

Renewable Energy Policy and Initiatives in Malaysia

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Abstract

Energy has always been an essential element for the generation of social and economic growth in a country. It is no longer viewed as a luxury as it used to be but it has become a necessity in our everyday life. Malaysia, a country located between 1° and 7° North of the Equator, has an abundance of renewable energy resources such as solar, wind, hydro and biomass but most of these renewable energy resources are not fully exploited. Presently, Malaysia is still very much dependent on fossil fuels as its primary source of energy. Due to the current upward trend of fuel prices, especially crude oil prices in the world market, the Malaysian Government is forced to look into other alternative energy sources with the emphasis on renewable energy. There are numerous efforts taken by the Malaysian Government in pursuit of the exploitation of renewable energy. This paper will discuss the five main initiatives taken by the Malaysian government on renewable energy, namely Renewable Energy as the 5th Fuel under the 8th and 9th Malaysian Plan, MS1525 or Energy Efficiency in Commercial Buildings, the Kyoto Protocol, the Malaysian Building Integrated Photovoltaic Programme, also known as MBIPV, and Biomass.

Keywords: Renewable Energy, Fuel, Photovoltaic, Biomass, Energy Efficiency.

1. Introduction

The current population of Malaysia is expected to rise from 25.6 million to approximately 28 million by the year 2010, with an annual growth rate of 2.4%. With this population growth rate the energy demand is also expected to increase, since energy consumption is an integral part and is proportional to the economic development and total population of a country. Refer to Table 1 for the increase of oil prices from 1971 to 2005. In order to cope with the increasing demand for energy, it is universally accepted that renewable energy would be a sensible option in the future.

In line with the population increase the Malaysian Government has taken several measures to explore and promote the use of renewable energy as an alternative fuel source. These measures include the Fifth-Fuel Policy under the 8th and 9th Malaysia Plan, Energy Efficiency in Commercial Buildings (MS1525), The Kyoto Protocol, the Malaysian Building Integrated Photovoltaic Programme (MBIPV), and Biomass. These will be briefly discussed subsequently.

Despite the above and the fact that Malaysia is endowed with abundance of natural resources for renewable energy exploitation, the majority of all the major power stations in Malaysia are still using fossil fuels, such as oil, gas and coal to generate electricity. Tenaga Nasional Berhad (TNB) is the largest electricity utility company in the country with the largest generation capacity of 10,481 MW.

