

2. ENERGY AUDIT

Energy Assessment and Audit:

This indicator covers lighting, appliances, energy sources, energy monitoring, and energy consumption. Use of Energy is unquestionably a significant component of campus sustainability, hence there is no justification for its inclusion in the evaluation.

- The proposed methodology is centered on comprehending the current energy usage of different electric appliances in the campus.
- A comprehensive inventory of all the equipment and devices that consume energy was completed.
- A walk-through survey was conducted to identify the type of installed energy devices (fans, tube lights, air conditioners, etc.).

Objectives of Energy Audit:

An efficient tool for creating and implementing all-encompassing energy management plans is the energy audit. It offers suggestions for ways to enhance the system's maintenance and operation procedures and aids in the optimization of energy costs, pollution management, and safety issues.

Energy Generated from Solar panels:

Solar cell grid with 98 panels producing 40kwh/day is commissioned. Till date nearly 3Mwh is generated. On a daily basis 1/3 of the power is met with solar. Solar cell-Grid connected photovoltaic power system of 246 KW capacities. 3 Panels will generate 4 KWH per day electricity (on a Sunny day) Total 92 Panels are there in the picture given above Energy generated via solar

$$\begin{aligned} \text{(in Kilowatt / month)} &= (\text{Number of panels divided by 3}) \times (4\text{KWH}) \times (30 \text{ days}) \\ &= (92 / 3) \times 4 \times 30 \\ &= 26 \times 4 \times 30 = 3600\text{KWH} \end{aligned}$$

Our campus is lit with LED lights to minimize the carbon emission and to save energy. Whole campus area is equipped with LED lighting for saving energy.

S.NO:	SPECIFICATION	COUNT	TOTAL CONSUMPTION
1	20-watt LED	95	1900 Watt
2	50-watt LED	25	1250 Watt
		120	3.1 KW