## **Research Summary**

Global warming and the associated changes in the world climate pattern have been accepted world wide as the gravest threat to humanity in the 20<sup>th</sup> century. To mitigate the impacts of global warming, Kyoto Protocol was established in 1997 with the objective of reducing global greenhouse gases(GHGs) emission, in particular carbon dioxide(CO2),by 5.2% below 1990 levels. Developed nations that ratified the Protocol are committed to GHG reduction targets while developing nations are encouraged to reduce GHG emissions on a voluntary basis. Since most of the GHGs emissions come from the energy sector, energy policy plays an important role in fulfilling the Kyoto Protocol obligations. This year marks the beginning of the commitment period for the Kyoto Protocol. Thus in this study, a comparison on the energy policies in Malaysia and Japan, as these nations move towards fulfilling their obligations towards the Kyoto Protocol are reported; bearing in mind that both countries ratified the Protocol, but that Japan commits a reduction target of 6% while Malaysia bears no obligation. Based on the comparison, recommendations were made on how a developing nation like Malaysia could adopt the policies implemented in Japan to suit local conditions and contribute significantly to GHG reduction. This study has shown that effective energy policies are crucial in order to reduce the GHG emissions and subsequently achieve the targets in the Kyoto Protocol. Japan has been actively and successfully carried out numerous projects such as the Keidanren Voluntary Action Plan, Cool Biz and Warm Biz which show its significant commitment in accomplishing the aims of the protocol. On the other hand, Malaysia also has been aggressively promoting several policies and projects that can substantially reduce the emission of GHG. However, there were some weaknesses in those projects which limit its success in achieving the aims. Thus, there are many important lessons that Malaysia and other countries in the world can learn from Japan's successful programs and policies in mitigating CO2 emission. Some of them are the full pledge commitment given by the Japanese government. For example, the Japanese government is very supportive of the private sector in the promotion of RE development. Incentives and financial aids are well established in order to help and stimulate achievements. It is also important to gather information and track the progress of a particular program. Malaysia could also imitate Japan and provide incentives (such as capital incentives) to promote members of public to install PV panels in residential homes. In addition, in order to reduce CO2 emissions from the industrial sector, the Keidanren Voluntary Action Plan that has been successfully implemented in Japan should be adopted in Malaysia.

## Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

Name of Journal : Energy Policy Date : in Press

Title : A Comparative Study on the Energy Policies in Japan and Malaysia in Fulfilling their Nations' Obligation towards The Kyoto Protocol

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Book (Publisher and Date of the Book, Title and Author of the Book, etc.)