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GO SHOONYA PVT. LTD.

NEUTRALITY REDEFINED

CIN: U37100MH2021PTC368088

Green Audit Report

B-206, Shiv Parvati C.S Road, Dahisar East Mumbai – 400 068
Contact: +91 80807 88677/+91 90284 84090Email:

GO SHOONYA PVT. LTD.

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Site Description		
Building Name	:	Prahladrai Dalmia Lions College of Commerce & Economics.
Address	:	Sunder Nagar, S.V Road, Malad West, Mumbai, Maharashtra 400064.
City	:	Mumbai
State	:	Maharashtra
Pin code	:	400064
Building Type	:	Educational Institute
No. of Units	:	1 Nos
No. of Floors	:	Nos
No. of Parking Floors	:	0 Nos
Age of Structure	:	51 years (Approximately)
No. of Employees (Teaching and Non-teaching staff)	:	141 Nos (Approximately)
No. of students	:	7284 Nos (Approximately)
No. of Lifts	:	1 Nos
Contact Person	:	Dr. Kiran Mane
Position	:	Principal
Contact Email	:	principal@dalmialionscollege.ac.in
Contact Number	:	
No. of Connections	:	

Prahladrai Dalmia Lions College of Commerce & Economics - Educational Institute

Electricity Consumption

The institute has several elements that are completely dependent on electrical energy for operations.

It is observed from the bills that:

Electricity	Consumption (units)	Emissions (tons of CO2e)
Daily	162.115	0.314
Monthly	4931	9.426
Yearly	59172	114.69

Based on the consumption in 2022, it was observed that there is an average fluctuation of approximately 27%. This fluctuation can be the result of **work demand.**

The facility has several types of instruments, equipment, devices and items that includes light fittings, fans, air conditioners, lifts, computer projectors, cameras etc. and items that induce *inductive or capacitive load*. This has a direct impact on the efficiency at which the power is being consumed at the Institute. (In simpler terms, use of such devices has a direct contribution towards the power factor of the facility.)

Based on the bills provided for the months from Oct 2022 to November 2022, it can be observed that the average power factor for the institute was 0.8889. the month of February has observed the lowest Average Power Factor of 0.8678 for the institute.

Fugitive Emission

Air Conditioners are found on each floor in the specific rooms. Fugitive emissions are introduced due to the leaked refrigerant from the air conditioning system/refrigeration system. The Air conditioning systems were operated throughout the working hours of the college. Refrigerant R-32 was used in each of the air conditioners. The Average Fugitive Fluctuation over is 10%

Fugitive Emissions	Emissions (tons of CO2e)
Daily	0.006
Monthly	0.198
Yearly	2.42

Commute

Commute of a total of 7,425 people was considered which included the students, faculty, and the non-teaching staff of the institute. Public transportation such as local trains for long distance travel and buses for short distance travel were considered.

Emissions due to Commute	Emissions (tons of CO2e)
Daily	1.188
Monthly	35.65
Yearly	433.78

Water

Based on the Average Consumption of water based on the Water bills Provided of the Year 2022.

Emissions due to Commute	Emissions (tons of CO2e)
Daily	3.00
Monthly	90.15
Yearly	1096.87

Waste

On the Approximated Calculation done on the waste generation at the Premises Of both Wet and Dry waste.

Emissions due to Commute	Emissions (tons of CO2e)
Daily	0.902
Monthly	27.07
Yearly	329.4

Total emissions

Considering all the parameters mentioned earlier, the total emissions generated due to the institute was determined.

Total Emissions	Emissions (tons of CO2e)
Daily	5.416
Monthly	162.50
Yearly	1977.16

Remarks

There is a 20% error margin due to the lack of verification of the data collected by the volunteers.

Recommendations

Based on the audit conducted, there is a scope of reduction and offsetting the emissions generated within the organizational boundary of the institute.

- Plantations: Planting 8000 trees per year for the next 5 years would make a major contribution in offsetting the emissions generated.
- Energy Audit: Targeted audit can help achieve up to 10-15 % savings on electrical consumption by recommending changes or upgrades to the existing systems in place.
- Solar Installation: Setting up at least 20kW of solar power plant will not only reduce energy consumption from conventional grids but also yield monetary savings.
- Water conservation: Reuse of grey water should be considered wherever possible. Rainwater harvesting with immediate use of water and not from borewells, will
- Waste Management: Design policies for on-site waste management in the organization. For off-site wet and dry waste management partner with registered organizations
- Shared buses: Set up shared buses for commute up to the railway station as most of the students take local trains.