

2014



# The LNG Industry



# The LNG Industry in 2014

## Editorial



Dear Colleagues,

As we have been commemorating in 2014 the 50<sup>th</sup> anniversary of commercial LNG deliveries, our industry is facing more opportunities and challenges than ever.

In the main, the global LNG industry can look back on 2014 as another year of relative stagnation with LNG trade reaching 239.2 MMT, a 1% increase over 2013, but just below 2011 levels. Although one new liquefaction plant came on stream in May in Papua New Guinea and one expansion train started producing in Algeria, disappointments in Angola and Egypt and slowdown in Qatar limited the volume of additional LNG supply. Low demand in South Korea as well as slower than expected growth in China contributed to loosen the market tightness observed in recent years, foreboding the **return of a buyers' market** as the year progressed.

Other highlights in the past year's review of LNG imports are the remarkable gain in India, ahead of the U.K and Japan's demand increase, and the arrival of Lithuania as the world's 30<sup>th</sup> importer with a floating storage and regasification unit (FSRU). On the supply side, Queensland Curtis was on the brink at year-end of joining the producers' rank and managed to load its first cargo in December. Nigeria showed the second largest addition of supply (after PNG) attributable to a much improved feed-gas supply.

During the second half of the year a sharp decrease in crude oil prices combined with a looser supply situation in the Pacific drove down prices in Asia, where spot prices were halved between March and October of last year. On the supply side, this price drop in Asia will inevitably slow down or defer development of expensive new supply projects. On the demand side, it has begun to translate into the return of flexible LNG cargoes to Europe, where spot prices have been disconnected from oil prices for some time.

In this context of demand and price uncertainty, **traditional procurement models are changing**, as new players with different business models emerge, new procurement alliances are being formed and new commercial offerings are being structured; all mainly in the pursuit of enhanced flexibility both in terms of destination and pricing. LNG players' quest for flexible volumes and volume risk mitigation has contributed to a multiplication of portfolio deals last year, mainly for short to medium-term durations. In parallel, the addition of flexible quantities with a lengthening of trade voyages and the entry of new players results in the need for an expansion of the LNG fleet - with 77 new orders

placed in 2014 - compared to a total fleet of 421 at year-end.

Meanwhile, the Ukraine-Russia crisis and the start-up of six new regasification terminals worldwide reminds us that **LNG is an effective tool to ensure security of supply**. In this regard FSRUs are continuing to expand worldwide, with 20 units on the water at the end of 2014 and several more to come in 2015.

3 FIDs have been taken in 2014, namely Cameron and Freeport in the USA and Rotan FLNG in Malaysia, for a combined capacity of about 25 mtpa. Although not formally announced at the time of this writing, Cove Point is reported to have started construction work on site. **Prospects for LNG demand throughout the world remain strong**, and the industry is waiting for the wave of new exports from the United States and from Australia, who will likely top the producers' list by 2020. Noteworthy is also that the dominant market share and role of Middle East producers will diminish.

**The structure of demand should also evolve**, mainly driven by the emergence of new importers from fast growing economies in South East Asia and in India.

China's appetite for gas will significantly influence the global LNG market, although several uncertainties remain concerning the price elasticity of demand, the policy changes promoting cleaner fuels and the competition of large gas pipeline projects.

Finally, stricter legislation on shipping emissions starting in January 2015 in the Atlantic basin will help stimulating the development of small scale LNG, offering new opportunities of growth as well as new challenges.

We hope you will find our report a helpful tool in your daily activities and remain committed to facilitate LNG trade and, foremost, improve the safety and reliability of our industry.

Yours sincerely,

Domenico Dispenza

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## Key figures 2014



**239.2** million tons  
imported or a **1%**  
increase vs.2013

**69.6** million tons traded  
on a spot or short-term basis or  
**29%** of total trade

**75%** of global  
LNG demand in Asia

**40%** of global LNG volumes  
supplied from the Middle-East

**38%** of global LNG volumes  
supplied from Asia-Pacific

**110** LNG receiving terminals

**30** importing countries

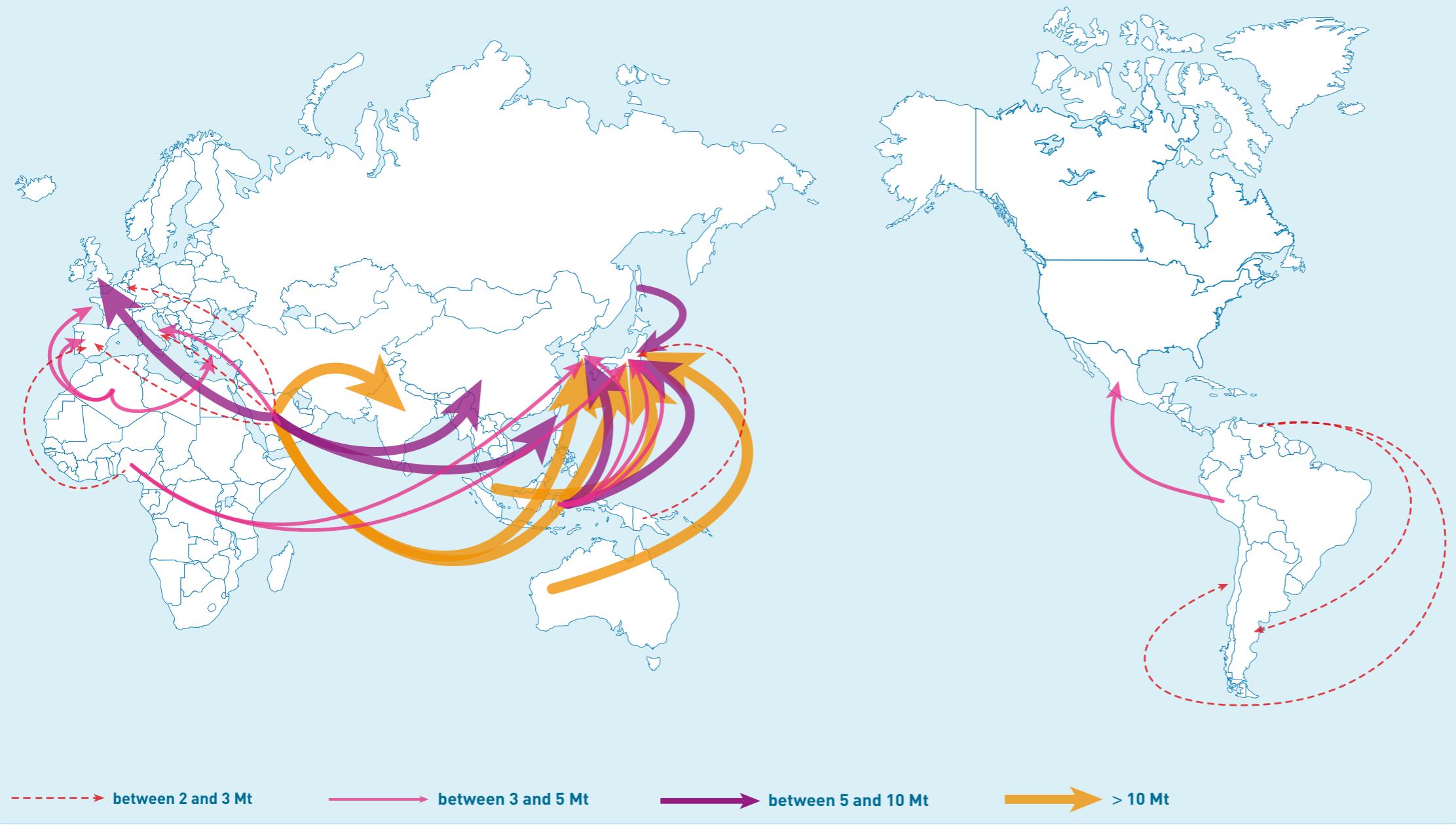
**751** mtpa total regasification  
capacity

**19** exporting countries

**298** mtpa nameplate  
liquefaction capacity

# LNG Trade in 2014

## Major LNG Flows



In 2014, global LNG imports reached 239.2 Mt, a 1% increase compared to 2013, but still below 2011 levels (240.8 Mt).

### A SLIGHT UPTURN IN SUPPLY

In 2014, global LNG imports increased by about 2.3 Mt. One new supply source came on-stream with the start-up of a two-train liquefaction plant in Papua New Guinea, which quickly reached full production capacity.

Taking into account the restart of the Kenai plant in Alaska, 19 countries produced LNG in 2014. For the third year in a row, the increase in supply was however partly offset by a reduction in production from

several exporting countries :

In the Asia-Pacific Basin, incremental volumes from Papua New Guinea (+3.4 Mt) and Australia (+1.2 Mt) were partly counterbalanced by a lower output from all other countries, in particular from Indonesia (-1 Mt), Brunei (-0.9 Mt) and Malaysia (-0.3 Mt).

In the Middle East, maintenance work on the Ras Laffan facilities curtailed Qatar's annual output by 1.7 Mt. Lower than expected volumes from Oman (-0.6 Mt) and Yemen (-0.6 Mt) largely offset additional supplies from Abu Dhabi (+ 1 Mt).

In Egypt (-2.4 Mt), exports were further reduced due to growing domestic demand. Supply from the Atlantic Basin nevertheless progressed for the first time since 2010, driven by improved

performance in Nigeria (+2.7 Mt) as well as in Algeria (+1.9 Mt) thanks to the start-up of an expansion train (GL3Z) at Algeria's Arzew plant.

These gains in production must not conceal the fact that both countries are still only recovering their 2011 production level, with respectively 19.1 Mt and 12.7 Mt exported in 2014. Noteworthy, Norway reached its record export level, with close to 3.6 Mt marketed in 14 countries last year.

### LOWER THAN EXPECTED GROWTH IN ASIA

Asian imports remained the main growth driver in 2014. The region represents more than 75% of global LNG demand. After a year of stagnation in 2013, the largest increase in demand came from India

(+1.5 Mt), mainly due to reduced availability of hydropower. The biggest variation came from sluggish demand in South Korea, where a mild weather combined with several nuclear restarts induced a -2.8 Mt decline in LNG imports (-6.9%). Unsurprisingly, Japan remains the world's leading importer. With no nuclear restarts in 2014, LNG consumption in Japan continued to rise (+1.2 Mt) and exceeded 89 Mt, which represents more volumes than Asia's total imports ten years ago. Despite the start-up of two new terminals in China last year, Chinese imports recorded a lower than expected growth (+2%, representing 0.4 Mt) due to the economic slowdown and to stronger fuel competition in the country. In total, Asian LNG demand growth nevertheless outpaced the global growth rate of around 1%, which translated into 2 Mt of additional LNG consumption. Looking back over recent years, the development of LNG in the Asian region has been impressive. Asian LNG imports have doubled over the last decade, and so has the number of importing countries in the region.

### EUROPEAN IMPORTS STILL DEPRESSED

In 2014, despite growth in the U.K (+1.5 Mt) due to an increase in Qatari deliveries and in Turkey (+1 Mt) where LNG demand continues to be driven by power generation, European LNG import activity overall further declined (-1.5 Mt) and almost all European countries recorded double-digit drops in LNG demand. As an example, no European country is listed in the world's top 5 importers, and France is no longer part of the top 10 importing nations. Several European terminal operators took special measures in order to operate in low send-out conditions to accommodate this new environment. Consequently, Europe's share of global imports decreased from 14.3% in 2013 to 13.6% in 2014.

With 8.4 Mt imported last year The U.K came back as Europe's leading LNG importer, with a large part of the volumes delivered into South Hook as a consequence of low demand in Asia and of the redirection of Qatari volumes. Second to the U.K, Spain imported a total of about 11.7 Mt last year, but re-exported more than 3.8 Mt. On the same pattern, more than half of the volumes imported in Belgium during the year (2.1 Mt) were eventually re-exported (1.1 Mt). The same applies to the Netherlands, where 0.35 Mt were reloaded out of Rotterdam. Unlike Europe, Latin America recorded a strong increase in demand (+1.8 Mt). Two thirds of incremental demand came from Brazil, who imported a record 5.3 Mt due to the dry weather conditions and to the low level of hydropower. Mexico remains the leading importer in the region, with 6.6 Mt in 2014.

### SPOT & SHORT-TERM TRADING ON THE RISE

Spot and short-term LNG trading - volumes delivered under contracts of four years or less - continued to increase last year, reaching 69.6 Mt, a 4.6 Mt increase over 2013 (+7%). The share of spot and short-term trades reached 29% of total flows, compared with 27% in 2013 and 25% in 2012.

Asian buyers attracted around 74% of spot and short-term volumes, with Japan alone accounting for 37% of the total (25.8 Mt). Japan imported 4.1 Mt of additional spot & short-term volumes compared with 2013. These additional volumes were mostly supplied from Papua New Guinea and Australia. The Middle East remains the main source of spot and short-term LNG, representing 43% of total supply, followed by Atlantic Basin exporters (36%) and Asia Pacific (21%).

Reloaded quantities jumped 51% last year, reaching 6.4 Mt. About 108 cargoes were re-exported and delivered to 19 countries, compared with 14 in 2013. With close to 6 Mt, Europe accounted for 95% of global re-exports. Spain was the main source accounting for about 60%. Despite a reduced Atlantic/Asian price differential compared to 2013, more than half of the total re-exports were absorbed by Asia (3.2 Mt). One-third of the reloaded quantities were delivered into Latin America, with Brazil and Argentina accounting for the largest share (1.9 Mt). Generally speaking, "non-conventional" trades are on the rise, with several occurrences of two and sometimes three-port loadings and unloadings observed last year.

# Contracts concluded in 2014

Origin	Export country / Exporter	Buyer	Import country	Amount (mtpa)	Duration (years)	Comments	Start	Delivery format
Long & Medium Term Sales	ALGERIA/Sonatrach	Botas	TURKEY	3	10	Extension of existing contract	2015	DES
	BP	Tokyo Electric	JAPAN	1.2	18		2017	DES
	BP	CNOOC	CHINA	1	20		2019	DES
	BP	CNOOC	CHINA	0.5	15		2019	FOB
	BP	Pavilion	N/A	0.4	20		2019	
	BP Indonesia (Tangguh's Trains 1, 2, 3)	Perusahaan Listrik Negara (PLN)		1.5	19		2015	
	BP	KPC	KUWAIT	6-8 shipments per year	5		2014	
	COLOMBIA/ Pacific Rubiales	Gazprom Marketing & Trading Singapore	GM&T Portfolio	0.5	4		2015	FOB
	Gas Natural Fenosa	BHP Billiton	CHILE (Mejillones)	0.5	6		2016	DES
	Osaka Gas	Hiroshima Gas	JAPAN	0.05 ~ 0.13	15		2016	DES
	MALAYSIA/Malaysia LNG	JX Nippon Oil & Energy	JAPAN	0.4	10		2015	DES
	MALAYSIA/Malaysia LNG	Tohoku Electric	JAPAN	0.4	10		2016	DES
	MALAYSIA/Malaysia LNG Sdn. Bhd. (SPA Amendment)	Saibu Gas Co., Ltd.	JAPAN	0.39 (2014) 0.45 (2015-2028)	15		2014	DES/FOB
	MALAYSIA/Petronas	CPC	TAIWAN	2	5		2015	DES
	NORWAY/Statoil	Litgas	LITHUANIA	0.4	5		2014	DES
	QATAR/Qatargas 3	Tohoku Electric	JAPAN	0.1 ~ 0.18	15		2016	DES
	RUSSIA/Yamal	CNPC	CHINA	3				DES
	RUSSIA/Yamal LNG	Gazprom Marketing & Trading Singapore	GM&T Portfolio	Hoa: 'Up to 3 mtpa' NOTE: SPA signed 23-Jan-15 (i.e. not concluded in 2014). Volume 2.9 mtpa			FOB at a transhipment point in Western Europe	
Short Term Contracts (< 4 yrs)	Shell	KPC	KUWAIT	1 ~ 1.2	5 to 6 years		2014	DES
	Shell	Chubu Electric	JAPAN	up to 12 cargoes/year	20		2014	DES
	Shell	GDF SUEZ	GDF SUEZ Portfolio	0.4	20		2014	DES
	Total Gas & Power	Pavilion Energy	ASIA including Singapore	0.7	10		2018	DES
	USA/ Cheniere/Corpus Christi Trains 1-3	Endesa	Endesa Portfolio	1.5	20	Option to extend for 10 years	2018	FOB
	USA/ Cheniere/Corpus Christi Trains 1-3	Endesa	Endesa Portfolio	0.75	20	Option to extend for 10 years	2018	FOB
	USA/Cheniere/Corpus Christi Train 2	Iberdrola	Iberdrola Portfolio	0.76	20	In addition to existing 0.4 mtpa from Train 1. Option to extend for 10 years	2019	FOB
	USA/Cheniere/Corpus Christi Train 2	Gas Natural Aprovisionamentos	Gas Natural Fenosa Portfolio	1.5	20	Option to extend for 10 years	2019	FOB
	USA/ Cheniere/Corpus Christi Train 2	Woodside	Woodside Portfolio	0.85	20	Option to extend for 10 years	2019	FOB
	USA/Cheniere/Corpus Christi Train 2	Pertamina	INDONESIA	0.76	20	In addition to existing 0.76 mtpa contract signed in 2013	2020	FOB
	USA/Cheniere/Corpus Christi Trains 3	EDF	EDF Portfolio	0.77	20	In addition to existing 0.38 mtpa from Train 2. Option to extend for 10 years	2019	FOB
	USA/Cheniere/Corpus Christi Train 3	EDP	EDF Portfolio	0.77	20	Option to extend for 10 years	2019	FOB
	USA/GDF SUEZ/Cameron LNG	CPC	TAIWAN	0.8	20		2018	DES
	USA/Mitsui & Co., Ltd./ Cameron LNG	Kansai Electric	JAPAN	0.4	20		2017	DES
	USA/Mitsui & Co., Ltd./ Cameron LNG	Toho Gas	JAPAN	0.3	20		2017	DES
	USA/Mitsui & Co., Ltd./ Cameron LNG	Tokyo Gas	JAPAN	8 cargoes	20		2020	DES
	USA/Cameron LNG	Pavilion	ASIA	0.4				

Origin	Export country/exporter	Purchaser	Import country	Amount (mtpa)	Duration (years)	Comments	Start	Delivery format
Heads of Agreement (H.O.As)	Short Term Contracts (< 4 yrs)	QATAR (Qatargas 2 - Train 4)	KPC	KUWAIT	8 cargoes			2014
		QATAR	Botas	TURKEY	9 cargoes			2014/2015
	AUSTRALIA/ Prelude	Tokyo Electric	JAPAN	0.56	8		2017	DES
	AUSTRALIA/ Prelude	Shizuoka Gas	JAPAN	0.07	8		2017	DES
	GDF SUEZ	Chubu Electric	JAPAN	1.2 (20 cargoes)	2 years and three months		2015	DES
	INDONESIA	PT Pertamina (Persero)	INDONESIA	0.7	7		2017	FOB
	Petronas LNG	Keppel Gas Pte Ltd	SINGAPORE	1	10		2017	FOB
	USA/Diamond Gas International/Cameron LNG	Tokyo Electric	JAPAN	0.8	20		2017	FOB
	USA/GDF SUEZ/Cameron LNG	Tohoku Electric	JAPAN	0.3	20		2018	DES
	USA/Diamond Gas International/Cameron LNG	Tohoku Electric	JAPAN	0.2	16		2022	DES
Memorandums Of Understanding (M.O.U.s)	USA/Mitsui & Co., Ltd./ Cameron LNG	CNOOC Gas & Power Trading and Marketing Ltd.	CHINA	0.2	20		2019	FOB
	CANADA/Woodfibre LNG	Guangzhou Gas	CHINA	1	25		2017	



# Long-term and medium-term LNG contracts in force in 2014\*

Export Country	Loading Point	Seller	Buyer	Nominal quantity ACQ 10 <sup>6</sup> t/year	Duration	Type of contract	Comments	
ATLANTIC BASIN								
Algeria	Skikda-Bethioua	Sonatrach	GDF SUEZ	3.70	1976/2019	FOB		
			GDF SUEZ	2.50	1972/2019	FOB	Extension to 2019	
			GDF SUEZ	1.30	1992/2019	FOB		
			Eni	1.33	1997/2017	FOB		
			Iberdrola	1.15	2002/2021	DES	Extended until 2024 with a higher volume of up to 3.2 mtpa	
			Botas	3.02	1994/2014	DES	Delivery under the "GDF SUEZ/Enel" swap agreement. In 2014 no delivery accounted under this contract	
			Enel	0	1999/2022	DES		
			Cepsa	0.77	2002/2022	DES		
			Statoil	0.75	2003/2009	DES	Extension to 2014	
			Endesa	0.75	2002/2017	DES		
			DEPA S.A.	0.50	2000/2021	CIF		
Egypt	Idku	ELNG T1	GDF SUEZ	3.60	2005/2025	FOB	Currently under Force Majeure	
		ELNG T2	BG	3.60	2006/2026	FOB	Currently under Force Majeure	
	Damietta	SEGAS	BP	1	2005/2025	FOB	Currently under Force Majeure	
		SEGAS	Union Fenosa gas	3.30	2005/2030	FOB	Currently under Force Majeure	
Equatorial Guinea	Punta Europa	EGLNG	BG	3.30	2006/2023	FOB		
Nigeria	Bonny Island	Nigeria LNG T1 & 2	Enel	2.57	1999/2022	DES		
			Gas Natural Aprovisionamientos	1.17	1999/2021	DES		
			Botas	0.91	1999/2021	DES		
			GDF SUEZ	0.33	1999/2022	DES		
			Galp Energia	0.26	1999/2022	DES		
			Gas Natural sdg	1.99	2002/2024	DES		
		Nigeria LNG T3	Galp Energia	0.73	2002/2022	DES		
			Eni	1.15	2006/2026	DES		
		Nigeria LNG T4	Iberdrola	0.38	2006/2026	DES		
			BG	2.30	2006/2026	DES		
			Galp Energia	1.42	2006/2026	DES		
			Shell International Trading Middle East	1.13	2006/2026	DES	Contract novated to Shell Middle East from Shell Western	
		Nigeria LNG T4 & 5	Endesa	0.75	2006/2026	DES		
			Total	0.23	2006/2026	DES		
			Total	0.90	2008/2027	DES		
			Shell Western LNG	3.10	2008/2027	DES		
Norway	Hammerfest	Statoil	Statoil	≈1.75	2007/2021	DES		
			Iberdrola	1.13	2006/2025	DES		
		Total	Total	0.70	2007/depletion	FOB		
		GDF SUEZ	GDF SUEZ	0.50	2007/depletion	FOB		
Trinidad & Tobago	Point Fortin	Statoil	Petronas	0.10	2012/depletion	FOB		
		Atlantic LNG T1	GDF SUEZ	1.98	1999/2018	FOB		
			Gas Natural Aprovisionamentos	1.06	1999/2018	FOB		
			BG	1.70	2004/2023	FOB		
			BG	0.40	2004/2026	DES		
			Shell	1.60	2006/2023	FOB	Former Repsol contract	
		Atlantic LNG T2 & 3	BP	0.85	2002/2021	FOB		
			Naturgas Energia	0.70	2003/2023	FOB	GNF/Naturgas swap. GNF buys 0.74 mtpa on a FOB basis until 2023	
			Gas Natural sdg	0.65	2002/2023	FOB		
			BP	2.50	2006/2025	FOB		
			BG	1.50	2007/2027	FOB		
			Shell	1	2014/2024	FOB	As part of Repsol LNG Acquisition	
Australia	Withnell Bay	BP	AES	0.75	2003/2023	DES	Related to BP/ALNG T2 & 3 contract	
		GDF SUEZ	Ecolectrica	0.60	2000/2020	DES	Related to GDF SUEZ/ALNG T1 contract	
PACIFIC BASIN								
Woodside, Shell, BHP Billiton, BP, Chevron, Japan Australia LNG Pty Ltd (Mitsubishi & Mitsui)		The Chugoku Electric	1.43	2009/2021	DES			
		Tokyo Gas, Toho Gas	1.37	2004/2029	FOB			
		Kyushu Electric	0.70	2009/2023	FOB			
		Osaka Gas	1	2004/2033	FOB			
		Tohoku Electric	1	2010/2019	DES			
		Toho Gas	0.76	2009/2019	DES			
		Chubu Electric	0.60	2009/2029	DES			
		Tokyo Gas	0.50	2009/2017	DES			
		Osaka Gas	0.50	2009/2015	DES			

Export Country	Loading Point	Seller	Buyer	Nominal quantity ACQ 10 <sup>6</sup> t/year	Duration	Type of contract	Comments
Australia	Withnell Bay	Woodside, Shell, BHP Billiton, BP, Chevron, Japan Australia LNG Pty Ltd (Mitsubishi & Mitsui)	The Kansai Electric	0.50 - 0.93	2009/2024	DES	
			Chubu Electric	0.50	2009/2016	DES	
			The Kansai Electric	0.20 - 0.44	2009/2017	DES	
			Tokyo Electric	0.30	2009/2017	DES	
			Kyushu Electric	0.50	2006/2021	DES	
			Shizuoka Gas	0.13	2004/2029	FOB	
			KOGAS	0.50	2003/2016	DES	
			GDLNG	3.30	2006/2030	FOB	
			Tokyo Electric	2	2006/2022	FOB	
			Toho Gas	1	2006/2022	FOB	
			Pluto LNG	1.75 - 2	2011/2025	FOB	
			Pluto LNG	1.50 - 1.75	2011/2025	FOB	
Brunei	Lumut	Brunei LNG	QCLNG	up to 4.25	2014/2034	FOB	
			BG	3.60	2014/2034	DES	
			Tokyo Gas, Osaka Gas, Tokyo Electric	3.40	2013/2023	DES	Extended to 2023
			KOGAS	1	1997/2018	DES	
			Shell	0.80	2013/2023	FOB	
			Kansai Electric, Chubu Electric, Kyushu Electric, Osaka Gas, Toho Gas, Nippon Steel & Sumitomo Metal	3	2011/2020	FOB/DES	Nominal quantity (ACQ) 2011/2015: 3 mtpa 2016/2020: 2 mtpa
Indonesia	Bontang	Pertamina, Total E&P Indonesia, INPEX	Hiroshima Gas, Nippon Gas, Osaka Gas	0.39	1996/2015	DES	
			KOGAS	2	1994/2014	FOB	Expired in 2014
			KOGAS	1	1998/2017	FOB	
			CPC	1.84	1998/2017	DES	
			Sempra LNG	3.70	2008/2029	DES	1.7 mtpa divertible
			CNOOC	2.60	2009/2033	FOB	
			Kansai Electric	1	2014/2035	DES	
			SK E&S	0.60	2006/2026	DES	
			Posco	0.55	2005/2024	DES	
			Tohoku Electric	0.12	2010/2024	DES	
			Tokyo Gas, Tokyo Electric	7.40	1983/2003	1.8 mtpa FOB/ 5.6 mtpa DES	Extended to 2018
			Saibu Gas	0.39 (until 2014) 0.45 (2015 onward)</td			

# Long-term and medium-term LNG contracts in force in 2014\*

Export Country	Loading Point	Seller	Buyer	Nominal quantity ACQ 10 <sup>6</sup> t/year	Duration	Type of contract	Comments
<b>MIDDLE EAST</b>							
Abu Dhabi	Das Island	Adgas	Tokyo Electric	4.30	1994/2019	DES	
			Chubu Electric	4	1997/2021	DES	
		Qatargas I	Tohoku Electric, Tokyo Gas, Osaka Gas, The Kansai Electric, Tokyo Electric, Toho Gas, Chugoku Electric	2	1998/2021	DES	
			Tokyo Electric	1	2012/2021	DES	
			Gas Natural sdg	0.75	2005/2024	DES	
			Gas Natural sdg	0.75	2006/2025	FOB	
			ExxonMobil	7.80	2009/2034	DES	
			CNOOC	2	2009/2034	DES	
			Total	1.85	2009/2034	DES	
		Qatargas II T2	Total	1.50	2009/2034	DES	
			Total	1.15	2009/2034	DES	
			Total	0.70	2009/2034	DES	
			ExxonMobil	0.60	2009/2033	DES	
			ConocoPhillips	7.80	2010/2035	DES	
			Centrica	3	2014/2018	DES	Extension of the previous 3 year contract ending in 2014
			CNOOC	2	2011/2035	DES	
		Qatargas III	Chubu Electric	1	2013/2028	DES	Nominal quantity (ACQ) 2013/2017: 1 mtpa 2018/2028: 0.7 mtpa
			The Kansai Electric	0.50	2013/2027	DES	
			Shell	3.60	2011/2036	DES	Quantity and total years amended
			Petrochina	3	2011/2036	DES	
			Marubeni	1	2011/2031	DES	
			RasGas I	KOGAS	4.92	1999/2024	FOB
			RasGas II T1	Petronet LNG	5	2004/2028	FOB
		RasGas II T2	RasGas II T2	Edison	4.60	2009/2034	DES
			Endesa	0.74	2005/2025	DES	
			EDF Trading	3.40	2007/2012	DES	Extended to 2027
			CPC	3.08	2008/2032	FOB	
			ENI	2.05	2007/2027	DES	Former Distegas contract
			ExxonMobil	7.80	2009/2034	DES	
			Petronet LNG	2.50	2009/2029	FOB	
		RasGas III T1	KOGAS	2.10	2007/2026	DES	
			KOGAS	2	2012/2032	DES	
			RasGas III T2	ExxonMobil	7.80	2010/2035	DES
			Rasgas III	CPC	1.50	2013/2032	DES
			Oman LNG	KOGAS	4.06	2000/2024	FOB
			Osaka Gas	0.66	2000/2024	FOB	
			Union Fenosa Gas	1.65	2006/2025	DES	
		Qalhat LNG	Mitsubishi Corp.	0.80	2006/2020	FOB	
			Osaka Gas	0.80	2009/2026	FOB	
			Itochu Corp.	0.77	2006/2020	FOB	
			Yemen LNG T1	KOGAS	2	2008/2028	FOB
			Yemen LNG T2	GDF SUEZ	2.55	2009/2029	FOB
			Yemen LNG T1 & 2	Total	2	2009/2029	DES
			OTHER				
BG Portfolio		BG	CNOOC	3.60 8.60 (2015 onward)	2014/2034	DES	
BG Portfolio		BG	Quintero LNG	3	2009/2030	DES	
BG Portfolio		BG	Singapore LNG	3	2013/2033	DES	
BG Portfolio		BG	KOGAS	1.30	2008/2016	DES	
BG Portfolio		BG	Chubu Electric	up to 0.40	2014/2035	DES	Total quantity of LNG during contract duration: maximum 122 cargoes
BP Portfolio		BP	Chubu Electric	0.50	2012/2028	DES	
Chubu Electric Portfolio		Chubu Electric	INPEX	*	2013/2018	DES	*Total quantity of LNG during contract duration: 17 cargoes
ENI Portfolio		Eni	Tokyo Electric	1.04	2011/2015	DES	
ENI Portfolio		Eni	Iberdrola	0.92	2002/2018	DES	
ENI Portfolio		Eni	E.ON Global Commodities	0.65	2007/2022	DES	
ENI Portfolio		Eni	Hidrocanabrico + EDP	0.36	2005/2016	DES	
ENI Portfolio		Eni	KOGAS/Chubu Electric	*	2013/2017	DES	*Total quantity of LNG during contract duration: 28 cargoes (approx. 1.68 mtpa)
Iberdrola Portfolio		Iberdrola	DONG	0.72	2011/2021	DES	

(\*) Duration above four years

Export Country	Loading Point	Seller	Buyer	Nominal quantity ACQ 10 <sup>6</sup> t/year	Duration	Type of contract	Comments
Mitsubishi		Mitsubishi	Shizuoka Gas	0.30 ~ 0.70	2010/2015	DES	
Shell Portfolio		Shell	Gas Natural Fenosa	1.16	2006/2023	DES	
Shell Portfolio (Nigeria, Russia, Australia)		Shell	JX Nippon Oil & Energy Corporation	0.20	2015/2032	DES	Total quantity of LNG during contract duration: 46 cargoes of about 66,000 tonnes each)
Shell Portfolio		Shell	Osaka Gas	= 0.80	2012/2038	DES	
Shell Portfolio		Shell	KOGAS	1 ~ 3.64	2013/2035	DES	
Shell Portfolio		Shell	GDF SUEZ	0.40	2014/2034	DES	
Shell Portfolio		Shell	Chubu Electric	*	2014/2034	DES	*Maximum 12 cargoes per year
Tokyo Gas Portfolio		Tokyo Gas	Hokkaido Gas	0.30 ~ 0.40	2012/2023	DES	
Tokyo Gas Portfolio		Tokyo Gas	Saibu Gas	0.30	2014/2029	DES	
Total Portfolio		Total	KOGAS	Up to 2 mtpa	2014/2031	DES	
Total Portfolio		Total	CNOOC	1	2010/2024	DES	



# LNG Characteristics

## LNG CHARACTERISTICS

The average composition is chosen as being representative among compositions reported by the different receiving terminals.

Origin	Nitrogen N2 %	Methane C1 %	Ethane C2 %	Propane C3 %	C4+ %	TOTAL	LNG Density <sup>(1)</sup> kg/m <sup>3</sup>	Gas Density <sup>(2)</sup> kg/m <sup>3(n)</sup>	Expansion ratio m <sup>3(n)</sup> / m <sup>3 liq</sup>	Gas GCV <sup>(2)</sup> MJ/m <sup>3(n)</sup>	Wobbe Index <sup>(2)</sup> MJ/m <sup>3(n)</sup>
Australia - NWS	0.04	87.33	8.33	3.33	0.97	100	467.35	0.83	562.46	45.32	56.53
Australia - Darwin	0.10	87.64	9.97	1.96	0.33	100	461.05	0.81	567.73	44.39	56.01
Algeria - Skikda	0.63	91.40	7.35	0.57	0.05	100	446.65	0.78	575.95	42.30	54.62
Algeria - Bethioua	0.64	89.55	8.20	1.30	0.31	100	454.50	0.80	571.70	43.22	55.12
Algeria - Arzew	0.71	88.93	8.42	1.59	0.37	100	457.10	0.80	570.37	43.48	55.23
Brunei	0.04	90.12	5.34	3.02	1.48	100	461.63	0.82	564.48	44.68	56.18
Egypt - Idku	0.02	95.31	3.58	0.74	0.34	100	437.38	0.76	578.47	41.76	54.61
Egypt - Damietta	0.02	97.25	2.49	0.12	0.12	100	429.35	0.74	582.24	40.87	54.12
Equatorial Guinea	0.00	93.41	6.52	0.07	0.00	100	439.64	0.76	578.85	41.95	54.73
Indonesia - Arun	0.08	91.86	5.66	1.60	0.79	100	450.96	0.79	571.49	43.29	55.42
Indonesia - Badak	0.01	90.14	5.46	2.98	1.40	100	461.07	0.82	564.89	44.63	56.17
Indonesia - Tangguh	0.13	96.91	2.37	0.44	0.15	100	431.22	0.74	581.47	41.00	54.14
Libya	0.59	82.57	12.62	3.56	0.65	100	478.72	0.86	558.08	46.24	56.77
Malaysia	0.14	91.69	4.64	2.60	0.93	100	454.19	0.80	569.15	43.67	55.59
Nigeria	0.03	91.70	5.52	2.17	0.58	100	451.66	0.79	571.14	43.41	55.50
Norway	0.46	92.03	5.75	1.31	0.45	100	448.39	0.78	573.75	42.69	54.91
Oman	0.20	90.68	5.75	2.12	1.24	100	457.27	0.81	567.76	43.99	55.73
Peru	0.57	89.07	10.26	0.10	0.01	100	451.80	0.79	574.30	42.90	55.00
Qatar	0.27	90.91	6.43	1.66	0.74	100	453.46	0.79	570.68	43.43	55.40
Russia - Sakhalin	0.07	92.53	4.47	1.97	0.95	100	450.67	0.79	571.05	43.30	55.43
Trinidad	0.01	96.78	2.78	0.37	0.06	100	431.03	0.74	581.77	41.05	54.23
USA - Alaska	0.17	99.71	0.09	0.03	0.01	100	421.39	0.72	585.75	39.91	53.51
Yemen	0.02	93.17	5.93	0.77	0.12	100	442.42	0.77	576.90	42.29	54.91

<sup>(1)</sup> Calculated according to ISO 6578 [T = -160°C]. <sup>(2)</sup> Calculated according to ISO 6976 [0°C / 0°C, 1.01325 bar].



# LNG tankers

The total LNG tanker fleet consisted of 421 vessels at the end of 2014.

It included 5 Floating Storage Regasification Units (FSRUs), 15 Regasification Vessels (RVs) and 24 ships of less than 50,000 cubic meters.

## LNG CARRIER DEMOLITION 2014

• 3 ships were scrapped during the year :

Built	Vessel Name	Ex Name	IMO Number	Demolition Date	Capacity (m <sup>3</sup> )	Cargo Containment System	Owner Company
1969	SCF Arctic	Methane Arctic	6910702	Oct-14	71 500	GT	Sovcomflot JSC
1969	Aris	SCF Polar	6901892	Feb-14	71 500	GT	Unknown
1977	LNG Aries		7390193	Feb-14	126 300	KM	BGT Ltd.

Source: Clarkson Research, 2015

## LNG CARRIERS LAID UP END 2014

• 5 ships were laid-up at the end of 2014 :

Built	Vessel Name	Ex Name	IMO Number	Capacity (m <sup>3</sup> )	Cargo Containment System	Owner Company	Manager Name
1977	Gandria	Hoegh Gandria	7361934	125 820	KM	Golar LNG	Golar Wilhelmsen
1984	Koto	Kotowaka Maru	8210209	125 454	KM	BW Gas	BW Fleet Mngt
1981	Tenaga Dua		7428469	130 000	GT	MISC	MISC
1981	Tenaga Tiga		7428471	130 000	GT	MISC	MISC
1983	Wilpower	Bishu Maru	8013950	125 929	KM	Awilco LNG	V. Ships (UK) Ltd

Source: Clarkson Research, 2015

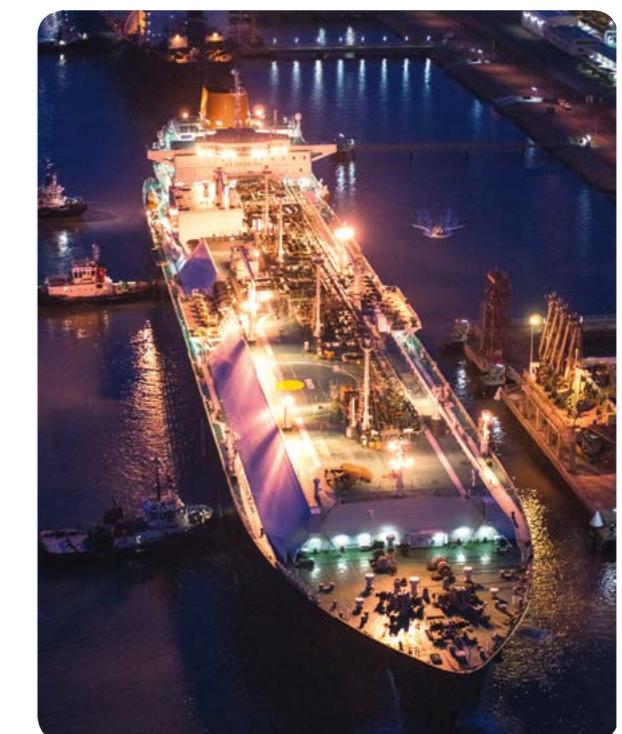
New ships delivered in 2014 added 5.48 million cubic meters to the existing fleet capacity, a 10% increase.

The average capacity of new vessels delivered in 2014 amounted to 161 278 m<sup>3</sup>, compared to an average 145 091 m<sup>3</sup> for the total fleet at year-end.

In all, about 4 023 loaded vessels were delivered in 2014 (compared to 3998 in 2013):

- 1 524 » to Japan (1 532 in 2013)
- 559 » to South Korea (616 in 2013)
- 273 » to China (260 in 2013)
- 219 » to Taiwan (204 in 2013)
- 210 » to India (195 in 2013)
- 660 » to Europe (661 in 2013)
- 241 » to Argentina, Brazil and Chile (224 in 2013)
- 175 » to North America (171 in 2013)
- 101 » to Indonesia, Malaysia, Singapore and Thailand (82 in 2013)
- 61 » to Israel, Kuwait and Dubai (53 in 2013)

Since the first commercial deliveries in 1964, close to 80 000 cargoes have been delivered without loss.



## LNG tankers (cont'd.)

• 34 ships were delivered in 2014 including one Floating Storage Regasification Unit (FSRU) and 5 Regasification Vessels (RVs):

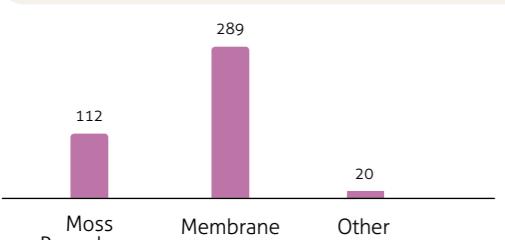
### LNG CARRIER DELIVERIES 2014

Vessel Name	Type	Built Date	Capacity (m³)	Owner Company	Manager Name	Containment System	IMO Number
Adam LNG	LNG Carrier	September 2014	161 870	Oman Shipping Co.	Oman Shipping Co.	TZM	9501186
Amani	LNG Carrier	November 2014	154 800	Brunei Gas Carriers	Brunei Gas Carriers	TZM	9661869
Asia Energy	LNG Carrier	September 2014	160 000	Chevron Transport	Chevron Transport	TZM	9606950
Asia Vision	LNG Carrier	June 2014	160 000	Chevron Transport	Chevron Transport	TZM	9606948
Clean Ocean	LNG Carrier	June 2014	161 881	Dynagas LNG	Dynagas LNG	TZM	9637492
Clean Planet	LNG Carrier	August 2014	161 814	Dynagas LNG	Dynagas LNG	TZM	9637507
Cool Runner	LNG Carrier	March 2014	160 000	Thenamaris	B. Schulte (Hellas)	TZM	9636797
Corcovado LNG	LNG Carrier	April 2014	160 106	Cardiff Marine Inc.	TMS Cardiff Gas	GT	9636711
Esshū Maru	LNG Carrier	December 2014	155 300	Mitsubishi Corp	Mitsui O.S.K. Lines	KM	9666560
Experience (RV)	LNG/Regasification	April 2014	173 660	Excelerate Energy	Excelerate Energy	GT	9638525
Gaslog Saratoga	LNG Carrier	December 2014	155 000	GasLog	GasLog LNG Services	TZM	9638903
Golar Bear	LNG Carrier	September 2014	160 000	Golar LNG	Golar LNG	TZM	9626039
Golar Crystal	LNG Carrier	May 2014	160 000	Golar LNG	Golar LNG	TZM	9624926
Golar Eskimo (RV)	LNG/Regasification	December 2014	160 000	Golar LNG Partners	Golar Wilhelmsen	TZM	9624940
Golar Frost	LNG Carrier	October 2014	160 000	Golar LNG	Golar LNG	TZM	9655042
Golar Glacier	LNG Carrier	October 2014	162 000	Golar LNG	Golar LNG	TZM	9654696
Golar Igloo (RV)	LNG/Regasification	February 2014	170 000	Golar LNG Partners	Golar LNG	TZM	9633991
Golar Penguin	LNG Carrier	September 2014	160 000	Golar LNG	Golar LNG	TZM	9624938
Hoegh Gallant (RV)	LNG/Regasification	November 2014	170 000	Höegh LNG	Höegh LNG	TZM	9653678
Independence (RV)	LNG/Regasification	March 2014	170 000	Höegh LNG	Höegh LNG	TZM	9629536
Kita LNG	LNG Carrier	July 2014	160 118	Cardiff Marine Inc.	TMS Cardiff Gas	GT	9636723
LNG Venus	LNG Carrier	November 2014	155 300	Osaka Gas	Osaka Gas	KM	9645736
Maran Gas Apollonia	LNG Carrier	January 2014	161 870	Maran Nakilat	Maran Nakilat	TZM	9633422
Maran Gas Delphi	LNG Carrier	February 2014	159 800	Maran Nakilat	Maran Nakilat	GT	9633173
Maran Gas Efessos	LNG Carrier	June 2014	159 800	Maran Nakilat	Maran Nakilat	GT	9627497
Maran Gas Posidonia	LNG Carrier	May 2014	161 870	Maran Nakilat	Maran Nakilat	TZM	9633434
Pacific Arcadia	LNG Carrier	October 2014	147 200	Nippon Yusen Kaisha	Nippon Yusen Kaisha	KM	9621077
Palu LNG	LNG Carrier	October 2014	160 000	Cardiff Marine Inc.	TMS Cardiff Gas	GT	9636735
PGN FSRU Lampung	FSRU	April 2014	170 000	Höegh LNG	Höegh LNG	TZM	9629524
Pskov	LNG Carrier	August 2014	170 200	Sovcomflot JSC	Unicom Mngt	GT	9630028
Seishū Maru	LNG Carrier	September 2014	155 300	Mitsubishi Corp	Nippon Yusen Kaisha	KM	9666558
Solaris	LNG Carrier	June 2014	155 000	GasLog	Gaslog LNG Services	TZM	9634098
Velikiy Novgorod	LNG Carrier	January 2014	170 567	Sovcomflot JSC	Unicom Mngt	GT	9630004
Yari LNG	LNG Carrier	November 2014	160 000	Cardiff Marine Inc.	TMS Cardiff Gas	GT	9636747

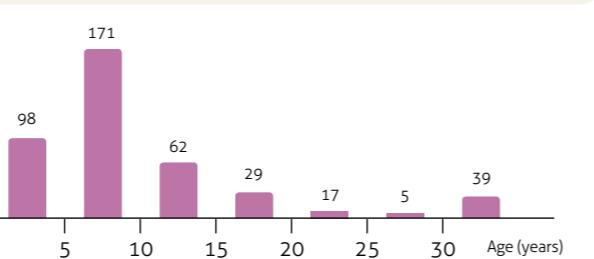
Source: Clarkson Research, 2015

At the end of 2014, the fleet could be classified as follows :

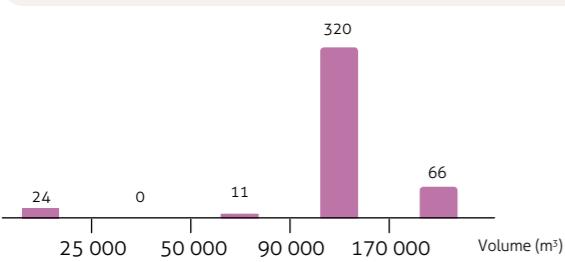
#### According to containment system



#### According to the delivery date or the age of the ships



#### According to cargo capacity



- In 2014, 77 new orders were placed, including 2 FSRUs.
- At the end of 2014, the orderbook comprised of 163 vessels, 144 of which were above 50,000 cubic meters. 47 of these vessels were scheduled for delivery in 2015.
- The orderbook included 3 FSRUs and 5 RVs, 5 of which were scheduled for delivery in 2015.

### LNG CARRIER FLEET AT THE START OF 2015

Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name	Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name
1972	Bebatik (ex Gadinia)	75 060	TZM	Brunei Shell Tankers	STASCO (Shell)	1992	Northwest Seaeagle	127 452	KM	Aust. LNG Ship Optg.	STASCO (Shell)
1974	Seagas - Bunkering Vessel (ex Fjalir)	170	Other	Aga Gas AB	Aga Gas AB	1993	Aman Bintulu	18 928	TZM	MISC	MISC
1975	Belanak (ex Gouldia)	75 000	TZM	Brunei Shell Tankers	STASCO (Shell)	1993	Arctic Spirit (ex Arctic Sun)	89 880	IHI	Teekay LNG Partners	Teekay Shpg (Gla)
1975	Bilis (ex Geomitra)	77 731	GT	Brunei Shell Tankers	STASCO (Shell)	1993	LNG Flora	127 705	KM	Nippon Yusen Kaisha	NYK LNG Shipmgnt.
1975	Bubuk (ex Genota)	77 670	GT	Brunei Shell Tankers	STASCO (Shell)	1993	Northwest Sandpiper	127 500	KM	Aust. LNG Ship Optg.	STASCO (Shell)
1976	Gimi	126 277	KM	Golar LNG	Golar Wilhelmsen	1993	Polar Spirit (ex Polar Eagle)	89 880	IHI	Teekay LNG Partners	Teekay Shpg (Gla)
1976	LNG Lagos (ex Gastor)	122 000	GT	Bonny Gas Transport	STASCO (Shell)	1994	Al Khaznah	135 496	KM	National Gas Shpg.	National Gas Shpg
1976	Mostefa Ben Boulaid	125 260	TZM	Hyproc Shipping Co.	Hyproc Shipping Co.	1994	Dwiputra	127 386	KM	Mitsui O.S.K. Lines	Humolco Trans Inc.
1977	Golar Freeze - FSRU	125 000	KM	Golar LNG Partners	Golar Wilhelmsen	1994	Hyundai Utopia	125 182	KM	Hyundai LNG Shipping	Hyundai Ocean
1977	Nusantara Regas Satu FSRU Jawa (ex Khanhur)	125 000	KM	Golar LNG	Golar Wilhelmsen	1994	LNG Vesta	127 547	KM	Mitsui O.S.K. Lines	MOL LNG Transport
1977	Gandria (ex Hoegh Gandria)	125 820	KM	Golar LNG	Golar Wilhelmsen	1994	Northwest Stormpetrel	127 606	KM	Aust. LNG Ship Optg.	STASCO (Shell)
1977	Larbi Ben M'Hidi	129 767	GT	Hyproc Shipping Co.	Hyproc Shipping Co.	1994	Puteri Intan	130 405	GT	MISC	MISC
1977	LNG Aquarius	126 300	KM	Hanocoem Shpg.	MOL LNG Europe	1994	Shahamah	135 496	KM	National Gas Shpg.	National Gas Shpg
1977	LNG Port Harcourt (ex Nestor)	122 000	GT	Bonny Gas Transport	STASCO (Shell)	1994	YK Sovereign	127 125	KM	SK Shipping Co. Ltd.	SK Shipmgnt.
1978	LNG Capricorn	126 300	KM	Nova Shpg & Logist.	Nova Shpg & Logist.	1995	Ghasha	137 514	KM	National Gas Shpg.	National Gas Shpg
1978	LNG Gemini	126 300	KM	General Dynamics	Pronav Ship Mngt.	1995	Hanjin Pyeong Taek	130 600	GT	Hanjin Shipping	Eusu ShipManagement
1978	LNG Leo	126 400	KM	General Dynamics	Pronav Ship Mngt.	1995	Ish	137 540	KM	National Gas Shpg.	National Gas Shpg
1978	Methania	131 235	GT	Distrigas S.A.	Exmar Shipmgnt.	1995	Puteri Delima	130 405	GT	MISC	MISC
1979	Bachir Chihani	129 767	GT	Hyproc Shipping Co.	Hyproc Shipping Co.	1995	Puteri Nilam	130 405	GT	MISC	MISC
1979	LNG Libra	126 400	KM	Höegh LNG	Höegh LNG Fleet M.	1996	Al Khor	137 354	KM	Nippon Yusen Kaisha	NYK LNG Shipmgnt.
1979	LNG Taurus	126 300	KM	Nova Shpg & Logist.	Nova Shpg & Logist.	1996	Al Zubarah	137 573	KM	Mitsui O.S.K. Lines	MOL LNG Transport
1979	LNG Virgo	126 400	KM	General Dynamics	Pronav Ship Mngt.	1996	Hyundai Greenpia	125 000	KM	Hyundai LNG Shipping	Hyundai Ocean
1979	Matthew (ex Suez Matthew)	126 540	TZM	Suez LNG N.A.	Höegh LNG Fleet M.	1996	Mraweh	137 000	KM	National Gas Shpg.	National Gas Shpg
1980	LNG Abuja (ex Louisiana)	126 530	KM	Bonny Gas Transport	Anglo-Eastern UK	1996	Al Rayyan	135 358	KM	K-Line	K-Line Ship Mngt.
1980	LNG Edo (ex Lake Charles)	126 530	KM	Bonny Gas Transport	Anglo-Eastern UK	1997	Al Wajbah	137 354	KM	Mitsui O.S.K. Lines	MOL LNG Transport
1980	Mourad Didouche	126 130	GT	Hyproc Shipping Co.	Hyproc Shipping Co.	1997	Aman Sendai	18 928	TZM	MISC	MISC
1981	Golar Spirit - FSRU	129 000	KM	Golar LNG	Golar Wilhel						

## LNG CARRIER FLEET (cont'd.)

Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name
2000	LNG Jamal	135 333	KM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2000	SK Splendor	138 375	TZM	SK Shipping Co. Ltd.	SK Shipmngt.
2000	SK Stellar	138 375	TZM	SK Shipping Co. Ltd.	SK Shipmngt.
2000	SK Supreme	138 200	TZM	SK Shipping Co. Ltd.	SK Shipmngt.
2000	Surya Satsuma	23 096	TZM	Mitsui O.S.K. Lines	Humolco Trans Inc.
2001	Sohar LNG (Lakshmi)	137 248	KM	Oman Shipping Co.	Oman Shipping Co.
2002	Abadi	136 912	KM	Brunei Gas Carriers	STASCO (Shell)
2002	British Trader	138 000	TZM	BP Shipping	BP Shipping
2002	Excalibur	138 034	GT	Exmar	Exmar Shipmngt.
2002	Galea	136 967	KM	Shell Tank. (S'pore)	STASCO (Shell)
2002	Gallina	137 001	KM	Shell Tank. (S'pore)	STASCO (Shell)
2002	Hispania Spirit (ex Fernando Tapias)	140 500	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2002	LNG Rivers	137 231	KM	Bonny Gas Transport	Nigeria LNG Ltd.
2002	LNG Sokoto	137 231	KM	Bonny Gas Transport	Nigeria LNG Ltd.
2002	Puteri Delima Satu	137 100	GT	MISC	MISC
2002	Puteri Intan Satu	137 489	GT	MISC	MISC
2003	FSRU Toscano (ex Golar Frost-Livorno FSRU)	137 000	KM	OLT Offshore	ECOS
2003	British Innovator	138 287	TZM	BP Shipping	BP Shipping
2003	British Merchant	138 283	TZM	BP Shipping	BP Shipping
2003	BW GDF Suez Boston (ex BW Suez Boston)	138 059	GT	BW Gas	BW Fleet Mngt
2003	BW GDF Suez Everett (ex BW Suez Everett)	138 028	GT	BW Gas	BW Fleet Mngt
2003	Castillo de Villalba	138 000	GT	Elcano	Elcano
2003	Catalunya Spirit (ex Iñigo Tapias)	138 000	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2003	Energy Frontier	147 599	KM	Tokyo LNG Tanker Co.	Mitsui O.S.K. Lines
2003	Excel	138 106	GT	Exmar	Exmar Shipmngt.
2003	Golar Arctic (ex Granatina)	140 648	GT	Golar LNG	Golar Wilhelmsen
2003	LNG Bayelsa	137 500	KM	Bonny Gas Transport	Nigeria LNG Ltd.
2003	Methane Princess	138 000	GT	Golar LNG	Golar Wilhelmsen
2003	Pacific Notus	137 006	KM	TEPCO	NYK LNG Shipmngt.
2003	Puteri Nilam Satu	137 585	GT	MISC	MISC
2003	Shinju Maru No. 1	2 513	Other	NS United Tanker	NS United Tanker
2003	SK Sunrise	138 306	TZM	I.S. Carriers S.A.	Iino Marine Service
2004	Golar Winter	138 000	GT	Golar LNG	Golar Wilhelmsen
2004	Berge Arzew	138 088	GT	BW Gas	BW Fleet Mngt
2004	Bilbao Knutsen	138 000	GT	Knutsen OAS Shipping	Knutsen OAS Shipping
2004	Cadiz Knutsen	138 826	GT	Knutsen OAS Shipping	Knutsen OAS Shipping
2004	Disha	136 026	GT	India LNG Transport	Shpg Corp of India
2004	Dukhan	137 661	KM	Mitsui O.S.K. Lines	MOL LNG Europe
2004	Fuji LNG (ex Muscat LNG)	149 172	KM	Cardiff Marine Inc.	TMS Cardiff Gas
2004	Fuwairit	138 000	TZM	Mitsui O.S.K. Lines	MOL LNG Europe
2004	Galicia Spirit	140 624	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2004	Gemmata	136 985	KM	STASCO (Shell)	STASCO (Shell)
2004	Lalla Fatma N'Soumer	147 845	KM	Algeria Nippon Gas	Hyproc Shipping Co.
2004	LNG Akwa Ibom	141 038	KM	Bonny Gas Transport	Anglo-Eastern UK
2004	LNG River Orashi	145 914	GT	BW Gas	BW Fleet Mngt
2004	Madrid Spirit	138 000	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2004	Methane Kari Elin	138 209	TZM	BG Asia Pacific Ltd.	GasLog LNG Services
2004	Milaha Ras Laffan (ex Maersk Ras Laffan)	138 270	TZM	Malt LNG	Pronav Ship Mngt.
2004	Northwest Swan	138 000	GT	Aust. LNG Ship Optg.	Chevron Shpg. Co.
2004	Pioneer Knutsen	1 100	Other	Knutsen OAS Shipping	Knutsen OAS Shipping
2004	Puteri Firus Satu	137 617	GT	MISC	MISC

## LNG CARRIER FLEET (cont'd.)

Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name
2004	Puteri Zamrud Satu	137 100	GT	MISC	MISC
2004	Raahi	136 026	GT	India LNG Transport	Shpg Corp of India
2005	Al Deebel	145 130	TZM	Mitsui O.S.K. Lines	MOL LNG Europe
2005	Al Thakhira	145 130	TZM	K-Line	K Line LNG Shpg.
2005	Energy Advance	147 624	KM	Tokyo LNG Tanker Co.	Mitsui O.S.K. Lines
2005	Golar Viking (ex Gracilis)	140 208	TZM	Golar LNG	Golar Wilhelmsen
2005	LNG Adamawa	142 656	KM	Bonny Gas Transport	Anglo-Eastern UK
2005	LNG Cross River	141 000	KM	Bonny Gas Transport	Nigeria LNG Ltd.
2005	LNG Enugu	145 914	GT	BW Gas	BW Fleet Mngt
2005	LNG Oyo	145 842	GT	BW Gas	BW Fleet Mngt
2005	LNG Pioneer	138 000	GT	Mitsui O.S.K. Lines	MOL LNG Europe
2005	Lusail	145 000	TZM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2005	Maran Gas Asclepius (ex Rasgas Asclepius)	145 822	GT	Maran Nakilat	Maran Gas Maritime
2005	Nizwa LNG	147 684	KM	Oman Shipping Co.	Mitsui O.S.K. Lines
2005	North Pioneer	2 512	Other	Japan Liquid Gas	Iino Kaiun Kaisha
2005	Puteri Mutiara Satu	137 100	GT	MISC	MISC
2005	Salalah LNG	145 951	TZM	Oman Shipping Co.	Mitsui O.S.K. Lines
2005	Seri Alam	145 572	TZM	MISC	MISC
2005	Umm Bab	145 000	GT	Maran Nakilat	Maran Gas Maritime
2005	Excellence (RV)	138 120	GT	Excelerate Energy	Exmar Shipmngt.
2005	Excelsior (RV)	138 087	GT	Exmar	Exmar Shipmngt.
2006	Al Marouna	149 539	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2006	Arctic Discoverer	142 612	KM	K-Line	K Line LNG Shpg.
2006	Arctic Lady	147 208	KM	Höegh LNG	Höegh LNG Fleet M.
2006	Arctic Princess	147 835	KM	Höegh LNG	Höegh LNG Fleet M.
2006	Arctic Voyager	142 929	KM	K-Line	K Line LNG Shpg.
2006	Energy Progress	147 558	KM	Mitsui O.S.K. Lines	MOL LNG Transport
2006	GDF Suez Global Energy (ex Gaz de France Energy)	74 130	CS1	GDF Suez	Gozocean SA.
2006	Golar Grand (ex Grandis)	145 879	GT	Golar LNG	Golar Wilhelmsen
2006	Golar Maria (ex Granosa)	145 700	GT	Golar LNG Partners	Golar Wilhelmsen
2006	Iberica Knutsen	138 120	GT	Knutsen OAS Shipping	Knutsen OAS Shipping
2006	Ibra LNG	147 100	TZM	Oman Shipping Co.	Mitsui O.S.K. Lines
2006	Ibri LNG	147 569	KM	Oman Shipping Co.	Mitsui O.S.K. Lines
2006	LNG Benue	145 842	GT	BW Gas	BW Fleet Mngt
2006	LNG Dream	145 000	KM	Osaka Gas	NYK LNG Shipmngt.
2006	LNG Lokoja	149 600	GT	BW Gas	BW Fleet Mngt
2006	LNG River Niger	141 000	KM	Bonny Gas Transport	Nigeria LNG Ltd.
2006	Methane Jane Elizabeth	145 000	TZM	GasLog Partners	GasLog LNG Services
2006	Methane Lydon Volney	145 000	TZM	GasLog	GasLog LNG Services
2006	Methane Rita Andrea	145 000	TZM	GasLog Partners	GasLog LNG Services
2006	Milaha Qatar (ex Maersk Qatar)	145 130	TZM	Malt LNG	Pronav Ship Mngt.
2006	Pacific Euris	136 942	KM	TEPCO	NYK LNG Shipmngt.
2006	Provallys	154 472	CS1	GDF Suez	Gozocean SA.
2006	Seri Amanah	145 000	TZM	MISC	MISC
2006	Seri Anggun	145 731	TZM	MISC	MISC
2006	Seri Angkasa	145 000	TZM	MISC	MISC
2006	Simaisma	145 700	GT	Maran Nakilat	Maran Gas Maritime
2006	Stena Blue Sky (ex Bluesky)	145 819	GT	Stena Bulk	Northern Marine Mngt
2006	Excelite (RV)	138 074	GT	Exmar	Exmar
2007	Al Areesh	148 786	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2007	Al Daayen	148 853	GT	Teekay LNG Partners	Teekay Shpg. (Gla)
2007	Al Gattara	216 224	TZM	Qatar Gas (Nakilat)	OSG Shipmngt. UK
2007	Al Jassasiya	145 700	GT	Maran Nakilat	Maran Gas Maritime
2007	Al Ruwais	210 100	GT	Pronav GmbH	Pronav Ship Mngt.
2007	Al Safiya	210 154	GT	Pronav GmbH	Pronav Ship Mngt.
2007	British Emerald	154 983	TZM	BP Shipping	BP Shipping
2007	Celestine River (ex Neva River)	147 608	KM	K-Line	K Line LNG Shpg.
2007	Cheikh El Mokrani	74 365	TZM	Hyproc Shipping Co.	Hyproc Shipping Co.
2007	Clean Energy	149 700	TZM	Dynagas LNG	Dynagas LNG
2007	Ejnan	145 000	TZM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2007	Gaselys	154 472	CS1	GDF Suez	Gozocean SA.
2007	Grace Acacia	149 786	TZM	Gozocean SA.	Gozocean SA.
2007	Grace Barleria	149 700	TZM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2007	Grand Elena	147 200	KM	Sovcomflot JSC	NYK LNG Shipmngt.
2007	LNG Borno	149 600	TZM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2007	LNG Kano	149 600	GT	BW Gas	BW Fleet Mngt
2007	LNG Ogun	149 600	TZM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2007	LNG Ondo	148 300	GT	BW Gas	BW Fleet Mngt
2007	Maran Gas Coronis	145 700	GT	Maran Nakilat	

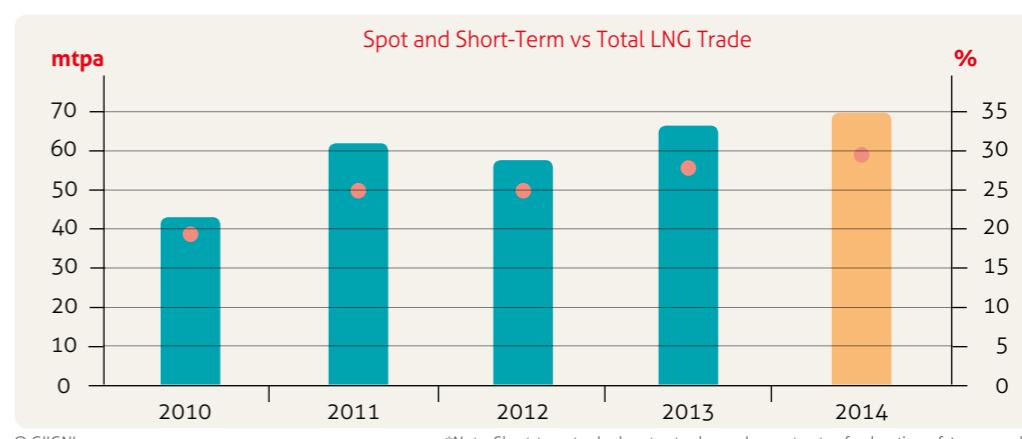
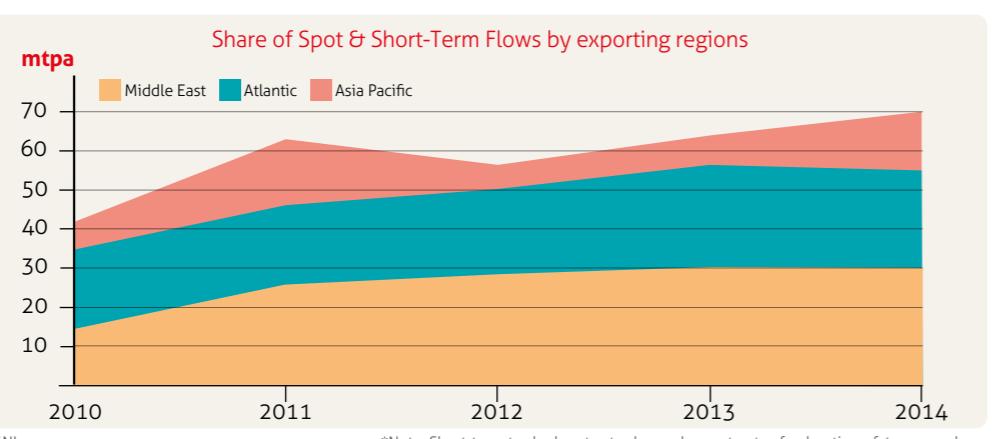
## LNG CARRIER FLEET (cont'd.)

Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name	Built	Vessel Name	Capacity (m³)	Cargo	Owner Company	Manager Name
2009	Coral Methane	7 500	Other	Anthony Veder	Anthony Veder	2013	GasLog Skagen	155 000	TZM	GasLog	GasLog LNG Services
2009	Express (RV)	150 900	GT	Exmar	Exmar	2013	GasLog Sydney	155 000	TZM	GasLog	GasLog LNG Services
2009	Exquisite (RV)	151 000	GT	Excelerate Energy	Exmar Shipmngt.	2013	Golar Celsius	160 000	TZM	Golar LNG	Golar LNG
2009	GDF Suez Neptune (RV)	145 130	TZM	Höegh LNG	Höegh LNG Fleet M.	2013	Golar Seal	160 000	TZM	Golar LNG	Golar LNG
2010	Aamira	267 335	TZM	Qatar Gas (Nakilat)	STASCO (Shell)	2013	Grace Dahlia	177 630	KM	Nippon Yusen Kaisha	NYK LNG Shipmngt.
2010	Al Bahiyav	210 185	GT	Qatar Gas (Nakilat)	STASCO (Shell)	2013	Kakuyu Maru	2 538	Other	Tsurumi Sunmarine	Tsurumi Sunmarine
2010	Barcelona Knutsen	173 400	GT	Knutsen OAS Shipping	Knutsen OAS Shipping	2013	Lena River	155 165	TZM	Dynagas LNG	Dynagas LNG
2010	Castillo de Santisteban	173 673	GT	Elcano	Elcano	2013	Wilforce	156 007	GT	Teekay LNG Partners	Awilco LNG Technical
2010	GasLog Chelsea (ex STX Frontier)	153 000	TZM	GasLog	GasLog LNG Services	2013	Wilpride	156 007	GT	Teekay LNG Partners	Awilco LNG Technical
2010	GasLog Savannah	155 000	TZM	GasLog	GasLog LNG Services	2013	Woodside Goode	159 662	GT	Maran Gas Maritime	Maran Gas Maritime
2010	GasLog Singapore	155 000	TZM	GasLog	GasLog LNG Services	2013	Woodside Rogers	160 668	GT	Maran Gas Maritime	Maran Gas Maritime
2010	GDF Suez Point Fortin	154 914	TZM	Trinity LNG Carrier	MOL LNG Europe	2013	Yenisei River	155 000	TZM	Dynagas LNG	Dynagas LNG
2010	Gigira Laitebo (ex Abdalkader)	155 000	TZM	Mitsui O.S.K. Lines	MOL LNG Europe	2013	Coral Anthelia	6 500	Other	Anthony Veder	Anthony Veder
2010	Meridian Spirit (ex Maersk Meridian)	165 772	TZM	Malt LNG	Malt LNG	2014	PGN FSRU Lampung (ex Höegh LNG Newbuild 2 Medan PGN FSRU)	170 000	TZM	Höegh LNG	Höegh LNG
2010	Methane Becki Anne	170 678	GT	BG Group	GasLog LNG Services	2014	Adam LNG	161 870	TZM	Oman Shipping Co.	Oman Shipping Co.
2010	Methane Julia Louise	170 000	TZM	BG Group	GasLog LNG Services	2014	Amani	154 800	TZM	Brunei Gas Carriers	Brunei Gas Carriers
2010	Methane Mickie Harper	170 000	GT	BG Group	GasLog LNG Services	2014	Asia Energy	160 000	TZM	Chevron Transport	Chevron Transport
2010	Methane Patricia Camila	170 000	TZM	BG Group	GasLog LNG Services	2014	Asia Vision	160 000	TZM	Chevron Transport	Chevron Transport
2010	Rasheeda	267 335	TZM	Qatar Gas (Nakilat)	STASCO (Shell)	2014	Clean Ocean	161 881	TZM	Dynagas LNG	Dynagas LNG
2010	Ribera Del Duero Knutsen	173 400	GT	Knutsen OAS Shipping	Knutsen OAS Shipping	2014	Clean Planet	161 814	TZM	Dynagas LNG	Dynagas LNG
2010	Sevilla Knutsen	173 400	GT	Knutsen OAS Shipping	Knutsen OAS Shipping	2014	Cool Runner	160 000	TZM	Thenamaris	B. Schulte (Hellas)
2010	Spirit of Hela (ex Ben Badis)	173 010	TZM	Mitsui O.S.K. Lines	MOL LNG Europe	2014	Corcovado LNG	160 106	GT	Cardiff Marine Inc.	TMS Cardiff Gas
2010	Taitar No. 3	147 366	KM	Nimic Ship Mngt.	Nimic Ship Mngt.	2014	Esshu Maru	155 300	KM	Mitsubishi Corp	Mitsui O.S.K. Lines
2010	Taitar No. 4	147 546	KM	Nimic Ship Mngt.	Nimic Ship Mngt.	2014	Gaslog Saratoga	155 000	TZM	GasLog	GasLog LNG Services
2010	Valencia Knutsen	173 400	GT	Knutsen OAS Shipping	Knutsen OAS Shipping	2014	Golar Bear	160 000	TZM	Golar LNG	Golar LNG
2010	Zarga	267 335	TZM	Qatar Gas (Nakilat)	STASCO (Shell)	2014	Golar Crystal	160 000	TZM	Golar LNG	Golar LNG
2010	Norgas Creation	10 030	Other	Norgas Carriers	Norgas Carriers	2014	Golar Frost	160 000	TZM	Golar LNG	Golar LNG
2010	Norgas Innovation	10 030	Other	Norgas Carriers	Norgas Carriers	2014	Golar Glacier	162 000	TZM	Golar LNG	Golar LNG
2010	Exemplar (RV)	151 000	GT	Excelerate Energy	Exmar Shipmngt.	2014	Golar Penguin	160 000	TZM	Golar LNG	Golar LNG
2010	Expedient (RV)	151 000	GT	Excelerate Energy	Excelerate Energy	2014	Kita LNG	160 118	GT	Cardiff Marine Inc.	TMS Cardiff Gas
2010	GDF Suez Cape Ann (RV)	145 130	TZM	Höegh LNG	Höegh LNG Fleet M.	2014	LNG Venus	155 300	KM	Osaka Gas	Osaka Gas
2011	Akebono Maru	3 556	Other	NS United Tanker	NS United Tanker	2014	Maran Gas Apollonia	161 870	TZM	Maran Nakilat	Maran Nakilat
2011	Amali	148 000	GT	Brunei Shell Tankers	STASCO (Shell)	2014	Maran Gas Delphi	159 800	GT	Maran Nakilat	Maran Nakilat
2011	Arkat	147 228	GT	Brunei Gas Carriers	STASCO (Shell)	2014	Maran Gas Efessos	159 800	GT	Maran Nakilat	Maran Nakilat
2011	Energy Horizon	177 441	KM	Tokyo LNG Tanker Co.	NYK LNG Shipmngt.	2014	Maran Gas Posidonia	161 870	TZM	Maran Nakilat	Maran Nakilat
2011	Lobito	161 337	TZM	MiNT LNG	Teekay Shpg (Gla)	2014	Pacific Arcadia	147 200	KM	Nippon Yusen Kaisha	Nippon Yusen Kaisha
2011	Malanje	160 400	TZM	MiNT LNG	Mitsui & Co	2014	Palu LNG	160 000	GT	Cardiff Marine Inc.	TMS Cardiff Gas
2011	Sonangol Benguela	160 500	GT	Sonangol	Chevron Shpg Co.	2014	Pskov	170 200	GT	Sovcomflot JSC	Unicom Mngt
2011	Sonangol Etosha	160 786	GT	Sonangol	Chevron Shpg Co.	2014	Seishu Maru	155 300	KM	Mitsubishi Corp	Nippon Yusen Kaisha
2011	Sonangol Sambizanga	160 785	GT	Sonangol	Chevron Shpg Co.	2014	Solaris	155 000	TZM	GasLog	GasLog LNG Services
2011	Soyo	161 337	TZM	MiNT LNG	Teekay Shpg (Gla)	2014	Velikiy Novgorod	170 567	GT	Sovcomflot JSC	Unicom Mngt
2011	Stena Clear Sky	173 593	GT	Stena Bulk	Northern Marine Mngt	2014	Yari LNG	160 000	GT	Cardiff Marine Inc.	TMS Cardiff Gas
2011	Stena Crystal Sky	173 611	GT	Stena Bulk	Northern Marine Mngt	2014	Experience (RV)	173 660	GT	Excelerate Energy	Excelerate Energy
2011	Bahrain Vision	12 022	Other	Teekay LNG Partners	Norgas Carriers	2014	Golar Eskimo (RV)	160 000	TZM	Golar LNG Partners	Golar Wilhelmsen
2011	Norgas Conception	10 030	Other	Norgas Carriers	Norgas Carriers	2014	Golar Igloo (RV)	170 000	TZM	Golar LNG Partners	Golar LNG
2011	Norgas Invention	10 030	Other	Norgas Carriers	Norgas Carriers	2014	Hoegh Gallant (RV)	170 000	TZM	Höegh LNG	Höegh LNG
2011	Norgas Unikum	12 000	Other	Teekay LNG Partners	Norgas Carriers	2014	Independence (RV)	170 000	TZM	Höegh LNG	Höegh LNG
2012	Coral Energy	15 600	Other	Anthony Veder	Anthony Veder						
2012	Cubal	160 534	TZM	MiNT LNG	NYK LNG Shipmngt.						
2012	Shen Hai	147 210	GT	CLNG	CLNG						
2013	Arctic Aurora	154 899	TZM	Dynagas LNG	Dynagas LNG						
2013	Cool Voyager	160 372	TZM	Thenamaris	B. Schulte (Hellas)						
2013	GasLog Santiago	155 000	TZM	GasLog	GasLog LNG Services						
2013	GasLog Seattle	155 000	TZM	GasLog	GasLog LNG Services						
2013	GasLog Shanghai	155 000	TZM	GasLog	GasLog LNG Services						

Source: Clarkson Research, 2015

# Spot and Short-Term Volumes ( $10^3$ T) received in 2014 by the importing countries from the exporting countries

	Qatar	Nigeria	Trinidad & Tobago	Indonesia	Algeria	Yemen	Papua New Guinea	Russia	Australia	Norway	Brunei	Oman	Equ. Guin.	Malaysia	Abu Dhabi	Peru	Angola	Egypt	USA	Re-exports received	Re-exports loaded	Net Imports (after re-exports)
Japan	7 337	4 452	121	2 030	743	663	2 011	1 668	1 488	354	647	1 108	714	368	729	75	64	67	253	916	-	25 811
Korea	2 888	1 614	63	968	367	516	-	512	283	72	-	95	72	132	127	-	68	66	-	1 208	-198	8 854
India	5 063	519	53	-	126	403	-	-	-	-	67	10	59	-	78	-	-	-	-	321	-	6 699
China	1 117	189	60	220	310	233	133	128	315	122	-	64	132	236	-	-	131	117	-	420	-	3 929
Taiwan	314	117	59	247	59	190	489	64	132	-	632	124	70	58	-	-	-	-	65	-	2 619	
Malaysia	67	256	-	-	380	309	-	-	65	60	263	-	-	129	-	-	-	61	-	123	-	1 714
Indonesia	-	-	-	392	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 399	
Thailand	945	132	62	-	-	66	-	65	-	-	67	-	63	-	-	-	-	-	-	-	392	
Singapore	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	138	-	205	
Asia	17 732	7 279	419	3 924	1 986	2 382	2 633	2 438	2 283	609	1 608	1 468	1 047	986	934	75	264	312	253	3 191	-198	51 622
Brazil	449	1 355	1 277	-	61	-	-	-	-	744	-	-	309	-	-	-	70	-	-	1 132	-70	5 327
Argentina	695	637	2 138	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	795	-	4 420
Puerto Rico	-	168	960	-	-	-	-	-	-	60	-	-	-	-	-	-	-	-	-	61	-	1 250
Mexico	-	56	119	-	-	-	-	-	-	-	-	-	-	-	334	-	-	-	-	120	-	629
Chile	57	-	378	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	436
Canada	-	-	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229
Domin Rep	59	-	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192
U.S.A.	-	-	179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	-56	184
Americas	1 260	2 217	5 414	-	61	-	-	-	-	959	-	-	309	-	-	334	70	-	-	2 169	-126	12 665
Spain	473	358	580	-	1 378	-	-	-	-	311	-	121	-	-	193	-	-	-	143	-3 839	-282	
U.K.	2 776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 776
Turkey	820	52	60	-	-	-	-	-	-	189	-	-	-	-	-	-	-	-	-	247	-	1 368
Portugal	541	-	170	-	110	-	-	-	-	61	-	-	-	-	-	-	-	-	58	-246	695	
Netherlands	-	-	-	-	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-351	-	-200
Italy	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	-	57	-	95	
Lithuania	-	-	-	-	-	-	-	-	-	45	-	-	-	-	-	-	-	-	-	-	-	45
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	42	
France	-	-	-	-	-	-	-	-	-	-	-	-	61	-	-	-	-	-	-	-463	-	-402
Belgium	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1 129	-1 125
Europe	4 610	410	810	-	1 530	-	-	-	-	757	-	121	61	-	193	-	-	-	547	-6 028	3 011	
Kuwait	920	246	-	-	-	189	-	-	-	-	-	-	-	72	-	-	-	-	336	-	1 763	
Dubai	-	121	-	-	-	67	-	-	67	-	-	-	-	67	-	-	-	-	109	-	432	
Israel	-	-	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84	
Middle East	920	367	84	-	-	255	-	-	67	-	-	-	-	139	-	-	-	-	445	-	2 278	
	24 522	10 272	6 727	3 924	3 577	2 637	2 633	2 438	2 350	2 325	1 608	1 589	1 417	1 125	934	602	333	312	253	6 352	-6 352	69 577



## Quantities (in $10^6$ T) received in 2014 by the importing countries from the exporting countries

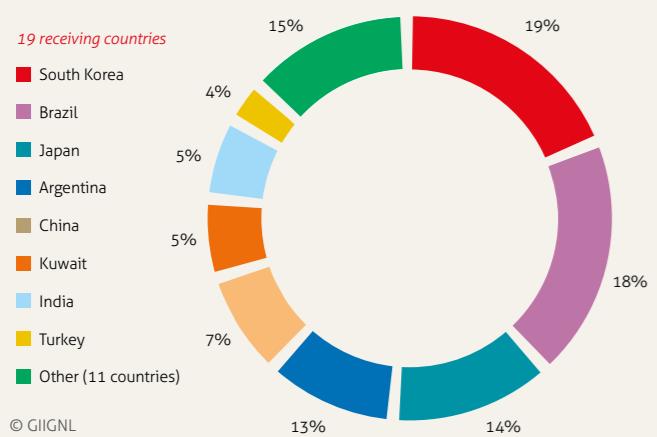
	Qatar	Malaysia	Australia	Nigeria	Indonesia	Trinidad & Tobago	Algeria	Russia	Oman	Yemen	Brunei	Abu Dhabi	Peru	Norway	Equ. Guin.	Papua New Guinea	Angola	Egypt	USA	Re-exports received	Re-exports loaded	Net Imports (after re-exports)
Japan	16.25	15.14	18.53	4.84	5.77	0.12	0.74	8.41	3.45	0.97	4.38	5.87	0.07	0.29	0.91	2.14	0.06	0.07	0.25	0.92	-	89.20
South Korea	13.19	3.80	0.85	3.33	5.15	0.13	0.37	1.91	3.77	3.00	0.72	0.13	-	0.07	0.07	-	0.07	0.07	-	1.21	-0.20	37.62
China	6.09	2.62	3.97	0.44	2.47	0.15	0.31	0.13	0.13	0.91	0.06	-	-	0.12	0.64	0.28	0.13	0.12	-	0.42	-	18.98
India	12.14	-	-	1.29	-	0.05	0.13	-	0.01	0.40	0.07	0.08	-	-	0.06	-	-	-	0.32	-	14.54	
Taiwan	5.99	2.87	0.13	0.12	2.12	0.06	0.06	0.06	0.12	0.19	0.63	-	-	-	0.07	0.97	-	-	0.06	-	13.45	
Singapore	-	-	-	-	0.07	0.28	-	-	-	-	-	-	-	-	1.20	-	-	-	0.14	-	1.68	
Malaysia	0.07	0.13	0.06	0.26	-	-	0.38	-	-	0.31	0.26	-	-	-	-	-	0.06	-	0.12	-	1.65	
Indonesia	-	-	-	-	1.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.56	
Thailand	0.95	0.06	-	0.13	-	0.06	-	0.07	0.07	0.07	-	-	-	-	-	-	-	-	-	-	1.40	
Asia	54.66	24.63	23.54	10.40	17.13	0.85	1.99	10.58	7.55	5.85	6.12	6.08	0.07	0.49	2.95	3.38	0.26	0.31	0.25	3.19	-0.20	180.10
U.K.	7.89	-	-	0.06	-	0.30	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40
Spain	2.30	-	-	2.08	-	1.49	3.76	-	0.12	-	-	-	0.92	0.93	-	-	-	-	-	0.14	-3.84	7.90
Turkey	0.82	-	-	1.09	-	0.06	3.05	-	-	-	-	-	-	0.19	-	-	-	-	0.25	-	5.45	
France	0.75	-	-	0.82	-	0.06	3.23	-	-	-	-	-	0.06	0.06	0.06	-	-	-	-	-0.46	4.58	
Italy	3.12	-	-	-	-	0.06	0.04	-	-	-	-	-	-	-	-	-	-	-	0.06	-	3.27	
Belgium	2.09	-	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.13	0.97
Portugal	0.54	-	-	0.27	-	0.17	0.11	-	-	-	-	-	-	0.06	-	-	-	-	0.06	-0.25	0.97	
Netherlands	0.09	-	-	-	-	0.16	-	-	-	-	-	-	-	0.51	-	-	-	-	-	-	-0.35	0.42
Greece	-	-	-	-	-	-	0.34	-	-	-	-	-	-	-	-	-	-	-	0.04	-	0.38	
Lithuania	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-	-	-	-	-	0.11
Europe	17.61	-	-	4.32	-	2.29	10.68	-	0.12	-	-	-	0.98	1.86	0.06	-	-	-	-	0.55	-6.03	32.44
Mexico	1.01	-	-	1.77	0.25	0.33	-	-	-	-	-	-	2.98	0.12	-	-	-	-	-	0.12	-	6.58
Brazil	0.45	-	-	1.36	-	1.28	0.06	-	-	-	-	-	-	0.75	0.31	-	0.07	-	-	1.13	-0.07	5.33
Argentina	0.69	-	-	0.64	-	2.14	-	-	-	-	-	-	-	0.15	-	-	-	-	0.80	-	4.42	
Chile	0.06	-	-	-	-	2.45	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	-	2.57
Puerto Rico	-	-	-	0.17	-	0.96	-	-	-	-	-	-	-	0.06	-	-	-	-	0.06	-	1.25	
U.S.A.	-	-	-	-	-	0.87	-	-	-	0.17	-	-	-	0.12	-	-	-	-	0.06	-0.06	1.16	
Domin Rep	0.06	-	-	-	-	0.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.83
Canada	-	-	-	-	-	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40
Americas	2.27	-	-	3.93	0.25	9.20	0.06	-	-	0.17	-	-	-	2.98	1.20	0.37	-	0.07	-	2.17	-0.13	22.53
Kuwait	0.92	0.14	-	0.36	-	0.68	-	-	0.06	0.19	-	-	-	-	-	-	-	-	-	0.34	-	2.68
Dubai	0.91	0.07	0.07	0.12	-	-	-	-	-	0.07	-	-	-	-	-	-	-	-	0.11	-	1.34	
Israel	-	-	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08
Middle East	1.83	0.21	0.07	0.48	-	0.76	-	-	0.06	0.26	-	-	-	-	-	-	-	-	0.45	-	4.10	
	76.37	24.83	23.60	19.14	17.38	13.09	12.72	10.58	7.73	6.27	6.12	6.08	4.03	3.55	3.38	3.38	0.33	0.31	0.25	6.35	-6.35	239.18

## International Re-exports

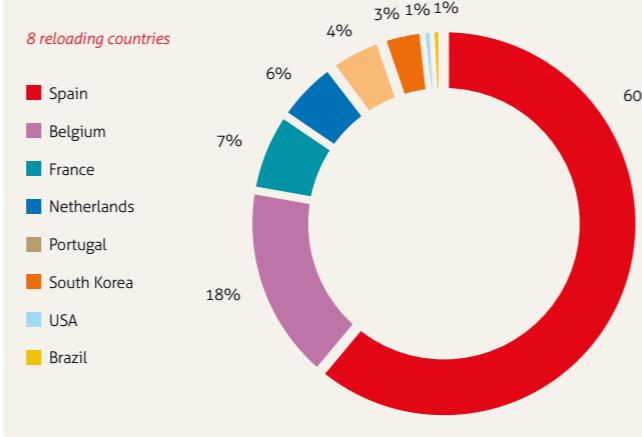
Export country	Import country	Re-exported volumes (Mt)	Total (Mt)
Belgium	ARGENTINA	0.11	1.13
	BRAZIL	0.09	
	DUBAI	0.32	
	ITALY	0.23	
	JAPAN	0.05	
	KOREA (SOUTH)	0.01	
	PORTUGAL	0.12	
	SINGAPORE	0.14	
	SPAIN	0.06	
	MEXICO	0.06	
France	INDIA	0.07	0.46
	MALAYSIA	0.06	
	JAPAN	0.06	
	KOREA (SOUTH)	0.11	
	BRAZIL	0.11	
	ARGENTINA	0.08	
	BRAZIL	0.05	
Netherlands*	ITALY	0.06	0.35
	JAPAN	0.05	
	KUWAIT	0.05	
	SPAIN	0.06	
	ARGENTINA	0.06	
	BRAZIL	0.18	
	ARGENTINA	0.47	
Spain	BRAZIL	0.50	3.84
	CHINA	0.35	
	DUBAI	0.06	
	GREECE	0.04	
	INDIA	0.19	
	JAPAN	0.62	
	KOREA (SOUTH)	0.78	
	KUWAIT	0.27	
	MALAYSIA	0.06	
	MEXICO	0.06	
	PUERTO RICO	0.06	
	TAIWAN	0.06	
	TURKEY	0.25	
	USA	0.06	
Europe		6.03	6.03
Brazil	ARGENTINA	0.07	0.13
USA	BRAZIL	0.06	
Americas		0.13	0.13
KOREA (SOUTH)	CHINA	0.07	0.20
	INDIA	0.06	
	JAPAN	0.07	
Asia		0.20	0.20
World		6.35	6.35

\*Also re-exported 13 small-scale cargoes to Sweden for a total volume of 0.05 Mt

### Re-exports received by receiving country in 2014 (6.4 Mt)



### Re-exports loaded by reloading country in 2014 (6.4 Mt)



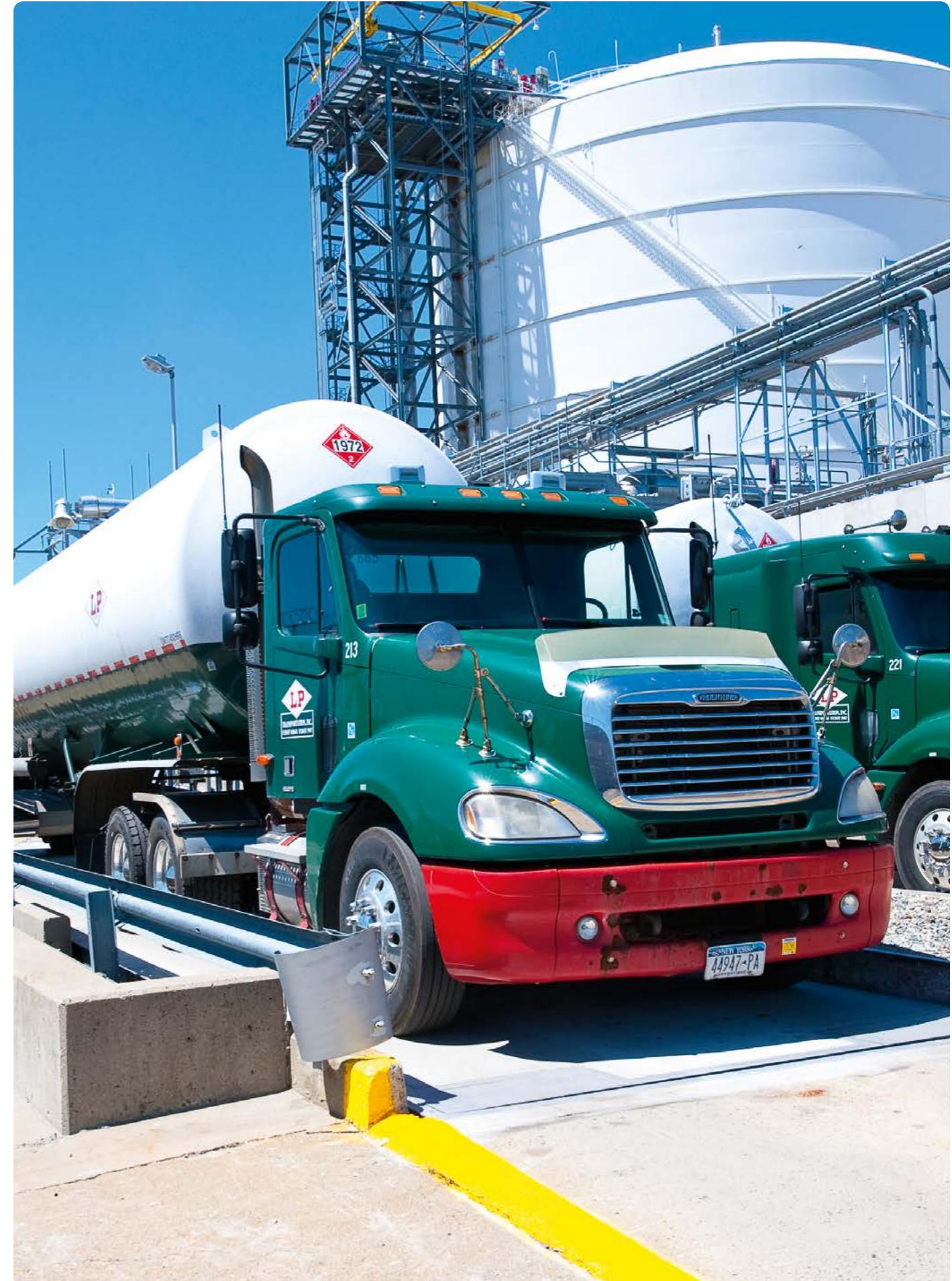
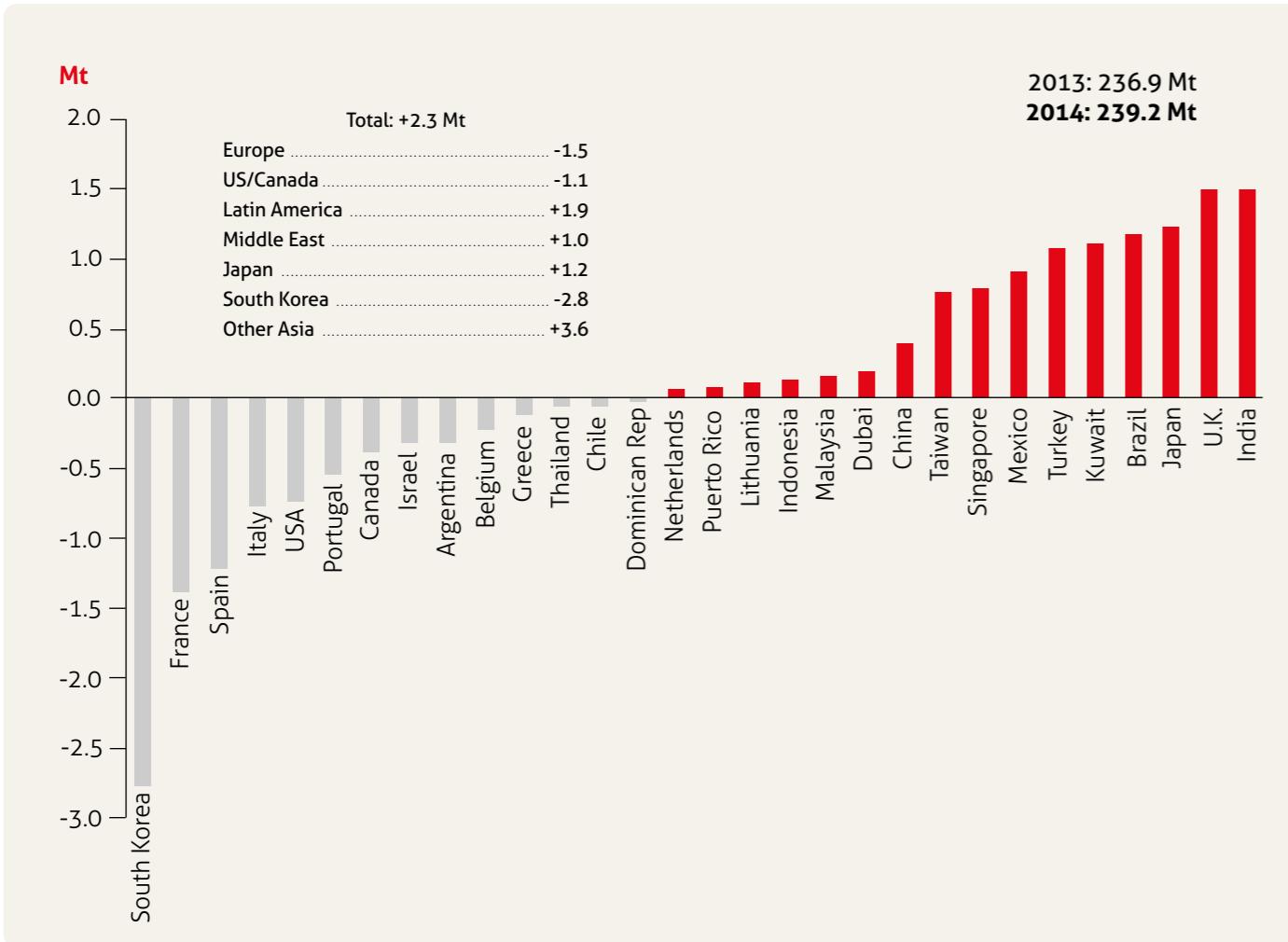
## LNG imports 2014 (net of re-exports)

	10 <sup>6</sup> m <sup>3</sup> liquid	10 <sup>6</sup> t	10 <sup>9</sup> m <sup>3</sup> (n) gaseous	Share (%)	Var. 2014/2013(%)
Belgium	2.13	0.97	1.21	0.4%	-18.9%
France	10.13	4.58	5.80	1.9%	-22.9%
Greece	0.84	0.38	0.48	0.2%	-16.8%
Italy	7.23	3.27	4.13	1.4%	-19.1%
Lithuania	0.24	0.11	0.14	0.0%	N/A
Netherlands	0.95	0.42	0.55	0.2%	15.7%
Portugal	2.15	0.97	1.23	0.4%	-35.4%
Spain	17.65	7.90	10.13	3.3%	-13.5%
Turkey	12.05	5.45	6.90	2.3%	24.0%
U.K.	18.55	8.40	10.60	3.5%	21.5%
Europe	71.93	32.44	41.16	13.6%	-4.4%
Argentina	10.00	4.42	5.77	1.8%	-6.4%
Brazil	11.96	5.33	6.87	2.2%	28.5%
Chile	5.95	2.57	3.46	1.1%	-1.7%
Dominican Rep	1.91	0.83	1.11	0.3%	-1.0%
Mexico	14.61	6.58	8.37	2.8%	16.0%
Puerto Rico	2.87	1.25	1.66	0.5%	7.4%
Canada	0.93	0.40	0.54	0.2%	-47.1%
USA	2.67	1.16	1.55	0.5%	-38.9%
Americas	50.90	22.53	29.34	9.4%	3.3%
China	41.77	18.98	23.83	7.9%	2.0%
India	32.11	14.54	18.34	6.1%	11.4%
Indonesia	3.48	1.56	1.99	0.7%	9.0%
Japan	195.18	89.20	111.07	37.3%	1.4%
South Korea	83.09	37.62	47.44	15.7%	-6.8%
Malaysia	3.66	1.65	2.09	0.7%	9.9%
Singapore	3.83	1.68	2.21	0.7%	84.8%
Taiwan	29.63	13.45	16.91	5.6%	5.8%
Thailand	3.10	1.40	1.77	0.6%	-3.2%
Asia	395.84	180.10	225.65	75.3%	1.2%
Dubai	2.95	1.34	1.69	0.6%	16.0%
Israel	0.19	0.08	0.11	0.0%	-79.2%
Kuwait	6.00	2.68	3.44	1.1%	69.1%
Middle East	9.15	4.10	5.24	1.7%	30.6%
Total	527.81	239.18	301.39	100%	1.0%

## Source of imports 2014

	10 <sup>6</sup> m <sup>3</sup> liquid	10 <sup>6</sup> t	10 <sup>9</sup> m <sup>3</sup> (n) gaseous	Share (%)	Var. 2014/2013(%)
Algeria	28.10	12.72	16.09	5.3%	17.7%
Angola	0.74	0.33	0.42	0.1%	1.3%
Egypt	0.72	0.31	0.42	0.1%	-88.3%
Equatorial Guinea	7.69	3.38	4.45	1.4%	-10.4%
Nigeria	42.37	19.14	24.19	8.0%	16.2%
Norway	7.92	3.55	4.54	1.5%	16.3%
Trinidad & Tobago	30.38	13.09	17.67	5.5%	-4.2%
Atlantic Basin	117.91	52.53	67.79	22.0%	3.5%
Abu Dhabi	13.01	6.08	7.37	2.5%	19.6%
Oman	16.91	7.73	9.60	3.2%	-7.5%
Qatar	168.45	76.37	96.13	31.9%	-2.1%
Yemen	14.18	6.27	8.18	2.6%	-8.1%
Middle East	212.55	96.45	121.28	40.3%	-1.9%
Australia	50.87	23.60	28.75	9.9%	5.3%
Brunei	13.26	6.12	7.48	2.6%	-12.6%
USA (Alaska)	0.60	0.25	0.35	0.1%	N/A
Indonesia	38.83	17.38	22.24	7.3%	-5.3%
Malaysia	53.87	24.83	30.66	10.4%	-1.2%
Papua New Guinea	7.50	3.38	4.29	1.4%	N/A
Peru	8.94	4.03	5.13	1.7%	-5.2%
Russia	23.49	10.58	13.41	4.4%	-1.0%
Pacific Basin	197.36	90.20	112.32	37.7%	2.7%
Total	527.81	239.18	301.39	100%	1.0%

## LNG Imports: 2014 vs 2013

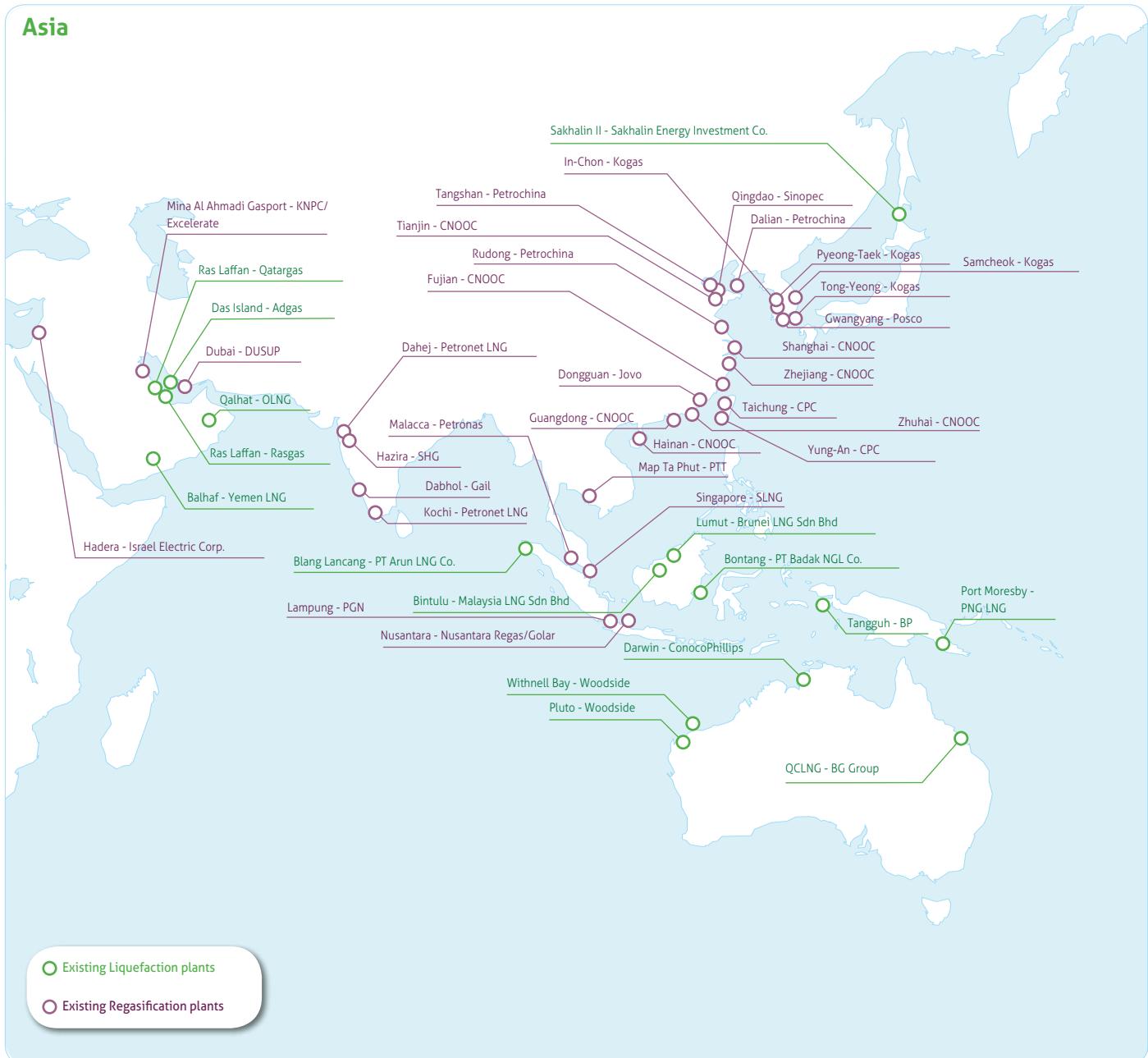


# Liquefaction plants

In 2014, LNG supply capacity increased marginally.

Total nameplate capacity reached 298 mtpa at year-end. However, force majeure in Angola and Egypt, feedgas limitation in Algeria and the late (December) start-up of QCLNG caused output to be significantly below this capacity.

Papua New Guinea became the 20<sup>th</sup> LNG exporting country. First exports from the 6.9 mtpa plant started in May (Spirit of Hela, bound for Japan). 2015 should see several more new liquefaction plants coming online, in particular from Australia.



## Algeria

- Following the start-up of the new 4.7 mtpa LNG train at Skikda in 2014, Algerian LNG production largely increased compared to 2013. Nevertheless, due to the limitation of feedgas, capacities are still used at a low rate (around 50%).

## Angola

- Having started in June 2013, the plant shut down in April 2014 for an extensive repair. Restart is not planned before end of 2015. Only four cargoes were delivered in 2014 (5 in 2013).

## Australia

- From the 61.8 mtpa capacity under construction in Australia, only one project - Queensland Curtis (QCLNG) - started operations in late 2014. Other projects are progressing well, but with some delays. Significant production - 25 to 30 mtpa - is expected to come on stream in 2015.

At the end of December 2014, BG announced the first LNG export from its **Queensland Curtis (QCLNG)** plant. The 2<sup>nd</sup> train should come in operation in the second half of 2015, and full production capacity of 8.5 mtpa should be reached by 2016.

## Liquefaction plants (cont'd.)

**Australia Pacific LNG** announced the delivery of first gas from its coal seam gas fields in the Surat Basin to its LNG facility. LNG production (a 9 mtpa train) is expected to start up by mid-2015.

The **GLNG Gladstone** project (a joint venture of Santos, Petronas, Total and KOGAS) is close to completion and the first train's production (3.9 mtpa) is planned for mid-2015.

Led by Chevron, the 15.6 mtpa **Gorgon project** was 90% completed at the beginning of 2015. Production could start around Q4 2015.

In **Wheatstone**, Chevron's other project of 8.9 mtpa, start-up was delayed to 2017.

Concerning the **Ichthys** project (Inpex, Total and other Japanese partners), first drilling operations started in early 2015. First train (4.2 mtpa) should not come online before 2017.

Shell's offshore **Prelude** 3.6 mtpa FLNG is still expected for 2017.

### Cameroon

- In Cameroon, on-shore, near-shore and off-shore geophysical and geotechnical (G&G) surveys in view to develop the **Cameroon LNG** project were successfully completed, in May and June 2014.

### Canada

- In December 2014, Petronas delayed FID on its 12 mtpa **Pacific Northwest LNG** project (Canada).
- BG Group delayed its **Prince Rupert** project to post-2020.
- In Kitimat, Shell Canada Energy (Shell), PetroChina Corporation, KOGAS and Mitsubishi Corporation have announced on 30 April 2014 the signing of a joint venture agreement to develop a proposed LNG export project in Kitimat - **LNG Canada**. KOGAS and Mitsubishi each sold 5% of their stake to Shell, who now owns 50% of the project.
- Repsol announced in February that the company was seeking partners for a \$4 billion Canadian LNG export facility. The plant - located at the existing Canaport terminal on the East coast of Canada - could have an annual capacity of 5 mtpa.

### Colombia

- In Colombia, construction of the 0.5 mtpa **Caribbean FLNG** was underway in Chinese shipyards at the end of the year. Operated by Exmar on behalf of Canadian oil company Pacific Rubiales, the FLNG was initially expected in the first half of 2015. However, financing difficulties have recently forced partners to delay the project. The total output should be sold to Gazprom Marketing & Trading under a 0.5 mtpa HOA signed in December 2014.

### Indonesia

- In Indonesia, the Arun export plant exported its last cargo in October 2014. The Arun plant has been converted into an import terminal which is expected to import its first cargo in Q1 2015.
- The 2 mtpa **Donggi-Senoro** project should start producing in the second half of 2015.

- In Keera, province of South Sulawesi, Hong-Kong based Energy World Corporation (EWC) has built an LNG liquefaction project (**Sengkang**) which includes four modular 0.5 mtpa LNG trains, LNG storage and loading facilities. The installation of the 88 000 m<sup>3</sup> tank is nearly completed and the containment system will be installed in 2015.

### Malaysia

- Petronas is developing a 1.2 mtpa floating liquefaction facility to be moored off the coast of Bintulu. The FLNG is expected to start producing in 2015. In 2014, Petronas took FID for a second 1.5 mtpa FLNG to be located off the coast of the state of Sabah. The second FLNG is expected to start production in 2018. A 3.6 mtpa expansion which could come online by the end of 2015 is also under construction on the 9<sup>th</sup> liquefaction train of the existing Bintulu plant.



### Mexico

- In February 2015, Sempra Energy signed a MOU with a subsidiary of Pemex to cooperate and coordinate in the development of a natural gas liquefaction project in Mexico. The project, planned to have the capacity to process about 7.8 mtpa, will be located at the site of the Energía Costa Azul receiving terminal in Ensenada, Mexico.

### Mozambique

- Anadarko and ENI, who are involved in Areas 1 and 4, expanded their exploration works to evaluate the gas reserves - estimated at over 100 Tcf -, and to complete front-end engineering studies.
- LNG production in Mozambique is not expected before the end of the decade.

### Papua New Guinea

- In 2014, first exports from the 6.9 mtpa plant in Papua New Guinea started on May 25 (Spirit of Hela bound for Japan). PNG became the 20<sup>th</sup> LNG exporting country and production quickly ramped-up.

### Tanzania

- Like Mozambique, Tanzania -with estimated gas reserves of more than 50 Tcf- should lead to LNG export development in East Africa. BG Group and partners (among whom Ophir Energy, Exxon Mobil and Statoil) have shown interest to develop a 2-train project in Tanzania's southern Lindi region.

### USA

- In Alaska, **Kenai LNG** plant resumed exports to Japan in May 2014. Two FIDs have been taken in the U.S.A in 2014: Cameron LNG (Trains 1 to 3, with a total capacity of around 12 mtpa) and Freeport (Trains 1 and 2, with a capacity of 9.3 mtpa). Cove Point (5.3 mtpa) is also reported to have started construction, which brings total U.S capacity under construction formally to 44.6 mtpa.

## Liquefaction plants (cont'd.)

### Sabine Pass

In 2014, Cheniere Energy continued construction of the first 4 trains of the Sabine Pass liquefaction plant, with first LNG expected from Train 1 in late 2015. The remaining three trains are expected to begin operations on a 6 to 9 months staggered basis. Capacity from the first four trains has been sold to BG (5.5 mtpa), Gail (3.5 mtpa), KOGAS (3.5 mtpa), and Gas Natural Fenosa (3.5 mtpa). Train 5 has been contracted to Centrica (1.7 mtpa) and Total (2.0 mtpa). In December 2014, Cheniere received its Final Environmental Impact Study (FEIS) from the Federal Energy Regulatory Commission (FERC) for Trains 5 and 6 at Sabine Pass, putting it on track to complete environmental permitting in Q1 2015.

### Cameron LNG

In August, Sempra Energy and its partners - GDF SUEZ, Mitsubishi and Mitsui - took the Final Investment Decision for the 12 mtpa natural gas liquefaction plant project of Cameron LNG.

The groundbreaking ceremony of the Cameron LNG project took place in Hackberry, Louisiana (USA) on the 23<sup>rd</sup> of October.

### Corpus Christi

Construction of the first three trains at Corpus Christi could start in 2015. The project is designed to produce about 13.5 mtpa of LNG over three trains. Cheniere is expected to receive all necessary permits from FERC and the Department of Energy (DOE) by the first half of 2015. Cheniere executed SPAs with six customers during 2014 totaling 6.9 mtpa, including Endesa (2.25 mtpa), Gas Natural Fenosa (1.5 mtpa), Iberdrola (0.76 mtpa), Woodside (0.85 mtpa), Électricité de France (0.77 mtpa), and Energias de Portugal (0.77 mtpa). In total, Cheniere has now SPAs in place for a total of 8.42 mtpa over 20 years.

### Cove Point

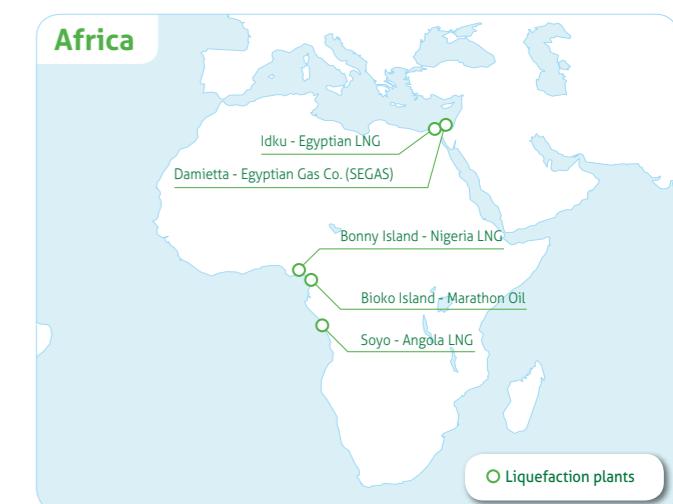
September 2014, Dominion received approval from the U.S. Federal Energy Regulatory Commission to site, construct and operate facilities for the liquefaction and export of domestically produced natural gas. At the time of this writing, Dominion is reported to have begun the construction-related activities in October 2014, and aims to start operations in later 2017.

### Freeport LNG

In November 2014, Freeport LNG received final approvals for the liquefaction and LNG export facility from the U.S. Federal Energy Regulatory Commission and the U.S. Department of Energy, which give to the company all authorizations required for the construction of the project.

In November 2014, Freeport LNG closed financing on trains 1 and 2 of the liquefaction project. The first two trains are anticipated to start operations respectively 45 and 50 months from start of construction.

Financial close and start of construction on a 3<sup>rd</sup> train of the project is expected to occur in the second quarter of 2015. Each liquefaction train has a nameplate design capacity of 4.6 mtpa. Approximately 13.2 mtpa have been contracted under use - or - pay liquefaction tolling agreements with Osaka Gas, Chubu Electric, BP Energy Company, Toshiba Corp. and SK E&S LNG, LLC.



## Liquefaction plants at the end of 2014

Country	Site	Liquefaction		Storage		Owner(s)	Operator	LT Buyer(s)	Start-up date
		Number of trains	Nominal capacity 10 <sup>6</sup> t per year	Number of tanks	Total capacity m <sup>3</sup>				
<b>Atlantic Basin</b>									
Algeria	Arzew-Bethioua GL 1Z	6	7.90	3	300 000	Sonatrach	Sonatrach	GDF SUEZ, Botas, ENI, Iberdrola, Depa, Cepsa Gas, Statoil, Endesa	1978
	Arzew-Bethioua GL 2Z	6	8.20	3	300 000	Sonatrach	Sonatrach	GDF SUEZ, Botas, ENI, Iberdrola, Depa, Cepsa Gas, Statoil, Endesa	1981
	Arzew-Bethioua GL 3Z	1	4.70	2	320 000	Sonatrach	Sonatrach	GDF SUEZ, Botas, ENI, Iberdrola, Depa, Cepsa Gas, Statoil, Endesa	2014
	Skikda - GL1K/GL2K	3	3.20	5	308 000	Sonatrach	Sonatrach	GDF SUEZ, Botas, ENI, Iberdrola, Depa, Cepsa Gas, Statoil, Endesa	1972-1981
Angola	Soyo	1	5.20	2	320 000	Angola LNG (Chevron 36.40%, Sonangol 22.80%, BP 13.60%, ENI 13.60%, Total 13.60%)	Chevron	Angola LNG	2013
Egypt	Damietta	1	5	2	300 000	Union Fenosa Gas (80%), EGPC (10%), EGAS (10%)	SEGAS SERVICES	BP, Union Fenosa Gas	2005
	Idku	2	7.20	2	280 000	T1: BG (35.50%), Petronas (35.50%), GDF SUEZ (5%), Egyptian LNG (EGPC 12%, EGAS 12%)	LNOC	Gas Natural Fenosa	2005
Equatorial Guinea	Bioko Island	1	3.70	2	272 000	Marathon (60%), Sonagas (25%), Mitsui (8.50%), Marubeni (6.50%)	EG LNG	BG	2007
Libya (stopped)	Marsa-el-Brega	4	3.20	2	96 000	LNOC	LNOC	Gas Natural Fenosa	1970
Nigeria	Bonny Island (NLNG T1-3)	3	9.60	3	336 800	Nigeria LNG (NNPC 49%, Shell (25.60%), Total (15%), ENI (10.40%)	Shell	Enel, Gas Natural Fenosa, Botas, GDF SUEZ, GALP	1999-2002
	Bonny Island (NLNG T4 & 5)	2	8.10			Nigeria LNG (NNPC 49%, Shell (25.60%), Total (15%), ENI (10.40%))	Shell	BG, Shell, Iberdrola, Endesa, GALP, Total, ENI	2006
	Bonny Island (NLNG T6)	1	4.10			Nigeria LNG (NNPC 49%, Shell (25.60%), Total (15%), ENI (10.40%))	Shell	Total, Shell	2008
Norway	Hammerfest	1	4.30	2	250 000	Statoil (36.79%), Petro (30%), TOTAL (18.40%), GDF SUEZ (12%), RWE (2.81%)	Atlantic LNG		2007
Trinidad & Tobago	Point Fortin	4	15.50	4	524 000	Atlantic LNG			1999
	Atlantic LNG T1	1	3.30	2	204 000	BP (34%), BG (26%), Shell (20%), CIC (10%), NGC Trinidad (10%)	Atlantic LNG	GDF SUEZ, Gas Natural Fenosa	1999
	Atlantic LNG T2 & 3	2	7	1	160 000	BP (42.50%), BG (32.50%), Shell (25%)	Atlantic LNG	BG, BP, Gas Natural Fenosa, Naturgas, Shell	2002-2003
	Atlantic LNG T4	1	5.20	1	160 000	BP (37.80%), BG (28.90%), Shell (22.20%) NGC Trinidad (11.10%)	Atlantic LNG	BG, BP, Shell	2006
<b>Middle-East</b>									
Abu Dhabi	Das Island	3	5.80	3	240 000	ADNOC (70%), Mitsui (15%), BP (10%), Total (5%)	Adgas	The Tokyo Electric Power Co.	1977
Oman	Qalhat	2	7.10	2	240 000	Omani gvt (51%), Shell (30%), Total (5.50%), Korea LNG (5%), Mitsubishi (2.80%), Mitsui (2.80%), Partex (2%), Itochu (0.90%)	Oman LNG	KOGAS, Shell, Osaka Gas, BP, Itochu	2000
						Omani gvt (46.80%), Oman LNG (36.80%), Union Fenosa Gas (7.40%), Osaka Gas (3%), Mitsubishi (3%), Itochu (3%)	Qalhat LNG	Mitsubishi, Osaka Gas, Union Fenosa Gas, Itochu	2006

## Liquefaction plants 2014 (cont'd.)

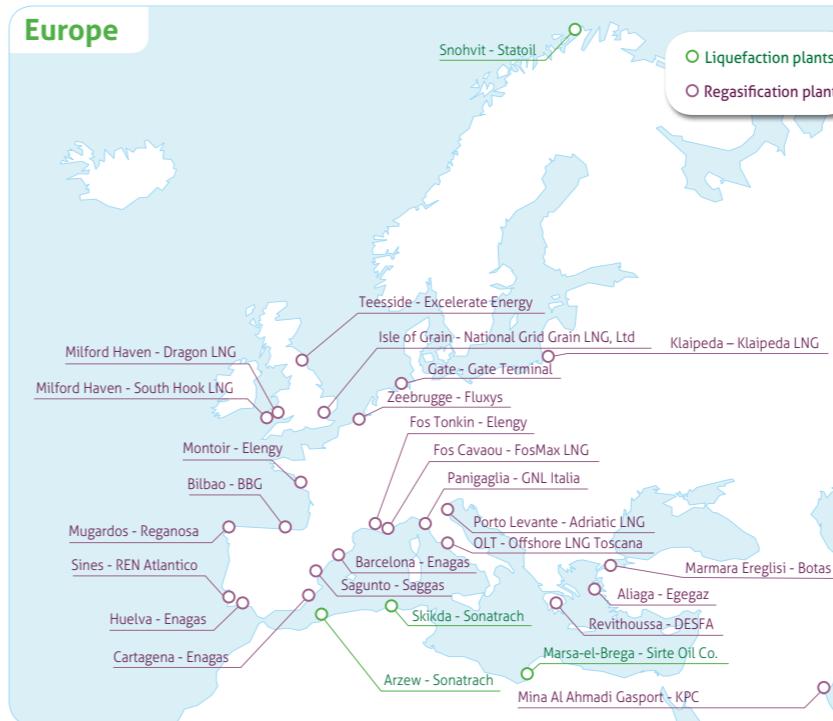
Country	Site	Liquefaction		Storage		Owner(s)	Operator	LT Buyer(s)	Start-up date	
		Number of trains	Nominal capacity 10 <sup>6</sup> t per year	Number of tanks	Total capacity m <sup>3</sup>					
<b>Pacific Basin</b>										
Qatar	Ras Laffan (Qatargas 1 - T1 & 2)	2	6.40	4	340 000	Qatar Petroleum (65%), ExxonMobil (10%), Total (10%), Marubeni (7.50%), Mitsui (7.50%)	Qatargas I	Chubu Electric, The Chugoku Electric, The Kansai Electric, Osaka Gas, Toho Gas, Tohoku Electric, Tokyo Gas, Tokyo Electric, Gas Natural Fenosa, PTT	1999	
	Ras Laffan (Qatargas 1 - T3)	1	3.10			Qatar Petroleum (65%), ExxonMobil (10%), Total (10%), Marubeni (7.50%), Mitsui (7.50%)		Tokyo Gas	1999	
	Ras Laffan (Qatargas 2 - T1)	1	7.80			Qatar Petroleum (70%), ExxonMobil (30%)		ExxonMobil, Chubu	2009	
	Ras Laffan (Qatargas 2 - T2)	1	7.80			Qatar Petroleum (65%), ExxonMobil (18.30%), Total (16.70%)		ExxonMobil, Total, CNOOC	2009	
	Ras Laffan (Qatargas 3 - T1)	1	7.80	8	1 160 000	Qatar Petroleum (68.50%), ConocoPhillips (30%), Mitsui (1.5%)	Qatargas III	ConocoPhillips, Shell, Centrica	2010	
	Ras Laffan (Qatargas 4 - T1)	1	7.80			Qatar Petroleum (70%), Shell (30%)		Shell, Petrochina, Marubeni	2011	
	Ras Laffan (Rasgas 1 - T1 & 2)	2	6.60			Qatar Petroleum (63%), ExxonMobil (25%), KOGAS (5%), Itochu (4%), LNG Japan (3%)		RasGas I	KOGAS, ENI 1999-2000	
	Ras Laffan (Rasgas 2 - T1)	1	4.70			Qatar Petroleum (70%), ExxonMobil (30%)		Petronet LNG	2004	
Yemen	Ras Laffan (Rasgas 2 - T2)	1	4.70	6	840 000	Qatar Petroleum (70%), ExxonMobil (30%)	RasGas II	Endesa, Edison	2005	
	Ras Laffan (Rasgas 2 - T3)	1	4.70			Qatar Petroleum (70%), ExxonMobil (30%)		Petronet, EDF, ENI, CPC	March 2007	
	Ras Laffan (Rasgas 3 - T1)	1	7.80			Qatar Petroleum (70%), ExxonMobil (30%)		Petronet, KOGAS	August 2009	
	Ras Laffan (Rasgas 3 - T2)	1	7.80			Qatar Petroleum (70%), ExxonMobil (30%)		ExxonMobil	April 2010	
	Balhaf - T1 & 2	2	6.70	2	280 000	Yemen LNG (Total 39.60%, Hunt Oil Co. 17.20%, Soc. Corp. 9.60%, KOGAS 6%, Yemen Gas Co. 16.70%, Hyundai 5.90%, GASSP 5%)	Yemen LNG	KOGAS, GDF SUEZ, Total	October 2009 & April 2010	
	Withnell Bay - Trains 1 - 4	4	12.10			Woodside, Shell, BHP, BP Australia, Chevron (17% each)		Woodside	Tokyo Electric, Chubu Electric, Kansai Electric, The Chugoku Electric, Kyushu Electric, Tokyo Gas, Osaka Gas, Shizuoka Gas, Tohoku Electric, Nippon Gas, KOGAS, Shell, CNOOC	
Australia	Withnell Bay - Train 5	1	4.30	1	65 000	Woodside, Shell, BHP, BP Australia, Chevron (17% each)	Woodside	Tokyo Electric, Chubu Electric, Kansai Electric, The Chugoku Electric, Kyushu Electric, Tokyo Gas, Osaka Gas, Shizuoka Gas, Tohoku Electric, Nippon Gas, KOGAS, Shell Hazira Gas, CNOOC	2008	
	Darwin	1	3.40	1	188 000	ConocoPhillips (57%), ENI, Santos, Inpex (11% each) The Tokyo Electric Power Co. (6%), Tokyo Gas (3%)		ConocoPhillips	Tokyo Electric, Tokyo Gas	2006
	Pluto	1	4.30	2	240 000	Woodside (90%), The Kansai Electric (5%), Tokyo Gas (5%)		Woodside	The Kansai Electric, Tokyo Gas, Petronas	2012
	Curtis Island	1	4.30	2	280 000	BG (50%), CNOOC (50%)		BG	BG, CNOOC	2014
	Lumut	5	7.10	3	195 000	Brunei gvt (50%), Shell (25%), Mitsubishi (25%)	Brunei LNG Sdn Bhd	Tokyo Gas, The Tokyo Electric Power Co., Osaka Gas, KOGAS	1973	

## Liquefaction plants 2014 (cont'd.)

Country	Site	Liquefaction		Storage		Owner(s)	Operator	LT Buyer(s)	Start-up date	
		Number of trains	Nominal capacity 10 <sup>6</sup> t per year	Number of tanks	Total capacity m <sup>3</sup>					
U.S.A.	Kenai	1	0.40	3	108 000	ConocoPhillips	ConocoPhillips	Tokyo Gas, Tokyo Electric	1969	
Indonesia	Blang Lancang Arun (ceased operations in October 2014)			5	636 000	Pertamina	PT Arun NGL Co. (Pertamina 55%, ExxonMobil 30%, JILCO 15%)	KOGAS	1978-2014 (decommissioned)	
	Bontang - Badak (Total capacity)	8	22.30	6	630 000		Kansai Electric, Chubu Electric, Kyushu Electric, Osaka Gas, Toho Gas, Nippon Steel Co.			
	Badak A & B	2					Kansai Electric, Chubu Electric, Osaka Gas, Toho Gas		1977	
	Badak C & D	2					CPC		1983	
	Badak E	1					Tokyo Gas, Osaka Gas, Toho Gas, Hiroshima Gas, Nippon Gas		1990	
	Badak F	1					KOGAS		1994	
	Badak G	1					CPC		1998	
	Badak H	1							1998	
Malaysia	Tangguh	2	7.60	2	340 000	Tangguh LNG	KOGAS, Posco, SK E&S, CNOOC, Chubu Electric, Kansai Electric, Tohoku Electric, Sempra LNG		2009	
	Bintulu MLNG 1 (Satu)	3	8.10	6	390 000	Petronas (90%), Mitsubishi (5%), Sarawak state gvt (5%)	Petronas	Tokyo Gas, Tokyo Electric, Saibu Gas, Shikoku Electric, Hiroshima Gas	1983	
	Bintulu MLNG 2 (Dua)	3	7.80			Petronas (60%), Shell (15%), Mitsubishi (15%), Sarawak state gvt (10%)	Malaysia LNG Dua	Chubu Electric, Tokyo Gas, Osaka Gas, Toho Gas, The Kansai Electric, Shizuka Gas, Tohoku Electric, Sendai City Gas, KOGAS, CPC	1995	
	Bintulu MLNG 2 (Dua)-debottleneck	1	1.50			Petronas (60%), Shell (15%), Mitsubishi (15%), Sarawak state gvt (10%)	Malaysia LNG Dua	Chubu Electric, Tokyo Gas, Osaka Gas, Toho Gas, The Kansai Electric, Shizuka Gas, Tohoku Electric, Sendai City Gas, KOGAS, CPC	2010	
Papua New Guinea	Bintulu MLNG 3 (Tiga)	2	6.80			Petronas (60%), Shell (15%), JX Nippon Oil (10%), Sarawak state gvt (10%), Mitsubishi (5%)	Malaysia LNG Tiga	Tokyo Gas, Osaka Gas, Toho Gas, Tohoku Electric, Japex, KOGAS, CNOOC	2003	
	PNG LNG	2	6.90	2	320 000	Exxon Mobil (33.20%), Oil Search (29%), Indep Public Business Corp (16.60%), Santos (13.50%), JX Nippon (3.70%), MRDC (2.80%), Marubeni (1%), Petromin PNG (0.20%)	PNG LNG	CPC, Sinopec, Tokyo Electric, Osaka Gas	2014	
Peru	Peru LNG	1	4.45	2	260 000	Hunt Oil (50%), Shell (20%), SK Energy (20%), Marubeni (10%)	Hunt Oil	Shell	2010	
Russia	Sakhalin 2	2	9.55	2	200 000	Sakhalin Energy Invest Co. (Gazprom 50%, Shell 27.50%, Mitsui 12.50%, Mitsubishi 10%)	Sakhalin Energy Invest Co. (Gazprom 50%, Shell 27.50%, Mitsui 12.50%, Mitsubishi 10%)	Gazprom, Shell, KOGAS, Chubu Electric, Hiroshima Gas, Kyushu Electric, Osaka Gas, Saibu Gas, Toho Gas, Tohoku Electric, Tokyo Electric, Tokyo Gas	2009	
	<b>Total</b>	<b>92</b>	<b>298</b>		<b>10 807 000</b>					

## Regasification plants

Six new terminals with a combined capacity of 25.5 Bcm/y (20 mtpa) started receiving LNG in 2014. Five new terminals are located in Asia: in China (Qingdao and Hainan), Japan (Hibiki), South Korea (Samcheok) and Indonesia (PGN FSU Lampung) and one terminal in Europe: in Lithuania (Klaipeda). At the end of the year, 21 projects worldwide were under construction, with 15 of them located in Asia. 7 expansion projects were also underway.



from 1 250 m<sup>3</sup> (per day) to 2 500 m<sup>3</sup> per day, allowing the company to load up to 50 LNG trucks per day. With the installation of a new third vaporizer, Phase I Expansion Project will expand total capacity to about 15 millions m<sup>3</sup> per day in early 2015. In 2014, President Michelle Bachelet announced that Chile would build a new liquefied natural gas terminal in the central-south region.

### China

- China is currently adding massive regasification capacity. Two new terminals came online in 2014 :
  - The 3 mtpa Qingdao import terminal developed by Sinopec was commissioned in December with a cargo from Papua New Guinea. Sinopec has a 2 mtpa long-term contract with PNG LNG.
  - The Hainan LNG terminal (CNOOC's 7th terminal) which received a commissioning cargo from Qatar in August. The FSU has a nameplate capacity of 3 mtpa and is the second terminal in China after Dalian to have reloading capabilities. Three terminals are being expanded:
- In Guangdong, a 4<sup>th</sup> tank with a capacity of 160 000 m<sup>3</sup> is being constructed and is scheduled to be commissioned by September 2015.
- Jiangsu (Rudong) terminal: construction of a 4<sup>th</sup> storage tank of 200 000 m<sup>3</sup>, planned to be completed at the end of December. The terminal has a send-out capacity of 3.5 mtpa.

In Tianjin, currently operated with the FSU Cape Ann, a land-based expansion project will increase the capacity to 6 mtpa. Six new terminals (Beihai, Shenzhen, Tianjin, Yantai, Yuedong and Zhangzhou) are also under construction, for a combined capacity of around 16 mtpa.

### Colombia

- In November, Höegh signed a twenty year charter to provide a 5 Bcm/y FSU to Colombia's Sociedad Portuaria El Cayao (Spec). At the end of the year, the project was subject to environmental approval. Höegh LNG plans to employ FSU#7 / HN2551 scheduled for delivery in May 2015.

### Dominican Republic

- Construction work started on a new 1 mtpa receiving terminal developed by BW Gas. The terminal will use an FSU or an FSU and it will supply a local power plant.

### Egypt

- In Egypt, Höegh LNG signed a five year FSU time charter contract with state company Egas. With a capacity of around 5 Bcm/y, the Höegh Gallant FSU is expected to start operating in 2015.

### Emirates

- The United Arab Emirates are planning to develop a 9 mtpa terminal in Fujairah with possible start-up in 2018.

### France

- In Dunkirk, the construction of the 13 Bcm/y regasification plant was 83.7% complete at the end of 2014, on time and in line with budget. The terminal will include 3 storage tanks of 190 000 m<sup>3</sup> and it will be able to accommodate Q-Max vessels.

The 1<sup>st</sup> LNG commissioning vessel is planned during the summer 2015 and commercial start-up date remains scheduled for November 2015.

## Regasification plants (cont'd.)



### Greece

- In Revithoussa, the 3<sup>rd</sup> expansion project has broken ground and is progressing. Completion is expected by end 2016. The project includes construction of a 3<sup>rd</sup> tank of 95 000 m<sup>3</sup> and facilities for reloading small and medium size ships.

### India

- In Dahej, a second jetty was commissioned in April 2014. The terminal is now capable of receiving Q-Max vessels, and the first Q-Max was received in December 2014. During the third quarter 2014, the Dahej terminal has operated at its highest level ever of around 117% of its nameplate capacity. Dahej's capacity expansion to 15 mtpa is underway. Completion is expected by Q4 2016.
- In Kochi, a truck loading facility started operating in September 2014.
- In Mundra (West Coast), GSPC and Adani Group are jointly developing a 7 Bcm/y onshore terminal expected to start-up by the end of 2016.
- On the East Coast, Petronet is planning to build their 3<sup>rd</sup> terminal in Gangavaram, with a proposed initial capacity of 5 mtpa. The terminal could be commissioned in 2017-18. To commence supplies as early as 2016, an FSRU option is being examined. Also in Andhra Pradesh province, Gail is looking at installing an FSRU, off the coast of Kakinada. The Kakinada project will have GDF Suez and Shell as strategic partners, each with a 26% stake. The FSRU would have a capacity of 3.5 mtpa and would supply gas to state-owned companies in Andhra Pradesh province. The project is scheduled to be completed in 18 months from the date of Final Investment Decision (FID).

### Indonesia

- In Indonesia, a 2<sup>nd</sup> regasification terminal started operating in July: the 2 mtpa PGN FSRU Lampung terminal (Höegh).
- In addition, the former Arun export plant is being converted into a 1.5 mtpa import terminal. Arun could start receiving LNG in 2015.

### Israel

- In January, Israel Natural Gas Lines launched the 3.7 mtpa Hadera LNG terminal, operated by Excelerate. The terminal received 0.4 Mt of LNG in 2013.

### Italy

- In Panigaglia, the plant is in low send-out conditions since 2013 and in 2014 the natural Boil-Off Gas (BOG) has represented the main part of the total send-out from the terminal. In July 2014, a new Boil-Off Gas compressor was commissioned and it is currently available. The expansion project includes: the possibility to unload larger ships (up to 140 000 m<sup>3</sup>), a revamping process of the plant's main equipments involving the storage tanks and the berthing area, and the installation of a new cogeneration plant (32 MW) for self-production of electricity.

### Japan

- Two terminals were under construction at the end of 2014:
  - **Hitachi** terminal, developed by Tokyo Gas, with an expected capacity of 1 mtpa in the first phase.
  - JX Nippon Oil & Energy's 4.6 mtpa **Hachinohe LNG** terminal, which was expected to start commercial operations in April 2015.
- In Ishikari, HOKKAIDO GAS is building a second LNG storage tank and installing an additional LNG vaporizer.

### Jordan

- In Aqaba, BAM has started construction work on the jetty and is expected to start importing LNG by Q2 2015. It will lease a 160 000 m<sup>3</sup> vessel from Golar for 10 years. The terminal will have a capacity of around 3.5 mtpa.

### South Korea

- KOGAS commissioned its 4<sup>th</sup> Receiving terminal, **Samcheok**, with 1 jetty and 3 storage tanks (phase 1) in July 2014. In accordance with the timeline of construction, Samcheok terminal will be further expanded to 12 storage tanks by May 2017, for a total storage capacity of 2,610,000 m<sup>3</sup> and a 7.9 mtpa regasification capacity.
- GS Energy and SK E&S are constructing a 1.5 mtpa terminal in **Boryeong**. South of Seoul, expected to start-up in 2016. In October 2014, Posco was said to be looking to sell a portion of its stakes in the existing Gwangyang terminal.

### Japan



### Kuwait

- In Kuwait, the Golar Igloo FSRU replaced Excelerate's Explorer in March 2014 and delivered the first cargo from Qatar. In the future, Kuwait plans to build an onshore terminal to replace the current FSRU.

### Lithuania

- In Lithuania, the FSRU Independence started-up in October. Operated by Höegh LNG and chartered by Klaipedos Nafta, the terminal started services as of January 1<sup>st</sup> 2015. It is able to reload to smaller ships and to LNG cargoes. Theoretical capacity is 4 Bcm/y. Litgas has a 0.54 Bcm/y LNG supply contract with Statoil.

### Netherlands

- In 2014, **Gate Terminal** started operations on its truck loading bay in February. Gate also took FID for a break bulk terminal next to Gate with a third and dedicated small scale jetty with Shell as launching customer. RFO is planned for 2016.

### Pakistan

- Developed by Engro in a record time, Pakistan's first LNG terminal was expected to be commissioned by the end of March 2015. Located at **Port Qasim**, the FSRU will be leased by Excelerate. It will be able to receive 9 mpta of LNG and to handle Q-Flex vessels up to 217 000 cubic meters.

### Philippines

- Australia's Energy World Corp. is building an LNG receiving terminal and a 600-megawatt power plant in **Pagbilao**, Quezon. The 1<sup>st</sup> phase will involve a 130 000 m<sup>3</sup> storage tank, regasification facility, jetty and supporting infrastructure. Three other projects are under consideration, two of which would be land-based (First Gen Corp, Osaka Gas) and one in the form of an FSRU project (Shell).

### Poland

- In Poland, construction of the **Swinoujscie** receiving terminal is still underway and will be completed in 2015. Polskie LNG S.A. is considering the expansion of the terminal just after its start-up. The possible expansion would include building a 3<sup>rd</sup> tank, reloading facilities to reload LNG to smaller vessels, bunkering installations and expansion of truck loading facilities. PGNiG and Qatargas renegotiated the supply contract so that the LNG initially intended for Poland can be delivered elsewhere in 2015.

### Puerto Rico

- A new FRSU has been ordered by Puerto Rico's utility Prepa to Excelerate. It will be Puerto Rico's second terminal. Designed to supply the 1500 MW Aguirre power plant, the **Aguirre Offshore GasPort** facility is expected to be in service in 2016.

### Singapore

- SLNG awarded the EPC contract in August 2014 for the expansion of terminal facilities. Expansion will include the addition of a 4<sup>th</sup> tank (260 000 m<sup>3</sup> net working capacity), additional process capacity to increase regasification capacity to about 16.6 Bcm/y and nitrogen ballasting facilities.
- SLNG also started offering Storage & Reload Services in July 2014 on a short term (storage of less than a year) basis.

### Spain

- During 2014, BBG has finished the construction of a new tank of 150 000 m<sup>3</sup> capacity, which implies a 50% increase in the storage capacity of the plant, allowing enough storage to accommodate Q-max vessels. Additionally, BBG has improved the system to be able to reload ships in a fast and efficient way, up to a loading rate capacity of 2 500 m<sup>3</sup> of LNG per hour. BBG has also initiated the truck loading service which had to be halted during the construction of the third tank for safety reasons.

### Taiwan

- In Taiwan, the capacity of **Taichung** terminal will be expanded from 4.5 mtpa to 5 mtpa. 3 additional 160 000 m<sup>3</sup> tanks and related regasification

### South America



facilities will be installed before 2019. CPC is also conducting feasibility studies for a 3<sup>rd</sup> terminal in Northern Taiwan. The receiving terminal would be able to handle up to 6 mtpa and would thus expand Taiwan's total receiving capacity to 17.5 mtpa in 2022 and 20 mtpa in 2024.

### Thailand

- PTT LNG has started to **Map Ta Phut** expand the terminal by building 2 LNG tanks (160 000 m<sup>3</sup> each), 1 Jetty (125 000 – 270 000 m<sup>3</sup>) as well as another 5 mtpa regasification unit. Phase 2 expansion is expected to be completed by 2017.

### United Arab Emirates

- In 2014, DUSUP signed a 10-year charter agreement with Excelerate Energy to lease an FSRU which will be located at the existing **Dubai LNG terminal**. The FSRU should replace the existing Golar Freeze, which will be dry-docked in 2015.

### United Kingdom

- Isle of Grain has taken FID on a truck loading station on course for completion in summer 2015. **Grain LNG** is continuing to progress a possible further expansion of the terminal (Phase 4).

### Uruguay

- Near Montevideo, GDF SUEZ has been selected by **Gas Sayago**, (joint-venture between state companies Ancap and UTE) to build and operate the country's 1<sup>st</sup> import terminal. The 263 000 m<sup>3</sup> FSRU is being built by Mitsui and will have a regasification capacity of 3.7 Bcm/y, with possible expansion to 5.5 Bcm/y. In a bridging phase starting in 2015, GDF SUEZ will use its GDF Suez Neptune SRV.

### Vietnam

- State company PV Gas is planning to start importing LNG in 2017 through a 1 mtpa terminal. In June 2014, Shell signed a Master Sales and Purchase Agreement with PetroVietnam Gas Joint Stock Corporation (PVGas) to supply LNG to the **Thi Vai LNG** receiving and regasification terminal once it comes onstream. On the same day, Shell also signed a Memorandum of Understanding for collaboration on the potential Son My LNG receiving and regasification terminal project in Vietnam with PVGas.

# Regasification Terminals at the end of 2014

Country	Site	Storage		Send-out		Owner	Operator	Third Party Access (TPA)	Services offered (Reloading, Transhipment, Bunkering, Truck loading)	Start-up date of the terminal
		Number of tanks	Total capacity in liq m³	Number of vaporizers	Nominal capacity in NG Bcm/y					
<b>AMERICAS</b>										
Argentina	Bahia Blanca *(f)		151 000	6	5.1	YPF	YPF	No		2008
	Escobar *(f)		151 000	6	5.1	UTE Escobar (50% Enarsa, 50% YPF)	YPF	No		2011
Brazil	Bahia *(f) - Golar Winter		137 000		8.3	Owner: Golar / Charterer: Petrobras	Petrobras	No		2013
	Guanabara Bay *(f) - Excelerate Experience		173 400	6	5	Owner: Excelerate Energy / Charterer: Petrobras		No		2009
	Pecem *(f) - Golar Spirit		129 000	2	2.5	Owner: Golar / Charterer: Petrobras	Petrobras	No		2009
Canada	Canaport LNG	3	160 000	8	10	Repsol (75%), Irving Oil (25%)	Repsol Canada Ltd	Yes (but no RTPA)		2009
Chile	Mejillones	1	175 000	3	2	Codelco (37%), GDF SUEZ (63%)	GNLM	Yes		2010
	Quintero	3	334 000	3	3.7	Terminal de Valparaiso SA (40%), ENAP (20%), Endesa (20%), Metrogas (20%)	GNL Quintero S.A.	Yes	Truck loading (4 bays-50 Trucks/day)	2009
Dominican Rep.	Punta Caudedo	1	160 000	2	2.3	AES	AES	No	Truck loading	2003
Mexico	Altamira	2	300 000	5	7.8	Terminal de LNG de Altamira (Vopak 60%, Enagas 40%)	Terminal de LNG de Altamira (Vopak 60%, Enagas 40%)	Yes		2006
	Energia Costa Azul	2	320 000	6	10.3	Sempra	Sempra	Yes		2008
	Manzanillo	2	300 000		5.2	Samsung (37.50%), Kogas (25%), Mitsui (37.50%)	KOGAS			2012
Puerto Rico	Penuelas	1	160 000	2	3.7	Gas Natural Fenosa (47.50%), GDF SUEZ (35%), Mitsui (15%), GE (2.50%)	Eco Electrica			2000
U.S.A.	Cameron LNG	3	480 000	10	15.5	Sempra	Sempra	Yes		2009
	Cove Point	5	380 000	10	10.7	Dominion Cove Point LNG	Dominion Cove Point LNG	Shell, BP, Statoil, Peakers 1/4 each		1978, restarted 2003
	Cove Point Expansion	2	320 000	15	8	Dominion Cove Point LNG	Dominion Cove Point LNG	Statoil		2008
	Elba Island	5	535 000	11	16.3	Southern LNG (Kinder Morgan)	Southern LNG	Yes		1978, restarted 2001, expanded 2006, expanded 2010
	Everett	2	155 000	4	6.9	GDF SUEZ	GDF SUEZ	Yes		1971
	Freeport LNG	2	320 000	7	18	Freeport LNG Development, L.P.	Freeport LNG Development, L.P.	Yes		2008
	Golden Pass	5	775 000	8	21.4	QP (70%) Exxon (17.60%), Conoco Philips (12.40%)	Golden Pass LNG	No		2010
	Gulf LNG Energy	2	320 000		12	Kinder Morgan (50%), GE (40%), AES (10%)	Gulf LNG Energy	No		2011
	Lake Charles	4	425 000	14	24.3	Trunkline LNG	Trunkline LNG	Yes		1982, Infrastructure enhancement project completed March 2010
	Northeast Gateway *(f)		151 000	6	4.1	Excelerate Energy	Excelerate Energy			2008
	Sabine Pass	5	800 000	16	41.3	Cheniere Energy	Cheniere Energy	Total, Chevron, CMI		2008
<b>ASIA</b>										
China	Dalian	3	480 000	3	4.1	Petrochina (75%), other companies	Petrochina	No	Reloading	2011
	Guangdong Dapeng, Shenzhen	3	480 000	7	9.2	CNOOC (33%), BP (30%), other companies	GDLNG	No	Truck loading	2006

\*(f): Floating technology

Country	Site	Storage		Send-out		Owner	Operator	Third Party Access (TPA)	Services offered (Reloading, Transhipment, Bunkering, Truck loading)	Start-up date of the terminal
		Number of tanks	Total capacity in liq m³	Number of vaporizers	Nominal capacity in NG bcm/y					
China	Dongguan, Guangdong province	2	160 000		1.4	Jovo Group				2013
	Fujian	2	320 000		3.6	Fujian LNG (CNOOC 60%, Fujian Inv. & Dev.Co. 40%)	CNOOC	No		2008
	Hainan	3	480 000		3	CNOOC	CNOOC	No	Reloading	2014
	Qingdao	3	480 000		4.2	Sinopec	Sinopec	No		2014
	Rudong, Jiangsu	2	320 000	3	4.8	Petrochina (55%), other companies	Petrochina	No		2011
	Shanghai, Mengtougou	3	120 000		0.3	Shanghai Gas Group	Shanghai Gas Group	No		2008
	Shanghai LNG	3	495 000		4.1	Shanghai LNG (CNOOC 45%, Shenergy Group Ltd 55%)	CNOOC	No		2009
	Tangshan (Caofeidian)	3	480 000		4.8	Petrochina	Petrochina, Beijing Entreprises			2013
	Tianjin *(f) - GDF SUEZ Cape Ann	2	60 000		3	Owner: Höegh LNG (50%), MOL (48.50%), Tokyo LNG Tanker Co. (1.50%) / Charterer: GDF SUEZ - relet to CNOOC for 5 years	Höegh LNG			2013
	Zhejiang, Ningbo	3	480 000		4.1	CNOOC (51%), other companies	CNOOC	No		2012
India	Zhuhai (Gaolan)	3	480 000		4.8	CNOOC	CNOOC			2013
	Dabhol	2	320 000	6	2.4	Ratnagiri Gas & Power Ltd (GAIL, NTPC)	Gail	No		2013
	Dahej	4	592 000	19	12.5	Petronet LNG	Petronet LNG	Yes (on a cargo by cargo basis)		2004, expansion in July 2009
	Hazira	2	320 000	5	6.9	Hazira LNG Private Ltd (Shell 74%, Total 26%)	Hazira LNG Private Ltd	No		2005
Indonesia	Kochi	2	368 000	6	6.3	Petronet LNG	Petronet LNG	Yes (on a cargo by cargo basis)		2013
	Lampung LNG *(f) - PGN FSRU Lampung		173 000	3	2.4	Owner: Höegh LNG / Charterer: PGN LNG	Höegh LNG			2014
Japan	Nusantara Regas Satu *(f)	6	125 016	6	4.1	Owner: Golar LNG Charterer: Nusantara Regas	PT Nusantara Regas (JV Pertamina & PGN)	No		2012
	Chita	7	640 000	11	14.8	Chita LNG	Chita LNG	Yes		1983
	Chita Kyodo	4	300 000	14	9.9	Toho Gas / Chubu Elec	Toho Gas	Negotiated TPA		1978
	Chita-Midorihama Works	2	400 000	8	10.5	Toho Gas	Toho Gas	Negotiated TPA		2001
	Fukuoka	2	70 000	7	1.1	Saibu Gas	Saibu Gas	Yes	Truck loading	1993
	Futtsu	10	1110 000	13	26	Tokyo Electric	Tokyo Electric	Yes		1985
	Hatsukaichi	2	170 000	4	1.2	Hiroshima Gas	Hiroshima Gas	No		1996
	Hibiki	2	360 000	5	2.9	Hibiki LNG (Saibu Gas 90%, Kyushu Electric 10%)	Hibiki LNG	Negotiated TPA	Truck loading	2014
	Higashi-Ongishima	9	540 000	9	18	Tokyo Electric	Tokyo Electric	Yes		1984
	Himeji	8	740 000	6	6.4	Osaka Gas	Osaka Gas	Yes		1984
	Himeji LNG	7	520 000	8	11	Kansai Electric	Kansai Electric	Yes	Truck loading	1979
	Ishikari LNG	1	180 000	3	2.3	Hokkaido Gas	Hokkaido Gas	Negotiated TPA	Truck loading	2012
	Joetsu	3	540 000	8	3.2	Chubu Electric	Chubu Electric			2011
	Kagoshima	2	86 000	3	0.3	Nippon Gas	Nippon Gas	No		1996
	Kawagoe	6	840 000	7	6.7	Chubu Electric	Chubu Electric	Yes		1997

\*(f): Floating technology

## Regasification Terminals in 2014 (cont'd.)

Country	Site	Storage		Send-out		Owner	Operator	Third Party Access (TPA)	Services offered (Reloading, Transhipment, Bunkering, Truck loading)	Start-up date of the terminal
		Number of tanks	Total capacity in liq m³	Number of vaporizers	Nominal capacity in NG bcm/y					
Japan	Mizushima	2	320 000	6	5.8	Mizushima LNG	Mizushima LNG	Yes		2006
	Nagasaki	1	35 000	3	0.2	Saibu Gas	Saibu Gas	Yes	Truck loading	2003
	Naoetsu	2	360 000	4	2	INPEX Corporation	INPEX Corporation	No		2013
	Negishi	14	1 180 000	13	13.8	Tokyo Gas /Tokyo Electric	Tokyo Gas /Tokyo Electric	Negotiated TPA	Truck loading	1969
	Niigata	8	720 000	14	11.6	Nihonkai LNG	Nihonkai LNG	Yes		1984
	Ohgishima	4	850 000	11	12.8	Tokyo Gas	Tokyo Gas	Negotiated TPA		1998
	Oita	5	460 000	6	6.3	Oita LNG	Oita LNG	Yes		1990
	Sakai	3	420 000	6	8.7	Kansai Electric	Kansai Electric	Yes	Truck loading	2006
	Sakaide	1	180 000	3	1.6	Sakaide LNG	Sakaide LNG	Yes		2010
	Senboku I	2	90 000	5	2.9	Osaka Gas	Osaka Gas	Yes		1972
	Senboku II	18	1 585 000	15	15.7	Osaka Gas	Osaka Gas	Yes		1977
	Shin-Minato	1	80 000	3	0.4	Gas Bureau, City of Sendai	Gas Bureau, City of Sendai	No		1997
	Sodegaura	35	2 660 000	37	41.5	Tokyo Gas / Tokyo Electric	Tokyo Gas / Tokyo Electric	Negotiated TPA	Truck loading	1973
	Sodeshi	3	337 200	8	3.9	Shimizu LNG (Shizuoka Gas 65%, TonenGeneral 35%)	Shimizu LNG	No	Truck loading	1996
	Tobata	8	480 000	9	10.3	Kita Kyushu LNG	Kita Kyushu LNG	Yes		1977
	Yanai	6	480 000	5	3.1	The Chugoku Electric	The Chugoku Electric	Yes		1990
	Yokkaichi LNG Centre	4	320 000	8	8.7	Chubu Electric	Chubu Electric	Yes		1987
	Yokkaichi Works	2	160 000	6	2.9	Toho Gas	Toho Gas	Negotiated TPA		1991
Malaysia	Melaka *(F)		260 000	3	5.2	Petronas	Petronas Gas	No		2013
Singapore	Jurong	3	540 000	5	7.8	SLNG	SLNG	Yes but sale of regasified LNG limited to licensed LNG importers	Cool-down Services, Storage & Reloading Services on short term (<1 year storage) basis	2013
South Korea	Gwangyang	4	530 000	2	2.3	Posco	Posco	No		2005
	Incheon	20	2 880 000	43	56.4	KOGAS	KOGAS	No		1996
	Pyeong-Taek	23	3 360 000	39	51.5	KOGAS	KOGAS	No		1986
	Samcheok	3	600 000	8	9	KOGAS	KOGAS	No		2014
	Tong-Yeong	17	2 620 000	20	33.7	KOGAS	KOGAS	No		2002
Taiwan	Taichung	3	480 000	8	6	CPC	CPC	No		2009
	Yung-An	6	690 000	18	12.8	CPC	CPC	No		1990
Thailand	Map Ta Phut	2	320 000	4	7.3	PTT	PTT LNG	No		2011
		<b>36226216</b>		<b>544.2</b>						
<b>MIDDLE EAST</b>										
Dubai	Jebel Ali *(F) - Golar Freeze		125 850		4.9	Owner: Golar / Charterer: Dubai Supply Authority	Golar	No		2010
Israel	Hadera *(F)		138 000	6	4.8	INGL	Excelerate Energy	No		2013
Kuwait	Mina Al Ahmadi *(F) - Golar Igloo		150 000		5.2	Owner: Golar / Charterer: KPC	Golar	No		2009
		<b>433 850</b>		<b>17.6</b>						

\*(F): Floating technology

Country	Site	Storage		Send-out		Owner	Operator	Third Party Access (TPA)	Services offered (Reloading, Transhipment, Bunkering, Truck loading)	Start-up date of the terminal
		Number of tanks	Total capacity in liq m³	Number of vaporizers	Nominal capacity in NG bcm/y					
<b>EUROPE</b>										
Belgium	Zeebrugge	4	380 000	12	9	Fluxys LNG	Fluxys LNG	Yes	Reloading, Bunkering, Truck loading	1987
France	Fos-Cavaou	3	330 000	4	8.3	Fosmax LNG (Eleny 72.50%, Total 27.50%)	Eleny	Yes	Reloading, Bunkering	2009 (commercial operation from April 2010)
	Fos-sur-Mer	3	150 000	12	5.5	Eleny	Eleny	Yes	Reloading, Bunkering, Truck loading	1972
	Montoir-de-Bretagne	3	360 000	11	10	Eleny	Eleny	Yes	Transhipment, Reloading, Bunkering, Truck loading	1980
Greece	Revithoussa	2	130 000	6	5	DESFA S.A.	DESFA S.A.	Yes		2000
Italy	Offshore Livorno *(F)	4	135 000	3	4.1	OLT (E.ON 48.20%, IREN Group 49.10%, other 2.70%)	ECOS (Exmar, Fratelli Cosulich)	Yes		2013
	Panigaglia	2	100 000	4	3.3	GNL Italia S.p.A.	GNL Italia S.p.A.	Yes		1971
	Rovigo (Gravity Based Structure)	2	250 000	5	8	Qatar Petroleum (22%), Edison (7.30%), ExxonMobil (70.70%)	Adriatic LNG (Qatar Petroleum, Edison, Exxon)	Yes (20%)		2009
Lithuania	Klaipeda *(F) - FSU Independence		173 000	4	4	Owner: Höegh LNG / Charterer: Klaipedos Nafta	Höegh LNG			2014
Netherlands	Rotterdam	3	540 000	8	12	Gasunie (47.50%), Vopak (47.50%), OMV (5%)	Gate Terminal	Yes		2011
Portugal	Sines	3	390 000	7	7.6	Ren Atlântico	Ren Atlântico	Yes	Reloading, Truck loading	2004
Spain	Barcelona	6	760 000	13	17.1	Enagas	Enagas	Yes	Truck loading	1969
	Bilbao	3	450 000	4	7	Enagas (50%) EVE (50%)	Bahia de Bizkaia Gas, SL (BBG)	Yes	Reloading, Truck loading	2003
	Cartagena	5	587 000	9	11.8	Enagas	Enagas	Yes	Transhipment, Reloading, Truck loading	1989
	Huelva	5	619 500	9	11.8	Enagas	Enagas	Yes	Reloading, Truck loading	1988
	Mugardos	2	300 000	3	3.6	Gadisa (20.30%), Forestal del Atlantico (16.20%), Sonatrach (10%), Gasifica S.A. (21%), Comunidad Autonoma de Galicia (17.50%), First State Regasificadora S.L.U. (15%)	Reganosa	Yes	Reloading, Bunkering, Truck loading	2007
Turkey	Sagunto	4	600 000	5	8.8	Union Fenosa Gas (42.50%), Oman Oil (7.50%), Osaka Gas (20%), Deutsche Asset & Wealth Management (30%)	Saggas	Yes	Reloading, Truck loading	2006
	Aliaga/Izmir	2	280 000	5	6	Egegaz	Egegaz	No	Truck loading	2006
United-Kingdom	Marmara Ereglisi	3	255 000	7	6.2	Botas	Botas	No	Truck loading	1994
	Dragon	2	320 000	6	7.6	BG Group (50%), Petronas (50%)	Dragon LNG	Yes (but no RTPA)		2009
	Isle of Grain	8	1 000 000	14	20.5	National Grid	Grain LNG	Yes (but no RTPA)	Truck loading from summer 2015, Cool-Down services	2005
	South Hook LNG	5	775 000	15	21.3	Qatar Petroleum International (67.50%), Exxon Mobil (24.15%), Total (8.35%)	South Hook LNG Terminal Company Ltd	Yes		2009
	Teesside *(F)		138 000		4.2	Excelerate Energy	Excelerate Energy			2007
						<b>9022500</b>		<b>202.7</b>		
		<b>Total World</b>				<b>52 993 966</b>		<b>1 014.1</b>		

\*(F): Floating technology

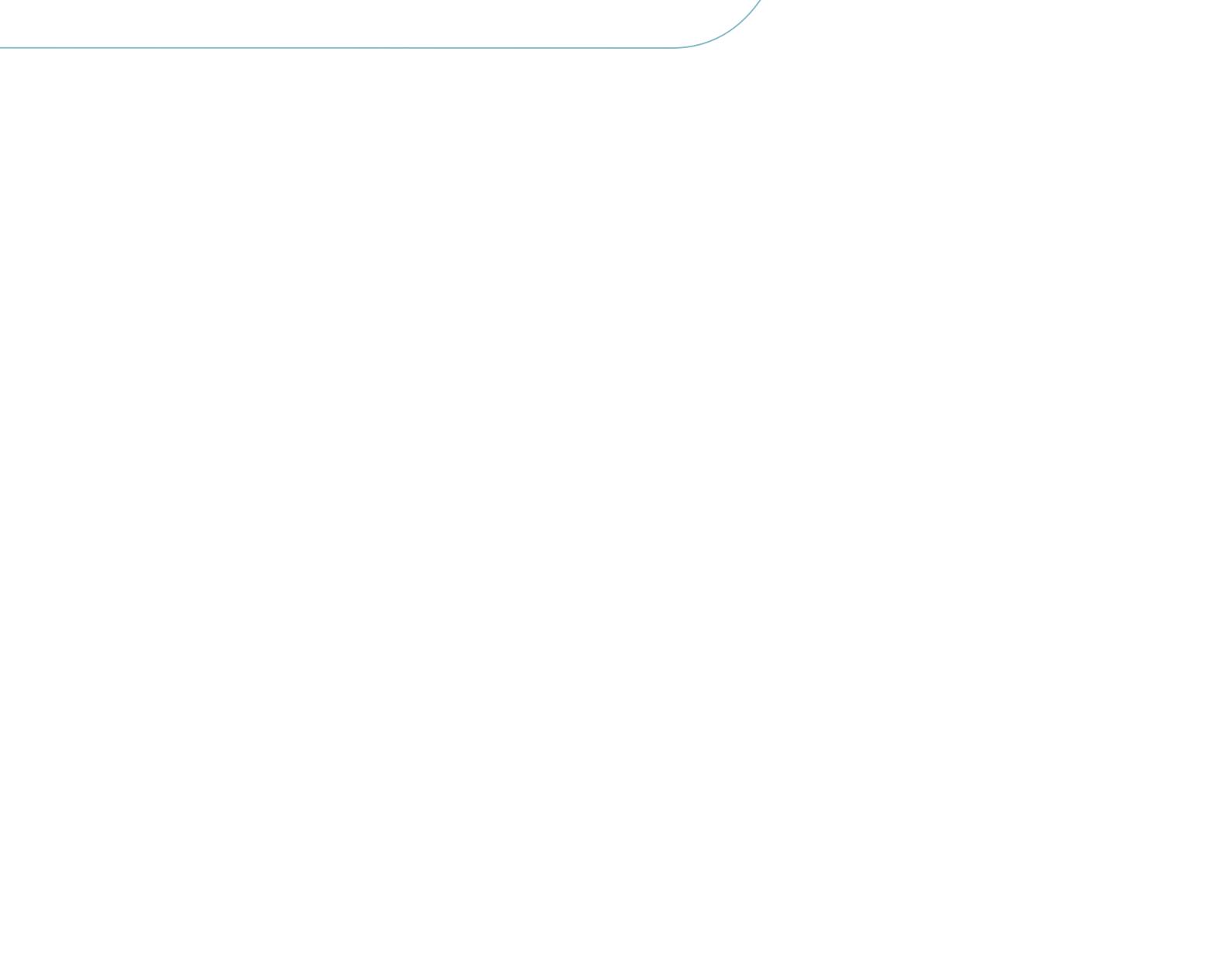
# Sea transportation routes

	Loading point	Unloading point	Distance in nautical miles
Algeria	Bethioua	Aliaga	1 500
	Bethioua	Bahia	355
	Bethioua	Barcelona	343
	Bethioua	Caofeidian	9 536
	Bethioua	Cartagena	113
	Bethioua	Chita	8 502
	Bethioua	Dahej	4 775
	Bethioua	Dalian	9 413
	Bethioua	Fos Cavaou	528
	Bethioua	Fujian	8 476
	Bethioua	Futtsu	9 604
	Bethioua	Higashi-Oghishima	9 605
	Bethioua	Huelva	373
	Bethioua	Incheon	9 241
	Bethioua	Isle of Grain	1 676
	Bethioua	Joetsu	9 720
	Bethioua	Melaka	1 559
	Bethioua	Oita	9 351
	Bethioua	Pyeong Taek	9 283
	Bethioua	Reganosa	945
	Bethioua	Revithoussa	1 050
	Bethioua	Sagunto	243
	Bethioua	Sakai	9 462
	Bethioua	Shanghai	8 983
	Bethioua	Sines	504
	Bethioua	Yung-An	8 328
Skikda	Barcelona	349	
	Cartagena	388	
	Fos Cavaou	435	
	Fos-sur-Mer	400	
	Huelva	1 330	
	Panigaglia	456	
	Reganosa	1 266	
	Revithoussa	920	
	Sagunto	384	
	Sines	870	
Angola	Soyo	Dapeng	8 866
	Soyo	Guanabara Bay	3 395
	Soyo	Ningbo	9 499
	Soyo	Senboku	10 002
	Soyo	Tong-Yeong	9 819
Australia	Darwin	Futtsu	3 036
	Darwin	Higashi-Oghishima	3 056
	Darwin	Negishi	3 017
	Darwin	Oghishima	3 036
	Darwin	Sodegaura	3 045
	NWS	Caofeidian	3 816
	Zeebrugge	Bahia	4 529
Belgium	Zeebrugge	Bahia Blanca	6 615
	Zeebrugge	Barcelona	1 890
	Zeebrugge	Escobar	6 378
	Zeebrugge	Guanabara Bay	5 219
	Zeebrugge	Huelva	1 222
	Zeebrugge	Incheon	10 909
	Zeebrugge	Jebel Ali	6 217
	Zeebrugge	Jurong Island	8 342
	Zeebrugge	Niigata	11 335
	Zeebrugge	Panigaglia	2 214

	Loading point	Unloading point	Distance in nautical miles
France	Fos Cavaou	Pecem	3 725
	Fos Cavaou	Pyeong Taek	9 242
	Montoir de Bretagne	Altamira	4 969
	Montoir de Bretagne	Dahej	3 871
	Montoir de Bretagne	Melaka	819
	Montoir de Bretagne	Mizushima	10 680
Brazil	Guanabara Bay	Escobar	1 200
	Guanabara Bay	Pecem	1 549
	Lumut	Futtsu	2 390
	Lumut	Himeji	2 999
	Lumut	Incheon	2 854
	Lumut	Melaka	5 561
	Lumut	Negishi	2 416
	Lumut	Niigata	2 525
	Lumut	Oita	2 880
	Lumut	Pyeong Taek	2 082
Brunei	Lumut	Sakai	2 201
	Lumut	Senboku	2 405
	Lumut	Shanghai	1 792
	Lumut	Sodegaura	2 430
	Lumut	Tobata	2 058
	Lumut	Tong-Yeong	2 014
	Lumut	Yung-An	1 186
	Idku	Fujian	7 188
	Idku	Melaka	5 125
	Idku	Yanai	3 535
Egypt	Idku	Ningbo	7 343
	Idku	Sodeshi	7 980
	Bioko Island	Bahia	3 011
	Bioko Island	Caofeidian	10 771
	Bioko Island	Chita	10 789
	Bioko Island	Dahej	7 127
	Bioko Island	Dapeng	9 516
	Bioko Island	Guanabara Bay	3 476
	Bioko Island	Himeji	10 781
	Bioko Island	Incheon	10 651
Equatorial Guinea	Bioko Island	Jurong Island	8 000
	Bioko Island	Kawagoe	10 791
	Bioko Island	Montoir de Bretagne	4 135
	Bioko Island	Ningbo	10 105
	Bioko Island	Oghishima	10 897
	Bioko Island	Oita	10 616
	Bioko Island	Pyeong Taek	10 567
	Bioko Island	Quintero	6 786
	Bioko Island	Sodeshi	10 833
	Bioko Island	Tobata	10 591
France	Bioko Island	Tong-Yeong	10 578
	Bioko Island	Yung-An	9 657
	Bioko Island	Zhuhai	9 389
	Fos Cavaou	Bahia	4 214
	Fos Cavaou	Gwangyang	9 135
	Zeebrugge	Panigaglia	2 214
	Zeebrugge	Pecem	10 504
	Zeebrugge	Senboku	10 914
	Zeebrugge	Shanghai	3 422
	Zeebrugge	Tong-Yeong	10 542
France	Fos Cavaou	Yazawa	7 053
	Fos Cavaou	Higashi-Oghishima	10 972
	Bintulu	Himeji	2 400
	Bintulu	Incheon	2 124
	Bintulu	Ishikari	2 900
	Bintulu	Jebel Ali	4 103
	Bintulu	Kawagoe	2 433
	Bintulu	Map Ta Phut	933
	Bintulu	Melaka	6 402
	Bintulu	Mina Al-Ahmadi	4 484
Malaysia	Bintulu	Mizushima	2 335
	Bintulu	Nagasaki	2 151
	Bintulu	Negishi	2 513
	Bintulu	Niigata	2 511
	Bintulu	Oghishima	2 481
	Bintulu	Oita	2 191
	Bintulu	Pyeong Taek	2 124
	Bintulu	Senboku	2 376
	Bintulu	Shanghai	1 942
	Bintulu	Shanghai	1 942
Nigeria	Bintulu	Shin-Minato	2 603
	Bintulu	Sodegaura	2 515
	Bintulu	Sodeshi	2 460
	Bintulu	Tobata	2 210
	Bintulu	Tong-Yeong	1 674
	Bintulu	Yung-An	1 350
	Bintulu	Zhuhai	1 145
	Gate	Bilbao	817
	Gate	Escobar	6 375
	Gate	Futtsu	11 275
Netherlands	Gate	Guanabara Bay	5 291
	Gate	Mina Al-Ahmadi	6 693
	Gate	Pecem	4 016
	Bonny Island	Aliaga	5 042
	Bonny Island	Aliaga	5 042
	Bonny Island	Altamira	6 214
	Bonny Island	Joetsu	2 965
	Bonny Island	Kawagoe	2 573
	Bonny Island	Niigata	3 036
	Tangguh	Himeji	2 258
Nigeria	Tangguh	Incheon	2 736
	Tangguh	Joetsu	2 965
	Tangguh	Kawagoe	2 573
	Tangguh	Niigata	3 036
	Tangguh	Oita	2 458
	Tangguh	Pyeong Taek	2 734
	Tangguh	Sakai	2 535
	Tangguh	Tong-Yeong	2 257
	Tangguh	Yung-An	1 972
	Bintulu	Chita	2 395
Norway	Bintulu	Dahej	3 173
	Bintulu	Dalian	10 682
	Bintulu	Dongguan	1 243
	Bintulu	Fukuoka	2 160
	Bintulu	Futtsu	2 505
	Bintulu	Higashi-Oghishima	2 492
	Bonny Island	Barcelona	3 824
	Bonny Island	Bilbao	3 886
	Bonny Island	Caofeidian	10 802
	Bonny Island	Cartagena	3 574
Australia	Bonny Island	Chita	10 602
	Bonny Island	Dabhol	7 120
	Bonny Island	Dahej	7 136
	Bonny Island	Dalian	10 682
	Bonny Island	Dongguan	9 328
	Bonny Island	Dragon	4 206
	Bonny Island	Escobar	4 995
	Bonny Island	Fos Cavaou	3 349
	Bonny Island	Futtsu	4 091
	Hammerfest	Aliaga	4 287
Norway	Hammerfest	Altamira	5 578
	Hammerfest	Bahia	

## Sea transportation routes (cont'd.)

	Loading point	Unloading point	Distance in nautical miles		Loading point	Unloading point	Distance in nautical miles		Loading point	Unloading point	Distance in nautical miles		Loading point	Unloading point	Distance in nautical miles		Loading point	Unloading point	Distance in nautical miles
Norway	Hammerfest	Gate	1 325	Papua New Guinea	Port Moresby	Yung-An	3 186	Peru	Ras Laffan	Mizushima	6 428	Russia	Sakhalin II	Sodegaura	960	Spain	Sagunto	Futtsu	9 638
	Hammerfest	Guanabara Bay	6 404		Pampa Melchorita	Barcelona	9 566		Ras Laffan	Negishi	6 550		Sakhalin II	Tobata	981		Sagunto	Guanabara Bay	4 633
	Hammerfest	Higashi-Oghishima	12 529		Pampa Melchorita	Bilbao	9 639		Ras Laffan	Niigata	6 640		Sakhalin II	Tong-Yeong	1 013		Sagunto	Incheon	9 318
	Hammerfest	Huelva	2 594		Pampa Melchorita	Cartagena	9 292		Ras Laffan	Ningbo	5 771		Sakhalin II	Yanai	1 392		Sagunto	Melaka	6 639
	Hammerfest	Klaipeda	1 701		Pampa Melchorita	Fos Cavaou	9 835		Ras Laffan	Oghishima	6 568		Sakhalin II	Yung-An	1 967		Sagunto	Negishi	9 645
	Hammerfest	Mejillones	10 754		Pampa Melchorita	Manzanillo	2 585		Ras Laffan	Oita	6 250		Gwangyang	Hazira	5 043		Sagunto	Oita	9 335
	Hammerfest	Melaka	9 497		Pampa Melchorita	Pecem	8 621		Ras Laffan	Pyeong Taek	6 156		Gwangyang	Senboku	437		Sagunto	Pecem	3 435
	Hammerfest	Montoir de Bretagne	1 958		Pampa Melchorita	Oita	8 940		Ras Laffan	Quintero	10 188		Gwangyang	Shanghai	453		Sagunto	Pyeong Taek	9 317
	Hammerfest	Niigata	12 602		Sines	Bahia	3 519		Ras Laffan	Reganosa	5 689		Barcelona	Bahia	4 044		Sagunto	Tong-Yeong	9 218
	Hammerfest	Pecem	5 145		Sines	Bahia Blanca	5 591		Ras Laffan	Rovigo	4 405		Barcelona	Incheon	9 243		Point Fortin	Aliaga	5 100
Oman	Hammerfest	Penuelas	4 556		Sines	Escobar	5 355		Ras Laffan	Sagunto	4 719		Barcelona	Shanghai	8 865		Point Fortin	Altamira	2 220
	Hammerfest	Pyeong Taek	12 211		Ras Laffan	Aliaga	3 722		Ras Laffan	Sakai	6 347		Cartagena	Aliaga	1 414		Point Fortin	Andres	683
	Hammerfest	Reganosa	2 048		Ras Laffan	Altamira	9 783		Ras Laffan	Senboku	6 347		Cartagena	Bahia Blanca	5 842		Point Fortin	Bahia	3 976
	Hammerfest	Revithoussa	4 132		Ras Laffan	Andres	8 567		Ras Laffan	Shanghai	5 901		Cartagena	Caofeidian	9 553		Point Fortin	Bahia Blanca	4 628
	Hammerfest	Sagunto	3 065		Ras Laffan	Bahia	4 683		Ras Laffan	Sines	5 291		Cartagena	Escobar	5 526		Point Fortin	Barcelona	3 975
	Hammerfest	Sines	2 398		Ras Laffan	Bahia Blanca	8 630		Ras Laffan	Sodegaura	6 576		Cartagena	Futtsu	9 671		Point Fortin	Bilbao	3 669
	Hammerfest	Tianjin	12 401		Ras Laffan	Barcelona	4 710		Ras Laffan	South Hook	6 168		Cartagena	Guanabara Bay	4 474		Point Fortin	Canaport	2 110
	Hammerfest	Zhuhai	10 999		Ras Laffan	Caofeidian	6 436		Ras Laffan	Taichung	5 229		Cartagena	Incheon	9 350		Point Fortin	Cartagena	3 648
	Qalhat	Chita	6 032		Ras Laffan	Cartagena	4 817		Ras Laffan	Tobata	6 173		Cartagena	Joetsu	9 737		Point Fortin	Chita	13 190
	Qalhat	Dapeng	4 558		Ras Laffan	Chita	6 446		Ras Laffan	Tong-Yeong	5 706		Cartagena	Mina Al-Ahmadi	5 016		Point Fortin	Cove Point	1 879
Papua New Guinea	Qalhat	Futtsu	5 980		Ras Laffan	Dabhol	1 504		Ras Laffan	Yanai	6 170		Cartagena	Penuelas	3 669		Point Fortin	Dragon	4 360
	Qalhat	Gwangyang	5 595		Ras Laffan	Dahej	1 290		Ras Laffan	Yokkaichi	6 448		Cartagena	Pyeong Taek	9 350		Point Fortin	Elba Island	1 690
	Qalhat	Hazira	760		Ras Laffan	Dalian	6 313		Ras Laffan	Yung-An	5 230		Cartagena	Revithoussa	1 283		Point Fortin	Escobar	4 920
	Qalhat	Higashi-Oghishima	6 000		Ras Laffan	Dapeng	5 098		Ras Laffan	Zeebrugge	6 277		Huelva	Aliaga	1 758		Point Fortin	Everett	2 032
	Qalhat	Himeji	5 849		Ras Laffan	Dongguan	5 147		Ras Laffan	Zhuhai	5 054		Huelva	Bahia Blanca	5 611		Point Fortin	Freeport	2 272
	Qalhat	Incheon	5 750		Ras Laffan	Dragon	6 184		Sakhalin II	Caofeidian	1 645		Huelva	Chita	9 919		Point Fortin	Gate	4 061
	Qalhat	Map Ta Phut	3 845		Ras Laffan	Escobar	9 023		Sakhalin II	Chita	1 084		Huelva	Dahej	5 127		Point Fortin	Guanabara Bay	3 245
	Qalhat	Mina Al-Ahmadi	740		Ras Laffan	Fos Cavaou	4 684		Sakhalin II	Futtsu	951		Huelva	Dapeng	8 598		Point Fortin	Hazira	8 428
	Qalhat	Mizushima	5 873		Ras Laffan	Fujian	5 625		Sakhalin II	Hatsukaichi	1 105		Huelva	Freeport	4 695		Point Fortin	Huelva	3 366
	Qalhat	Oita	5 673		Ras Laffan	Futtsu	6 570		Sakhalin II	Hibiki	1 105		Huelva	Incheon	9 693		Point Fortin	Incheon	9 706
	Qalhat	Pyeong Taek	5 695		Ras Laffan	Gate	6 468		Sakhalin II	Higashi-Oghishima	956		Huelva	Kawagoe	9 917		Point Fortin	Isle of Grain	3 974
	Qalhat	Sagunto	4 259		Ras Laffan	Guanabara Bay	8 197		Sakhalin II	Himeji	1 196		Huelva	Manzanillo	11 351		Point Fortin	Jurong Island	10 948
	Qalhat	Senboku	5 812		Ras Laffan	Hainan	4 998		Sakhalin II	Incheon	1 380		Huelva	Mina Al-Ahmadi	5 359		Point Fortin	Manzanillo	10 299
	Qalhat	Sodegaura	6 045		Ras Laffan	Hazira	1 236		Sakhalin II	Ishikari	229		Huelva	Niigata	10 119		Point Fortin	Map Ta Phut	11 712
	Qalhat	Tong-Yeong	5 300		Ras Laffan	Higashi-Oghishima	6 590		Sakhalin II	Joetsu	605		Huelva	Pecem	3 035		Point Fortin	Mejillones	3 327
	Qalhat	Yanai	5 700		Ras Laffan	Himeji	6 350		Sakhalin II	Kawagoe	1 085		Huelva	Shanghai	9 343		Point Fortin	Mina Al-Ahmadi	8 673
	Qalhat	Yung-An	4 719		Ras Laffan	Huelva	5 144		Sakhalin II	Map Ta Phut	3 356		Huelva	Tobata	9 659		Point Fortin	Montoir de Bretagne	3 760
	Qalhat	Zhuhai	4 477		Ras Laffan	Incheon	6 156		Sakhalin II	Mizushima	1 233		Reganosa	Bahia Blanca	5 933		Point Fortin	Ohgishima	13 928
Papua New Guinea	Port Moresby	Caofeidian	3 965		Ras Laffan	Isle of Grain	6 428		Sakhalin II	Negishi	950		Reganosa	Dahej	5 661		Point Fortin	Pecem	1 732
	Port Moresby	Chita	3 344		Ras Laffan	Jebel Ali	200		Sakhalin II	Niigata	581		Reganosa	Hazira	5 649		Point Fortin	Penuelas	560
	Port Moresby	Futtsu	3 322		Ras Laffan	Joetsu	6 620		Sakhalin II	Ohgishima	964		Reganosa	Jebel Ali	5 535		Point Fortin	Qingdao	3 782
	Port Moresby	Higashi-Oghish																	



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# 75 Member Companies in 25 countries

GIIGNL (International Group of LNG Importers) is the worldwide association of LNG importers. Founded in 1971, at the outset of the LNG industry, its membership has grown to 75 companies worldwide, comprising nearly all companies active in LNG imports or in the operation of LNG terminals. It is a non profit organization and its resources only come from the membership fees. The association constitutes a forum for exchange of experience among its members, with a view to enhance safety, reliability and efficiency of LNG imports. GIIGNL members are coming from 25 countries located in the main three regions: Americas, 9 members, Asia, 35, Europe, 31.

Every year, GIIGNL conducts a wide survey amongst its members in order to publish this global statistical report, The LNG Industry.

4 companies joined the group in 2014: Höegh LNG, Hazira LNG, Pertamina PT (Persero) and Singapore LNG Corporation.

## AMERICAS - 9 members

BG Group Plc.  
Cheniere Energy, Inc.  
Freeport LNG Development, L.P.  
GDF SUEZ GAS NA  
GNL Quintero S.A.  
Repsol Energy Canada  
Sempra LNG  
Southern LNG Company, LLC  
YPF S.A.

## EUROPE - 31 members

BP Global LNG  
Botas  
Centrica LNG Company  
DEPA  
Dong Naturgas  
Dunkerque LNG  
Edison S.p.A.  
Elengey S.A.  
EDF Trading Limited  
EDP Energias de Portugal, S.A.  
Enagas  
Enel Trade  
Eni S.p.A.  
E.ON Ruhrgas A.G.  
Fluxys LNG S.A.  
Gas Natural Fenosa  
Gate Terminal B.V.  
GDF SUEZ  
GNL Italia  
Höegh LNG  
Iberdrola Generacion S.A.U.  
National Grid Grain LNG, Ltd.  
N.V. Nederlandse Gasunie  
Polskie LNG S.A.  
Ren Atlântico, S.A.  
Shell Western LNG B.V.  
Sonatrach Gas Marketing UK Limited  
South Hook LNG Terminal Company, Ltd.  
Statoil ASA  
Total S.A.  
Vopak LNG Holding B.V.

## ASIA - 35 members

Chubu Electric Power Company, Inc.  
CNOOC Gas & Power Group  
CPC Corporation, Taiwan  
Gail India Limited  
Guangdong Dapeng LNG Company, Ltd.  
Gujarat State Petroleum Corp. Ltd. (G.S.P.C.)  
Hazira LNG  
Hiroshima Gas Company, Ltd.  
Hokkaido Gas Co  
Inpex  
Itochu Corporation  
JX Nippon Oil & Energy Corp  
Korea Gas Corporation  
Kyushu Electric Power Company, Inc.  
LNG Japan Corporation  
Marubeni Corporation  
Mitsubishi Corporation  
Mitsui & Company, Ltd.  
Nippon Gas Company, Ltd.  
Osaka Gas Company, Ltd.  
Pertamina PT (Persero)  
Petronet LNG Limited  
PTT Public Company, Ltd.  
Saibu Gas Company, Ltd.  
Shikoku Electric Power Company  
Shizuoka Gas Company, Ltd.  
Singapore LNG Corporation  
SK E&S Company, Ltd.  
Sumitomo Corporation  
The Chugoku Electric Power Company, Inc.  
The Kansai Electric Power Company, Inc.  
The Tokyo Electric Power Company, Inc.  
Toho Gas Company, Ltd.  
Tohoku Electric Power Company, Inc.  
Tokyo Gas Company, Ltd.





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