

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM, KARNATAKA



SHRI B.V.V SANGHA'S
BASAVESHWAR ENGINEERING COLLEGE,
BAGALKOT

2008-2009



DEPARTMENT OF MECHANICAL ENGINEERING

A Project Report On

**“IDENTIFYING ENERGY SAVING OPPORTUNITIES IN
SUGAR INDUSTRIES THROUGH ENERGY AUDIT AND
ENERGY MANAGEMENT”**

(KSCST Approved)

Project Guides

Prof. G. K. Patil

Dr. V. S. Puranik

HOD

Dr. V. R. Kabadi

Project Associates

Mr. Mahantesh R. Gudagunti

2BA05ME036

Mr. Harsha B. Kamatagi

2BA05ME025

Mr. Basavaraj M. Fakirapur

2BA05ME010

Mr. Santosh S. Shebannavar

2BA05ME078

ABSTRACT

¹ Energy audit is an important tool in transforming the fortunes of any organization. This is highly relevant to the sugar industry as it deals with a renewable energy source and looked upon as rural power house. The scope for conservation is immense and if properly harnessed can take the organisation to the path of prosperity.]

Industrial profits usually leak out through inefficient energy utilization. ² Increasing industrial competition and ever-increasing costs of available forms of energy, especially fossil fuels, have focused attention on the need to cut down on wasteful energy consumption - to enhance & to sustain industrial profits. Since ~~as~~ Energy Audit helps in identifying the areas where there is wastage and where scope for conservation exists, it has become an important tool in crucial management decisions. Energy Audit is a positive approach to energy cost reduction, preventive maintenance and quality control programs.] It helps keep alive variations which occur in energy costs, availability and reliability of energy supply, decide the appropriate energy mix, select the right conservation technology, retrofits for energy conservation equipment, etc.

³ The present work is about electrical energy audit of motors/pumps and thermal energy audit of boiler unit of co-generation plant located in a sugar industry. The project is designed for identifying energy saving opportunities in sugar industry through energy audit and energy management.] The project attempts a common language for all these company officials to work together.