

7.2.3 Carbon Management and Reduction

STAUNCHLY MANAGEMENT AND SYSTEM SERVICESLIMITED



ISO 50001: 2018 INITIAL REPORT

COMPANY NAME: SR UNIVERSITY

COMPANY ADDRESS: ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL 506

371, T.G, INDIA.

Company Representative: Dr. P. V. Raja Shekar

Start date of visit: 18 September 2024

Visit duration: 01 Days

AUDIT TEAM – Lead Auditor

ARUN KUMAR

STAUNCHLY MANAGEMENT AND SYSTEM SERVICES LTD.

Authorized Signatory

AUDIT SCOPE & OBJECTIVES

Objectives

To evaluate the ongoing effective compliance of the Energy Management System against the requirements of ISO 50001:2018, the scope of certification and your own Energy Management System(EnMS).

The audit will also identify any areas of potential improvement to your management system, as appropriate to the audit scope.

Scope

"Providing Educational Services leading to Award of Bachelor of Technology (CSE | ECE | EEE | ME | CE), Bachelor of Business Administration, Bachelor of Computer Applications, B.Sc (Hons.) Agriculture, Master of Technology (CTM | PE | AMS | ES | EDT | VLSI | CSE), Master of Business Administration and Master of Computer Applications"

This scope was reviewed during this audit and was considered appropriate, there are no foreseen changes at this time.

Standard - Audit Criteria

ISO 50001; 2018

Site location

ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL 506 371, T.G, INDIA.



Site Review

The audit was completed on site. A tour of 1 locations was included in this initial audit. These sites were all academic locations.

The site tours included interviews with the facilities managers and Facility Assistants, a review of site energy monitoring and a tour of the buildings including academics areas as relevant.

All of the locations visited were seen to be managed in line with the energy management system with onsite teams demonstrating a good understanding of the significant energy uses and the variables that effect energy efficiency.

AUDIT CONCLUSION

Summary and certification status

During the assessment no nonconformities were raised.

Continued certification is recommended.

The audit plan & objectives have been achieved and the certificate scope remains appropriate.

ISO 50001: During this audit it has been demonstrated and confirmed that there has been continual energy performance improvement made across the business. Examples of which are detailed in this report.

Follow up action required

In response to any nonconformity raised you are required to prepare, document and implement a correction and corrective action plan. Each finding must be investigated to identifyany root causes or underlying trends. Appropriate action must be taken to eliminate the causeof any nonconformity in order to prevent reoccurrence. The plan must define timely action, timescales and responsibilities.

There is no need to submit this plan to us as the actions detailed will be verified by the auditor during the next visit.

Failure to adequately implement the planned action may result in the raising of a major nonconformity putting your certification in jeopardy.

A response to any opportunity for improvement raised is optional.



AUDIT FINDINGS

Nonconformities identified during last visit – (Report Number: TISTENW0140465)

There were no corrective actions required to be taken in response to the last audit.

There are no outstanding nonconformities from previous audits.

Nonconformities identified during this visit – Aspect Impact register is not updated

The assessment was based on sampling.

ASSESSMENT COMMENTS & OPPORTUNITIES FOR IMPROVEMENT

ASSESSMENT COMMENTS

From the sample selected for audit at this surveillance audit the SR UNIVERSITY management & employees have demonstrated that they are maintaining their Energy Management System (EnMS) in line with Energy management processes and the policy objectives. As can be seen form the findings of this report there is evidence of compliance with both ISO 50001:2018 and the EnMS, Policy and Objectives. The EnMS wasseen to have the capability to meet applicable requirements and expected outcomes.

EnPl's are identified and energy objectives have been set as part of the energy review process. From the representative sample taken as part of the audit the EnMS was seen to becapable of achieving Energy policy commitments, objectives and operational control needs. The EnMS was assessed and found to be managing internal monitoring processes & internal audits.

The assessment demonstrated a high level of implementation of the processes and monitoring and measurement activities, ensuring that the planned arrangements are achieved. Management review and internal audits continue to be carried out to a high standard, are effective and conform to the requirements of the standard

Monthly monitoring of energy is reviewed and the results are investigated as appropriate. There is an opportunity to improve the investigation reporting (OFI/02) Energy performance is known and performance is evaluated against the objectives and predicted energy use.

There have been significant improvement made to the detail and effectiveness of the individual site audits. The duration and detail of the audit has been increased, and there is a positive effect can be seen in the energy performance. The audits now include interrogating the BMS and other control systems on site, improving control of energy use and better reflecting the sites occupancy.



The scope of the EnMS has been updated to include carbon emissions from scope 3 sources. This has been done in anticipation of changes to the legal compliance scheme 'PAT Perform Achieve and Trade'. This may include net zero in future. This has been seen as an opportunity to remain compliant with PAT via the ISO 50001:2018 Certification. The details are to be fully established following the issue of government guidance on the changes to the PAT scheme.

There are potential complications with the relationship between Carbon reduction and energy efficiency. This will be monitored at future audits and will become clearer how this will fit in to the ISO 50001 EnMS, once the Indian Government has published the new PAT guidance / Scheme documents.

Continual Improvement of energy performance and the EnMS was demonstrated during this audit and the 3 year cycle. There are processes in place to identify and manage continual improvement. There has been significant improvement in energy performance set against the baseline. PIOEATFW continues to make cycle significant investment in new buildings to replace the older stock. There is an established commitment to continual improvement with stretching future objectives in place

All of the employees and management interviewed during this assessment were positive and demonstrated an awareness of the EnMS. There was an open dialogue established which greatly assisted the auditor – Thank You.

OPPORTUNITIES FOR IMPROVEMENT

OFI/01 - LEADERSHIP:

Top Management - Energy Policy and Carbon Management Plan were drafted by the Associate Director (Sustainable Operations) and approved by the Director of Estates.

The Carbon & Environment Action Group (C&EAG), is no longer responsible for this. The leadership section of the Compliance manual, needs to be reviewed to reflect this recent change in authorities.

OFI/02 - INVESTIGATION OF SIGNIFICANT DEVIATIONS:

Significant deviations are identified as part of the monthly energy monitoring process, with sites identified as having significant deviations required to investigate and respond the energy team.

A number of the responses are limited in detail and slow. Significant deviation needs to be investigated and responded to, to ensure energy performance is maintained. There is an opportunity to improve the response detail and time. ISO 50001:2018 9.1.1

Thanks to the company and its people for their time and cooperation during the audit.



MISCELLANEOUS

Changes to your management system

You must not carry out significant changes to the Energy Management System, without first confirming with your auditor that the proposed changes are acceptable.

Report distribution

The report will be distributed to the company representative, the Lead Auditor and the Business Support Team (for archiving), unless otherwise agreed.

Report confidentiality

This report will not be disclosed to any third party by us. You are free to circulate it as required, however, if this report is circulated to a third party the entire content (excluding audit trail) must be included.

NEXT VISIT

The current 3 year audit programme, audit frequency and duration, were considered during this visit against your current scope and manning levels. The audit program and auditor competences are confirmed as suitable and sufficient and remain unchanged.

The next visit will be due in AUG. 2025 and will be of 1 days duration.

An Audit programme including an agreed outlined plan for your next assessment visit and a summary of previous assessments in the certification cycle is attached to/included in this report. Further details as appropriate will be confirmed prior to your next assessment visit.



1 day EnMS Initial Audit

Next visit plan – 1 day EnMS Initial Audit.					
Date	Time	Auditor	Area / Department / Process / Function		
SR UNIVER	SITY				
	~ . ~	~~~ ~~. ~ .			
ANANTHAS	SAGAR ((V), HASA	ANPARTHY (M), WARANGAL 506 371, T.G, INDIA.		
18		Arun	Arrive On Site - On site meeting and greeting		
September		kumar	a s a s a s a s a s a s a s a s a s a s		
2024			Onening Meeting & Management System Administration		
			Opening Meeting & Management System Administration Management System Manual / Policy / Risks and Opportunities /		
			Management Review / Objectives & targets.		
			Internal Audits		
			Including corrective action management.		
			Evaluation of Legal compliance		
			Management Review		
			Energy Planning, Baseline & Performance		
			Lunch		
			Operational Control - Site Tour		
			Including site tours – Energy use, monitoring, communication,		
			maintenance energy projects.		
			Auditor / Report Preparation Time - The close out & follow up		
			on any outstanding details picked up during the audit		
		Arun	End of day review		
		kumar			
Day 1					
		Arun	Arrive on site		
		kumar			
			Monitoring & Measurement		
			Including significant deviations.		
			Operational Control – Site Tour Including site tours – Energy use, monitoring, communication,		
			maintenance energy projects.		
			Lunch		
			Competence, Training & Awareness		
			Identification of personnel who can have a significant effect on		
			energy use.		
			Evidence of training and awareness on site.		
			Auditor / Report Preparation Time - The close out & follow up		
			on any outstanding details picked up during the audit		
	16.00		Closing Meeting		

Notes to Client:

- Times are approximate and will be confirmed at the opening meeting prior to commencement of the audit.
- Our auditors reserve the right to change or add to the elements listed before or during the audit depending on the results
- of on-site investigation

 Your contract with us is an integral part of this audit plan and details confidentiality arrangements, audit scope, information on follow up activities and any special reporting requirements.



OBSERVATION TABLE

Organization:	SR UNIVERSITY	Audit No.	TISTE	VW0140465	Page: 1/8
Department	Contents			ISO Element	Grade of NC
Good Points Management	Points for Impr	ovements			
	Energy target of the institute 202 maintain	3-2024 record are	e well		Good Observation
	Energy management system policy was not displayed in campus area. The institute EnMS quality objective plan need to be updated.				Point of improvement
			yed in		Point of improvement
)e		Point of improvement
	The opportunities to optimize en- environmental impact was well n		duce		Good Observation

Lead Auditor: ARUN KUMAR (signature) Audit date: 18/09/2024





Certificate of Registration

(Energy Management System)

KVQA CERTIFICATION SERVICES PVT. LTD.

This is to certify that the Energy Management System of



ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL - 506 371, T.G, INDIA.

has been found in accordance with Energy Management System Standard

ISO 50001:2018

This Certificate is valid for the following scope

Providing Educational Services leading to Award of Bachelor of Technology (CSE | ECE | EEE | ME | CE), Bachelor of Business Administration, Bachelor of Computer Applications, B.Sc (Hons.) Agriculture, Master of Technology (CTM | PE | AMS | ES | EDT | VLSI | CSE), Master of Business Administration and Master of Computer Applications.

Certificate No.: KDENM202107124

Date of Issue: 05, July, 2021 Valid Until: 04, June, 2024*

1st Surveillance Done On: 07/06/2022 2nd Surveillance Due On: 16/06/2023



Issued by -- Authorised Signatory KVQA

To Check the Status of the Certification, kindly log on to www.kvqa.in F-300, Sector -63, Noida U.P., India. Ph 011-22711940, 22711941. email:delhi@kvqaindia.com

*Subject to successful completion of surveillance audits

CERTIFICATE



This is to Certify that the Management System of

SR UNIVERSITY



ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL 506 371, T.G, INDIA.

has been found to conform to the Energy Management System standard:

ISO 50001:2018

This certificate is valid for the following scope of operations:

Providing Educational Services leading to Award of Bachelor of Technology (CSE | ECE | EEE | ME | CE), Bachelor of Business Administration, Bachelor of Computer Applications, B.Sc (Hons.) Agriculture, Master of Technology (CTM | PE | AMS | ES | EDT | VLSI | CSE), Master of Business Administration and Master of Computer Applications

:: Certificate No :: IN57903G

Date of initial registration

Date of this Certificate

Surv. audit on or before / Certificate expiry

Recertification Due

24 September 2024

24 September 2024

23 September 2025

23 September 2027

This Certificate remains valid subject to satisfactory surveillance audits.





ent certificate visit to http://staunchlyservices.com/search_certified_client.php This Certificate is the property of Staunchly Management & System Services Limited and shall be returned immediately when demanded

STAUNCHLY MANAGEMENT AND SYSTEM SERVICES LIMITED

International Office: Labrynth Business Centre, 43 Middle Hill Gate, Stockport Great Manchester, England-SK1 3DG

(Company Registered in England with Company Number 11488683

STAUNCHLY MANAGEMENT AND SYSTEM SERVICES PVT. LTD.

Corporate Office: 303, U-60, 3rd Floor Shakarpur, Delhi-110019, India

Phone: +91-6389519394

:- www.staunchlyservices.com E-mail: Info@staunchlyservices.com









KVQA CERTIFICATION SERVICES PVT. LTD.

I-25, Third Floor, Southern Avenue, Maharani Bagh, New Delhi-110065
Phone :011-22711940, 22711941 E-mail : delhi@kvqaindia.com Web Site : www.kvqa.in

Ref: KDENM202107124

Date: 07.06.2022

To, SR UNIVERSITY

ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL - 506 371, T.G, INDIA.

Kind Attn. : Top Management

Subject : Recommendation for continuation of EnMS 50001:2018 certificate.

Dear Sir,

Thank you for your response during the 1st Surveillance Audit. The auditor has reviewed and accepted the Energy Management System and other requirements as per ISO 50001:2018 standard requirements. The auditor's recommendation for continuing the certification is therefore confirmed.

I would like to take this opportunity to congratulate you for continuation of your ISO certificate and thank you for working with us.

With Regards

Kvqa Certification Services Pvt Ltd.

KVQA CERTIFICATION SERVICES PVT. LTD.



KVQA CERTIFICATION SERVICES PVT. LTD.

I-25, Third Floor, Southern Avenue, Maharani Bagh, New Delhi-110065

Phone :011-22711940, 22711941 E-mail : delhi@kvqaindia.com Web Site : www.kvqa.in

Ref: KDENM202107124

Date: 16.06.2023

To, SR UNIVERSITY

ANANTHASAGAR (V), HASANPARTHY (M), WARANGAL - 506 371, T.G, INDIA.

Kind Attn. : Top Management

Subject : Recommendation for continuation of EnMS 50001:2018 certificate.

Dear Sir,

Thank you for your response during the 2nd Surveillance Audit. The auditor has reviewed and accepted the Energy Management System and other requirements as per ISO 50001:2018 standard requirements. The auditor's recommendation for continuing the certification is therefore confirmed.

I would like to take this opportunity to congratulate you for continuation of your ISO certificate and thank you for working with us.

With Regards

Kvqa Certification Services Pvt Ltd.

Authorised Signatory



1. Solar Energy

- SRU established Grid-Connected Rooftop Solar Photovoltaic (SPV) systems on roofs of academic buildings.
- The DC power generated from the SPV panels is converted to SC power using Power Conditioning Unit (PCU) / Grid-tied Inverters, and it is fed to the 33 kV three-phase grid lines with a capacity of 1858.08 kWp of the system installed at the institution.
- Solar Energy generated for the academic year 2022 23 is 216980 kwh

Geo-tagged Photos



Grid-Connected Rooftop Solar Photovoltaic (SPV) Systems at Block 1



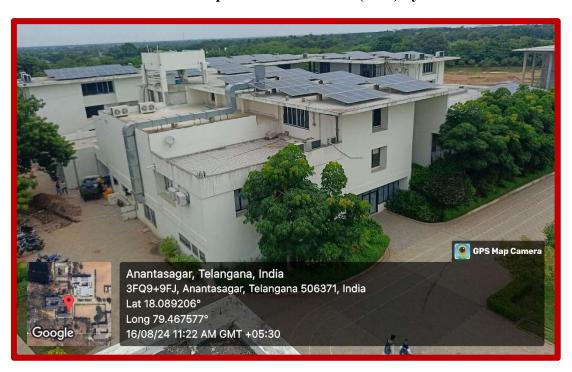


Grid-Connected Rooftop Solar Photovoltaic (SPV) Systems at Block 1



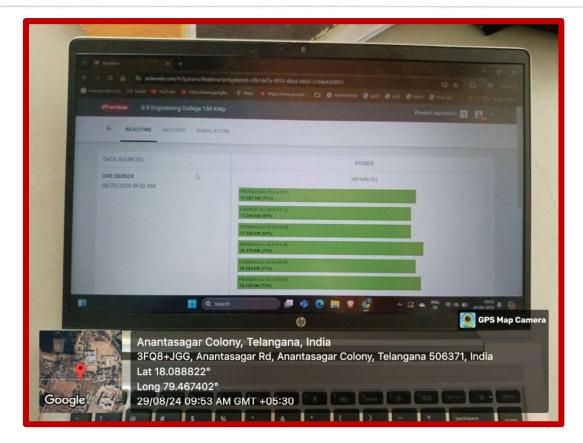


Grid-Connected Rooftop Solar Photovoltaic (SPV) Systems at SRIX



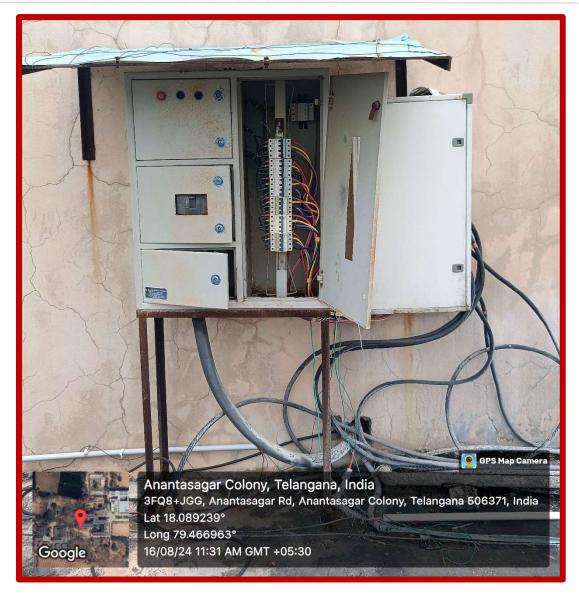
Grid-Connected Rooftop Solar Photovoltaic (SPV) Systems at SRIX





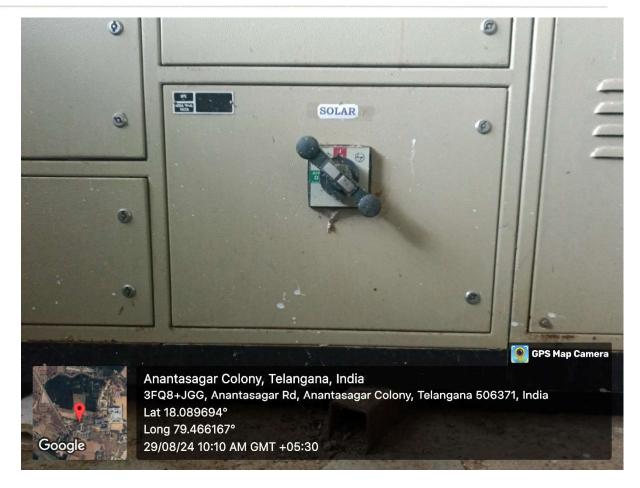
Measurements of Real time Production of Solar power





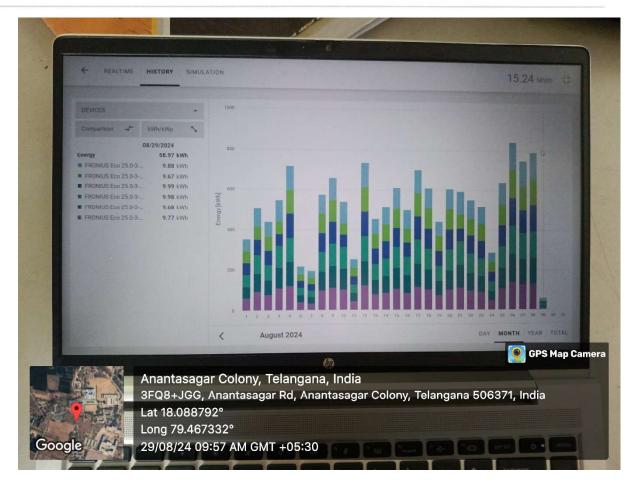
Connecting On-Grid to Inverter





Control Panel of Solar Power





Solar-Log for renewable energy readings



2. Biogas Plant

About Biogas Plant:

- Our campus biogas plant is a proactive initiative for waste management and energy sustainability.
- Installed capacity: 350 kgs.
- Generates sufficient amount of biogas every daywhich is equivalent to energy from one commercial LPG cylinder.
- Utilizes sewage water, food, and vegetable waste, showcasing our commitment to resource optimization and eco-friendly practices.

Bio gas Production Process:

Stage	Description	
Biogas Production	Floating Drum Plant	
Gas Conveyance	Gas conveyed via pipeline to Hostels and the remains will be sent to compost.	

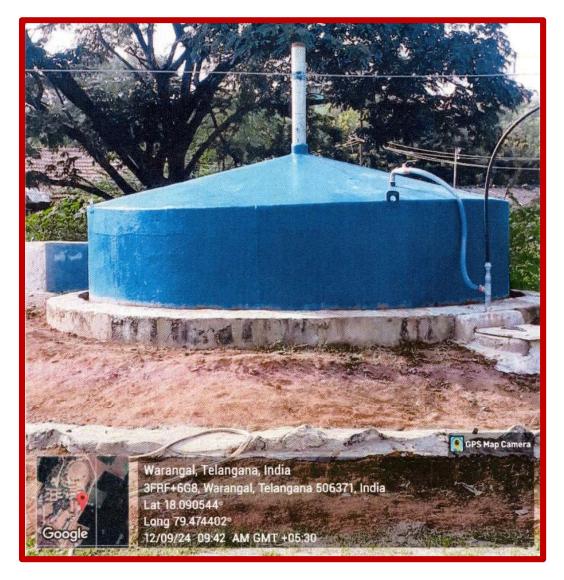
Biogas Output:

Source	Generated Biogas (kg/day)	Equivalent to
FoodandVegetable Waste	5	
Sewage Treatment Plant (STP)	2	Energy of 1 LPG cylinders
Total 350 kgs capacity per day	15 kgs	

REGISTRAR
SR UNIVERSITY
(V) Ananthasagar, (M) Hasanparthy
Dt: Warangal - 506371, T.S.



Geo-tagged Images of Biogas Facilities



Biogas Production Unit



3. Wheeling to the Grid

- These SPV systems generate power during the daytime, which is fully utilized to power campus internal loads and feed excess power (wheeling to the grid) as long as the grid is available.
- In cases where solar power is not sufficient due to cloud cover, etc., the campus loads are served by drawing power from the grid.
- SRU exported 23754 kwh (Units) to TSNPDCL Grid during the academic year 2022-23.

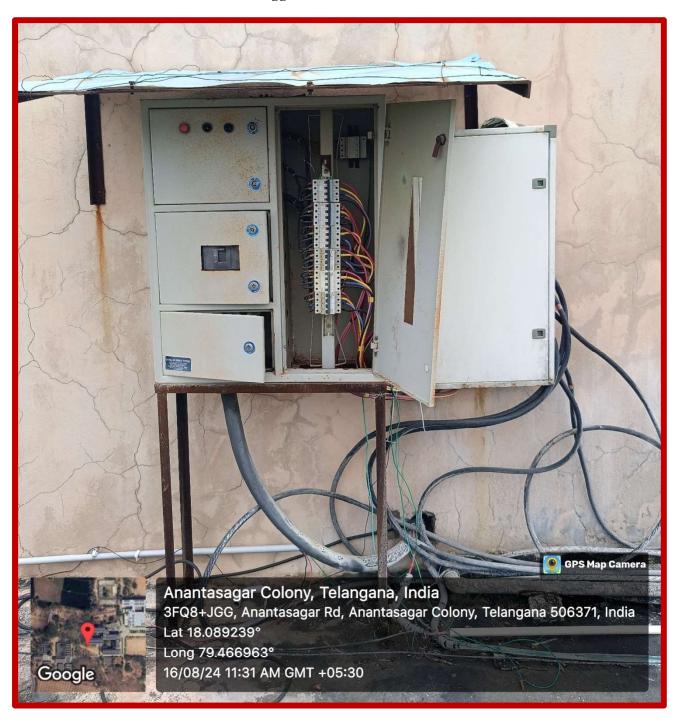
Renewable Energy Exporting to Grid Report:

	Academic Year: 2022- 23				
S. No	Month	Solar Generation (kwh)			
1	May-23	3029			
2	Apr-23	33			
3	Mar-23	1449			
4	Feb-23	2506			
5	Jan-23	3092			
6	Dec-22	1616			
7	Nov-22	2669			
8	Oct-22	3593			
9	Sep-22	1616			
10	Aug-22	1852			
11	Jul-22	1029			
12	Jun-22	1270			
Tot	tal Export	23754			



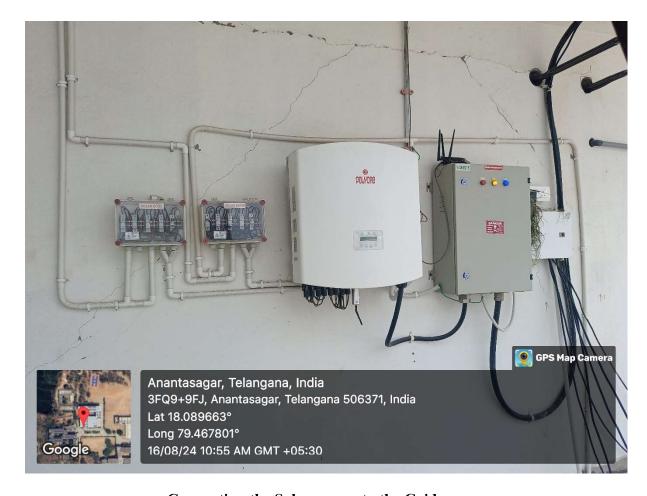


Geo-tagged Photos



Connecting On-Grid to Inverter





Connecting the Solar power to the Grid





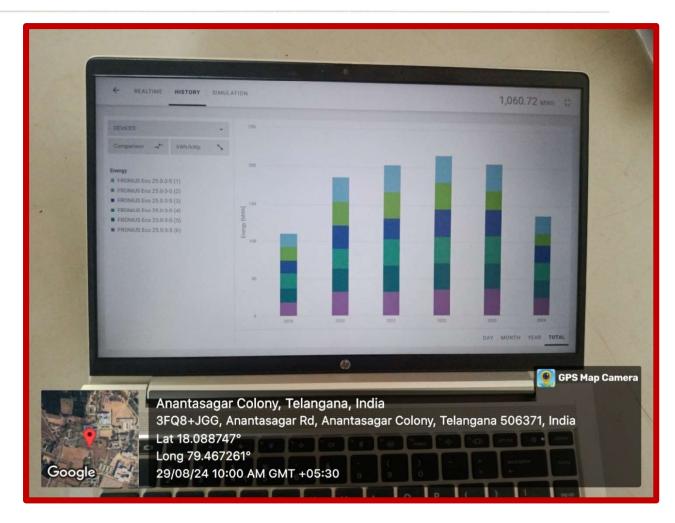
On-Grid to Inverter





On-Grid to Inverter





Solar-Log for renewable energy readings

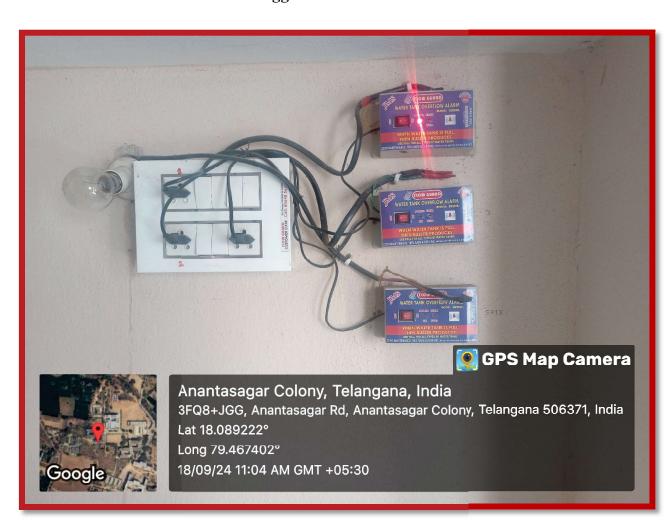


4. Sensor-based energy conservation:

The institution implements the following energy-saving measures through sensor-based technology for conservation.

- 1. Sensor based Water tank Overflow Alarm:
- 2. Sensor Based Solar Streetlight System:
- 3. Sensor Based Water Taps:

Geo tagged Photos



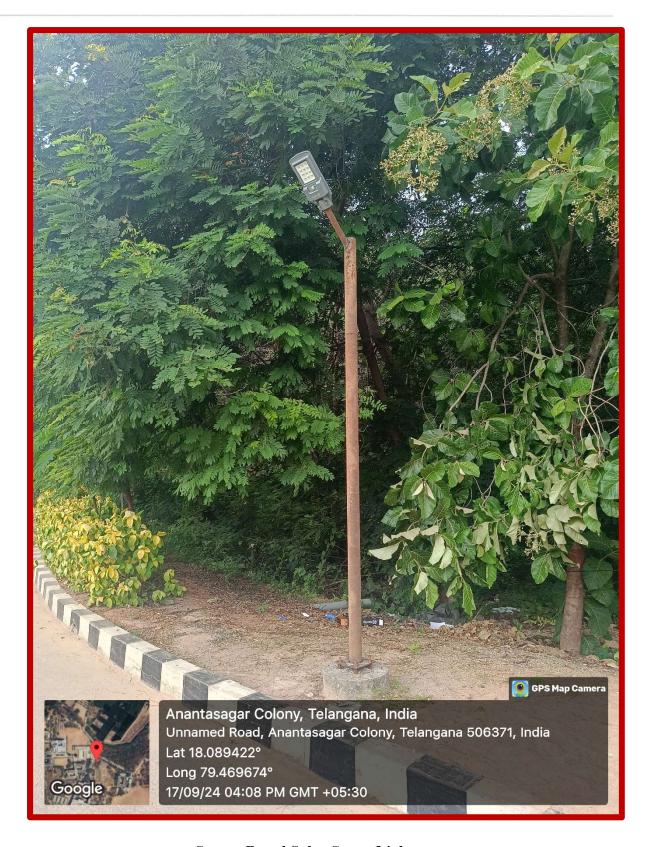
Sensor based Water tank Overflow Alarm





Sensor Based Solar Street Light





Sensor Based Solar Street Light





Sensor Based Solar Street Light





Sensor Based Water Tap



5. Use of LED bulbs/power-efficient equipment:

The classrooms and office rooms in the academic blocks of SRU are furnished with BLDC (Brushless Direct Current Motor) fans and LED (Light Emitting Diode) lights

Geo Tagged Photos



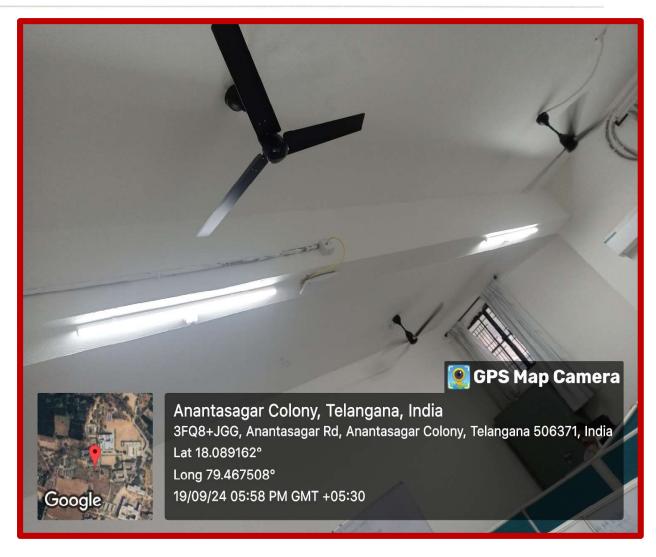
Design Thinking room with Natural Lighting





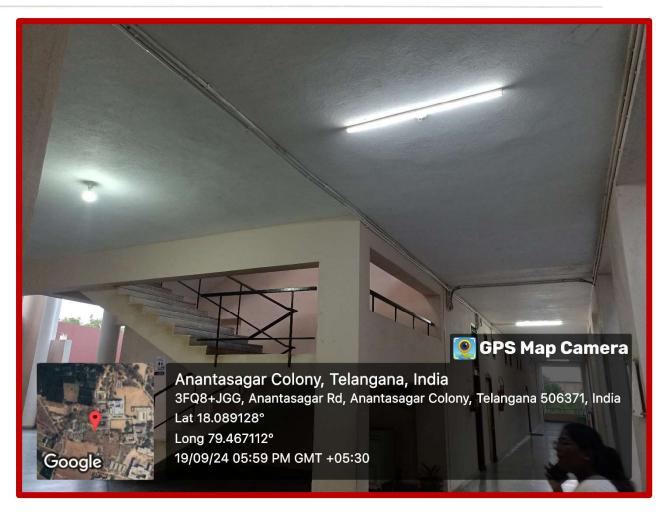
LED Bulbs and Energy Saving BLDC fans in University Library





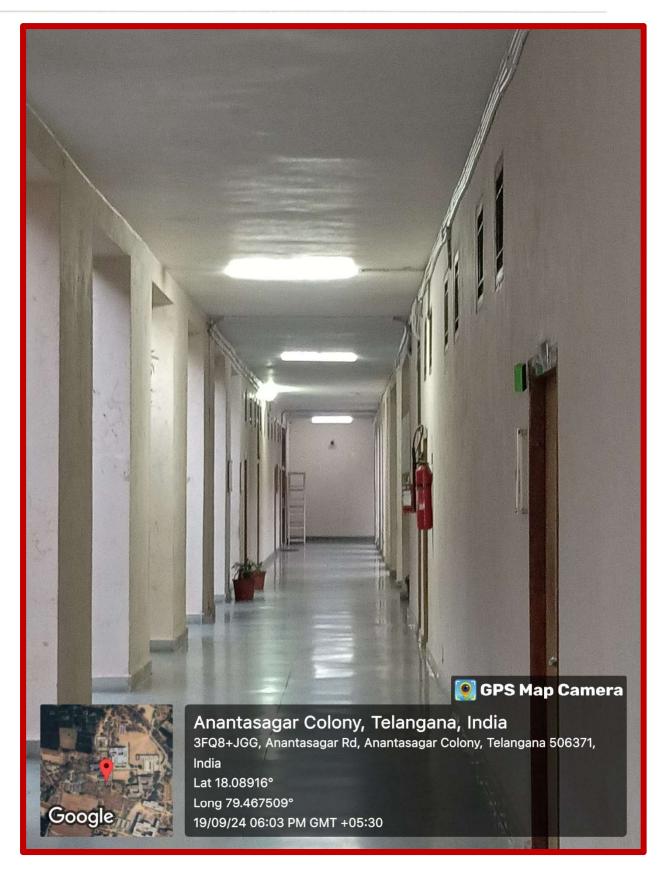
LED Bulbs and Energy Saving BLDC fans in Staff Room





LED Bulbs in all Common areas





LED Bulbs in Corridors