

Executive Summary

The Great East Japan Earthquake resulted in supply disruption of oil products, gas, and electricity in the country. This incident prompted the government and the industries of Japan to alter the concept of oil supply security, and to prepare not only for supply risks abroad but also for those in Japan. The government and the industries introduced the concept of national resilience – a concept that intends to avoid the repetition of the cycle of destruction, recovery, and reconstruction. In line with the concept of national resilience, the government and the industries have implemented a set of measures to mitigate the damage and quicken the recovery.

This study found out that selected Association of Southeast Asian Nations (ASEAN) member countries, namely Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam, are aware of the external risks to oil infrastructure and supply chains. These include natural disasters and possible sabotages by terrorists. These selected ASEAN countries currently implement various countermeasures to these risks. The study also found out that while the general framework for emergency response has been developed in most countries, its functionality has not necessarily been tested in a real emergency situation or in exercises. Similarly, emergency plan, business continuity plan (BCP), and the like are available at major energy companies, but regular assessments, upgrades, and exercises are not necessarily implemented.

Oil supply resilience is a part of oil supply security, and there is a significant overlap between supply security and resilience in terms of countermeasures. This study revealed that the importance of oil supply resilience might not be fully recognized in the ASEAN region. While stockpiling and infrastructure development may be regarded as general measures for oil supply security, the more important measures for oil supply resilience are education, planning, and institutional and legal framework. The government should lay out institutional and legal frameworks first so that detailed policies can be effectively implemented and that division of roles can be specified. Upon such framework, industries can work on enhancing their resilience to natural disasters and other risk factors associated with oil supply. Making a BCP is the obvious area to start with, however, it is important to do it with a ‘plan, do, check, action’ (PDCA) cycle.

Given the scale of the potential negative impact and the existing framework in the ASEAN region, stockpiling is the obvious area for international cooperation in enhancing oil supply security and resilience. As far as capacity building for institutional and legal framework and for industry efforts like BCP, Japan could be of help to ASEAN member countries. Other cooperation areas include enhancing gasoline and diesel quality in the region.