

24 December 2020

The 437th Forum on Research Works

Gas Market Outlook for 2021

Executive Summary

Hiroshi Hashimoto, Head of Gas Group

Fossil Energies and International Cooperation Unit

The Institute of Energy Economics, Japan

Prices, Demand and Supply of LNG in 2021

1. Japan's average LNG import price is forecast to go down to USD 7.0 - 7.3 per million Btu in 2021 from USD 7.8 in 2020. The assessed spot LNG price in Northeast Asia is forecast to be USD 8 in the first quarter, around USD 5 in the second and third quarters, and USD 6-7 in the fourth quarter.
2. The global LNG trades are forecast to expand by 5% to 380 million tonnes in 2021 from estimated 362 million tonnes in 2020, backed by lower prices and expected ample supply capacity, which is forecast to continue being larger than demand at around 400 million tonnes.

Regional Trends in the Global LNG and Natural Gas Markets

3. The global gas demand is expected to decline by 3% in the calendar year 2020, while some recovery trends were observed from the third quarter. Gas consumption significantly decreased in the first quarter in North America and in the first half in OECD Europe. Gas consumption did not grow much in the first quarter but grew markedly in the second quarter in China. On the other hand, gas consumption increased significantly in the first quarter then shrank markedly in the second quarter in India. Trends in demand show stark contrasts between major markets.
4. Global LNG trades continued its growth until the first quarter of 2020. Although the second quarter saw a year-on-year decrease, a 2% increase is estimated for the calendar year. The share of Japan in the global LNG trades declined from 22% in the year 2019 to 20% in the first half of 2020. China imported more LNG than Japan in November 2019, May, June, August, November and December 2020. Meanwhile, OECD Europe as a region has recently imported more LNG than Japan or China.
5. Recent major fluctuation of prices has been an intense wake-up call for the LNG industry to thoroughly review LNG contracts and pricing. The Japan's average LNG import price was below USD 6 in September. The gap between crude oil linked contract LNG prices and spot LNG prices was wider in the year.

Notable Trends in Gas and LNG Demand

6. While the growth rate of China's natural gas consumption slowed in the first quarter,

consumption during the first ten months of 2020 was 6.6% larger than that of the same period in 2019. During the same period the country's LNG import increased by 11.9%, although the growth rate was smaller than those in the past few years. As some city-gas companies based in cities along the coast line have their own LNG receiving terminals, apart from terminals owned by the three major state companies, and third-party access is promoted at terminals - mainly those managed by the national pipeline company, new entrants' activities to increase LNG imports attract attention.

7. While India imported 19 million tonnes of LNG during the first nine months of 2020, 15% more than the same period in 2019, its gas consumption as a whole declined by 2%. The other South and Southeast Asian countries imported 3% more LNG during the first eleven months of 2020 than the same period one year earlier. Ample supply and relatively palatable prices are expected to stimulate demand there.
8. Natural gas consumption declined by 4.6% and LNG import increased by 1.4% year-on-year during the first three quarters of 2020 in OECD Europe, while pipeline gas imports from other regions shrank by more than 20% during the same period. During the rise of LNG imports in the last several quarters, more LNG was imported from the United States and the Russian Arctic region. In October 2020, the European Commission announced its Methane Strategy, including initiatives to manage and regulate methane emissions from natural gas production and other activities. Its impacts on suppliers from other regions should be closely observed.

Notable Trends in Gas and LNG Supply

9. Monthly export of LNG from the United States declined by more than 50% from a January peak by July 2020. However, the U.S. Energy Information Administration (EIA) has estimated that monthly volumes again started registering record highs from November.
10. Many potential new LNG export projects in the United States and other regions postponed investment decisions due to uncertainties over future demand. Only one FID was announced in the world in the year, from a project on the Pacific Coast of Mexico in November.

Developments in LNG Bunkering and Small-Scale LNG

11. More and more initiatives have been underway to introduce LNG as a marine fuel around the world. In addition to business development in Japan, Japanese companies have participated in LNG bunkering projects in different countries. LNG has also been adopted as a land transportation fuel in different regions in the world.

City-Gas Liberalisation Developments in Japan

12. In the liberalised Japan's city-gas industry, 3.94 million retail customers (15.5% of the total customers) had switched their suppliers as of August 2020. More than 2 million

customers (15.9% of the total) had switched their suppliers in the Kanto region at that time. While larger urban areas have observed many customer switchings, developments to promote competition in those areas where customer switchings have not happened should be also watched.

Remaining Challenges

13. While the LNG market continues expanding, it is essential to ensure investment in production projects to meet the expected demand after the middle of the 2020s. It is also important to enhance liquidity in the LNG market and improve trading conditions including appropriate pricing indexes, when the industry pursues development of emerging markets in Asia. New approach will be required to address CO₂ and methane emissions.