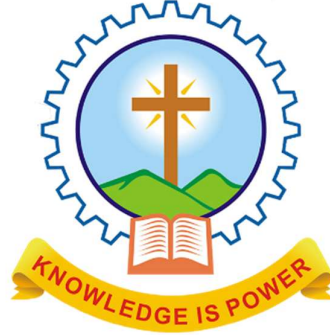




**MAR ATHANASIOUS COLLEGE OF
ENGINEERING**

**ENVIRONMENT AND ENERGY
POLICY (GREEN POLICY)**



VISION

Excellence in education through resource integration

MISSION

The institution is committed to transform itself into a centre of excellence in Technical Education, upholding the motto “**Knowledge is Power**”. This is to be achieved by imparting quality education to mould technically competent professionals with moral integrity, ethical values and social commitment, and by promoting innovative activities in the thrust areas emerging from time to time.

INTRODUCTION

Being a frontline in the Technical Educational Institutional in the state, Mar Athanasius College of Engineering is committed to the development and implementation of a Green and Sustainable energy system on the whole campus, which will spread the awareness and motivation in the society to move toward clean and sustainable energy resources.

The institution aims to realistically and comprehensively reduce energy consumption, assure acceptable indoor air quality and improve energy efficiency on campus through methods that are consistent with a safe, secure, and Eco-conscious campus community.

Mar Athanasius College of Engineering, within its capacity, has introduced several innovative ideas for green initiatives, energy efficiency and sustainability on the campus as outlined in this policy, energy conservation is accomplished by developing a proactive and progressive approach to providing energy-efficient, responsible, and cost-effective operations on campus.

The policies include:

1. The college pays considerable attention to minimizing the use of products of plastic on campus. The college promotes rain water harvesting and has already started tapping renewable energy resources such as solar energy.
2. All staff members and students should take a keen interest in maintaining the trees and plants inside the campus.
3. Student and visitor vehicles are not permitted inside the campus to minimize air pollution. They are provided with a separate parking lot outside the compound wall of the campus.
4. All electrical equipment should be judiciously used without wastage.
5. All staff members and students of this institution should take responsibility to reduce electricity consumption on the campus.
6. Lights, Fans and Projectors inside a classroom should be switched off before leaving.
7. Lights and Fans inside the staffroom should be switched off before leaving.
8. Air conditioners in laboratories should be strictly used only during academic related activities.
9. Air conditioners in seminar halls should only be used during programs/events approved by the principal.

10. Use of electrical equipment like water heaters, iron boxes etc. is strictly banned inside the campus.
11. College authorities recommend the usage of bicycles/electric vehicles by staff and students.
12. All heads of the departments shall ensure that electricity is not wasted inside the campus.
13. Promotes usage of LED bulbs and BLDC fans to reduce energy consumption.

SCOPE

This policy applies to all stakeholders students, staff and visitors

STRATEGY

The commitment toward protection, conservation and enrichment of the environment is being achieved through the following mission:

- Green Campus: Green Cover & Growing Trees.
 - Solar plant implementation on the campus.
 - Usage of energy-efficient equipment on the whole campus.
 - Periodical green and energy audit.
 - Awareness through NSS.
 - Awareness through circulars and notices.
 - Develop and practice new behavioral changes to enhance energy management.
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- The shift to clean and renewable energy is attained using solar energy. Solar plant implementation in the college is a steppingstone to a sustainable future. Unlike fossil fuels, it presents a pollution-free, safe, efficient and inexhaustible alternative. Major advantages are seen including less cost and innovation. Solar energy is quite cheap. As engineers, the whole campus is keen on researching better solutions to meet the energy concerns and goals. As of now, a major portion of the electricity demands is met by solar panels.
 - Environmental threats have become evident during these times. One such threat is plastic waste and its management. This non-biodegradable product needs to be disposed of leading to a major problem. The most efficient way of disposal is to convert it into a valuable resource. Road tarring can be done using plastic. The durability of the roads laid out with shredded plastic waste is much more compared with roads with asphalt with the ordinary mix. Roads laid with the plastic waste mix are found to be better than the conventional ones. It offers satisfactory performance with good skid resistance, good texture value,

stronger and less amount of progressive unevenness over a period. There is a better stability value too indicating higher strength.

- The campus landscape, like its buildings, can be seen as the physical embodiment of a college's values. The landscape serves as a visual representation of the campus community's commitment to sustainability. As campus landscapes are so visible and accessible, landscaping initiatives are a great way to build awareness around the environment.
- Energy Saving and Energy Efficient Equipment are used to install environment-friendly electrical appliances that save energy and reduce wasteful inefficiencies. The college believes in using cleaner energy such as LED lighting and sensor lights to reduce electricity. The classrooms, office rooms and hostels are built in such a way that the maximum amount of daylight is utilized in the best way possible. The rooms are well ventilated and spacious which in aiding in the supply of fresh and healthy air supply.
- Environmental education has become an inevitable tool in creating awareness of the imperatives of environmental sustainability. Bhoomitra Sena Club, an idea conceived by The Directorate of Environment & Climate Change under the Department of Environment and Climate Change serves this purpose. Agencies like Kerala State Pollution Control Board, Kerala State Biodiversity Board and Kerala Suchitwa Mission extend support to this program. The Bhoomithra Sena club of MACE is aimed at encouraging college students to appreciate the environment and to react positively to environmental issues. The club organizes Seminars, Debates, Lectures, Field visits and talks on environmental issues. It also arranges visits to Wildlife Parks, environmentally degrading areas etc. Other activities include cleaning and maintaining the polluted or environmentally degraded sites and planting and maintaining trees on the campus.
- The Horticulture Club is involved in planting and maintaining the trees, flowering plants such as roses, eugenia, bougainvillea, indoor plants adenium, golden cypress etc. which give great beauty to our college campus. The fruit trees include Rambutan, Mangosteen, Mango trees, Guava, Supota, Avocado, Passion fruit, Jack fruit etc. The grass lawn on the campus gives a scenic beauty to our campus. The greenery made up of the trees and plants of the campus maintains a cool atmosphere on the campus especially during the hot summer months. This also instills a sense of closeness towards the nature that nurtured us.

- Outreach and education are of utmost importance so that all members of the campus community may value the objectives of the policy and aid in its implementation. This is why MACE supports and encourages awareness campaigns, seminars, workshops, conferences and other interactive sessions to facilitate effective implementation of the Green Campus, Energy and Environment policies.
- MACE encourages all the departments and specific student societies like Green society, NSS and others to organize events, competitions and training sessions that will bring about positive environmental changes at the foundation level. The college supports departments and student societies in molding the students into active agents of environment protection and conservation and continuing to pursue the betterment of the environment through their actions and ideas. Several activities about environmental awareness are conducted regularly.
- The skillful use of daylight cannot be overlooked. Construction of college building is such that natural source of lighting is available in all rooms providing a healthier and a more enjoyable indoor climate.

It also saves energy and thereby costs as well as conserves the earth's energy resources. Hence the heavy reliance on tube lights can be reduced. Windows apart from providing daylight reduce visual fatigue which is quite common among college students. The combined effects of natural effects of heating, cooling and lighting strategies result in energy savings when compared to conventional buildings in the same area.

CONCLUSION

At MACE, the importance of keeping the environment clean and thriving is instilled in every MACEian's heart. The infrastructure of the entire campus is built of nature-friendly ideas and methods. Great concern has been given to the environment and infrastructure as the institution aims toward sustainability.




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