## 100% Renewable Energy Pledge

## **Current Assessment:**

GMR Institute of Technology currently boasts an installed solar photovoltaic (PV) generation capacity of 700 kW on its campus. The solar power plant consistently generates an average of 1222005 units per year. Concurrently, the campus's total energy consumption stands at 1884813 units. Presently, renewable energy accounts for 65% of the overall campus energy consumption.

## Goals:

The institute is unwavering in its commitment to achieve 100% renewable power generation on the campus by 2050. This ambitious transition will be executed through a phased approach, with the renewable energy share expected to increase to 75% by 2035 and further to 90% by 2045.

## **Energy Efficiency measures:**

The institute has devised a comprehensive plan to enhance the energy efficiency of the campus. The following measures have been scheduled to increase efficiency:

- 1. By 2024, we plan to replace all incandescent bulbs, fluorescent tube lights, compact fluorescent (CFL) bulbs, and streetlights with energy-efficient LED lights.
- 2. By 2025, we will upgrade the HVAC systems to enhance energy performance.
- 3. All toilets within the institute are now equipped with sensor-based controls to conserve power effectively.
- 4. We have also implemented timer-based control systems for external lighting, ensuring efficient use of energy resources.
- 5. Solar water heaters are installed in all hostels for capturing the solar energy and reducing the power usage for heating applications.