



Maratha Vidya Prasarak Samaj

G. M. D. Arts, B. W. Commerce and Science College, Sinnar, Dist. Nashik

Affiliated to Savitribai Phule Pune University, Pune
Best College Awarded by SPPU2012-13

Id.No.PU/NS/ASC/013/1969
AISHE:C-41292

ISO 9001:2015 Certified College

www.gmdcollege.in

sinnarcollege001@yahoo.com

INTERNAL QUALITY ASSURANCE CELL

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

7.1.3 Energy audit (2018-19)





Maratha Vidya Prasarak Samaj Nashik
G. M. D. Arts, B. W. Commerce and Science College, Sinnar

Solar Energy Report 2018-19

1. Energy generated from Roof Grid Tie Solar System:

The Campus has 15.3 kWh on grid solar system that is connected to grid via NET meter. The following table shows the energy generated by the solar system sent to the Grid and also shows CO₂ saved in Kg:

Sr. No.	Month	Energy Generated kWh	Energy Consumed by College kWh	CO ₂ credit in Kg
1	Jan	581	11646	489.202
2	Feb	400	3710	336.8
3	March	114	3745	95.988
4	April	1218	5294	1025.556
5	May	760	4199	639.92
6	June	434	2308	365.428
7	July	372	2925	313.224
8	August	372	3224	313.224
9	Sept	1222	4408	1028.924
10	October	1529	3869	1287.418
11	Nov	1489	3834	1253.738
12	Dec	1743	3834	1467.606
Total Units		10234	52996	Avg. CO₂ Credit = 8617.028 kg

Roof Top Photo Voltaic Solar System (15 kWh) is installed on terrace of Department of Chemistry. As per the above table:

- The average Electricity Generation is **10234 kWh** per year
- The average Electricity Consumption is **52996 kWh** per year

- The Average CO2 credit (emission saved) per year is **8617.028 Kg.**

There is no major additional Electricity Consumption in the infrastructure of the College.

2. Energy generated from Roof Grid Tie Solar System:

The Campus has 7.5 kWh off-grid solar system generates daily average 25 kWh units. The yearly average generation is 9000 kWh (units approx.) and it saves the electricity from the grid as well. This system works even if the grid power is cut off and helps the campus in the emergency also.

3. Power generated from Roof Grid Tie Solar System

The campus has Roof Top Solar water heater on Girls Hostel the office and of 2000 LPD (Litres Per Day) connected to the washrooms and bathrooms. The estimated energy saved per day is 134.3 kWh energy assumed when water is heated at 60°C of 2000 (LPD).

HEAD

DEPARTMENT OF PHYSICS
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar

Co-ordinator
IQAC

G. M. D. Arts, B.W. Commerce & Science
College, Sinnar, Dist. Nashik 422103

Principal

G M D Arts B.W Commerce and
Science College Sinnar, Dist. Nashik