

## **SDG 17 – Partnership for Goals**

### **Report on SDG 7 – Affordable and Clean Energy**

The Institution takes it as its top priority to align with national energy conservation policies, replacing non-compliant equipment on a regular and annual basis. The relevant standards shall be reviewed and updated depending on the availability of additional funding.

1. Rain Water Harvesting pits have been developed at several locations in the campus.
2. Sensor based power control is placed in all the public toilets.
3. Bathroom have been renovated to restrict water flow on faucets and showers.
4. lower water flow toilets and automated urinal flushers have been installed.
5. Sewage Water Treatment has been setup at campus to reuse the water for gardening purpose.
6. Solar water heaters have been installed at all the hostel roofs for providing hot water facility to the students. This water heaters reduces additional heating cost.
7. Solar power plant of 700 kW is installed in the campus to cater the electricity needs of the institution and if any excess generation will be given to State Electricity Board.
8. The relevant standards shall be reviewed and updated depending on the availability of additional funding.
9. In phase manner all the air conditioners (one star, two star, & three star) will be replaced Five star rating.
10. Throughout the institution buildings all the 36 W conventional tube lights have been replaced with 20 W LED tube lights.
11. All the Corridors, streetlights, Pole lights replaced with LED lights instead of CFL lights.
12. Air quality monitoring devices have been placed to periodically monitor the air quality index.
13. To transform the existing campus in to green campus several initiatives such as NSS activity (Plastic free environment) have been implemented

## **Carbon reduction and emission reduction process**

The Institution is committed to regulating the overall consumption of water, electricity, paper, and fuel, to lower carbon dioxide emissions through reduced consumption.

1. Consumption of water has been achieved by renovating the toilets.
2. The water to the entire garden is obtained from Sewage water treatment plant. Such reuse of water improves ground water level. In addition, water harvesting pits at several locations in the campus improve the ground water level.
3. Roof top solar water heaters which were installed at hostels reduce the heating cost.
4. The 700kW Solar plant in the campus supplying load to different blocks. This energy is clean and free of pollution.
5. All these above mentioned practices, as a whole reduces carbon emissions.

## **Plan to reduce energy consumption**

The Institution strives towards the goal of reducing the annual electricity consumption by implementing best practices like replacing high energy consuming equipment with energy efficient equipment, and placing motion sensors at academic block toilets.

1. All the conventional tube lights have been replaced with LED lights.
2. Corridor, streetlights, Pole lights have been replaced with LED lights, instead of CFL lights.
3. In a phase manner all the existing ACs have been replaced with five star ACs.
4. The roof top solar heaters, which were installed at hostels reduce the energy consumption.
5. These practices improved the energy consumption and achieved a net saving in electricity bill.

## **Energy wastage identification**

The institution is having the practice of detailed energy auditing from an authenticated energy auditor. The recommendations from the audit would be carefully considered, and implement the feasible points.

The following are the recommendations from the recent audit.

1. Recommended to check with the authorized service person to improve the performance of the AC'S.
2. Retrofit T12& T8tube lights with LED Tube Light.

Most of the energy consumption happens from the air-conditioning and lighting load. Based on these recommendations all the air conditioners are replaced with energy efficient air conditioner with in phase manner.

The tube lights in the entire campus have been replaced with LEDs.

### **Energy and the community**

The institution is having in-house NSS body which organizes several activities to promote social awareness.

All these programs will aid the communities to think in the direction to save environment, which further may lead to think about energy consumption, as energy consumption is an integral part of environment.