



Reduction in Electricity Bill of the University due to Solar Power Generation Tezpur University

Duration	APDCL Electricity (Grid) Consumption (kWh)	Solar Power Plant Electricity Generation (kWh)	Solar Power Export to APDCL Grid (kWh)	Total Electricity Consumption (kWh)	Bill amount paid to APDCL (Rs)
Oct - Dec 2018	950013	284432	0	1234445	7575832
Jan - Dec 2019	4251992	1064809	5175	5311626	32235627
Jan - Dec 2020	2528512	1065771	156372	3437911	19161014
Jan - Dec 2021	3098311	1099199	84289	4113221	23607767
Jan - Dec 2022	4377676	1015810	12900	5380586	35232400
Jan - Dec 2023	4805123	1033905	7504	5831524	43942535
Total	20011627	5563926	266240	25309313	161755175
Duration	Bill amount paid to APPCL for Solar Geneation (Rs)	Total bill amount paid for Electricity (APDCL+APPCL) (Rs)	Amount payable based on APDCL Rate (Rs) (without solar power generation)	APDCL paid to Univ for Export Electricity (Rs)	Reduction in Electricity Bill due to solar power generation (Rs)
Oct - Dec 2018	502449	8078281	9509970	0	1431689
Jan - Dec 2019	2313920	34549547	39415907	18664	4885023
Jan - Dec 2020	2507071	21668085	25198585	591086	4121586
Jan - Dec 2021	2660060	26267827	30185654	318611	4236438
Jan - Dec 2022	2458260	37690660	41927952	51564	4288856
Jan - Dec 2023	2502050	46444585	51192106	32342	4779863
Total	12943810	174698985	197430174	1012267	23743455
CO2 emission reduction (kg)					4506780
<i>Weighted average emission factor of the Indian Grid for FY 2021-22 is 0.81 kg of CO2 per kWh</i>					