Membrane	MOL	HZ	MOL LNG Transport (E)
2019	Maran Gas Andros	173,400	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2019	Maran Gas Chios	173,548	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2019	Maran Gas Hydra	173,617	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2019	Marvel Crane	177,627	Moss	NYK	MHI	NYK Shipmngt. Pte.
2019	Marvel Heron	177,000	Moss	MOL	MHI	MOL LNG Transport
2019	Marvel Kite	174,000	Membrane	NYK	SHI	MMS Co Ltd
2019	Marvel Pelican	156,265	Moss	MOL	KHI	MOL LNG Transport
2019	Nikolay Urvantsev	172,597	Membrane	Arctic Purple LNG	DSME	MOL LNG Transport (E)
2019	Nikolay Yevgenov	172,625	Membrane	Seapeak CLNG JV	DSME	Teekay Shpg. (Gla)
2019	Nikolay Zubov	172,636	Membrane	Dynagas	DSME	Dynagas
2019	Nohshu Maru	180,000	Moss	MOL	MHI	MOL LNG Transport
2019	Pan Africa	174,000	Membrane	Seapeak	HZ	Teekay Shpg. (Gla)
2019	Prism Agility	180,024	Membrane	SK Shipping	HHI	SK Shipping
2019	Prism Brilliance	180,016	Membrane	SK Shipping	HHI	SK Shipping
2019	Rias Baixas Knutsen	180,041	Membrane	Knutsen OAS Shipping	HHI	Knutsen OAS Shipping
2019	Shinshu Maru	177,481	Moss	NYK	KHI	NYK LNG Shipmngt.
2019	Sohshu Maru	177,474	Moss	MOL	KHI	MOL LNG Transport
2019	Vladimir Voronin	172,608	Membrane	Seapeak CLNG JV	DSME	Teekay Shpg. (Gla)
2019	Woodside Chaney	173,579	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2019	Woodside Rees Withers	173,400	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2019	Yakov Gakkel	172,658	Membrane	Seapeak CLNG JV	DSME	Teekay Shpg. (Gla)
2019	Yamal Spirit	174,174	Membrane	Seapeak	HSHI	Teekay Shpg. (Gla)
2020	Amberjack LNG	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2020	Aristos I	174,000	Membrane	Capital Product Partners	HHI	B. Schulte (Hellas)
2020	Bonito LNG	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2020	BW Magnolia	173,400	Membrane	BW LNG	DSME	BW Fleet Mngt
2020	BW Pavilion Aranthera	173,400	Membrane	BW LNG	DSME	BW Fleet Mngt
2020	Celsius Copenhagen	180,000	Membrane	Celsius	SHI	Celsius Tech
2020	Cool Discoverer	174,000	Membrane	Thenamaris	HHI	Thenamaris LNG
2020	Diamond Gas Metropolis	174,000	Membrane	NYK Mitsubishi JV	HSHI	NYK LNG Shipmngt.
2020	Dorado LNG	174,000	Membrane	TMS Cardiff Gas	SHI	TMS Cardiff Gas
2020	Elisa Larus	174,000	Membrane	NYK	HSHI	Gazocan (NYK)
2020	Energy Pacific	173,400	Membrane	Alpha Gas	DSME	Alpha Gas
2020	Flex Amber	173,400	Membrane	FLEX LNG	HSHI	FLEX Fleet Mngt.
2020	Flex Artemis	173,400	Membrane	FLEX LNG	DSME	FLEX Fleet Mngt.
2020	Flex Aurora	173,400	Membrane	FLEX LNG	HSHI	FLEX Fleet Mngt.
2020	Flex Resolute	173,400	Membrane	FLEX LNG	DSME	FLEX Fleet Mngt.
2020	GasLog Georgetown	174,000	Membrane	GasLog	SHI	GasLog LNG Services
2020	GasLog Wales	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2020	GasLog Westminster	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2020	GasLog Windsor	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2020	Global Energy	173,514	Membrane	Nakilat Maran JV	DSME	Nakilat Shipping
2020	La Seine	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2020	LNG Megrez	174,000	Membrane	MOL China COSCO JV	HZ	MOL LNG Transport (E)
2020	LNG Merak	174,000	Membrane	MOL China COSCO JV	HZ	MOL LNG Transport (E)
2020	LNG Phecda	174,000	Membrane	MOL China COSCO JV	HZ	MOL LNG Transport (E)
2020	Maran Gas Psara	173,595	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2020	Pearl LNG	174,000	Membrane	TMS Cardiff Gas	SHI	TMS Cardiff Gas
2020	Ogür	174,000	Membrane	TMS Cardiff Gas	SHI	TMS Cardiff Gas
2020	SCF Barents	174,000	Membrane	Sovcomflot	HSHI	SCF Mngt Dubai
2020	SCF La Perouse	174,000	Membrane	Sovcomflot	HSHI	SCF Mngt Dubai
2020	Traiano Knutsen	180,000	Membrane	Knutsen OAS Shipping	HHI	Knutsen OAS Shipping
2020	Vivit Americas LNG	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2020	Woodside Charles Allen	173,583	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2021	Adamastos	174,000	Membrane	Capital Product Partners	HHI	Capital Ship Management
2021	Aristarchos	174,000	Membrane	Capital Product Partners	HHI	B. Schulte (UK)
2021	Aristidis I	174,000	Membrane	Capital Product Partners	HHI	B. Schulte (UK)
2021	Asklipios	174,000	Membrane	Capital Product Partners	HHI	Capital Ship Management
2021	Attalos	174,000	Membrane	Capital Product Partners	HHI	B. Schulte (UK)
2021	BW Helios	174,000	Membrane	BW LNG	DSME	BW Fleet Mngt
2021	BW Lesmes	174,000	Membrane	BW LNG	DSME	BW Fleet Mngt
2021	Celsius Canberra	180,000	Membrane	Celsius	SHI	Celsius Tech
2021	Celsius Carolina	180,000	Membrane	Celsius	SHI	Celsius Tech
2021	Celsius Charlotte	180,000	Membrane	Celsius	SHI	Celsius Tech
2021	Cobia LNG	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2021	Cool Racer	174,000	Membrane	Thenamaris	HHI	Thenamaris LNG
2021	Diamond Gas Crystal	174,000	Membrane	MISC NYK Mitsubishi JV	HSHI	NYK LNG Shipmngt.
2021	Diamond Gas Victoria	174,000	Membrane	MISC NYK Mitsubishi JV	HSHI	NYK LNG Shipmngt.
2021	Energy Endeavour	173,400	Membrane	Alpha Gas	DSME	Alpha Gas
2021	Energy Integrity	173,400	Membrane	Alpha Gas	DSME	Alpha Gas
2021	Energy Intelligence	173,400	Membrane	Alpha Gas	DSME	Alpha Gas
2021	Flex Freedom	173,400	Membrane	FLEX LNG	DSME	FLEX Fleet Mngt.
2021	Flex Vigilant	174,000	Membrane	FLEX LNG	HSHI	FLEX Fleet Mngt.
2021	Flex Volunteer	174,000	Membrane	FLEX LNG	HSHI	FLEX Fleet Mngt.
2021	GAIL Bhuwan	180,000	Membrane	MOL	DSME	MOL LNG Transport (A)
2021	GasLog Galveston	174,000	Membrane	GasLog	SHI	GasLog LNG Services
2021	GasLog Wellington	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2021	GasLog Winchester	180,000	Membrane	GasLog	SHI	GasLog LNG Services
2021	Global Sea Spirit	174,000	Membrane	Nakilat Maran JV	DSME	Nakilat Shipping
2021	Global Star	173,400	Membrane	Nakilat Maran JV	DSME	Nakilat Shipping
2021	Grace Emilia	174,000	Membrane	NYK	HSHI	NYK LNG Shipmngt.
2021	Gui Ying	174,000	Membrane	CSSC Shpg Leasing	HZ	B. Schulte (Hellas)
2021	Hellas Athina	173,400	Membrane	Latsco Shipping	HSHI	Latsco Marine Mngt
2021	Hellas Diana	173,400	Membrane	Latsco Shipping	HSHI	Latsco Marine Mngt

Built ▼	Vessel Name ▼	Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Manager ▼
2021	Isabella	174,129	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2021	LNG Adventure	174,000	Membrane	NYK	SHI	Gazoclean (NYK)
2021	LNG Endeavour	174,000	Membrane	NYK	SHI	Gazoclean (NYK)
2021	LNG Endurance	174,000	Membrane	NYK	SHI	Gazoclean (NYK)
2021	LNG Enterprise	174,000	Membrane	NYK	SHI	Gazoclean (NYK)
2021	LNG Rosenrot	180,000	Membrane	MOL	DSME	MOL LNG Transport (E)
2021	LNGShips Athena	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2021	LNGShips Empress	174,000	Membrane	TMS Cardiff Gas	SHI	TMS Cardiff Gas
2021	LNGShips Manhattan	174,000	Membrane	TMS Cardiff Gas	HHI	TMS Cardiff Gas
2021	Maran Gas Amorgos	174,000	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2021	Maran Gas Ithaca	174,000	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2021	Maran Gas Kalymnos	173,400	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime
2021	Marvel Swan	174,000	Membrane	Navigare Capital	SHI	Pronav Ship Mngt
2021	Minerva Chios	174,000	Membrane	Minerva Gas	SHI	WSM Malaysia
2021	Minerva Kalymnos	174,000	Membrane	Minerva Gas	SHI	B. Schulte (Hellas)
2021	Minerva Limnos	173,400	Membrane	Minerva Gas	DSME	B. Schulte (Hellas)
2021	Minerva Psara	173,400	Membrane	Minerva Gas	DSME	WSM Malaysia
2021	MOL Hestia	180,000	Membrane	MOL	DSME	Northern Marine Mngt
2021	Mu Lan	174,000	Membrane	CSSC Shpg Leasing	HZ	B. Schulte (Hellas)
2021	Prism Courage	180,000	Membrane	SK Shipping	HHI	SK Shipping
2021	SCF Timmerman	173,400	Membrane	Sovcomflot	HSHI	SCF Mngt Dubai
2021	Vivirt City LNG	174,000	Membrane	H-Line Shipping	HSHI	H-Line Shipping
2021	Yiannis	174,000	Membrane	Maran Gas Maritime	DSME	Maran Gas Maritime

DSME: Daewoo Shipbuilding & Marine Engineering

HHI: Hyundai Heavy Industries (Ulsan)

HHIC: Hanjin Heavy Industries & Construction

HSHI: Hyundai Samho Heavy Industries

HZ: Hudong Zhonghua

IHI: Ishikawajima-Harima Heavy Industries

KHI: Kawasaki Heavy Industries

MHI: Mitsubishi Heavy Industries

SHI: Samsung Heavy Industries

LNG carrier fleet

less than 50,000 cubic meters

The total LNG carrier fleet (less than 50,000 cubic meters) consisted of 33 vessels at the end of 2021.

The orderbook comprised 3 vessels, 1 of which was scheduled for 2022 delivery.

LNG CARRIER FLEET AT THE END OF 2021

Built ▼	Vessel Name ▼	Storage Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Location ▼
1988	Kayoh Maru	1,517	Other	Daiichi Tanker	Imamura Zosen.	Daiichi Tanker
1993	Lucia Ambition	18,928	Membrane	Farenc Shipping	NKK (Tsu)	Farenc Shipping
1996	Surya Aki	19,474	Moss	Humpuss Intermoda	KHI	MOL LNG Transport
1997	Aman Sendai	18,928	Membrane	MISC	NKK (Tsu)	EagleStar Shipmgmt
1998	Pelita Energy	18,944	Membrane	Jaya Samudra	NKK (Tsu)	Jaya Samudra
2000	Tripura	23,096	Membrane	Humpuss Intermoda	NKK (Tsu)	Humolco LNG
2003	Shinju Maru No. 1	2,513	Other	NS United Tanker	Higaki Zosen	NS United Tanker
2005	North Pioneer	2,512	Other	Japan Liquid Gas	Shin Kurushima	Iino Kaiun Kaisha
2007	Sun Arrows	19,100	Moss	Maple LNG Transport	KHI	MOL
2008	Kakurei Maru	2,536	Other	Tsurumi Sunmarine	Higaki Zosen	Tsurumi Sunmarine
2008	Shinju Maru No. 2	2,536	Other	NS United Tanker	Higaki Zosen	NS United Tanker
2010	Coral Favia	10,030	Other	Anthony Veder	Taizhou Skaugen	Anthony Veder
2011	Akebono Maru	3,556	Other	NS United Tanker	Higaki Zosen	NS United Tanker
2011	Coral Fungia	10,030	Other	Anthony Veder	Taizhou Skaugen	Anthony Veder
2011	Coral Furcata	10,030	Other	Anthony Veder	Taizhou Skaugen	Anthony Veder
2011	Unikum Spirit	12,000	Other	Seapeak	AVIC Dingheng SB	OSM Tanker
2011	Vision Spirit	12,022	Other	Seapeak	AVIC Dingheng SB	OSM Tanker
2013	Coral Anthelia	6,500	Other	Anthony Veder	AVIC Dingheng SB	Anthony Veder
2013	Kakuyu Maru	2,538	Other	Tsurumi Sunmarine	KHI	Tsurumi Sunmarine
2015	Hai Yang Shi You 301	31,043	Other	CenerTech	Jiangnan SY Group	CenerTech
2015	JS Ineos Ingenuity	27,566	Other	Evergas AS	Sinopacific Offshore	Thome Ship Mngt
2015	JS Ineos Insight	27,566	Other	Evergas AS	Sinopacific Offshore	Thome Ship Mngt
2015	JS Ineos Intrepid	27,566	Other	Evergas AS	Sinopacific Dayang	Thome Ship Mngt
2016	JS Ineos Innovation	27,566	Other	Evergas AS	Sinopacific Dayang	Evergas AS
2016	JS Ineos Inspiration	27,566	Other	Evergas AS	Sinopacific Offshore	Thome Ship Mngt
2017	JS Ineos Independence	27,566	Other	Evergas AS	Sinopacific Offshore	Evergas AS
2017	JS Ineos Intuition	27,500	Other	Evergas AS	Jiangsu New YZJ	Evergas AS
2017	JS Ineos Invention	27,500	Other	Evergas AS	Jiangsu New YZJ	Evergas AS
2019	LNG Jia Xing (ex Saga Dawn)	45,000	Membrane	CMI	CMHI (Jiangsu)	Integrated Mrtm
2020	CNTIC VPower Global	28,000	Other	CNTIC Vpower	COSCO HI (Dalian)	LNG STS
2020	Coral Encanto	30,000	Other	Anthony Veder	Ningbo Xinle SB	Anthony Veder
2021	Hong Li	9,500	Other	Tianjin SW Maritime	Huangpu Wenchong	Tianjin SW Maritime
2021	Ravenna Knutsen	30,117	Other	Knutsen OAS Shipping	Hyundai Mipo	Knutsen OAS Shipping

LNG CARRIER ORDERBOOK AT THE END OF 2021

Built ▼	Vessel Name ▼	Storage Capacity (m³) ▼	CCS* ▼	Owner ▼	Builder ▼	Location ▼
2022	Coral Nordic	30,000	Other	Anthony Veder	Jiangnan SY Group	Anthony Veder
2023	TBN	9,500	Other	Tianjin SW Maritime	Huangpu Wenchong	Tianjin SW Maritime
2023	TBN	30,000	Other	Anthony Veder	Hyundai Mipo	Anthony Veder

LNG bunkering vessel (LNGBV) fleet

The total LNGBV fleet consisted of **31 vessels** at the end of 2021.

The orderbook comprised 22 LNGBVs, 10 of which were scheduled for 2022 delivery.

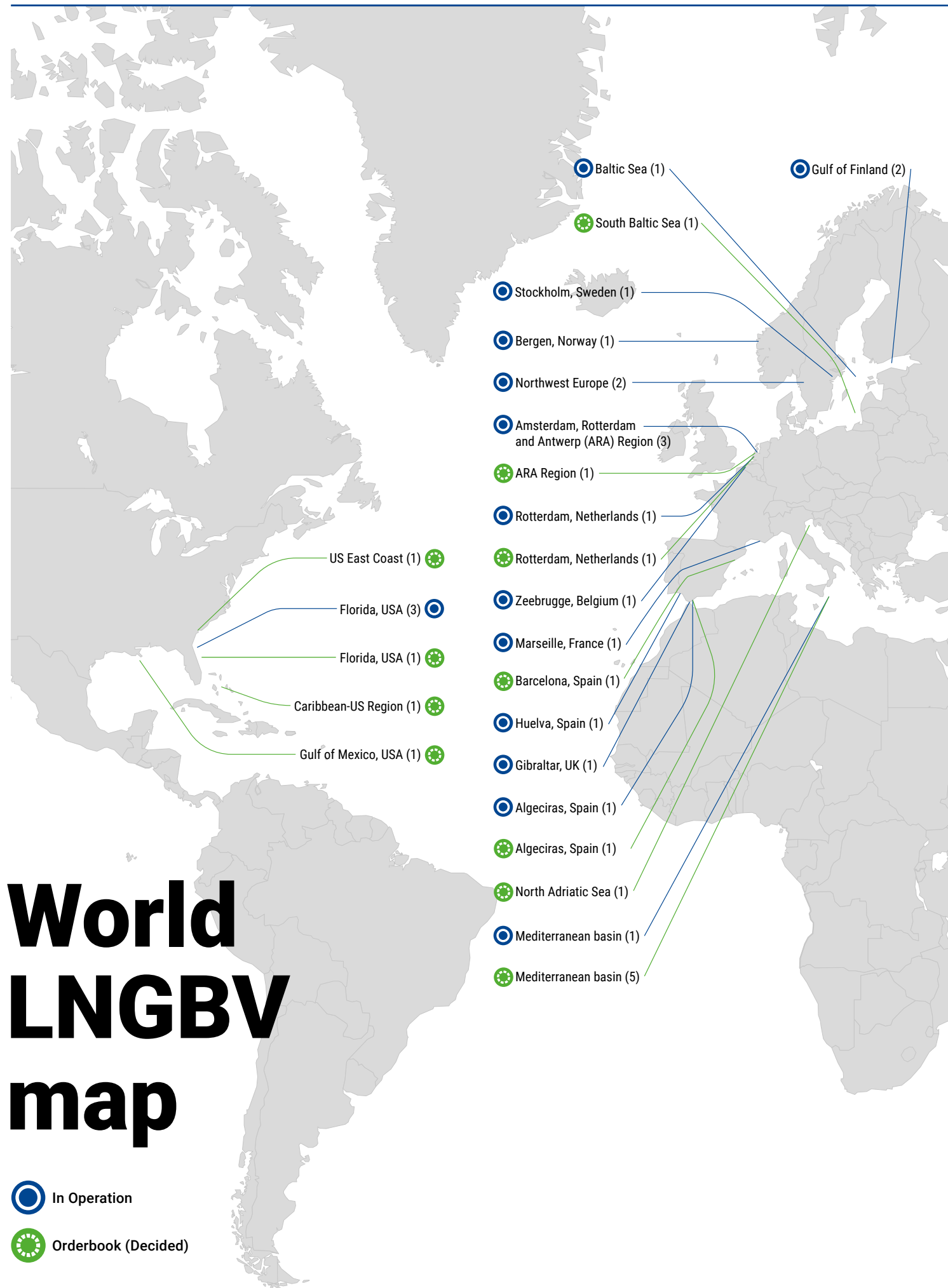
LNGBV FLEET AT THE END OF 2021

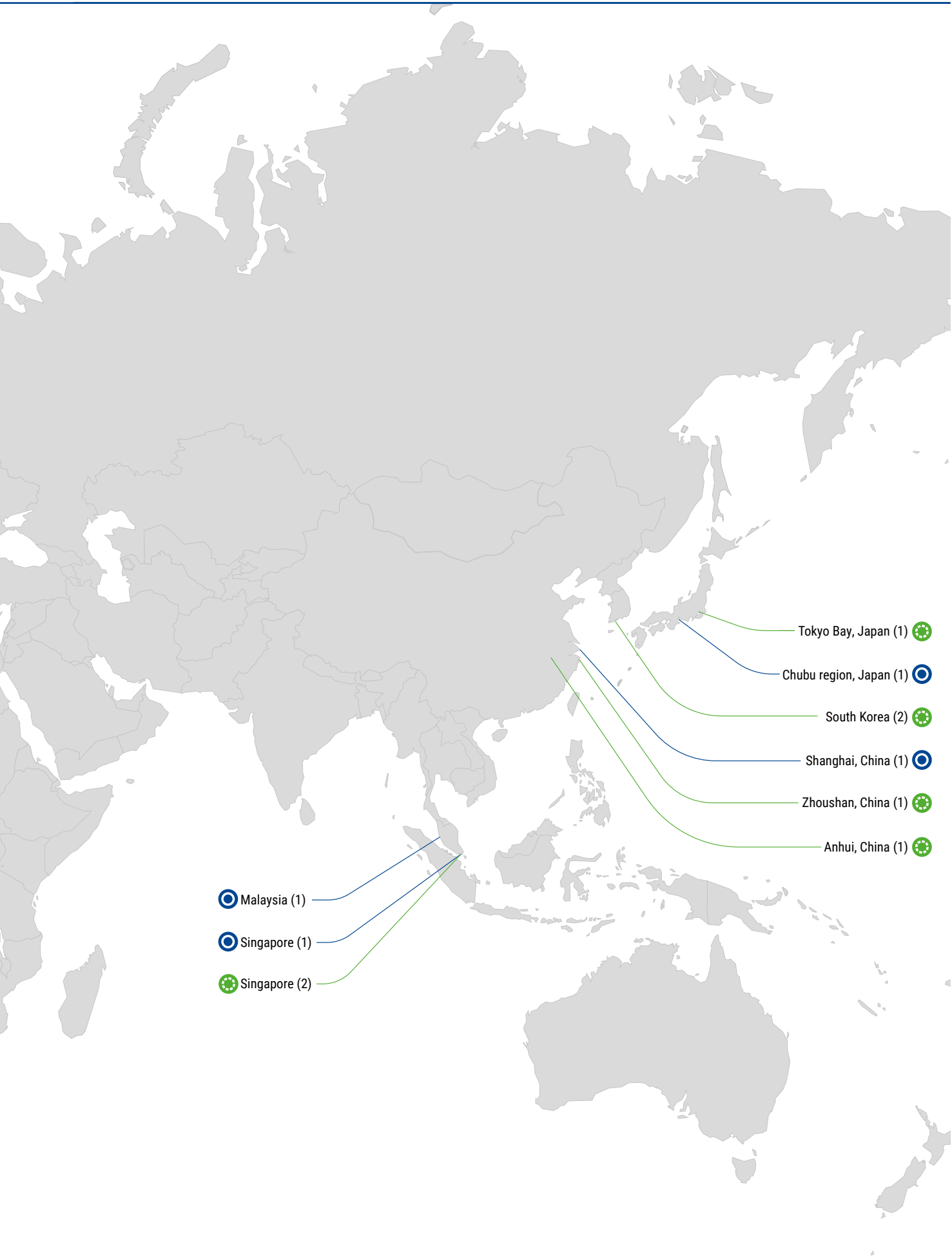
Built	Vessel Name	Storage Capacity (m³)	CCS*	Type	Owner	Builder	Manager	Location
1974	Seagas	167	Other	LNGBV	Aga Gas AB	Fiskerstrand Verft	Sirius Shipping	Stockholm, Sweden
2004	Pioneer Knutsen	1,100	Other	LNGBV/LNGC	Knutsen OAS Shipping	Veka SY Lemmer	Knutsen OAS Shipping	LNGC
2009	Coral Methane	7,500	Other	LNGBV/LNGC	Anthony Veder	Remontowa Repair	Anthony Veder	Gibraltar, UK
2009	Oizmendi	600	Other	LNGBV	ITSAS Gas Bunker	Astilleros Murueta	Naviera Ulises Ltd	Huelva, Spain
2010	Coral Fraseri	10,030	Other	LNGBV/LNGC	Anthony Veder	Taizhou Skaugen	Anthony Veder	LNGC
2013	Coral Energy	15,600	Other	LNGBV/LNGC	Anthony Veder	Neptun Werft	Anthony Veder	LNGC
2017	Coralius	5,800	Other	LNGBV	Anthony Veder	Royal Bodewes SY	Sirius Shipping	Northwest Europe
2017	Green Zeebrugge	5,100	Other	LNGBV	NYK	HHIC	NYK LNG Ship Mgt	Zeebrugge, Belgium
2017	New Frontier 1 (ex.Cardissa)	6,469	Other	LNGBV	Pan Ocean	STX SB (Jinhae)	WSM Malaysia	Northwest Europe
2018	Bunker Breeze	1,200	Other	LNGBV	Grupo Suardiaz	Ast. Zamakona	Flota Suardiaz SL	Algeciras, Spain
2018	Clean Jacksonville	2,200	Membrane	Bunker barge*	TOTE	Conrad Shipyard	Harvey Gulf	Florida, USA
2018	Coral Energece	18,000	Other	LNGBV/LNGC	Anthony Veder	Neptun Werft	Anthony Veder	LNGC
2018	Kairos	7,500	Other	LNGBV	Schulte Group	Hyundai Mipo	B. Schulte (Deutsch)	Baltic Sea
2019	FlexFueler 001	1,480	Other	Bunker barge*	Titan LNG	Kooiman Marine Group	Titan LNG	ARA region***
2019	LNG London	3,000	Other	LNGBV	LNG Shipping		LNG Shipping	ARA region***
2019	SM Jeju LNG1	7,654	Membrane	LNGBV/LNGC	Korea Line LNG	SHI	KLC SM	LNGC
2019	Avenir Advantage	7,500	Other	LNGBV/LNGC	Future Horizon	Keppel Nantong	EagleStar Shipmanagement	Malaysia
2020	FlexFueler 002	1,480	Other	Bunker barge*	Titan LNG	Kooiman Marine Group	Titan LNG	ARA region***
2020	FuelNG Bellina	7,500	Other	LNGBV	FuelNG	Keppel Nantong	K-Line	Singapore
2020	Gas Agility	18,600	Membrane	LNGBV	MOL	HZ	MOL LNG Transport (E)	Rotterdam, Netherlands
2020	Kaguya	3,500	Other	LNGBV	Central LNG Shipping	KHI	Central LNG Shipping	Chubu region, Japan
2020	Q-LNG 4000	4,000	Other	LNGBV	Q-LNG	VT Halter Marine	Harvey Gulf	Florida, USA
2020	SM Jeju LNG2	7,500	Membrane	LNGBV/LNGC	Korea Line LNG	SHI	KLC SM	LNGC
2021	Avenir Accolade	7,500	Other	LNGBV/LNGC	Avenir LNG	Keppel Nantong	Golar Management	LNGC
2021	Hai Gang Wei Lai (ex. Avenir Allegiance)	20,000	Other	LNGBV/LNGC	Shanghai SSPG Energy	CIMC SOE	PG Shipmanagement	Shanghai, China
2021	Avenir Aspiration	7,500	Other	LNGBV/LNGC	Avenir LNG	CIMC SOE	Hoegh LNG Fleet M.	Mediterranean basin
2021	Bergen LNG	850	Other	LNGBV	Bergen Tankers	Westcon Shipyards	Bergen Tankers	Bergen, Norway
2021	Clean Canaveral (Polaris)	5,500	Other	Bunker barge*	Polaris New Energy	Fincantieri Bay	Polaris New Energy	Florida, USA
2021	Dmitry Mendeleev	5,800	Other	LNGBV	Gazpromneft Shipping	Keppel Nantong	Gazpromneft Shipping	Gulf of Finland
2021	Gas Vitality	18,600	Membrane	LNGBV	MOL	HZ	MOL LNG Transport (E)	Marseille, France
2021	Optimus	6,000	Other	LNGBV	Infortar	Damen Yichang	Damen Gorinchem	Gulf of Finland

LNGBV ORDERBOOK AT THE END OF 2021

Built	Vessel Name	Storage Capacity (m³)	CCS*	Type	Owner	Builder	Manager	Location
2022	K LNG Dream	500	Other	LNGBV	Ministry of Oceans and Fisheries	EK Heavy Industries	Korea Research Ships	Korea
2022	Ecobunker Tokyo Bay	2,500	Other	LNGBV	Ecobunker Shipping	Fukuoka shipbuilding/JMU Isogo	Ueno Transtech	Tokyo Bay, Japan
2022	TBN	4,000	Other	Bunker barge**	Rimorchiatore Riuniti Panfido	Rosetti Marino shipyard	Rimorchiatore Riuniti Panfido	North Adriatic Sea
2022	Haugesund Knutsen	5,000	Other	LNGBV	Knutsen OAS Shipping	Armon (Gijon)	Knutsen OAS Shipping	Barcelona, Spain
2022	Avenir Ascension	7,500	Other	LNGBV/LNGC	Avenir LNG	CIMC SOE	Avenir LNG	South Baltic Sea
2022	Titan Hyperion	8,000	Other	LNGBV	Titan LNG		Titan LNG	ARA region
2022	Xin Ao Pu Tuo Hao	8,500	Other	LNGBV	XinAo Marine Shipping	Dalian Shipbuilding	XinAo Marine Shipping	Zhoushan, China
2022	Brassavola	12,000	Membrane	LNGBV	MOL	Sembcorp	V-Bunkers	Singapore
2022	K. Lotus	18,000	Other	LNGBV	Korea Line LNG	Hyundai Mipo	Korea Line LNG	Rotterdam, Netherlands
2022	Avenir Achievement	20,000	Other	LNGBV/LNGC	Avenir LNG	CIMC SOE	Avenir LNG	Caribbean-US region
2023	Titan Krios	4,500	Other	LNGBV	Titan LNG		Titan LNG	Mediterranean basin
2023	TBN (Kanfær 1)	6,000	Other	LNGBV	Kanfær Shipping	Taizhou	Kanfær Shipping	Mediterranean basin
2023	TBN (Kanfær 2)	6,000	Other	LNGBV	Kanfær Shipping	Taizhou	Kanfær Shipping	Mediterranean basin
2023	TBN	7,500	Other	LNGBV	KOGAS	HHI	Korea LNG Bunkering	Korea
2023	TBN (Fratelli Cosulich 1)	8,200	Other	LNGBV	Fratelli Cosulich	CIMC SOE	Fratelli Cosulich	Mediterranean basin
2023	TBN	12,500	Other	LNGBV	Peninsula/Scale Gas	Hyundai Mipo	Peninsula/Scale Gas	Algeciras, Spain
2023	TBN	18,000	Other	LNGBV	Pan Ocean	Hyundai Mipo	Pan Ocean	Singapore
2023	TBN	18,000	Other	LNGBV	Korea Line LNG	Hyundai Mipo	Korea Line LNG	Gulf of Mexico, USA
2024	TBN	5,500	Other	Bunker barge*	Polaris New Energy	Fincantieri Bay	Polaris New Energy	Florida, USA
2024	TBN (Fratelli Cosulich 2)	8,200	Other	LNGBV	Fratelli Cosulich	CIMC SOE	Fratelli Cosulich	Mediterranean basin
2024	TBN	12,000	Other	Bunker barge*	Crowley Maritime	Fincantieri Bay	Crowley Maritime	US East Coast, USA
2024	TBN	12,000	Other	LNGBV	CenerTech	CIMC SOE	CenerTech	Anhui, China

* (pushed by tug) ** (pulled by tug) *** ARA: Amsterdam, Rotterdam and Antwerp





The figures in parentheses refer to the number of LNGBV(s)

LNG imports in 2021 (net of re-exports)

Market	10 ⁹ m ³ liquid	10 ⁶ T	Global Share	Var. 2021/2020
China	180.12	79.27	21.3%	15.0%
Japan	166.21	74.35	20.0%	-0.1%
South Korea	105.59	46.92	12.6%	15.0%
India	53.63	24.02	6.5%	-9.8%
Taiwan	43.43	19.44	5.2%	9.5%
Pakistan	18.45	8.19	2.2%	10.5%
Thailand	14.78	6.55	1.8%	16.8%
Bangladesh	11.52	5.10	1.4%	22.2%
Indonesia	7.58	3.31	0.9%	20.4%
Singapore	7.19	3.12	0.8%	-2.2%
Malaysia	4.73	2.02	0.5%	-21.5%
Myanmar	0.49	0.22	0.1%	19.0%
ASIA	613.73	272.51	73.2%	7.1%
Spain	31.34	13.82	3.7%	-10.1%
France	27.84	12.34	3.3%	-5.6%
United Kingdom	25.04	11.04	3.0%	-17.8%
Turkey	22.68	9.99	2.7%	-6.8%
Italy	15.59	6.88	1.8%	-24.1%
Netherlands	12.94	5.64	1.5%	5.8%
Portugal	9.25	4.11	1.1%	0.9%
Belgium	7.54	3.32	0.9%	3.3%
Poland	6.49	2.83	0.8%	4.7%
Greece	3.73	1.64	0.4%	-25.5%
Croatia	2.76	1.20	0.3%	#N/A
Lithuania	2.60	1.12	0.3%	-21.9%
Sweden	0.83	0.36	0.1%	1.0%
Malta	0.66	0.29	0.1%	-10.1%
Norway	0.50	0.22	0.1%	86.4%
Finland	0.47	0.20	0.1%	33.3%
Gibraltar	0.14	0.06	0.0%	29.6%
EUROPE	170.41	75.05	20.2%	-8.0%

Market	10 ⁹ m ³ liquid	10 ⁶ T	Global Share	Var. 2021/2020
Brazil	16.19	7.01	1.9%	193.0%
Chile	7.27	3.14	0.8%	16.7%
Argentina	5.79	2.52	0.7%	84.9%
Puerto Rico	3.51	1.52	0.4%	62.8%
Dominican Republic	3.41	1.47	0.4%	26.1%
Mexico	1.42	0.61	0.2%	-67.5%
Jamaica	1.24	0.52	0.1%	-26.9%
Canada	1.16	0.50	0.1%	-21.1%
United States	0.99	0.42	0.1%	-52.7%
Panama	0.47	0.21	0.1%	-4.4%
Colombia	0.10	0.04	0.0%	-85.0%
AMERICAS	41.56	17.97	4.8%	36.3%
Kuwait	11.99	5.34	1.4%	31.3%
United Arab Emirates	2.66	1.19	0.3%	-18.4%
Israel	0.41	0.18	0.0%	-69.4%
Egypt	0.12	0.05	0.0%	#N/A
MIDDLE EAST & AFRICA	15.19	6.76	1.8%	-2.3%
GLOBAL NET IMPORTS	840.88	372.29	100.0%	4.5%

Source: GIIGNL, Kpler

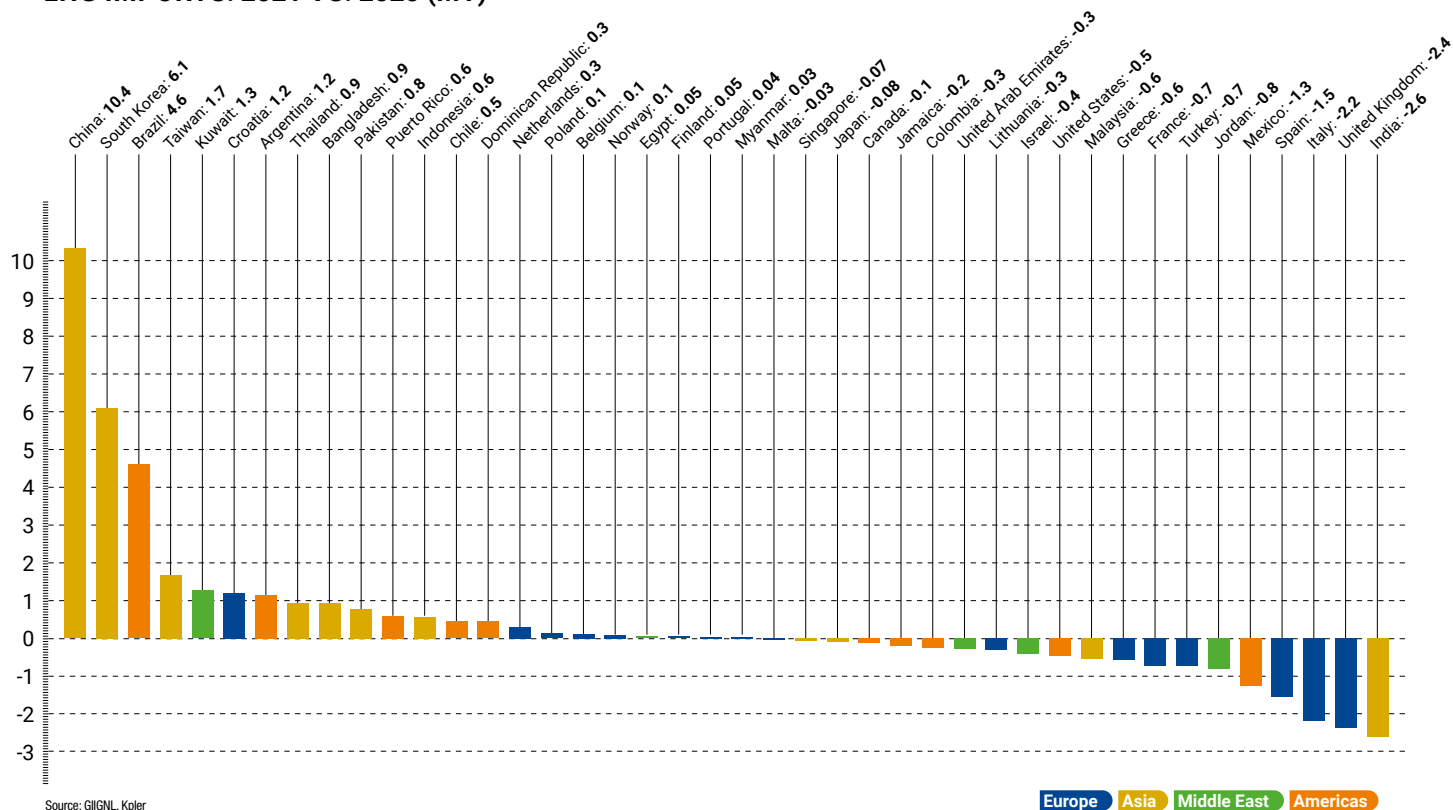
Source of LNG imports in 2021

Country	10 ⁹ m ³ liquid	10 ⁶ T	Global Share	Var. 2021/2020
Australia	177.24	78.52	21.1%	1.0%
Malaysia	56.78	24.94	6.7%	4.6%
Indonesia	31.49	13.82	3.7%	-7.8%
Russia (Asia)	22.56	10.15	2.7%	-9.8%
Papua New Guinea	17.84	8.30	2.2%	-0.4%
Brunei	12.28	5.59	1.5%	-10.2%
Peru	5.68	2.55	0.7%	-32.1%
PACIFIC BASIN	323.87	143.87	38.6%	-1.6%
United States	155.09	67.03	18.0%	49.8%
Russia (Europe)	44.53	19.46	5.2%	6.1%
Nigeria	36.35	16.42	4.4%	-20.1%
Algeria	26.19	11.78	3.2%	11.3%
Egypt	15.23	6.56	1.8%	390.5%

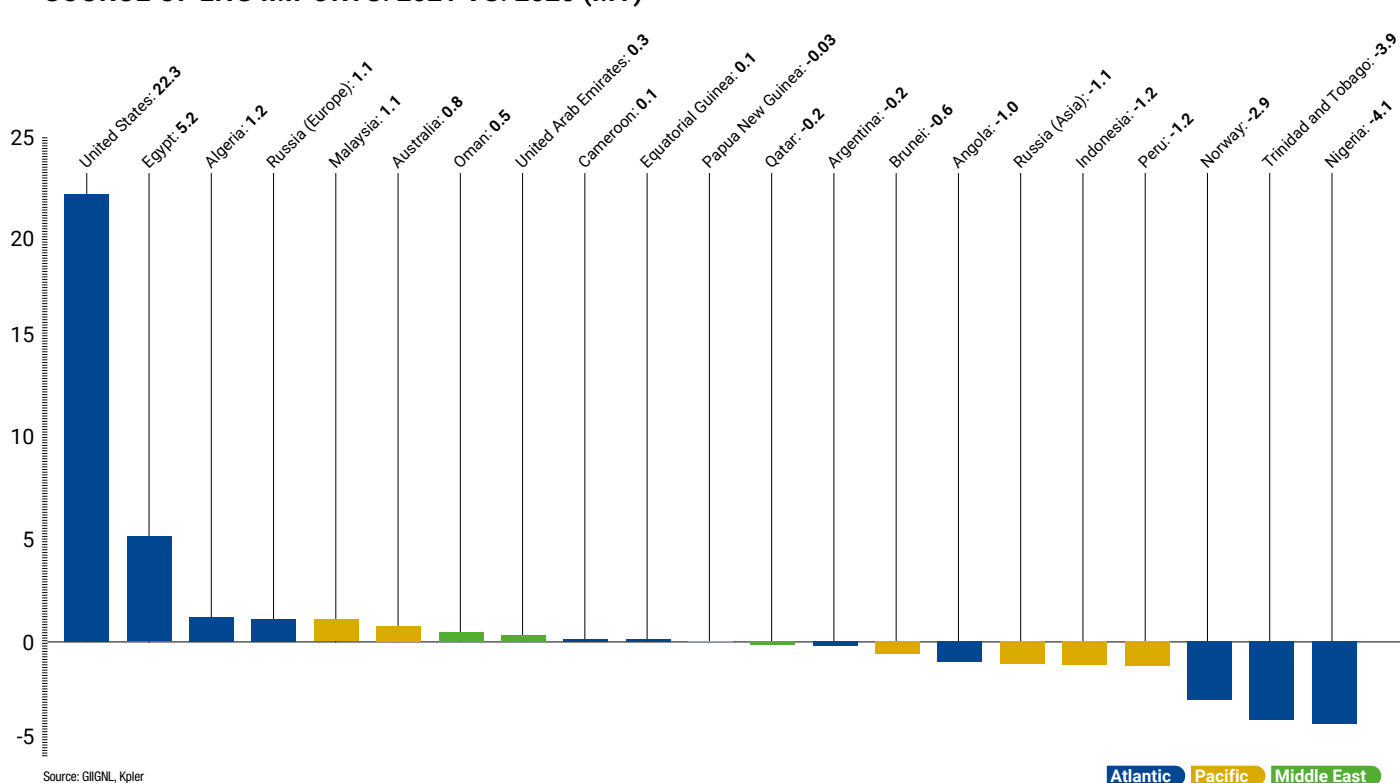
Country	10 ⁹ m ³ liquid	10 ⁶ T	Global Share	Var. 2021/2020
Trinidad and Tobago	14.51	6.19	1.7%	-38.6%
Angola	8.17	3.63	1.0%	-21.6%
Equatorial Guinea	6.20	2.72	0.7%	4.0%
Cameroon	2.69	1.20	0.3%	9.8%
Norway	0.53	0.24	0.1%	-92.5%
ATLANTIC BASIN	309.47	135.23	36.3%	15.2%
Qatar	172.18	76.96	20.7%	-0.2%
Oman	22.26	10.22	2.7%	4.7%
United Arab Emirates	13.10	6.02	1.6%	5.5%
MIDDLE EAST	207.53	93.19	25.0%	0.6%
TOTAL	840.88	372.29	100.0%	4.5%

Source: GIIGNL, Kpler

LNG IMPORTS: 2021 VS. 2020 (MT)



SOURCE OF LNG IMPORTS: 2021 VS. 2020 (MT)



Quantities (in MT) received in 2021

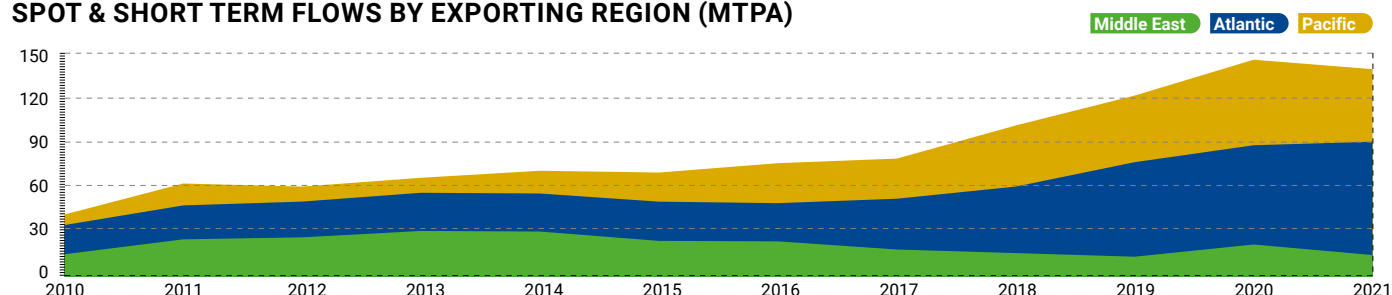
Markets	Algeria	Angola	Australia	Brunei	Cameroon	Egypt	Equatorial Guinea	Indonesia	Malaysia	Nigeria	Norway
Bangladesh	0.13	0.07				0.45	0.13	0.06		0.19	
China	0.24	0.57	30.97	0.67	0.62	1.19	0.45	4.72	8.85	1.53	
India	0.07	1.11	0.28		0.19	1.04	0.33		0.06	1.39	
Indonesia		0.07	0.04			0.02		3.24		0.00	
Japan			26.77	4.29		0.19	0.26	1.89	10.05	0.81	
Malaysia			1.55	0.18					0.23	0.06	
Myanmar								0.03	0.14		
Pakistan		0.59				0.83	0.06			0.12	
Singapore		0.13	2.13			0.31	0.15	0.06	0.06	0.08	
South Korea		0.12	9.69	0.20	0.14	0.19	0.13	2.41	4.00	0.65	
Taiwan			6.26	0.06	0.20	0.18		1.17	0.50	0.58	
Thailand		0.13	0.74	0.19			0.20		1.07	0.78	
ASIA	0.43	2.80	78.45	5.59	1.14	4.41	1.70	13.59	24.94	6.20	
Belgium	0.06					0.06					
Croatia						0.07				0.13	
Finland											0.01
France	3.39					0.17				2.41	
Gibraltar											
Greece	0.36	0.06				0.07					
Italy	0.94					0.19				0.19	
Lithuania						0.07	0.06				
Malta											
Netherlands	0.06	0.27					0.07			0.13	
Norway											0.13
Poland											
Portugal										2.16	
Spain	1.55	0.27	0.06			0.25	0.58			3.13	
Sweden											0.10
Turkey	4.31					0.95				0.99	
United Kingdom	0.62									0.06	
EUROPE	11.29	0.60	0.06			1.83	0.71			9.19	0.24
Argentina											
Brazil		0.10								0.04	
Canada											
Chile			0.02				0.30				
Colombia											
Dominican Republic						0.02					
Jamaica										0.02	
Mexico								0.24			
Panama											
Puerto Rico											
United States											
AMERICAS		0.10	0.02			0.02	0.30	0.24		0.05	
Egypt						0.05					
Israel											
Kuwait	0.06	0.07			0.07	0.26				0.84	
United Arab Emirates		0.07								0.13	
MIDDLE EAST	0.06	0.13			0.07	0.31				0.98	
GLOBAL NET IMPORTS	11.78	3.63	78.52	5.59	1.20	6.56	2.72	13.82	24.94	16.42	0.24

Oman ▼	Papua New Guinea ▼	Peru ▼	Qatar ▼	Russia (Asia) ▼	Russia (Europe)	Trinidad and Tobago ▼	UAE ▼	USA ▼	Re-exports Received ▼	Re-exports Loaded ▼	2021 Net imports ▼	Markets ▼
			2.97		0.07			0.77	0.25		5.10	Bangladesh
1.52	3.16	0.14	9.17	0.89	3.78	0.44	0.71	9.03	0.62		79.27	China
1.15			10.20		0.41	0.28	3.17	3.86	0.47		24.02	India
					0.02			0.04		-0.11	3.31	Indonesia
1.90	3.50	0.53	8.97	5.85	0.78		1.33	7.07	0.24	-0.08	74.35	Japan
										-0.01	2.02	Malaysia
									0.04		0.22	Myanmar
0.06			5.24				0.26	0.85	0.19		8.19	Pakistan
			0.17		0.04			0.32		-0.35	3.12	Singapore
4.62	0.19	0.86	11.72	1.99	0.88	0.06	0.24	8.69	0.19	-0.04	46.92	South Korea
0.47	1.43		4.76	1.41	0.48	0.10	0.06	1.76			19.44	Taiwan
0.26			2.59			0.24		0.35	0.06	-0.06	6.55	Thailand
9.99	8.29	1.53	55.80	10.15	6.47	1.12	5.77	32.75	2.06	-0.65	272.51	ASIA
			1.96		1.21			0.11	0.00	-0.09	3.32	Belgium
			0.12		0.06	0.06		0.72	0.06	0.00	1.20	Croatia
					0.19						0.20	Finland
		0.07	0.52		3.59			2.87	0.04	-0.73	12.34	France
									0.06		0.06	Gibraltar
			0.31					0.83			1.64	Greece
			4.71			0.11		0.66	0.08		6.88	Italy
					0.23	0.11		0.65			1.12	Lithuania
						0.19		0.10			0.29	Malta
		0.18	0.09		2.08	0.07		3.18	0.06	-0.55	5.64	Netherlands
					0.08				0.02		0.22	Norway
			1.75					1.09			2.83	Poland
			0.24		0.57			1.14			4.11	Portugal
	0.01	0.09	1.72		2.46	0.80		3.85	0.02	-0.96	13.82	Spain
					0.17				0.09		0.36	Sweden
			0.21			0.13		3.38	0.02		9.99	Turkey
		0.62	4.36		2.35	0.11		2.91	0.01		11.04	United Kingdom
	0.01	0.96	15.99		12.99	1.58		21.47	0.47	-2.33	75.05	EUROPE
			0.97			0.04		1.52			2.52	Argentina
			0.63			0.18		6.07	0.06	-0.08	7.01	Brazil
		0.06				0.44					0.50	Canada
						0.43		2.39			3.14	Chile
								0.04			0.04	Colombia
						0.45		0.99	0.06	-0.04	1.47	Dominican Republic
			0.01			0.34		0.51	0.04	-0.38	0.52	Jamaica
						0.08		0.30	0.00		0.61	Mexico
								0.16	0.04		0.21	Panama
						1.00			0.52		1.52	Puerto Rico
						0.42					0.42	United States
		0.06	1.60			3.38		11.98	0.72	-0.50	17.97	AMERICAS
											0.05	Egypt
								0.18			0.18	Israel
0.23			2.64			0.11	0.19	0.66	0.23		5.34	Kuwait
			0.92				0.07				1.19	United Arab Emirates
0.23			3.57			0.11	0.25	0.83	0.23	0.00	6.76	MIDDLE EAST
10.22	8.30	2.55	76.96	10.15	19.46	6.19	6.02	67.03	3.48	-3.48	372.29	

Spot and short-term quantities* (in 10³T) received in 2021

Markets	Algeria	Angola	Australia	Brunei	Cameroon	Egypt	Equatorial Guinea	Indonesia	Malaysia	Nigeria	Norway
Bangladesh	129	71				450	131	64		187	
China	118	572	13,414	478	555	566	314	1,736	5651	906	
India	65	529				628	130		60	623	
Indonesia			32					437			
Japan			4,575	478		195	67	626	1,898	590	
Malaysia			24						228	62	
Myanmar								13	139		
Pakistan		462				770	57			56	
Singapore		132	442			131				80	
South Korea		124	3,940	64	137	59	65	633	2,639	267	
Taiwan			2,522		199	180		1,037	369	125	
Thailand		67	545						61	72	
ASIA	312	1,957	25,493	1,019	891	2,978	763	4,547	11,046	2,968	
Belgium						59					
Croatia						68				130	
Finland											10
France	104										
Gibraltar											
Greece		62				74					
Italy	124					190					
Lithuania						66	65				
Malta											
Netherlands	64	266					66			55	
Norway											127
Poland											
Portugal										69	
Spain	793	270	55			194	129			765	
Sweden											100
Turkey	1,679					946				65	
United Kingdom	617										
EUROPE	3,381	597	55			1,597	260			1,084	236
Argentina											
Brazil		104								39	
Canada											
Chile											
Colombia											
Dominican Republic						16					
Jamaica										15	
Mexico											
Panama											
Puerto Rico											
United States											
AMERICAS		104				16				54	
Egypt						53					
Israel											
Kuwait	57					192				61	
United Arab Emirates											
MIDDLE EAST	57					245				61	
GLOBAL NET IMPORTS	3,749	2,658	25,549	1,019	891	4,836	1,024	4,547	11,046	4,167	236

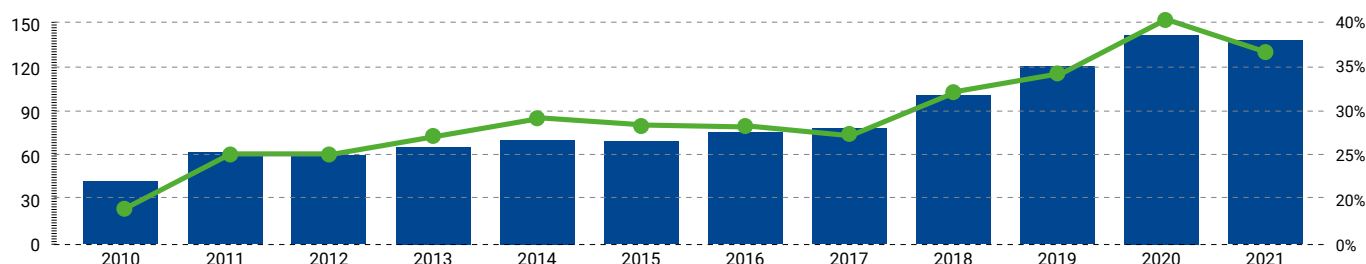
SPOT & SHORT TERM FLOWS BY EXPORTING REGION (MTPA)



Oman ▼	Papua New Guinea ▼	Peru ▼	Qatar ▼	Russia (Asia) ▼	Russia (Europe) ▼	Trinidad and Tobago ▼	UAE ▼	USA ▼	Re-exports Received ▼	Re-exports Loaded ▼	2021 Net imports ▼	Markets ▼
			132		67			774	255		2,261	Bangladesh
863	830		1,129	638	2,313	60	711	5,367	621		36,843	China
502			713		204	228	1,095	2,242	467		7,485	India
					25					-113	380	Indonesia
186	863	273	276	1,265	570		781	3,246	235	-81	16,043	Japan
										-8	305	Malaysia
									45		197	Myanmar
			1,187				131	677	190		3,529	Pakistan
			168		42			253		-346	900	Singapore
255	192	145	2,176	519	410	60	242	4,528	185	-44	16,597	South Korea
408	99		300	257	215		59	449			6,220	Taiwan
62			573					69	63	-61	1,452	Thailand
2,276	1,984	418	6,654	2,679	3,846	348	3,020	17,605	2,061	-653	92,213	ASIA
					702			68	1	-88	742	Belgium
			116		59			717	59	-3	1,144	Croatia
					193						203	Finland
					645			1,500	42	-728	1,562	France
									62		62	Gibraltar
			240					727			1,103	Greece
			61			113		604	81		1,173	Italy
					227	55		651			1,064	Lithuania
								50			50	Malta
		181			1,934	71		2,893	62	-551	5,040	Netherlands
					79				16		221	Norway
								807			807	Poland
					144			312			525	Portugal
	11				670	120		2,338	21	-958	4,408	Spain
					172				91		362	Sweden
			212			72		3,264	23		6,261	Turkey
		190			1,420			2,306	9		4,542	United Kingdom
	11	371	629		6,245	430		16,235	466	-2,328	29,270	EUROPE
			968			38		1,518			2,525	Argentina
			143			182		5,739	64	-79	6,192	Brazil
						357					357	Canada
								1,056			1,056	Chile
								44			44	Colombia
								329	57	-43	359	Dominican Republic
			5			337		469	37	-380	484	Jamaica
						76		214	3		293	Mexico
									43		43	Panama
						651			517		1,169	Puerto Rico
						422					422	United States
			1,117			2,063		9,370	722	-501	12,944	AMERICAS
											53	Egypt
								175			175	Israel
230			68				185	528	233		1,554	Kuwait
							69				69	United Arab Emirates
230			68				254	703	233	0	1,851	MIDDLE EAST
2,506	1,995	789	8,468	2,679	10,091	2,841	3,274	43,913	3,482	-3,482	136,278	

* Quantities delivered under contracts of a duration of 4 years or less. Source: GIIGNL, Kpler

SHARE OF SPOT & SHORT TERM VS. TOTAL LNG TRADE (MTPA/%)



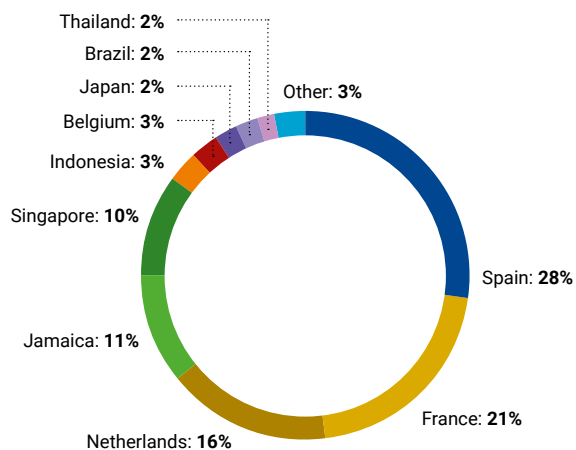
Re-exports (in MT)

(Based on cargoes received in 2021)

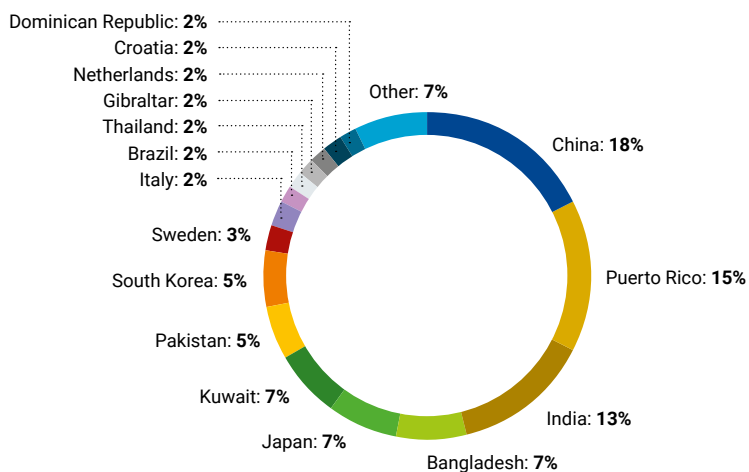
To ▼	From ►	Belgium	Brazil	Croatia	Dominican Republic	France	Indonesia	Jamaica	Japan	Malaysia	Netherlands	Singapore	South Korea	Spain	Thailand	Total
Bangladesh						0.14					0.06			0.06		0.25
China						0.07	0.11		0.03		0.13	0.21		0.07		0.62
India						0.25								0.21		0.47
Japan						0.03						0.08		0.07	0.06	0.24
Myanmar									0.04	0.01						0.04
Pakistan											0.06			0.12		0.19
South Korea									0.01		0.11	0.06				0.19
Thailand						0.06										0.06
ASIA						0.55	0.11		0.08	0.01	0.37	0.35		0.53	0.06	2.06
Belgium											0.00					0.00
Croatia						0.06										0.06
France			0.04													0.04
Gibraltar											0.01			0.05		0.06
Italy				0.00										0.08		0.08
Netherlands	0.00													0.06		0.06
Norway	0.00										0.01					0.02
Spain											0.02			0.00		0.02
Sweden	0.02							0.01			0.07					0.09
Turkey														0.02		0.02
United Kingdom											0.01					0.01
EUROPE		0.02	0.04	0.00		0.06		0.01			0.12			0.22		0.47
Brazil											0.06					0.06
Dominican Republic						0.06										0.06
Jamaica			0.04													0.04
Mexico								0.00								0.00
Panama					0.04											0.04
Puerto Rico								0.37						0.15		0.52
AMERICAS			0.04		0.04	0.06		0.37			0.06			0.15		0.72
Kuwait	0.07					0.06							0.04	0.06		0.23
MIDDLE EAST		0.07				0.06							0.04	0.06		0.23
WORLD		0.09	0.08	0.00	0.04	0.73	0.11	0.38	0.08	0.01	0.55	0.35	0.04	0.96	0.06	3.48

Source: GIIGNL, Kpler

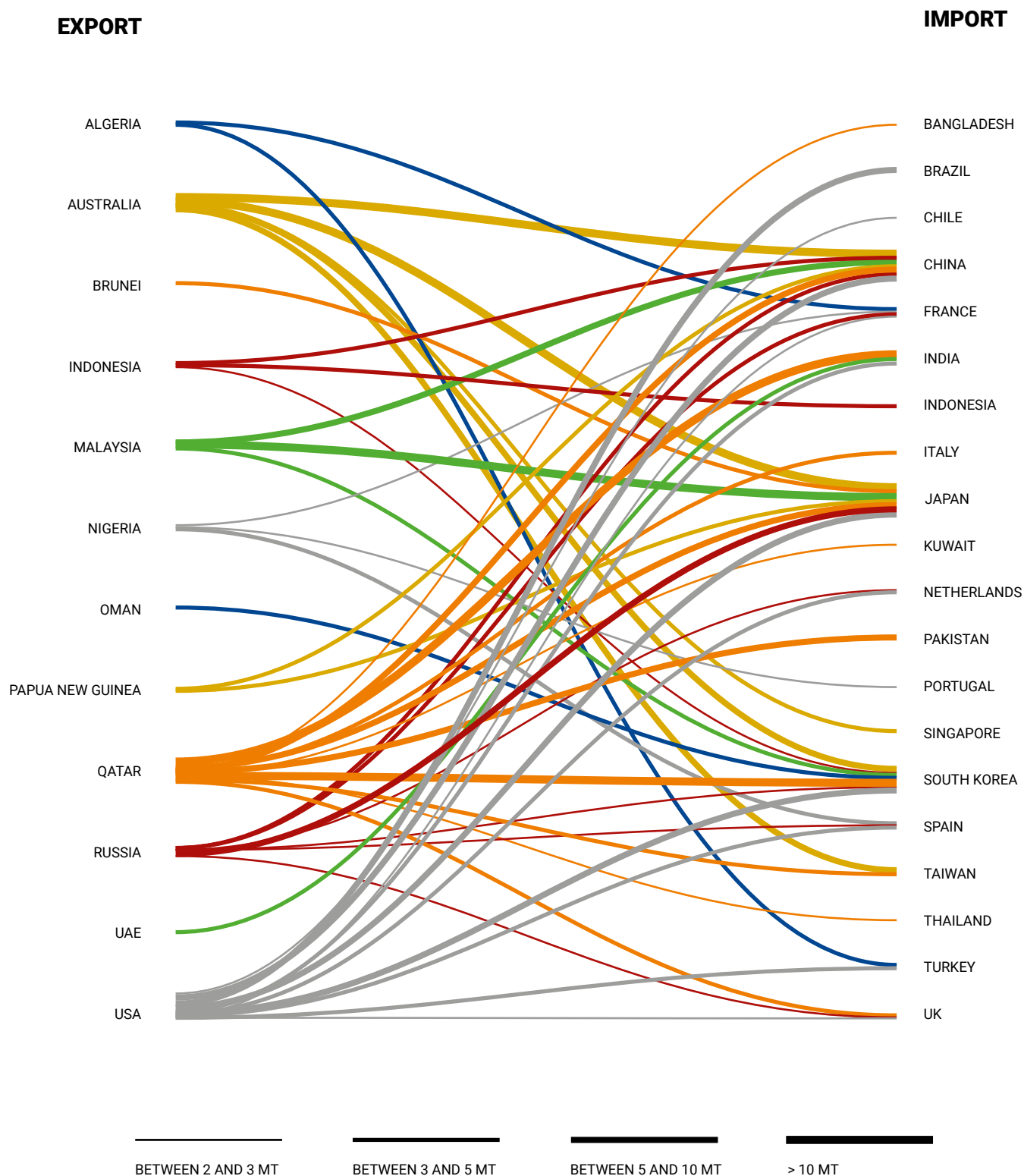
RE-EXPORTS LOADED IN 2021 (3.5 MT)



RE-EXPORTS RECEIVED IN 2021 (3.5 MT)



Major LNG flows in 2021



Liquefaction plants

In 2021 global liquefaction capacity reached **462 MTPA** at year-end. New capacity amounted to **7.4 MTPA**.

The 1.5 MTPA PFLNG Dua floating liquefaction unit started operations in offshore Sabah, Malaysia, and a new large-scale, 5 MTPA capacity, liquefaction train (Train 6 at the Sabine Pass LNG plant) started production in the United States. The 0.9 MTPA Train 4 at Yamal LNG started operations in Russia. In addition, the 5 MTPA Damietta liquefaction facility restarted operations in Egypt.

Two FIDs were taken in 2021, for a total capacity of 38 MTPA: the North Field East project in Qatar (33 MTPA) and Pluto LNG Train 2 in Australia (5 MTPA).

Algeria

Skikda LNG remained shut down from late June until August 2021 due to a technical issue caused by a sudden failure of a gas turbine control mechanism. According to Sonatrach, the shutdown did not affect LNG deliveries as the production was increased at its Arzew facilities.

In February 2022, Sonatrach signed a contract with Sinopec Luoyang Engineering & Sinopec International Petroleum Services Corporation for renovation works at the GL1K LNG plant at Skikda, including the dismantling of two 20-year-old storage tanks and the construction of a new tank of 150,000 m³ capacity, and the modernization of the jetty and loading facilities to accommodate larger vessels.

Angola

In March 2022, Eni and bp created a new 50/50 joint venture, Azule Energy, through the combination of the two companies' Angolan businesses. The new company will participate in the **Angola LNG** joint venture, in which Eni and bp each hold a 13.6% stake. Azule Energy will develop the New Gas Consortium, the first non-associated gas project in the country.

Australia

After resuming operations in January 2021, **Prelude FLNG** was shut down again in December due to a fire incident following a power outage. An electrical fault has been found in the battery systems associated with the uninterruptible power supply. Australia's offshore regulator gave approval to restart the facility in March 2022. The commissioning process could take a few weeks.

In November 2021, Woodside took FID on the development of **Pluto LNG** Train 2 and the offshore Scarborough gas field. Pluto Train 2 includes the construction of a new 5 MTPA liquefaction train and associated domestic gas processing facilities. The expansion of Pluto LNG will also include modifications to Pluto Train 1 to allow it to process Scarborough gas. Aero-derivative gas turbines for liquefaction and inlet air chilling will be used in order to provide higher thermal efficiency and lower greenhouse gas emissions. The start of operations at Pluto Train 2 is planned for 2026. In January 2022, Woodside completed the sell-down of a 49% non-operating interest in the Pluto Train 2 joint venture to Global Infrastructure Partners.

In January 2021, Global Infrastructure Partners Australia announced acquisition of a 26.25% interest

in the **Queensland Curtis LNG** (QCLNG) Common Facilities for \$2.5Bn from QGC Common Facilities, a full subsidiary of Shell. The transaction concerns the entity which holds and operates LNG storage tanks, jetties and infrastructure, which service the LNG trains and does not impact the ownership structure of QGC or QCLNG joint venture.

FID was reached in late 2020 for the Waitsia Stage 2 gas project, which is developed by Beach Energy and Mitsui E&P and includes a new gas processing plant with a 20-year life. Following a gas processing agreement between the partners and Woodside, Beach Energy and Mitsui will market their respective LNG quantities, out of a total of 1.5 MTPA expected from the Waitsia field to be processed at the Woodside-led **North West Shelf** (NWS) project between the second half of 2023 and end-2028. Bp will be purchasing all 3.75 MT of Beach's expected LNG volumes from the project according to a HoA signed in September 2021. The supply could start in the second half of 2023. In March 2022, supply of gas from Pluto to the NWS plant started after the completion by Woodside of the Pluto-KGP (Karratha Gas Plant) interconnector pipeline. In March 2021, Santos took FID on the Barossa gas and condensate project, which will include an FPSO vessel, subsea production wells, supporting subsea infrastructure and pipelines. The project is aimed at providing a new supply source to the 3.7 MTPA **Darwin LNG** plant allowing its life to be extended for around 20 years. First LNG production from gas supplied from the project is expected in the first half of 2025. In December 2021, JERA, through its Australian subsidiary, agreed to buy a 12.5% interest in the Barossa project from Santos. In April 2021, Santos completed the sale of a 25% stake in the Bayu-Undan field and Darwin LNG to SK E&S. Santos remains operator of these assets and of the Barossa project.

In July 2021, TotalEnergies completed a transaction with GIP Australia (GIP) according to which GIP will receive a throughput-based tolling fee prorated by TotalEnergies' share of gas processed through the **Gladstone LNG** facility over a period of 15 years from January 2021. The transaction does not change the shareholding of Gladstone LNG Downstream joint venture.

In July 2021, Chevron and its partners in **Gorgon LNG** agreed to invest in the \$4Bn Jansz-Lo compression project to increase gas recovery from offshore wells. The project will maintain gas supply from the Jansz-Lo field to the liquefaction plant for 40 years. Construction and installation activities are estimated to take 5 years.



Train 1 of Gorgon LNG was shut down for 10 days in November 2021 due to a minor gas leak detected on piping associated with the dehydration unit.

In October 2021, Origin Energy agreed to sell a 10% share in Australia Pacific LNG (APLNG) to EIG Partners. The sale was preempted by ConocoPhillips and the transaction was finalized in February 2022. The resulting shareholding of APLNG is as follows: ConocoPhillips 47.5%, Origin Energy 27.5% and Sinopec 25%.

Canada

In June 2021, a 345-tonne main cryogenic heat exchanger and two precoolers arrived at the **LNG Canada** site in Kitimat. In August 2021, LNG Canada completed the roof raise on the first of its two 225,000 m³ storage tanks. In March 2022, the project received the first of 12 inlet facilities modules, aimed at receiving natural gas from the Coastal GasLink pipeline and distributing it for treatment, processing, and liquefaction. The project was reported to approach 60% completion as of March 2022 and is expected to start operations in the middle of this decade.

In May 2021, **Woodfibre LNG** signed a 15-year LNG SPA with bp for the delivery of 0.75 MTPA of LNG from its planned LNG facility, located in Squamish, British Columbia, which takes bp's offtake to 1.5 MTPA. In November 2021, Woodfibre signed an engineering, procurement, fabrication, and construction (EPFC) contract with McDermott International. FID is targeted for 2023. Completion of the project is expected in 2027.

In June 2021, Pembina announced acquisition of a 50% stake in Cedar LNG, a proposed 3 MTPA floating LNG export facility in Kitimat, British Columbia. In

February 2022, **Cedar LNG** awarded a FEED contract to Black & Veatch and Samsung Heavy Industries. The project has filed an Environmental Assessment Certificate application. The facility is planned to be powered by renewable electricity from BC Hydro, making it one of the lowest carbon intensity LNG facilities in the world. FID is expected in 2023 with commercial operation starting in 2027.

In July 2021, Pieridae Energy decided not to proceed with **Goldboro LNG** as a land-based project due to cost pressures and problems securing financing. As of March 2022, the company was keeping options open including developing a floating LNG facility.

Cameroon

In July 2021, Golar agreed with its partners Perenco and Société Nationale des Hydrocarbures (SNH) to increase utilization of the FLNG Hilli Episeyo located offshore **Kribi** by 0.2 MTPA from 2022 and by 0.4 MTPA from January 2023, through to the end of the current contract term in 2026. For this purpose, the companies intend to drill and appraise two or three additional natural gas wells and upgrade upstream facilities.

Egypt

Damietta liquefaction plant in Egypt resumed operations in February 2021, after the 5 MTPA terminal was shut down in December 2012.

Equatorial Guinea

EG LNG halted production from late September to November 2021 because of feed gas supply disruption due to technical issues.

Indonesia

In April 2021 Eni started gas production from Merakes Project deep offshore East Kalimantan. Merakes gas will contribute to extend the life of the **Bontang LNG** facility. In August 2021, Indonesian oil and gas regulator SKK Migas approved the plan for the development of a carbon capture utilization and storage (CCUS) project at the **Tangguh LNG** export complex. Tangguh LNG Train 3, with a capacity of 3.8 MTPA, is currently under construction and could start production in December 2022 according to SKK Migas. Initially planned in 2020 then 2021, the start-up was further delayed due to restrictions related to the pandemic.

FID on a proposed **Abadi LNG** project in the Masela Block offshore Indonesia will be delayed until the second half of the 2020s with the planned production start in the early 2030s. The delay is due to the pandemic and changes to the project design including adding CCS or CCUS.

Malaysia

Petronas' second FLNG facility **PFLNG Dua** started LNG production in February 2021.

In September 2021, Petronas reported a fire in a sea cooling water outfall channel located outside the complex' process area at its LNG complex in **Bintulu**. According to Petronas, the incident has not affected operations of the plant. In March 2022, Mubadala Petroleum started first gas flows from Pegaga offshore field which will feed the Bintulu LNG plant. In December 2021, Petronas awarded FEED contracts for its third FLNG - a 2 MTPA nearshore LNG project in Sabah. FID is planned for end of 2022.

Mauritania/Senegal

In May 2021, the first phase of the **Greater Tortue Ahmeyim (GTA) LNG** project was reported to be 58% complete. In September 2021, Kosmos Energy completed the sale and lease back of the GTA FPSO to bp. In November 2021, the mechanical completion works started on the floating LNG vessel. The FPSO is scheduled to be delivered to bp in late third quarter of 2022. First gas from the project is expected for late-2023. The start-up has been delayed due to the pandemic and cost inflation. FID for phase 2 of the project is expected by late 2022 or early 2023.

Mexico

In February 2021, ECA LNG issued Full Notice to Proceed (FNTP) to Technip Energies for the construction of the 3.25 MTPA single train project – **ECA LNG Phase 1**. Site preparation works commenced in April 2021. As of December 2021, the construction of the project was reported to be advancing as planned and within budget and schedule.

In February 2022, Mexico's Federal Electricity Commission (CFE) and Sempra Infrastructure signed an MoU for the development of **Vista Pacifico LNG**, a proposed 3.5 MTPA FLNG project to be located in Topolobampo, off the Mexican west coast. The project is in the early development stages. Natural gas would originate from the Permian Basin in the US via two already existing pipelines, one of which is owned by Sempra Infrastructure. In January 2022, CFE announced that it will be launching a tender for construction of a pipeline which will supply gas to an LNG export plant planned by CFE in Salina Cruz.

Mexico Pacific Limited (MLP) is working on the development of an up to 14.1 MTPA facility at Puerto Libertad in Sonora, which will be developed in three phases of 4.7 MTPA trains each. The company is progressing in applying for an export permit from the Mexican government. FID on the first two trains is expected in 2022.

Mozambique

The Coral-Sul FLNG vessel for the Coral South FLNG project arrived in the offshore Rovuma Basin from the Samsung Heavy Industries shipyard in South Korea in January 2022. This is the first floating LNG facility to be deployed in the deep waters of the African continent. Installation is underway including mooring and hook-up operations at a water-depth of around 2,000 m by means of 20 mooring lines. The project is scheduled to start production in late 2022.

In April 2021, due to security issues in the north of the Cabo Delgado province in Mozambique, TotalEnergies declared force majeure on the **Mozambique LNG** project, where the company is the project operator and has a 26.5% participating interest. TotalEnergies withdrew all the project's personnel from the site.

FID on the **Rovuma LNG** project led by ExxonMobil in Mozambique has been put on hold due to the pandemic, security issues and unfavorable market conditions.

Nigeria

Start of construction of Train 7 at **Nigeria LNG** was marked by a groundbreaking ceremony held in June 2021. The construction is expected to take approximately 5 years. Air Products and Chemicals will provide the main cryogenic heat exchangers, which will be delivered in 2023, and process technology for the project. In June 2021, NLNG also signed 10-year SPAs with Asiko Power, Bridport Energy Limited and Gas-Plus Synergy to supply 1.1 MTPA of LNG domestically for their gas-to-power projects.

Another liquefaction project has been proposed by **UTM Offshore** in partnership with the Nigerian National Petroleum Corporation. It will be a 1.2 MTPA floating LNG facility, supplied with feedgas from the Yoho gas field owned by ExxonMobil and the NNPC. In February 2021, UTM Offshore was awarded a license from the Department of Petroleum Resources to build the project and in May 2021, it awarded a pre-FEED contract to JGC.

Norway

After being shut-down due to a fire incident in September 2020, the restart date of the **Hammerfest LNG** plant, was pushed back from 31 March 2022 to 17 May 2022 due to delays entailed by Covid-19 and related operational restrictions.

Oman

Oman LNG is being debottlenecked to increase the capacity of its current facilities. Talks have commenced to renew the Oman LNG concession, which is set to expire in 2025.

In December 2021, TotalEnergies (80%) and Oman National Oil Company (20%) agreed to establish a joint venture, **Marsa LNG**. The new company will produce natural gas from Block 10, with a view to developing a low-carbon LNG plant in Sohar, powered by solar electricity, for the production of LNG for use as a bunker fuel.

Papua New Guinea

In October 2021, ExxonMobil and its partners in the **PNG LNG** took FID on the Angore development project. Gas from the field will be used to maintain production at the PNG LNG export plant. The first gas from the Angore project is expected in 2024. In December 2021, the shareholding of PNG LNG was modified following the acquisition of Oil Search by Santos. Santos currently owns a 42.5% interest in the project.

In May 2021, the Government of Papua New Guinea and TotalEnergies announced the remobilization of the 5.4 MTPA two-train **Papua LNG** project, after a year

of delay because of the pandemic, with the objective of launching FEED in 2022 and taking FID in 2023. The license for the project was extended in February 2021. Following the merger between Santos and Oil Search in December 2021, Santos owns 17.7% in the project.

Peru

In May 2021, **Peru LNG** went offline due to an issue with a compressor. In July-August 2021 the plant was shut down again due to problems in one of the turbines that operates the propane compressor. LNG production resumed in September.

Qatar

In February 2021, Qatar Petroleum took FID on the **North Field East** project. The project will be composed of 4 mega LNG trains and will have a total capacity of 33 MTPA. First production from the trains is scheduled by the end of 2025. The company also aims to complement its North Field East expansion with the 16 MTPA North Field South project taking the total capacity from 110 MTPA (including NFE) to 126 MTPA by 2027.

In March 2021, Qatar Petroleum announced that it will become the 100% owner of the **Qatargas 1** assets and facilities starting from January 2022 following expiry of the Qatargas Liquefied Natural Gas Company Limited (QG1) joint venture agreements. QG1 facilities will continue to be operated by QatarGas on behalf of Qatar Energy as of 2022.

In October 2021, Qatar Petroleum changed its name to Qatar Energy.

Russia

The 0.9 MTPA **Train 4 of Yamal LNG** started production in May 2021, taking nameplate production capacity of 17.4 MTPA.

In August 2021, **Sakhalin-II LNG** plant resumed operations after a full maintenance shutdown from mid-July, during which Sakhalin Energy replaced LNG loading arms among other maintenance activities. In February 2022, the company took delivery of an electric engine for the main gas booster compressor of the Sakhalin-II onshore processing facility. The same month, as a result of the Russia-Ukraine conflict, Shell announced its intention to exit its joint ventures with Gazprom and related entities, including its 27.5% stake in the Sakhalin-II LNG facility.

In June 2021, Novatek signed an MoU with Fortum to purchase electricity produced by Fortum's renewable power facilities in Russia. The **Cryogas-Vysotsk** LNG plant will be one of the facilities to receive power purchased under the terms of the MoU.

The same month, TotalEnergies signed an SPA with Novatek to acquire 10% of Arctic Transshipment LLC, a wholly owned subsidiary of Novatek, which owns and will operate two LNG transshipment terminals being developed in

the Murmansk and Kamchatka regions of Russia. These terminals will provide export logistics services, including for the **Arctic LNG 2** project under construction, and will each initially include a 360,000 m³ FSU and two ship-to-ship transfer kits (STS). They will allow for the transshipment of LNG from Arc7 ice class LNG carriers to conventional LNG carriers.

In September 2021, **Arctic LNG 2** took delivery of the first two (out of fourteen) modules for LNG Train 1, by the project's EPC contractor, a joint venture of Technip Energies, Saipem and NIPIGAS. As of March 2022, all 14 heavy modules have been delivered and Train 1 was being assembled and installed on a gravity-based structure in Murmansk. It is planned to be transported to the site in Yamal in August 2022. As of end March 2022, Train 1 was 98% complete. Its start-up is expected in 2023.

1.5 MTPA **Portovaya LNG**, located on the Baltic Sea coast, is reported to be close to completion and is expected to start operations later this year.

In September 2021, Gazprom and a consortium of Linde and Renaissance Heavy Industries signed an EPC contract to build a 13 MTPA natural gas liquefaction plant within the Gas Processing Complex near **Ust-Luga**, an integrated complex for natural gas processing and liquefaction. As of March 2022, Linde has suspended all business development for new projects in Russia.

Tanzania

As of March 2022, negotiations on the Host Government Agreement were ongoing between a group of oil and gas companies (Equinor, Exxon Mobil, Ophir Energy, Pavilion Energy and Shell), the state-run Tanzania Petroleum Development Corporation and the Government of Tanzania for the development of the 10 MTPA **Tanzania LNG** project in Lindi region. The project had been put on hold due to regulatory delays. Depending on the progress of discussions, construction could start in 2023.

Trinidad and Tobago

Atlantic LNG Train 1 has been idle since November 2020 because of a feedgas shortage and was closed indefinitely in mid-2021. In January 2022 an HoA was signed between bp, Shell, the National Gas Company, and the Government to consolidate Atlantic LNG trains under the framework of a single ownership structure. China Investment Corporation (CIC) which has a 10% interest in Atlantic LNG Train 1 is not actively participating in the restructuring. The completion of the restructuring is targeted for June 2022.

In July 2021, Shell started production on Block 5C, known as Barracuda project, a backfill gas production project which will supply feed gas to the Atlantic LNG

liquefaction facility, where Shell is a major shareholder with equity ranging from 46% to 57.5% in its four trains.

United States

At the end of 2021 there were 6 liquefaction plants in operation, with a total capacity of 81.3 MTPA. One new train started producing in December (**Sabine Pass**'s sixth train, 5 MTPA) and one greenfield plant came online in March 2022 (**Calcasieu Pass**, 10 MTPA).

In October 2021, Cheniere received approval from the Federal Energy Regulatory Commission (FERC) to increase the liquefaction production capacity of the **Sabine Pass** liquefaction project from 1,509 Bcf/y to 1,662 Bcf/y and of the Corpus Christi liquefaction project from 767 Bcf/y to 875 Bcf/y.

Train 3 at Cheniere's **Corpus Christi** liquefaction plant achieved substantial completion in March 2021. In February 2022, Cheniere signed an EPC contract with Bechtel for the **Corpus Christi Stage III** project and released Bechtel to commence early engineering, procurement, and other site work under a limited notice to proceed. The project includes the construction of 7 mid-scale trains each with a capacity of 1.49 MTPA giving total production capacity of 10.4 MTPA. FID is expected in mid-2022.

In March 2022, **Calcasieu Pass** LNG export facility in Cameron, Louisiana, started commissioning. The 18-train 10 MTPA greenfield project developed by Venture Global took 29 months from FID to first LNG production.

Freeport LNG issued a formal request to the US FERC and the US DOE to increase export volumes to 870 Bcf/y from the existing plant until 2050, with full authorization to export LNG to FTA and non-FTA counties. These authorizations are anticipated by mid-2022.

The development of the 5 MTPA **Train 4** at **Freeport LNG** is ongoing. The expansion project received all regulatory approvals for construction. FID is expected in 2023.

In November 2021, Freeport LNG and Talos Energy announced their intent to develop a CCS project adjacent to Freeport LNG's natural gas pre-treatment facilities. The Freeport LNG CCS project will utilize a Freeport LNG-owned geological sequestration site with up to a 30-year injection term and will permanently sequester CO₂. The companies anticipate first injection could occur by year-end 2024.

The same month JERA Americas, a subsidiary of JERA, agreed to purchase a 25.7% stake in Freeport LNG from Global Infrastructure Partners. Final closure is expected in early 2022.

Freeport LNG awarded a FEED contract for the addition of up to two small-scale bunker barge-loading docks at its Freeport facility. FERC permitting submissions on

the project are expected in late 2022. If constructed, the berths are anticipated to accommodate vessels from 2,000 m³ to 30,000 m³ in size.

2021 marked the first full year of commercial operations for all three trains at Cameron LNG Phase 1. In January 2022 **Cameron LNG** submitted an amendment application to FERC to construct a single 6.75 MTPA liquefaction train for Phase 2 of the Cameron LNG project which will utilize electric drive compressors to reduce emissions. FID is targeted for the first half of 2023.

Construction is underway at **Golden Pass LNG** terminal to add liquefaction and export capabilities of 15.6 MTPA capacity with expected start of operations in 2024.

Venture Global awarded EPC contracts for the 20 MTPA **Plaquemines LNG** project to KZJV, Baker Hughes, UOP Honeywell and CB&I and announced that early construction works had started in August 2021. The company continues commercial development and pre-FID activities. As of March 2022, 70% of the project capacity was contracted for 20 years.

In June 2021, Tellurian, the developer of the 27.6 MTPA **Driftwood LNG** export project on the Calcasieu River, south of Lake Charles, Louisiana, entered into a ground lease agreement with the Lake Charles Harbor and Terminal District for a 477-acre site for an initial term of 20 years with extension options of up to 50 years. In March 2022, Tellurian issued a limited notice to proceed to Bechtel under its \$15.5 Bn EPC contract to start construction works. The first phase of the project includes 2 plants with up to 4 trains per plant and will have a total capacity of 11 MTPA. First LNG is expected in 2026. At the time of this writing, Driftwood LNG had secured 9 MTPA of 10-year off-take agreements for the first phase of the project.

Initially planned for 2021, FID on the 13.5 MTPA **Port Arthur** LNG Phase 1 greenfield liquefaction project developed by Sempra Infrastructure has been delayed to 2022.

More than 180 MTPA of additional liquefaction projects have secured both FERC and Department of Energy approvals. The operators of seven projects, with a combined capacity of over 80 MTPA, have said that they are aiming to take FID in 2022.

In March 2021, **Annova LNG** announced its decision to discontinue its 6.5 MTPA LNG project in Texas, due to the changes in the global LNG market.

In December 2021, Pembina told FERC that it would not move forward with **Jordan Cove** LNG export project, which had failed to secure regulatory approval.

Liquefaction plants

		Liquefaction		Storage					
Country	Name	Number of trains	Nominal capacity (MTPA)	Number of tanks	Total capacity (liq m³)	Owner(s)	Operator	MT - LT Buyer(s)	Start-up date
ATLANTIC BASIN									
Algeria	Arzew GL1Z T1 - T6	6	7.9	3	300,000	Sonatrach	Sonatrach	Botaş, Cepsa Gas, DEPA, Enel, TotalEnergies	1978
	Arzew GL2Z T1 - T6	6	8.2	3	300,000				1981
	Arzew GL3Z	1	4.7	2	320,000				2014
	Skikda GL1K	1	4.5	1	150,000				2013
Angola	Angola LNG	1	5.2	1	360,000	Angola LNG (Chevron 36.4%, Sonangol 22.8%, BP 13.6%, ENI 13.6%, TotalEnergies 13.6%)	Angola LNG		2013
Argentina	Tango (stopped; no vessel chartered) (FLNG)								2019, Stopped in 2020
Cameroon	Kribi (FLNG)	4	2.4	1	125,000	Golar LNG 89%, Keppel Corporation Ltd 10%, Black & Veatch 1%	Golar LNG	Gazprom	2018
Egypt	Damietta	1	5	2	300,000	SEGAS (ENI 50%, EGPC 40%, EGAS 10%)	SEGAS SERVICES	BP, ENI	2005
	Idku T1	1	3.6	2	280,000	Egyptian LNG (Shell 35.5%, Petronas 35.5%, EGPC 12%, EGAS 12%, TotalEnergies 5%)	Egyptian LNG	TotalEnergies	2005
	Idku T2	1	3.6			Egyptian LNG (Shell 38%, Petronas 38%, EGAS 12%, EGPC 12%)		Shell	
	Equatorial Guinea	EG LNG	1	3.7	2	272,000	EG LNG (Marathon 60%, Sonagas 25%, Mitsui 8.5%, Marubeni 6.5%)	EG LNG	Shell
Nigeria	NLNG T1 - T2	2	6.6	4	336,800	Nigeria LNG (NNPC 49%, Shell 25.6%, TotalEnergies 15%, ENI 10.4%)	NLNG	Botaş, Enel, Galp Energía, Naturgy, TotalEnergies	T1: 1999 T2: 2000
	NLNG T3	1	3.3					Galp Energía, Naturgy	2002
	NLNG T4 - T5	2	8.2					Endesa, ENI, Galp Energía, Pavilion Energy, Shell, TotalEnergies	2006
	NLNG T6	1	4.1					Shell, TotalEnergies	2008
Norway	Snohvit	1	4.2	2	250,000	Equinor 36.8%, Petoro 30%, TotalEnergies 18.4%, Neptune Energy 12%, DEA 2.8%	Equinor	Equinor, Pavilion Energy, RWE Supply & Trading, TotalEnergies	2007
	Stavanger	1	0.33	1	30,000	Skangas	Skangas		2010
Russia	Vysotsk LNG	1	0.66	1	42,000	Novatek 51%, Gazprombank 49%	CryoGAS Vysotsk		2019
	Yamal T1 - T4	4	17.4	4	640,000	Yamal LNG (Novatek 50.1%, CNPC 20%, TotalEnergies 20%, Silk Road Fund 9.9%)	Yamal LNG	CNPC, Gazprom Marketing & Trading, Naturgy, Novatek, TotalEnergies	T1: 2017 T2: 2018 T3: 2018 T4: 2021
Trinidad & Tobago	Atlantic LNG T1	1	3.3	1	102,000	Shell 46%, BP 34%, CIC 10%, NGC Trinidad 10%	Atlantic LNG		1999
	Atlantic LNG T2 - T3	2	6.8	2	262,000	Shell 57.5%, BP 42.5%		BP, ENGIE, Naturgas Energia, Naturgy, Shell	T2: 2002 T3: 2003
	Atlantic LNG T4	1	5.2	1	160,000	Shell 51.1%, BP 37.8%, NGC Trinidad 11.1%		BP, Shell	2006
USA	Calcasieu Pass	18	10	2	400,000	Venture Global Calcasieu Pass	Venture Global Calcasieu Pass	BP, CNOOC, Edison, Galp, PGNiG, Repsol, Shell	2022
	Cameron LNG T1	1	4.5	3	480,000	Sempra 50.2%, TotalEnergies 16.6%, Mitsui 16.6%, Japan LNG Investment (a joint venture between Mitsubishi and NYK) 16.6%	Cameron LNG	Mitsubishi, Mitsui & Co, TotalEnergies	2019
	Cameron LNG T2	1	4.5						2020
	Cameron LNG T3	1	4.5						2020
	Corpus Christi T1	1	5.0	3	480,000	Corpus Christi Liquefaction (Cheniere 100%)	Cheniere	Cheniere Marketing, EDF, EDP, Ende-sa, ENGIE, Naturgy, Pavilion Energy, Pertamina, Woodside	2018
	Corpus Christi T2	1	5.0						2019
	Corpus Christi T3	1	5.0						2020
	Cove Point	1	5.25	7	700,000	Cove Point LNG, LP (Dominion Energy 75%, Berkshire 25%)	Cove Point LNG, LP	Gail, Kansai Electric, Sumitomo Corp., Tokyo Gas	2018
	Elba Island	10	2.5	5	550,000	Kinder Morgan	Southern LNG	Shell	2019

		Liquefaction		Storage						
Country	Name	Number of trains	Nominal capacity (MTPA)	Number of tanks	Total capacity (liq m³)	Owner(s)	Operator	MT - LT Buyer(s)	Start-up date	
USA	Freeport LNG T1	1	5.0	3	480,000	Freeport LNG Liquefaction, LLC		JERA, Osaka Gas	2019	
	Freeport LNG T2	1	5.0			Freeport LNG Liquefaction 2, LLC		Freeport LNG	BP	2020
	Freeport LNG T3	1	5.0			Freeport LNG Liquefaction 3, LLC			SK E&S, TotalEnergies	2020
	Sabine Pass T1	1	5.0	5	800,000	Sabine Pass Liquefaction (Cheniere 100%)	Cheniere	Centrica, Cheniere Marketing, GAIL, KOGAS, Naturgy, Shell, TotalEnergies	2016	
	Sabine Pass T2	1	5.0						2016	
	Sabine Pass T3	1	5.0						2017	
	Sabine Pass T4	1	5.0						2017	
	Sabine Pass T5	1	5.0						2018	
	Sabine Pass T6	1	5.0						2021	
ATLANTIC BASIN TOTAL			200.1	8,119,800						
MIDDLE EAST										
Oman	Oman T1 - T2	2	7.1	2	240,000	Government of Oman 51%, Shell 30%, TotalEnergies 5.5%, Korea LNG 5%, Mitsubishi 2.8%, Mitsui 2.8%, PTTEP 2%, Itochu 0.9%		BP, Itochu, KOGAS, Osaka Gas	2000	
	Qalhat	1	3.3			Government of Oman 65.6%, Shell 11%, Mitsubishi 4%, ENI 3.7%, Naturgy 3.7%, Itochu 3.3%, Osaka Gas 3%, TotalEnergies 2.1%, Korea LNG 1.9%, Mitsui 1%, PTTEP 0.7%		Oman LNG	Mitsubishi, Osaka Gas, Naturgy	2005
Qatar	Qatargas I T1 - T3	3	9.5	4	340,000	Qatar Energy (100%)	Qatargas Operating Company	Chugoku Electric, JERA, Kansai Electric, Naturgy, Osaka Gas, Shizuoka Gas, Toho Gas, Tohoku Electric, Tokyo Gas	T1:1996 T2: 1997 T3: 1998	
	Qatargas II T1	1	7.8	8	1,160,000	Qatar Energy 70%, ExxonMobil 30%		Qatargas Operating Company	Botas, ExxonMobil, KPC, Pakistan State Oil, Petrochina	2009
	Qatargas II T2	1	7.8			Qatar Energy 65%,ExxonMobil 18.3%, TotalEnergies 16.7%			CNOOC, ExxonMobil, Petrochina, TotalEnergies	2009
	Qatargas III	1	7.8			Qatar Energy 68.5%, ConocoPhillips 30%, Mitsui 1.5%		Qatargas Operating Company	CNOOC, JERA, Kansai Electric, PGNiG, PTT, RWE Supply & Trading, Tohoku Electric	2010
	Qatargas IV	1	7.8			Qatar Energy 70%, Shell 30%		Qatargas Operating Company	Centrica, CNPC, Petronas, Shell	2011
	Rasgas I T1 - T2	2	6.6			Qatar Energy 63%, ExxonMobil 25%, KOGAS 5%, Itochu 4%, LNG Japan 3%		Qatargas Operating Company	KOGAS	T1: 1999 T2: 2000
	Rasgas II T1	1	4.7	6	840,000	Qatar Energy 70%, ExxonMobil 30%	Qatargas Operating Company	Petronet	2004	
	Rasgas II T2	1	4.7					Edison	2005	
	Rasgas II T3	1	4.7					CPC, EDF Trading, ENI	2007	
	Rasgas III T1	1	7.8				Qatargas Operating Company	EDF Trading, ExxonMobil, KOGAS, Petronet	2009	
	Rasgas III T2	1	7.8					CPC, KOGAS, Petrobangla, Petronet	2010	
UAE	Das Island T1 - T3	3	5.8	3	240,000	ADNOC LNG (ADNOC 70%, Mitsui 15%, BP 10%, TotalEnergies 5%)	ADNOC LNG	BP, Vitol, TotalEnergies	T1: 1977 T2: 1977 T3: 1994	
Yemen	Balhaf T1 - T2 (stopped)	2	7.2	2	280,000	Yemen LNG (TotalEnergies 39.6%, Hunt Oil Co. 17.2%, SK Innovation 9.6%, KOGAS 6%, Yemen Gas 16.7%, Hyundai 5.9%, GASSP 5%)	Yemen LNG	TotalEnergies	T1: 2009 T2: 2010	
MIDDLE EAST TOTAL			100.4	3,100,000						

Liquefaction plants

		Liquefaction		Storage					
Country	Name	Number of trains	Nominal capacity (MTPA)	Number of tanks	Total capacity (liq m³)	Owner(s)	Operator	MT - LT Buyer(s)	Start-up date
PACIFIC BASIN									
Australia	NWS T1 - T5	5	16.3	4	260,000	BHP, BP, Chevron, Woodside (16.7% each), Shell 16.7%, Mitsubishi, Mitsui (8.3% each)	Woodside	Chugoku Electric, GDLNG, JERA, Kansai Electric, Kyushu Electric, Osaka Gas, Shizuoka Gas, Toho Gas, Tokyo Gas	T1: 1989 T2: 1989 T3: 1992 T4: 2004 T5: 2008
	Darwin	1	3.7	1	188,000	Santos 43.4%, SK E&S 25%, INPEX 11.4%, Eni 11%, JERA 6.1%, Tokyo Gas 3.1%	Santos	JERA, Tokyo Gas	2006
	Pluto T1	1	4.9	2	240,000	Woodside 90%, Kansai Electric 5%, Tokyo Gas 5%	Woodside	Kansai Electric, Tokyo Gas	2012
	QCLNG T1	1	4.25	2	280,000	Shell 50%, CNOOC 50%	Shell	CNOOC, Shell	2015
	QCLNG T2	1	4.25			Shell 97.5%, Tokyo Gas 2.5%		Shell, Tokyo Gas	2015
	GLNG T1 - T2	2	7.8	2	280,000	Santos 30%, Petronas 27.5%, TotalEnergies 27.5%, KOGAS 15%	Santos	KOGAS, Petronas	T1: 2015 T2: 2016
	APLNG T1	1	4.5	2	320,000	ConocoPhillips 47.5%, Origin Energy 27.5%, Sinopec Group 25%	Australia Pacific LNG	Sinopec	2016
	APLNG T2	1	4.5					Kansai Electric, Sinopec	2016
	Gorgon T1 - T3	3	15.6	2	360,000	Chevron 47.3%, ExxonMobil 25%, Shell 25%, Osaka Gas 1.3%, Tokyo Gas 1%, JERA 0.4%	Chevron	BP, Chevron, ENEOS Corp., ExxonMobil, GS Caltex, JERA, Kyushu Electric, Osaka Gas, PetroChina, Petronet, Shell, SK E&S, Tokyo Gas	T1: 2016 T2: 2016 T3: 2017
	Wheatstone T1 - T2	2	8.9	2	300,000	Chevron 64.1%, KUFPEC 13.4%, Woodside 13%, JOGMEC 3.4%, Mitsubishi 3.2%, Kyushu Electric 1.5%, NYK 0.8%, JERA 0.6%	Chevron	Chevron, JERA, KUFPEC, Kyushu Electric, Tohoku Electric, Woodside	T1: 2017 T2: 2018
Ichthys T1 - T2	2	8.9	2	330,000	INPEX 66.3%, TotalEnergies 26%, CPC 2.6%, Tokyo Gas 1.6%, Kansai Electric 1.2%, Osaka Gas 1.2%, JERA 0.7%, Toho Gas 0.4%	INPEX	CPC, INPEX, JERA, Kansai Electric, Kyushu Electric, Osaka Gas, Toho Gas, Tokyo Gas, TotalEnergies	2018	
Prelude (FLNG)	1	3.6	1	220,000	Shell 67.5%, INPEX Corporation 17.5%, KOGAS 10%, CPC 5%	Shell	CPC, INPEX, KOGAS, Shell	2019	
Brunei	Brunei T1 - T5	5	7.2	3	195,000	Brunei Government 50%, Shell 25%, Mitsubishi 25%	Brunei LNG	JERA, Osaka Gas, Petronas, Shell, Tokyo Gas	1973
Indonesia	Bontang	4	11.5	6	630,000	Government of Indonesia	PT Badak NGL (Pertamina 55%, PHSS 20%, PNA 15%, TotalEnergies 10%)	ENI, Kyushu Electric, Nusantara Regas, PPT ETS, Pertamina	Train E: 1990 Train F: 1994 Train G: 1998 Train H: 1998
	Tangguh T1 - T2	2	7.6	2	340,000	Tangguh LNG (BP 40.2%; CNOOC 13.9%; JX Nippon Oil & Gas Exploration 7.5%; Mitsubishi 9.9%; INPEX 7.8%; LNG Japan 7.4%; Mitsui 3.2%, Others 10.2%)	Tangguh LNG	CNOOC, Kansai Electric, PLN, Posco, Sempra LNG, SK E&S, Tohoku Electric	2009
	Donggi-Senoro	1	2.0	1	170,000	PT Donggi-Senoro LNG (Mitsubishi 45%, Pertamina 29%, KOGAS 15%, Medco 11%)	PT Donggi-Senoro LNG	JERA, KOGAS, Kyushu Electric	2015
Malaysia	MLNG 1 Satu	3	8.4	6	390,000	Petronas 90%, Mitsubishi 5% Sarawak state government 5%	Petronas	JOVO, Hiroshima Gas, PTT, Saiibu Gas, Shikoku Electric, S-Oil, Tokyo Gas	1983
	MLNG 2 Dua	3	9.6			Petronas 80%, Mitsubishi 10% Sarawak state government 10%		CPC, ENEOS Corp., JERA, Osaka Gas, Sendai City Gas, Shizuoka Gas, Tohoku Electric, Tokyo Gas	1995
	MLNG 3 Tiga	2	7.7			Petronas 60%, Sarawak state government 25%, ENEOS Corporation 10%, Diamond Gas 5%		CNOOC, JAPEX, KOGAS, Osaka Gas, Toho Gas, Tohoku Electric, Tokyo Gas	2003
	MLNG T9	1	3.6			Petronas 70%, ENEOS Corporation 10%, PTT 10%, Sarawak state government 10%		Hokkaido Electric, Hokuriku Electric	2016
	PFLNG Dua (FLNG)	1	1.5		177,000	Petronas	Petronas	KEPCO, Petronas, PTT	2021
	PFLNG Satu (FLNG)	1	1.2	1	180,000	Petronas	Petronas	KEPCO, PTT	2017

Country	Name	Liquefaction		Storage		Owner(s)	Operator	MT - LT Buyer(s)	Start-up date
		Number of trains	Nominal capacity (MTPA)	Number of tanks	Total capacity (liq m ³)				
Papua New Guinea	PNG LNG T1 - T2	2	8.3	2	320,000	PNG LNG (Santos 42.5%, Exxon Mobil 33.2%, Kumul Petroleum 16.8%, Nippon Papua New Guinea LNG LLC 4.7%, MRDC 2.8%)	PNG LNG	BP, CPC, JERA, Osaka Gas, Sinopec	2014
Peru	Peru	1	4.45	2	260,000	Hunt Oil 50%, Shell 20%, SK Innovation 20%, Marubeni 10%	Hunt Oil	Shell	2010
Russia	Sakhalin-2 T1 - T2	2	10.8	2	200,000	Sakhalin Energy Investment Company (Gazprom 50%, Shell 27.5%, Mitsui 12.5%, Mitsubishi 10%)	Sakhalin Energy Investment Company	CPC, Gazprom, Hiroshima Gas, JERA, KOGAS, Kyushu Electric, Osaka Gas, Saibu Gas, Shell, Toho Gas, Tohoku Electric, Tokyo Gas	2009
PACIFIC BASIN TOTAL			171.03		5,640,000				
TOTAL			471.57		16,859,800				



Regasification terminals

At the end of 2021, global regasification capacity reached **993 MTPA**.

7 new regasification terminals started commercial operations in 2021 totaling 22.6 MTPA of capacity. One large scale onshore terminal was commissioned in Kuwait, two small scale terminals in Italy, and one small scale terminal in Mexico. Three floating terminals started commercial operations in 2021 respectively in Brazil, Croatia and Indonesia.

Croatia joined the ranks of LNG importing countries in 2021.

5 expansion programs were completed during the year: four in China and one in Japan, adding around 10 MTPA of regasification capacity.

At the end of the year, 19 new floating and 24 new onshore terminals were reported to be under construction. Total regasification capacity under construction at the end of the year exceeded 190 MTPA, with 72% located in Asia.

Argentina

In June 2021, following the results of a tender for seasonal regasification service, Excelsior's FSRU *Exemplar*, which has a storage capacity of 150,900 m³, restarted operations at **Bahia Blanca**. The vessel left the site at the end of the year to be used as LNG carrier.

Australia

In November 2021, Australian Industrial Energy signed a contract with Höegh LNG to lease FSRU *Höegh Galleon* for the **Port Kembla** LNG import terminal, located 90 km south of Sydney. The terminal is expected to be operational by 2023.

In December 2021, the government of South Australia granted Venice Energy approval to build the **Outer Harbor** LNG terminal, located at the Port of Adelaide. The construction could start in the second half of 2022 and would take 12-14 months. GasLog could supply an FSRU for the project.

Belgium

In January 2021, Fluxys LNG, owner and operator of the **Zeebrugge** import terminal launched a backhaul liquefaction service which allows to create LNG by counter-nominating gas on the regasified flows. In May 2021, the company announced the availability of four additional LNG truck loading bays as of early 2024. In December 2021, Fluxys LNG launched a subscription window for booking long-term BioLNG liquefaction services, which include the conversion of biomethane into BioLNG for trucks and bunker ships. In June 2021 Titan LNG commissioned a short-term ship-to-truck loading facility at the Port of Zeebrugge, to supply LNG as a marine fuel during a maintenance period at Gate terminal in the Netherlands. Titan LNG-chartered *Green Zeebrugge* LNG bunkering vessel was used as an interim solution to fill up trucks to serve bunkering in Zeebrugge and surrounding areas.

Brazil

In September 2021, **Gás Natural** Açú LNG-to-power project, a joint venture of bp, Siemens, SPIC Brasil and Prumo Logística, started commercial operations after receiving authorization from the Brazilian Electricity Regulatory Agency (Aneel) to start operations of all generation units of the GNA I power plant.

In December 2021, Excelsior Energy started operations at the **Bahia** regasification terminal in Brazil using 173,400 m³ FSRU *Excelsior Sequoia* with

a regasification capacity of up to 5.6 MTPA after it signed a contract to lease the terminal from Petrobras following a tender process.

The **Barcarena** LNG terminal which involves a 3.8 MTPA FRU located on the Para River, near the port of Vila do Conde, is under construction. Natural gas will be supplied to industrial customers and to the 605 MW Celba power plant. In December 2021, New Fortress Energy signed a 15-year gas supply agreement with a subsidiary of Norsk Hydro for the supply of 29.5 Tbtu per year of regasified LNG to the Alunorte Alumina Refinery. The terminal is expected to be operational in 2022.

In August 2021, Cosan's unit Compass Gas e Energia started construction of the Sao Paulo regasification terminal project (TRSP) located in the Port of **Santos**.

In December 2021, Compass signed a binding HoA for the charter of the *Höegh Gannet* FSRU which has a capacity of 170,000 m³. The 3.7 MTPA project could be operational by 2023.

In November 2021, New Fortress Energy started construction of its floating 3.8 MTPA LNG Terminal Gas Sul (TGS) in **Santa Catarina**. The first construction phase involves the maritime terminal which is scheduled to be completed in 2022.

Canada

In November 2021, Repsol completed the acquisition of the Canaport LNG terminal, after buying Irving Oil's 25% interest. The terminal was renamed **Saint John LNG**.

China

China's first night berthing was carried out in December 2021 at **Dapeng** LNG terminal.

Several expansion projects were completed in 2021. In June, two 160,000 m³ storage tanks, three Intermediate Fluid Vaporizer (IFV) regasifiers, 14 loading skids and relevant supporting facilities and process systems have been added at **Zhoushan** LNG terminal, which increased the regasification capacity to 5 MTPA. In August, four 160,000 m³ storage tanks were added at **Caofeidian** (Tangshan) LNG terminal, increasing the capacity by 3.5 MTPA taking it to 10 MTPA. In September, 1 MTPA of regasification capacity was added at the **Qingdao** LNG terminal. Phase III was completed at **Rudong** Jiangsu LNG terminal in October, increasing the regasification capacity from 6.5 MTPA to 10 MTPA. In December, a second berth was put into service at **Sinopec's Tianjin Nangang**

LNG terminal, which became the first double-jetty LNG terminal in China. Full expansion, increasing capacity from 6 MTPA to 10.8 MTPA, is scheduled to be completed in 2023.

Construction work started in June 2021 for the 3 MTPA Phase II at **Binhai** LNG terminal and the 3.5 MTPA Phase II at **Zhuhai** LNG terminal, both are expected to be completed in 2023.

Construction started at two new terminals: Sinopec's 6 MTPA **Longkou**, which is expected to be completed in 2022 and Guangdong Energy's 6.2 MTPA **Huizhou**, which is planned to be operational in 2024.

In June 2021, Beijing Gas Group held the roof air-lifting ceremony for the first of ten 220,000 m³ LNG onshore storage tanks under construction at the **Tianjin Nangang LNG** regasification terminal. The first phase of the terminal, which includes 4 tanks, is expected to be commissioned during the last quarter of 2022.

Other terminals under construction are **Binhai** (Tianjin), **Wenzhou** (Zhejiang), **Chaozhou**, **Guangzhou**, **Hebei**, PipeChina's **Longkou**, **Yangjiang** (Guangdong), **Yantai**, **Zhangzhou** (Fujian) and **Wuhu**, adding more than 30 MTPA to China's LNG import capacity by 2024.

Construction of the 1 MTPA **Jiaxing** LNG terminal is reported to have been completed in 2021 but commissioning had not yet started at the beginning of 2022.

Chile

Expansion of truck loading facilities is ongoing at the **Quintero** LNG terminal through the construction of a fifth loading bay with a loading capacity of 625 m³/day. This expansion will increase the capacity of the

truck loading facility to 3,125 m³/day and is expected to be completed in the fourth quarter of 2022. GNL Quintero announced the joint development of a 10 MW green hydrogen plant project at the terminal with Acciona Energía and Enagas Renovable. FID is expected in 2024 and the start of operations in 2025. In March 2022, Enagas and Omers agreed to jointly sell their respective shareholdings in GNL Quintero, which together represent an 80% ownership, to the consortium led by EIG and Fluxys. The transaction is expected to be completed in the second half of 2022.

Croatia

1.9 MTPA FSRU **LNG Croatia** at **Krk** Island started commercial operations in January 2021.

In May 2021, **LNG Croatia** performed first small-scale reloading of LNG, which marked the start of the bunkering service at the terminal. LNG was reloaded from the FSRU to the 7,500 m³ **Avenir Accolade** dual-purpose (LNG supply and bunkering) vessel for delivery as the commissioning cargo to the HIGAS LNG terminal in Sardinia. **LNG Croatia** commissioned ship-to-truck services in April 2022. The project of a bunkering station is under development.

Colombia

In June 2021, Black and Veatch was selected to conduct a technical, engineering and commercial study for the gas-to-power Pacific LNG project in **Buenaventura** including an LNG regasification facility and a 400 MW power plant. In October 2021, a tender to build, own and operate the project was canceled by the Mines and Energy Ministry Planning Unit (JPME) because of a lack of interest.

SPEC LNG carries out technical studies to expand the capacity of the **Cartagena** LNG terminal to 530-600 MMcf/d in the fourth quarter of 2025.

Cyprus

The 137,000 m³ LNG carrier **Galea** is being converted at Cosco Shipping Heavy Industry in Shanghai into an FSRU named **Etyfa Prometheus** and is destined for the Cyprus LNG project located at **Vasilikos** port. The FSRU will be moored alongside a purpose-built jetty and regasified LNG will be sent to a gas-fired power plant and to the country's gas grid. The project is scheduled to start in 2023.

Dominican Republic

Construction of a second storage tank with a capacity of 120,000 m³ at the **Andrés** LNG terminal is expected to be completed during the second quarter of 2023. As part of this expansion project two new truck loading bays are being built and are scheduled to be ready by the end of the first quarter of 2022.

In March 2021, the Dominican government launched the request for proposal for a new natural gas-fired generation project including combined cycle power plants and terminal with onshore storage capacity in **Manzanillo**.

Ecuador

In January 2022, Sycar's small scale terminal in **El Oro** received its first LNG in two 40 foot iso-containers. The second phase of the project includes a 20,000 m³ FSU with ship-to-truck loading facilities and is planned to start in 2023.



El Salvador

In November 2021, 137,000 m³ FSRU *BW Tatiana* arrived at the Port of **Acajutla** from the Keppel Tuas shipyard (Singapore) to commission the country's first LNG-to-power project, which is owned by Energía del Pacífico (EDP). Invenery and BW LNG will jointly commission, operate, and maintain the FSRU which has a regasification capacity of 280 MMcfd. The FSRU will be part of a 378-MW LNG-powered plant being developed by Wärtsilä. It will provide 30% of El Salvador's electricity demand and contribute to the country's energy mix. EDP and Shell have a 12-year SPA for the supply of LNG for the project which is scheduled to start operations in 2022.

France

Dunkerque LNG scaled-up its truck loading capacity to 3,000 per year in the first half of 2021. It also modified the jetty to receive vessels from 5,000 m³ capacity. The first small-scale vessel loaded at the terminal was Gas Agility, which refueled the world's largest containership powered by LNG, the *CMA CGM JACQUES SAADE*, with around 16,400 m³ of LNG in April 2021. This was the first LNG bunkering operation with simultaneous cargo operations at French port Terminal des Flandres.

Following the decommissioning of some of its vaporizers, the capacity at the **Fos Tonkin** terminal was reduced to 1.2 MTPA.

In January 2021, the capacity at **Fos Cavaou LNG** was increased to 6.8 MTPA. In April 2021, for the first time in France, the terminal loaded an ISO-container, which was then transported by rail from Miramas in the South of France to a service station near Milan. In December 2021, the terminal started a small-scale LNG loading service.

In January 2022, TotalEnergies and CMA CGM performed the first ship-to-containership bunkering operation in the Port of Marseille Fos with around 6,000 m³ of LNG transferred.

As of March 2022, a 3.9 MTPA FSRU project was under consideration by the French government to be installed at the Port du Havre, the site of the first French and world's second LNG receiving terminal in operation from 1965 to 1989.

Germany

In May 2021, Hanseatic Energy Hub and Dow concluded implementation agreements for a planned zero-emission LNG import terminal in **Stade**. With a capacity of 13.3 BCMA, the project will be integrated into the existing industrial park and developed into an energy hub for various energy sources. The terminal infrastructure is also approved for BioLNG and synthetic natural gas. It is planned to use waste heat from the Dow plant at Stade. The terminal could start operating in 2026.

In June 2021, the European Commission approved

the decision by Germany's regulatory authority, Bundesnetzagentur, to exempt the planned German LNG Terminal at **Brunsbüttel** from tariff and network access regulations. The terminal will have two onshore tanks of 165,000 m³ and a send-out capacity of 8 BCMA. The terminal will be built and operated by German LNG Terminal GmbH which is a 50/50 joint venture between Gasunie and German state-owned bank Kreditanstalt für Wiederaufbau (KfW) after Vopak and Oiltanking decided to withdraw from the project in February 2022.

At the end of February 2022, the German government announced that it would reduce the country's reliance on Russian gas by fast-tracking the construction of two LNG terminals, in Brunsbüttel and Wilhelmshaven. Uniper resumed its plans to build the **Wilhelmshaven** terminal. In addition, in March 2022, Uniper and RWE, on behalf of the German government, secured three FSRUs which are planned to start operations in late 2023.

Ghana

In January 2021, **Tema LNG** project, which includes an FRU and an FSU, received its FRU, *Torman*, built by Jiangnan Shipbuilding and designed with a regasification capacity of 1.7 MTPA. FSRU *Vasant 1* arrived on site in May 2021, as temporarily chartered while the project's FSU is under conversion from an LNG carrier. The project startup is expected in 2022.

Greece

The truck loading station under construction in **Revithoussa** LNG terminal will have one loading bay for 50 m³ trucks with a loading capacity of 100 m³/h. It is planned to enter in service in 2022. Bunkering infrastructure is expected to be ready by 2024. A new jetty will be built at the terminal and will enable the loading of LNG onto small scale ships.

In February 2022, Gastrade took FID for construction of a 4 MTPA LNG terminal in **Alexandroupolis**, as part of the Independent Natural Gas System of Alexandroupolis. A 153,500 m³ FSRU, converted from an LNG carrier and operated by GasLog, will be connected to the National Natural Gas Transmission System of Greece by a 28 km pipeline. The terminal is expected to start operations by the end of 2023. Gastrade has signed contracts for 50% of the technical capacity. The project has received €167M of public spending.

In June 2021, DESFA and Dioriga Gas signed an advanced reservation of capacity agreement for the construction of the connections between DESFA's gas grid and Dioriga Gas' FSRU, a proposed project in the Gulf of Corinth. The FSRU is set to have a 2 MTPA capacity and is targeting operational start-up in 2023. LNG barge reloading and truck loading fa-

cilities are also expected to be developed as part of the project.

Hong Kong

The **Hong Kong LNG** terminal, planned to be located offshore, 25 km southwest of Hong Kong Island, is currently under construction. A joint venture between MOL and Vopak will lease the world's largest FSRU *Bauhinia Spirit* (ex. *Challenger*), which has 263,000 m³ of storage capacity and 800 mmscf/d regasification capacity, to the terminal on a long-term basis, as well as provide jetty O&M and port services. The project is expected to be operational around 1Q 2023. Regasified LNG will be used for power generation.

India

In October 2021, **Mundra** started operations of its LNG truck loading facilities.

Construction of two additional 170,000 m³ storage tanks has started at the **Dahej** LNG terminal. FID was taken for construction of a third jetty, which will have a unique feature of handling ethane and propane in addition to LNG. An expansion of the terminal's regasification capacity from existing 17.5 MTPA to 22.5 MTPA by the mid-2020s is underway.

In March 2022, India's first FSRU 170,000 m³ *Höegh Giant* arrived at **Jaigarh** LNG terminal in Maharashtra. The 6 MTPA project, developed by H-Energy, is ready for commissioning. The facility will include regasification, reloading, bunkering and truck loading services. The terminal is connected to the national gas grid through the 56 km long Jaigarh-Dabhol natural gas pipeline.

Swan Energy's 5 MTPA offshore LNG import project including 180,000 m³ FSRU *Vasant 1*, and an FSU located at **Jafrabad** could be commissioned in April 2022, following completion of the construction of a breakwater.

In June 2021, Crown LNG initiated the development of an LNG import project, which will be located offshore **Kakinada**. The project is planned as a gravity-based structure with FID targeted for the end of 2022 and the start of operations 3 years later. Crown LNG will build and ensure operations and management of the facility over a 25-year lease period following the completion of construction.

Indonesia

In April 2021, the newly built **Jawa Satu** FSRU received its first LNG cargo. The FSRU has a storage capacity of 170,000 m³ and a regasification capacity of 300 mmscf/d. The facility is located 14 km off the coast of the Karawang Regency, West Java, and connected via an onshore/offshore pipeline to Jawa-1 gas-fired power plant in Cilamaya, the largest combined cycle power plant in Southeast Asia, with a capacity of 1,760 MW. The LNG-to-power project came

online in February 2022, with the start-up of the first unit of the power plant.

Italy

In May 2021, the 7,500 m³ *Avenir Accolade* dual-purpose – LNG supply and bunkering – vessel delivered the commissioning cargo to the **HIGAS** LNG terminal in Sardinia.

In September 2021, the new small-scale coastal terminal in the port of **Ravenna** received its first cargo. It has been built for the handling and storage of LNG for refueling purposes and is owned by Depositi Italiani GNL (DIG). Operations commenced in October 2021.

Japan

A second 230,000 m³ LNG storage tank at **Hitachi** LNG terminal commenced operations in March 2021. JERA renovated 3 vaporizers at **Futtsu** LNG terminal and 4 vaporizers at Kawagoe LNG terminal, where the company added three 20t/h BOG compressors.

The new 1 MTPA **Niihama** LNG terminal developed by Tokyo Gas and other Japanese partners on Shikoku Island, received its first LNG cargo in January 2022.

By the end of 2022, Oita LNG, a subsidiary of Kyushu Electric, will start reloading LNG as a marine fuel for two newly built large RoPax (cars, trucks, and passengers) ferries, the *Sunflower Kurenai* and the *Sunflower Murasaki*, operated by MOL's subsidiary "Ferry Sunflower". Around 50 tons of LNG fuel per day will be supplied via truck-to-ship to the domestic transport ferries at the Beppu Port in Oita.

Ecobunker Shipping, a joint venture between Uyenno Transtech, Sumitomo Corporation, Yokohama-Kawasaki International Port Corporation and Development Bank of Japan, is developing a "Ship-to-Ship LNG bunkering project in Tokyo Bay" using a multi-bunker vessel, the *Ecobunker Tokyo Bay*, which is capable of both LNG and fuel oil bunkering. The vessel is slated for completion by the end of March 2022.

Kuwait

The newly built **Al-Zour** LNG import terminal received its first LNG cargo in July 2021, delivered by Nakilat's *Al Kharsaah* LNG carrier. The first phase of the terminal has four 225,000 m³ storage tanks and 11 MTPA of regasification capacity. The second phase, which will include 4 additional tanks of the same size, is expected to be completed in 2022. The 22 MTPA terminal is owned by Kuwait Petroleum Corporation and operated by its unit, Kuwait Integrated Petroleum Industries Company (KIPIC).

Lithuania

In July 2021, Klaipėdos Nafta announced the tender for the acquisition of an FSRU for the Klaipėda LNG terminal. In February 2022, the company said that it

plans to acquire the *Independence* FSRU, which has been in operation at the terminal since 2014, from Høegh LNG at the end of the lease agreement.

Mexico

In July 2021, New Fortress Energy's 0.8 MTPA LNG terminal in the port of **Pichilingue** started commercial operations. The terminal, located at Baja California Sur, is equipped with NFE's proprietary ISOFlex system, which allows LNG carriers to transfer LNG using a specialized manifold into ISO containers on offshore support vessels. The containers are offloaded at container ports and onto trucks. Natural gas will be supplied to the CTG La Paz and CTG Baja California Sur power plants.

Mozambique

In February 2022, Great Lakes Africa Energy finalized the concession agreement with the Mozambique government to finance and operate the country's first LNG-to-power project, the 250 MW **Nacala** LNG plant. Construction will be carried out in three stages, with the first comprising 50 MW capacity – expected to be completed in the second quarter of 2023. The following stages will add an additional 200 MW of capacity and are planned to be completed in 2024. A Karmol's LNTT powership FSRU is under conversion in Singapore.

Netherlands

In June 2021, **Gate** terminal received its first carbon neutral LNG cargo which was delivered by OMV and TotalEnergies. The regasification terminal is also able to receive BioLNG.

In July 2021, Gate took FID on an increase of its regasification capacity by 1.5 BCMA to 13.5 BCMA. The capacity is expected to become available as of October 2024.

Gasunie is developing a floating LNG receiving terminal at **Eemshaven** in Groningen. In March 2022, Gasunie signed a charter agreement with Exmar for the 600 mmscf 26,000 m³ regasification barge FSRU *S188* for 5 years. The FSRU is expected to arrive at Eemshaven in early August 2022 and the start of operations is expected in the third quarter of 2022.

Nicaragua

As of October 2021, New Fortress Energy's LNG-to-power project at **Puerto Sandino**, which includes an FSU with onshore regasification facilities and a 300 MW power plant, was 85% complete. The project is scheduled to start operations in 2022.

Panama

In 2021 AES started to deliver LNG to industrial customers in Panama through truck loading facilities at its **Costa Norte** LNG terminal in Colón. In September

2021, AES acquired 49.9% of AES Colón from Inversiones Bahia and became the full owner of the LNG terminal and the adjacent 381 MW power plant.

In July 2021, GasLog completed conversion of the GasLog Singapore LNG carrier to an FSU, which is planned to be employed at the **Sinolam** LNG terminal. The FSU will receive, store and send LNG to a power plant located near Colón.

Poland

In February 2021, **Świnoujście** LNG terminal received permission for the construction of a third LNG storage tank of 180,000 m³ capacity, which will increase the total terminal storage capacity to 500,000 m³. In September 2021 the annual truck loading capacity was increased to 130,000 tons of LNG. In November 2021 GAZ-SYSTEM launched a binding Open Season Procedure, to verify the interest of market participants in regasification capacity at the proposed **Gdansk** FSRU Terminal. The terminal is expected to have 6.1 BCMA of send-out capacity.

Portugal

The **Sines** LNG Terminal started the replacement of the existing marine transfer arms in March 2022.

Philippines

A 3 MTPA LNG receiving terminal in development by Energy World Corporation in **Pagbilao**, Quezon, which will supply LNG to an adjacent 650 MW power plant, was reported to be 80% complete as of September 2021.

In June 2021, construction started on the **FGEN** LNG offshore terminal, which is being developed by First Gen and Tokyo Gas. The existing jetty will be transformed into a multi-purpose jetty allowing to accommodate an FSRU as an interim offshore solution while building an adjacent onshore gas receiving facility. Construction is expected to be completed in 2022.

All engineering and procurement-related works are fully completed at Philippines LNG (**PLNG**) import terminal, developed by AG&P. Construction started in 2021 using an offshore, modular approach. The start of commercial operations is planned in 2022.

Puerto Rico

In 2021, the LNG receiving terminal in **Peñuelas** started a truck loading service following the commissioning of its truck loading station at the end of 2020. In April 2021, the US Federal Energy Regulatory Commission (FERC) gave approval for the expansion of the Peñuelas LNG terminal. The operator, EcoEléctrica, aims to increase the send-out capacity of the terminal by 93 MMcf, to a total of 279 MMcf using one of the two existing spare LNG vaporizers.

Senegal

In June 2021, the 125,470 m³ FSRU *KARMOL LNGT Powership Africa*, owned by KARMOL, a joint venture between Karpowership and MOL, arrived at the port of **Dakar**. The vessel will be part of the country's first LNG-to-power project and will be connected through a natural gas pipeline to a 235 MW floating power plant, *Karadeniz Powership Ayşegül Sultan*, owned by Karpowership. The start of operations has been delayed due to the high spot LNG prices.

Singapore

Studies related to additional storage and jetty capacity, which will be used for storage, reloading, small-scale LNG and LNG bunkering activities, are being carried out at **SLNG** terminal. FEED studies are ongoing for an NGL extraction facility which will remove heavier hydrocarbons from LNG using cold energy from the terminal's operations in the extraction process. In addition, feasibility studies are underway on a CO₂ liquefaction and storage facility using cold energy from the terminal's operations. SLNG has developed a Green Strategy which includes achieving carbon neutrality for terminal operations. Solar panels on the rooftops have been installed to generate a portion of the power used by the terminal.

Spain

Since the launch of the Virtual Balance Tank (TVB) on 1 April 2020, a new capacity allocation system at Spanish LNG terminals has also been introduced. The new slot allocation model allows marketers to book slots on a 15-year forward basis through annual auctions. This includes a system of allocation by auction when slots demanded exceed those offered. These regulatory changes concern both small and large-scale recharging operations.

Enagás LNG regasification terminals have been declared carbon neutral since 2017 through the implementation of best available emissions reduction techniques and offsetting emissions that cannot technically be reduced.

South Korea

In July 2021, Doosan Heavy Industries & Construction was awarded a contract to build four 270,000 m³ LNG storage tanks for the new 11.6 MTPA **Dangjin** LNG terminal. The terminal, which is being developed by KOGAS, will have 10 tanks in total and is planned to be completed by 2031.

Regasification capacity has been increased by 2.1 MTPA at POSCO's **Gwangyang** LNG terminal taking it to 5.2 MTPA following the addition of 5 vaporizers. Along with ongoing construction works on the sixth storage tank, POSCO announced in February 2022 a further expansion of the terminal with two more 200,000 m³ storage tanks, which will be completed by 2025.

In 2021, LNG Bunkering Korea, a subsidiary of KOGAS, ramped up the supply of STS-LNG bunkering services with LNG loaded from the **Tong-Yeong** LNG terminal.

Sri Lanka

In September 2021, New Fortress Energy signed an agreement with Sri Lanka's government to construct a new LNG receiving, storage and regasification terminal, to be located offshore the coast of **Colombo**. The terminal will supply gas to the Kerawalapitiya Power Complex including a 310 MW operational and a 700 MW planned power plants. NFE plans to supply initially the equivalent of 0.25 MTPA of LNG to these power plants. The terminal is expected to start operations in 2023.

Taiwan

A second LNG berth, including associated marine facilities, is under construction at **Taichung** LNG terminal with the target of completion by the end of 2023. CPC launched feasibility studies for the phase III expansion of the terminal, which includes two additional LNG storage tanks of 180,000 m³ capacity each as well as new regasification facilities.

Work started in February 2021 on construction of three additional storage tanks of 200,000 m³ each and related regasification facilities at **Yung-An** LNG terminal. The expansion will add 1.8 MTPA of regasification capacity by 2027.

CPC is conducting the construction of its third LNG receiving terminal, named **Guantang**. Phase I will include two storage tanks and one berth. Start-up is expected in the middle of 2025.

Thailand

In 2021, PTT renamed its **Map Ta Phut** LNG Terminal **LNG Map Ta Phut Terminal 1**. In January 2021, commercial reloading operations started at the terminal with the loading of a cargo, which was delivered to the Ohgishima terminal in Japan.

Construction of the second LNG receiving terminal in Thailand **LNG Map Ta Phut Terminal 2**, previously referred as Nong Fab terminal, which will have 2 storage tanks of a 250,000 m³ capacity each, 5 vaporizers and a 7.5 MTPA regasification capacity, is expected to be completed in 2022. The new terminal will be operated by PTT LNG. In February 2022, Electricity Generating Authority of Thailand (Egat) and PTT formed a joint venture to co-invest in the project each with a 50% share.

Turkey

In July 2021, the new 170,000 m³ FSRU *Ertuğrul Gazi* replaced the FSRU *Challenger* and started operations at the **Dörtyol** LNG terminal. The new FSRU was built by Hyundai Heavy Industries and chartered by BOTAS. The FSRU has a regasification capacity of 28 mcm/d. At **Izmir Aliaga** LNG terminal, a facility dedicated to small scale LNG vessels is expected to be completed by EgeGaz by the end of 2022.

Vietnam

As of November 2021, the onshore 1 MTPA **Thi Vai** LNG terminal, located southeast of Ho Chi Minh City and developed by PetroVietnam and its partners, was reported to be 90% complete. The terminal is expected to start operations in 2022.

In May 2021, Bechtel was awarded the FEED contract by Delta Offshore Energy for the LNG-to-power project in **Bac Lieu** Province in the Mekong Delta. The project will include an FSU, a Jettyless Floating Terminal (JFT) and a Self-installing Regas Platform (SRP) to provide LNG to a 3.2 GW power plant. The project received its environmental approval in September. The start-up of the first of four 800 MW blocks of the power plant is expected in 2024.

Regasification terminals

		Storage		Send-out							
Market	Site	Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)	Owner	Operator	Third Party Access	Additional Services offered	Start-up date	
AMERICAS											
Argentina	Bahia Blanca <i>No vessel chartered</i>									2008	
	Escobar <i>Excelerate Expedient (FSRU)</i>	4	151,000	6	6.1	Owner: Excelerate Energy Charterer: UTE Escobar (50% Enarsa, 50% YPF)	FSRU: Excelerate Energy Terminal: YPF	No		2011	
Brazil	Bahia <i>Excelerate Sequoia (FSRU)</i>	4	173,400		5.6	Owner: Maran Gas Maritime Charterer: Excelerate Energy	FSRU: Excelerate Energy Terminal: Excelerate Energy	Yes		2013	
	Guanabara Bay <i>Excelerate Experience (FSRU)</i>	4	173,400	6	6.0	Owner: Excelerate Energy Charterer: Petrobras	FSRU: Excelerate Energy Terminal: Petrobras	No	Reloading	2009	
	Pecem <i>Golar Winter (FSRU)</i>	4	138,000		3.8	Owner: New Fortress Energy Charterer: Petrobras	FSRU: Golar Terminal: Petrobras	No		2009	
	Port of Açú <i>BW Magna (FSRU)</i>	4	173,400		5.6	Owner: BW Charterer: Gas Natural Açú (Prumo Logística, BP, Siemens)	FSRU: BW Terminal: Klaipedos Nafta			2021	
	Sergipe <i>Golar Nanook (FSRU)</i>	4	170,000		5.6	Owner: New Fortress Energy Charterer: CELSE	New Fortress Energy		Reloading	2020	
Canada	Saint John, New Brunswick	3	480,000	8	7.4	Repsol	Canaport LNG	Yes		2009	
Chile	Mejillones	1	187,000	3	1.5	ENGIE (63%), Ameris Capital (37%)	GNL Mejillones	Yes	Transshipment, Truck loading	2010	
	Quintero	3	334,000	4	3.8	GNLQ: Enagas (45.4%), Omers (34.6%), ENAP (20%)	GNL Quintero	Yes	Reloading, Truck loading	2009	
Colombia	Cartagena SPEC LNG <i>Höegh Grace (FSRU)</i>	4	170,000	4	3.7	Owner: Höegh LNG Charterer: Sociedad Portuaria El Cayao (SPEC LNG: Promigas, Vopak)	FSRU: Höegh LNG Terminal: SPEC LNG	No	Reloading, Transshipment	2016	
Dominican Republic	Andrés	1	160,000	3	1.7	AES	AES	No	Reloading, Truck loading	2003	
Jamaica	Montego Bay	7	7,000		0.5	New Fortress Energy	New Fortress Energy		Truck loading	2016	
	Old Harbour <i>Golar Freeze (FSRU)</i>	5	125,000		3.6	New Fortress Energy	New Fortress Energy			2019	
Mexico	Altamira	2	300,000	5	5.7	Terminal de LNG de Altamira (Vopak 60%, Enagas 40%)	Terminal de LNG de Altamira	Yes		2006	
	Energía Costa Azul	2	320,000	6	7.6	IEEnova (Sempra)	IEEnova (Sempra)	Yes	Reloading	2008	
	Manzanillo	2	300,000		3.8	Mitsui (37.5%), Samsung (37.5%), KOGAS (25%)	Terminal KMS			2012	
	Pichilingue, La Paz	3			0.8	New Fortress Energy	New Fortress Energy		Truck loading	2021	
Panama	Costa Norte	1	180,000		1.5	AES	AES		Bunkering, Truck loading	2018	
Puerto Rico	San Juan				1.1	New Fortress Energy	New Fortress Energy		Truck loading	2020	
	Peñuelas	1	160,000	4	2.0	Naturgy (47.5%), ENGIE (35%), Mitsui (15%), OCO Partners (2.5%)	Eco Eléctrica		Truck loading	2000	
USA	Cameron	3	480,000	10	11.4	Sempra (50.2%), TotalEnergies (16.6%), Mitsubishi (16.6%), Mitsui (16.6%)	Cameron LNG	Yes	Reloading	2009	
	Cove Point	7	700,000	25	13.7	Cove Point LNG, LP (Dominion Energy 75%, Brookfield 25%)	Cove Point LNG, LP			1978	
	Elba Island	5	535,000	11	12.0	Kinder Morgan	Southern LNG	Yes		1978	
	Everett	2	155,000	4	5.1	Exelon	Exelon	Yes	Truck loading	1971	

Regasification terminals

Market	Site	Storage		Send-out		Owner	Operator	Third Party Access	Additional Services offered	Start-up date
		Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)					
USA	Freeport	3	480,000	7	13.2	Freeport LNG Development, L.P.	Freeport LNG Development	Yes		2008
	Golden Pass	5	775,000	8	15.7	QP (70%), ExxonMobil (30%)	Golden Pass LNG	No		2010
	Gulf LNG	2	320,000		8.8	Kinder Morgan (50%), GE (40%), AES (10%)	Gulf LNG Energy	No		2011
	Lake Charles	4	425,000	14	17.9	Lake Charles LNG	Lake Charles LNG	Yes		1982
	Northeast Gateway <i>No vessel chartered</i>	4	151,000	6	3.8	Excelerate Energy	Excelerate Energy			2008
	Sabine Pass	5	800,000	24	30.4	Sabine Pass LNG	Cheniere	Yes	Reloading	2008
AMERICAS TOTAL			8,523,200		209.4					
ASIA										
Bangladesh	Moheshkhali <i>Excelerate Excellence (FSRU)</i>	4	138,000		3.8	Owner: Excelerate Energy Charterer: Petrobangla	Excelerate Energy			2018
	Summit LNG <i>Summit LNG (FSRU)</i>	4	138,000		3.8	Owner: Excelerate Energy Charterer: Summit Power International	FSRU: Excelerate Energy Terminal: Summit			2019
China	Beihai, Guangxi	4	640,000		6.0	PipeChina (80%), Guangxi Beibu Gulf International (20%)	PipeChina	Yes	Truck loading	2016
	Caofeidian (Tangshan), Hebei	8	1,280,000		10.0	Petrochina (51%), Beijing Gas Blue Sky Holdings Ltd. (29%), Hebei Natural Gas (20%)	Petrochina	Yes	Truck loading	2013
	Dalian, Liaoning	3	480,000	3	6.0	PipeChina (75%), Dalian Port Company Limited (20%), Dalian Construction Investment (5%)	PipeChina	Yes	Reloading, Truck loading	2011
	Dapeng, Shenzhen	4	640,000	7	6.8	CNOOC (33%), Guangdong Province Consortium (31%), BP (30%), HK & China Gas (3%), Hong Kong Electric (3%)	GDLNG	Limited	Truck loading	2006
	Dongguan, Guangdong	2	160,000	4	1.5	Jovo Group	Jovo	No	Truck loading	2012
	Diefu, Shenzhen	4	640,000		4.0	PipeChina (70%), Shenzhen Energy Group (30%)	PipeChina	Yes	Truck loading	2018
	Fangchenggang, Guangxi	2	60,000		0.6	PipeChina (51%), Fangchenggang Port Group Co. LTD (49%)	PipeChina	Yes	Truck loading	2019
	Hua'an, Guangdong	1	80,000		0.8	Shenzhen Gas	Shenzhen Gas		Truck loading	2019
	Ningbo, Zhejiang	6	960,000		6.0	CNOOC (51%), Zhejiang Energy Group Co Ltd (29%), Ningbo Development & Investment Group (20%)	CNOOC	No	Truck loading	2013
	Putian, Fujian	6	960,000		6.3	Fujian LNG (CNOOC 60%, Fujian Inv. & Dev.Co. 40%)	CNOOC	No	Truck loading	2008
	Qidong, Jiangsu	3	420,000		3.0	Guanghai Energy	Guanghai Energy		Truck loading	2017
	Qingdao, Shandong	6	960,000		7.0	Sinopec (99%), Qingdao Port Group (1%)	Sinopec	No	Truck loading	2014
	Rudong, Jiangsu	5	1,080,000	3	10.0	Petrochina (55%), Pacific Oil & Gas (35%), Jiangsu Guoxin Investment Group (10%)	Petrochina	Yes	Truck loading	2011
	Tianjin <i>Cape Ann (FSRU) & Onshore facilities</i>	7	390,000	3	6.0	FSRU owner: Höegh LNG Charterer: CNOOC Gas & Power Trading and Marketing Onshore facilities owner: PipeChina (46%), Tianjin Govt (40%), Tianjin Gas (9%), Tianjin Hengrongda Investment (5%)	FSRU: Höegh LNG Terminal: PipeChina	No	Truck loading	2013
	Tianjin LNG	4	640,000		6.0	Sinopec (98%), Tianjin Nangang Industrial Zone Developemnt Co., Ltd. (2%)	Sinopec		Truck loading	2018

Market	Site	Storage		Send-out		Owner	Operator	Third Party Access	Additional Services offered	Start-up date
		Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)					
China	Shennan, Hainan	2	40,000		0.6	Petrochina (90%), Beijing Gas Bluesky (10%)	Petrochina	No		2014
	Wuhaogou, Shanghai	5	320,000		1.5	Shanghai Gas (Shenergy 100%)	Shenergy Group	No		2008
	Yangshan, Shanghai	5	895,000		6.0	Shanghai LNG (CNOOC 45%, Shenergy Group Ltd 55%)	Shenergy Group	No	Truck loading	2009
	Yangpu, Hainan	2	320,000		3.0	PipeChina (65%), Guodian Haikong New Energy (35%)	PipeChina	Yes	Truck loading	2014
	Yuedong, Guangdong	3	480,000		4.2	PipeChina	PipeChina	Yes	Truck loading	2017
	Zhoushan, Zhejiang	4	640,000	5	5.0	ENN Group (90%), SK E&S (10%)	ENN	Yes	Truck loading	2018
	Zhuhai, Guangdong	3	480,000		3.5	CNOOC (30%), Guangdong Energy (25%), Guangzhou Gas Group (25%), Guangdong Yuegang (8%), Zhuhai Electric Development (3%), Zhongshan Zhonghui Investment Group (3%), Jiangmen City (3%), Foshan Gas (3%)	CNOOC		Reloading, Truck loading	2013
India	Dabhol	3	480,000	6	5.0	Konkan LNG Ltd.	Gail	Yes		2013
	Dahej	6	932,000	21	17.5	Petronet LNG	Petronet LNG	Yes	Truck loading	2004
	Ennore	2	360,000		5.0	Indian Oil Corporation (90%), Tamil Nadu Industrial Development Corporation (10%)	Indian Oil Corporation			2019
	Hazira	2	320,000	5	4.9	Shell Energy India Private Ltd. (Shell 100%)	Shell Energy India Private Ltd.	Negotiated	Truck loading	2005
	Kochi	2	368,000	5	5.0	Petronet LNG	Petronet LNG	Yes	Bunkering, Cool-down, Gassing-up, Reloading, Truck loading	2013
	Mundra	2	320,000	5	5.0	GSPC LNG Limited - Government of Gujarat and its entities including GSPC holding (95%), Adani Group (5%)	GSPC LNG Limited		Truck loading	2020
Indonesia	Amurang <i>Hua Xiang (FSRU)</i>		14,000		0.1	Owner: Zhejiang Huaxiang Charterer: PT Sulawesi Satu (PLN GG, Humpuss)	Karpowership			2020
	Arun Regas	4	508,000		3.0	PT Perta Arun Gas (Pertamina 70%, Government of Aceh 30%)	PT Perta Arun Gas	Yes (2 tanks)	Bunkering, Cool-down, Reloading, Truck loading	2015
	Tanjung Benoa, Bali <i>FSRU Karunia Dewata</i>		26,000		0.4	Owner: JSK Group (50%), PT Pelindo III (50%) Charterer: PLN	PT Pelindo Energi Logistik (PEL)			2016
	Cilamaya, West Java <i>Jawa Satu (FSRU)</i>	4	170,000	4	2.4	Jawa Satu Regas (Pertamina, Sojitz, Marubeni)	Jawa Satu Regas			2021
	Lampung, Sumatra <i>PGN FSRU Lampung</i>	4	170,000	3	2.7	Owner: Høegh LNG Charterer: PGN (subsidiary of Pertamina)	FSRU: Høegh LNG Terminal: PGN	No		2014
	Nusantara, West Java <i>Nusantara Regas Satu (FSRU)</i>	6	125,000	6	3.0	Owner: New Fortress Energy Charterer: PT Nusantara Regas	PT Nusantara Regas (Pertamina 60% & PGN 40%)	No		2012
Japan	Chita	7	640,000	11	10.9	Chita LNG	Chita LNG	Yes	Truck loading	1983
	Chita Kyodo	4	300,000	14	7.5	Toho Gas / JERA	Toho Gas	Yes	Truck loading	1978
	Chita-Midorihama Works	3	620,000	8	7.7	Toho Gas	Toho Gas	Yes	Truck loading	2001
	Futtsu	12	1,360,000	13	22.9	JERA	JERA	Yes	Truck loading	1985
	Hachinohe	2	280,000	5	1.0	ENEOS Corporatoin	ENEOS LNG Service Corporatoin	Yes	Reloading, Truck loading	2015

Regasification terminals

Market	Site	Storage		Send-out		Owner	Operator	Third Party Access	Additional Services offered	Start-up date
		Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)					
Japan	Hatsukaichi	2	170,000	4	0.8	Hiroshima Gas	Hiroshima Gas	No	Truck loading	1996
	Hibiki	2	360,000	5	2.4	Hibiki LNG (Saibu Gas 90%, Kyushu Electric 10%)	Hibiki LNG	Yes	Cool-down , Gas test services, Truck loading	2014
	Higashi-Ohgishima	9	540,000	9	13.2	JERA	JERA	Yes		1984
	Himeji	8	740,000	8	6.9	Osaka Gas	Osaka Gas	Yes	Reloading, Truck loading	1979
	Himeji LNG	7	520,000	8	8.1	Kansai Electric	Kansai Electric	Yes	Truck loading	1979
	Hitachi	2	460,000	5	5.3	Tokyo Gas	Tokyo Gas	Yes	Reloading, Truck loading	2016
	Ishikari	4	840,000	7	4.6	Hokkaido Gas / Hokkaido Electric	Hokkaido Gas	Yes (No.1,2 tank) No (No.3,4 tank)	Reloading, Truck loading	2012
	Joetsu	3	540,000	8	3.2	JERA	JERA	No	Truck loading	2011
	Kagoshima	2	86,000	4	0.2	Nippon Gas	Nippon Gas	No	Truck loading	1996
	Kawagoe	6	840,000	7	8.7	JERA	JERA	Yes	Bunkering, Truck loading	1997
	Minato	1	80,000	3	0.3	Gas Bureau, City of Sendai	Gas Bureau, City of Sendai	No	Truck loading	1997
	Mizushima	2	320,000	6	4.3	Mizushima LNG	Mizushima LNG	Yes	Truck loading	2006
	Naoetsu	2	360,000	4	2.1	INPEX Corporation	INPEX Corporation	Yes		2013
	Negishi	12	990,000	13	10.8	Tokyo Gas / JERA	Tokyo Gas	Yes	Truck loading	1969
	Niigata	8	720,000	13	8.5	Nihonkai LNG	Nihonkai LNG	Yes	Truck loading	1984
	Niihama	1	230,000		1.0	Niihama LNG (Tokyo Gas 50.1%, Shikoku Electric 30%, Shikoku Gas 5%, Sumitomo 14.9%)	Niihama LNG			2022
	Ohgishima	4	850,000	12	10.2	Tokyo Gas	Tokyo Gas	Yes		1998
	Oita	5	460,000	7	5.4	Oita LNG	Oita LNG	Yes	Truck loading	1990
	Sakai	4	560,000	6	6.4	Kansai Electric	Kansai Electric	Yes	Truck loading	2006
	Sakaide	1	180,000	3	1.2	Sakaide LNG	Sakaide LNG	No	Truck loading	2010
	Senboku I	1	230,000	5	1.9	Osaka Gas	Osaka Gas	Yes	Truck loading	1972
	Senboku II	16	1,435,000	12	10.0	Osaka Gas	Osaka Gas	Yes	Truck loading	1977
	Shin-Sendai	2	320,000	3	1.7	Tohoku Electric	Tohoku Electric	No		2015
	Sodegaura	32	2,480,000	38	34.4	Tokyo Gas / JERA	Tokyo Gas	Yes	Reloading, Truck loading	1973
	Sodeshi	3	337,200	8	2.9	Shimizu LNG (Shizuoka Gas 65%, ENEOS Corporation 35%)	Shimizu LNG	Yes	Reloading, Truck loading	1996

Market	Site	Storage		Send-out		Owner	Operator	Third Party Access	Additional Services offered	Start-up date
		Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)					
Japan	Soma	2	460,000		1.5	Japex/Fukushima Gas Power (JAPEX 33%, Mitsui 29%, Osaka Gas 20%, Mitsubishi Gas Chemical 9%, Hokkaido Electric Power 9%)	Japex		Truck loading	2018
	Tobata	8	480,000	9	7.6	Kita Kyushu LNG	Kita Kyushu LNG	Yes	Reloading, Truck loading	1977
	Toyama Shinko	1	180,000	4	1.8	Hokuriku Electric	Hokuriku Electric	No	Truck loading	2018
	Yanai	6	480,000	5	2.3	Chugoku Electric	Chugoku Electric	No	Truck loading	1990
	Yokkaichi LNG Center	4	320,000	8	6.4	JERA	JERA	Yes		1987
	Yokkaichi Works	2	160,000	6	2.1	Toho Gas	Toho Gas	Yes	Truck loading	1991
	Yoshinoura	2	280,000	3	0.8	Okinawa Electric	Okinawa Electric	Yes	Truck loading	2012
Malaysia	Melaka <i>Tenaga Empat (FSU) and Tenaga Satu (FSU)</i>	8	260,000	3	3.8	Owner: MISC Charterer: Petronas Gas	Petronas Gas	Yes	Reloading	2013
	Pengerang	2	400,000		3.5	Petronas Gas (65%), Dialog Group (25%) and Johor State (10%)	Petronas Gas		Bunkering, Cool-down, Gassing-up, Reloading, Truck loading	2017
Myanmar	Thanlyin, Yangoon <i>CNTIC VPower Energy (FSU)</i>	4	127,500		0.5	CNTIC Vpower (China National Technical Import Corporation, Vpower Global)	CNTIC Vpower			2020
Pakistan	Port Qasim Karachi <i>Excelerate Exquisite (FSRU)</i>	4	150,900	6	4.8	Owner: Excelerate Energy Charterer: ETPL (Engro (51%), Vopak (49%))	FSRU: Excelerate Energy Terminal: Engro	No		2015
	Port Qasim GasPort <i>BW Integrity (FSRU)</i>	4	170,000		5.0	Owner: BW Charterer: Pakistan GasPort	FSRU: BW Terminal: Pakistan GasPort Consortium			2017
Singapore	Jurong	4	800,000	5	11.0	SLNG	SLNG	Yes	Cool-down, Gassing-up, Reloading, Storage, Transshipment, Truck loading, Wobbe Index Correction	2013
South Korea	Boryeong	5	1,200,000	5	7.9	GS Energy (50%), SK E&S (50%)	Boryeong LNG		Reloading	2016
	Gwangyang	5	730,000	7	5.2	POSCO	POSCO	No	Reloading	2005
	Incheon	23	3,480,000	52	40.0	KOGAS	KOGAS	No		1996
	Jeju	2	90,000	5	0.8	KOGAS	KOGAS	No		2019
	Pyeong-Taek	23	3,360,000	38	30.1	KOGAS	KOGAS	No	Truck loading	1986
	Samcheok	12	2,610,000	8	8.5	KOGAS	KOGAS	No		2014
	Tong-Yeong	17	2,620,000	20	19.5	KOGAS	KOGAS	No	Bunkering, Truck loading	2002
Taiwan	Taichung	6	960,000	10	6.0	CPC	CPC	No		2009
	Yung-An	6	690,000	18	10.5	CPC	CPC	No		1990
Thailand	Map Ta Phut 1	4	640,000	9	11.5	PTT	PTT LNG	Yes	Reloading, Truck loading	2011
ASIA TOTAL			55,130,600		561.0					

Regasification terminals

		Storage		Send-out							
Market	Site	Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)	Owner	Operator	Third Party Access	Additional Services offered	Start-up date	
EUROPE											
Belgium	Zeebrugge	5	566,000	12	6.6	Fluxys LNG	Fluxys LNG	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	1987	
Croatia	Krk LNG Croatia (FSRU)	4	140,206		1.9	LNG Hrvatska (HEP, Plinacro)	FSRU: Golar LNG Terminal: LNG Croatia		Bunkering, Truck loading	2021	
Finland	Tornio Manga	1	50,000		0.4	Manga LNG (Gasum, Outokumpu, SSAB and EPV Energy)			Bunkering, Truck loading	2018	
	Pori	1	28,500		0.1	Gasum	Gasum	Yes	Bunkering, Truck loading	2016	
France	Dunkerque LNG	3	600,000	10	9.6	Dunkerque LNG - Consortium led by Fluxys with AXA Investment Managers & Crédit Agricole Assurances (60.76%) - Korean investors consortium led by IPM Group in cooperation with Samsung Asset Management (39.24%)	Gaz-Opale (Dunkerque LNG, Fluxys)	Yes	Bunkering, Cool-down, Reloading, Truck loading	2016	
	Fos Cavaou	3	330,000	4	6.8	Fosmax LNG (Elengy 100%)	Elengy	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	2009	
	Fos Tonkin	1	80,000	6	1.2	Elengy	Elengy	Yes	Bunkering, Cool-down, Reloading, Truck loading	1972	
	Montoir-de-Bretagne	3	360,000	11	8.0	Elengy	Elengy	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	1980	
Gibraltar	Gibraltar	5	5,000	3	0.1	Shell (51%), Government of Gibraltar (49%)	Gasnor			2019	
Greece	Revithoussa	3	225,000	6	5.1	DESFA S.A (Snam, Enagas, Fluxys, Govnt)	DESFA S.A.	Yes		2000	
Italy	Oristano, Sardinia	6	10,800		0.2	HIGAS: Avenir LNG (80%), CPL Concordia (10%), Gas and Heat (10%)	HIGAS	Yes	Truck loading	2021	
	Toscana FSRU Toscana	4	137,500	3	2.8	OLT (First State Investments 48.24%, SNAM 49.07%, Golar 2.69%)	OLT Offshore LNG Toscana	Yes		2013	
	Panigaglia	2	100,000	4	2.5	GNL Italia S.p.A.	GNL Italia S.p.A.	Yes		1969	
	Ravenna	2	20,000		0.7	Depositi Italiani GNL	Depositi Italiani GNL			2021	
	Rovigo (Gravity-Based Structure)	2	250,000	5	5.6	Adriatic LNG (ExxonMobil (70.7%), Qatar Petroleum (22%), SNAM (7.3%))	Adriatic LNG	Yes		2009	
Lithuania	Klaipeda Höegh Independence (FSRU)	4	170,000	4	2.9	Owner: Höegh LNG Charterer: Klaipedos Nafta	Höegh LNG	Yes	Reloading	2014	
	KN LNG Reloading Station	5	5,000			Klaipedos Nafta	Klaipedos Nafta		Bunkering, Reloading, Truck cool-down, Truck loading	2017	
Malta	Delimara Armada LNG Mediterrana (FSU)	4	125,000		0.5	Owner: BumiArmada Charterer: Electrogas Malta (GEM Holdings Limited (33.34%), Siemens (33.33%), SOCAR (33.33%))	Reganosa			2017	
Nether-lands	Gate	3	540,000	8	8.8	Gasunie (50%), Vopak (50%)	Gate Terminal	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	2011	
Norway	Fredrikstad	9	5,900		0.1	Gasum	Gasum	Yes	Bunkering, Truck loading	2011	
	Mosjøen	8	6,500	4	0.4	Gasnor	Gasnor	Partly	Truck loading	2007	

Market	Site	Storage		Send-out		Owner	Operator	Third Party Access	Additional Services offered	Start-up date
		Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)					
Poland	Świnoujście	2	320,000	5	3.7	GAZ-SYSTEM S.A.	GAZ-SYSTEM S.A.	Yes	Truck loading	2016
Portugal	Sines	3	390,000	7	5.6	Ren Atlântico	Ren Atlântico	Yes	Cool-down, Reloading, Truck loading	2004
Russia	Kaliningrad No vessel chartered									2019
Spain	Barcelona	6	760,000	13	12.6	Enagás	Enagás	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	1969
	Bilbao	3	450,000	4	5.1	Enagás (50%), EVE (50%)	Bahia de Bizkaia Gas, SL (BBG)	Yes	Bunkering, Cool-down, Reloading, Truck loading	2003
	Cartagena	5	587,000	9	8.7	Enagás	Enagás	Yes	Bunkering, Cool-down, Reloading, Transshipment, Truck loading	1989
	El Musel (mothballed)	2	300,000	4	5.1	Enagás	Enagás	Yes	Reloading, Truck loading	Construction completed in 2013
	Huelva	5	619,500	9	8.7	Enagás	Enagás	Yes	Bunkering, Cool-down, Reloading, Truck loading	1988
	Mugardos	2	300,000	3	2.6	Tojeiro Group (51%), Xunta Galicia (24%), Sojitz (15%), Sonatrach (10%)	Reganosa	Yes	Bunkering, Cool-down, Gassing up, Reloading, Truck loading	2007
	Sagunto	4	600,000	5	6.4	Infraestructuras de Gas [Enagas and Oman Oil Company S.A.O.C.] (50%), Iniciativas de Gas [Enagás and Osaka Gas] (50%)	Saggas	Yes	Cool-down, Reloading, Truck loading	2006
Sweden	Lysekil	1	30,000		0.2	Gasum	Gasum		Bunkering, Truck loading	2014
	Nynashamn	1	20,000		0.4	AGA Gas	AGA Gas		Bunkering, Truck loading	2011
Turkey	Dörtyol FSRU Ertuğrul Gazi		170,000		4.1	Owner: Botas Charterer: Botas	FSRU: Botas Terminal: Botas			2018
	Etki FSRU Turquoise		170,000		5.7	Owner: Pardus Energy Charterer: Etki Terminal	Pardus Energy		Bunkering, Reloading	2016
	Izmir Aliaga	2	280,000	11	10.7	EgeGaz	EgeGaz	Yes	Bunkering, Reloading, Truck loading	2006
	Marmara Ereglisi	3	255,000	7	4.6	Botas	Botas	No	Truck loading	1994
UK	Dragon	2	320,000	6	5.6	Shell (50%), Ancala (50%)	Dragon LNG	Yes		2009
	Grain	8	1,000,000	14	14.3	National Grid	Grain LNG	Yes	Cool-down, Reloading, Transshipment, Truck loading	2005
	South Hook LNG	5	775,000	15	15.4	QatarEnergy (67.5%), Exxon Mobil (24.15%), TotalEnergies (8.35%)	South Hook LNG Terminal Company Ltd	Yes		2009
	Teesside GasPort Awaiting recommissioning					Trafigura				2007
EUROPE TOTAL			11,097,906		183.7					

Regasification terminals

		Storage		Send-out						
Market	Site	Number of tanks	Total capacity (liq m³)	Number of vaporizers	Nominal capacity (MTPA)	Owner	Operator	Third Party Access	Additional Services offered	Start-up date
MIDDLE EAST										
Bahrain	Hidd <i>No vessel chartered</i>					Bahrain LNG: Nogaholding (30%), Seapeak (30%), Gulf Inv. Corp. (24%), Samsung C&T (16%)	Bahrain LNG			2020
Egypt	Sumed <i>BW Singapore</i>	4	170,000	4	5.7	Owner: BW Charterer: Egas	BW	No		2015
Israel	Hadera <i>Excelerate Excelsior (FSRU)</i>	4	138,000	6	3.8	Owner: Excelerate Energy Charterer: INGL	FSRU: Excelerate Energy Terminal: IEC	No		2013
Jordan	Aqaba <i>Golar Eskimo (FSRU)</i>		160,000		3.8	Owner: New Fortress Energy Charterer: MEMR (Jordan Ministry of Energy and Mineral Resources)	Golar	No		2015
Kuwait	Al Zour	4	900,000		11.0	Kuwait Petroleum	KIPIC	No		2021
	Mina Al Ahmadi <i>Golar Igloo (FSRU)</i>		170,000		5.8	Owner: New Fortress Energy Charterer: KPC (Kuwait National Petroleum Company)	Golar	No		2014
UAE	Jebel Ali <i>Excelerate Explorer (FSRU)</i>		150,900	6	6.0	Owner: Excelerate Energy Charterer: DUSUP (Dubai Supply Authority)	FSRU: Excelerate Energy Terminal: DUSUP	No		2010
	Ruwais, Abu Dhabi <i>Excelerate Express (FSRU)</i>		151,000		3.8	Owner: Excelerate Energy Charterer: ADNOC	Excelerate Energy	No		2016
MIDDLE EAST TOTAL			1 839 900		39.9					
WORLD TOTAL			76,591,606		993.94					



Retail LNG in 2021

SMALL-SCALE* LNG CARGOES LOADED FROM RECEIVING TERMINALS IN 2021

Country	2021 M³ LNG	2020 M³ LNG	Var. 2021/2020
BELGIUM	173,842	65,754	164%
FRANCE	66,948	N/A	N/A
INDONESIA	418,568	971,450	-57%
JAPAN	730,382	721,241	1%
NETHERLANDS	632,026	425,999	48%
SINGAPORE	51,955	0	N/A
SPAIN	182,736	68,412	167%

* Less than 30,000 liq m³

TRUCK-LOADING OF LNG FROM RECEIVING TERMINALS IN 2021

Country	2021 M³ LNG	2020 M³ LNG	Var. 2021/2020
AMERICAS	1,145,046	947,769	21%
CHILE	617,438	511,688	21%
DOMINICAN REPUBLIC	419,811	340,733	23%
USA	107,796	95,348	13%
ASIA	52,617,836	55,059,358	-4%
CHINA	48,295,964	51,345,291	-6%
INDIA	154,903	92,456	68%
INDONESIA	126,481	132,002	-4%
JAPAN	3,446,099	3,046,730	13%
SINGAPORE	14,945	2,437	513%
SOUTH KOREA	434,758	363,257	20%
THAILAND	144,686	77,185	87%
EUROPE	5,038,307	4,170,010	21%
BELGIUM	272,356	129,158	111%
FRANCE	664,943	476,672	39%
LITHUANIA	21,890	13,565	61%
NETHERLANDS	367,019	234,117	57%
POLAND	200,559	125,439	60%
PORTUGAL	323,487	289,709	12%
SPAIN	2,256,886	2,043,260	10%
TURKEY	787,701	718,997	10%
UNITED KINGDOM	130,605	87,542	49%

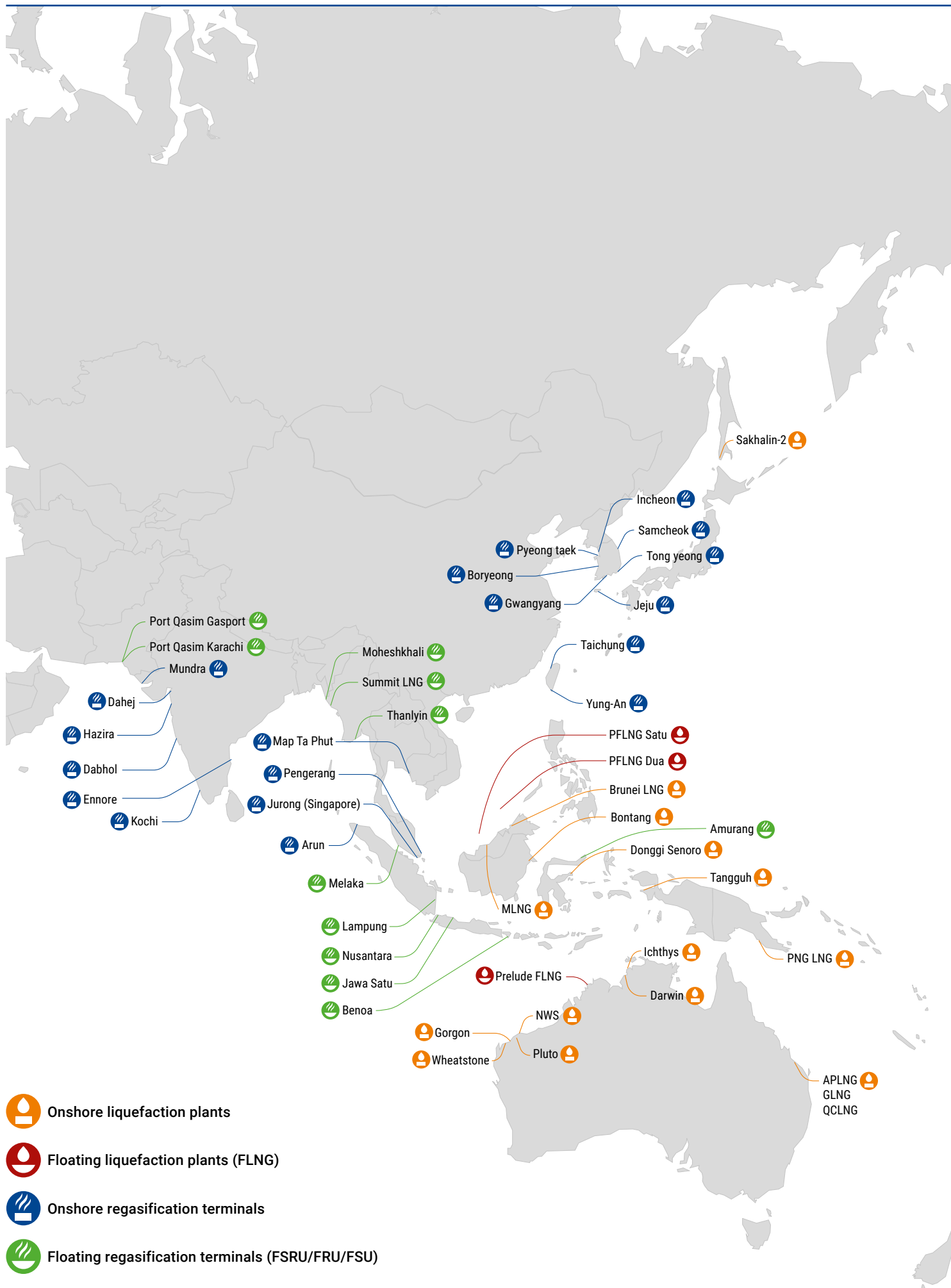


World LNG maps

-  Onshore liquefaction plants
-  Floating liquefaction plants (FLNG)
-  Onshore regasification terminals
-  Floating regasification terminals (FSRU/FRU/FSU)







ZOOM

Japan



ZOOM

China



About GIIGNL

GIIGNL is the international association of LNG importers.

It constitutes a forum for exchange of information and experience among its members with a view to enhance safety, reliability, efficiency and sustainability of LNG import activities.

GIIGNL is a non-profit organization registered under the French law of 1901 and its resources only come from the membership fees.

Governance

The Association is composed of two main governing bodies: the General Assembly and the Executive Committee.

The General Assembly is composed of the whole membership and holds its annual meeting in the Fall.

The Executive Committee is composed of **15 member companies**, who are elected by the General Assembly for 2-year terms and meet at least once a year. The Executive Committee elects a Bureau composed of the President and of 3 regional Vice-Presidents to assist him.

The Executive Committee steers two **Standing Study Groups** within which leaders from the LNG industry offer their commercial and technical expertise to improve efficiency and safety across the midstream of the LNG value chain.

GIIGNL's day-to-day activities are coordinated by the **General Delegate**, in charge of the Central Office located in Paris.



GIIGNL Staff



General Delegate
V. Demoury



LNG Advisor
K. Sasaki



LNG Analyst
E. Dukhanina



LNG Analyst &
Communications Officer
L. Mora

GIIGNL officers

Bureau



President
J. Abiteboul



VP for Americas
S. Hill
Shell



VP for Asia
M. Hirose
Tokyo Gas



VP for Europe
P. Olivier
TotalEnergies

Executive Committee

AMERICAS



E. Bensaude
Cheniere



A. Bacigalupo
GNL Quintero



D. Brouillette
Semptra Infrastructure



M. Chennoufi
Shell

ASIA



Y. Zhu
CNOOC



S.C. Lee
CPC



H. Nishizawa
Jera



K-c. Shin
Kogas



M. Fujiwara
Osaka Gas



A.K. Singh
Petronet LNG



A. Takeuchi
Tokyo Gas

EUROPE



E. Neviaski
Engie



C. Signoretto
Eni



A. Basolas
Naturgy



T. Maurisse
TotalEnergies

Study Groups

Commercial Study Group Chair



L. Chaveron
TotalEnergies



P.E. Decroës
Engie

Technical Study Group Chair

84 member companies

Founded in 1971, GIIGNL gathers 84 companies from **27 countries** headquartered in three regions: Americas, 11 members, Asia, 41 and Europe, 32.

GIIGNL comprises nearly all companies active in LNG imports or in the operation of LNG terminals.

11
members
in Americas

32
members
in Europe

41
members
in Asia

FULL MEMBERS

BP Global LNG
Centrica LNG Company Ltd.
Cheniere Energy, Inc.
CNOOC Gas & Power Trading & Marketing Ltd.
Cove Point LNG, LP
CPC Corporation, Taiwan
Dunkerque LNG SAS
Edison S.p.A.
EDP - Energias de Portugal, S.A.
Elengy S.A.
Enagás S.A.
Enel Trade S.p.A.
ENEOS Corporation
ENGIE
Eni S.p.A.
Equinor ASA
Excelerate Energy L.P.
Exelon
Fluxys LNG SA
Freeport LNG Development, L.P.
Gail (India), Ltd.
Gate Terminal B.V.
GNL Italia S.p.A.
GNL Quintero S.A.
Guangdong Dapeng LNG Company, Ltd.
Hiroshima Gas Co., Ltd.
Höegh LNG AS
Hokkaido Gas Co., Ltd.
Hokuriku Electric Power Company
Iberdrola Energía España, S.A.U.
Itochu Corporation
JERA Co., Inc.
Korea Gas Corporation
Kyushu Electric Power Co., Inc.
LNG Japan Corporation
Marubeni Corporation

Mitsubishi Corporation
Mitsui & Co., Ltd.
Mitsui O.S.K. Lines, Ltd.
National Grid Grain LNG, Ltd.
Naturgy Energy Group S.A.
Nippon Gas Co., Ltd.
N.V. Nederlandse Gasunie
Osaka Gas Co., Ltd.
Pavilion Energy
PetroChina International Co., Ltd.
Petronet LNG Ltd.
PTT Public Company Ltd.
Ren Atlântico – Terminal de GNL, S.A.
Saibu Gas Co., Ltd.
Sempra Infrastructure
Shell Energy North America, L.P.
Shell Energy India Private, Ltd.
Shikoku Electric Power Co., Inc.
Shizuoka Gas Co., Inc.
Singapore LNG Corporation
Southern LNG Company, L.L.C.
South Hook LNG Terminal Company, Ltd.
Sumitomo Corporation
The Chugoku Electric Power Co., Inc.
The Kansai Electric Power Co., Inc.
Toho Gas Co., Ltd.
Tohoku Electric Power Co., Inc.
Tokyo Gas Co., Ltd.
TotalEnergies
Trafigura
Uniper Global Commodities SE
Vopak LNG Holding B.V.

ASSOCIATE MEMBERS

Ege Gaz AS
ENN LNG Trading Company Ltd.
GAZ-SYSTEM S.A.
Gazprom Marketing & Trading Ltd.
GSPC LNG Ltd.
HE Terminals Pvt. Ltd.
INPEX Corporation
MET International AG
Mytilineos S.A.
Novatek Gas & Power Asia Pte Ltd.
Japan Petroleum Exploration Co., Ltd.
PT Pertamina (Persero)
RWE Supply & Trading GmbH
Sonatrach Gas Marketing UK Ltd.
SPEC LNG
YPF S.A.



Photo credits:

Front Cover: GNL Quintero; P2: SPEC LNG; P4-5: GAZ-SYSTEM S.A.;

P7: JERA, P11: TotalEnergies; P45: Sempra Infrastructure;

P51: Qatargas; P53: GAZ-SYSTEM S.A.; P64&65: Enagas; P72: GAZ-SYSTEM S.A..

Design: www.pension-complete.com

INTERNATIONAL GROUP
OF LIQUEFIED NATURAL
GAS IMPORTERS



GROUPE INTERNATIONAL
DES IMPORTATEURS DE
GAZ NATUREL LIQUÉFIÉ



giignl.org



twitter.com/GIIGNL



[instagram.com/GIIGNL](https://www.instagram.com/GIIGNL)



[youtube.com/user/GIIGNL](https://www.youtube.com/user/GIIGNL)

8, rue de l'Hôtel de Ville - 92200 Neuilly-sur-Seine - France
E-mail: central-office@giignl.org - Website: www.giignl.org
Tel: + 33 1 84 78 47 15
