

"SMART UTILIZATION OF RENEWABLE ENERGY SOURCES"

**A Project Report
submitted in partial fulfillment of the requirements
for the award of the Degree of Bachelor of
Engineering in Electrical & Electronics Engineering
of the Visvesvaraya Technological University, Belgaum**

Submitted by

**Namrata A. Revankar
Rashmi R. Sankpal**

**Ashwini R. Hanchinmani
Ashwini B. Halki**

**Under the Guidance of
Prof. Shobha S. Kumbar**



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**Shri Siddharameshwar Education Trust's(R)
S.G.BALEKUNDRI INSTITUTE OF TECHNOLOGY
SHIVABASAVA NAGAR, BELGAUM-591010**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM
2011-2012**

ABSTRACT

Taking into consideration the present day ecological conditions, the use of conventional sources such as coal, wood, petroleum, natural gas, oil, etc to generate power need to be reduced which has direct effect on the environment. Therefore we have to make use of renewable energy sources such as solar, wind, hydro, geothermal, biomass, etc which are eco friendly. To meet the present day demand of energy consumption we have to make use of renewable energy sources which are available abundantly and free of cost in nature.

The project mainly aims to use renewable sources namely solar and wind in a smart manner by using more efficient power generating techniques such as Vertical axis wind turbine, three PV panels, and parabolic collector with TEG to get maximum power output.

This project is reliable as it can be used in all the seasons irrespective of climatic conditions.