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ENERGY POLICY

CONTENTS

INTRODUCTION

In today's world, where environmental concerns are paramount, our college is stepping up to implement policies and guidelines for energy conservation. Our College of Education, being a hub of learning and innovation, recognizes the importance of sustainable practices. It sets the stage by highlighting the global need for energy conservation and its relevance in educational institutions, the College's Education's commitment to reducing its carbon footprint through strategic energy-saving measures.

IMPORTANCE OF ENERGY CONSERVATION

This section elaborates on why energy conservation is crucial. It touches upon environmental benefits, cost savings, and the role of our educational institution as leaders in sustainable practices.

POLICY AND GUIDELINES OVERVIEW

Here, the specific policies and guidelines implemented by the College, includes setting targets for energy reduction, promoting energy-efficient technologies, and encouraging staff and students to adopt sustainable habits.

ENERGY AUDIT

An energy audit is conducted regularly to identify areas of energy wastage and inefficiency. This audit serves as a basis for developing targeted conservation strategies.

ENERGY-EFFICIENT INFRASTRUCTURE

The College invests in energy-efficient infrastructure, such as LED lighting, smart heating and cooling systems, and energy-saving appliances, to reduce energy consumption.

WASTE MANAGEMENT

Proper waste management practices are in place to minimize energy usage in waste disposal processes. Recycling and composting initiatives further contribute to energy conservation efforts.

AWARENESS PROGRAMS

Educational campaigns and workshops are conducted to raise awareness among students and staff about the importance of energy conservation and ways to reduce energy consumption.

MONITORING AND EVALUATION

Regular monitoring and evaluation of energy usage help track progress towards conservation goals and identify areas for improvement.

FUNDING AND RESOURCES

The College allocates funds and resources towards energy conservation projects, including grants for renewable energy initiatives and incentives for energy-efficient practices.

CASE STUDIES

This section presents case studies highlighting successful energy conservation projects within the College, showcasing real-world examples of effective strategies.

CHALLENGES AND SOLUTIONS

Challenges such as budget constraints or resistance to change are addressed, with solutions provided to overcome these hurdles and ensure sustained energy conservation efforts.

INSTITUTION'S ENERGY POLICY:

- In the context of utilization of energy resource like electricity, the management consulted the faculty, non-teaching staff and student-teachers and created awareness about the necessity of saving the electricity and uses the non-conventional energy as well as natural resources like sunlight and air.
- To utilize the natural resources of light namely sunlight and air, the entire college community is trained to keep windows and doors open on either side of the class- rooms, halls and laboratories.
- To use a minimum level of air-conditioners in the computer lab, conference hall and other halls. In the event of electricity failure we use generators and solar energy.
- To pay attention to the switching off the lights, fans and air-conditioners when the classes or educational programmes are not held.
- To remind at periodical intervals, the usage of non-conventional energy and its impact on general health, eyes and bodily temperature.
- To educate the members of this institution to practice consciously the planting of trees in their homes, use of plants that promote oxygen and maintaining them regularly.
- To encourage the stakeholders to spread the importance and usage of non-conventional energy and avoid the usage of conventional energy. Thus the investment on conventional energy is reduced and non-conventional energy is promoted.

AIM OF ENERGY POLICY DOCUMENT

- The aim of the energy policy document is to have a clear policy and guidelines for energy conservation and minimize the impact of institutes' energy usage on the environment.
- The College should assess its energy usage and measure its impact on the environment. Switching to solar energy has to be given prime importance. The College should install photovoltaic solar panels for the generation of alternate energy to meet at least 75% of its

electric needs. All individuals (teaching, non-teaching and students) of the institution should appreciate and value the use of energy. They must switch off all the lights and fans after the classes /college working hours.

- **Signboards on energy conservation** need to be displayed at the focal points of the institution.
- All the classrooms, labs and offices must have large windows to maximize the usage of natural daylight and air.
- LED bulbs must be used in the complete campus to save energy.
- Priority needs to be given to energy efficient equipment during purchase of electrical appliances.

OBJECTIVES

- To provide awareness about renewable and non-renewable energy resources
- To sensitize the student teachers about their social responsibility to preserve various forms of energy.
- To adopt measures to avoid the misuse of energy.
- To transcend the values and principles related to conservation of energy among their students in future.
- To participate in activities that put a point on energy conservation strategies among

SCOPE OF THE POLICY

The policies and initiatives for energy conservation activities are effectively implemented by the college to develop a positive attitude towards wise use of energy, creating awareness towards renewable and non renewable energy resources and to instill the value of energy resources amongst the prospective teachers. Being the future nation builders of the society, the student teachers are expected to impart the same to the young generation of the schools through various activities.

ROLES AND RESPONSIBILITIES IN IMPLEMENTING

- The institution will be constituted clear policy and guidelines for energy conservation and use.
- All individuals (teaching, non-teaching and students) of the institution should appreciate and value the judicious use of any form of energy i.e., electricity and water.
- They are entitled/ obliged to save and prevent the misuse or wastage of any form of energy.
- An energy club will be constituted in the institution including members of teaching staff, and students with the principal as the Chairman.
- Energy Monitoring Committee will be constituted in the institution to check the use of various energy sources available in the institution.

- The energy monitoring committee will be comprise of members from teaching, non-teaching and students of the institution with the principal as the Chairman
- The energy monitoring committee will be conduct energy audit biannually and must submit the report to the head of the institution.

NOTICE FOR ENERGY CONSERVATION

It is noticed that fans and lights in the class rooms and restrooms were not switched-off at the time of leaving class rooms and restrooms. Hence, the students are advised to switch-off the lights and fans in the class rooms/restrooms at the time of leaving.

CONCLUSION

In conclusion, the policy and guidelines for energy conservation in the College reflect a holistic approach towards sustainability. By implementing targeted strategies, raising awareness, and fostering a culture of conservation, the College aims to be a model institution for energy efficiency.

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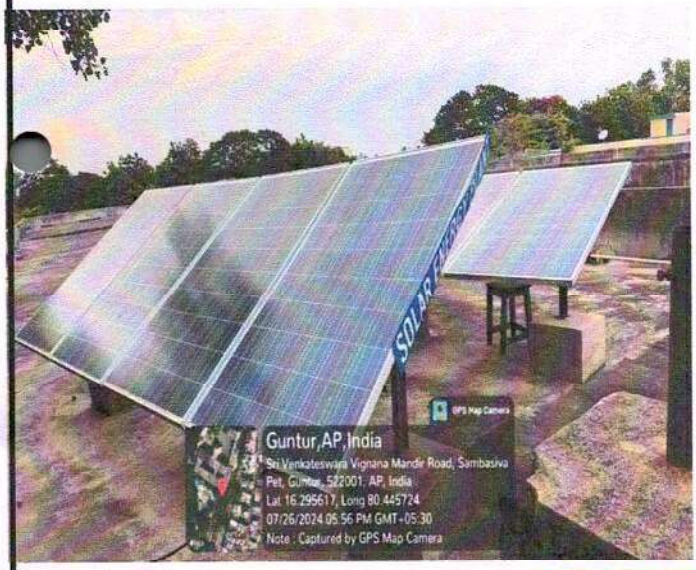
Solar Energy Plant

The integration of a solar plant in our campus marks a significant stride towards sustainability and energy independence. The solar plant was installed on the rooftops of key buildings in open areas with ample sunlight exposure. By harnessing solar energy, the campus significantly reduces its carbon footprint. The solar plant provides considerable financial benefits through reduced energy bills. The solar plant offers numerous educational opportunities for students and faculty. It serves as a living laboratory for studying renewable energy technologies, energy management, and sustainability practices.



Solar Energy Panels in Block- 1

Solar Energy Panels in Block- 2

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Solar water heater

We in SJCE have installed the solar water heaters in our campus which is part of our ongoing efforts to promote sustainability and reduce our environmental footprint. By utilizing solar energy to heat water, the campus significantly reduces its reliance on fossil fuels. This transition helps decrease greenhouse gas emissions and lowers our carbon footprint. This initiative not only supports our green goals but also serves as a model for other institutions looking to adopt renewable energy solutions reducing the use of electricity.

Solar water heater in Block – 1

Solar water heater in Block - 2

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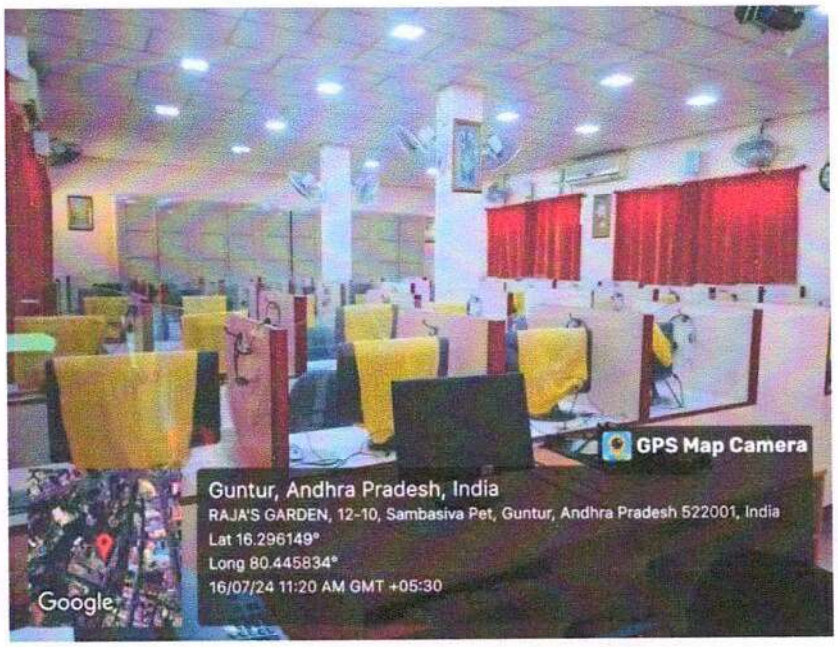
L.E.D (Light Emitting Diode) Lights

The transition to LED lighting across our campus underscores our commitment to sustainability and energy efficiency. It reduces energy consumption, lower maintenance costs, and enhanced lighting quality. It not only lowers our electricity bills but also reduces the demand on power plants. This initiative aligns with our goals of minimizing our environmental impact and promoting sustainable practices. The reduced energy consumption of LEDs results in lower carbon dioxide emissions, helping to combat climate change.



Installation of LED Lights in the Rooms

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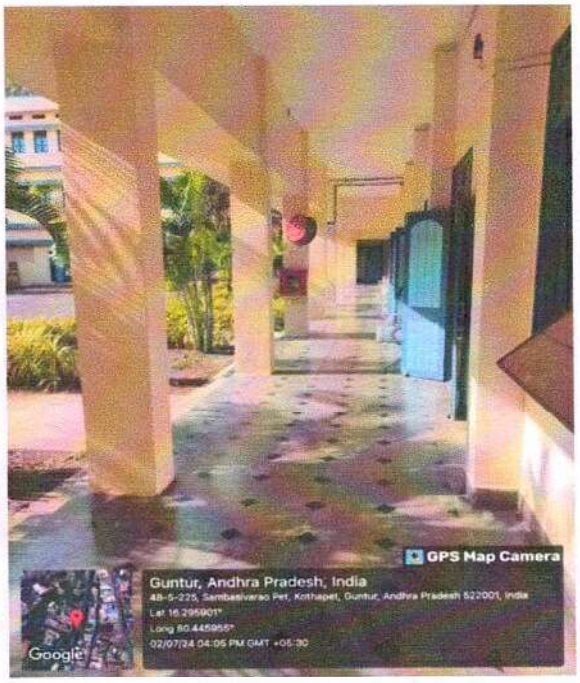
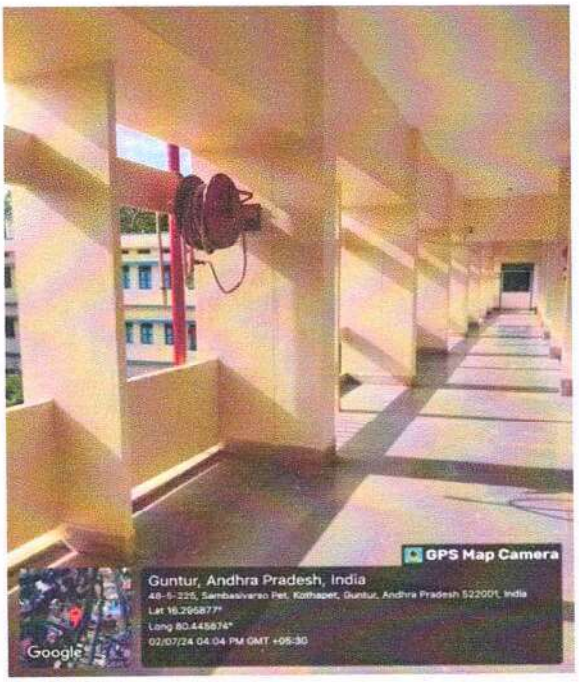
Natural Ventilation

The integration of natural ventilation systems in our campus is a key component of our sustainability and wellness initiatives. It not only minimizes energy consumption but also creates a healthier and more comfortable environment for students, faculty, and staff. By purposefully placing windows, vents, and openings, buildings maximize these natural forces to ensure a continuous supply of fresh air. It also encourages the adoption of eco-friendly design principles beyond the campus.



Ventilated Corridor - Ground Floor



Ventilated Corridor - First Floor

Ventilated Classrooms

Ventilated staff room

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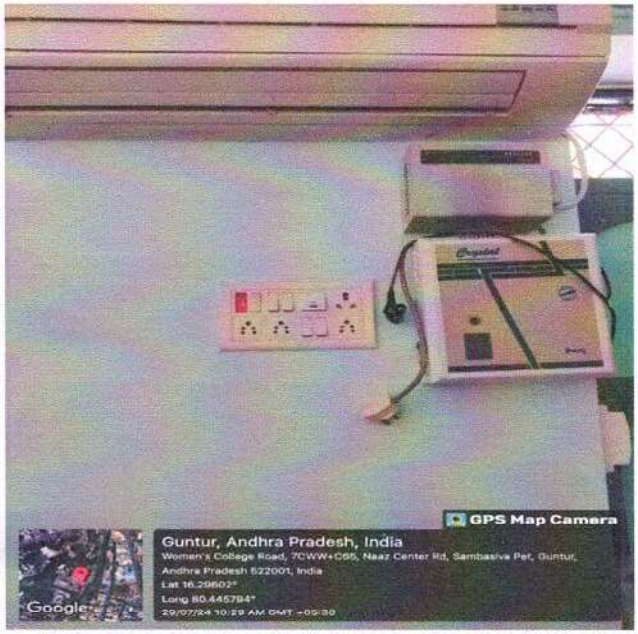
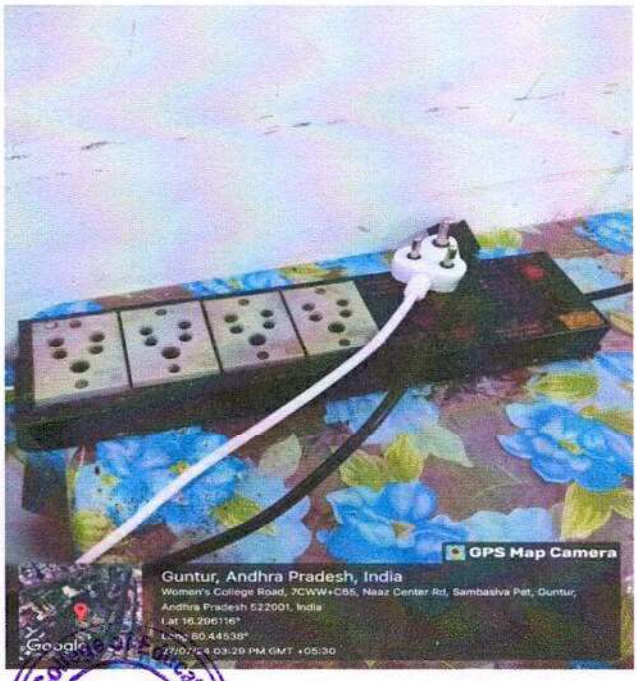
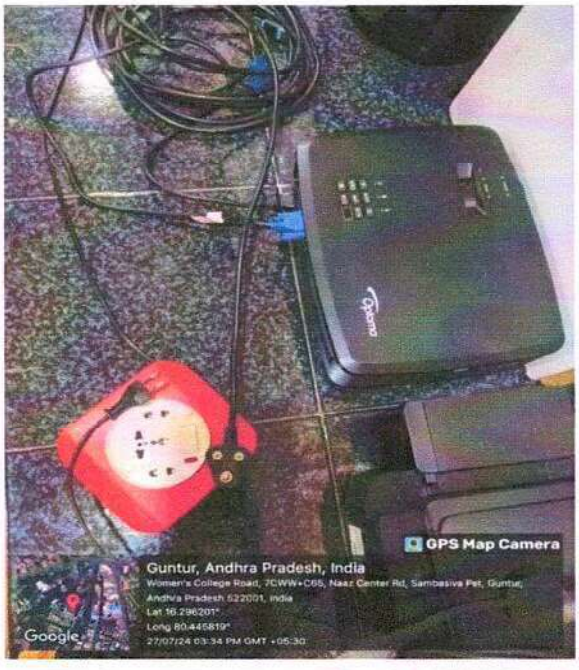
Unplug the Device When not in Use

Unplugging devices when not in use is a simple yet effective strategy to save energy and reduce electricity bills. Many electronic devices and appliances continue to draw power even when they are turned off but remain plugged in, a phenomenon known as "phantom" or "standby" power. By conscientiously unplugging devices, we are minimizing the unnecessary energy consumption in the campus and contribute to a more sustainable environment.



Practice of unplugging the devices after the use





Practice of unplugging device from the Socket after the use

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Use of Certified Devices

Using certified devices is a crucial step towards ensuring energy efficiency, safety, and environmental responsibility. As they have undergone rigorous testing to meet the specific standards set by reputable organizations we use these devices which perform efficiently, safely, and sustainably, benefiting both consumers and the environment. Five star devices are certified by organizations as energy star, which are designed to be highly energy –efficient and it helps to lower energy consumption.

Five star certified devices

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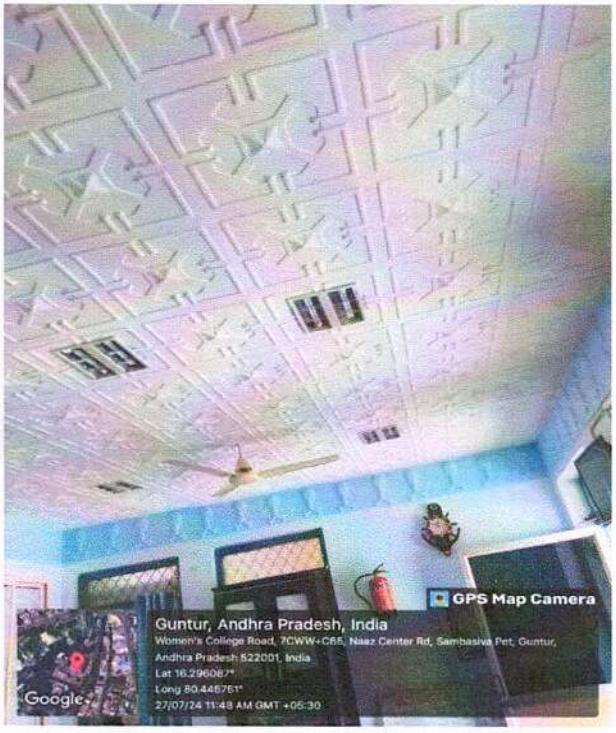
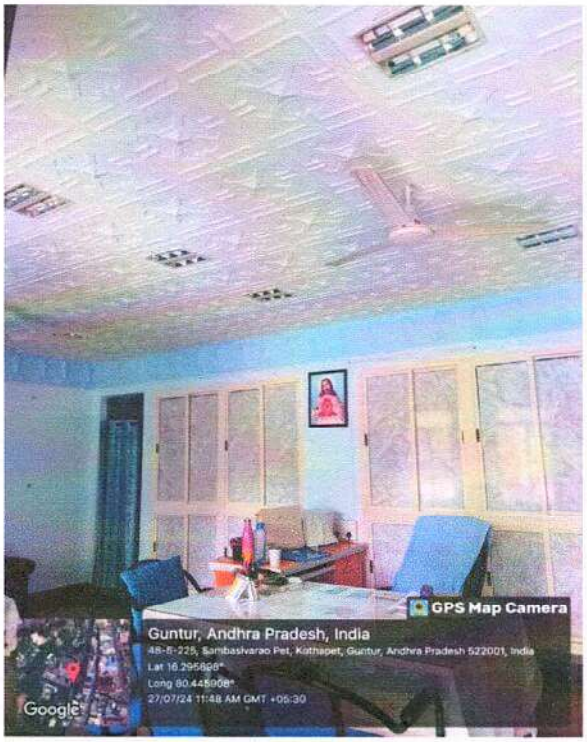
Turning off the lights and fans

Turning off lights and fans when they are not in use is a simple yet highly effective way to conserve energy, reduce electricity bills, and minimize environmental impact. This practice, is adopted widely, that leads to significant energy savings and contribute to a culture of sustainability, by decreasing energy demand. It prolongs the life span of bulbs and fans and helping to reduce greenhouse gas emissions.





Turning off the lights and fans when no one in the rooms

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Generator & Inverters

Generator (30 KV) and Inverters (9.5 KV) are installed in our institution to play a crucial role in maintaining uninterrupted power supply, ensuring that essential operations continue smoothly during power outages or fluctuations. Generator provides a reliable source of backup power during electricity outages by converting mechanical energy into electrical energy while inverters convert direct current (DC) from batteries or solar panels into alternating current (AC) used by most electrical devices.

30 KV KIRLOSKAR Generator

Invertor

Solar Invertor

Solar Invertor

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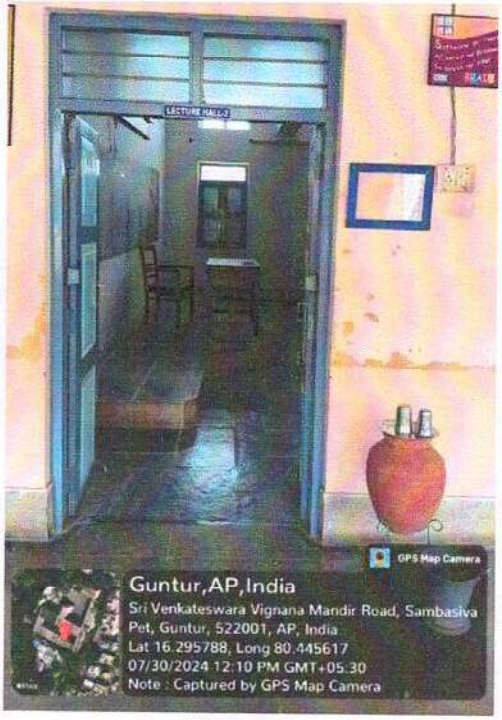
Use of Matka /Clay Pots

The use of matka or clay pots is a traditional practice with numerous benefits that span cultural, environmental, and health aspects. These unglazed earthenware vessels are known for their natural cooling properties and have been used for centuries to store and cool water, cook food. In modern times, the use of matka is being revitalized as a sustainable and health-conscious alternative to plastic and metal containers. So we use this to provide water to the staff and students at classrooms, Corridors, office rooms, especially during summer, the natural way of cooling oneself, and the best way to minimize usage of electricity



Use of Matka/Clay pots in the classroom, Varandha

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