

Annexure VII

BEST PRACTICES

Name of the Department: PHYSICS

The college has the Best Practices to improve the functioning of the Academic and Administrative systems.

- **Best Practice I**

1. **Title of the Practice:** Maintenance of campus solar power system.
2. **Goal:** To keep record and maintenance of solar energy generated in college solar power on grid and off grid plants.
3. **The Context:** The College has large area of roof top that can be used to harvest solar energy for college utility. This solar plant is given by SPPU to those colleges has large rooftop area.
4. **The Practice:** The main aim of this practice to maintain the solar power generation active in college. In the maintenance we clean the solar panel to get good performance. The cleaning of battery and filling water to it whenever needs. We keeps the records of power generations per month. We also motivate students to utilize the green energy to keep environment clean. The college has two solar power plant one is 10 KW off grid and other is 15 KW on grid (grid tie).
5. **Evidence of Success:** Since from the installation of this solar power plant department keeps its all records and maintenance successfully. The average power generations per day is 45 KWh Units. The average power consumption from grid (MSEB) is 120 KWh per day. The college solar system generates 37.8 % of electricity that college campus need electricity every day. The 42.3 Kg carbon dioxide generation is saved per day.
6. **Problems Encountered and Resources Required (Financial, Human & Other): -**
The cleaning and maintenance of battery for every time we need in man power that can be students, non-teaching staff. Some time when there is cutoff of power off grid solar system get overloaded. The on grid solar generation stops when grid electricity not available or there is a fluctuation in grid voltage.


HEAD
DEPARTMENT OF PHYSICS
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar