



वयं राष्ट्रे जागृयाम् पुरोहिताः



Govt. Girls' P.G. College, Ujjain (M.P.)

(Established in 1958)

A Centre for Excellence, "A" Graded by NAAC in Two Cycles
Affiliated to Vikram University, Ujjain



INTERNAL QUALITY ASSURANCE CELL

❖ *Energy Audit*

Focal Scheme

SRISHTI

Eco-friendly initiatives



in synergy with



A brief report of Energy Conservation Initiatives

- ❖ The institute has been taking small and medium term measures for energy conservation for over a decade.
- ❖ Besides Energy Conservation and Awareness Drives, the institute installed Solar lights in the college campus and hostel premises for the first time in 2016.
- ❖ A next major strategic step in this direction was the installation of RESCO roof top 20KW Solar Panel under an MoU. Some other steps include use of LED and Sensor Lights and other energy efficient electrical devices.
- ❖ Other initiatives include sensitizing the staff, students and society about the use of cycle and energy conservation, celebration of World Bicycle Day; Celebration of Energy Conservation Day, World Ozone Layer Day, World Environment Day, Declaring college premises a No Fuel Vehicle Zone on one or two days in a month and declaring a zone of college permanently as No Fuel Vehicle Zone.
- ❖ College worked under Focal Scheme SRISHTI
- ❖ College developed a synergistic structure of Focal Scheme SRISHTI and SDGs
- ❖ The institute registered its Action under Sustainable Development Goals Global Map
- ❖ College got an Energy Audit of the institute and hostel conducted by SABS ENERGY ENVIRO PVT. LTD. (Empanelled Cwith Urja Vikas Nigam, M.P. - A Govt. Undertaking)

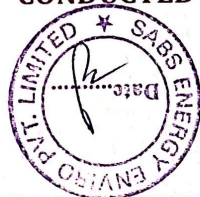
ENERGY AUDIT REPORT

YEAR-2021-22



GOVERNMENT GIRLS P.G. COLLEGE UJJAIN (M.P.)

CONDUCTED BY:



SABS ENERGY ENVIRO PVT.LTD

(Empaneled with Madhya Pradesh Urja Vikas Nigam Ltd. - A Govt. Undertaking)

WE BUILD A SOLID FOUNDATION FOR SAVING ENERGY

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2	Mr. Rambabu Raghuvanshi	Lead Auditor and Energy Consultant
3	Mr. Shravan Yadav	Energy Consultant
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CHAPTER NINE

SOLAR SYSTEM

5.1.1.1 Details of Solar Power Plant:

There is 20 KW solar power system installed in campus for green energy generation.

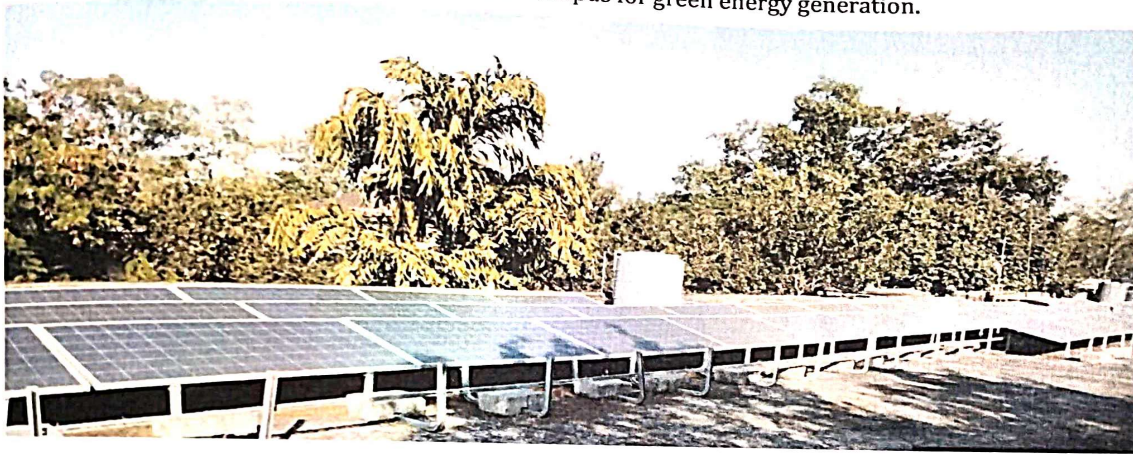


Figure 6: Government Girls PG College, Ujjain. Solar system



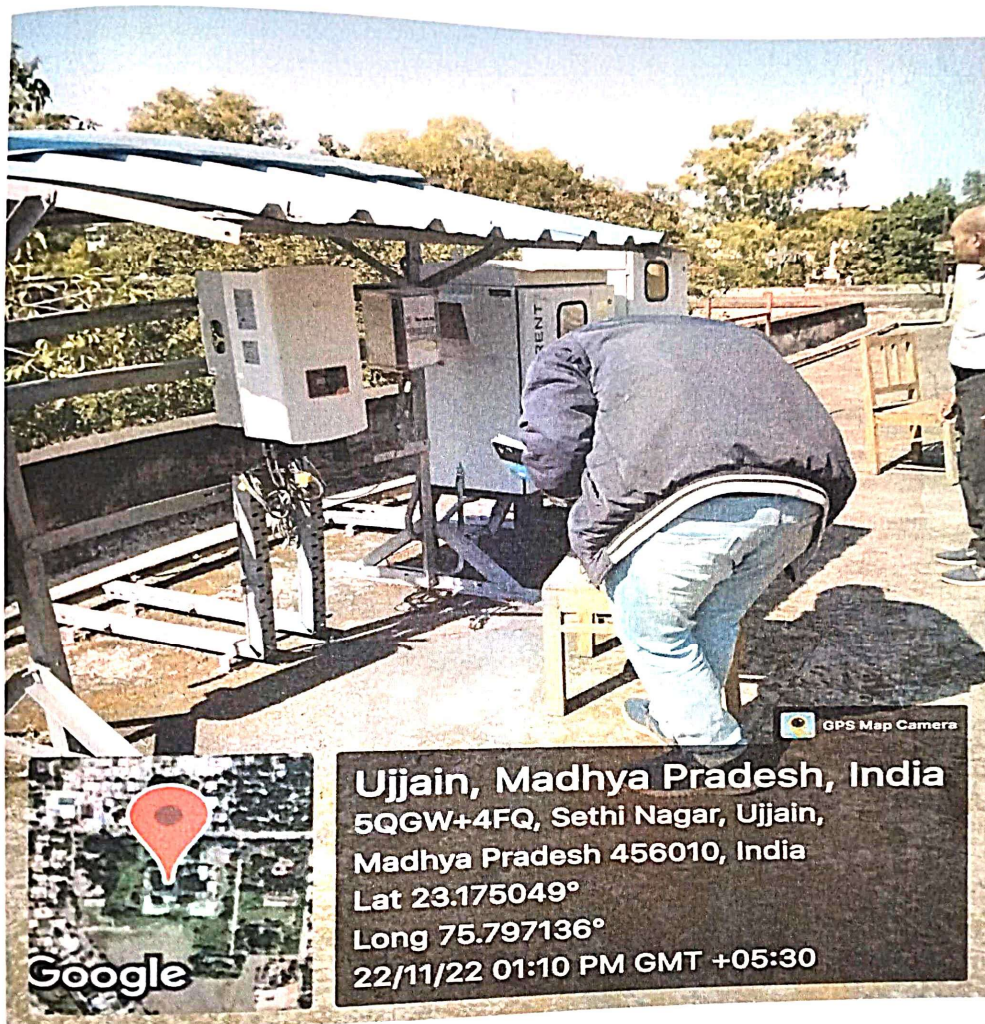
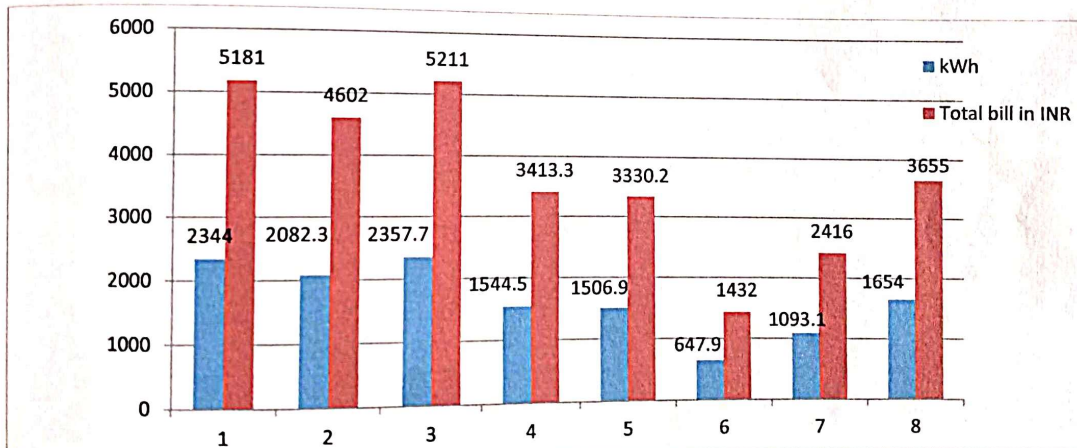


Figure 7: Government Girls PG College, Ujjain. Solar system power measurement

Table 11: Details of Electricity Generated by Solar system

Monthly Electricity Bill FY-2021- 22						
Sr. No.	Months	Sanctioned Load (KW)	MDI	KWH	Total bill INR (Rs)	Electricity bill Energy Charges Rs/KWh
1	27.04.22 to 28.05.22	20				
2	01.04.22 to 27.04.22	20		2344	5181	2.21
3	28.05.22 to 01.07.22	20		2082.3	4602	2.21
4	01.07.22 to 03.08.22	20		2357.7	5211	2.21
5	13.10.21 to 03.02.22	20		1544.5	3413.3	2.21
6	03.02.22 to 08.03.22	20		1506.9	3330.2	2.21
7	08.03.22 to 01.04.22	20		647.9	1432	2.21
	Average Values Rs			1654	3655	2.21
Total annual Electricity bill Rs.					25586	



Observation and Comments

- We observed solar system generate **11577 kWh** of electricity in the above duration.
- Total revenue generated by solar system is around INR Rs **25586**.
- CARBON FOOT Print is calculated around **2.45 tCO₂e**.
- More Solar Power plant can be installed for more green power generation.

Conclusion

Govt. Girls PG College, Ujjain is an old college serving for female Higher Education for about sixty four years. The electrical equipment are therefore quite old and since the bulk of replacement. However, the College has been energy conscious for having installed Solar Lights, Sensor Lights and most importantly Solar Panel and the resulting wheeling to the Grid. The activities involving students for energy conservation, signboards for energy conservation and participation of the students and teachers in the Energy Literacy Campaign of Govt. of Madhya Pradesh and receiving Usha Mitra Certificates are some of the genuine efforts on the part of the college for Energy conscious conservation measures. The College has also received a Clean and Green Campus Recognition from Ujjain Municipal Corporation. Their initiative of conducting an Energy Audit for attaining professional assessment and recommendations for energy saving is also commendable.

The fulfillment of recommendations of this Audit partially or fully will surely move the institute a forward in the direction of energy conservation significantly