

Singapore Talks on Asia Pacific Gas/LNG Market Challenges

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

On November 28, a conference took place in Singapore under the title “Natural Gas and LNG Market Dynamics in Asia and the Pacific Region.” As indicated by the title, the conference focused on the Asia Pacific natural gas and LNG market’s future dynamic growth and changes, and it was cosponsored by the Global Gas Center of the World Energy Council, the Energy Studies Institute of the National University of Singapore, the Australia-China Relations Institute of the University of Technology Sydney and the International Energy Forum.

Some 60 participants in the conference included LNG industry representatives, scholars and experts mainly from Asian countries, conducting vigorous talks in four sessions on the demand side, the supply side, market dynamics, competition/energy transition/energy policy. In a keynote address at the outset of the conference, I made a presentation to give an overview on hopes and challenges of Asian natural gas and LNG market growth, based on the IEEJ Outlook 2020. In the following, I would like to summarize impressive points of discussions at the conference.

It has been globally recognized that the center of global energy demand is shifting to Asia that is driving global energy demand growth. As for gas and LNG, stakeholders have agreed that the Asian market will grow more important. In fact, Asian gas and LNG demand has substantially grown and is well expected to continue expansion. At issue in this regard are the speed and degree of the growth. This is because the speed and degree are set to exert great influence on structural changes in gas and LNG supply and demand and in the gas and LNG market. In the conference, various views were presented on slack spot LNG prices in Asia, factors behind the slackness, future developments and their impacts. However, the key factor behind the slack prices is that demand expansion has been slower than supply expansion, resulting in a loose supply-demand balance.

As noted above, few people doubt that Asian gas and LNG demand is going in the direction of expansion. However, there are numerous factors that exert influence on the speed and degree of the expansion. In the keynote address, I pointed out that factors exerting such influence would include the economic growth speed, the intensity of environmental regulations, price affordability, and competition from coal, nuclear, renewable energy, and LPG and other petroleum products, as well as market liberalization and deregulation and competition between pipeline gas and LNG. Based on a price sensitivity analysis in the IEEJ Outlook 2020, particularly, I noted that LNG demand in 2050 in the Low Price Case assuming LNG prices as remaining unchanged from current spot LNG price levels would be some 60% more than in the Reference Scenario assuming the price of some \$10 per million British Thermal Units, contributing to resolving Asia’s energy trilemma. Participants in the conference proactively gave questions and opinions about the concept and significance of the price assumption, indicating their great interests in the matter. Naturally, however, there are complicated marketplace

problems including whether massive investment to meet demand growth could be realized even at current spot LNG price levels. In this sense, a common challenge for Asian market stakeholders would be how to explore conditions for balancing the sound expansion of LNG supply with that of demand.

Second, I would like to note that vigorous discussions on the future Chinese market came at the conference, indicating LNG market stakeholders' high interests in the Chinese market. Although the center of global LNG demand growth is expected to shift to emerging markets such as India and the Association of Southeast Asian Nations over a long term, it is natural for LNG market stakeholders to have high interests in the future course of the Chinese market that has become the world's second largest LNG importer and is still expanding demand and imports. Particularly, how far China would expand LNG imports would be the greatest matter of interest to the demand side in the Asian market. At the conference, however, participants pointed out that there are diverse, complicated factors that would exert influence on China's future LNG imports. They range from macro factors such as economic growth and environmental regulations to gas market supply and demand factors including domestic gas production, pipeline gas imports and the Chinese government's gas market reform.

Impressively, arguments on China indicated anew that China is considering various policies and strategic responses after its substantial expansion of LNG imports in winter 2017 tightened the supply-demand balance on the spot LNG market and pushed up spot LNG prices to its disadvantage. One of the impressive arguments emphasized China's plan to expand and utilize underground natural gas storage reserves. It was interesting that the argument indicated China's attitude of taking advantage of such inventories or reserves for procuring LNG imports more efficiently. In China, oil import dependence has risen close to 70%. Gas import dependence has also increased close to 40%. Given that the utilization of inventories or reserves would contribute to improving China's gas supply security, the Chinese government could give higher priority to gas inventories or reserves. Its relevant initiatives will attract attention.

Third, I would like to point out that participants in the conference presented numerous opinions and questions about coal and renewable energy competing with gas and LNG, indicating high interests in the competitors. If gas decarbonization is required as seen in Europe, the gas market environment may change greatly. In Asia with hopes placed on economic growth, however, low-carbonization and cleaner energy will be given priority before decarbonization. At the same time, gas price affordability is a key challenge to support growth and protect low-income people in Asia.

While gas and LNG demand growth is expected, switching from coal to gas is likely to contribute to low-carbonization and cleaner energy expansion. However, there is a challenge regarding price affordability. A sharp rise in the competitiveness of gas and LNG can resolve the challenge, but in reality it would not be easy. It was also interesting that whether gas and LNG would expand along with renewable energy by responding to renewables' intermittency or compete with renewables was controversial in the conference. An argument noted that as renewable energy expands substantially, gas-fired power plants' economic efficiency may deteriorate due to the merit order in a competitive electricity market, exerting downward pressure on gas demand. Arguments at the conference thus indicated that complicated factors and conditions exist in regard to the relationship between gas and renewable energy.

Undoubtedly, gas and LNG as energy sources have various advantages. However, they are

not perfect energy sources. No energy sources are perfect. It is a challenge for Asia to further promote gas and LNG while attempting to overcome their disadvantages in pursuit of the best energy mix.

Contact: report@tky.iej.or.jp

The back issues are available at the following URL

http://eneken.iej.or.jp/en/special_bulletin.html