

Maulana Azad College

8, RAFI AHMED KIDWAI ROAD, KOLKATA - 700013, WEST BENGAL, INDIA





CPE (1st Cycle) * NAAC Accredited 'A' Grade (2nd Cycle) * DBT STAR College

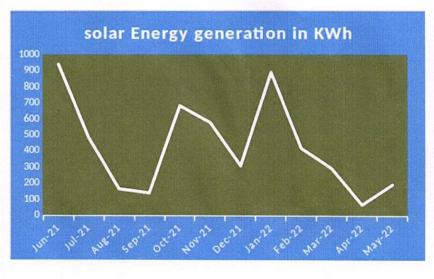
ISO Certified - 14001: 2015, 50001: 2018, 9001: 2015

Audit Report on Renewable source of energy-Roof Top Solar Power Plant

20 kWp Rooftop Solar PV Power Plant to Maulana Azad College was sanctioned by WEST BENGAL RENEWABLE ENERGY DEVELOPMENT AGENCY (WBREDA), KOLKATA, an Autonomous Organisation under Department of Power & NES, Govt. of West Bengal in March, 2019. The installation work including FIVE years comprehensive Maintenance on turnkey basis was started by M/s LARSEN & TOUBRO Ltd., Mumbai in February, 2020. The plant started producing electricity in the grid from April, 2021. The amount of electricity produced by the Solar Grid through CESC net metering can now be accessed remotely. The power generation data for this year and also for previous year, acquired in this manner is tabulated below. It also can be monitored on daily basis. A graphical representation of the power generation in the month of July, 2024 is shown below. Overall our solar grid is working satisfactorily.

Energy production by Solar Grid, June 2021 - May 2022

Month & Year	Solar Energy produced (Units)
Jun-21	942
Jul-21	486
Aug-21	168
Sep-21	142
Oct-21	686
Nov-21	580
Dec-21	312
Jan-22	892
Feb-22	420
Mar-22	296
Apr-22	70
May-22	196



Observation:

Solar Grid has been working efficiently since installation and is generating power to its full capacity which has led the institute one step forward in successful usage of Green Energy. However, the pattern of seasonal variation shows that starting from the pre-monsoon to the entire monsoon period, due to overcast sky in Kolkata, power generation is much low, on an average one fourth of the full capacity.





GOVERNMENT OF WEST BENGAL



Maulana Azad College

8, RAFI AHMED KIDWAI ROAD, KOLKATA - 700013, WEST BENGAL, INDIA

Phone: 033 2249-3737 / 2226-7814 Web: https://maulanaazadcollegekolkata.ac.in e-mail: maulanaazadcollegekolkata@gmail.com, Institutional e-mail: info@maulanaazadcollegekolkata.ac.in



CPE (1st Cycle) * NAAC Accredited 'A' Grade (2nd Cycle) * DBT STAR College

ISO Certified - 14001: 2015, 50001: 2018, 9001: 2015

Energy production by Solar Grid, June 2022 - May 2023

Month & Year	Solar Energy produced (Units)
Jun-22	64
Jul-22	188
Aug-22	188
Sep-22	208
Oct-22	Under maintenance
Nov-22	Under maintenance
Dec-22	Under maintenance
Jan-23	Under maintenance
Feb-23	Under maintenance
Mar-23	Under maintenance
Apr-23	Under maintenance
May-23	Under maintenance

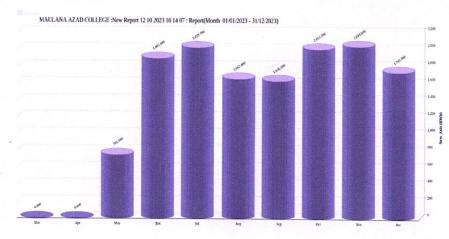
Observation:

Grid connected Roof Top Solar PV unit is working, but not to its full capacity. It needs servicing.

Generation Record of the year 2023:

(We started getting data remotely from May, 2023)

Date	Generation (KWh)
Mar-2023	0.000
Apr-2023	0.000
May-2023	765.100
Jun-2023	1905.100
Jul-2023	2029.700
Aug-2023	1662.400
Sep-2023	1636.500
Oct-2023	2012.200
Nov-2023	2044.600
Dec-2023	1743.300



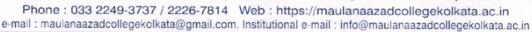






Maulana Azad College





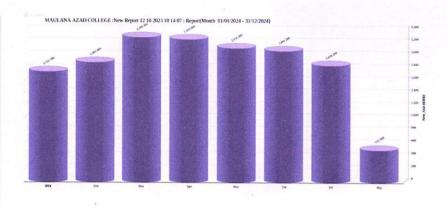


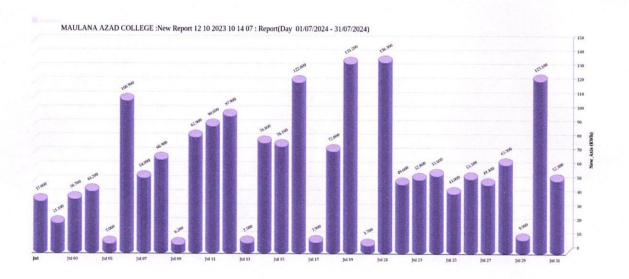
CPE (1st Cycle) * NAAC Accredited 'A' Grade (2nd Cycle) * DBT STAR College

ISO Certified - 14001: 2015, 50001: 2018, 9001: 2015

Generation Record of the year 2024:

Date	Generation (KWh)
Jan-2024	1755.700
Feb-2024	1901.400
Mar-2024	2298.300
Apr-2024	2263.300
May-2024	2126.500
Jun-2024	2081.200
Jul-2024	1850.200
Aug-2024	515.500





Graphical representation of the generation data in the month of July, 2024







Maulana Azad College

8, RAFI AHMED KIDWAI ROAD, KOLKATA - 700013, WEST BENGAL, INDIA

Phone: 033 2249-3737 / 2226-7814 Web: https://maulanaazadcollegekolkata.ac.in e-mail: maulanaazadcollegekolkata@gmail.com, Institutional e-mail: info@maulanaazadcollegekolkata.ac.in



CPE (1st Cycle) * NAAC Accredited 'A' Grade (2nd Cycle) * DBT STAR College

ISO Certified - 14001: 2015, 50001: 2018, 9001: 2015

Conclusion:

Although compared to total electrical power consumption of the college, Solar power generation is meagre, but the venture of solar energy generation is the beginning towards green energy initiatives. We are looking for extension of solar generation depending on government policy and fund allocation in future. Maintenance is necessary for the optimization of power consumption. A proposal has been submitted for the installation of smart switching system in phases, so that light, fan in the class rooms will go OFF when there is no classes in the room.

Co-ordinator
IQAC
Maulana Azad College

Govt. of West Bengal 8, R.A. Kidwai Road, Kol.-13 Sanjoy Chatopadoo.

Associate Professor
Department of Physics
Maulana Azad College
8 Rafi Ahmed Kidwai Rd
Kolkata - 700013

Govt. of West Bengal

Associate Professor
Department of Physics
Maulana Azad College
Rafi Ahmed Kidwai Rd
Kolkata - 700013
Govt. of West Bengal

Azad color of the color of the

Principal
Maulana ASA College
Kolkata-13