

Executive Summary

The global liquefied natural gas (LNG) market has been undergoing sustained and fundamental transformation since 2010. A combination of forces led by the revolution in shale gas production in the United States (US), rising global LNG use, diverging natural gas and crude oil prices, and demand shifts from traditional Northeast Asian countries (Japan, Republic of Korea, and Taiwan) to China, Southeast Asia, and South Asia present new challenges and opportunities for producing and consuming regions. The LNG market is already experiencing rising competition from the US and Australia in a market traditionally reliant on suppliers from Asia and Middle East. While new competitive forces bring challenges to producers, the development of a broad-based liquid and flexible LNG market can deliver substantial economic, environmental, and energy security benefits throughout the region. The challenge for policymakers in securing the widespread benefits of rising supplies of LNG is to transform potential LNG demand in Asia into real demand.

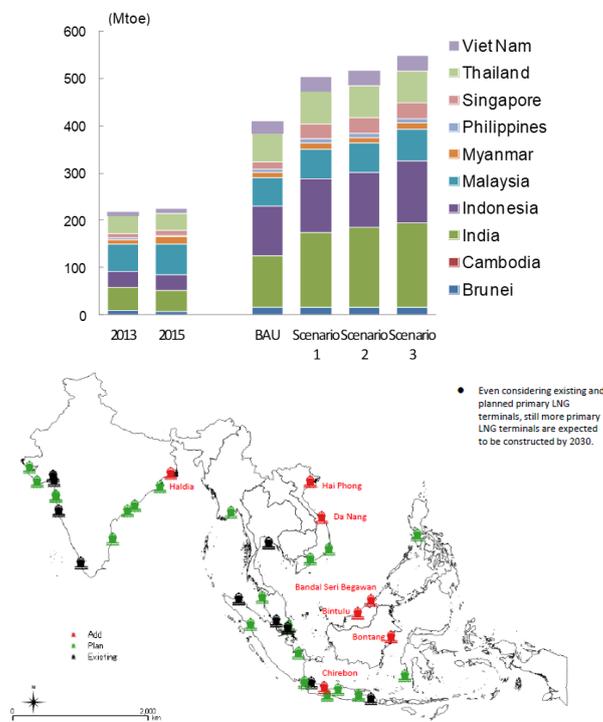
The key findings of the study are as follows:

- The US natural gas resource base is big and getting bigger. Advances in extraction technologies show continued improvements, indicating that US natural gas output could rise by substantial additional volumes at costs below US\$4 per one million British thermal unit.
- The US regulatory framework for natural gas production, distribution, and construction of processing facilities, including LNG export plants, has been largely efficient, but persistent and important challenges for its review process remain and these challenges pose risks to the rapid expansion of LNG export facilities.
- The natural gas market in Asia has significant potential and could grow 2.5 times between now and 2030.

Meeting this demand growth will require about US\$80 billion in LNG infrastructure investment in the Association of Southeast Asian Nations (ASEAN) and India combined¹ (Figure1-1).

- While historic Asian LNG demand centres Japan, Republic of Korea, and Taiwan are likely to experience modest or declining demand growth, emerging Asian LNG importers such as China, India, and other new emerging Asian countries will see rising demand for LNG. The base case assumption of the region’s LNG demand will reach 350 million metric tons in 2030.

Figure 1-1. Natural Gas Demand Potential and Required LNG Infrastructures in ASEAN and India



ASEAN = Association of Southeast Asian Nations, BAU = business as usual, LNG = liquefied natural gas, Mtoe = million tonnes of oil equivalent.

Source: Economic Research Institute for ASEAN and East Asia.

¹ Outcomes of the ERIA study on ‘Formulating Policy Options for Promoting Natural Gas Utilization in the East Asia Summit Region’, which was reported to the 11th East Asia Summit Energy Ministers Meeting on 28 September 2017. ‘LNG infrastructure’ includes LNG terminals, pipelines, satellite facilities, and ISO containers, but does not include upstream development, liquefaction facilities or gas-fired power plants. Additional US\$80 to US\$130 billion will be required for new-build gas-fired power plant construction.

Summary of Major Policy Recommendations

This report recommends that relevant stakeholders undertake the following initiatives to support a growing market for LNG in Asia:

Developing more liquid and flexible LNG markets:

- Removal of LNG destination restrictions in LNG contracts amongst all market participants to stimulate spot markets and price discovery; and
- Holding close dialogues between producers and consumers to determine the long-run requirements and policy instruments to promote competition and LNG growth.

Providing financial support:

- Engaging export credit agencies, including the Japan Bank for International Cooperation, Nippon Export and Investment Insurance, US Export–Import Bank, and Overseas Private Investment Cooperation; development agencies; and multilateral development banks to increase support for LNG projects to address long-term credit risks.

Capacity building:

- Providing a capacity building programme that covers technical standards, safety guidelines, and environmental regulations for government and industries in emerging LNG-importing countries in Asia.

Assisting policy developments in Asia:

- Helping structure energy mix targets and policy planning so that Asian countries could take full advantage of natural gas.