



ALPHONSA COLLEGE, PALA

Reaccredited to A Grade by NAAC in the
4th Cycle of Accreditation (CGPA 3.24)

Affiliated to Mahatma Gandhi University, Kottayam



**ACTION TAKEN REPORT ON GREEN AND
ENERGY AUDIT**

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Alphonsa College, Pala, is steadfast in its commitment to exemplary environmental management while advancing its higher educational objectives. By fostering a green living ethos, the institution contributes to making our planet more sustainable and habitable. This dedication to integrating the green movement into daily operations is enshrined in our policy documents, which encompass Green, Energy, and Environment Audits, thereby ensuring a systematic approach to environmental responsibility.

To uphold our commitment to the green movement, Alphonsa College conducts an internal green and energy audits, with faculty and students forming a dedicated committee to rigorously assess the institution's green practices. The audit report, along with recommendations and proposals for corrections and improvements, is submitted to the Head of the Institution and then communicated to staff and students.

In addition to internal audits, we have conducted two external audits during the periods 2018-19 and 2022-23 in collaboration with the Advanced Centre of Environmental Studies and Sustainable Development at Mahatma Gandhi University, Kottayam and Periyar Tiger Reserve Foundation , Thekkady. Personnel from the external agency visited the campus to study the ecosystem and analysed the institution's energy and water resource utilization and green practices. The detailed reports submitted by the external agency were carefully reviewed by the institutional authorities, leading to the implementation of corrective measures and appropriate interventions to enhance the sustainable practices of Alphonsa College.

- **Green Campus Initiatives:**

The college has initiated the development of green infrastructure on campus. This includes the establishment of green spaces, and the plantation of trees and shrubs to enhance biodiversity and improve air quality.

- **Tree Plantation Drive:** A tree plantation drive has been initiated to increase the carbon credit and greenery of the campus. Indigenous and evergreen/fruit trees are being planted to enhance the campus environment.
- **Restricted Entry of Automobiles:** to maintain a sustainable and eco-friendly environment a policy of restricted automobile entry has been followed on the campus. This initiative significantly reduces carbon emissions and noise pollution, contributing to a cleaner, quieter educational atmosphere.
- **Pedestrian-Friendly Walkways:** pedestrian-friendly have been promoted to encourage walking and reducing the need for vehicular transport. These safe and scenic walkways not only lower our campus's carbon footprint but also enhance the well-being of our students and staff by providing a peaceful environment.
- **Restricted Use of Plastic Inside the Campus:** A rigorous policy on plastic use has been followed effectively to reduce plastic waste and foster a cleaner and more sustainable environment. The institution's commitment to eco-friendly practices has been recognized by the Pala municipality, which has declared the campus as Clean and Plastic-Free.
- **MoU with Municipality for Plastic Collection:** The College has an MoU with Pala municipality for the collection of plastic waste, ensuring responsible waste management and promoting recycling efforts..
- **Digital Display to Replace Flex Banners:** The institution has adopted the use of projectors instead of flex banners for displaying information during seminars and public gatherings. This sustainable practice eliminates the need for single-use banners and reduces waste production.

- Use of Cloth Banners: A practice of using cloth banners over traditional plastic or vinyl materials has been strictly followed on the campus. Cloth banners are reusable and more eco-friendly, significantly reducing waste and environmental footprint.
- Encouragement of Steel Glasses, Bottles, and Plates: The institution encourages the use of steel glasses, bottles, and plates to reduce the use of single-use plastics and other disposable items.
- Campus Green Protocol Display: The Green Protocol followed by the college is prominently displayed on campus. This serves as a constant reminder of the eco-friendly practices followed at the institution and inspires the community to contribute to our green initiatives.
- Campus Tree Diversity Register: On behalf of the college the Department of Botany maintains Campus Tree Diversity Register, cataloguing the variety of tree species on campus to help preserve local flora and serves as an educational resource for students.
- Maintenance of Gardens: The campus has been designed to serve a sanctuary for various plant and animal species, promoting biodiversity and ecological balance. On campus we maintain Butterfly garden, Botanical garden, fruit tree garden and herbal garden. It offers a vibrant, living laboratory for learning and research in environmental sciences.
- Botanical Garden: botanical garden, equipped with QR-coded trees has been maintained to allow students, staff and visitors to access information about the flora through their smartphones.
- Birds Club International: The college has entered into a partnership with Birds Club International to maintain a natural ecosystem for birds, fostering biodiversity and ecological balance.
- Display Boards: display boards are strategically placed across campus to raise awareness about energy conservation. These boards remind everyone of the importance of preserving this critical resource.

- Campus Biodiversity Board: campus biodiversity boards have been displayed cataloguing various elements of our natural environment, from trees to butterflies. This meticulous documentation enhances the understanding and appreciation of campus biodiversity.
- Tree Diversity Audit and Carbon Sequestration Analysis: Tree Diversity Audit and Carbon Sequestration Analysis have been initiated to help understand and enhance ecological footprint.

- **Waste Management Initiatives:**

As part of the green audit recommendations, waste management initiatives have been strengthened. This includes the implementation of segregation at the source, composting of organic waste, and recycling of paper, plastic, and other recyclable materials.

- Plastic-Free Campus Initiative: Efforts are being made to avoid the use of plastic on campus and encourage the use of biodegradable alternatives, achieving a plastic-free campus. An MoU was signed with Pala Municipality to collect plastic wastes and recycle it.
- Leaf Litter Composting: Leaf litter from the campus is being effectively utilized for aerobic and vermicomposting, producing high-quality manure for campus gardens.
- Paper Recycling: Paper waste is being recycled instead of incinerated or burned, contributing to waste reduction and environmental sustainability. An MoU was signed with FIATH Mission, Thrissur, where they collect the paper wastes from the college and recycle it to print Bible.
- Vermi Composting and Biogas plant: Several composting yards have been set up on campus to compost canteen waste aerobically. Students are actively involved in managing these compost yards, contributing to waste management and organic manure production. Also a biogas plant is set up.

- E- Waste and Chemical Wastes- An MoU was Signed with KIEL, Govt of Kerala, for recycling E-wastes and managing chemical wastes.
- Awareness Campaigns: To promote energy conservation and sustainability, awareness campaigns have been organized regularly. These campaigns educate students, faculty, and staff about the importance of energy conservation, methods to reduce energy consumption, and the benefits of adopting sustainable practices.
- **Water Conservation Measures:**
 - To optimize water usage and promote water conservation, the college has implemented various measures recommended in the green audit. This includes the installation of water-efficient fixtures, rainwater harvesting systems, water recharge pits, open wells and the promotion of water-saving practices among students and staff.
 - The Bhoomithrasena club has conducted awareness programs on water conservation, emphasizing the importance of monitoring water consumption patterns and conducting water quality monitoring regularly. Bhoomithrasena club, in association with Department of Zoology conducted a water audit during the year 2020-21.
- **Energy Management measures:**
 - Implementation of Energy-Efficient Practices: Following the recommendations of the energy audit, the college has initiated the implementation of energy-efficient practices across campus buildings. This includes the installation of LED lighting systems, and energy-efficient appliances.
 - Replacement of Electrical Appliances: The college has replaced energy-consuming electrical appliances with more energy-efficient alternatives, such as five-star rated refrigerators, inverter ACs etc., to reduce energy consumption.

- Solar Panel Installation: Solar powered sensor based street lights have been installed. Solar panel is installed to meet the energy needs of administrative office. Steps have been taken to install solar panels to meet entire energy needs of the college. Solar-powered appliances, including water heaters, cookers, and LED display boards, are being considered for installation.
- **Monitoring and Evaluation:**
 - Regular monitoring and evaluation of energy consumption, waste generation, and other environmental parameters are being conducted to track progress and identify areas for improvement.