



GLOBAL MANAGEMENT CERTIFICATION SERVICES PRIVATE LIMITED

Certification Audit Report

ISO 50001:2018

For

Client: M/s.BAPATLA WOMEN'S ENGINEERING COLLEGE
Behind Arts and Science College, Srinivasa Nagar,
Karlapalem Road, BAPATLA-522 101
Andhra Pradesh, India.

Audit Ref No. GMCSPL/BWEC

Disclaimer: - The Auditing is based on a sampling process of the available information and consequently there is an element of uncertainty which may be reflected in the Audit findings. Those relying or acting upon the Audit results and conclusions to be aware of this uncertainty. The Audit recommendations are subject to an independent review, prior to decision.

This report was presented to and accepted by:

Name: Mr. Dr. G.SRINIVASARA RAO

Job title: Principal

1. Audit details:

Management Member(s)	SRI MUPPALANENI SRINIVASARAO-PRESIDENT. Dr. G.SRINIVASARA RAO– Principal		
Audit Criteria [Standard]	ISO 50001:2018	Exclusion	NIL
Audit Objectives	To Verify if the Institution's compliance and effective maintenance of EnMS accordance with ISO 50001:2018 and to make decision on Certification.		
Audit Scope [confirmed]	Imparting Quality Technical Education Services at Undergraduate Level for Women		
Functional Units/Processes Audited	Top Management, CSE, ECE, AI & ML, S&H, Administration, Admission Cell, Exam Cell, Stores, IQA, MRM		
Audit Site[s]	Behind Arts and Science College, Srinivasa Nagar, Karlapalem Road, BAPATLA-522 101 Andhra Pradesh, India.		
Audit Team	Team Leader	K S N Prasad	
	Lead Auditor[s]	K.V.Murthy,	
Audit Dates	28/01/2023		

2. Audit Trials

Description	Objective Evidence
Brief Profile of the organization Including main products/ services and customers	The Bapatla Women's Engineering College, one of the seven educational institutions sponsored by the Bapatla Education Society, was established in 2009.
Organizational context	External issues related to EnMS identified are: Competition, Technology, Culture, Legal, Market etc. Internal Issues identified are: Knowledge, Employee Base, performance of the students, performance of Faculty, strategic direction etc.
Interested parties needs and expectations	Interested parties include: Society/Neighbors/NGOs/Media/Employees/workers Govt.: Legal compliance to all applicable statutory requirements. Management: Improving Environmental Performances.
EnMS Management Scope and Boundaries	Imparting Quality Technical Education Services at Under Graduate Level for Women
EnMS Management System establishment	BWEChas established, implemented and maintained EnMS in accordance with the requirements of International Standard. Documentation consists of EnMS Manual, Procedures, and Formats Verified and found ok.
Leadership and commitment	Vision, Mission, objectives are set for each department and institute is monitoring same through Internal quality audit process.
Risks and Opportunitles	Risks and Opportunities are defined for each functional areas, same were verified and found in order

Energy Management System Assessment	Energy Management System Assessment was documented for all the processes.
Actions to address risks and opportunities	The Risks and Opportunities Identified are inputs for planning actions and for establishing the EnMS Objectives and the same is described in assessment ..
EnMS Objectives and action plans	EnMS objectives for the year 2023 <ul style="list-style-type: none"> - Reduction in power consumption by 5 % over last year. - Reduction in paper consumption by 10% over last year. - Recycle and reuse the water
Legal and other requirements and Evaluation of compliance	<ul style="list-style-type: none"> - AICTE Approval, University Affiliation
Resources	All the resources needed for the implementation, maintenance of EnMS is provided. <ul style="list-style-type: none"> - Annual financial budget for the year 2023: 04 Lacks
Competency	Competence of each and every role in the Institution is determined by their Education, training, Qualification and Experience. <ul style="list-style-type: none"> - Verified competency matrix for all the Designations
Awareness	Awareness among the campus towards reuse, recycle of natural resources was found good among faculty and students.
Operational planning and control	BWEC developed procedures for various activities. Handling of Hazardous Waste itEnMS Handling of Non-Hazardous Waste itEnMS Operational Controls on EnMS like: Management of Anti Ragging Committee / Management of First Aids /Management of PPE. General Operational Controls includes: Emergency Procedure Work Instructions/ OCP Display at Various Operations, Process, Machines Earth Pit testing & Identification Energy Related Slogans & posters Display at various place for better Performance & Awareness. Reduction in Energy consumption, reduction in number of incidents & ensuring safe Environment.
Emergency Preparedness and Response	BWEC adopts procedure for Emergency preparedness and response for all Energy emergency situations and a rescue team, NSS is available. Emergency preparedness plan includes natural, technical, and man-made events that occur inside and outside normal working hours. Few of the Emergency situations are: Emergency control center includes On Site Emergency Plan, Site Map, List of Site Areas, Fire Extinguishers, first aid boxes, and emergency power supply to the main switchboard, alarm systems and exit signs/ lights, Important Telephone Numbers, Communication Facility ,an evacuation route map and a safe assembly point. 2 Scenarios were taken for Mock Drill one was Electrical Fire and one was contamination of Drinking water.

Performance evaluation & Evaluation of Compliance	BWEC established a process for monitoring and measuring of EnMS performance. All the legal requirements documented information kept up to date, verified and found ok. Department level documents are made available for the demonstration of performance
Internal Audits	BWEC has planned, established, implemented and maintained an audit program. Audit criteria and scope for each audit is defined. Internal audits are being conducted once in semester. Auditors are selected such that there is no impartiality in the audit process. Number of nonconformities identified during internal audit system was well taken with both correction and corrective action
Management Review	MRM is planned once in 6 months. Regular reviews at department and college level are organizing by PRINCIPAL/HOD and minutes of same were verified and found in order
Incident, Nonconformity and corrective action	Incident register maintained, with correction and corrective actions taken. No environmental incidents happened till now in the campus
Continual Improvement	Continual Improvement is done by promoting the participation of students and employees in implementing EnMS Management system

Overall Recommendations and conclusion:

Recommendations:

EnMS awareness among staff may be improved.
Awareness on the ISO 50001:2018 standard with supporting staff to be planned

Conclusions: System is compliance with the requirements of ISO 50001:2018 and recommended for issuance of Certification in accordance with ISO 50001:2018.

Name of the Lead Auditors and Sign

Name: Mr.K.S.N.Prasad

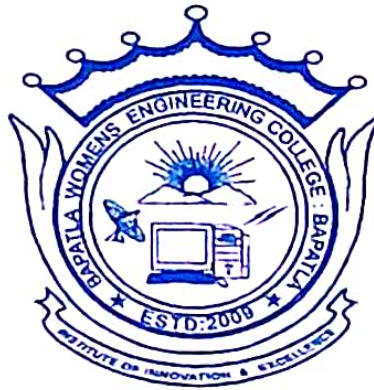
Signature:




Date: 28/01/2023

ENERGY AUDIT REPORT

2022-2023

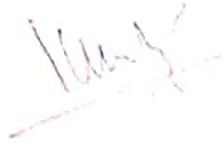


Bapatla Women's Engineering College:: Bapatla
Bapatla, Guntur, Andhra Pradesh

Environment Audit Assessment Team



K.Siva Naga Prasad, Lead Auditor EMS/EnMS



K.V.Murthy, Lead Auditor EMS/EnMS



Ch.Rama Rao, Lead Auditor EMS/EnMS

CONTENTS

S.No.	Titles/Topics
1.	INTRODUCTION
2.	OBJECTIVES
3.	METHODOLOGY
4.	ABOUT THE COLLEGE
5.	VISION & MISSION STATEMENTS
6.	Energy Efficiency

INTRODUCTION

INTRODUCTION

The growth of countries across the world is leading to increased consumption of natural resources. There is an urgent need to establish environmental sustainability in every activity we do. In a modern economy, environmental sustainability will play a critical role in the very existence of an organization. An educational institution is no different. Built environment, especially an educational institution, has a considerable footprint on the environment. Impact on the environment due to energy consumption, water usage and waste generation in an educational institute is prominent. Therefore, there is an imminent need to reduce the overall environmental footprint of the institution.

As an Institution of higher learning, Bapatla Women's Engineering College (BWCE) firmly believes that there is an urgent need to address the environmental challenges and improve their environmental footprint. True to its belief, BWEC has almost 90% transforming conventional bulbs & fixtures into non conventional energy LED's. Keeping BWEC work in energy efficiency, we recommend the following to be taken by the competent team at BWEC:

Work towards achieving carbon neutrality: NDC emphasizes creating an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030. BWEC should focus on energy efficiency, renewable energy, and carbon sequestration as tools that will enable them to offset the present carbon emissions and achieve carbon neutrality.

Improve energy efficiency of the college: It is recommended to adopt latest energy efficient technologies for reducing energy consumption in fans, lighting, and air conditioners. We recommend the following projects to be implemented at the earliest.

- Install air conditioners energy savers to save energy in split air conditioners
- Replace all conventional tube lights with LED lamps

OBJECTIVES

OBJECTIVES

The Institutions have recognized the importance of energy Audits in recent years as a means of self-assessment and demonstrating their commitment to addressing environmental concerns. Our college has always been dedicated to maintaining a clean environment, and this Energy Audit is designed to create a comprehensive framework for environmental sustainability that adheres to relevant regulations and standards. The audit will establish, quantify, and prioritize our efforts to promote sustainability. The main objectives of carrying out Energy audit are:

- To Estimate the Energy Requirement of the College.
- To Increase the Energy efficiency.

METHODOLOGY

METHODOLOGY

The purpose of the Environment audit of BWEC is to ensure that the practices followed in the campus are in accordance with the green policy of the country. The process involves gathering data, conducting physical inspections of the campus, observing and reviewing documentation, and analyzing the collected information.

ABOUT THE COLLEGE

ABOUT THE COLLEGE

The Bapatla Women's Engineering College, one of the seven educational institutions sponsored by the Bapatla Education Society, was established in 2009 with a vision to impart quality technical education and is affiliated to Acharya Nagarjuna University. The college is located in Bapatla, a town with a historic and hoary past, about 75km. south of Vijayawada on Chennai-Vijayawada rail route. The college offers B.Tech. Programs in 3 faculties of Computer Science &Engineering, Electronics and Communication Engineering, Artificial Intelligence and Machine Learning.

Programmes Offered by the Institution

Programme Code	Programme Name
UG02	B.Tech-Computer science and Engineering
UG04	B.Tech-Electronics and Communication Engineering
UG07	B.Tech- Artificial Intelligence and Machine Learning

VISION AND MISSION STATEMENT

VISION

To impart quality education through exploration and experimentation and generate socially conscious engineers, embedding ethics and values, for the advancement in science and technology.

MISSION

- Empowering girl students with the contemporary knowledge in Electronics and communication engineering for their success in life.
- Continuous up gradation of techniques for reaching heights of excellence in a global. To make the students entrepreneur and employable and to showcase adaptability in fields of technical knowledge through the academic infrastructure.

ENERGY EFFICIENCY

Energy Efficiency

Annual energy consumption of Sri Bapatla Women's Engineering College (BWEC) campus is 2,44,743 units. There are major blocks in the campus which consumes energy for their operation. Major energy consumers are:

1. Fans
2. Air conditioners
3. Replace conventional tube lights with LED lamps

Month	Consumption Details for 2021	Consumption Details for 2022
January	19258	19000
February	21428	21000
March	22356	22,222
April	21126	20915
May	9856	10457
June	14526	13071
July	22986	22875
August	23489	23529
September	18876	18300
October	24976	24836
November	25239	24938
December	23908	23600
Total (Kwh)	2,48,024	2,44,743