ABSTRACT

ASEAN is a region with a high level of economic growth. However, the

ASEAN region is also faced with several important issues in the energy sector such

as high energy consumption growth, fossil energy dependency, and fluctuations in

energy prices. Energy efficiency is viewed as the proper way to enhance energy

security. The concept of energy intensity (ratio of energy consumption per GDP) is

used to describe the level of energy efficiency.

The objective of the research was to analyze the factors that influence

energy intensity in the ASEAN region. This study used secondary data in nine

countries in Southeast Asia in 2001-2014. This study used analysis with Arellano

Bond Generalized Method of Moments (GMM) panel data to analyze the factors

that affect energy intensity.

The results of the study found that the variable of GDP per capita and

energy prices have a significant negative effect on energy intensity. The variable of

energy consumption per capita has positive significant effect on energy intensity.

The variable of trade openness, and foreign direct investment have no significant

effect on energy intensity.

Keywords: Energy Efficiency, Energy Intensity, Panel Data, ASEAN.

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