## Chapter 8

## **Policy Implication**

February 2018

## This chapter should be cited as

ERIA (2018), 'Policy Implication', in Uemura T. and K. Ishigami (eds.), Formulating Policy Options for Promoting Natural Gas Utilization in the East Asia Summit Region Volume II: Supply Side Analysis. ERIA Research Project Report 2016-07b, Jakarta: ERIA, p.87.

## Chapter 8 Policy implications

Promoting LNG supply chain infrastructure development in ASEAN and India has three policy implications.

First, LNG supply chain development beyond national boarders will bring investment savings and achieve efficient LNG supply chain development for ASEAN and India. To realize cross-border LNG supply chain network using sea route, the flexibility of LNG tanker operations must be improved. This is because most ASEAN countries have introduced Cabotage regulation and domestic transport by vessels should be operated by national sailors. Cross-border LNG terminals will not only supply LNG for domestic demand but also for overseas demand. On the other hand, LNG tankers transporting LNG from an LNG terminal can go to both domestic and overseas users. To save on transport costs, the same sailors can operate the same tanker for both destinations. For this to occur, the Cabotage regulation must be relaxed.

Second, railway and sea transport is another option for LNG supply in ASEAN and India. They can utilize existing infrastructures like national railway systems and ports, but existing infrastructures are not reviewed from an LNG supply chain infrastructure development perspective. Also, in most cases, the last 1-mile infrastructure for final demand points and ports and LNG terminals is not well developed. These additional infrastructure developments are expected to be led by each country.

Third, LNG terminals can supply cool heat as a new industry resource. However, some LNG storage and regasification facilities are assumed as FSRUs. As such, it cannot utilize cool heating well. When hinterland LNG demand developments, including cool heat and other derivatives are prioritized, onshore LNG storage facilities or onshore mooring FSRUs are expected. In Japan, these are big refrigerators for preserving frozen foods, air separation plants to produce liquid oxygen, liquid argon, liquid nitrogen, and liquid carbon dioxide, as well as powder manufacturing facilities using extremely low temperatures to utilize such extreme cold heat. These kinds of industries are expected to be developed around the LNG terminal as a new business in those countries.