2019 IGU World LNG Report

• Data in the 2019 World LNG Report is sourced from a variety of public and private domains, including the BP Statistical Review of World Energy, Cedigaz, the International Energy Agency (IEA), the Oxford Institute for Energy Studies (OIES), the US Energy Information Agency (EIA), the US Department of Energy (DOE), GIIGNL, IHS Markit and company reports and announcements.

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Agenda

• Global Trade
• Prices
• Liquefaction
• Regasification
• Shipping
LNG Trade

Global LNG trade increased sharply in 2018.

- Increased by **28.2MT**
- Setting a new annual record of **316.5MT**
- 5th consecutive year of incremental growth
- 3rd largest annual increase ever (behind only 2010 and 2017)

LNG import growth in 2018 was driven by China and South Korea, the world’s second- and third-largest LNG importers. Represented nearly **80%** of the increase in net trade. Combined incremental growth of **22.2MT**

- Two new markets began receiving LNG supply in 2018: Bangladesh and Panama
- Cameroon joined the club of LNG exporters with the world’s second floating liquefaction project
- Australia led all exporters in incremental growth
Short-, Medium-, and Long-term LNG Trade in 2018

- Non-long-term LNG trade reached 99 MT in 2018, increase of 14.5 MT YOY, accounting for 31% of total gross LNG trade.

- Short-term supply and demand growth was strongest in the Pacific Basin.

- New liquefaction capacity added during the year was contracted mostly to aggregators with diverse LNG trading portfolios.

- Particularly notable was the increase in short-term supply from Australia, which had the largest increase in non-long-term exports (+6.4 MT) despite holding long-term contracts directly with many end-markets.

- The largest growth in non-long-term imports was in China, which took in an additional 10 MT YOY from the short-term market as buyers relied heavily on the spot market to satisfy their strong demand growth.
Global Prices in 2018

- Most LNG-related prices around the world followed an upward trend in 2018

- Several price markers experienced some volatility in the spring and summer months

- Northeast Asian spot prices fell from an average $9.88/MMBtu in January 2018 to a low of $7.20/MMBtu in May 2018.

- Spot prices showed some signs of weakness toward the end of 2018

- European spot prices climbed for most of the year, though a large influx of LNG in the fourth quarter of the year began to place some downward pressure on market prices
Liquefaction Plants

The substantial expansion of global liquefaction capacity that began in 2016 continued through 2018.

- Led by additions in Russia & Australia
- Capacity has reached 392.9 MTPA as of February 2019
- Total nominal liquefaction capacity increased by 30.6 MTPA since the end of 2017
- A further 101.3 MTPA has been sanctioned for development, the majority of which is under construction in the United States

- A total of 21.5 MTPA of liquefaction projects reached FID in 2018 — nearly as much as in the previous three years combined
- Significant additional FIDs are expected in 2019 starting with the Golden Pass LNG project in February.
- A growth of 22% is expected by 2024 in global nominal liquefaction capacity from February 2019
- Liquefaction project developers are poised to drive a wave of new capacity with approximately 843 MTPA in proposed capacity seeking to come online by 2025

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LNG Receiving Terminals

- Global LNG regasification capacity reached a high of 824 MTPA as of February 2018.
- 6.2 MTPA net growth in global LNG receiving capacity.
- 2 new LNG offshore terminals.
- New terminals and expansion projects added 22.8 MTPA of regasification capacity in the global LNG market in 2018.
- 5 new LNG onshore import terminals.
- 2 regasification markets.

Argentina, Brazil, Egypt, and United Arab Emirates had their chartered ships transport in 2018 receiving the LNG from the market and resulting in only 5.74 MTPA of new regasification capacity growth.

New markets including Bahrain, Croatia, El Salvador, Ghana, and the Philippines are in the process of installing their first regasification terminals.

Multiple new regasification terminals and expansion projects were set to begin operations in early 2019, including Thailand, India, China, Jamaica, Russia (Kaliningrad), Bahrain, and Bangladesh.

China was a particular source of growth, commissioning three new terminals in 2018 and an expansion of an existing terminal.
Floating Regasification in 2018

• Total regasification capacity at operational offshore terminals decreased to 80.1 MTPA.

• Charters of two FSRUs ended as well, in Kuwait and at Tianjin, China.

• As of February 2019, twelve offshore projects were under construction. These terminals are spread between new markets, such as Ghana and Russia (Kaliningrad) and more mature markets, such as India and Brazil.

• Projects have even been proposed in Australia, a major LNG exporter, with one project signing a time charter for an FSRU in December 2018 to meet periodic surges in gas demand.

• As of February 2019, twelve FSRUs (including conversions) were on the order book of shipbuilding yards.
LNG Carriers

525
LNG Vessels
At end-2018

5,119
Trade voyages
In 2018

Spot charter rates for a modern fuel-efficient tanker averaged 28% in January for the first two months of the year, an 81% YoY increase.

Spot charter rates tapered off during the spring and summer months, averaging $56,000/day.

This was short-lived and spot charter rates had returned to around $74,000/day by January 2019.

Global LNG Fleet

+53
Conventional carriers added to the global fleet in 2018

Propulsion systems

41%
Active vessels with DP06/TFDE, ME-GI, or XFD propulsion systems

Charter Market

Steam $53,400 TFDE/DFDE $85,500
Average spot charter rate per day in 2018

Orderbook Growth

+52
Conventional carriers ordered in 2017

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