

MAHATMA GANDHI UNIVERSITY



Mahatma Gandhi University
Priyadarsini Hills P. O.
Kottayam, Kerala - 686560

(Re-accredited by NAAC with A Grade)

Energy Policy

Energy Policy

The Energy Policy of Mahatma Gandhi University is framed addressing effective energy management through improvement in energy efficiency and maximize the use of renewable energy, reduction of energy consumption and cost, eliminating wastages by use of good housekeeping practices, awareness and training programmes on energy conservation, and minimizing environmental degradation in order to maintain an eco-friendly green campus.

Mission:

- Minimise energy consumption by use of energy efficient infrastructure and maximum use of day light, natural ventilation and energy substitution.
- Maximise use of renewable energy.
- Create awareness on energy conservation.

The University envisages an Energy Management Action Plan as follows:

1. Management System

- An Energy Management Cell with representation from all departments to ensure that the energy management programme is implemented effectively.
- The Energy Management Cell establishes well-defined procedures to create an energy baseline assessment, define the academic year's energy agenda, develop implementation instrumentations, review, follow-up and monitor, as well as prepare a checklist to keep track of the Energy Management Action Plan's short and long-term objectives.
- In order to meet and exceed zero-carbon campus objectives, short- and long-term goals as well as conservation methods are followed.

2. Improvement in energy efficiency

- Keep track of and analyze energy efficiency
- Use of energy-efficient equipment with star rating
- A sustainable approach is followed by extending the life of existing equipment and replacing with more efficient ones as necessary.
- Use of star labelled equipment such as Refrigerators and Air Conditioners.
- Encourage the use of energy-efficient light bulbs and the replacement of conventional ceiling fans with BLDC ceiling fans.
- Use of TFT computer monitors.

3. Elimination of Energy wastage

- To save energy, employ occupancy sensors in classrooms, administrative offices, and toilets, as well as sensor-based switches for streetlights and corridor lighting.
- Optimal temperature settings for air conditioners and water coolers are to be fine-tuned.
- Encourage the timely repairing or replacement of old instruments minimizing the wastage of energy.
- Maximum use of natural day light for indoor illumination
- Use of natural ventilation
- Use of timer switches to street light control
- Use of timer switches in class room
- Encourage good house keeping practices
- Maintenance and replacement of additional lights/lighting fixtures with LEDs on a regular basis.

4. Energy Substitution

- Effectively make use of the natural light for indoor illumination.
- Use of solar water heaters in place of electric Geysers.
- Increase the use of renewable energy by installing a Grid Interactive Solar PV System on campus.
- Install additional biogas plants to convert the organic wastes to biogas, an alternate energy source.
- Encourage the use of electric vehicles on campus.
- Promote the use of bicycles inside the campus.

5. Energy Cost Optimisation

- Maximum demand optimisation by adequate reactive power management.
- Use of detuned RTPFC to eliminate risk of resonance.
- TOD tariff benefits by operating flexible load during off Peak Period.
- Use of dual trigger RTPFC panel to optimise DG fuel consumption.

6. Training and awareness

- Conducting awareness programmes for staff, student and society
- Conduct workshops on Grid interactive solar PV systems and Renewable Energy

- Organise seminar and poster presentation in the area of Renewable Energy and Environmental Protection
- Provide energy management and energy auditing training to staff and students.
- Encourage students to work on UG and PG projects related to energy management, energy optimization techniques and renewable energy harvesting, in order to raise knowledge on energy usage and cost.
- Encourage the University community to participate in a 'No Vehicle Day' on campus.
- Conduct of energy conservation awareness programme for students, staff, and society.
- Encourage faculty members to obtain Energy Audit certification.

Mahatma Gandhi University is committed to responsible energy management as part of an overall environmental strategy. The University by efficient management of energy utilisation aims to minimise energy use, energy costs and environmental impacts. By minimizing the use of fossil fuels, effective energy management and utilizing alternate sources of energy, the University aims at a carbon neutral campus in the near future.