

Flash Analysis Maritime Industries – LNG tankers

Credit Analysis

>>> Green footprint: energy-hungry China becomes game-changer for LNG tanker shipping

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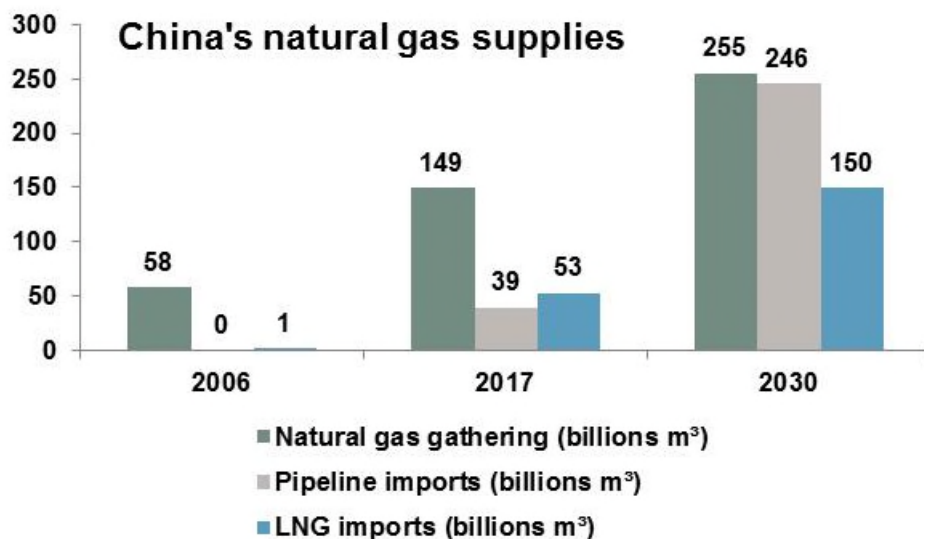
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China plans to reduce air pollution in large cities by replacing coal with gas as a source of energy. This led to a rapid increase in LNG imports, particularly in the second half of 2017. China became the world's second largest importer of LNG after Japan in 2017. China could even be in a position to overtake Japan as the world's largest importer of natural gas by 2020. In 2017, global LNG trade amounted to 393.4 billion m³ (approx. 291 million t). Asia alone accounted for around 72% of this figure. An enormous increase in demand for LNG tankers can be expected as a result.

13th five-year plan: increase the share of natural gas in China's primary energy mix from 6% (2015) to 10% (2020) and then to 15% (2030).

China consumed around 59 billion m³ of natural gas in 2006 and imported natural gas in liquefied form (around 1 billion m³ of LNG) for the first time in its history. In 2017, China's consumption had already reached around 241 billion m³ of natural gas, of which 53 billion m³ was LNG. Between 2016 and 2017, China's LNG imports increased significantly by 15%. For 2018, current LNG import data even suggests growth of around 50%, to just under 80 billion m³.

In 2017, China met 22% of its demand for natural gas with LNG imports. The five-year plan envisages that 15% (approx. 651 billion m³) of China's primary energy consumption will be accounted for by natural gas by 2030. The International Energy Agency (IEA) estimates that China's own gas production will rise to about 255 billion m³ in 2030. If the percentage of LNG to meet the forecast demand for natural gas is conservatively estimated to be 22%, we expect LNG imports to increase by 184% to around 150 billion m³ by 2030 (see diagram below). This is equivalent to average annual growth of around 14%.



Source: BP Statistical Review of World Energy June 2007, June 2018, IEA Forecast (own diagram)

Development in China's LNG infrastructure

To ensure the distribution of LNG to households, China is investing in LNG containers that can be transported by truck and in (expanding) gas storage facilities and pipelines. In mid-2018, China was operating 18 LNG import terminals with a total capacity of around 84 billion m³/year according to the International Gas Union. Seven new terminals (approx. 26.5 billion m³/year) and four terminal expansions are under construction. In the meantime, investment commitments have been made for another nine import terminals.

Impact on LNG tanker shipping

In 2017, China's LNG imports came from the following regions: Australia (47%), Qatar (21%), Malaysia (11.5%), Indonesia (8%), New Guinea (6.5%) and the USA (6%). Shipments from the USA had the most positive impact on tonnage-mile demand in the LNG tanker segment as this represents the longest distance by far. With the planned expansion of the US LNG export terminals and the high LNG demand forecast for China, we expect a drastic increase in the importance of US-China LNG trade and an especially positive impact on the LNG spot transport market, as the LNG volumes contracted by China under long-term gas supply and purchase agreements are not sufficient to cover demand during peak periods. US LNG exports to China increased significantly by 244% year-on-year in 2018.

We expect Chinese US LNG imports to rise to 10% by 2030. This is equivalent to 13.6 billion m³ (10 billion t). An average of around 1.7 LNG tankers are needed for US exports of 1 million t of LNG to China. This means that in purely mathematic terms, all other factors remaining the same, a total of 17 LNG tankers would be tied up in US-China LNG trade all year round until 2030. This is an enormous tonnage capacity in relation to the total fleet.

The current LNG trade fleet (ships with a capacity >100,000 m³ (excluding FSRUs¹) comprises 470 ships with a total capacity of around 75 million m³. Of these, around 70% are tied up in long-term charter contracts. The order book with deliveries until 2021 comprises 95 ships, 23 of which do not have a long-term charter in place.

Although according to Clarksons 2018 - all other factors remaining the same - the LNG trade fleet is growing disproportionately by 14% compared to the increase in liquefaction capacities (+8%), spot market rates have risen by more than 70% year-on-year, mainly due to the high Chinese demand for LNG, and reached USD 95,000/day currently, which is well above the cash break even level of approx. USD 70,000/day.

Conclusion

The long-term outlook for LNG tanker shipping is positively impacted by China's high gas demand, although in the short term the prospering US LNG exports to China are negatively impacted by the current trade conflict between the US and China and uncertainty is growing. If we estimate an average of 1.1 LNG tankers for the export of one tonne of LNG to China, regardless of route, 121 ships (about 1/5 of the fleet) would be tied up in global China LNG trade all year round in 2030, in purely mathematical terms. Possible tonnage overcapacities due to the currently rising LNG tanker order book would primarily arise in this scenario as a result of insufficient supply (bottleneck in LNG export capacities).

¹ Floating Storage and Regasification Unit