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Oil and gas trends and implications in Malaysia

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HIGHLIGHTS

- ▶ The quantities of petroleum production and consumption are expected to converge.
- ▶ Malaysia's status as a net exporter in value terms is expected to expand.
- ▶ With slower consumption trend, petroleum reserves will be depleted by 2035.
- ► There is a large potential in natural gas utilization in Malaysia.
- ▶ Renewable energy is abundant for the fuel diversification policy for Malaysia.

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ABSTRACT

The trends of reserves, production and consumption of oil in Malaysia to meet the ever-increasing demands do not seem to show that oil and gas will be depleted soon, contrary to many reports. Malaysia's net exporter status of oil continues to expand over time for as long as the value of exports is greater than the value of imports. Only in physical quantities of oil that Malaysia's imports exceed exports, but this does not mean that Malaysia will be a net importer by then. Given higher prices of exports, the value of exports outweighs the value of imports. If the current reserves are extracted based on the domestic consumption trend of 1980–2010, Malaysia's reserves will last until 2027 but based on the 1998–2010 trend, the reserves will be depleted by 2035. Malaysia has adopted a four fuel diversification strategy comprising oil, gas, coal and hydro, instead of heavily dependent on oil. Gas has a huge potential for domestic utilization as well as for exports to increase revenues. Malaysia is one of the few countries having many types of renewable energy sources. Malaysia has great potential in biomass utilization as renewable resources mostly from the existing natural forest and planned plantations.

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1. Introduction

A common objective of government energy policies around the world is to ensure secure, diverse and sustainable supplies of energy at competitive prices. Malaysia's policy on the energy sector focuses on ensuring a secure, reliable and cost-effective supply of energy, aimed at enhancing the competitiveness and resilience of the economy. Given the dominance of petroleum product demand in the country the emphasis of the Malaysian National Energy Policy initiated in 1979 has been diversification and efficiency in the use of the fossil fuels and hydro-power. Efficient utilization of energy resources, as well as the use of alternative fuels particularly renewable energy, are encouraged.

Efficient fuel switching in favor of natural gas and electricity has received high priority by policy makers. Energy pricing policy is considered an important instrument to diversify the fuel-mix. All energy policy in Malaysia is crafted and overseen by the Economic Planning Unit (EPU) and the Implementation and Coordination Unit (ICU), which report directly to the Prime Minister. In March 2004, the Ministry of Energy, Water, and Communications (MEWC) was formed to regulate the energy and electricity sectors, although this body does not have policymaking powers. On April 9, 2009 the Ministry of Energy, Green Technology and Water was established to replace the MEWC following the cabinet reshuffle and restructuring in March.

2. The energy supply and demand in Malaysia

The main sources of energy supply in Malaysia are crude oil and petroleum products as well as natural gas. Both accounted for

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