



**COLLEGE OF BUILT ENVIRONMENT
UNIVERSITI TEKNOLOGI MARA**

**EXPLORING ENERGY EFFICIENCY STRATEGIES FOR REDUCING
ELECTRICITY CONSUMPTION: UITM SERI ISKANDAR CAMPUS**

**Academic Project Submitted in Partial Fulfillment of the Requirements
for the award of the Degree
Bachelor of Estate Management (Hons)**

**MUHAMMAD AFIQ BIN ZULKUPLI
2023634708
SEMESTER MARCH 2025 – AUGUST 2025**

STUDENT'S DECLARATION

Title of Academic Project:

EXPLORING ENERGY EFFICIENCY STRATEGIES FOR REDUCING
ELECTRICITY CONSUMPTION: UITM SERI ISKANDAR

I hereby declare that this academic project is the result of my own research except
for the quotation and summary which have been acknowledged

Signature :

Name of Student : MUHAMMAD AFIQ BIN ZULKUPLI

Date : 11/7/2025

SUPERVISOR'S DECLARATION

Title of Academic Project:

**EXPLORING ENERGY EFFICIENCY STRATEGIES FOR REDUCING
ELECTRICITY CONSUMPTION: UITM SERI ISKANDAR**

I here declare that I have read this academic project and in my opinion it is sufficient
for the award of Bachelor of Estate Management (Hons)

Signature :

Name of Supervisor : DR FATIN SYAZWINA ABDUL SHUKOR

Date : 11/7/2025

ACKNOWLEDGEMENT

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ABSTRACT

Globally, energy consumption has significantly increased due to urbanization, population growth, and economic development, making energy efficiency a priority for many organizations, including universities. Universities have high electricity consumption because of their large buildings, diverse activities, and the need to maintain comfortable spaces for students and staff. This research aims to explore energy efficiency strategies, identify those implemented at UiTM Seri Iskandar, and assess the effective indicators for the energy efficiency strategies implemented in UiTM Seri Iskandar. Data was gathered from secondary sources such as journals, articles, and websites to design interview questions. Semi-structured interviews were conducted with three energy management experts from the campus, selected through purposive sampling. The study found that universities use various strategies to save electricity, such as raising energy awareness, obtaining top management support, developing energy-saving policies and guidelines, buildings management and infrastructure optimization, and developing energy conservation behaviour. At UiTM Seri Iskandar, strategies like awareness campaigns, establishment of an Energy Management Committee, incentives for contributions, resource allocation, training program, energy usage audits and tools, LED lighting, motion sensors and timer, daylight harvesting techniques, energy-saving competitions, recognition and rewards, and peer influence and reminders have been implemented. Meanwhile, newsletters, building management systems (BMS), large-scale solar panels, and feedback systems are not yet in place. The study also identified effective indicators of success, including visual reminders, establishment of Energy Management Committee, incentives, resource allocation, LED lightings, motion sensors and timers, daylight harvesting techniques, solar panels, energy saving competitions, recognition and rewards, peer influence and reminders, and feedback systems. Future research can investigate how well the current strategies are working by measuring actual electricity savings. It can also explore the use of Building Management Systems (BMS) for better energy control, the impact of financial rewards on saving energy, and the potential of using solar power. Lastly, research could study feedback systems that help users track their energy use to encourage better energy habits.