ENERGY AUDIT IN BLOCK 3 IN S&T TOWER TOWARDS ENERGY EFFICIENCY IN UiTM SHAH ALAM

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ABSTRACT

The main purpose of this project is to study on the energy consumption and to give recommendation to reduce the energy wastage in the building in Block 3 S&T Tower. The energy consumption was recorded using Fluke Meter 1750. The meter was installed at the Sub-Switch Board (SSB) at Block 3 for two different operations namely during normal working days and during semester break. Based on the data collected, the pattern of energy usage was analyzed and energy wastage was identified strategic steps are recommended to reduce total energy consumption at Block 3.

TABLE OF CONTENT

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Energy management is a structured approach designed to manage energy usage and minimize energy costs without affecting production and quality. Energy management is the proactive, organized and systematic coordination of procurement, conversion, distribution and use of energy to meet the requirements, taking into account environmental and economic objectives. [1] In other words, energy management is to produce goods and provide services with the least cost. The energy management practice has traditionally focused exclusively on technologies that increase the energy efficiency. [2]

Energy efficiency refers to a reduction in the energy used for a given service or level of activity. The reduction in the energy consumption is usually associated with technological changes, but not always since it can also result from better management or improved economic conditions. Energy efficiency also can be defined as using less energy to provide the same level of performance or service. Efficient energy use is achieved by using more efficient technologies or processes rather than by changing human behavior. [3]

Energy efficiency is first of all a matter of individual behavior and reflects the rationale of energy consumers. Avoiding unnecessary consumption of energy or choosing the most appropriate equipment to reduce the cost of the energy helps to decrease individual energy consumption without decreasing individual welfare.