

## IENE Company Profile

### DYNAGAS: A Greek-owned Pioneering LNG Company

Dynagas is a Liquefied Natural Gas (LNG) maritime transportation company established in 2004. The company offers in-house ship management services in order to provide charterers and stakeholders with the best performance and reliability. The company is dedicated to safety excellence, and has achieved outstanding performance statistics. The company and its fleet have been vetted by all major charterers and have in place term charters with first class companies.

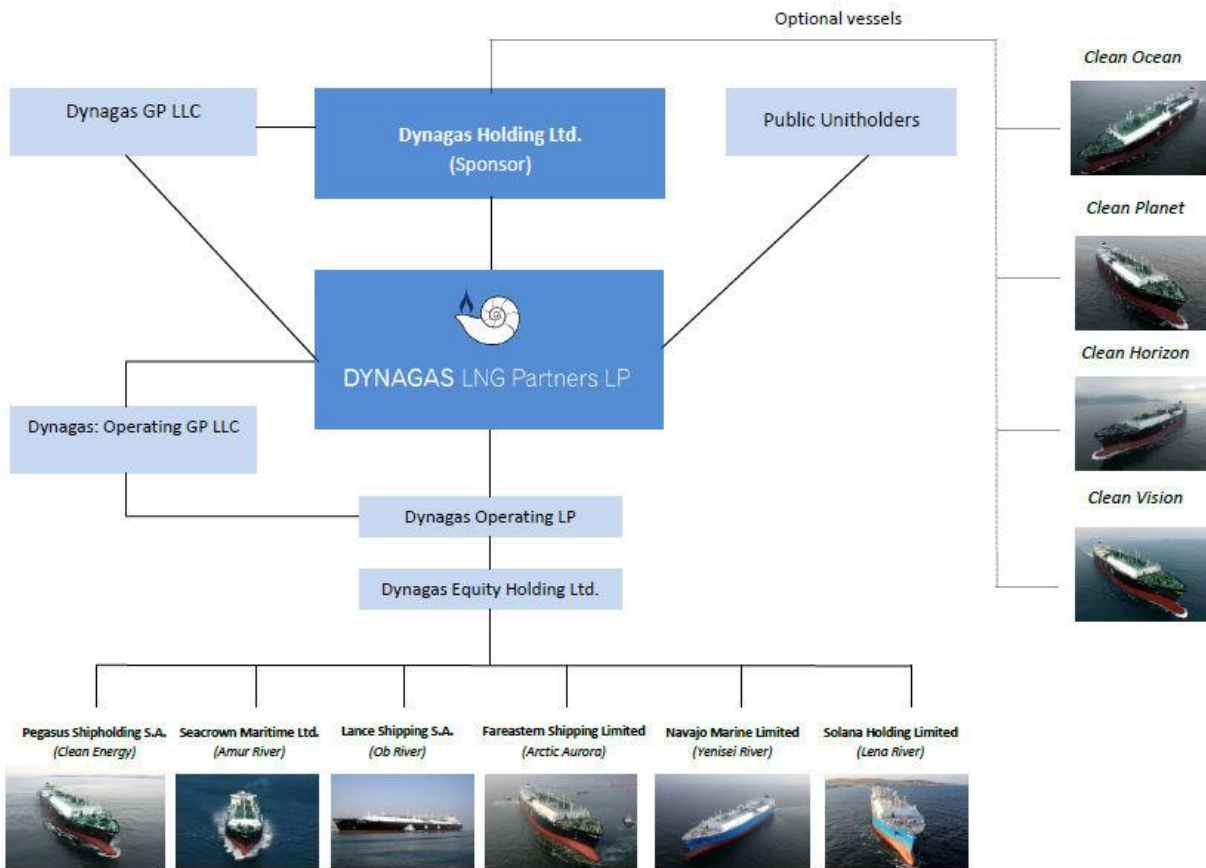
The company has an established risk management system associated with Health, Safety, Security and Environmental protection via effective monitoring and continuous enhancement of vessel operations and by establishing a safety culture across its organization, onboard and ashore. The company's main policies are exceeding industry standards through adoption of ISO standards (14001, 9001, 18001) and are continually revised to meet evolving requirements and management practices.

#### 1. Dynagas LNG Partners LP: Fleet Profile, Ice Class Trades and Financial Data

Currently, the company has **six (6) LNG carriers** through its subsidiary Dynagas Equity Holding Ltd., with a **total cbm capacity of 914,100 cbm**. Through its subsidiary Dynagas Holding Ltd. (its Sponsor, as shown in Figure 1), it controls a further **four (4) LNG vessels**. The **average age of Dynagas's fleet is about 6.8 years** as of June 8, 2017, while its **average remaining charter duration is roughly 10.5 years**, without including charterer extension options, basis earliest delivery and redelivery dates, but taking into account the Yenisei River and Lena River time charter contracts with Yamal for the Yamal LNG project. The **company's counterparties** include Gazprom, Statoil and Yamal LNG (see Figure 2), while the **total estimated contract backlog is \$1.52 billion** as of June 8, 2017. The fleet of Dynagas has the ability to trade as conventional LNG carriers and in ice bound areas (see below) without cost disadvantages.

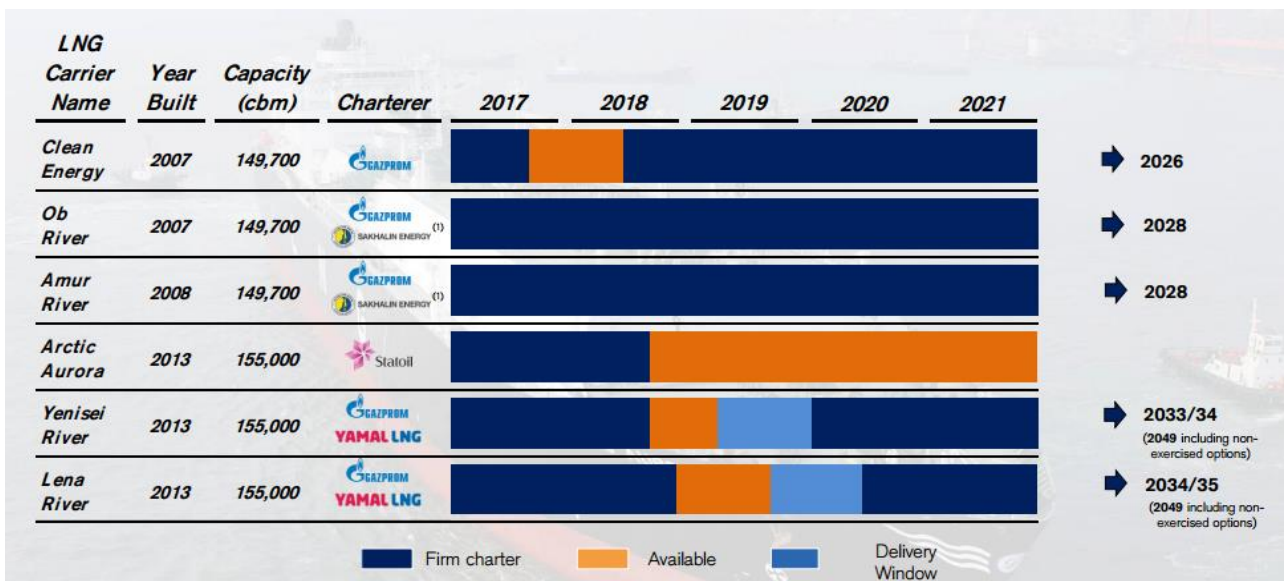
The "IENE Company Profile" is an occasional communication published by the Institute of Energy for SE Europe in its effort to broaden the dialogue on current energy issues of regional and global interest. A Company Profile, as the name implies, focuses on a particular company engaged in one or more areas of activity in the broad energy field. The scope of the "Company Profile" is to focus on the achievements and plans of prominent energy companies and organizations which through their work paradigm could provide inspiration for leadership, strategy and innovation. Material used for a Company Profile may come from published sources but also from original input contributed by IENE's staff and research associates.

Figure 1: Corporate Overview



Source: Dynagas LNG Partners LP

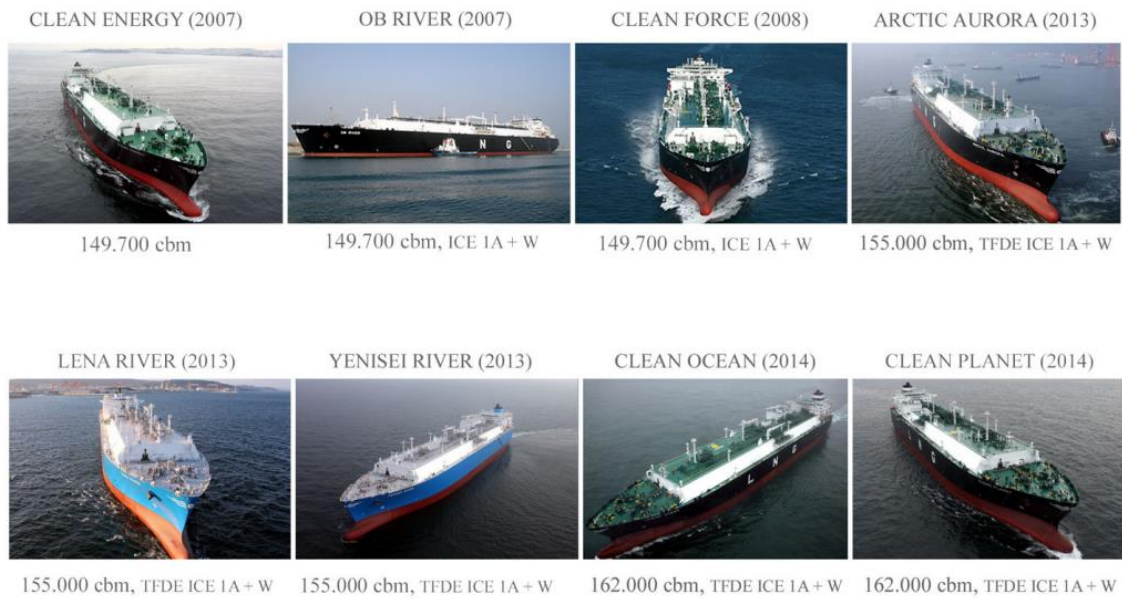
Figure 2: Long-Term Charters Provide Steady, Predictable Cash Flows



Source: Dynagas Ltd.

Most of the existing vessels of Dynagas are shown in Figure 3, together with useful technical characteristics. Latest new buildings include two vessels (i.e. Clean Horizon and Clean Vision (see Figure 4)) with the same size (i.e. 162,000 cbm) for tri-fuel diesel engine (TFDE) and with delivery dates in January 2015 and April 2015 respectively.

**Figure 3: Existing Vessels of Dynagas**



*Source: Dynagas Ltd.*

**Figure 4: Dynagas Clean Vision**



*Source: Dynagas Ltd.*

As shown in Figure 3, the majority of Dynagas’s LNG carriers have ice class specification, with proven ability to capitalize on market leadership in ice class trades with long term contracts. The contracted fleet for 2017 is expected to be 86% and is

projected at 75% for 2018 and 2019, with minimal capital requirements providing significant free cash flow. According to the International Gas Union (IGU) (2017)<sup>1</sup>, five (5) Dynagas LNG vessels are included in the orderbook, as presented in Table 1.

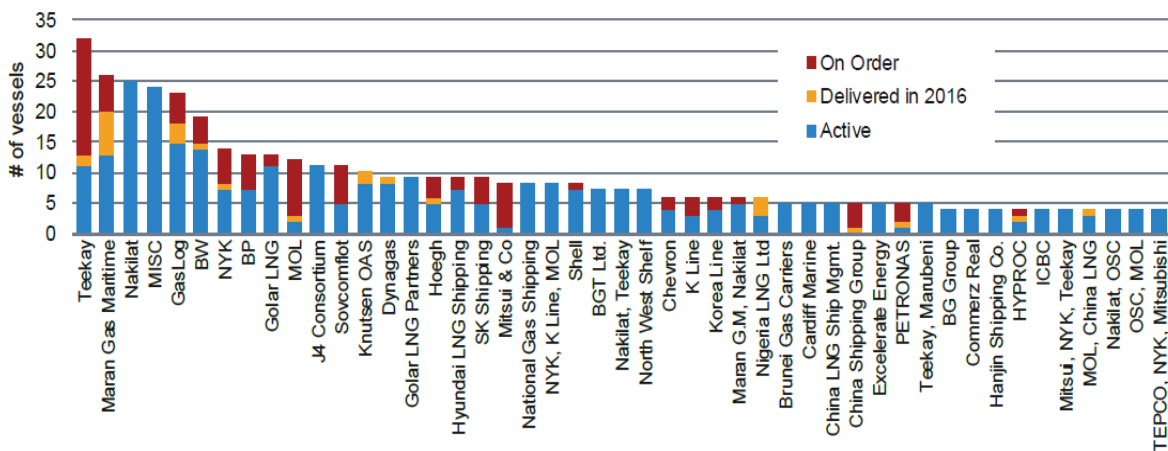
**Table 1: Dynagas LNG Vessel Orderbook**

| Ship Name          | Shipbuilder | Type         | Delivery Year | Capacity (cm) | Propulsion Type |
|--------------------|-------------|--------------|---------------|---------------|-----------------|
| <b>DAEWOO 2424</b> | Daewoo      | Conventional | 2018          | 172,000       | TFDE            |
| <b>DAEWOO 2425</b> | Daewoo      | Conventional | 2018          | 172,000       | TFDE            |
| <b>DAEWOO 2430</b> | Daewoo      | Conventional | 2019          | 172,000       | TFDE            |
| <b>DAEWOO 2431</b> | Daewoo      | Conventional | 2019          | 172,000       | TFDE            |
| <b>DAEWOO 2432</b> | Daewoo      | Conventional | 2018          | 172,000       | TFDE            |

*Source: IGU (2017)*

Figure 5 illustrates the upper position Dynagas holds in the ranking of global LNG fleet as of end of 2016, having nine active vessels and one vessel delivered in 2016.

**Figure 5: LNG Fleet by Respective Company Interests, end - 2016**



*Source: IGU (2017)*

### **Dynagas Progresses FSRU Newbuilding Projects**

Dynagas has breathed new life into its planned LNG floating storage and regasification unit (FSRU) newbuildings in China. Those close to the project say fresh engineering work has started on Dynagas’ FSRUs for which the company has agreed

<sup>1</sup> IGU (2017), “2017 World LNG Report”, [http://www.igu.org/sites/default/files/103419-World IGU Report no%20crops.pdf](http://www.igu.org/sites/default/files/103419-World%20IGU%20Report%20no%20crops.pdf)



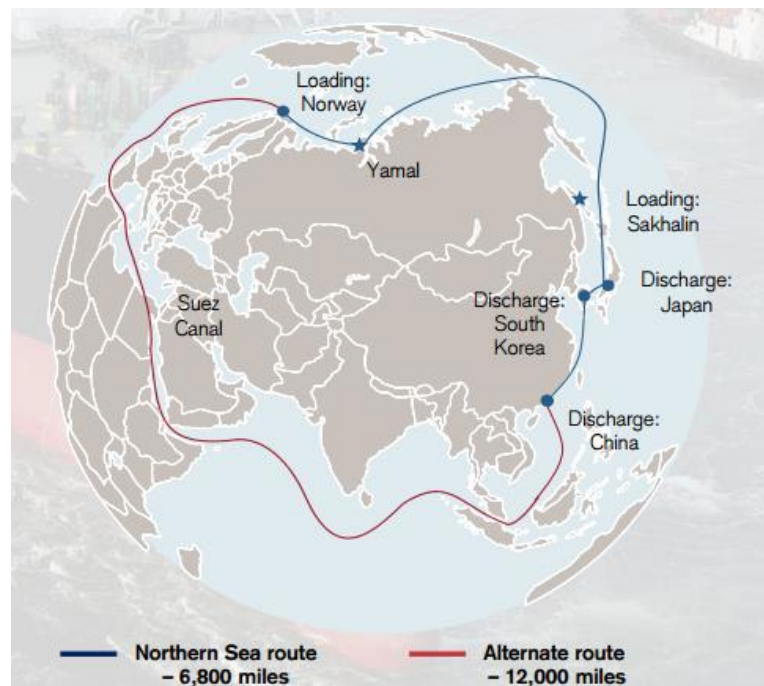
an order at Hudong-Zhonghua Shipbuilding. In 2016, George Prokopiou-led Dynagas (see below) was widely linked to an order for up to two FSRUs at the Chinese shipyard for delivery dates in 2019 and 2020. The deal is significant because if it finally moves ahead the contracts will mark China's shipbuilding entry into the FSRU sector. It would also be Dynagas' second attempt to break into the floating regasification business after cancelling a planned FSRU order at STX Offshore & Shipbuilding in 2012.

In a results briefing in March 2017, Tony Lauritzen, CEO of publicly listed arm Dynagas LNG Partners, made clear that the company's efforts to enter the floating regasification sector were now concentrated on taking the newbuilding route rather than converting any of its existing LNG carriers. However, he stressed that building new required a project sponsor, which was the focus for the company.

***Dynagas is a Leader in Ice Class Trades***

In addition to conventional LNG shipping, the company has specialized in sub-zero, harsh weather and ice conditions. The company has steadily built up knowledge and experience in this field by transporting cargoes in areas where such conditions prevail. After extensive investigation and planning of how to ensure safe and reliable operations of LNG carriers in such conditions, the company invested in Ice Class 1A and winterized LNG carriers.

**Map: Northern Sea Route**



*Source: Dynagas Ltd.*

Dynagas made history in 2012, when the company's LNG carrier OB RIVER became the world's first LNG carrier to transit and carry a cargo through the Northern Sea Route (see the following Map). The company performed all logistics, approval process and risk analysis for this effort. Subsequent to the above mentioned voyage, the company is performing Northern Sea Route voyages on a frequent basis.

### ***Dynagas Financial Results Positive in Spite of Market Volatility***

Tables 2 and 3 present the company's latest available (i.e. Q117) financial data, as shown in its results presentation on June 8, 2017<sup>2</sup>. **Voyage revenues** decreased to \$39.1 million for the three-month period ended March 31, 2017, from \$42.7 million for the same period of 2016. This decrease was primarily due to the company's agreement with the charterer of the Yenisei River and the Lena River to lower, with effect from November 2016, the charter hire rates of these vessels in return for entering into an eight year contact for the Clean Energy, with an estimated contract backlog of \$132.7 million. This fall was also, albeit to a lesser extent, driven by the unscheduled off-hire days for the Yenisei River (as opposed to no off-hire days in same quarter in 2016).

**Net income** for Q117 was \$12.9 million, compared to net income of \$17.1 million in the corresponding period of 2016, which represents a 24.6% decrease. **Adjusted net income** for the three months ended March 31, 2017 was \$14.7 million, compared to adjusted net income of \$18.9 million in the corresponding period of 2016, which represents a 22.4% decrease. The decline in both net income and adjusted net income was mainly attributable to the aforementioned reasons. **Adjusted Earnings Before Interest, Tax, Depreciation, and Amortization (EBITDA)** for Q117 decreased by 11.1% across the quarters (Q117 Adjusted EBITDA of \$31.3 million, compared to Q116 Adjusted EBITDA of \$35.2 million) and was due to the factors outlined above.

The company's **distributable cash flow** for the three-month period ended March 31, 2017 was \$18.6 million, compared to \$22.7 million in the corresponding period of 2016, which represents a decrease of \$4.1 million or 18.0%. Dynagas reported **average daily hire gross of commissions**<sup>3</sup> of approximately \$76,700 per day per vessel in the three months ended March 31, 2017, compared to approximately \$81,300 per day per vessel in the same period of 2016. During the three-month period ended March 31, 2017, the Partnership's vessels operated at **99% utilization**.

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<sup>2</sup> [http://dynagaspartners.irwebpage.com/files/DLNG\\_Q1\\_2017.pdf](http://dynagaspartners.irwebpage.com/files/DLNG_Q1_2017.pdf)

<sup>3</sup> Average daily hire gross of commissions represents voyage revenue without taking into consideration the non-cash time charter amortization expense and amortization of prepaid charter revenue, divided by the available days in the company's fleet.

**Table 2: Q117 Financial Results**

| <b>USD in thousands</b><br><i>(except per unit, average daily hire and other operational data)</i> | <b>Q1 2017</b> | <b>Q4 2016</b> | <b>Q1 2016</b> |
|--|----------------|----------------|----------------|
| Revenues   | 39,092         | 41,385         | 42,741         |
| Adjusted Net Income <sup>(1)</sup>   | 14,685         | 17,287         | 18,928         |
| Adjusted EBITDA <sup>(1)</sup>   | 31,271         | 33,893         | 35,178         |
| Distributable Cash Flow <sup>(1)</sup>   | 18,634         | 21,272         | 22,736         |
| Annualized cash distributions per unit   | 1.69           | 1.69           | 1.69           |
| Average daily hire per LNG carrier <sup>(2)</sup>  | 76,700         | 78,250         | 81,300         |
| Fleet utilization  | 99%            | 100%           | 100%           |
| Available Days   | 540            | 552            | 546            |
| Average Number of Vessels  | 6              | 6              | 6              |

**Notes:** (1) Adjusted Net Income, Adjusted EBITDA and Distributable Cash Flow are not recognized measures under US GAAP. (2) Average daily hire gross of commissions represents voyage revenue without taking into consideration the non-cash time charter amortization expense and amortization of above market acquired time charter contract, divided by the Available Days in the Partnership's fleet

Source: Dynagas LNG Partners LP

**Table 3: Q117 Distributable Cash Flow and Coverage Ratio**

| <b>USD in thousands</b>                                    | <b>Three Months Ended<br/>31 March 2017</b> | <b>Three Months Ended<br/>31 March 2016</b> |
|--|---|---|
| Net Income   | 12,912                                      | 17,135                                      |
| Depreciation   | 7,476                                       | 7,552                                       |
| Amortization of deferred financing fees                    | 486   | 489   |
| Net interest and finance costs, excluding amortization     | 8,404                                       | 8,209                                       |
| Class survey costs   | 220   | -   |
| Amortization of fair value of acquired time charter        | 1,787                                       | 1,807                                       |
| Charter hire amortization                                  | (14)  | (14)  |
| <b>Adjusted EBITDA</b>                                     | <b>31,271</b>                               | <b>35,178</b>                               |
| Net interest and finance costs, excluding amortization     | (8,404)                                     | (8,209)                                     |
| Maintenance capital expenditure reserves                   | (1,038)                                     | (1,038)                                     |
| Replacement capital expenditure reserves                   | (3,195)                                     | (3,195)                                     |
| <b>Distributable Cash Flow</b>                             | <b>18,634</b>                               | <b>22,736</b>                               |
| Less: declared Preferred Unitholders' distributions        | (1,688)                                     | (1,688)                                     |
| <b>Distributable Cash, net of preferred <sup>(1)</sup></b> | <b>16,946</b>                               | <b>21,048</b>                               |
| Total declared Distributions <sup>(1)</sup>                | 15,027                                      | 15,027                                      |
| <b>Coverage Ratio <sup>(1)</sup></b>                       | <b>1.13x</b>                                | <b>1.40x</b>                                |

**Note:** (1) Refers to Common, Subordinated and GP unitholders in both Q117 and Q116

Source: Dynagas LNG Partners LP

It is worth noting that Dynagas refinanced its existing secured commercial bank facilities with a new \$480.0 million institutional senior secured term loan B due in 2023 (the “Term Loan B”), which was closed on May 18, 2017. The Term Loan B provides for 0.25% quarterly amortization on principal and a bullet payment at maturity. The Term Loan B is secured by, among other things, the six LNG carriers in the company’s fleet. The company used the net proceeds of the Term Loan B to repay in full its secured indebtedness, pay transaction fees and expenses and for general corporate purposes.

## 2. Current Situation of the Global LNG Industry

### *LNG in the Global Gas Market*

In order to appreciate Dynagas’s position in the global LNG scene, it is important to understand somehow the ever evolving gas market. Today, natural gas accounts for roughly a quarter of global energy demand, of which 9.8% is supplied as LNG. Although LNG supply previously grew faster than any other natural gas supply source – averaging 6.2% per annum from 2000 to 2015 – its market share growth has stalled since 2010 as indigenous production and pipeline supply have competed well for growing global gas markets, according to IGU (2017). Despite the lack of market share growth in recent years, the large additions of LNG supply through 2020 mean LNG is poised to resume its expansion.

### *Global LNG Trade*

As can be seen in Figure 5, Dynagas is well placed at global level to meet the challenges but also take advantage of a fast growing LNG market. The average age of the company’s fleet is fairly young while its forward looking stance is already paying dividends.

Global LNG trade set a new record in 2016 for the third consecutive year reaching 258 million tonnes (see Figure 6). This marks an increase of 13.1 million tonnes (+5%) from 2015, when a previous record of 244.8 million tonnes was set over the 2014 trade volume of 241.1 million tonnes. The growth rate in 2016 was a noticeable increase from the average growth of 0.5% over the last four years, when there were not very many new supply additions. The continued addition of supply in the Pacific Basin, primarily in Australia, as well as the start of exports from the US Gulf of Mexico (US GOM) enabled this increase. Demand growth was most pronounced in Asia; China, India, and Pakistan added a combined 13.0 million tonnes in incremental LNG demand. Inter-basin LNG trade flows have declined, particularly as Pacific Basin supplies continued to catch up with high demand in that region.

In 2016, short-term trade<sup>4</sup> reached 67.6 million tonnes or 25.8% of total gross traded LNG (including re-exports), as shown in Figure 7. Although this volume equates to a

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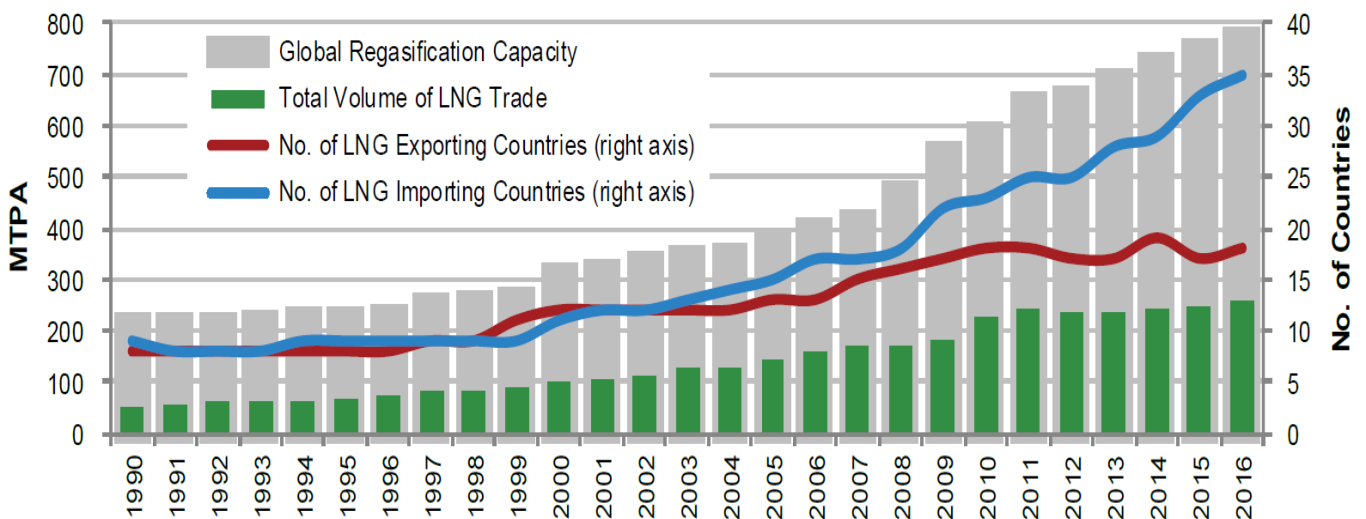
<sup>4</sup> Short-term trade is defined as all volumes traded under agreements of less than two years.



total growth of 1.65 million tonnes relative to 2015, its share of total traded LNG declined by 0.6%. Several emerging markets, such as Pakistan and Malaysia, began importing LNG under new long-term contracts in 2016; while other markets that typically rely very heavily on spot and short-term volumes, like Brazil, measured large drops in LNG imports. Further, the majority of new liquefaction projects that started operations in 2015 and 2016 in the Asia-Pacific region are supported by long-term contracts. Volumes traded under medium-term contracts (between 2 and <5 years) remain a comparatively small portion of all non-long-term trade. Medium-term deliveries declined for the second year in a row in 2016, falling to 4.7 million tonnes from 6.0 million tonnes in 2015, as several contracts were filled increasingly with short-term volumes. Medium term contracts offer countries with uncertain future LNG needs more security of supply for their minimum requirements than would be provided by short-term imports; and have been favoured by buyers hesitant to sign long-term contracts because of the availability of uncontracted and flexible supply.

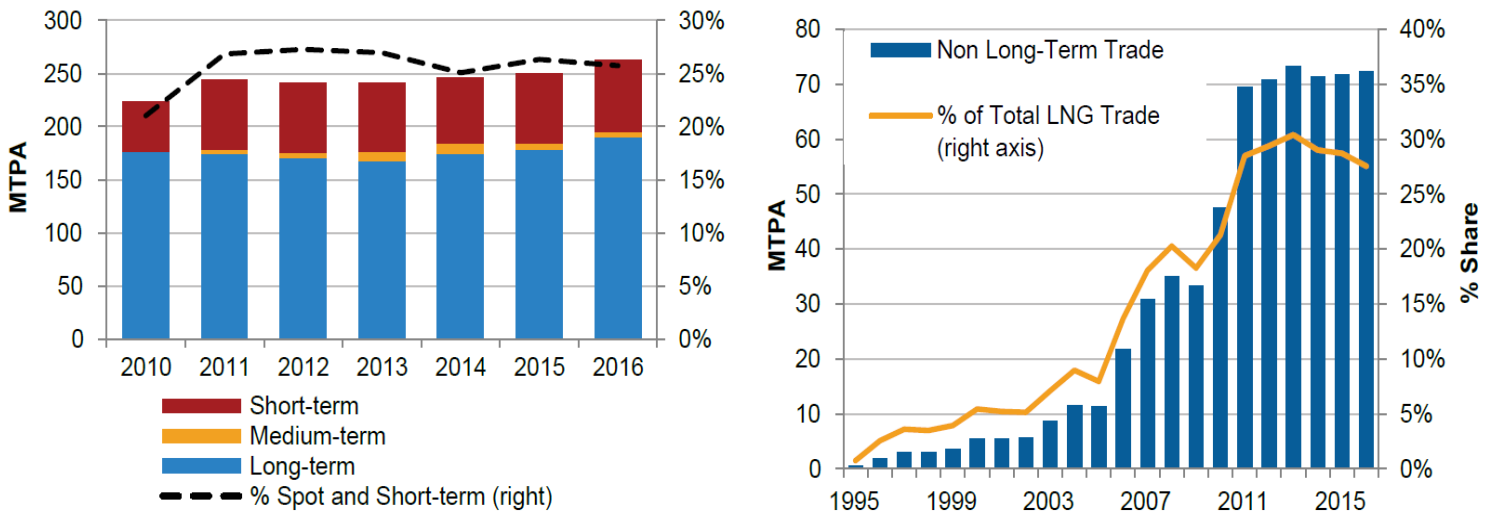
In total, all non-long-term LNG trade reached 72.3 million tonnes in 2016 (+0.4 million tonnes y-o-y) and accounted for 28% of total gross LNG trade - a 4% decline in share from 2015 (see Figure 8). This volume was 1.0 million tonnes lower than the peak that non-long-term trading reached in 2013, when Japan was turning heavily to the spot market to satisfy its post-Fukushima needs. Since then, the start-up of new projects underpinned by long-term contracts has led the non-long-term market to decline consistently as a share of total traded LNG. Still, the volume of LNG traded without a long-term contract in 2016 is more than double the amount traded a decade ago.

Figure 6: LNG Trade Volumes, 1990-2016



Sources: IHS Markit, IEA, IGU

**Figures 7 and 8: Short, Medium and Long-Term Trade, 2010-2016 (LHS) and Non Long-Term Volumes, 1995-2016 (RHS)**



Sources: IHS Markit, IGU

### Global LNG Prices

Asian and spot LNG prices fell steadily in H116 as supply overwhelmed demand, settling at \$4.05 per million British thermal units (MMBtu) in May. A reversal occurred in H216, with supply disruptions and cold winter temperatures driving spot prices to \$9.95/MMBtu by February 2017. With cold weather and storage constraints at Rough, the **United Kingdom National Balancing Point (UK NBP)** also ended the year on an upswing at \$5.44/MMBtu. The oil price continued to decline in H116 resulting in low oil-indexed contract prices. As prices fell around the world, the market moved closer to price convergence; the differential between UK NBP and Northeast Asian spot prices narrowed to an average \$0.91/MMBtu in 2016. Notably, the differential was negative for several months for the first time in six years. In May and June 2016, the **Asian spot price** was ~\$0.40/MMBtu lower than UK NBP.

### LNG Shipping Fleet

The global LNG shipping fleet consisted of 439 vessels as of January 2017, including conventional vessels and ships acting as FSRUs and floating storage units. In 2016, a total of 31 new-builds (including two FSRUs) were delivered from shipyards, a 7% increase when compared to 2015. Relative to the previous year, this was a much more balanced addition relative to liquefaction capacity (which grew by 35 MTPA). Nevertheless, the accumulation of the tonnage build-out from the previous years is still being worked through, keeping short-term charter rates at historical lows. In 2016, two vessels were retired and sold for scrap.

### **Short Bio of George Prokopiou**

George Prokopiou is the Founder of Dynacom Tankers Management, Sea Traders and Dynagas Ltd. Prokopiou has been the Chairman of Dynagas LNG Partners LP since May 30, 2013. He entered in the shipping business in 1974 and managed a shipping fleet consisting in excess of 250 vessels. He serves as the Chairman of the North of England P&I Association, as the Chairman of the Greek Committee of Bureau Veritas as well as Member of the Greek Committees of Germanischer Lloyd, Det Norske Veritas, Lloyd's Register and ABS. He holds a civil engineering degree from the National Technical University of Athens.

**Photo: George Prokopiou, Chairman of Dynagas LNG Partners LP**



## **IENE Company Profile**

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