









Green, Energy and Environment Audit Report-2023-2024

Prepared by

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# ACKNOWLEDGEMENT

The Audit Assessment Team extends its sincere appreciation to Ambedkar college of Arts and science, for entrusting us with the significant responsibility of conducting the Green, Energy, and Environment Audit. We deeply value and acknowledge the college's cooperation throughout the entire assessment process. Your collaborative approach and unwavering support have played a crucial role in facilitating a thorough and effective audit.

We commend Ambedkar college of Arts and science, for its commitment to sustainability and environmental consciousness by initiating the Green, Energy, and Environment Audit. This dedication to evaluating and enhancing eco-friendly practices reflects a commendable step toward fostering a more environmentally responsible campus.

Our team eagerly anticipates presenting comprehensive findings and recommendations that align with Ambedkar college of Arts and science commitment to sustainability. We are grateful for the opportunity to contribute to the university's ongoing endeavours to promote green initiatives and energy efficiency. Thank you for your continued cooperation and dedication to cultivating a more sustainable and environmentally friendly academic environment.

Our special thanks to:

- Dr. Pramod K M, Principal
- Bhaskaran P, College Manager
- Dr Sanil AS, Assistant Professor
- Sanil PP, Assistant Professor
- Muhsina V, Assistant Professor

We express gratitude for providing us with the essential inputs required to conduct the crucial Green, Energy, and Environment Audit. Additionally, we extend our thanks to the other staff members who actively participated in data collection and field measurements.





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# Audit Assessment Team

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## CONCEPT

An environmental management system (EMS) is a data system that tracks air, water, and waste to improve performance. It helps maintain a clean and green environment that leads to partnerships. EMS provides a 360-degree view of the surrounding campus, making it easier for owners, managers, and environmentalists to collaborate, measure, control, and mitigate environmental impacts. Ultimately, it leads to raising the living standards of humans, animals, and plants. Due to changes in environmental conditions, global warming, and the growing human population, green campus initiatives are needed around the world. The goal is to create a sustainable and eco-friendly campus for participants.

Environmental management audits, such as green campus audit and energy audit, are well-developed processes for extracting information about an organization's environmental impact. These audits provide an actual assessment of how organizations are taking action to protect the environment. To save the eco-friendly atmosphere of an institution, well-developed environmental objectives and targets should be undertaken to reduce harmful effects. These audits can significantly reduce environmental pollution on campus, which in turn reduces the overall impact of global warming. According to government law, all institutions and organizations must comply with environmental legislation and ensure that their activities do not harm the environment.

## INTRODUCTION

The foundation of a nation's development lies in its educational institutions, where ecological considerations are pivotal for environmental progress. Today, educational establishments are increasingly attuned to environmental concerns, advocating eco-friendly initiatives such as energy conservation, waste management, and water conservation. These efforts aim to mitigate environmental impacts stemming from college activities. Environmental auditing evaluates an organization's adherence to environmental policies and objectives, providing insights into campus environmental performance. Through internal audits, colleges assess their environmental footprint and identify opportunities for improvement. Such audits offer valuable data on resource consumption, waste generation, and enable colleges to implement effective conservation measures, benefiting both the institution and its students





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# **OVERVIEW OF INSTITUTION**

# Vision

"To kindle the spirit of learning among the youth, to uplift the lives of downtrodden, minority communities, and make them lead a sustainable life to consistently preserve the tradition of high integrity while meeting the challenges of globalised world."

# Mission

"To provide equal opportunities for quality education, while equipping students with knowledge and skills in their chosen stream, identify hidden talents, provide opportunities for students to realize their full potential and thus shape them into future leaders, entrepreneurs and above all good human beings."

# **COURSES OFFERED**

The institutes offer 04 undergraduate programs and 01 postgraduate programs under the affiliation of University of Calicut.

UNDERGRADUATE PROGRAMME		
BA. English	BA. Economics	
BSc (Mathematics)	B com (co-operation).	

#### **POSTGRADUATE PROGRAMME**

MA (Development Economics)

Clubs and Cells

- → National Service Scheme (NSS)
- ➔ Nature club
- Bhoomithra sena
- Tourism club
- Social science club
- → ED club





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Green, Energy and Environment Audit Report

OF ARTS AND SCIENCE WANDOOR

AMBEDKAR COLLEGE

# **Green Campus Audit-Report**

# **INTRODUCTION**

The Green Audit serves as a valuable tool in pinpointing opportunities for sustainable development practices, enhancing environmental quality, bolstering health, hygiene, and safety standards, mitigating liability, cutting costs, and embodying virtuous values. It involves a methodical process of identifying, measuring, documenting, reporting, and analysing the various facets of an institution's environmental diversity.

The primary objective of Green Auditing is to assist organizations in adopting sustainable development practices while also setting exemplary standards for the wider community and upcoming generations. It fosters health consciousness and fosters awareness about environmental values and ethics. This cultivates a heightened understanding among staff and students regarding the ecological footprint within the campus environment.

If the pursuit of self-examination is seen as a natural progression of quality education, then institutional introspection can be viewed as the inherent evolution of a distinguished educational establishment. Given the escalating significance of environmental sustainability within the nation, the role of higher education institutions concerning environmental stewardship is gaining increasing prominence. Outlined below are the specific objectives:

- Create a checklist detailing the flora and fauna present on and around the college campus.
- Propose initiatives to enhance biodiversity within the college premises.
- Monitor the energy consumption patterns of the college.
- Evaluate the levels of water usage within the campus.
- Recommend sustainable methods for energy use and water conservation.
- Investigate various sources of organic and solid waste, along with potential mitigation approaches.
- Foster the principles of sustainable development through the implementation of a green audit system.
- Identify sources of organic and solid waste generation, alongside potential mitigation strategies.
- Document the expenditure on green initiatives over the past five years.



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# **METHODOLOGY**

The objective of the Green Audit is to verify that the campus practices align with the nation's green policy. The methodology involves data collection, physical inspections of the campus, monitoring and reviewing documentation, and thorough data analysis.

#### **GREEN CAMPUS/ PLASTIC FREE CAMPUS POLICY**

#### Introduction

Ambedkar College of Arts and Science, Wandoor is committed to fostering a green campus that emphasizes environmental protection, conservation, and sustainability. Our Green Campus Policy aims to integrate eco-friendly practices into every aspect of campus life, ensuring a healthy and sustainable environment for our community. By promoting awareness and responsibility, we aim to set a standard for environmental stewardship that extends beyond our campus.

#### Objectives

The primary objectives of the Green Campus and Environmental Policy are to:

- Encourage students, faculty, and staff to actively participate in maintaining a clean and sustainable environment.
- Educate the college community about the importance of environmental conservation and sustainable practices.
- Implement eco-friendly practices in all aspects of campus operations.
- Promote awareness among the public about clean and green energy.

#### **Conservation Measures**

To achieve our Green Campus goals, Ambedkar College of Arts and Science will implement the following conservation measures:

**Reduction of Polluting Products:** 

- Sensitize the college community to minimize the use of products that cause pollution.
- Energy Efficiency:
- Replace all conventional lighting with energy-efficient LED lights. Purchase only energyefficient devices, such as "ENERGYSTAR" certified computers.
- Waste Management:
- Implement effective waste handling methods to prevent environmental pollution.

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Partner with certified e-waste management agencies to ensure proper disposal of electronic waste.

to reduce paper waste.

• Encourage the use of papel



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Water Conservation:

• Install and maintain rainwater harvesting systems.

• Ensure proper water distribution and use water-efficient fixtures to conserve water resources.

Sustainable Transportation:

- Reduce the use of personal vehicles on campus.
- Promote the use of bicycles and walking to decrease carbon emissions and improve health.
- Encourage carpooling.

Tree Plantation and Green Cover:

- Conduct regular tree planting drives to increase the green cover on campus.
- Maintain existing green spaces and develop new ones to support biodiversity.

Environmental Awareness and Education:

 Organize workshops, seminars, and awareness campaigns on topics like waste management, energy conservation, and biodiversity.

#### **Responsibility and Accountability**

The responsibility for implementing and maintaining the Green Campus Policy lies with every member of the college community. A designated Green Campus Committee, comprising faculty, staff, and student representatives, will oversee the implementation of this policy, monitor progress, and report to college leadership.

#### **Continuous Improvement**

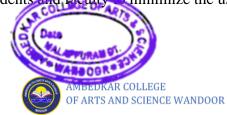
Environmental conservation is a continuous process. This policy will be regularly reviewed and updated to incorporate new technologies and best practices. Ambedkar College of Arts and Science is dedicated to setting an example in environmental stewardship, striving to create a sustainable and eco-conscious campus that benefits both the community and the environment.

#### Findings

Ambedkar college of Arts and science has been actively involved in promoting sustainability, environmental awareness, and green energy practices through various initiatives. This detailed report highlights the key activities and programs undertaken by different departments and units within the college. These initiatives aim to enhance environmental conservation, manage waste, conserve energy, and foster a sense of environmental responsibility among students and staff.

#### **Conservation Measures**

To realize the GREEN CAMPUS initiative, the following measures have been identified:



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□ Phase Out Conventional Lighting: Replaced CFLs and conventional light sources such as bulbs, tube lights, halogen, and mercury street/campus lights with LEDs.

□ Improved Waste Handling: Developed better waste management methods to ensure that campus waste does not pollute the environment.

□ E-Waste Management: Ensured that e-waste is properly handed over to approved e-waste handling agencies for proper disposal.

□ Water Conservation: Implemented water conservation facilities and a proper water distribution system on campus.

□ Promote Environment-Friendly Practices: Encouraged the use of paper bags, saving electricity, and other eco-friendly practices among students and faculty.

□ Energy-Efficient Purchases: Purchased only energy-efficient computers, such as those with the "ENERGYSTAR" rating or equivalent.

□ Green Campus Improvements:

- Reduce vehicle usage.
- Promote the use of bicycles and walking to maintain fitness.
- Gradually increase the green cover of the college.

#### Save Energy Tips

The college promotes energy-saving practices through:

- Power Management: Activate power management features on computers and monitors to enter low power "sleep" mode when not in use.
- Printer Management: Activate power management features on laser printers.
- Lighting: Turn off unnecessary lights and use daylight instead; avoid decorative lighting.
- Efficient Bulbs: Use LED bulbs.
- Light Management: Keep lights off in conference rooms, classrooms, and lecture halls when not in use.
- Fan Usage: Use fans only when needed.

#### Major Green Campus Initiatives

- Solar Street lights: Installation of solar power stations.
- Awareness Posters: Display posters on e-waste management, saving water, and saving energy.
- Paperless Administration: Initiatives to transition to paperless administration.
- Plastic-Free Campus: Efforts to eliminate plastic use on campus.



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- Tree Plantation and Cleanliness Drives: Organize tree plantation drives, cleanliness drives, student forests, and beach cleaning drives.
- Digital Library and E-Learning Centre: Establish a digital library and e-learning centre.

#### Biodiversity Conservation

Recognizing the importance of biodiversity, the college implements:

- Green Spaces: Establish green spaces with native plants to support local biodiversity.
- Sustainable Landscaping: Implement sustainable landscaping practices to preserve natural habitats.
- Awareness Programs: Conduct various awareness programs.

#### Waste Reduction and Recycling

To minimize environmental impact, the college focuses on:

- Recycling Program: Implement a campus-wide recycling program for paper, plastics, and other recyclables.
- Single-Use Plastics Reduction: Encourage the reduction of single-use plastics and promote reusable alternatives.
- Waste Collection Bins: Provide separate waste collection bins.
- NGO Partnerships: Establish partnerships and MOUs with various NGOs and schemes.

#### Water Conservation

The college is committed to responsible water usage and conservation through:

- Water-Efficient Fixtures: Install water-efficient fixtures and irrigation systems.
- Rainwater Harvesting: Implement rainwater harvesting ponds.
- Awareness Campaigns: Promote water conservation awareness campaigns among students and staff.

#### Sustainable Transportation

To reduce carbon emissions and promote sustainable transportation, the college encourages:

 Public Transportation: Use of public transportation, electric vehicles (EVs), cycling, and carpooling.

#### Safety and Well-Being

Ensuring the safety and well-being of the college community includes:

- Safety Drills: Conduct regular safety drills and emergency preparedness training.
- Sustainable Construction: Implement sustainable construction and maintenance practices to



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Active Clubs: Ensure the functioning of NSS, Nature Club, and implementation of nature policies.

Acknowledging that environmental preservation is a continuous journey, this policy will undergo periodic reviews and updates to integrate emerging technologies and best practices. We are committed to continual enhancement in our endeavours to establish a sustainable and eco-conscious campus. Ambedkar college of Arts and science is devoted to setting a precedent in environmental conservation. Through initiatives like biodiversity preservation, waste reduction, and sustainable practices, we aspire to build a campus that prioritizes the welfare of our community while making positive contributions to the environment.

# **CONCLUSION**

The Green Audit Report conducted for **Ambedkar college of Arts and science** reflects the institution's strong commitment to fostering a sustainable and environmentally conscious campus. Through the implementation of various conservation measures and initiatives, the college has made significant strides towards achieving its objectives of environmental protection, biodiversity conservation, waste reduction, water conservation, sustainable transportation, and ensuring safety and well-being.



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# **FUTURE OUTLOOK**



Moving forward, Ambedkar college of Arts and science will continue its efforts to create a greener and more sustainable campus environment. By leveraging renewable energy sources, implementing eco-friendly infrastructure, promoting resource efficiency, conducting and regular environmental audits, the college aims to its further enhance environmental performance and contribute positively to the well-being of the environment and its community.

In conclusion, the Green Audit Report underscores **Ambedkar college of Arts and science** steadfast commitment to environmental stewardship and sustainability. Through concerted efforts and ongoing initiatives, the college is poised to serve as a beacon of environmental responsibility and inspire positive change within its campus and beyond.

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# **Energy Audit-Report**

# **INTRODUCTION**

Energy efficiency involves conserving energy without compromising economic growth and development. This encompasses enhancing the efficiency of energy extraction, transmission, and distribution, as well as maximizing the effectiveness of energy utilization.

An Energy Audit is described as "the process of verifying, monitoring, and analyzing energy usage, including the submission of a technical report containing suggestions for enhancing energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption."

The purpose of this energy audit is to assess energy consumption, identify areas for improvement, and recommend measures to enhance energy efficiency and sustainability at Ambedkar college of Arts and science. The audit covers various aspects including air ventilation, irrigation systems, energy awareness programs, and the use of renewable energy sources.

The Energy Audit aimed to achieve the following objectives:

- → Perform a basic walk-through audit or observation of the energy usage of electrical appliances across the campus of Ambedkar college of Arts and science.
- Review and analyze the institution's energy usage history to establish a baseline against which savings can be assessed in the audited buildings.
- Recommend actions to decrease energy consumption throughout the buildings and propose feasible options for system enhancements within budget constraints.
- → Identify and assess measures that could enhance the environmental sustainability of the buildings/areas and offer corresponding recommendations.

#### Methodology

Energy Audit comprises three phases:

- 1 Pre-audit Phase
- 2 Audit Phase
- 3 Post-audit Phase

Each of these phases includes specific stages as follows:





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Data Collection:

During the initial data collection stage, various tools were utilized to gather executive data. This involved activities such as observation, surveys, communication with responsible individuals, and measurements. The following steps were undertaken for data collection:

 $\rightarrow$  The team visited each department, classroom, office, library, canteen, etc.

- → General information was collected through observations and interviews.
- $\rightarrow$  Power consumption of appliances was recorded by averaging values in certain cases.

#### Audit Phase:

At Ambedkar college of Arts and science, the energy audit was conducted in collaboration with faculty members. The audit commenced with the team conducting a thorough walkthrough of all college facilities. This included identifying various types of appliances and utilities such as lights, fans, taps, fridges, air conditioners, etc. Additionally, the team measured the usage per item, indicated in Watts on the appliances, and analyzed relevant consumption patterns and their impacts. Staff members were interviewed to gather details on usage frequency and general characteristics of specific appliances.

#### **FINDINGS**

#### **Energy policy**

#### Introduction

Ambedkar college of Arts and science introducing an energy policy on campus is a proactive and strategic approach to promote sustainability, reduce environmental impact, and optimize energy usage. The energy policy reflects the commitment of the campus to sustainability and outlines a comprehensive framework for achieving energy conservation and efficiency goals. By working together and embracing a culture of energy conservation, the campus can reduce its environmental footprint, enhance resilience, and create a healthier and more sustainable environment for all.

#### SCOPE AND OBJECTIVES:

Foster awareness in students regarding energy conservation and minimal use of energy in campus and their livelihood areas.

- $\rightarrow$  To reduce energy consumption and greenhouse gas emissions on campus.
- $\rightarrow$  To increase energy efficiency and utilize renewable energy sources wherever feasible.
- $\rightarrow$  To promote a culture of energy conservation and awareness among students, faculty, and staff.
- $\rightarrow$  To achieve cost savings through energy-efficient practices and technologies.



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#### SPECIFIC MEASURES

- → Implementation of solar streetlights in campus.
- Provide High quality LED bulb assembling workshop and energy conservation awareness class.
- → Installation LED bulbs throughout the campus
- → Automatic sensor device installation in disabled friendly washroom
- Training and Education: Workshops, seminars, and training sessions on energy conservation will be conducted for students, faculty, and staff to raise awareness and install sustainable habits
- → Lighting and Appliance Efficiency: Efficient lighting systems, appliances, and equipment will be adopted to reduce energy usage while maintaining optimal functionality.

#### Responsibility

The Energy Management Team comprises of:

- Head of the institution
- Staff and Students Representatives
- Faculty familiar with Energy auditing
- Technical Staff

#### **Energy Consumption Overview**

1. Major Areas of Energy Use:

Computer Lab, Classroom and office lighting and equipment, conference hall, mini auditorium, Canteen and kitchen facilities.

2. Electricity Supply:

KSEB, Generator, UPS units across various departments, solar streetlights.

3. Energy Efficiency Measures

Lighting:

- LED bulbs installed in various locations. Most classrooms and office rooms use natural lighting, minimizing the need for electrical lights during the day.
- Solar streetlights.

Appliances:

- Use of star-rated refrigerators in labs (three-star and five stars with eco-friendly refrigerants).
- Installation of energy efficient electrical appliances.





Energy Saving Practices:

- Instructions for staff and students to turn off lights, fans, and equipment when not in use.
- Use of daylight instead of electrical lighting where possible.
- Implementation of power management features on computers.

Electrical Equipment:

• Regular maintenance and calibration of electrical equipment by dedicated staff. Energy Training and Workshops:

• LED bulb-making workshops to educate students on energy-saving techniques. Power Backup:

• Generator and UPS systems ensure uninterrupted power supply.

Recommendations for Further Energy Efficiency Improvements

Upgrade to More Efficient Appliances:

- Replace remaining non-LED lighting with LED bulbs.
- Upgrade older appliances to more energy-efficient models.

Enhance Renewable Energy Use:

- Consider installing solar panels to reduce reliance on the grid and generator.
- Install biogas plant capacity to handle more organic waste.

Increase Awareness and Training:

- Conduct regular energy conservation workshops for students and staff.
- Promote carpooling and the use of public transportation to reduce carbon emissions.

Implement Smart Energy Management:

Use energy management systems to monitor and control energy usage across the campus.

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Install motion sensors in low-traffic areas to automatically turn off lights and appliances.
 Improve Waste Management:

Enhance the existing waste sogregation and recycling programs.
 Increase composting activities to handle more organic waste.
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# **ENVIRONMENT** Audit-Report

# **INTRODUCTION**

Environmental auditing is a systematic process designed to gather information about an institution's efforts in protecting the environment. This audit aims to provide a realistic assessment of Ambedkar college of Arts and science's environmental management practices. The primary goal is to identify opportunities to minimize harmful effects, reduce environmental pollution, and contribute to a broader reduction in global warming effects.

Environmental Audit is a thorough process designed to gather information about an Institution or Organization, providing a realistic assessment of their efforts in protecting the environment. To preserve the eco-friendly ethos of an Institution or Organization, well-defined environmental objectives and targets should be implemented to minimize harmful effects. These audits can significantly reduce environmental pollution on campus, thereby contributing to a broader reduction in global warming effects. They are instrumental in maintaining a clean, green environment that benefits stakeholders.

This audit process involves a systematic, documented, periodic, and objective review conducted by a regulated entity of facility operations and practices related to meeting environmental requirements. It entails observing, measuring, recording data, and collecting and analyzing various components within an organization concerning the environment.

## **Objectives of Environmental Auditing**

- Identify sources and quantify the types of waste generated.
- Gather data on unit operations, raw materials, products, water usage, and waste.
- Identify process inefficiencies and areas of inadequate management.
- Assist in establishing targets for waste reduction.
- Facilitate the development of cost-effective waste management strategies.
- Raise awareness among the workforce about the advantages of waste reduction.
- Aid in enhancing process efficiency.
- Evaluate the volume of water usage within the institution.
- Identify various sources of organic and solid waste generation along with mitigation options.
- Document the waste disposal system.



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Provide a status report on environmental compliance.

#### Methodology

The methodology for this environmental audit includes:

- Data collection
- Campus physical inspection
- Monitoring and review of documentation
- Data analysis

#### **FINDINGS**

**Environmental Initiatives and Practices** 

#### Air Ventilation:

- Classrooms, indoor and outdoor auditoriums, conference halls, reading rooms, and football grounds are designed to ensure proper air ventilation.

#### **Energy Efficiency Measures:**

- Use of LED lighting and sensor lights.
- Installation of star-rated appliances with eco-friendly refrigerants.

#### Waste Management:

- Waste segregation with color-coded bins.
- Composting and biogas plants for organic waste.
- Collaboration with Haritha Karma Sena for recycling non-biodegradable waste.
- E-waste management through proper recycling and disposal.

#### Tree Planting and Green Initiatives:

- Tree planting in association with different clubs and cells.
- Various environmental awareness programs such as Ozone Day celebrations, Nature Camp,

Eco Living Workshop, clean-ups, etc.

#### Sustainable Transportation:

- Promotion of public transportation and carpooling among staff and students.
- Use of electric vehicles by some faculty members.

#### Renewable Energy:

- Installed solar streetlights and biogas plants for further energy sustainability.

#### Hazardous Materials Management:

- Proper disposal of chemicals through designated pits.
- Use of autoclave in labs to sterilize harmful microbes.



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#### **Biodiversity Conservation:**

- Maintenance of gardens and herbal plants within the campus.
- Nature camp organized to foster environmental awareness.

#### Water Conservation:

- Effective use of rainwater harvesting and well water.
- Proper sewage disposal with septic tanks and soak pits.

#### **Plastic Ban Policy**

The college developed the policy based on the UGC Guidelines for the Ban of Plastic Use in Higher Education Institutions. The policy aims to make the campus 'plastic-free' by systematically banning the use of plastics and replacing them with suitable environment-friendly substitutes.

Policy Goals:

- Prohibit the use of single-use plastics in the college's canteen and other areas.
- Conduct sensitization and awareness campaigns on the negative impacts of single-use plastics.
- Use alternate materials, such as paper bags, cloth bags, and drinking water facilities, to reduce the number of plastic water bottles on campus.
- Segregate waste at the point of generation and transfer it via authorized trash collection services to approved waste processing centers, disposal sites, or deposition centers.
- Ensure all events organized inside the campus strictly follow plastic ban guidelines.

Recommendations for Improvement

Enhance Waste Management:

- Increase the capacity of composting and biogas plants.
- Implement a more rigorous recycling program for all waste types.

Boost Renewable Energy Use:

- Install solar panels to reduce dependency on non-renewable energy sources.
- Expand biogas plant operations to handle more organic waste.

Improve Awareness and Training:

- Regular workshops and training sessions on environmental practices for students and staff.
- Increase participation in environmental programs and initiatives.

Optimize Resource Use:

- Further reduce paper usage by promoting digital documentation.
- Encourage the use of eco-friendly materials in all campus operations.



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Strengthen Environmental Policies:

- Regularly update the green campus policy.
- Ensure strict adherence to environmental regulations and best practices.

#### Conclusion

Ambedkar college of Arts and science has demonstrated a commendable commitment to environmental sustainability. Through effective waste management practices, the implementation of a plastic ban policy, biodiversity conservation initiatives, and active student engagement, the institution has made significant strides towards creating a cleaner, greener campus environment. Continued efforts in these areas, along with ongoing monitoring and improvement, will further enhance the institution's environmental performance and contribute to a better quality of life for all stakeholders.



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#### **ACTIVITIES COORDINATED BY THE COLLEGE**

# NATURE AND WILDLIFE PHOTOGRAPHY EXHIBITION 27th January 2022

The Nature Club conducted a nature and Wildlife photography exhibition on 27th January 2022. Shahul Hameed welcomed the event, Dr. Pramod KM (IQAC Coordinator) presided over the function, Dr. Abdul Nasar V P (principal) inaugurated the function. V M Sadique Ali (Wildlife Photographer) was the chief guest of the exhibition. Sanil PP (staff Secretary), Dr. Sanil A S (HOD, Dept of Malayalam) felicitated to the programme and Anooj K (3rd Bcom) deliver the vote of thanks.



VM Sadique Ali exhibited his 150 Wildlife photographs and explained about each photograph.



#### CAMPUS CLEANING AND WASTE MANAGEMENT TRAINING

#### 19th March 2022

The Nature Club of Ambedkar college in Association with National Service Scheme conducted a campus cleaning on 19th March 2022 at 8.30. 36 Members Participated in the programme. Cleaning was completed at 12.00pm and after that a waste management training provided to the members. The training session was handled by Mr. Murfad T P. It was very informative, and students learned how to dispose waste and how to recycle waste. Training session ended at 2.00pm.



#### WORLD BICYCLE DAY

The world bicycle day was celebrated by the Nature club by conducting a cycle ride from college campus to wandoor town on 3<sup>rd</sup> June 2022. The programme was inaugurated by Dr. Abdul Nasar VP, Principal.



#### NADUKANI MASS CLEANING

Nature club members of Ambedkar College of Arts and Science, Wandoor participated in the Nadukani Mass Cleaning programme conducted by the Friends of Nature.



#### **BEAUTIFICATION OF COLLEGE ROAD**

The nature club members engaged in beautification of college road by planting trees on 30<sup>th</sup> August 2022.







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#### POND CLEANING

Nature club members of Ambedkar college of arts & science, wandoor cleaned a pond near to college on 30<sup>th</sup> September 2022. They collected plastics from the pond and make it ready for use.

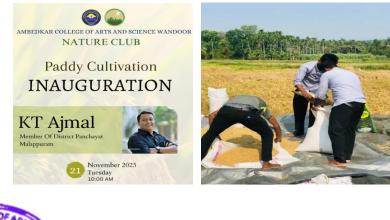
### NATURAL CLUB VISIT TO AGRICULTURAL EXHIBITION

On 1st August 2023 members of the natural club embarked on a visit to the agricultural exhibition 'Pulari' organized by Wandoor agricultural office. The purpose of the visit was to explore innovations in agriculture, understand sustainable practices and gather insights for potential collaborations. Almost 35 members of the club participated in the program.



#### PADDY CULTIVATION TO HARVESTING AND SALE.

Nature club started rice cultivation in 40 cents of land near Shariyil, Wandoor. Cultivation achieved of 120 kilogram of rice, showcase in the effectiveness of the cultivation. Mr KT Ajmal, district Panchayat member inaugurated seedling transplantation, Mr AP Anil Kumar MLA inaugurated the harvesting and the first sale of the organic rice was to the district collector Mr.VR Vinod IAS. This cultivation provided invaluable hands on experience to almost 150 students involved in every stage of the cultivation process, fostering practical understanding of sustainable agriulture and organic farming.



Green, Energy and Environment Audit Report







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#### WORLD ENVIRONMENTAL DAY

#### 12-06-2019

As part of the World Environmental Day celebration, students planted trees on the college campus on 12-06-2019. The programme was inaugurated by Dr Abdul Nasar V. P, Principal of Ambedkar College of Arts and Science, Wandoor. The College Management Secretary Mr K. Kasinathan addressed the gathering.



### **CLEANING THE COLLEGE CAMPUS**

#### 15-06-2019 and 31-08-2019

One day camp of second-year students for cleaning the college campus was conducted on 15-06-2019. 46 volunteers actively participated in the camp.



#### PROMOTE A KITCHEN GARDEN

The NSS unit conducted a one-day camp to promote a kitchen garden in 100 houses nearby the college and 118 students actively participated in the camp.







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#### INI NJAN OZHUKATTE 11-01-2020

The NSS unit of Ambedkar College of Arts and Science, Wandoor conducted cleaning and maintenance of rivulet. 59 Volunteers participated in the programme.



#### **NSS Camp**

The NSS unit of Ambedkar College of Arts and Science, Wandoor, commenced its camp, "Prakritikoro Koottu," on 21 December 2019. The inauguration was marked by enthusiasm and the participation of students, faculty, and community members.

The second day began with morning exercises at 6 am, followed by the NSS song at 8:30 am. The primary activity was cleaning the pond in Ward 10, a collaborative effort involving NSS volunteers, villagers, and club members. Post-lunch, Mr. Alavi Kannikkuzhi, ASI Karuvarakundu, conducted an awareness session on avoiding vehicle accidents. The day concluded with cultural activities and a review session.

The day three started with yoga and the NSS song. Activities included cleaning the Karimkura Check Dam, inaugurated by Ms. C. Jisha from Chokkad Grama Panchayath. Post-lunch, Mr. Sakir Hussain delivered a talk on anti-drug awareness, and cine artist Mr. Jijesh Wandoor shared his experiences in cinema. The day ended with cultural programs and a review session.

The day four began with yoga and the NSS song. Volunteers cleaned Govt. High School, Pullangode, in the morning. Mr. C. P. Salim, ChildLine District Coordinator, led a session on child safety in the afternoon. The evening featured a class on Mappilapattu Music by Mr. Irshad Sambrikallu. The day concluded with Christmas caroling and a review session.

Day 5 Starting with yoga and the NSS song, the day focused on cleaning the Nursery and surrounding areas. In the afternoon, Mr. P. Abdul Hameed gave a talk on water conservation, cleanliness, and agriculture. The evening was highlighted by a magic show from Mr. Vivek Arimbuth and Christmas celebrations, including sweets distribution by the college union. The day ended with cultural activities and a review session.





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The NSS camp effectively combined community service, environmental awareness, and cultural engagement, contributing to both the development of the volunteers and the welfare of the local community.





#### WATER FACILITY MAKING FOR BIRDS

(08-03-2021)

The NSS unit of Ambedkar College of Arts & Science, Wandoor initiated the project to provide water facilities for birds within the college campus. The programme aimed to ensure the accessibility of clean drinking water for birds and other creatures, especially during hot and dry seasons. The initiative reflects the commitment to environment and its diversity.



#### HARITHAVALKARANAM @ CALCUT UNIVERSITY CAMPUS

As part of NSS Unit activities, 13 NSS volunteers visited Calicut University campus and participated in 'Harithavalkaranam' programme, an activity of cleaning and planting of saplings at campus surroundings.







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# NATURE CAMP 2023 APRIL 14

NSS Unit of Ambedkar College conducted a Nature camp at Nedunkayam, Malappuram district in association with Forest Department, Nedunkayam. The camp aimed to foster an environmental awareness among the students. The camp provided the experiences of activities and interaction with nature which helped the students to understand the natural environment well. Students interacted with the forest guards and forest officers at Nedunkayam. The final day of the seven days camp commenced with the rejuvenating yoga session, making a peaceful start to the day. At 9.30 am a closing ceremony was conducted and the ceremony was graced by Mr.K. K. Surendhran, Vice President of Thuvvur Panchayath, as the chief guest. The closing ceremony was attended by volunteers, faculty members and local dignitaries.









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**Environmental Day Class and Plantation of Saplings (02-06-2023)** 

NSS Unit of Ambedkar College of Arts & Science, Wandoor in association with Kerala Forest and Wildlife Department conducted a social awareness programme and plantation of saplings as part of World Environment Day. Smt. E. Sitara, Panchayath President, Wandoor inaugurated the programme and Dr. V P Abdul Nasir, Principal of Ambedkar College presided over the section. An oath was taken by V B Sasikumar and retired Forest Range Officer S. Sugathan provided an awareness class for the volunteers. Dr. A S Sanil, Programme Officer, N. Ravidas, PTA Vice President, student volunteer Prathyusha delivered speech on this special occasion. 47 NSS volunteers participated in the programme.



**Vidyavanam (04-07-2023)** As part of NSS Unit activities a Forest plantation, 'Vidyavanam' was conducted at Ambedkar College, Wandoor. The programme was conducted by Kerala Forest and Wildlife Department and the session was inaugurated by Mr. A P Anilkumar, MLA, Wandoor. 41 NSS volunteers participated in the programme.



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#### PLASTIC WASTE COLLECTION (27-09-2023)

Volunteers of NSS Unit, Ambedkar College collected plastic waste from college campus and surroundings as part of the NSS Unit activities. In this session 65 volunteers participated.



#### **SNEHARAMAM (24-01-2024)**

As part of NSS activities the volunteers conducted a program named 'Sneharamam' at Ambalappadi, Wandoor. Grama panchayath member inaugurated the ceremony.







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## **Green Audit**

- Increase MoU with Govt and Non-Governmental organizations to ensure a green campus.
- QR-coded labelling for plants and trees.
- Butterfly, Zodiac, Vegetable and ornamental plant garden on the campus to be established.
- Sign boards and green quotes display in campus.
- The number of indoor plants needs to be increased.
- List of names of visiting birds and names of visiting animals on the campus to be displayed.
- Collaborate with government agencies for E-waste disposal.
- Keep soft copies of student's projects to reduce paper waste.
- Highlight some viewpoints of the campus
- Labelling of existing fruit plants
- Open Group discussion points to be demarked.
- Strengthen Organic waste management and reuse methods.
- Establishment of Open Class.
- Purchase environmental studies-related books and Journals to the library.
- Increase the number of flowering plants.

## **Environment Audit**

- Sign boards indicating the following to be created. Plastic free campus/Tobacco-free campus/Don't pluck the flowers.
- Some schemes of Government can be implemented for environmental protection of the campus like Swatch Bharath Abhiyan and Clean India Mission
- Recycling of wastes collected from the college should implemented properly.
- Steps should be taken for organic waste management, segregation of waste and reuse methods.
- Projects or dissertation works on environmental science and management can be carried out by students and teachers in collaboration with concerned bodies.
- Digital or automatic technology to reduce the use of paper, gas, water, and energy can implemented.







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- Number of Tri-Colour Waste bins to be increased.
- A list of trees and their variety can be prepared as a biodiversity register.
- Keep details of services and maintenance on the drinking water machines to ensure its credibility among users.
- Rainwater harvesting Facility and Well recharge should be systematized.
- Biogas plant make functional.
- Sufficient staff should be designated for waste management.

### **Energy Audit**

- Solar Energy generation may be improved up to 30% of the total connecting load.
- Sensor-based lights and water taps to be implemented.
- Refrigerators, Air conditioners, and other electrical equipment to be assured five-star category in the coming purchases.
- Awareness boards need to be displayed near switches and water taps.



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#### Reference

- The Environment [Protection] Act 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 The Petroleum Rules: 2002 13
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor VehicleRules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control of Pollution] Act 1974 (Amended 1988) & the
- Water (Prevention & Control of Pollution) Rules 1975
- The Air [Prevention & Control of Pollution] Act 1981 (Amended 1987) The Air
- (Prevention & Control of Pollution) Rules 1982
- The Gas Cylinders Rules 2016 (Replaces the Gas Cylinder Rules 1981
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules,2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices
- Internal Records of the Campus



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AMBEDKAR COLLEGE OF ARTS & SCIENCE, WANDOOR

## GREEN CAMPUS AUDIT

This is to certify that a "Green Campus Audit" for Ambedkar College of Arts and Science Wandoor, was conducted on 26 August 2024 to assess sustainable development practices regarding biodiversity and other resources, measures to reduce resource wastage, and efforts to improve resource quality and sustainability. During a site inspection and review of the submitted report, the college's initiatives and practices were duly verified and found to be in line with acceptable standards. The commendable efforts undertaken by management, faculty and students in the realm of environmental sustainability are highly appreciable.

ANAS E

Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106170721010121

GREELINE

Dr. SHAHIDA A T Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010107

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Dr. SABIQUE M K Certified Lead Auditor (ISO 14001:2015) eg. No. 2106210721010106

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## MBEDKAR COLLEGE OF ARTS & SCIENCE, WANDOOR

# ENVIRONMENT AUDIT

This is to certify that an "Environment Audit" for Ambedkar College of Arts and Science Wandoor, was conducted on 26 August 2024 to assess eco-friendly initiatives and strategic planning implemented on the campus to uphold a sustainable environment for all stakeholders. The activities and measures carried out by the college have been verified and found to be acceptable. We appreciate the immense efforts undertaken by management, staff, and students towards environmental protection and conservation.

ANAS

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GREELAN 0 Dr. SHAHIDA A T Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010107

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Dr. SABIQUE M K Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010106







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Green, Energy and Environment Audit Report

OF ARTS AND SCIENCE WANDOOR

AMBEDKAR COLLEGE



AMBEDKAR COLLEGE OF ARTS & SCIENCE, WANDOOR

# ENERGY AUDIT

This is to certify that an "Energy Audit" for Ambedkar College of Arts and Science Wandoor, was conducted on 26 August 2024 to assess energy costs, the availability and reliability of the energy supply, energy conservation technologies, and ways to reduce energy consumption. The activities and measures carried out by the college have been verified and found to be acceptable.

ANAS E

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Dr. SABIQUE M K Certified Lead Auditor (ISO 14001:2015) Reg. No. 2106210721010106

CERTIFICATE



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AMBEDKAR COLLEGE

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Certificate of Training

TNV hereby certifies that

DR. SABIQUE M. K.

has successfully completed the 5 days

Auditor / Lead Auditor Training Course which meets the training requirements of the Exemplar Global and has been declared as competent in the following competency units

- EM: Environmental Management System
  - AU: Management Systems Auditing
- TL: Leading Management Systems Audit Teams

# ISO 14001:2015

Issue Date: 21<sup>st</sup> Jun. 2021 Training Date : 05<sup>th</sup> to 09<sup>th</sup> Jun. 2021 Certificate Number : 2106210721010106

> Authorised Signatory (Pragyesh Singh)

This course is certified by Exemplar Global vide registration number. (N000 Note: The course conforms to the principles and practice of unders of Management Systems for compliance with standards. This certificate remains the promotion of the system this certificate is recognized by Exemplar Global. For vertication of this cycle ate, please write to Mail: info@isoindia.cog







Green, Energy and Environment Audit Report ARTS& SCIENCE WANDOOR, MALAPPURAM DT.





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# ISO 14001:2015

Issue Date: 17<sup>th</sup> Jun. 2021 Training Date : 26<sup>th</sup> to 30<sup>th</sup> May. 2021 Certificate Number : 2106170721010121

> Authorised Signatory (Pragyesh Singh)

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Certificate of Training

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TNV hereby certifies that

Dr. Shahida A.T

has successfully completed the 5 days

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