



# **SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE**

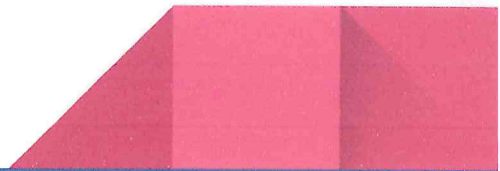
**(An Autonomous Institution)**

**Puducherry - 605 107**



## **ENERGY POLICY**

**Version 2.0**





**SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE**  
(An Autonomous Institution)

Puducherry - 605 107

**NOTIFICATION**

Ref: **SMVEC / IQAC / ACAD / JAN 2023**

Date: **10-01-2023**

In the pursuance of the resolution passed by the Governing Body Meeting at its meeting held on December 31, 2022 in its resolution no. GB 2022.05.09 and the decision was taken by the Management of SMVEC

It is hereby notified for information of all concerned that the Sri Manakula Vinayagar Engineering College, Puducherry has published the Energy Policy. This will come into force with immediate effect.

  
**Dr. AA. Arivalagar**  
IQAC coordinator

  
**Dr. S. Anbumalar**  
Dean Academics (Circuit)

  
**Dr. V.S.K. Venkatachalapathy**  
Director cum Principal

# ENERGY POLICY OF SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE, PUDUCHERRY

## Introduction

Sri Manakula Vinayagar Engineering College strives to use energy in the most efficient, cost effective, and environmentally responsible manner possible. The purpose of this policy is to optimize energy use throughout campus, improve cost-effectiveness and productivity, enhance working conditions, reduce greenhouse gas emissions, contribute to sustainability and otherwise reduce waste associated with energy use.

## Policy Objectives

To implement this policy, we will:

- Achieve and maintain compliance with applicable legal and other requirements
- Continuously improve energy efficiency by establishing and implementing strategic energy management practices
- Consider energy efficiency as a factor in process and facility design and in the procurement of goods and services
- Encourage continuous improvement in energy conservation by employees
- Use energy consumption data to establish Key Performance Indicators (KPIs) to drive performance improvements

## Implementation of Energy Conservation Policy

### (i) Electricity Conservation Measures:

- Install meters to measure the use of, electricity and water of each building or each department. Take ongoing meter measurements to set baseline data and determine progress.
- Install efficient lighting fixtures in all new buildings and retrofit inefficient fixtures in all existing buildings.
- Invest in energy efficient technologies for lighting systems in all existing and future campus buildings and earmark the savings for further improvements in environmental performance. Monitor the campus regularly for lighting efficiency (new and retrofit), and equipment selection, maintenance and use.
- Repair as per response to findings.

- Develop a long-term plan to incorporate safe and renewable solar energy.
- Measures the total surface areas of various buildings where solar panels can be installed.
- The total solar power that can be generated by the roof tops of various buildings to be calculated. The solar power generated from each building is to be linked to the grid by reverse metering technology.
- Raise campus awareness about the need for energy conservation such as by establishing campus wide “Eco-friendly” competitions among departments.
- Focus on high energy consuming units and blocks and consumption needs to be monitored closely.
- Inefficient sodium vapor high mast lamps on the internal roads in campus are to be replaced with low height (garden type) LED lighting.
- Conduct energy audit of the campus and its independent units for necessary inputs and recommendations.
- Install MCBs for arresting use of high-power consuming appliances in all hostels.
- Old high energy consuming fans need to be replaced.
- Replace CFL lamps with LED lamps in a phased manner
- Air filters of all ACs need to be cleaned every 3 months.
- All hostels and kitchens are to be installed with solar water heaters.
- All street lights including common areas are to be linked to pole-top solar panels to be cost-effective.
- Instead of permanently sealed windows in air-conditioned rooms, allow for windows that can be opened, while still providing good sealing when kept shut.

**(ii) Water Conservation Measures:**

- To find out quantity of water used in the campus every day.
- Choice of vegetation on campus can go a long way in maintaining quality of ground water and surface water.
- Rainwater harvesting projects are effectively implemented, 65 per cent of the rainwater which is wasted can be used.
- Monitor overhead tanks and noting the difference in levels of water in the overhead tank from the beginning to the end of the day. Ensure that the tanks are full when the day begins. Check the water level when the teaching / learning activity in the campus

ends in the day. Note the difference in levels of water for estimating the consumption of the day.

- Number of hours the water pump is switched on is measured and water output is calculated. Every time the motor runs, this is counted and added to understand it during withdrawal of water.
- Conducting the water audit followed by the preparation of water budget for the campus.
- Know the source of the campus water Find out the source of the campus water and the capacity of it to yield water.
- Mend the leaks in taps and pipes. Work on the toilet flushes and the optimum water use from the flush by installing two levels of flushing.
- Sticking to indigenous variety of plants and less water requiring plants, not only increases the aesthetic beauty of the garden but also goes a long way in water conservation.
- Watering the plants to be done either very early in the morning or very late. The best way to water plants is to focus on the root zone.
- The best way to conserve and replenish our water sources is by harvesting rainwater.
- Recycling Water recycling is the process of treating wastewater in order to upgrade its quality. This recycled water can be used again for other purposes as per the quality of water.
- The leakage of water from storage points and pipelines is waste of not only water, but also the power that is used for pumping the water. Hence arresting water leakage needs to get the top most priority.

### **Energy Audit**

Energy auditing involves assessing the energy consumption of a facility, identifying energy-saving opportunities, and recommending appropriate measures. Energy audit is performed every year to evaluate the energy performance of equipment and systems and it provides a foundation for optimizing energy use.