GLOBAL LNG MARKET: ILLUSORY GLUT

EXECUTIVE SUMMARY
Global LNG market is subject to the laws of economic cycles determined by the prices for hydrocarbons, the costs and periods of construction of new liquefaction capacity, the availability of freight. Amid favorable price environment numerous positive final investment decision (FIDs) on new LNG plants have been made prior to 2015. As a result, 16 projects with a total capacity of 93 MTPA (with 51% based in the US) are currently under construction worldwide. By 2020, their timely implementation may lead to a global glut amounting to 21 Mt.

Fig. 1. Status of LNG projects worldwide as of late October 2018 and their capacity as of the end of 2025, MTPA

Limited capacity of the LNG-carrier fleet creates the risks of underutilization of new and existing plants: due to the moderate rates of its expansion by 2020 it will be able to transport only 352 Mt of LNG, which corresponds to the consensus forecast of global demand, while the potential supply will amount to 374 Mt.

Unfavorable price environment in 2015-2017 made major adjustments to the original plans for the construction of new liquefaction capacity around the world: from the beginning of 2015, 20 projects with a total capacity of 184 MTPA were cancelled. As a result, virtually no additions resulting from new FIDs are expected until the end of 2022. This will lead to a gradual balancing of the market closer to that date.
By 2025, if new LNG supply is limited to the commissioning of liquefaction capacity currently under construction, the deficit of up to 74 MT will emerge on the market. Investors who share this vision aim to conclude agreements with customers and start construction as soon as possible. Various companies have already announced their intentions to make FID on 25 LNG plants over the next 2 years. Their total capacity amounts to almost 242 MTPA, of which 218 MTPA are planned for commissioning before the end of 2025.

Risk analysis of the proposed projects indicates that with a high probability by the end of 2025 only 3 new plants and 3 expansions of the existing ones with a total capacity of 74 MTPA may be launched in a timely manner. In 2025 they are expected to produce 66 MT of LNG. As a result, the potential supply of liquefied gas will remain within the demand range forecast, which implies market balance.

![Projected global LNG supply-and-demand balance up to 2025, MT](Fig. 2)

The latest oil price decline will make LNG exports from the majority of plants commissioned in the current decade unprofitable. Of all pre-FID projects, only those with the lowest costs per unit may achieve 100% capacity utilization. These include primarily Qatari and Russian enterprises, as well as Nigeria and Angola with the costs of supply of less than 7 $/MBTU.
Due to the incremental global LNG supply glut, by 2021 we expect a slight decrease of prices to 6.9 $/MBTU in Europe and 7.9-9.7 in Asia. After that the trend will be reversed and a moderate price growth to 8.5 $/MBTU in Europe and 10.5 $/MBTU in Asia will follow.

In the Baseline scenario, the prices are expected to remain at this level through 2022-2025.

Given the announced planned capital expenditure, we estimate that Arctic LNG 2 will achieve the breakeven price of 3.8 $/MBTU, while its cost of supply will amount to 6.7 $/MBTU. The project may become one of the most competitive gas liquefaction assets in the world.

**Fig. 3. Breakeven price (FOB delivery basis) and cost of supply to the APR of recent and pre-FID LNG plants*, $/MBTU**

* Freight rates – 140 thous. $ per day, fuel oil price – 404 $/t

Source: Sberbank CIB, VYGN Consulting

The target announced by the Ministry of Energy – the 15% share of Russian LNG in the global market by 2025 – can only be achieved if the actual LNG demand will be at the consensus forecast level and all Russian plants will operate at full capacity. However, Russian projects may fail to be commissioned in 2022-2023, which is the most favorable time for them to start operations due to the expected emergence of LNG deficit. Risk minimization efforts have to be intensified in order to achieve positive FIDs as soon as possible.
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