S.V.L.N.S GOVERNEMNT DEGREE COLLEGE

BHEEMUNIPATNAM

Alternate Sources of Energy and Energy Conservation Measures in the Institution

Following are the efforts made by the institution to incorporate alternate sources of energy and energy conservation measures. With an objective to reduce environmental impact, promote sustainability, and create a more energy-efficient campus our institution focussed on two key initiatives: the utilization of solar energy and the implementation of power-efficient equipment using LED bulbs.

Solar Energy: The institution has successfully integrated solar energy systems as an alternate source of power. The installation of solar panels on rooftops and open spaces allows for harnessing the abundant solar energy available. This initiative has multiple benefits, including a reduction in carbon emissions and dependency on conventional energy sources. The solar energy system in place generates clean and renewable electricity, contributing to a greener campus and reducing the institution's carbon footprint.

Key Highlights of Solar Energy Implementation:

- 1. Solar Panels: The institution has installed 20Kw grid connected solar panels strategically across rooftops, maximizing exposure to sunlight. These panels efficiently convert solar radiation into usable electricity, which is then integrated into the existing power grid.
- 2. Sustainable Energy Generation: By leveraging solar energy, the institution reduces its reliance on Govt power supply, contributing to a more sustainable energy.
- 3. Cost Savings: Solar energy systems significantly reduce electricity bills over the long term. The institution benefits from financial savings and allocates these funds to other areas of development and improvement.

LED Bulbs: In addition to solar energy, the institution has implemented energy conservation measures using LED bulbs. This approach focuses on reducing energy consumption and maximizing efficiency throughout the campus.

Key Highlights of LED Bulbs Implementation:

- 1. LED Lighting: Traditional lighting fixtures have been replaced with energy-efficient LED bulbs across classrooms, corridors, and other campus areas. LED bulbs consume less energy, have a longer lifespan, and provide better illumination, thus significantly reducing electricity consumption and maintenance costs.
- 2. Awareness and Education: The institution conducts awareness campaigns and educational programs such as Ozone layer protection day, Energy conservation Day, Survey on carbon foot print by Dept of Physics, Community service project on Energy conservation to promote energy conservation practices among students, faculty, and staff members. By fostering a culture of energy-consciousness, the institution encourages responsible energy usage and emphasizes the importance of sustainable practices.
- 3. The College has implemented effective waste management strategies to handle both biodegradable and non-biodegradable waste generated on campus. These strategies are based on the principles of the 3 Rs: Reduce, Reuse, and Recycle & Upcycle. The institution's environmental policy aims to minimize waste, safeguard the environment, and promote environmental sustainability.

- 4. Solid Waste Management: Solid waste management is given utmost importance, and waste is segregated before disposal. The college provided nappy vending machines and uses incinerators for the eco-friendly disposal of sanitary napkins. Additionally, the use of single-use plastic coverings and plastic within the college premises, including the canteen, is strictly prohibited to maintain a plastic-free campus.
- 5. Liquid Waste Management: Liquid chemical waste generated in laboratories is neutralized and disposed of safely. Rainwater from the terrace is diverted into rainwater harvesting pits, ensuring effective water conservation and management.
- 6. E-Waste Management: E-waste generated on campus is disposed of periodically following the guidelines provided by the concerned authorities.
- 7. Waste Recycling System: The wastewater from the reverse osmosis (RO) plant is diluted and utilized for gardening and watering plants. Wastewater from the drinking water facility is also diverted to water the plants. Paper waste is sent to recycling facilities. Organic waste is composted, and the resulting compost is used as garden fertilizer. Non-biodegradable and biodegradable waste are collected and sent to the nearest waste treatment facility.
- 8. Paperless Office: To reduce paper usage, the institution extensively relies on digital communication. Notices are sent digitally through emails, WhatsApp, and other electronic platforms. Correspondence with relevant authorities, such as the CCE, is conducted through e-office. Teaching diaries and attendance records are also maintained digitally.

Rainwater Harvesting Pits:

Promoting Water Conservation and Educational

- Awareness and Knowledge: The presence of rainwater harvesting pits on our college campus
 has increased awareness among students and staff regarding the importance of water
 conservation. It has sparked discussions and conversations about sustainable water
 management practices.
- 10. Practical Learning: Students could observe the functioning of rainwater harvesting pits first hand. They can witness the collection and storage of rainwater and understand how it can be utilized for various non-potable purposes.

Grid Connected Solar Power Generation 20Kw





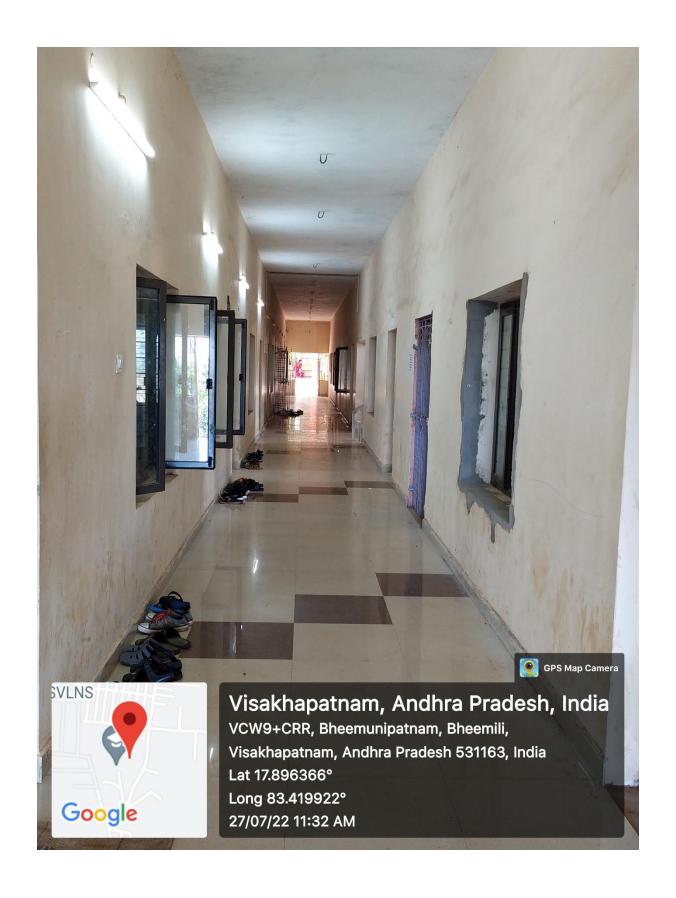




Energy Efficient LED blubs in class rooms.







Awareness programme on Ozone layer protection



Vermi Culture



Energy Conservation Day



Mega Plantation at College in association with DIVIs lab, Bheemunipatnam





Honourable Commissioner Sri. Pola Bhaskar Garu Planting a sapling at new college building



Rain Water Harvesting Pits



