ABSTRACT

Human development is an important thing that must be done by all countries in the world. Energy one of the important inputs in human development. The rapid population growth will lead to higher energy usage. The use of high energy output is not necessarily matched by a high human development. This led to the wasteful use of energy to produce the output of human development, so that the required efficiency of energy use. Efficiency in energy use is one part of the principle of sustainable development which has the aspect of the environment without compromising the results of development.

This study analyzes the implementation of sustainable development in ASEAN by looking at the energy efficiency of each country to produce the output of human development. This study assumes that energy becomes an important input in human development. The period used in this study is for five years from 2008 to 2012. The analysis used in this study using Data Envelopment Analysis (DEA) with the output variable of life expectancy, the average length of the school, the approximate length of the school and the Gross National Income (GNI). Input variables were used that energy consumption per capita, per capita electricity consumption and carbon dioxide (CO2) per capita.

Results of analysis in this study shows that there are four states that efficient in the use of energy from nine countries, namely Cambodia, Myanmar, Philippines, Singapore. Countries that are not efficient in energy use, namely Brunei Darussalam, Indonesia, Malaysia, Thailand and Vietnam. Inefficient state in order to be efficient can customize the efficient use of state input. State-efficient in energy use in 2008-2012 diving has become a reference country which has not efficient Myanmar respectively 25 times, 24 times Philippines, Singapore and Cambodia as much as eight times as much as four times.

Keywords: Human development, energy use, efficiency, Data Envelopment Analysis (DEA), ASEAN