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**THE FEASIBILITY STUDIES ON ENERGY CONSERVATION
BUILDINGS IN MALAYSIA**

**This academic project is submitted in partial fulfillment of the
requirement for the Bachelor Of Building Surveying (Hons.)**

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APRIL 2008

ABSTRACT

As Malaysia moves toward a developed country status in 2020, our energy requirement will be very intensive. As it is, presently almost half of the energy consumption in the country is in the industrial, residential and commercial sectors. Hence there is a strong need to apply energy efficient strategies in lowering the building's energy consumption. MS 1525:2001 Code of Practice on Energy Efficiency and use of Renewable Energy for Non Residential Buildings was developed to provide the best practice in energy efficiency for buildings. This standard is very useful as it provides minimum standards for the design of new, existing buildings as well as methods of determining their compliance. Though energy efficient buildings are given different names: Low Energy Office or LEO, Zero Energy Building, Sustainable and Green building, they all carry the same primary objective which is reducing the use of energy and efficient utilization of energy source. It is vital to the point that the country needs to construct energy efficient buildings in the future to safe guard our depletion of energy resources. Energy efficiency in building is such an urgent concern that cooperation among all individuals involved in the construction industry These professionals who typically work in isolation, and sometimes have contradicting views, now have to sit together, discuss and come to a consensus. Their thoughts and ideas must be molded into one collective force to bring about the creation of energy efficient buildings.

This research presents the feasibility studies of development on energy conservation building in Malaysia. The developments of energy conservation building are analyzed. The case study buildings were:

1. Menara Mesiniaga Building, Subang Jaya, Selangor
2. Security Commission Building, Kuala Lumpur
3. The Ministry of Energy, Water and Telecommunication (LEO Building), Putrajaya
4. Pusat Tenaga Malaysia (ZEO Building), Bangi, Selangor

The technology or features used in that building that gives the energy efficiency result also discussed and be determined. A list of recommendations was proposed to drive energy efficient or sustainable construction in the region. In conclusion, the status of energy efficiency construction in Malaysia is still in its infancy. The lack of awareness, training and education and ineffective procurement systems are among the major barriers for energy efficient construction in the region Besides the needs for capacities, technologies and tools, total and ardent commitment by all players in the construction sectors including the governments and the public at large are required in order to achieve energy efficient construction.

ACKNOWLEDGEMENT

Alhamdulillah, thanks to Allah the Greatest for Greatest for enabling me to strength and opportunity to complete this whole dissertation in time of submission. Even there are some difficulties in completing this project but thanks for all the strength to overcome those problems.

I would like to give the biggest appreciation to my Dissertation supervisor for my research, Puan Juaida Kaliwon for all the guidance and supports given along this period of research. Besides, I also would like to show my gratitude to En Sufian Hasim as Dissertation Coordinator.

Also thanks to the personnel in Menara Mesiniaga Building, Ministry of Energy, Water and Communication and Pusat Tenaga Malaysia for their cooperation in giving the good information in making this project.

Big thanks also to my family especially my beloved father and mother as well as to my siblings, my friends and everybody that involved in making this dissertation come true. Hopefully this dissertation shall become a reference for future research. Thank You....

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