



## ENERGY AUDIT REPORT

Shailabala Women's (Autonomous) College, Cuttack



2022

### Energy Audit Committee



Convenor: Dr. Biswadas Mohanty- H.O.D Physics

Members:

- 1) Dr. Jamini Ranjan Mohanty, Administrative Bursar
- 2) Dr. Bikash Ku. Das, Oic College Development
- 3) Dr. Anita Mekap, Assistant Professor of Physics
- 4) Sri. Himanshu Sekhar Sethy, Lecturer in Physics
- 5) Smt. Swagatika Pattnaik, Lecturer in Physics

External Member:

Er. Srimanta Sahoo, General Manager OPTCL

Principal  
S.B. Women's (Auto) College  
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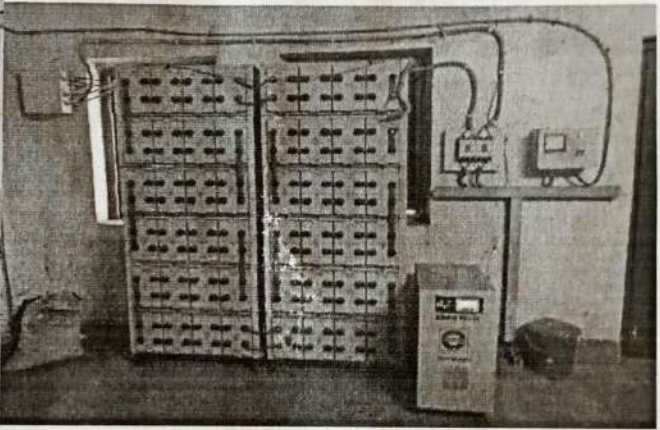
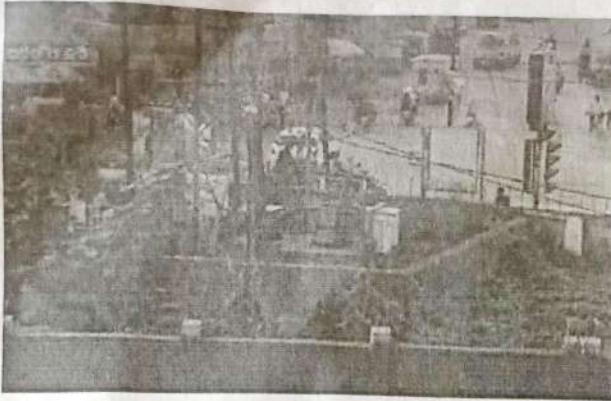
## Findings

The members of the committee visited different Departments, Controller of Examinations, Main office and collected data regarding different electrical appliances installed.

The following observations are made

1. Only one transformer is installed in the campus, which is used for the entire college as well as outside.
2. The college has 4 separate energy reading meters and the average electricity bill is 62865 per month.
3. The list of Electrical fittings and appliances is annexed in the table.
4. In some of the places ordinary bulbs and fans along with energy consuming old devices are still used.
5. The solar panel installed on the roof top of college office is not functioning properly.
6. The roof tops are not painted reflecting white.
7. The electrical instruments having movable parts are not maintained periodically including the AC installed in different places.







## Recommendations

The following recommendations are made unanimously.

1. At all places of the college only energy efficient (LED) bulbs and fans should be installed.
2. The old fans should be removed in a phased manner.
3. Two more dedicated transformers should be installed (one in Science block and one in Arts block).
4. The solar panel installed on the roof top of the college office should be made functional, and utilised every day for a certain time even if there is no power cut. This will drastically reduce the energy consumption of the Annual maintenance contract.
5. AMC for all ACs should be made.
6. All roof tops should be painted with reflecting white to reduce the use of AC and fans in summer.
7. All future purchases of electrical appliances should be only of five star rating with in built (AMC).
8. Existing cables and switches to be upgraded with high current carrying capacity, to reduce the losses in electrical circuits.
9. Sensor based panels to be explored with the manufacturers for implementing 'auto-switch off' of fans and lights in unmanned rooms.
10. Campaign to sensitise all concerned on 'electrical safety and energy conservation' as desired by Hon'ble Chief Minister, Odisha.