

Session 3: Regional Players (II) – South East Asia

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Indonesia's Energy Security

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Indonesia's energy security policy has remained unchanged since 1981 and revolves around the three principles of intensification, diversification and conservation despite the state's recent change in status from that of a net oil exporter to a net importer. Indonesia has opted out of OPEC in 2008. Despite its wide variety and huge fossil fuel resources primarily in coal, gas and oil, the share of oil in the national energy mix stands approximately at 53 percent as of 2005. It is projected that oil will continue to comprise at least 20 percent of the national energy mix up to 2025. This means that Indonesia will continue to rely on oil in the foreseeable future as a source of energy and revenue amidst decreasing domestic production, increasing domestic consumption and global price hikes. Since gaining independence in 1949, oil and gas revenue has formed the backbone of the country's economic development throughout the 1960s and 1970s where it has accounted for more than 70 per cent of the state's annual budget. This figure dropped to about 50 per cent in the 1980s and 40 per cent in the 1990s and dipped to 25 per cent in 2005.

Indonesia is highly dependent on oil for its energy supplies in sectors such as the industries, transportation and power generation. As of 2006, its oil fuel consumption stands at more than 60 percent of total energy consumption. As the global oil prices started to increase in 2005, the government was keen on the development of renewable energy and also in energy conservation due to the pressure caused by the fuel subsidy, which led to a proposed bio-fuel development program in 2006. However, the program could not be sustained.

The major concern in the Indonesian energy scenario is the declining oil reserves and production. This could affect the country's energy security in the short term. However, in the long term, Indonesia could always look to its abundant reserves of natural gas and coal. Indonesia is one of the largest Liquefied Natural Gas (LNG) exporters and possesses the tenth largest proven reserves of natural gas in the world.

Revenue from coal was estimated to reach about \$1 billion in 2008 while revenue from natural gas reached \$8 billion in 2006 which is almost double the \$4.2 billion in 2004. The resource/production ratio (R/P) of coal stands at 86 years or 18.7 billion tonnes of proven reserves, while its natural gas reserves stands at 165 trillion standard cubic feet with an R/P ratio of 59 years. Indonesia's crude oil reserves remain the lowest of the three at 8.4 million barrels with an R/P ratio of 24 years.

In its 2006 national energy policy framework, there was a noticeable shift towards a more demand-side policy and emphasis on energy diversification through the development of alternative energy, bio-fuel and fuel substitution programmes especially for poor households. This paradigm shift in thinking led to the new Energy Law which was enacted in 2007. Among other things, the new law stipulates that the government must provide an energy buffer stock to ensure the security of supply in the short-run.