

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1) Solar energy:

Solar energy is produced by the sun's light - photovoltaic energy offers many benefits that make it one of the most promising energy. In our college the rooftop solar PV power plant of capacity 51.1 KWP had been installed on the rooftops of Engineering as well as boys hostel buildings, as a consequence an amount of Rs.22, 94, 880.00 (Rupees Twenty-two Lakh Ninety-four Thousand eight hundred eighty rupees only) has been saved since January, 2017 till date. It is utilized totally for self-use. Monocrystal/biophysical cells are used in solar panels with individual 450-watt export/import system. The amount of power produced each month is between 4500 and 5000 units.



Fig. 7.1.2.1 Solar power plant of capacity 50 KWP installed on the rooftop boys' hostel building.



Fig. 1.2 Solar power plant of capacity 1.1 KWP installed on the rooftops of engineering building

2) Sensor-based energy conservation:

Building a water level indicator in college utilizing a water sensor with three levels that consists of inside a tank with three levels and a buzzer to show when the tank is full, then the motor pump is automatically turned off. When the sensor detects that the tank is empty, the motor pump is immediately turned on until the tank is filled.



Fig. 2.1 Three levels indicator Starter

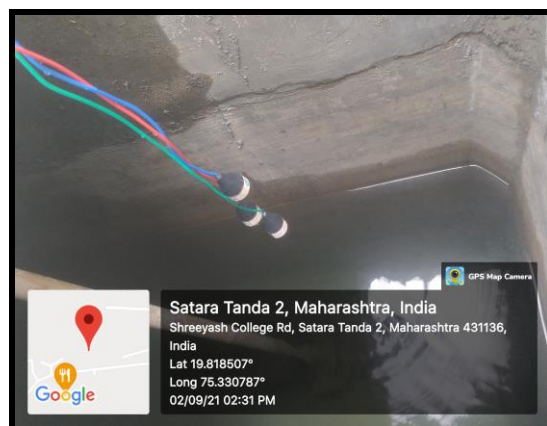


Fig. 2.2 Three Sensors in the tank

Air conditioners are controlled via a remote, which allows for easy temperature control. We must utilize a 5-star air conditioner, which contributes to energy conservation.

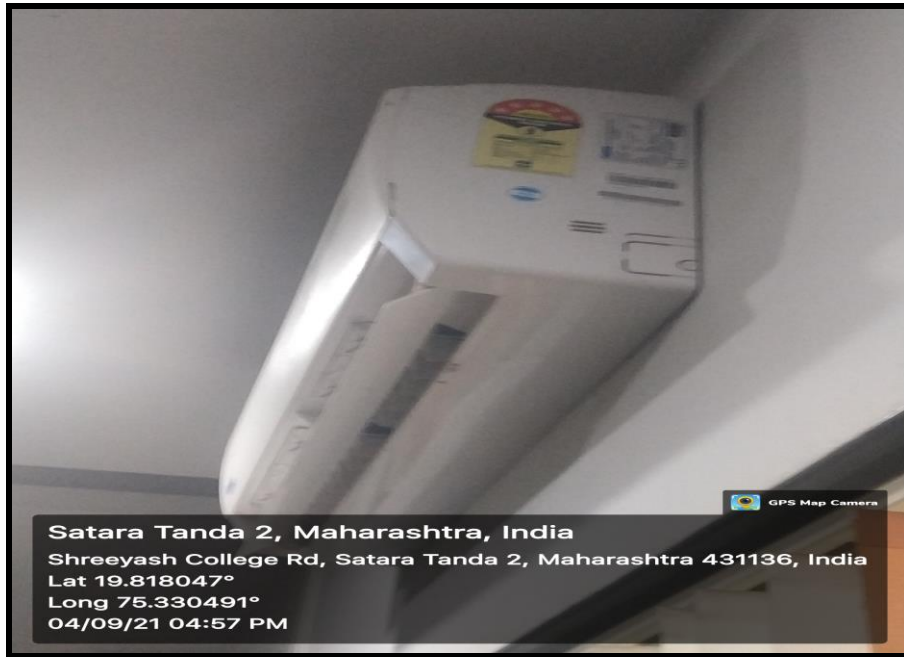


Fig. 2.3 Five-star air conditioner

3) LED:

The institution is moving towards 100% LED lights. Our students are instructed to use electricity wisely and signage's are displayed to reinforce appropriate use of electricity additionally use of power efficient equipment (five-star ac) is used in campus.

All the tube lights are with electronic ballasts and the college management is in the process to convert into LED Tubes. In our college 11/05 KV Sub-Station within college premises was able to convert the existing HPSV/HPMH outdoor light fittings into LED outdoor lightings, as a consequence an amount of Rs.7, 78,791.00 (Rupees seven Lakh Seventy-Eight Thousand Seven Hundred and Ninety-One) only (Approx.) has been saved since September, 2017 till date.



Fig. 3.1 LED tubes in the college premises



Fig. 3.2 LED bulbs in the campus area