CENTRE OF STUDIES
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THE STUDY ON ENERGY USAGE CONTRIBUTION TOWARD ENERGY CONSERVATION IN OFFICE BUILDING

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ABSTRACT

With more and more concern being expressed over the Earth's dwindling energy resources as well as rising pollution levels, the subject of energy management and conservation is becoming increasingly important. Over half of all energy consumed is used in buildings so effective management of buildings whether commercial or domestic is vital. The objective of this study was to understand the energy conservation in building. Another purpose was to study the factor contributing in energy conservation of office building. Finally, the study was done to analyze the energy usage of office building. The method applied in this study is quantitative method where a rating energy system was distributed and it was rated by the staff of building management. Based on the rating system, a comparison between green building and conventional building were made to analyze which of the building best contributes to energy conservation. The result of the study were indicates that a sustainable features such as energy efficiency, water efficiency and renewable energy were the major roles in contribution of energy conservation. One conclusion was that the green building contributes higher than conventional building toward energy conservation.

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CHAPTER ONE

INTRODUCTION

1.1 Overview

Energy is defined as "the ability to do work". In this sense, examples of work include moving something, lifting something, warming something or lighting something. The following is an example of the transformation of different types of energy into heat and power (EPA, 1997).

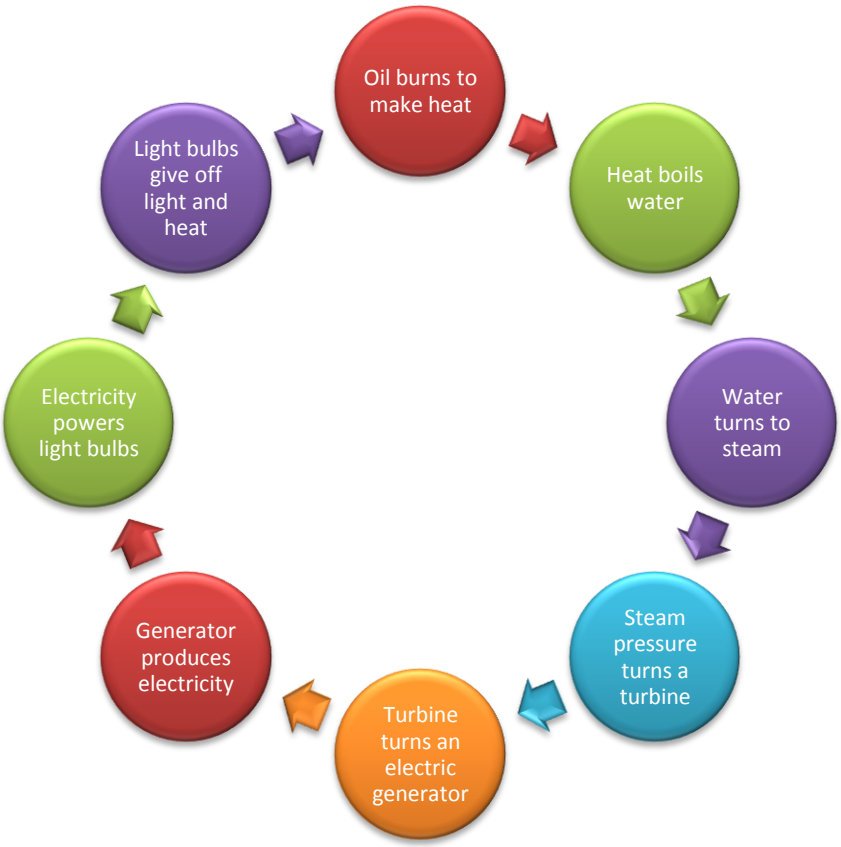

Figure 1Cycle of Transforming Energy

Source: EPA, 1997