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Gas Market Outlook for 2020
Executive Summary

Hiroshi Hashimoto, Head of Gas Group
Fossil Energies and International Cooperation Unit
The Institute of Energy Economics, Japan

Outlook for 2020 - LNG prices and LNG demand and supply

1. Japan's average LNG import price is expected to go down to USD 8.8 - 9.0 per million Btu in 2020, from USD 10 estimated for 2019. The expected average LNG import price reflects an expected average assessed spot LNG price in Northeast Asia of USD 5.5 - 6, an expected average crude oil import price of USD 66 per barrel, and the decreasing linkage to crude oil prices in term-contract LNG prices.
2. The global LNG demand is expected to grow by 6% to 370 million tonnes in 2020, from estimated 350 million tonnes in 2019. The global LNG supply capacity in the new year is expected to be more than 380 million tonnes even after assuming lower utilization rates, maintaining larger supply capacity compared to demand.

Major trends in the global LNG and natural gas markets

3. The global LNG market is estimated to grow more than 10% in 2019, thanks to significant increases in supply capacity, while the share of four major importing markets in Northeast Asia in the global total has shrunk to 55% from 62% in 2018, as the region has been importing almost the same volumes of LNG in 2019 as it did one year earlier.
4. A major portion of the rapidly expanded supply of LNG in 2019 has been directed into Europe. As spot LNG prices stay in the lowest level in the history, the gap between them and long-term contract prices has been the widest ever in Northeast Asia. With stronger influences of gas hub prices in Europe and the United States over LNG prices, underpinned by the increasing LNG imports in Europe and increasing LNG exports from the United States, global interaction of LNG prices in different regions has been more apparent.
5. Natural gas demand in OECD countries, China and India combined (which in total occupy more than half of the global demand), increased by 66 bcm (or

4%) year-on-year during the first three quarters of 2019, driven by growth in OECD Americas and China. OECD Europe has also returned to growth since the second quarter.

6. The global LNG imports were 260 million tonnes during the first nine months of 2019, increasing by 12% compared to the same period in 2018. While China increased LNG import by 16% during the period, Europe increased its LNG import by 83% to more than 60 million tonnes. Emerging LNG importers in Southeast and South Asia has maintained their growth trends, increasing imports by 25% or 1.7 million tonnes and 65% or 3.4 million tonnes year-on-year, respectively, during the first three quarters of 2019.

Notable trends in selected countries

7. On the LNG supply front, both Australia and the United States increased LNG exports by more than eight million tonnes each, while Russia increased its LNG export by seven million tonnes, during the first nine months of 2019. While Australia came very close to the world top LNG exporter position held by Qatar (equivalent to 77 million tonnes on an annualized basis), Russia's growth surpassed 50%. Egypt and Algeria, as well, increased their LNG exports, by 230% and 25%, respectively.
8. The United States exported 29.28 million tonnes of LNG during the first ten months of 2019, 65% more than the same period in 2018, as new LNG export facilities have started up in addition to the three projects in operation shipping out bulk exports to Japan. The annual LNG export capacity in operation in the United States is expected to be 48 million tonnes by the end of 2019 and 66 million tonnes by the end of 2020. The total export capacity is expected to grow further, surpassing 100 million tonnes per year when the facilities in which final investment decisions (FIDs) have been announced are completed.
9. Australia exported 64 million tonnes of LNG during the first ten months of 2019, a 14% increase year-on-year, approaching closer to the world No. 1 LNG exporter position. In the country, notable developments have been reported toward new generation LNG projects, including renewed project sponsor formations and additional feedgas arrangements to existing LNG production facilities. In the meantime, the country has several LNG importing projects in the Eastern regions.
10. In Russia, the Arctic LNG 2 has advanced with participation of Japanese players, to commence operation in 2023. New pipeline projects to supply China and Turley are expected to start operations by the end of 2019, while

the Nord Stream 2 to supply Germany has been slipped into 2020. The Yamal LNG project led by Novatek is now in competition in Europe against pipeline gas from Gazprom, who used to monopolize Russia's gas export.

11. China's natural gas production and consumption both increased by 10% year-on-year during the first ten months of 2019, although the growth rates were not as high as those in the last two years. During the same period, the country imported 47.70 million tonnes of LNG, 6.09 million tonnes or 15% more than it did one year earlier.
12. Large underground gas storage capacity has been one major contributor to the significant increase of LNG import in Europe. The inventory in European underground gas storage facilities at the end of October was equivalent to 71 million tonnes of LNG, 8.7 million tonnes or 14% larger than one year earlier. It represented 98% of the total working underground gas storage capacity, significantly higher than 87% one year earlier and the highest in the history of the storage statistics.

Japan's gas market

13. The number of customers switching retail suppliers in Japan's city-gas market had almost doubled during the last year to reach 12% of the total in the country by December 2019. In the Kanto region, in particular, the number had surpassed 1.5 million or 11.7% of the total residential retail customers there. In the meantime, in the electric power retail market, the switching rates had reached 22% in the country and 30% in Kanto. Competition has intensified between city-gas and electric power companies in mutual entries into each other's home turf.

New LNG production project development and Japan's contribution

14. In 2019, final investment decisions (FIDs) representing 71 million tonnes of annual production capacity - three in the United States, and one each in Mozambique, Russia and Nigeria - were announced, with many additional projects approaching the milestone.
15. As the world has significant additional gas resources to be developed, the global LNG supply capacity is expected to grow further in the future. In order to effectively utilise expected flexible LNG supply sources, more infrastructure investment is required in such facilities as LNG trans-shipment terminals, LNG FSRU receiving terminals, and LNG bunkering stations, to which Japanese companies and government are expected to contribute jointly.

Contact :report@tky.ieej.or.jp