

UNIVERSITI TEKNOLOGI MARA

**A CASE STUDY ON BUILDING ENERGY INDEX
AND ENERGY SAVING AWARENESS IN
COMMERCIAL AND RESIDENTIAL BUILDINGS**

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M.Sc

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CANDIDATE DECLARATION

I declare that the work of this dissertation was carried out in accordance with the regulations of Universiti Teknologi Mara. It is original and is the result of my own work, unless otherwise indicated or acknowledged as reference work. This dissertation has not been submitted to any other academic institutions or non academic institutions for any degree or qualification.

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**A CASE STUDY ON BUILDING ENERGY INDEX AND ENERGY
SAVING AWARENESS IN COMMERCIAL AND RESIDENTIAL
BUILDINGS**

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ABSTRACT

This study carried out mainly aims to get rational association between awareness factor, which influenced a Building Energy Index (BEI) value for particular building. This study basically had four main objective namely determination on the Building Energy Index (BEI) for office building, commercial and residential building, identification on the level of energy-saving awareness among building occupants of respective case study building, critically appraise the Building Energy Index (BEI) of case study building and examine an associate's relationship between Building Energy Index (BEI) and energy-saving awareness among building users of case study building. This study use foundation of statistic method in study methodology to achieve as mentioned objective. Study start by obtaining annual energy consumption, spacious area territory and also survey that carried out to get awareness value on by frugal energy consumption. In this study as many as 300 respondents were chosen at random from three different functions of building namely office building, commercial building and residential building. And as a result, this study finds that as many as 220 people or more than 73% respondent from the entire sample has owned awareness on energy-saving issue. Study continued by obtaining a relation between Building Energy Index values from three localities as mentioned earlier. In conclusion, found that provable that awareness level on energy saving has been able to contribute the better value of Building Energy Index (BEI).

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