Chapter 3

Summary and Way Forward

3.1 Summary

This study examined the current status and future prospects of oil stockpiling in selected ASEAN countries – Indonesia, Malaysia, Singapore, and Thailand.

Chapter 1 described the oil demand, supply, governance, and industry in these four countries. While oil demand will increase rapidly, domestic production will decrease slightly in Southeast Asia. Rising import dependency will follow, raising concerns regarding oil supply security. Oil storage capacity varies significantly among countries. While Singapore's capacity well exceeds its annual domestic demand, Indonesia's capacity is as little as 5% of its annual demand. Thailand and Malaysia fall somewhere in between, although no official data are available for Malaysia. Indonesia and Malaysia do not have a stockpiling obligation, but Indonesia is developing a law to guarantee a 30-day government stock and a 25-day company stock obligation. In Singapore, companies in the power sector are obliged to hold certain back-up fuel, but not in other sectors. Thailand is the most advanced in terms of stockpiling legislation, and refineries are required to hold 21.5 days of stock and traders 3.5 days of stock.

Chapter 2 analysed oil stockpile options for Southeast Asia. The traditional approach, which Japan took, involves obliging companies to keep oil stocks and then introducing government stocks. While Thailand and perhaps Indonesia seem to follow this approach, the financial burden is a major obstacle. Based on an estimate by the IEA (2013), Indonesia would have required $290 million–$530 million in 2015 to meet the 30-day government stockpiling stipulation.

Although stockpiling at existing oil terminals could offer a low-cost solution, lack of data and information makes it difficult to conduct meaningful analysis. Thus, chapter 2 investigated lower-cost options such as tickets, inviting tank operators, and joint stockpiling with crude exporters. These options could significantly reduce the development cost of oil stockpiling. However, introducing direct investment (often foreign) from tank operators and crude exporters is subject to commercial viability. Governments need to create a favourable investment climate to justify investments in oil storage in Southeast Asia if they wish to expand oil storage capacity with the help of tank operators and/or crude exporters. Aligning commercial viability and stockpiling policy is crucial. Given the characteristics of different stockpiling options, many countries in Southeast Asia could develop oil stockpiling with a portfolio of options (Table 3-1).

Table 3-1: Stockpiling Options for Southeast Asia

Options / Issues	Expanding commercial stocks	Government (strategic) stocks	Tickets	Inviting tank operators	Joint stockpiling with crude exporters
CAPEX Investors	Oil companies	Government	No need	Tank operators	Oil companies
CAPEX level	Medium	High	Low	High	Medium
Advantages	Using existing infrastructure	Full control by government	Low CAPEX	Using specialised expertise	Demand security for suppliers
Challenges	Sharing cost burden	High CAPEX Reluctance of Ministry of Finance	National security concerns	Incentives required for tank companies	Sharing cost burden

CAPEX = capital expenditure.
Source: IEEJ.

3.2 Way Forward

3.2.1 Prioritising Oil Stockpiling in Energy Policy

Rising dependency on oil imports will increasingly be a concern for the security of oil supply in Southeast Asia. The majority of the crude imported into the region is from the Middle East, where geopolitical tensions are likely to continue. Since oil accounts for the largest part of the energy mix in Southeast Asia, and major supply disruption could result in devastating economic, social, and political consequences in the region, government intervention in oil stockpiling as a last resort is justified.

Some governments in Southeast Asia, such as Thailand, oblige oil companies to hold certain stocks by law, while others, like Indonesia and Malaysia, do not impose such obligations. Policy makers are generally aware of the need for oil stockpiling but struggle to form a national consensus, especially over allocating adequate budget to develop a stockpiling system. Consequently, oil stockpiling has not gained priority status in energy policy issues such as upstream developments, energy subsidies, energy efficiency, and improving energy access.

It is difficult to form a national consensus on oil stockpiling, given other pressing policy needs. If implemented following IEA standards, stockpiling could cost hundreds of millions of United States dollars per year, but stockpiling alone does not create any commercial return. This makes it difficult to secure adequate budget allocation and convince industry players to institutionalise stockpiling. If a government intends to introduce and/or expand oil stockpiling, it needs to begin with raising awareness and the policy priority of oil stockpiling. ERIA (2016) conducted a case study of oil supply disruption in Southeast Asia, but each country could develop the study with more detailed analysis covering various risk factors and disruption scenarios, while estimating economic and social impacts. Such a study would be useful to justify and help form a national consensus on budget allocation to oil stockpiling.

3.2.2 Portfolio Approach towards Oil Stockpiling

Despite the difficulty in forming a national consensus, oil stockpiling developments show positive signs. Refinery projects – together with crude exporters in Viet Nam, Malaysia, and Indonesia – will not only lower the need for product imports but also add significant storage capacity. Indonesia, the largest consumer in the region, is formulating laws for company stockpiling obligations and government stockpiling. Its oil supply security will increase when these laws are enacted and enforced.

Several options are available for oil stockpiling in Southeast Asia (Table 3-1). The traditional approach, obliging industry to maintain oil stocks and then introducing government stocks, is likely to remain the principal strategy for stockpile development because of national security concerns. Oil stockpiling is supposed to address supply insecurity, and governments wish to retain full control over oil stocks within their jurisdictions. ASEAN countries have discussed regionwide joint stockpiling, but this might not be feasible since most countries do not have adequate storage capacity to share with their neighbours.

While the traditional approach should be the main direction, low-cost options such as tickets and/or investments from tank operators and/or crude exporters could significantly alleviate the financial burden. Stockpiling at existing oil terminals could also lower the development cost because terminal construction is not necessary, although this study could not examine the details because the relevant data and information are not available. Given the financial (budget) constraints to expand domestic capacity, governments could tap into the dynamics and capability of third parties such as tank operators and crude exporters by creating a conducive investment environment.

Oil will remain the main fuel to meet rising demand in Southeast Asia. A disruption in oil supply would have catastrophic social, economic, and political consequences. Governments in the region need to address oil stockpiling using various options to accommodate the characteristics of each country. The traditional approach, institutionalising oil stockpiling by expanding commercial stocks and introducing government stocks, should be the main strategy. This should be complemented by a combination of low-cost options – inviting tank operators, joint stockpiling with crude exporters, and tickets – to help expand storage capacity and eventually supply security.

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