

Executive Summary

With robust demand and modest supply growth in the region, the East Asia Summit (EAS) area is expected to rely more on imported oil and natural gas in the future. Lacking international pipeline infrastructure, the majority of the oil and natural gas is imported by sea transport to the EAS region. Therefore, sea lane security of oil and liquefied natural gas (LNG) is of vital importance for energy security of supply to the region.

IEEJ estimates that oil and LNG imports into Asia Pacific will increase by 76 percent and 120 percent towards 2040 and reach 34 million barrels per day and 394 million tonnes (MT), respectively. Despite diversified supply sources of oil and LNG, the Hormuz and Malacca/Singapore Straits will remain by far the busiest choke points for the EAS region even in 2040.

There are various risks to sea lane security that impact the trade of oil and LNG. The key background elements that determine sea lane risks are congestion, geography, geopolitics, climate change, poverty, and law and order. These background elements in turn can trigger events that increase costs and delays in international energy trade. Such trigger events include piracy, terrorism, regional conflicts, accidents and extreme weather events. Trigger events in turn impact energy security of the EAS region in the form of supply disruptions, price volatility of the traded goods, financial risks to the industry including increased insurance premium, and the physical risk to human life.

Such background elements and trigger events have different dynamics in different parts of the world. For instance, while piracy has declined globally, instances of piracy have been on the rise in the Malacca and Singapore Straits. On the other hand, in the Strait of Hormuz and the Western Indian Ocean, regional conflict and militancy is the key risk to energy trade. Further, extreme weather events are expected to increase over time due to climate change, which could pose greater risks of congestion and accidents in Southeast Asia and the Panama Canal in particular.

In order to mitigate risks, various measures and strategies will need to be adopted. These include the adoption of electronic identification tags to monitor vessels, regional agreements to foster joint patrolling of waters, regulation of private security agencies, the implementation of an integrated accident risk management approach to prepare joint contingency plans in case of emergencies, and the development of alternate sea routes.

With increasing dependency on imported oil and LNG, participant countries in this study recognise the importance and risks of sea lane security. The Ministry of Energy and Mineral Resources of Indonesia regards accident, piracy, terrorism, and extreme weather as major threats for sea lane security, and recommends improving mutual trust among stakeholders, promoting cooperation on capacity building among stakeholders, and improving coordinated response to any attacks or casualties. Thai initiatives include an Oil Fund Scheme and Mandatory Reserve Requirement, and the 'Kara Canal Project' that bypasses

Malacca, interconnected gas infrastructure of the Association of Southeast Asian Nations (ASEAN) countries, and various multilateral measures like the traffic separation scheme (TSS), automatic identification system (AIS), and the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP). Pointing out the discrepancy in perception of sea lane security of Malacca/Singapore Straits among littoral countries, the National Institute for South China Sea Studies encourages international organisations and institutions to play a positive and effective role in upgrading confidence building and capacity building of littoral states as well as prompting the maritime navigation order under the United Nations Convention on the Law of the Sea (UNCLOS), the Declaration on the Conduct of Parties in the South China Sea, and the Code of Conduct in the South China Sea.