

ENERGY MANAGEMENT

Improvement in Energy efficiency

1. REPLACEMENT -:

a. Replacement of conventional fluorescent lamps by LED tubes & Bulbs

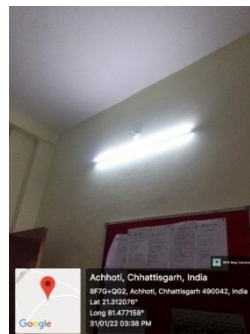
We have replaced Fluorescent Tube lights with LED lights because of heat energy loss is less in LED lights compared to Fluorescent Lights and bulbs.



Date – 08/11/2021



Date – 08/11/2021



Date – 31/02/2022



Date – 31/02/2022

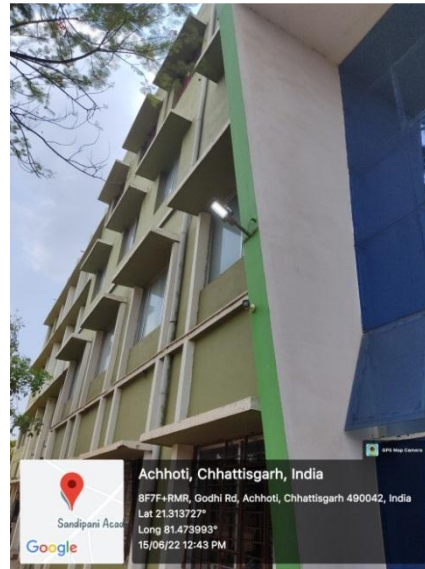
In given photographs you can see LED tubes and bulbs. Before them we had conventional lights.

b. 150HPSV street light fixtures replaced by 72 W LED Street Light Fixtures

We have replaced 150HPSV street light by 72 W LED Street Light because of heat energy loss is less in LED lights compared to Fluorescent Lights and bulbs.



Date – 11/02/2022



Date – 23/08/2022



Date – 15/06/2022



Date – 15/06/2022

In given photographs you can see LED Street light tubes and bulbs. Before them we had 150HPSV Street light.

c. Some conventional ceiling fans are replaced by BLDC fans.

We have replaced some of conventional ceiling fans by BLDC fan because it has more energy efficiency than conventional ceiling fans.



Date – 02/09/2022

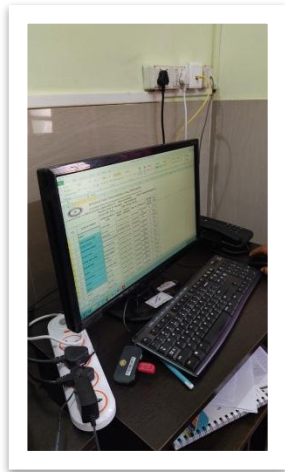


Date – 03/08/2022

In above photographs you can see BLDC fans. We have replaced 4 conventional fans by BLDC fans.

2. TFT Monitors installed in whole campus:-

In place of monitors we use TFT type Monitor because it is more energy efficient than Picture Tube (Old type) monitors in Offices, ICT/ Language Lab & where required.



IQAC – 01(24/03/2022)



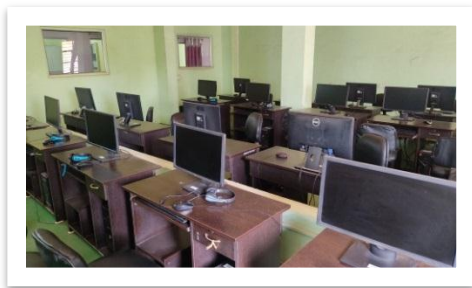
IQAC – 02(24/03/2022)



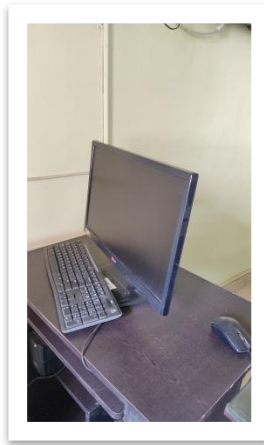
Accountant (24/03/2022)



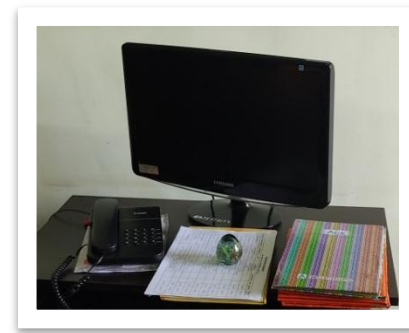
C.O. (24/03/2022)



ICT/Language Lab (24/03/2022)



Principal Office (24/03/2022)



HOD (24/03/2022) office

In above photographs you can see TFT monitors at many rooms. We are using TFT monitor from starting.

3. SOLAR PANEL :-

Solar cell panels have been installed in our institution for energy conservation so that the electrical energy requirements of the institution can be met by renewable sources of energy. The Grid Connected Solar Power Plant of 25 KW is installed by Lucrative Solar Solution, Raipur. Total 84 solar panels each having 300 watt capacity is generating power. We have informed that the solar power plant has been generating power since first February 2018.



We installed solar panel at 2017. It is our effort toward save energy and use non populating source. We have generated energy by solar energy in 4 years is 144671 KWh in 16189 hours.
Date – 08/11/2021

4. SOLAR WATER HEATING SYSTEM :-



Solar Geysers have been installed in our institution for energy conservation so that the electrical energy requirements of the institution can be met by renewable sources of energy.

Two set of 750LPD (Non Pressurized) Complete syst. (ETC) (HDGI TANK) Serial no. : 559,558 installed by Parthsarathi Renewables, Netaji Chowk, Shanti Nagar, Post-Shankar Nagar, Raipur.

Date- 17/11/2022



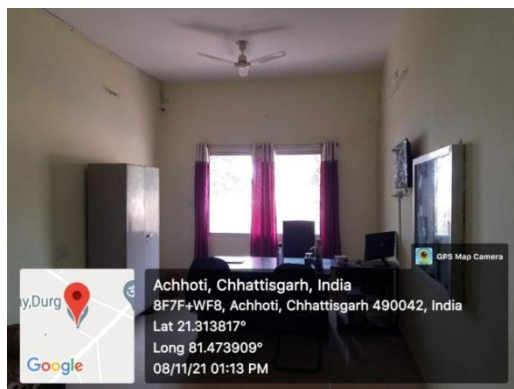
Date- 17/11/2022

In above photographs you can see two solar geysers on the roof of building.

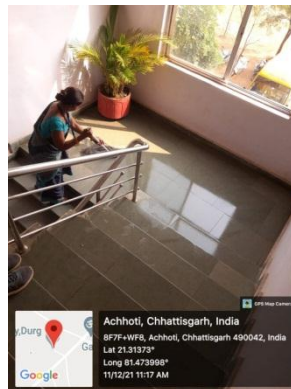
Elimination of Energy wastages

1. Natural Day light & natural ventilation:-

To reduce consumption of electrical energy we designed our building infrastructure like (floors, class rooms, labs &etc.) having wide windows to use day light for lighting of rooms & Ventilation for natural air pass.



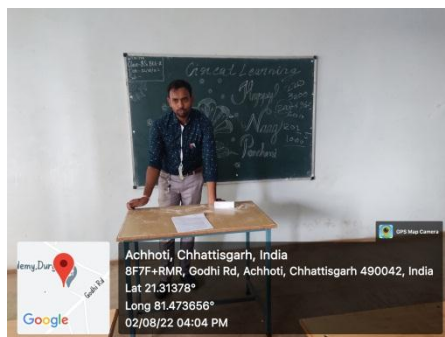
Date –08/11/2021



**Date –08/11/2021
11/11/2021**



Date – 08/11/2021



Date – 08/11/2021



Date – 02/08/2022



We can see in above Photographs there is sufficient light is coming from windows without using electric source of light.

2. HOUSE KEEPING:-

We have regular housekeeping system for maintaining cleanliness, waste management & energy management. Our plan for housekeeping is scheduled as Daily and alternate cleaning section. Our building has four floors with 16 classrooms, 06 Laboratories, 03 staff rooms, Principal, HOD, Administrative offices & etc.

In Daily cleaning section – Staff rooms, Classrooms, Offices, Common rooms, Sports room, corridor & toilets.

In Alternate cleaning Section – Laboratories & Pedestrians.

Cleaning of curtains and clothes done once in a month.



Date – 11/12/2021



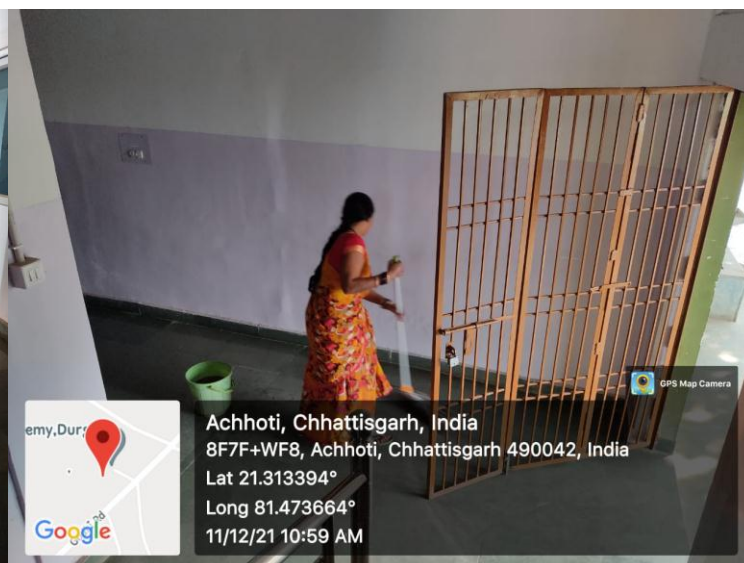
Date – 11/12/2021



Date – 15/02/2022



Date – 11/12/2021



Date – 26/03/2022

3. Fine tuning of temperature:-

Setting of water coolers and air conditioners are done according to season. In winter & rainy season we turn off the water cooler. We have set two water coolers in our building with water purifier. We keep it on in only working hours. It's cleaning done after every three days.



Date- 06/12/2021

In above photographs two water coolers are showing. During rainy and winter seasons we turn off it and it gives only water of normal temperature.

Date- 06/12/2021

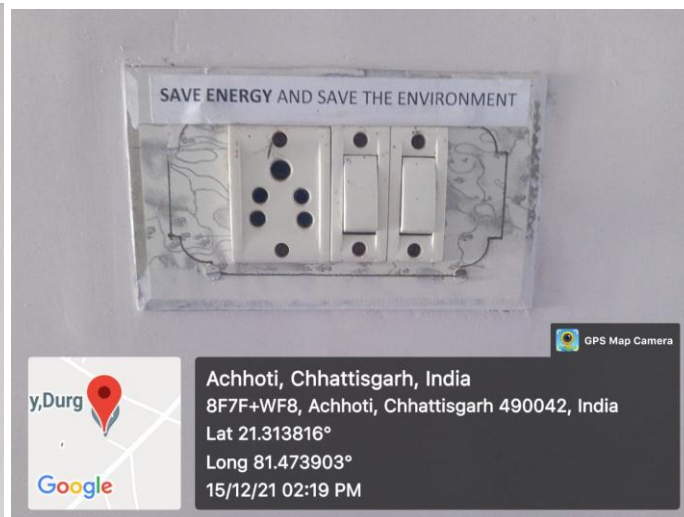
Training and awareness

1. Creating Awareness among staff, students:-

Tagging- At many switch boards and some walls we tagged posters and plates in which we are messaging that we can save energy with various ways and why we must do it.



Date- 15/12/2021



Date – 15/12/2021



Date- 24/05/2022



Date- 24/05/2022



Date-24/05/2022

In above photographs we can see posters and slogan we tagged on wall and near switches like about saving of energy.

2. Awareness Programs:-

- a. **For students and teachers-** Energy Conservation Awareness program conducted by us and we invited Mr. Sanjay Kumar Mishra (Certified Energy Auditor, Bureau of Energy, Ministry of Power, Govt. of India, New Delhi.) as guest speaker on 05/08/2022.



Date-05/08/2022



Date-05/08/2022



Date-05/08/2022



Date-05/08/2022

In above photographs Awareness Program on “Energy Conservation” is presenting by MR. Sanjay Kumar Mishra (Certified Energy Auditor, Bureau of Energy, Ministry of Power, Govt. of India, New Delhi.)

- b. We had done an awareness program on **“Only One Earth”** on date – 28-05-2022. In which we share our thoughts about protection of environment by save energy, waste management and save our environment they also shared some problems & we share ways to solve them. Sarpanch madam also joined and gives further problems of environment.



Awareness Program - “Only One Earth”

We went to village – Kandraka, kumhari Dist- Durg, (C.G.)

(Date- 28/05/2022)

In above photographs some students, staff and many villagers of Kandraka are involved in this awareness program and presenting Drama with message of Save Only One Earth through many ways such Waste Management, Energy Conservation, Go green and etc.

3. Energy Audit and Green Audit:-

We conducted Energy and Green Audit with external energy service agency (RAJ ENERGY SERVICES, RISALI, BHILAI, DURG). Date of audit was 15, 16 & 17 Mar 2022. Mr. Sanjay Kumar Mishra was our auditor (Certified Energy Auditor, Bureau of Energy, Ministry of Power, Govt. of India, New Delhi.)



Date- 25/05/2022



25/05/2022



Date- 25/05/2022

In above photographs Mr. Sanjay Kumar Mishra (Auditor) is giving audit report and Director – Mr. Mahendra Choubey, Advisor- Mrs. Abha Dubey and Asst Prof- Mr. Vedprakash Tripathi receiving report and certificate.