DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

A COMPARATIVE STUDY ON ENERGY SAVING BUILDING VS CONVENTIONAL BUILDING

This dissertation submitted in partial fulfillments of the requirements for honoring of the Bachelor in Building Surveying (Honours).

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ABSTRACT

Energy saving application in buildings is one of the actions that can be taken as the preparation for the future, when energy becomes crucial. Over past few years as buildings are energy intensive in their construction and operation, many efforts have been put by government and non government organisations (NGO) to make the construction industry become more aware of the impacts of the building on the global environment, particularly through its use of energy.

Energy saving buildings is the buildings that use energy, water and other natural resources efficiently and provide safe and productive indoor environment. The efficient use of energy or energy efficiency on energy saving building will help to reduce energy consumption, hence will cause less emission. It then provides the specified internal environment for minimum energy cost, normally within the constraint of what is achievable cost effectively.

This dissertation is to study the energy efficiency in energy saving building with comparison to the conventional building and only focuses on design and cost effectiveness on electrical consumption. To support this research, four (4) buildings namely the The Ministry of Energy, Water and Communications (MEWC) building, Mesiniaga Tower, Wisma UEP, Majlis Perbandaran Subang Jaya (MPSJ) building and has been taken as case studies.

From this study, the author hopes that it would give clear perception to the reader on advantages to build energy saving building. The cost yardstick from this study also can be use to develop the new energy saving building in the future.

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