



# AMITY UNIVERSITY

MADHYA PRADESH

Established vide Government of Madhya Pradesh Act No. 27 of 2010

## Power Energy Management in the Campus



### AMITY UNIVERSITY GWALIOR AmityPower MANAGEMENT

AU, Gwalior							
S. No.	Block	Capacity of Plant (KWp)	Capacity of Inverter (KW)	Modules	String	Inverters	
				Nos.	Nos.	Nos.	Rating
1	A	160	170	501	25	4	3x50 KW + 1x20 KW
2	B	83	80	260	13	2	1x50 KW + 1x30 KW
3	C	64	60	200	10	2	2x30 KW
<b>Total</b>		<b>307.2</b>	<b>310</b>	<b>961</b>	<b>48</b>	<b>8</b>	

### AMITY UNIVERSITY GWALIOR AmityPower MANAGEMENT

#### Summary

Year	Unit Generated by Solar in KWH	Unit Purchased from MPEB in KWh with Solar	Unit Purchased from MPEB in KWh Without Solar	Solar Unit Generated of Campus Energy Requirements (%)	Approx. % of Saving on Solar	Solar Units Rate (Rs.)
2018	285402	2257960	2543362	11.22	7.17	4.80
2019	392454	2265150	2651814	14.80	9.19	4.85
2020	391675	616242	933707	41.95	39.22	4.90
2021	388941	1061099	1372970	28.33	29.34	4.95
2022	414680	2364708	2757542	15.04	9.39	5.00
2023	416151	2776186	3183863	13.07	7.96	5.05
2024	412836	3434402	3834988	10.76	8.13	5.10
2025	410226	3611500	4019336	10.21	6.23	5.15



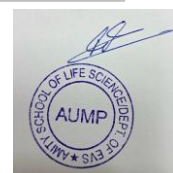
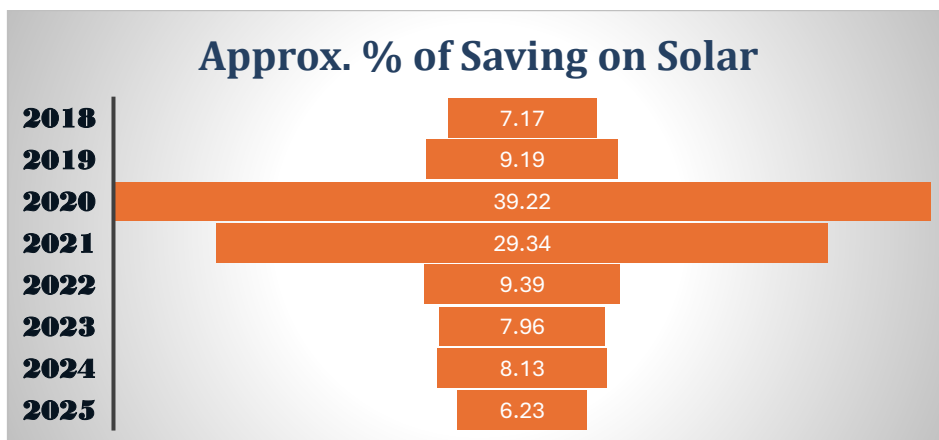
Month	Solar			MPEB		
	Unit Generated by Solar in KWH	Rate (Rs/KWh)	Payment to Clean Max Amount Rs	Units Received KWh	Unit cost of energy from MPEB (Rs)	Payment to MPEB Amount Rs
Jan'25	30434	5.15	156733	138860	15.69	2178843
Feb'25	33702	5.15	173565	122620	17.03	2087647
Mar'25	47201	5.15	243085	192160	13.43	2581636
Apr'25	45233	5.15	232950	372030	10.02	3727754
May'25	42719	5.15	220003	459540	9.96	4575740
Jun'25	34015	5.15	175177	506970	9.58	4855897
Jul'25	29226	5.15	150514	348570	10.30	3591858
Aug'25	31079	5.15	160057	379610	10.44	3964306
Sep'25	35786	5.15	184298	442050	9.59	4240184
Oct'25	28216	5.20	146725	307280	10.97	3371123
Nov'25	26676	5.20	138716	182270	13.49	2458865
Dec'25	25939	5.20	134883	159540	14.78	2358355
<b>Total</b>	<b>410226</b>	<b>5.05</b>	<b>2116706</b>	<b>3611500</b>	<b>11.07</b>	<b>39992208</b>

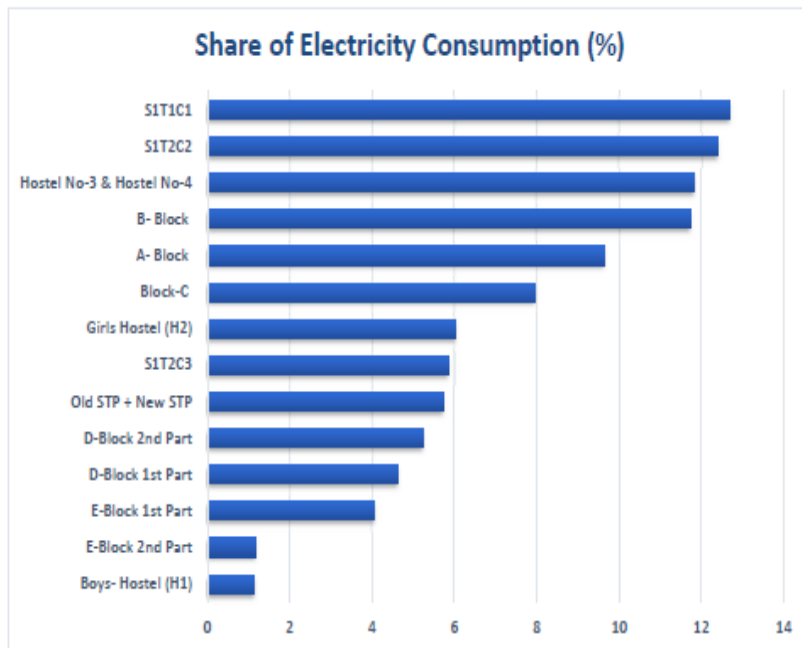
Export Unit (KWH) by Solar to The MPEB	Without Solar			Approx. Saving Amount on Solar (Rs)	Approx. % of Saving on Solar
	Unit Purchased from MPEB in KWh	Unit cost of energy from MPEB Rs	Amount		
0	169294	15.69	2656373	320798	12.08
1060	155262	17.03	2643388	400223	15.14
230	239131	13.43	3212683	391052	12.17
130	417133	10.02	4179688	220286	5.27
0	502259	9.96	5001102	205360	4.11
0	540985	9.58	5181702	150628	2.91
280	377516	10.30	3890134	150647	3.87
30	410659	10.44	4288554	164504	3.84
10	477826	9.59	4583351	158965	3.47
580	334916	10.97	3674318	162833	4.43
70	208876	13.49	2817789	221152	7.85
0	185479	14.78	2741792	248554	9.07
<b>2390</b>	<b>4019336</b>	<b>11.16</b>	<b>44870873</b>	<b>2795000</b>	<b>6.23</b>



Solar Export to Grid				
S.N	Year	Export Unit (KWH)	Export Unit Rate (Rs.)	Amount (Rs.)
1	2019	5790	7.00	40530
2	2020	74210	7.10	526891
3	2021	77070	7.15	551051
4	2022	21846	7.25	158384
5	2023	8474	7.38	62538
6	2024	2250	7.53	16943
7	2025	2390	7.68	18355
Total		192030		1374691

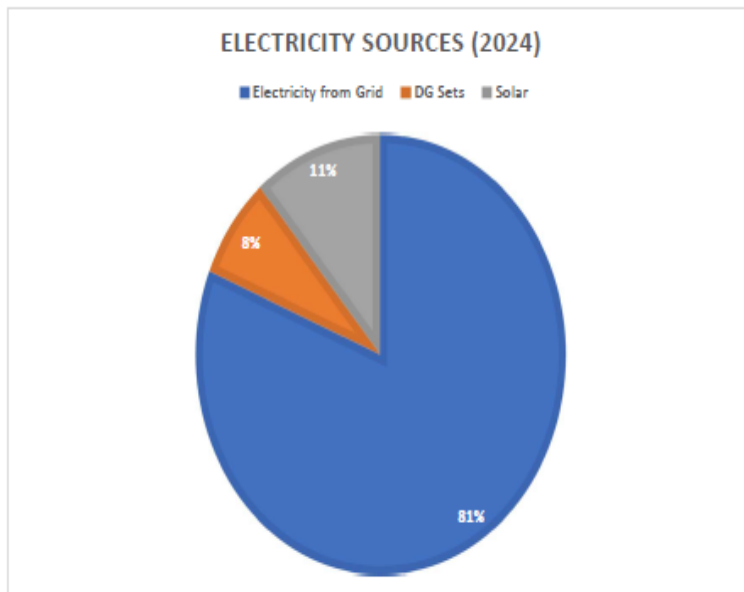
Power Profile Of AU-Gwalior	
Sanctioned Load KVA	2450
Released Load KVA	2450
Billing Load KVA	2205
Length of line Km	0.5
Voltage KV	33
Meter No.	XE481822
Meter Make	Secure
Line CT Ratio A	50/5
Line PT Ratio KV/V	33/110
Meter CT Ratio A	-/5
Meter PT Ratio KV/V	33/110
Multiplying Factor (MF)	10
Demand charges	Rs.501 per KVA
Unit Charges	Rs.7.53 per KWh
No Of Transformer	2 Nos 1500 KVA each & 1 No 2500 KVA
No of DG Sets	4 Nos x750 KVA & 1No x250 KVA
Installed Solar Capacity	307 KWp



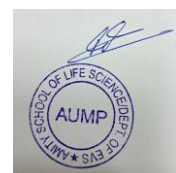


#### 4.3 Electricity Sources

The campus has three main sources of electricity. The grid electricity contributes 81%, 11% from solar, and 8% from the DG sets.



**Source:** Energy Audit Report, 2023-24, Amity University Madhya Pradesh, executed by Enviraj Consultant Private Limited, An ISO 14001:2015 and 5001: 2018 Certified Company.



# ENERGY AUDIT REPORT

(2024)



**Amity University**  
**Madhya Pradesh, Gwalior**

**Submitted by:**



**Enviraj Consulting Private Limited**

(An ISO 14001:2015 & 50001:2018 Certified)

F-29 Bhagat Singh Nagar,  
Bhind Road, Gwalior  
Madhya Pradesh - 474005  
[www.enviraj.com](http://www.enviraj.com)

**January, 2025**





## Certificate of Registration

This is to certify that

### ENVIRAJ CONSULTING PRIVATE LIMITED

F29 BHAGAT SINGH NAGAR, BHIND ROAD, GWALIOR,  
MADHYA PRADESH, 474005 INDIA

has been independently assessed by QRO  
and is compliant with the requirement of:

**ISO 50001:2018**

### Energy Management Systems

For the following scope of activities:

PROVISION OF ENERGY CONSULTANCY INCLUDING GREEN BUILDING  
CERTIFICATION, ENERGY AND DAYLIGHT SIMULATION, ENERGY AUDITS,  
BUILDING SYSTEM CX, ECBC COMPLIANCE REPORTING, FIRE LIFE AND  
SAFETY AUDIT, CFD ANALYSIS, ENERGY MANAGEMENT IN MULTI  
DISCIPLINARY ENGINEERING WORKS, TRAINING, NEW PRODUCT  
DEVELOPMENT.

Date of Certification: 27th September 2022

2<sup>nd</sup> Surveillance Audit Due: 26th September 2024

1<sup>st</sup> Surveillance Audit Due: 26th September 2023

Certificate Expiry: 26th September 2025

**Certificate Number: 305022092751Q**



  
Head of Certification

Validity of this certificate is subject to annual surveillance audits to be done successfully on or before 365 days from date of the audit.  
(In case surveillance audit is not allowed to be conducted: this certificate shall be suspended / withdrawn).

**The Validity of this certificate can be verified at [www.qrocert.org](http://www.qrocert.org)**

This certificate of registration remains the property of QRO Certification LLP, and shall be returned immediately upon request.

**India Office : QRO Certification LLP**

142, 11nd Floor, Avtar Enclave, Near Paschim Vihar West Metro Station, Delhi-110063, (INDIA)

Website : [www.qrocert.org](http://www.qrocert.org), E-mail : [info@qrocert.org](mailto:info@qrocert.org)

