

## FOREWORD

According to the Economic Research Institute for ASEAN and East Asia (ERIA) Energy Outlook and Energy Saving Potential in East Asia 2016, which consists of the ASEAN's 10 member states and the +6 countries (Australia, China, India, Japan, Korea and New Zealand), energy demand in the region will increase to almost double from 2013 to 2040 in terms of total primary energy supply and total final energy consumption. This increasing energy demand is largely driven by the stable economic growth and the intentionally low energy prices due to energy subsidy policy applied by several developing countries of the East Asia Summit.

Many international fora such as the International Energy Agency, Asia Pacific Economic Cooperation, and the East Asia Summit have been advocating that East Asia Summit countries remove their ineffective energy subsidies. Accordingly, some countries are starting to reform their energy subsidy policies. While it is widely known that an energy subsidy leads to inefficient resource allocation and overconsumption, the removal of subsidy will certainly lead to price increases across economic sectors. Therefore, an assessment on economic impact of energy subsidies removal becomes crucial as this will allow countries to formulate effective mitigation policies in order to minimise the impact of a subsidy removal.

Malaysia is one of the East Asia Summit countries that has an energy subsidy policy. Its Ministry of Energy, Green Technology and Water (KeTTHA) has been urged to phase out the subsidy on electricity and transport fuel (gasoline and transport diesel oil). In this regard, KeTTHA has requested ERIA to study the economic impact of energy subsidies removal. Thus, ERIA proposed four approaches to KeTTHA: (i) price impact analysis using the Malaysian input-output (I-O) table; (ii) macroeconomic impact analysis using Malaysia's macroeconomic model; (iii) study on the energy saving potential using an econometrics forecasting model; and (iv) the application of the Computable General Equilibrium approach. Out of the four approaches, three approaches are selected: the I-O table approach, macroeconomic approach, and energy saving approach. The Computable General Equilibrium approach has been postponed due to time constraint.

While ERIA is responsible for conducting the price impact analysis, Institute of Energy Economics Japan (IEEJ) is assigned to the macroeconomic impact analysis. As the Malaysia Energy Commission (ST) is still estimating energy demand functions, this report includes results of these two studies: the price impact analysis using the 2010 Malaysia Input-Output Table, and macroeconomic impact analysis.

On behalf of the study team, I wish that the results in this report will be useful to KeTTHA and truly help in the formulation of effective policies and programmes to mitigate economic disruption in Malaysia.

Mr Shigeru Kimura

Team Leader

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