

Talks in U.S. on LNG Market Outlook and Challenges

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Last week, I visited the United States to talk with energy policy and industry stakeholders and experts on a short to long-term outlook and challenges for the gas/LNG market. As international energy markets as a whole have been greatly shaken since the emergence of the Ukraine crisis, the European gas market has featured the most severe developments such as price spikes, the tightening supply-demand balance and destabilization, seriously affecting the global LNG market. The Dutch Title Transfer Facility (TTF) price, or the European benchmark for natural gas, skyrocketed to some \$100 per million British thermal units in late August as a substantial fall in Russian pipeline gas exports, the main traditional gas supply source for the European market, led to a tighter supply-demand balance and concerns about potentially serious gas shortages. Spot prices of LNG, which used to make up for the Russian supply fall, soared in line with European gas prices, hitting highs close to \$70/MMBtu. Later, European gas and spot LNG prices fell back from highs and restored stability. But they have remained as high as \$30-40/MMBtu.

The biggest issue for 2023 and 2024 is whether European gas and LNG markets will face a tighter supply-demand balance and destabilization again. While the markets have restored stability, no optimism can be warranted for the immediate future for several reasons. One reason is that European gas inventories, which increased to a full capacity level briefly, will decline to considerably low levels next spring and fail to be accumulated through Russian pipeline gas exports. Other reasons include potential additional falls in Russian pipeline gas and LNG supply, unexpected disruptions to supply from other countries and potential gas demand growth in China after a plunge in 2022. The European gas market will stay on a tightrope, being vulnerable to a tightening supply-demand balance. After the substantial decline in Russian gas supply accounting for a quarter of global gas exports, countries may race to obtain gas supply including LNG. The global gas/LNG market will thus remain unstable and vulnerable.

Any harsh race to obtain gas/LNG supply may push up prices even beyond the highs recorded in 2022. This may deal a severe blow to the European economy and exert spillover impacts on other gas consuming and importing economies. While the European Union has agreed to introduce a gas-price cap system, how the system would work still remains uncertain along with its effects. Price hikes may make it difficult to buy or import gas in low-income developing countries, leading to constraints on energy supply. Gas/LNG price spikes may lead these countries to depend more on relatively cheaper coal, resulting in an increase in CO₂ emissions as another spill-over effect.

To prevent such adverse impacts, relevant countries must be aware that the avoidance of any disorderly, exclusionary zero-sum game race to obtain gas supply would serve global interests,

must reaffirm the significance of their cooperation in coping with crises, and must refrain from taking excessively selfish actions. To these ends, they should reduce gas and electricity consumption and utilize all effective alternative energy sources. At the same time, they should secure gas and LNG investment to expand the reduced supply. Particularly, investment should be secured in LNG seen as a key alternative gas supply source to maintain and stabilize market order, although LNG investment takes some time before leading to supply expansion. In this sense, Europe should be encouraged to reconsider its recent attitude of striving to secure supply while being reluctant to increase investment.

The gas/LNG market also has various challenges for the medium to long term. First, how gas/LNG demand would change over the medium to long term is uncertain. If priority is given to decarbonization goals and geopolitical issues, gas/LNG demand may be expected to decline substantially. However, market realities indicate that global gas/LNG demand will expand. The IEEJ Outlook 2023, our latest long-term global energy outlook, shows that gas/LNG demand will continue to increase mainly in Asia until 2050 even in the Advanced Technologies Scenario where fossil fuel demand will be suppressed under climate change and energy security measures. As far as gas/LNG demand increases in the future, investment must be secured and implemented to meet the increase in demand and stabilize the market.

My talks in the United States allowed me to reaffirm that the abovementioned different gas/LNG demand projections lead to different views about the roles of gas/LNG. Those who give priority to decarbonization and see gas/LNG as part of fossil fuels argue that even Asia, featuring growing energy demand and coal's large share of energy consumption, should promote a leapfrog transition from coal to renewable energy instead of LNG investment. However, most of the experts with whom I talked during my recent U.S. visit argued that Asia should promote a transition from coal to gas/LNG first before decarbonizing gas/LNG (using blue hydrogen/ammonia and synthetic fuels), while accelerating energy efficiency improvement and spreading renewable and nuclear energy. Such step-by-step approach would be effective and efficient, they said. An interesting opinion was that the transition from coal to gas represents the "low hanging fruit" approach that is effective as the first step toward decarbonization as indicated by the U.S. experiences under the shale revolution.

As a matter of course, the United States has successfully taken advantage of the low hanging fruit approach thanks to the shale revolution, which dramatically lowered gas prices. The current high gas/LNG prices are impeding the promotion of gas/LNG consumption. In this respect, my talks with U.S. experts focused on how long gas/LNG prices would remain high. While it is difficult to forecast future prices, it is unrealistic to assume that the gas/LNG supply-demand balance would remain tight over a long time. As indicated by the international energy market history, the principle that high prices themselves are the most effective cure for healing high prices may work. Regarding investment to meet a long-term uptrend in LNG demand, many of my discussion partners pointed out that long-term commitments to link LNG supply to demand would be important for responding to uncertainties and preventing investment to be "stranded assets". In respect to long-term commitments to buy LNG, there are various uncertainties, including those about market liberalization in gas-importing countries. An interesting argument made in the talks in the United States was that market players with high capacity to buy LNG and adjust supply would play a key role in launching new LNG supply projects and flexibly increase supply to Asia with growing demand, while maintaining commitments to buy LNG over certain periods of time. As seen in

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energy markets frequently, needs lead to solutions. It is hoped that stakeholders' concentration of their wisdom will play a key role.

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