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2019 IGU World LNG Report



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- 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



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**

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)



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

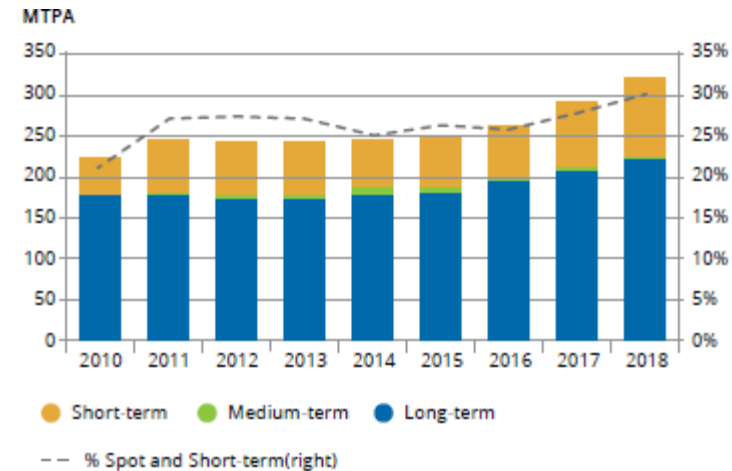


Australia led all exporters in

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.



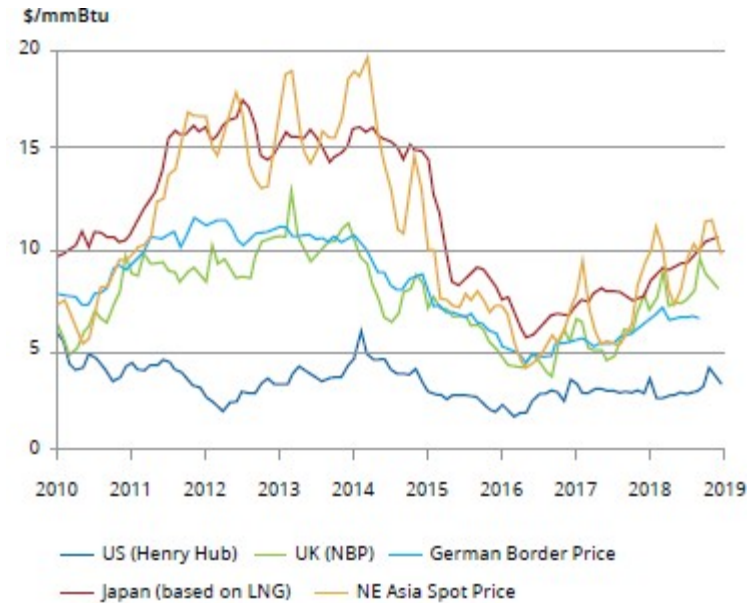
Sources: IHS Markit, IGU

- 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

Monthly Average Regional Gas Prices, 2010 – January 2019



Sources: IHS Markit, Cedigaz, US Department of Energy (DOE)

Liquefaction Plants

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



Led by additions in
Russia & Australia



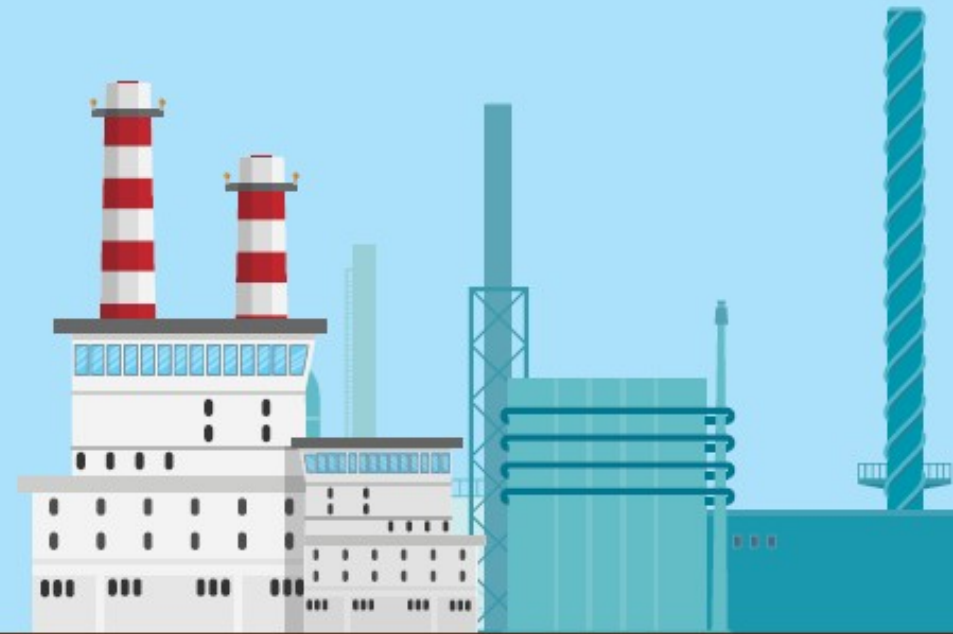
Capacity has reached
392.9 MTPA
as of February 2019



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
15.6 MTPA
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

LNG Receiving Terminals



Global LNG regasification capacity reached a high of **824 MTPA** as of February 2019



New terminals and expansion projects added **22.8 MTPA** of regasification capacity to the global LNG market in 2018



+6.2 MTPA Net growth of global LNG receiving capacity



+5 New LNG onshore import terminals



+2 New LNG Offshore terminals



+2 Regasification markets



Argentina, Brazil, Egypt, and United Arab Emirates

had their chartered FSRUs leave port in 2018 removing 16.5 MTPA from the market and resulting in only 5.2 MTPA of net regasification capacity growth.



New markets including Bahrain, Croatia, El Salvador, Ghana, and the Philippines

are in the process of constructing 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

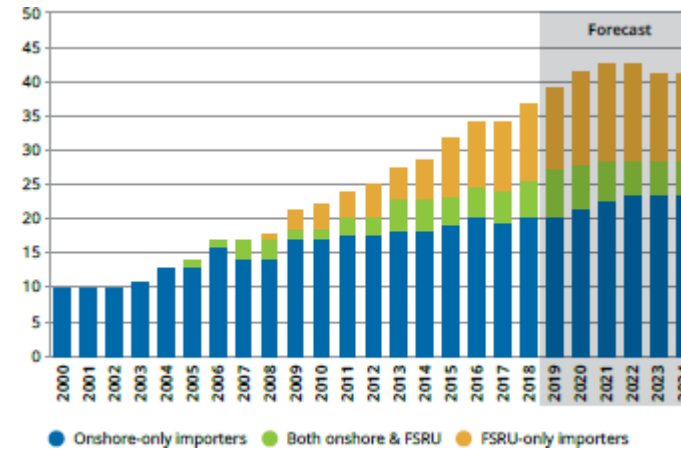


China

was a particular source of growth, completing 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.



Sources: IHS Markit, Company Announcements

LNG Carriers



525
LNG Vessels
At end-2018



5,119
Trade voyages
In 2018



Spot charter rates for a modern fuel-efficient tanker averaged \$76,000/day 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**



Spot charter rates in Q4 2018 peaked at an all-time high of **\$195,500/day** and averaged **\$150,000/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 DFDE/TFDE, ME-GI, or XDF 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

Available for download at:
www.igu.org

