

# **“ENERGY CONSERVATION AND MANAGEMENT”**

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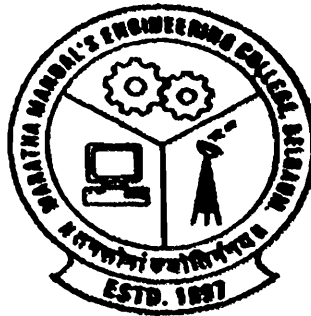
***A project report submitted in partial fulfillment of the requirement  
for the award of the Degree of Bachelor of Engineering in  
Electronics & Communication Engineering of the Visvesvaraya  
Technological University, Belgaum.***

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## **ABSTRACT**

Energy conservation management is the management of processes and policies designed to reduce energy usage. Energy conservation refers to efforts made to reduce energy consumption in order to preserve resources for the future. This project basically aims at implementing the energy conservation through the use of a control system that monitors the surrounding environment conditions. This particular machine is Embedded based, so it is highly efficient and it is also packed with a highly interactive and user friendly components with a wide applications.

Energy conservation and management is a system designed to prevent energy wastage in commercial, public, industrial areas and also to conserve energy by using solar system. The system includes sensors like LDR and thermistors which control the load of the system, and PIR sensor which detects the presence of human beings depending upon that the load gets activated. This system also consists of Solar Tracking System that automatically detects the intensity of the sunlight and depending on this the direction of the solar panel is controlled towards the maximum intensity to collect more electric power. The energy stored in the battery is used for various applications. Thus aims at utilizing the non conventional energy thereby energy conservation is achieved.