

Present Status and Outlook of Global LNG Market under COVID-19 Disaster

Ken Koyama, PhD
Chief Economist, Managing Director
The Institute of Energy Economics, Japan

The COVID-19 pandemic has exerted great impacts on the global economy, international politics and geopolitics, throwing international energy markets into a tumultuous whirlpool. It has brought about a substantial plunge in energy demand, an energy oversupply and energy price declines, gravely affecting the global energy industry. As a result, great uncertainties have arisen about energy investment required for the future, threatening to deal a severe blow to energy-exporting economies that depend heavily on energy export revenue and to trigger their social, economic and political destabilization. While the pandemic's impacts range very wide and are complicated, this report focuses on impacts on the liquefied natural gas (LNG) market.

Before the COVID-19 disaster, global LNG demand was growing robustly. Average annual growth for three years from 2017 stood at as high as around 10%, concentrating in Asian emerging and developing countries such as China, India and Southeast Asian countries. LNG, known as clean fossil fuel, was spreading as a mainstay energy source or an alternative in many Asian countries to coal to cope with air pollution as their urgent issue. Encouraged by growing Asian LNG demand, the global LNG industry planned to launch new LNG supply projects, creating a trend in which both LNG supply and demand were expanding together.

The COVID-19 pandemic has dampened the LNG growth trend and hopes on future growth. Although global LNG demand continued growing despite the previous global financial crisis of 2008-2009, demand is expected to decline in 2020 as the pandemic has put an unprecedented damper on the global economy including major Asian countries. Global economic contraction and stagnant global trade have seriously affected LNG demand. The Institute of Energy Economics, Japan, forecasts that global LNG demand would decline from 347 million tons in 2019 to 325 million tons in 2020 in a reference scenario assuming a steady economic recovery from the second half of this year or to 317 million tons in a scenario for the pandemic's prolonged economic impact. Before the COVID-19 disaster was taken into account for the outlook, the IEEJ had forecast global LNG demand in 2020 at 369 million tons.

Even before the pandemic, the global LNG market had been expected to see an oversupply. Global demand in the year had been predicted at 369 million tons as mentioned earlier against 381 million tons in supply capacity. Given the launch of LNG projects under hopes on demand growth as mentioned above, the supply capacity of 381 million tons had been expected to be realized in 2020. As the pandemic has dampened LNG demand, the oversupply is set to increase. Based on the abovementioned numbers, a potential global oversupply in 2020 comes close to 60 million tons. In response to the massive potential oversupply, spot LNG prices reflecting the supply-demand balance have plunged. Asian spot LNG prices have fallen to historical lows around \$2 per million British thermal units.

The LNG market has shown dynamic reactions to the historically low prices. In the LNG

market that does not have any mechanism like the OPEC-plus group's strategic reduction of supply in the international oil market, low prices themselves can become a key factor to trigger supply and demand changes. The extremely low prices have exerted pressure on LNG suppliers with high marginal production costs to exit from the market. Such pressure is stronger for suppliers with short-term flexibility. In a typical development where low prices caused LNG supply cuts, substantial numbers of U.S. LNG export cargoes have been cancelled. Conventional LNG project operators might have attempted to utilize their built-in flexibility as much as possible and cut supply to meet the demand fall. On the demand side, however, the remarkably low prices have enhanced LNG's price competitiveness against rival fuels. The low prices (and expectations of prices remaining low over a certain period of time) are expected to stimulate LNG demand in emerging and developing countries.

Meanwhile, the LNG market sometimes sees "supply-driven" developments where new LNG project operators explore sales channels or market shares. Although actual supply would be cut from the above projected supply capacity at 381 million tons in response to the weak prices in 2020, some excessive supply would flow into the market in search of buyers. The IEEJ's LNG demand projection represents "quantity demanded" based on economic growth, industrial production and other assumptions. In the actual market, "quantity supplied" may emerge as actual sales. Interesting in this respect may be the natural gas and LNG supply-demand trends in Europe.

In the first five months of 2020, gas consumption in OECD Europe totaled 237 billion cubic meters (BCM), down 19 BCM or 7% year on year. The decline was mainly attributable to economic contraction, lockdowns under the pandemic and other factors. Gas imports from outside Europe decreased by 15 BCM or 9%. However, LNG imports in the period increased by 8 BCM or 11%. Due to the LNG import rise and the consumption fall, pipeline gas imports posted a substantial decline of 23 BCM or 26%. In particular, pipeline imports of Russian gas plunged by 19 BCM or 23%, accounting for most of the total pipeline gas import drop. LNG oversupply flew into Europe as the "last resort market" to adjust supply to demand in the world market, exerting downward pressure on pipeline gas imports from Russia. In this sense, future gas supply and demand in Europe and Russian pipeline gas exports would attract attention as factors having influence on the global LNG supply-demand balance.

Irrespective of "supply-driven" developments, we must recognize current oversupply in the LNG market and its potential prolongation beyond expectations under the pandemic. Even earlier, the global LNG market had been expected to see an oversupply in the first half of the 2020s. Whether the market would transition from oversupply to equilibrium and to overdemand had been predicted to depend primarily on the pace of demand growth mainly in Asia. Given the pandemic's impact, however, we must also pay attention to future gas supply and demand trends in Europe, Russian gas strategies and future LNG supply capacity to be affected by the delay, revision or cancellation of LNG project investment decisions under the current low prices. Furthermore, we must watch how the position of natural gas and LNG would change as decarbonization initiatives are enhanced globally over a long term.

The sustainment of adequate investment in the entire LNG supply chain and the development of relevant infrastructure will be required for LNG to achieve sound growth as key energy source in Asia and the world. To this end, market stability and rational pricing will remain important for all LNG stakeholders.

Contact: report@tky.ieej.or.jp

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