GREEN AUDIT REPORT

BLDEA's
BASAVESHWARA ARTS & COMMERCE COLLEGE,
BASAVANA BAGEWADI

Prepared by,

V. P. Dr. P. G. Halakatti College of Engineering and Technology, Aashram Road, Vijayapur-586101.

ACKNOWLEDGMENT

The overall objectives of the Green Audit (GA) of a campus are to assess the environmental sustainability of its existing policies and practices, identify opportunities for improvement, make the campus as environmentally friendly as possible, and raise awareness on environmental issues and sustainable practices among the campus community. Keeping these objectives in mind, a systematic tool was developed, and several Green Audits have been carried out by V. P. Dr. P. G. Halakatti College of Engineering and Technology, Vijayapura.

The Green Audit for the year 2024–25 was conducted for BLDEA's Basaveshwara Arts & Commerce College, Basavana Bagewadi. This process involved the coordinated efforts of multiple people, to whom we express our sincere gratitude.

We acknowledge Dr. Dr. A V Suryavanshi, Principal of the College, for initiating the Green Audit process. Special thanks are also extended to the Heads and staff representatives of all departments, as well as IQAC Coordinator. Their cooperation, timely data provision, and valuable inputs were instrumental in completing this Green Audit successfully.

DISCLAIMER

The Green Audit Team has prepared this report for BLDEA's Basaveshwara Arts & Commerce College, Basavana Bagewadi, based on the data submitted by the representatives of the College, supplemented with the expert judgment of the audit team. While every reasonable effort has been made to ensure accuracy, the details presented in this report have been compiled in good faith using the information made available during the audit.

It is further clarified that the recommendations provided are based on professional judgment; however, no representation, warranty, or undertaking—express or implied—is made regarding the completeness or accuracy of the information. The Audit Team assumes no responsibility for any direct or consequential loss arising from the use of the information, statements, or projections contained in this report.

Prepared by:

BLDEACET, Vijayapura.

Table of Contents

EXECUTIVE SUMMARY

Green Audit is defined as a systematic evaluation of the environmental impact a college has on its surroundings. It helps institutions improve their existing practices with the goal of minimizing adverse environmental effects. Many colleges have adopted various approaches to conserve the environment within their campuses, such as promoting energy efficiency, recycling waste, reducing water consumption, harvesting rainwater, and more. A Green Audit documents these efforts by reviewing the institution's infrastructure, academic and administrative policies, and future environmental plans.

A Green Audit serves as an important tool for identifying how and where an institution uses energy, water, and other natural resources. It enables the college to explore opportunities to conserve resources and reduce costs. It also helps determine the type and quantity of waste generated, paving the way for waste minimization and recycling initiatives. Furthermore, it promotes health consciousness, environmental awareness, and ethical values among students and staff. It strengthens understanding of the environmental impact of campus activities and encourages financial savings through reduced resource consumption. Green auditing fosters a sense of ownership, personal responsibility, and social accountability among all members of the institution. Therefore, it is essential for every college to evaluate its contributions toward a sustainable future.

At Basaveshwara Arts & Commerce College, Basavana Bagewadi**,** the audit process included initial interviews with staff to clarify policies, review institutional activities and records, and gather information required for the audit. The process also involved cooperation from faculty and other employees in providing data through the questionnaire-based survey, examination of records, observation of existing practices, and evaluation of outcomes as part of the Green Audit.

The baseline data generated through this audit will serve as a valuable resource for campus greening efforts, resource management, planning of future projects, and supporting sustainable development initiatives at the college. It will enable the institution to benchmark its performance against peer institutions, identify areas requiring improvement, and prioritize future environmental initiatives. The Green Audit Report contributes to the college's journey toward becoming an eco-friendly and sustainable campus. It is expected that the findings of this report will help educate the campus community about current environmental practices and resource usage, We trust that the management will be committed to implementing the recommendations of the Green Audit.

We are pleased to submit this Green Audit Report to the authorities and to the Principal of Basaveshwara Arts & Commerce College, Basavana Bagewadi.

INTRODUCTION

ABOUT THE COLLEGE

Basaveshwar Arts & Commerce College was established in 1982 by the BLDE Association at Basavana Bagewadi, the birthplace of His Holiness Jagadguru Shri Basaveshwara, a great social reformer and revolutionary saint of the 12th century. The town is located about 42 km from Vijayapura, a district renowned for the world-famous historical monument, Gol Gumbaz.

The primary objective of establishing this institution was to provide higher education to the oppressed, disadvantaged, and rural communities of Basavana Bagewadi and its surrounding areas. Most of the students studying in this college come from economically weaker sections and largely depend on agriculture for their livelihood.

Basaveshwar Arts & Commerce College is an aided institution affiliated with Rani Channamma University, Belagavi, and recognized under Sections 2(f) and 12(b) of the UGC Act. The college offers two undergraduate programmes (BA and B.Com) and one postgraduate programme. Nearly 98% of the students come from rural backgrounds. The institution has consistently strived to impart quality education and contribute to the academic and social development of the region.

SCOPE AND GOALS OF GREEN AUDITING

A clean and healthy environment aids effective learning and provides an appropriate learning environment. There are various efforts around the world to address environmental education issues. Green Audit is the most efficient and ecological way to manage environmental problems. It is a kind of professional care which is the responsibility of each individual who are the part of economic, financial, social and environmental processes. It is necessary to conduct green audit in college campus because students become aware of the green audit, its advantages to save the planet and they become environmentally responsible citizens of our country. Thus Green audit becomes necessary at the college level.

A very simple indigenized system has been formulated to monitor the environmental performance of Basaveshwara Arts & Commerce College, Basavana Bagewadi . It comes with a series of questions to be answered on a regular basis. This innovative scheme is user friendly and totally voluntary. The aim of this is to help the institution to set environmental examples for the community, and to educate the young learners.

BENEFITS OF THE GREEN AUDITING

Empower the organizations to frame a better environmental performance. More efficient resource management.

- Benchmarking for environmental protection initiatives
- To provide basis for improved sustainability
- To create a green campus
- To enable waste management through reduction of waste generation, solid- waste and water recycling
- To create plastic free campus
- Recognize the cost saving methods through waste minimizing and managing.
- Point out the prevailing and forthcoming complications.
- Authenticate conformity with the implemented laws
- Enhance the alertness for environmental guidelines and duties
- Impart environmental education through systematic environmental management approach and improving environmental standards
- Financial savings through a reduction in resource use
- Development of ownership, personal and social responsibility for the College and its environment.
- Enhancement of college profile developing an environmental ethic and value systems in youngsters.
- Green auditing should become a valuable tool in the management and monitoring of environmental and sustainable development programs of the college.

METHODOLOGY OF GREEN AUDITING

The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The criteria, methods and recommendations used in the audit were based on the identified risks. The methodology includes: preparation and filling up of Basaveshwara Arts & Commerce College, Basavana Bagewadi, questionnaire, physical inspection of the campus, observation and review of the documents, interviewing responsible persons and data analysis.

The methodology adopted for this audit was a three step process comprising of.

1. **Data Collection and Preliminary Assessment**

- Collection of baseline information through questionnaires, checklists, interviews, and interaction with faculty, staff, and students.
- Review of existing records, policies, resource consumption data, and campus practices.
- Initial campus walk-through to understand facilities, environmental conditions, and operational systems.

2. **Field Inspection and Evidence Verification**

- Detailed physical inspection of academic blocks, laboratories, canteen, water systems, waste management units, green cover, and energy installations.
- Observation and documentation of actual practices related to water use, energy consumption, waste segregation, biodiversity, and environmental management.
- Verification of data through photographs, visual assessment, and interactions with responsible staff.

3. **Evaluation, Reporting, and Recommendations**

- Analysis of findings to identify strengths, gaps, and areas needing improvement.
- Preparation of a comprehensive Green Audit Report summarizing observations, baseline data, and environmental performance indicators.
- Providing feasible and actionable recommendations for enhancing sustainability, resource efficiency, and eco-friendly campus operations.

TARGET AREAS OF GREEN AUDITING

Target areas included in this green auditing are

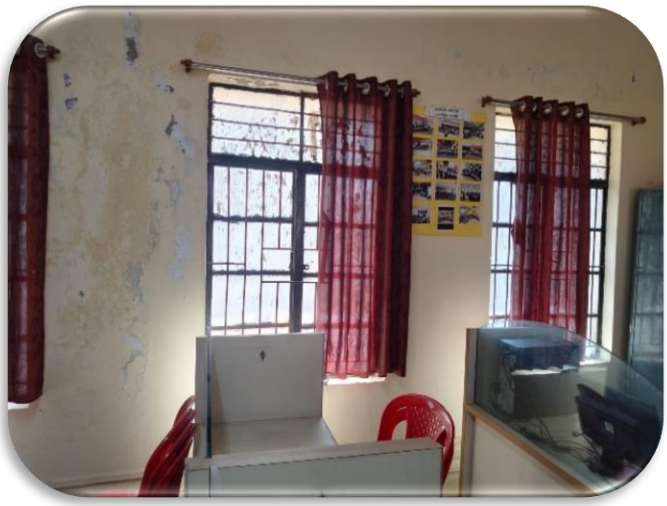
1. DAYLIGHT DESIGN AND VENTILATION

The institute corridors are spacious and have adequate ceiling height, ensuring proper ventilation and ample natural lighting. The classrooms, laboratories, and library areas are designed with wide windows that allow sufficient sunlight to enter, creating a comfortable and conducive learning environment.

However, some maintenance work is required. The walls of classrooms, corridors, and laboratories need whitewashing, along with minor repairs. Although curtains are provided, they require refurbishment. The library is well-organized and properly maintained.

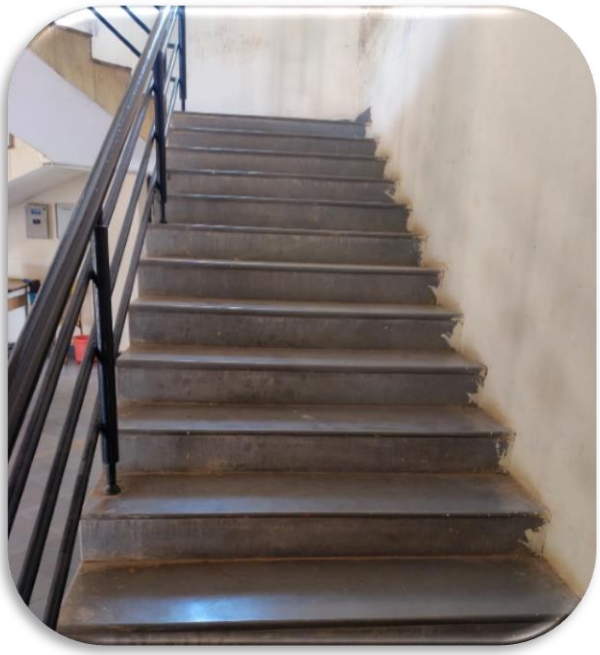
The language and computer laboratories are generally well maintained; however, some settlement cracks need to be repaired, and exhaust fans should be installed to enhance ventilation. The staircases are wide, well-lit, and adequately ventilated, ensuring safe and smooth movement throughout the building.

Library section

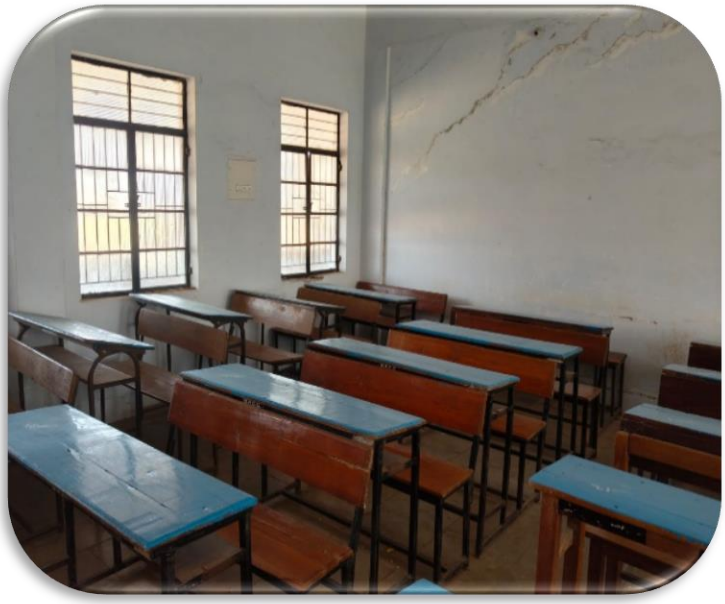


Computer Lab

Well-ventilated and adequately illuminated Corridor



Wide-well ventilated staircase



Well ventilated and illuminated classroom

2. WATER EFFICIENCY

Source: The institute is equipped with both Government water supply and an independent bore well system. There are three Government water connections catering to the academic blocks, hostel, and playground. In addition, an existing bore well serves as a supplementary source during periods of shortage in the Government supply. Considering future expansion needs, two additional bore well points have been successfully developed, each yielding a reliable water source.

Pump/Borewell Operation: The bore well is operated as required, typically for about 1–2 hours per day.

Water Storage Tanks: The institute has installed three overhead tanks, each with a capacity of 5,000 liters, to meet daily requirements in the hostel and academic sections. Additionally, a separate overhead tank with a capacity of 500 liters is provided exclusively for drinking water purposes.

An 2 underground sump measuring 8 ft × 10 ft × 10 ft in depth is also available for water storage; however, it requires some maintenance.

Drinking Water Facilities: RO-purified drinking water is supplied through water coolers installed in common areas, ensuring easy accessibility for students and staff in the academic sections.

Other Water Conservation Practices: Water-saving and food-saving signages are displayed at various locations across the campus to promote awareness and responsible usage among students and staff.

Drinking water Facility

RO system

Overhead tanks

Signages display on walls

3. WASTEWATER MANAGEMENT

The institute's drainage system is connected to the common municipal drainage network, where the wastewater is treated by the municipal authorities. The system is well planned, ensuring the smooth and efficient flow of wastewater from all academic and residential blocks. Regular maintenance and periodic inspections are carried out to prevent blockages and ensure proper functioning of the drainage lines.

4. INDOOR AIR QUALITY

Air conditioners are installed in the administrative offices and selected areas to ensure comfort. The toilets and bathrooms are already reasonably well ventilated; however, the addition of exhaust fans will further improve air circulation and overall hygiene. They also require minor repair works. Regular maintenance and servicing of the air conditioning units are carried out to ensure their efficient performance and longevity.

AC fitted in administrative section

Washroom area

5. ELECTRICITY CONSUMPTION AND ENERGY CONSERVATION

The major areas of electricity consumption include classrooms, laboratories, computer centers, the library, and administrative sections. All these areas are equipped with standard electrical appliances such as lighting systems and ceiling fans. Energy-efficient LED lighting, along with 5-star rated air conditioners and refrigerators, is used to promote energy conservation.

Owing to the institute's design, with wide windows and open corridors, there is ample natural lighting, which reduces the need for artificial lighting. Students and faculty members are

consistently encouraged to switch off lights and electrical appliances when not in use to further conserve energy.

Hostel room with wide windows and LED

5 star rating fridge

6. ONSITE ENERGY GENERATION

The institute has installed a solar water heating system has been installed in the hostel to provide hot water in an energy-efficient and environmentally friendly manner. The cooking area is connected to Liquefied Petroleum Gas (LPG), ensuring a clean and efficient fuel source. Furthermore, diesel generators are installed as a backup power source and are used during power outages to ensure uninterrupted functioning of essential services.

Solar water heating at rooftop of Hostel

Generator

7. TEMPERATURE AND ACOUSTIC CONTROL

Trees and plants have been planted at various locations across the college campus to create a green and healthy environment. A large number of trees are planted in front of the college building, which enhances the beauty of the entrance and provides shade. Many plants are also grown around the college playground, contributing to a pleasant atmosphere. The surrounding areas of the campus are well maintained with different varieties of plants and trees. These plantations help in improving air quality and maintaining ecological balance within the campus. In addition to outdoor greenery, indoor plants have also been placed in different sections of the college building. These indoor plants are kept in corridors, and office areas to create a refreshing environment. The greenery inside the college building adds to the aesthetic appeal and promotes a healthy atmosphere. Overall, the college takes continuous efforts to maintain and promote a green and eco-friendly campus.

Noise pollution within the campus is minimal, even though a major road is located near the institution. The college is situated in a spacious and well-planned area with sufficient greenery and open space, which helps reduce the impact of traffic noise. As a result, the campus maintains a calm and peaceful atmosphere.

Tree Plantation at Campus

Indoor Plants at corridor

8. Paper Waste Management

Used papers, outdated notices, and examination-related materials are systematically collected and either reused as rough sheets or sent for recycling through authorized vendors, thereby minimizing paper waste. To further reduce paper consumption, most administrative offices and departments follow the practice of double-sided printing whenever possible. In the case of internal examinations, question papers are often printed two per sheet, which significantly contributes to paper conservation. Additionally, internal communication within the institution takes place by digital platforms such as emails and WhatsApp groups.

9. E-Waste Management

Obsolete computers, printers, batteries, and other electronic components generated within the campus are systematically collected and stored in a designated area. These items are subsequently handed over to authorized e-waste recyclers in accordance with applicable environmental regulations. The institute follows a structured disposal procedure, and e-waste is disposed of as and when required, ensuring safe handling with proper documentation.

10.SOLID WASTE MANAGEMENT

A systematic waste management system is followed within the institute to ensure proper handling of solid waste. Bins are placed across the campus at convenient locations for the collection of waste generated by students and staff. These bins are regularly monitored and cleared to maintain cleanliness and hygiene within the premises. The collected waste is then segregated into biodegradable and non-biodegradable categories at a designated point. Biodegradable waste, wherever feasible, is utilized for composting, while non-biodegradable waste is safely collected and handed over to municipal authorities for further processing and disposal.

Bins Placed in convenient places

11.UNIVERSAL ACCESS AND BUILDING OPERATION & MAINTENANCE

The campus infrastructure is designed to ensure accessibility, safety, and the efficient operation of buildings. Ramps are provided to ensure barrier-free access for all individuals, including differently-abled persons. Staircases are constructed in accordance with standard width and safety norms, enabling smooth movement and effective emergency evacuation. In addition, fire extinguishers are installed at designated locations across the campus and are regularly inspected and maintained to ensure safety.

Fire Extinguisher at prominent places

Staircase at Institute

12. GREEN INITIATIVES

The institution regularly organizes various green and wellness initiatives such as World Environment Day**,** International Yoga Day**,** Swachh Bharat cleanliness drives**,** and tree plantation programs**.** These activities aim to promote environmental awareness, healthy lifestyles, and a sense of social responsibility among students and staff, while actively contributing to the creation and maintenance of a sustainable and eco-friendly campus.

World Environment Day celebration by planting the Tree at campus

Cleaning of open well

SUGGESTIONS AND RECOMMENDATIONS

1. **Day light Design and Ventilation:** whitewashing of classrooms, filling of cracks, and installation of exhaust fans in toilets to improve overall maintenance and ventilation.
2. **Effective Composting of Biodegradable Waste**: The institute can enhance its composting practices by adopting systematic methods such as pit composting or vermicomposting.
3. **Implementation of Rainwater Harvesting**: The campus can adopt rainwater harvesting systems to conserve water and promote sustainable resource management. Rooftop rainwater can be collected and directed into storage tanks or recharge pits.
4. **Enhanced Energy Efficiency Measures:** All remaining conventional lighting should be replaced with energy-efficient LED fixtures.
5. **Student Engagement and Capacity Building:** Active involvement of students through eco-clubs, NSS, and NCC activities is recommended to strengthen environmental awareness, leadership, and sustainable practices on campus.
6. **Formulation of a Green Policy:** The institution is encouraged to develop and implement a comprehensive Green Policy document that clearly outlines its commitment to environmental sustainability and continuous improvement.