Chapter 3

Discussion in the Working Group Meeting

December 2017

This chapter should be cited as

ERIA (2017), 'Discussions in the Working Group Meeting', in Koyama, K., Y. Kobayashi, I. Kutani and Y. Li (eds.), *Multilateral Joint Study on the Liquefied Natural Gas Market*. ERIA Research Project Report 2016-06, Jakarta: ERIA, pp.12-14.

CHAPTER 3

Working Group Discussions

This chapter summarizes the major discussions during the two working group meetings.

3.1 Dominant Factor to Encourage LNG Use

Although the importance of promoting natural gas demand varies depending on the country and perspective, majority of the workshop participants felt that, to increase LNG demand in the EAS region, it is most important to boost the competitiveness of LNG with respect to other types of energy. In the power generation sector, which is the core of LNG demand, competition is intense with low-cost coal-fired power and the politically supported renewable energy. Therefore, in attempting to increase LNG demand for power generation, the most important thing is to lower the relative price of LNG.

In addition, it was pointed out that there is no adequate regulation of carbon emissions, or existing regulations do not have an effect on the EAS region. Compared to other fossil fuels, LNG has low emissions of environmental pollutants, including carbon dioxide. Therefore, its use is expected to grow as the response to issues such as pollution and climate change becomes stricter. However, adequate mechanisms are not in place for evaluating the environmental value of natural gas, which makes it hard for the demand to increase.

3.2 LNG Price Benchmark and the Liberalization of the Downstream Market

For LNG to be reasonably and competitively priced, there is a need to create a highly transparent and reliable price benchmark for LNG/natural gas, which is lacking in Asia. Several efforts in that direction were presented, such as in China, Japan, and Singapore, but in every case it is assumed that the number of trading participants will be increased to raise transparency and reliability. From this perspective, it will be necessary to gradually abolish government control on price in the domestic market through the deregulation of the market in each country and the participation in LNG trading by an increasing variety of players.

Also, in international trading, interesting activities such as the standardization of sales and purchase agreements, and the removal or relaxation of destination clauses by ASEAN were presented as ways to lower LNG trading barriers and thereby increase the liquidity of trading.

3.3 Cost Reduction of LNG Supply Chain

Various options were presented and discussed in terms of cost reduction in the LNG supply chain. For liquefaction plants, an example presented was cost reduction through modularization, an approach which has actually been used in Australia. For regasification plants, the discussion

touched on the significance of floating storage and regasification units (FSRUs), whose use has been considered all over the world in recent years. FSRUs can be set up with less expense and a shorter construction period than conventional regasification plants built on land. This can be used by countries with comparatively low demand for LNG and as a short-term bridging solution. Due to the progress on this technology, it is expected that hurdles standing in the way of LNG production and importation will be lowered, and the growing LNG demand will consequently be supported in the future.

It was also pointed out that priority should be placed on the maximum use of underutilized capacity in existing LNG and natural gas infrastructure. In some existing infrastructure, not all equipment capacities are being used due to economic, technical, and other reasons, and reversing this situation will be one method of expanding supply capacity at the lowest cost.

If this idea is broadened further, countries new to using LNG will be able to create supply chains at low cost by jointly using, with other companies and other countries, the supply chains previously planned and developed in one company or country. For operators of existing infrastructure, this will have the benefit of improving the operation rate of equipment. In the case of ASEAN, for example between Thailand and Myanmar, it may be possible to efficiently build up LNG infrastructure by adopting this idea of wide-area infrastructure development and use across national boundaries.

3.4 Risk Share and the Role of Government

Long-term demand commitments have previously played a major role in developing new gas fields and establishing LNG supply chains. It was confirmed that demand commitments will continue to be an important element. However, at the same time, it was pointed out that the market environment is changing rapidly. There is increasing preference and trade in spot LNG and increasing competition in domestic gas and power market. In terms of the risk allocation between producers and consumers, it was proposed that a system of taking mutual risks be bolstered, for example by expanding upstream investment by consumers to shift some of the risks from producers to consumers.

In terms of government involvement, there were two contrary opinions. First is that involvement, such as leadership and risk sharing[2], should be limited to frontier projects[3] with high risk. Second is that the core infrastructure of LNG importing facilities and pipelines should be developed with government leadership[4]. It is difficult to establish a common degree of government involvement across the region, and there will be a need for studies on energy industry structures (ownership of business) and the capability of the private sector which differs for each country.

[2] Risk share includes equity investment, loan provision, and loan guarantee.
[3] An example of a frontier project is a project related to deepwater or arctic resource.
[4] In case a private company does not have the capability to build and operate such infrastructure or the business risk is too high for a private company, the government may be required to take the lead role.