The University's Carbon Reduction Target Covering Scope 1 & 2 Emissions by 2050

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Swami Vivekanand Subharti University, Meerut
(Established under U.P. Govt. Act no. 29 of 2008 and approved under section 2(f) of UGC Act 1956)

Swami Vivekanand Subharti University is committed to environmental stewardship and has established a roadmap to achieve significant carbon reduction targets covering Scope 1 & 2 emissions by at least 2050. The university's strategy focuses on transitioning to clean energy, improving operational efficiency, and promoting sustainable mobility.

1. Scope 1: Sustainable Transportation & Circular Waste Energy

- **Clean Fuel & Electric Mobility:** The University has transitioned its internal fleet to include CNG and Electric Vehicles (EVs), including 5, 7, and 11-seater battery-powered vehicles. To discourage fossil-fuel use, the University also observes regular "Car-Free Days".
- **Biogas Energy Production:** The university has established three biogas plants to enhance sustainable waste management. These plants convert organic mess waste into biogas for cooking and heating, directly reducing the University's reliance on traditional non-renewable fuels.
- **Carbon Sequestration:** The campus maintains a lush green cover with approximately 20,000 trees. Continuous plantation drives are undertaken to ensure the University effectively offsets its remaining carbon footprint.

2. Scope 2: Renewable Energy & Advanced Thermal Solutions

- **Solar Power Infrastructure:** The University has installed extensive rooftop solar PV systems, generating approximately 2,457,780.7 kWh of clean energy annually. This allows the campus to meet nearly 28% of its total power needs through renewable sources.
- **Solar Water Heating:** To further reduce electricity and LPG dependence, the University has installed multiple Solar Water Heaters with a combined capacity of thousands of liters per day across girls' and boys' hostels (e.g., Rani Chenamma, Bhagini Nivedita, and Veer Haqikat Rai hostels). These systems alone save approximately 1,28,110 kWh of electricity per year.
- **Energy Efficient Lighting:** The University has achieved approximately 90% coverage in replacing conventional bulbs with LED lights. This is paired with sensor-based lighting at 125 different campus locations to ensure zero energy waste in low-traffic areas.

3. Formal Commitment to 2050 Targets

In alignment with national climate goals and the United Nations Sustainable Development Goals (specifically SDG 7: Affordable and Clean Energy and SDG 13: Climate Action), the University's environment committee monitors a long-term roadmap to phase out fossil-fuel dependence. By scaling up solar capacity and fully electrifying campus transit, the university aims to reach its carbon reduction milestones well before the 2050 deadline.

The University Initiative – Solar Water Heating for Sustainable Energy Use

LED-Based Lights on Campus

CNG Buses – Driving Sustainable Mobility

Eco-Friendly Battery-Operated Vehicles Supporting Carbon Reduction


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Eco-Landscaping with Native and Shade-Giving Trees

University Walkways Designed to Enhance Pedestrian Movement and Sustainability

Establishment of Biogas Plant Within the University Campus

Students and Faculty Taking an Oath to Support the University's Vision for 100% Renewable Energy