

Loreto College
Kolkata

**Green &
Environment
Audit Report
2024-25**



**Consultrain Management
Services**



1.0 GREEN & ENVIRONMENT AUDIT INTRODUCTION

1.1 Introduction

A committee constituted by the qualified auditors, experts & scientists from different reputed institutes has conducted this audit. The committee developed a questionnaire for audit, based on the regulatory & statutory requirements of Central as well the State Government. The basic data was gathered & compiled, which the committee analyzed. By and large, the audit reveals a healthy environment inside the college premises. The committee has suggested short term as well as long-term planning for improved environmental conditions to higher levels and authorities and all stakeholders of the college confirmed that they will give due attention and utilize opportunities for identified improvements.

1.2 Purpose of Green and Environmental Auditing

The Green Audit is essential as per NAAC mandates. It is necessary to conduct Green Audit in the college campus to make students aware of the importance of having a green zone & this helps them to become good and responsible citizens of our country. The Green Audit involves practical use of renewable sources, conservation of energy, rainwater harvesting program, effects of carbon neutrality, plantation of trees, e-waste management and hazardous waste management. The national & local governments are putting in a lot of effort for maintaining a green planet. If caring for the environment is made must for all students and various programs are organized to make the students aware and environment friendly then they would feel responsible for saving our planet from pollution, keep it green & also save energy.

1.3 Audit Methodology & Survey Schedules

The methodology adopted for this assessment is by collecting information by onsite visit, group discussion, campus survey, enquiry, observation, perception study and opinions, included in the Audit Report. The audit covered the following major areas:

1. Green Zone Management & Biodiversity
2. Water Efficiency and Water Management
3. Energy Efficiency and Energy Management
4. Air Quality & Carbon footprint Management
5. Waste and Waste Management



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GREEN & ENVIRONMENT AUDIT REPORT

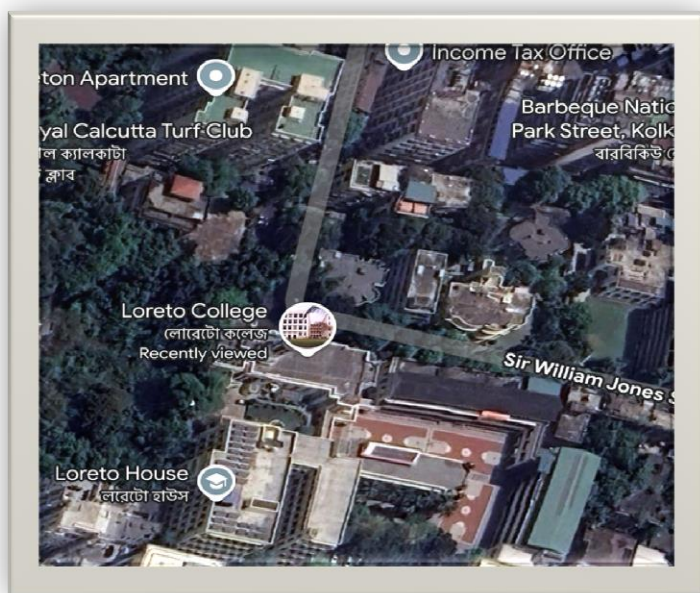


Survey Schedule

SL.NO	PURPOSE	DATE	REMARKS
1.	Communication with the College authority	05-12-2024	Discuss about terms and conditions
2.	Opening Meeting	10-01-2024	Submitted the survey schedule
3.	Collection of information about the College	22-01-2024 to 28.03.2024	Introduced to Departmental Heads/ Officer/staff
4.	Campus visits and Observation	10-03-2024	Physically enquiring with Audit team
5.	Departmental visit and Enquiry	10-03-2024	Enquiry conducted in Departments and Laboratories
6.	Interviewing faculty and Students	24-03-2024	Data collection
7.	Review data and Assessment	28-03-2024	Data review and report preparation
8.	Submission of Audit report	30-03-2024	Report submission

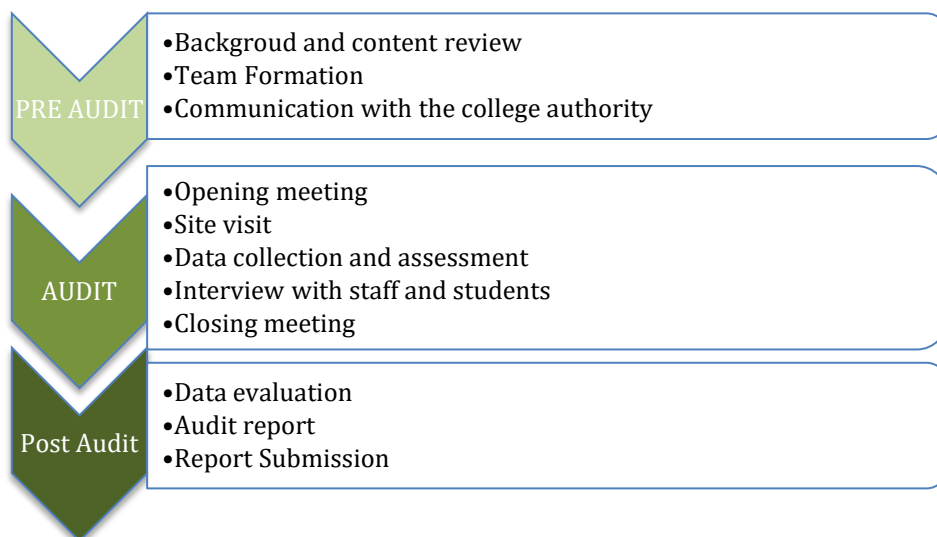
1.4 Site Visit

The campus and its premises were visited and analyzed by the audit-teams several times to gather information. Ground, Canteen, Library, Classrooms, Office rooms, were visited to collect data. The energy usage was calculated by identifying the total electricity consumption. Details of water taps and tank capacity were determined. The sources of wastes were identified and categorized into biodegradable and non-biodegradable wastes.





1.5 Methodology and Survey Schedules

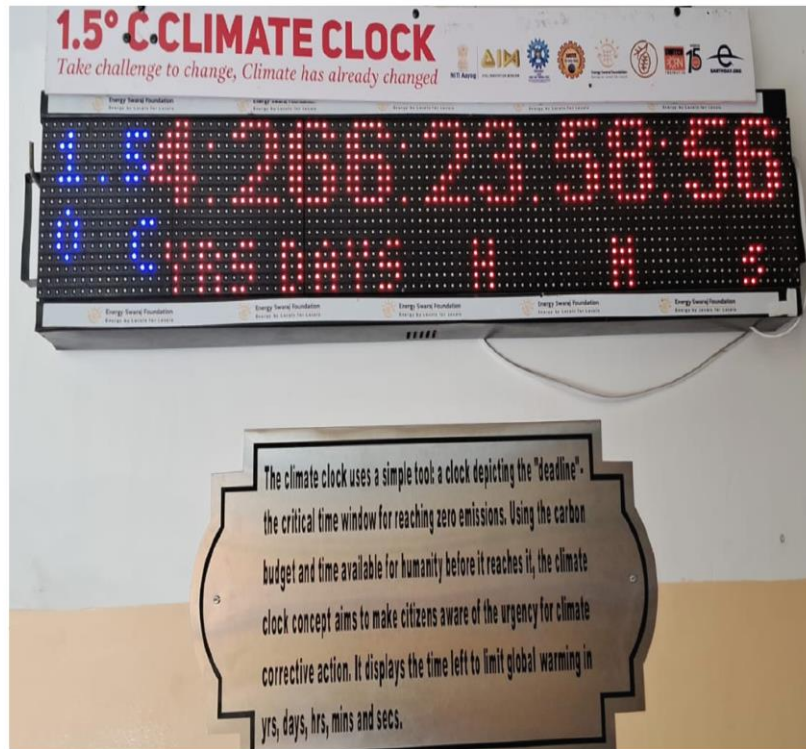


Flow chart for Audit Methodology



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GREEN & ENVIRONMENT AUDIT REPORT





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GREEN & ENVIRONMENT AUDIT REPORT



2.0 ABOUT THE COLLEGE

2.1 Introduction

Environmental auditing is a systematic, periodic and objective evaluation to assess and document an institution's activities and services in relation to:

- Facilitating management control of environmental practices
- Promoting good environmental management
- Raising staff awareness and enforcing commitment to the departmental environmental policy
- Exploring improvement opportunities
- Establishing the performance baseline for developing an Environmental Management System (EMS)

Loreto College, Calcutta was founded in 1912 by the Sisters of the Institute of the Blessed Virgin Mary (IBVM), commonly known as Loreto, a catholic religious order established by Mary Ward in 1609. The College has a rich history marked by its pioneering role in women's education in India and began as an extension of the School Department of Loreto House. A few rooms were allotted to school leavers and they were prepared privately for the university examinations at which they appeared as non-collegiate students. In 1912-1913, it became one of the first women's colleges to gain affiliation to the University of Calcutta, allowing its senior students to sit for university exams. Affiliation was first granted for Intermediate Arts and later for BA (Bachelor of Arts), ISC (Intermediate Science). Additionally, Loreto College was also affiliated for a Licentiate in Teaching (LT) in 1913, further expanding its academic offerings. The college was unique in being allowed to combine its Intermediate Arts and LT classes, a distinction supported by university professors. This was a significant achievement, as it provided young women access to higher education in subjects like biology, sciences, and Indian languages, which were typically reserved for their male counterparts.

The establishment of a teaching college was a long-held ambition of Loreto's Mother Superior, Gonzaga Joynt, dating back to the 1890s. Despite financial and governmental challenges, Mother Gonzaga Joynt persisted. Loreto's efforts were further strengthened by the influence of Mother Gonzaga Barry from Ballarat, Australia, who had established Australia's first teacher training college for women in 1884. Barry's connection with Joynt led to the introduction of innovative teaching philosophies in India, enhancing Loreto's educational mission.

Loreto College's pursuit of academic excellence and professional training for women played a crucial role in challenging the dominance of government-run education and Anglican influence in the region, marking it as a significant institution in the history of women's education in India.

The College holds the honour of being the first in West Bengal to be assessed by the National Assessment and Accreditation Council (NAAC), earning a five-star rating in 2000. It was re-accredited with an A grade in 2006 and again in 2012. On account of being a high performing institution the College received an extension of two years in 2017 and was re-accredited with an A grade in 2021. The B.Ed. Department,



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



established in 1913, received a B++ grade from NAAC in 2003 and was upgraded to an A grade in 2009. The UGC recognized the College as a "College with Potential for Excellence" in 2006, 2011 and 2014. The College also been ranked by NIRF (National Institutional Ranking Framework), Ministry of Human Resource Development, Government of India.

The College offers Four Year degrees in B.A. and B.Sc. and a Three Year Multi-Disciplinary Course offering a wide range of Major, Minor and Interdisciplinary subjects. Post graduate courses offered by the College include MA English and sanction has been granted for an M.Sc. Psychology. In continuance of its efforts towards all round development of its students, Value Education forms an integral part of the curriculum alongside various Certificate Courses.

Loreto College aims to develop high academic standards and inculcate values of leadership, commitment and selfless service. A Women's Cell was established in 1996. Staff members (retired and current) as well as students and friends of the College offer voluntary service to this cell in its endeavor to provide adult literacy programmes for disadvantaged young women

NAAC Gradation:

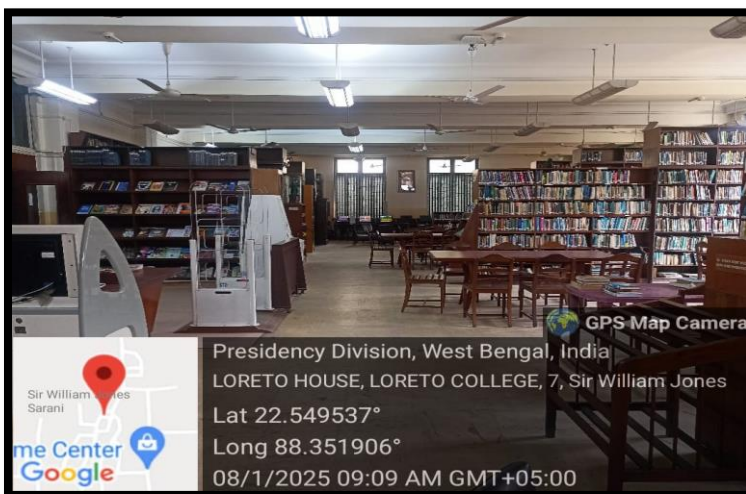
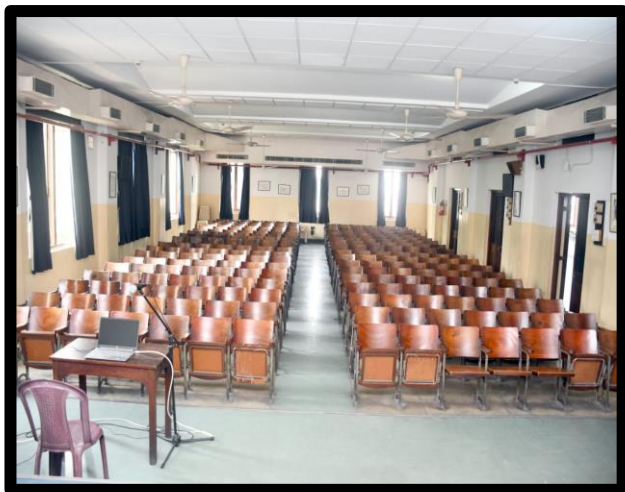
The National Assessment and Accreditation Council (NAAC) awarded Loreto College with Grade A





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GREEN & ENVIRONMENT AUDIT REPORT



2.2 Vision & Mission

Vision

In concordance with our Founder Mary Ward's core values of justice, freedom, sincerity, truth and joy, our goal is to form women alive to the needs of our world, with the knowledge which gives them power to act, motivated by the love which gives them purpose and wisdom in their action. We believe that:

- *every woman who is empowered to her best potential proclaims the Glory of God*
- *our institution must be a dynamic entity, to discern changing needs and re-adjust structures and activities in response.*
- *this demands high levels of awareness at the administrative level so that education becomes a continuous process involving staff, students and parents.*
- *the college is a place where social justice and equal access contribute to the quality of our nation.*
- *our institution prioritizes the practice of important human values and encourages the students to gain confidence and initiative even as they commit themselves to academic excellence.*

Mission Statement

We, in Higher Education, aim at forming informed and empowered women who respond to the needs of the universe with competence, conscience, compassion, and who persevere in 're-searching' for relevance and authenticity in a changing world.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



2.3 Institute Details

Loreto College, Kolkata	
7, Sir William Jones Sarani, Kolkata - 700071. West Bengal, India	
Year of Establishment	February 2, 1912
Year of UGC Recognition	June 28, 1999
UGC Recognition Number	2(f) and 12(B) SI No . F.10-29/91(CD-4)/ERO
Campus Area	15, 175 Sq. mts.
Total built up area (Four storied)	22,304 Sq. mts
Total planted area	3500 Sq. mts
Affiliation	University of Calcutta, in 1912
Programme Level	UG, B.Ed. PG
No. of Full time Teacher	41
No. of SACT	0
No. of Non-Teaching Staff including Casual Staff	25
Location type	Urban
No. of Departments	18
Total No. Books in Library as on 31.03.2024	Central Library – 54440 B Ed +PG – 15765
Playground	Shared with School
Type of Institution by Gender	Female
Shift	Day

2.4 Legal Compliances

Description	Registration Details
Consent to operate (CTO) from SPCB	Not available
Fire NOC	IND.K.7.23.0118
DG Set Permission	ESN-91252587



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GREEN & ENVIRONMENT AUDIT REPORT



2.5 Details of Infrastructure

Facility	No (s)
Classrooms	42
Laboratory	02
Library	02
Computer Centre	01
Seminar hall and auditorium	01
Sports room	01 (Common Room)
Gymnasium	01
Staff and student parking area	01
Canteen	01
Playground	01 (Shared with School)
Toilets	64
Medicinal plant garden	1 (In preparation at back lawn)
Water supply	01 (borewell)
Green Generator:	01
Roof water harvesting & Groundwater recharge unit:	Nil
Reuse of water unit	Nil
Animal House	Nil

2.6 Land use

There are three ways for Land use surveying, GPS points, field survey and Google earth data for Geo referencing. Our given Land use data is based on Field Survey.

Categories of Land Use	Area in Square-meter (Sqmt)
Ground Coverage /Built up area	7044 (46.42%)
Open Area including Plantation & Playground	4,175.0 (53.58%)
Total Land Area	15, 175 Sq. mts.

The College campus maintained a healthy environment with 54.58% open area, which is rarely available in a metro city like Kolkata.

2.7 Details of Students And Staff

Total Number of Students	808
Teaching Staff	57
Non-Teaching Staff	25
Others	18



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



2.8 Academic Departments and Growth Centers

Departments/ Faculties	Subjects	Type
Department of Humanities	English	BA Hons (with/without Research) MA
	Economics	BA Hons (with/without Research)
	History	BA Hons (with/without Research)
	Geography	BA Hons (with/without Research)
	Political Science	BA Hons (with/without Research)
	Psychology	BA Hons (with/without Research) MA
	Sociology	Elective subject
	Journalism & Mass Communication	Elective subject
	Hindi	Elective subject
	Bengali	Elective subject
	Film Studies	Self Financed
	Mathematic	Elective subject
	Statistics	Elective subject
	Education	B. Ed
Department of Science	Economics	BSc Hons (with/without Research)
	Geography	BSc Hons (with/without Research)
	Psychology	BSc Hons (with/without Research) MSc
	Mathematic	Elective subject
	Statistics	Elective subject



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



3.0 GREEN ZONE MANAGEMENT & BIODIVERSITY

3.1 General requirements: Environmental Policies /Environmental Objectives

Is there an environmental policy? Is it publicly communicated?	The environmental policy is draft stage, yet to finalise and available in publicly.
Is there a defined waste management policy in the institution?	Waste management policy is also being covered in Environmental Policy.
Are there any quantifiable environmental objectives decided by the institution?	No written evidence found at the time of the audit
Is the institution aware of all environmental Laws pertaining to different aspects of the institution's activities? Mention laws & compliance status.	No written evidence found at the time of the audit
Does the institution have any Recognition/ certification for the environment friendliness? Provide details.	No written evidence found at the time of the audit
Has the institution established any committee to decide, implement & monitor environmental initiatives?	The institution has established "W.E. Nature Society" for environmental & green initiatives. The club typically engages in a variety of activities, ranging from organizing clean-up drives, planting trees, waste management practices, air quality monitoring etc., to advocating eco-friendly practices in the community. The Nature Society also conducts awareness campaigns, workshops, and seminars to educate people about environmental issues, such as climate change, pollution, and deforestation.
Has the institution ever received any notice/warning from the pollution control board or any other concerned environmental authorities? If yes, then what corrective & preventive measures have been taken.	No, the institution has never received any document notice/warning from the pollution board or any other concerned environmental authorities.



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GREEN & ENVIRONMENT AUDIT REPORT



Related images / documents



Nature Society



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3.2 LIST OF BIRDS AND ANIMALS

S No.	Zoological Name	Family Name	Common Name	Migration Status
Birds				
1	Columba livia	Columbidae	Pigeon	Resident
2	Hierococcyx varius	Cuculidae	Common Hawk Cuckoos	Resident
3	Corvus Spendens	Corvidae	House crow	Resident
4	Pistaculla eupatria	Psittaciforms	Parrot	Resident
5	Gracupica Contra	Sturnidae	Mayna	Resident
6	Passer domesticus	Passeridae	Sparrow	Resident
7	Funumbulus palmarum	Sciuridae	Squirrel	Resident
8	Picus xanthopygeous	Picidae	Streak throated Woodpecker	Resident
9	Streptopelia Orientalis	Columbidae	Dove	Resident
Animals				
1	Hepesetes edwardsi	Herpestidae	Mongoose	--
2	Felies Catus	Felidae	Cat	--
3	Canis lupus familiaris	Canidae	Dog	--
LIST OF BUTTERFLIES FOUND IN AND AROUND THE CAMPUS				
S No	Zoological Name	Family Name	Common Name	
1	Eurema hecabe	Pleridae	Grass yellow hecabe	
2	Papillo polymnestor	Papillonidae	Blue mormon	
3	Papillio polytes	Papillonidae	Common mormon	
LIST OF REPTILES FOUND IN AND AROUND THE CAMPUS				
S No	Zoological Name	Family Name	Common Name	
1	Hemidactylus frenatus	Gekkonidae	House lizard	

3.4 Green Initiatives : Training

Has the institution provided waste management/handling training to concerned employees. Give details.	No record found at the time of audit.
Has the institution provided training forenergy saving?	No record found at the time of audit.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



Has the institution conducted training for solid waste management?	No record found at the time of audit.
Has the institution conducted awareness training for water saving?	No record found at the time of audit.
Observations: The College does not maintain any record regarding waste management/handling, energy saving, water saving training program.	

3.5 Environmental Practices

Waste recycling	No evidence found at the time of the audit
Waste Decomposition	Waste segregated and vermicompost plant is working.
Rainwater harvesting	No evidence found at the time of the audit
Environmentally Preferable Purchasing (EPP) or Green Purchasing	Although it is not documented, it was observed that the college uses LED lights and signages for energy conservation and water conservation
Distinct receptacles for trash and recycling	Separate Coloured Bins found in different locations of the college for distinct receptacles for trash. No recycling facility available
Low-emission transportation	Yes, the college encourages bicycles for staff & student travel.
Maximum use of clean energy	Yes, the college utilizes sunlight during the daytime.
Preference to electronics over the paper	Yes, the college has preferred using electronics for around 75% of its work over paper.
Campus garden	Yes, the college maintains Medicinal Garden and Vegetable Garden inside the campus.


Environmental Initiatives / Green Initiatives



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT




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PRESENTS

DIGITAL POSTER MAKING COMPETITION

WE NATURE SOCIETY

THEME : OUR POWER, OUR PLANET

CELEBRATING STUDENTS' WEEK, 2025

DATE OF SUBMISSION : JAN 05, 2025, MIDNIGHT

MORE INFO :
SNEHASREE BISWAS : +91 8910597453



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4.0 WATER EFFICIENCY & WATER MANAGEMENT

4.1 Water Pollution

a. Water Pollution Management (objective, practices / methods to minimize water pollution)

Source of water pollution within the premises.	No source of water pollution within the premises.
Measures taken to prevent / stop water wastage.	Signage are displayed to increase awareness
Does the institute harvest rainwater? Give details.	Not available
Is there any water recycling system? Give details.	Not available
Is there any effluent treatment plant in premises? No. of outlets for discharge of effluent?	Not applicable
What is the quality of effluent ?	Not applicable
Whether operating STP/ETP satisfactorily?	Not applicable
Whether provided flow meters on outlet & inlet of ETP/STP?	Not applicable
Whether provided separate electricity meter on ETP/STP?	Not applicable
Whether maintained Logbook for consumption of Electricity/ Chemicals/ Quantity of effluent?	Not available
Detail of land in case effluent is discharged for percolation/ irrigation purpose with justification for its 100% utilization.	Not applicable
Status of ZLD (Zero Liquid Discharge) as per CPCB	Not available
Locate the point of entry of water and point of exit of waste water in the organisation.	The point of the entry of the water is KMC supply inside the college and the point of exit of the waste water in the institution is the covered sewer system.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



b. Water Outlets : One sensor tap and others are push taps

S.No.	Question	Availability
1.	No. of water coolers/Gasser.	08
2.	No. of drinking water taps	15
3.	No. of water taps in laboratories.	01
4.	No. of toilet, urinals.	59
5.	No. of taps in canteen.	1
6.	Total No. of taps	165

c. Water Efficiency & Water Management

The assessment of water requirement comprises of cleaning, sanitation, laboratory, canteen, drinking, gardening, etc. The water is used in toilets, hostels, canteen, kitchen, gardens, etc. Main water resource is bulk supply by Kolkata Municipal Corporation (KMC) and bore water.

Water Consumption & Water Efficiency Use of water (indoor and outdoor water) & practices related to efficient /reduced use of water.)	
Sources of water supply	KMC water supply & Borewell water
Number of water storage tanks and their storage capacity. Total water storage capacity.	8 Overhead + 2 underground Total water storage capacity : 10,000 Ltr 1Lakh Ltr (Fire only)
Per day usage of water	Pump is operated through sensor. Hence actual use could not calculate. Data are taken with approximation
Water used in irrigation/plantation	3000 L / day
Water used in cleaning	10,000 L / day
Water used in canteen	5000 L / day
Laboratory use	--
Water used for drinking	3000 L / day
Water used in toilets	10, 000 L / day
Water stored in Fire tank	1,00,000 L

Description	Requirement*	Actual consumption
Water consumption per head /day	Without boarding facility: 75 literper head / day With boarding facility: 135 literper head / day	Without boarding facility: 60 literper head / day With boarding facility: 110 liter per head / day
*As per Central Ground Water Authority Guidelines water requirements (Ref. NBC 2016, BIS) of an educational institute for drinking and domestic use.		
Drinking Water Quality (As per IS 10500: 2012)	The institute conducted drinking water quality tests according to the IS 10500:2012 to confirm that the water is safe for drinking.	



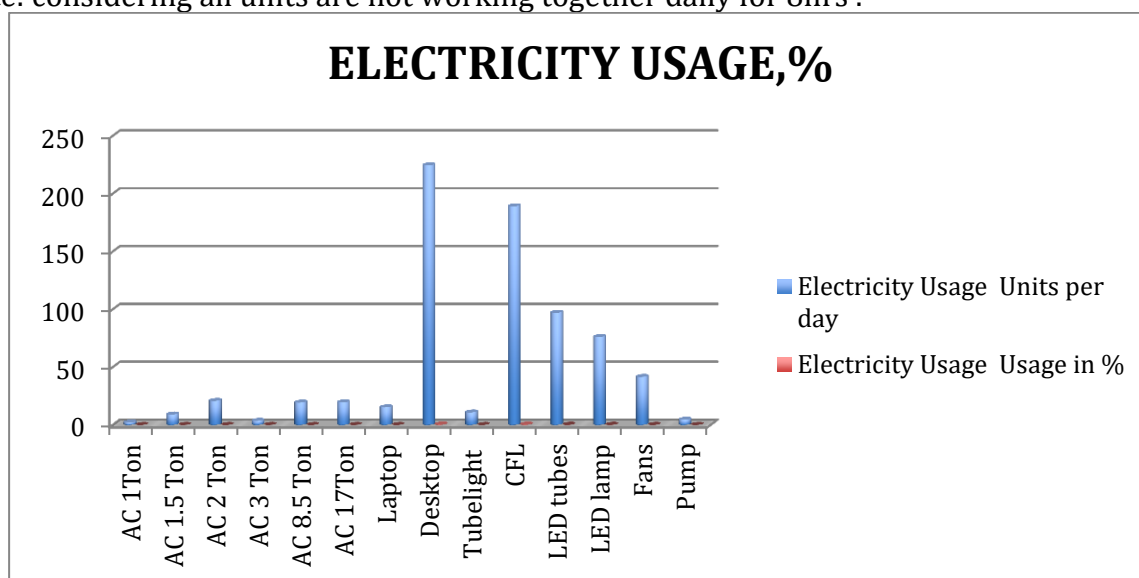
5.0 ENERGY EFFICIENCY & ENERGY MANAGEMENT

The indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances, and vehicles. Energy used is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. All florescent tube light and CFL lights are on the process of shifting to energy efficient Light Emitting Diode (LEDs). On enquiring we found that the college is planning for non-conventional energy source. The used energy for college was 18912 units, which amounts to **Rs. 1,47,146.00** in last 6 months.

Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation. It is therefore essential that any environmentally responsible institution examine its energy use practices. Energy cannot be seen, but we know it is there because we can see its effects in the forms of heat, light and power. The details of Energy consumption is given below:

Sl.No	Items	Qty	Usage
1	Air conditioning machine	18	308.97 unit/day
2	Computers: Desktop Laptop	92 38	561.2 units/day 18.24 units/day
3	Lights : LED Tubes LED Lamps Tubelights CFL bulbs	277 95 108 14	581.7 units/day 228 units/day 17.28 units/day 252 units/day
4	Fans	277	166 unit/day
5	Pump @ 5HP	2	8.95 units/day

Note: considering all units are not working together daily for 8hrs .





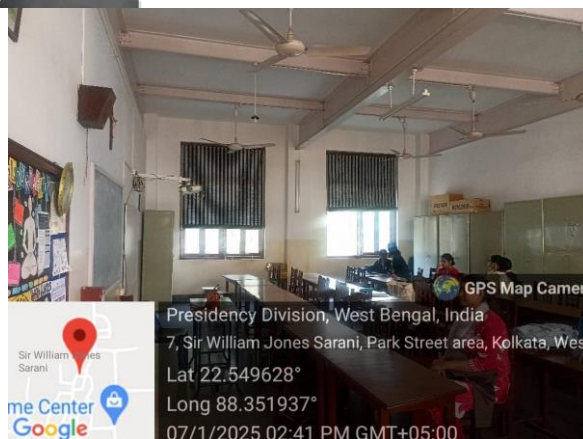
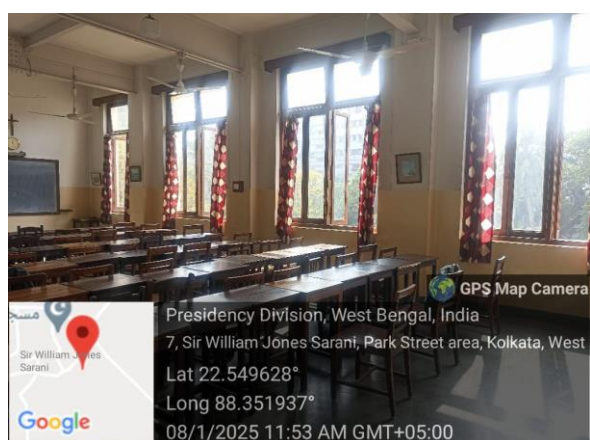
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GREEN & ENVIRONMENT AUDIT REPORT



Good Daylight Design and Ventilation:

- Most of the corridors receive good daylight due to the large windows.
- Corridors are wide with good ceiling height.
- Classrooms also have high ceiling with wide doors and large windows. Windows are kept open to receive sunlight.
- Curtains are provided on some of the windows to avoid glare. Due to their location inside the building some classrooms do not receive ample natural light and fresh air. These class rooms are provided with LED lights.



LIGHTING

Use of energy efficient lighting system (bulb & other products)	The college has installed LED lights as much as possible on its campus. A policy was taken so that all lights replaced with LED.
Use of natural day light	Yes, there is a use of natural daylight in every classroom and lab as far as possible.

Energy Sources

Electricity
Fuel oil
Solar

Consumption

3152Kw-Hr/month
Nil
(Net metering system)



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



ELECTRICITY CONSUMPTION

Month	Electricity Unit Consumption (Last 10 months)	Payment against in Rs
July'24	936+3116	9000+24880
August'24	3314	26840
September'24	877+4032	8500+32580
October'24	1213+1448	11360+4150
November'24	881+2124	8730+9350
December'24	1001	9780
Total (6 months)	18912	1,47,146
Average	3152	24,524

Energy Efficiency (consumption, objective, practices / methods to achieve energy efficiency objectives)	
Current energy uses.	
Short-term energy efficiency goals & roadmap to achieve those goals.	<ul style="list-style-type: none"> To replace all electric appliances with energy efficient one. To make all staff and students aware to save energy in each and every step of day to day life. Installation of complete solar light system in the campus. Installation of automatic switches with sensors. To use complete RO system for filtration. Complete air ventilation and day lighting facilities.
Long-term energy efficiency goals & roadmap to achieve those goals.	<ul style="list-style-type: none"> Installation of renewable energy sources for cooking, lighting and other purpose. To install LCD projector, AC, machines, stabilizers, UPS and other appliances with 5 star rating. To make our infrastructure more energy efficient and eco-friendly.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



6.0 AIR POLLUTION & CARBON FOOTPRINT

6.1 Air Pollution Management

(objective, practices / methods to minimize air pollution)	
Identify the major sources of air pollution within the campus & the actions taken to either eliminate or minimize the pollution.	The major source of the air pollution was found to be the passing vehicles. As the college is not situated on the main road, scope of air pollution is less.
HVAC maintenance and calibration records, testing and balancing reports. When was the duct system tested for leakage last?	not applicable as the college doesn't have any HVAC
DG set stack emission test as per CPCB norms.	GREEN DG set is available.

In-Door Air Quality (Checks, methods, tests & practices to ensure indoor air quality)	
Does the institution test indoor air quality? Details of last indoor air quality test done.	There were no records to verify that the college conducted the test to check indoor air quality test. An outdoor air quality check of the campus area regularly, a monitoring unit is installed at the Gate.
Is there a proper system of exhaust of indoor air?	Yes, the classroom has open windows and the door facilities.
Supplies: <ul style="list-style-type: none"> Are 'Material Safety Data Sheets (MSDS)' available for different types of supplies (Ex: solvent, wax, adhesives, paints, flammables etc.)? Are storage areas separate & ventilated properly? Are less or nonhazardous materials used when possible? Does the institution have a defined system to evaluate & find out safer alternatives? Is there a defined procedure available for disposal of used substances? 	<ul style="list-style-type: none"> Not applicable, chemical use are nominal, only cleaning agents Yes Yes, wherever possible non hazardous materials are used. Yes, alternate materials are used. MOU with Redvirus recyclable Pvt. Ltd for waste disposal. All reports are available.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



6.2 General Cleanliness:

<ul style="list-style-type: none"> Are rooms dusted and vacuumed thoroughly and regularly? What are related checks & controls? Does the institution ensure to use of environment-friendly, non-scented cleaning products? 	<ul style="list-style-type: none"> The rooms are dusted and vacuumed thoroughly and regularly. There are no related checks and control. The institution does not use the environmental – friendly, and non-scented cleaning product.
Pest control methods & products used (check & control).	Pest Control facility is available for Libraries, offices, staff rooms etc
Does the institution ensure use of low emitting paints, coatings, furniture etc.? What are related checks & controls?	No written evidence found at the time of the audit
Is there any sign of mold infestation?	During the time of the audit, there was no sign of mold infestation in the premises of the college.
Does the institution eliminate any bird or animal nests or droppings near outdoor air intakes?	No, the institution has never eliminated any bird or animal nest or dropping near outdoor air intake.
What are the methods adopted by the institution to control/prevent dust within the buildings?	The institution has the classrooms that has the large windows that are kept closed, when not in use and also regular dusting and mopping is carried out.

6.3 Noise Pollution

Noise Pollution Management (objective, practices / methods to minimize noise pollution)
During the audit, sound levels were measured at various locations, ranging from the outside playground to the classroom corridor. The sound levels were found to be 42.1 dB, 40.7 dB, 39.1 dB, 41.1 dB, and 42.4 dB, resulting in an average sound level of 41.08 dB. This average value is well within the limit and does not exceed the standard.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



The sound attributed to fan movement was identified as the primary reason for the elevated sound levels and chaos made by the students during lunch time. Continuous operation of fans can contribute significantly to the overall ambient noise in indoor spaces. Additionally, construction activities can further elevate sound levels, impacting the overall acoustic environment of the premises.

It is important to address these elevated sound levels to ensure a conducive and healthy environment for occupants. Strategies such as using sound-absorbing materials, installing sound barriers, or modifying ventilation systems can help mitigate these noise levels. By implementing these measures, the institution can create a more comfortable and productive environment for individuals using the facilities.

Noise level in dB(A)	Standard Level*	Actual Level
Day Time	50	41.08 (Lunch Time)
Night Time	40	--

*As per The Noise Pollution (Regulation and Control) Rules, 2000; rule 3 and 4(1) Day time from 6:00am to 10:00pm Nighttime from 10:00pm to 6:00am



At Gate : On the Road side



7.0 WASTE MANAGEMENT

7.1 Waste Identification

Type of waste - Plastic waste

Approximate annual quantity- 56 kg

Source of waste – Packaging materials, water bottle, disposable utensils, wrappers, damaged chairs & tanks

Handling methods: Given to the authorized vendor for proper disposal

Measures to reduce the waste quantity- Promote the use of utensils made of paper & leaves.

Type of waste – Paper waste

Approximate annual quantity- 100 Kg

Source of waste – News Paper, Internal Assessment & official papers

Handling methods-Given to the authorized vendor for proper disposal/ recycling for recycling

Measures to reduce the waste quantity- More use of Digital methods

Type of waste – Electronic waste (E-waste)

Approximate annual quantity- 22 Kg.

Source of waste – Damaged part of PCs, laptops, printer etc.

Handling methods- Given to the authorized vendor for proper disposal or buy back

Measures to reduce the waste quantity- Good maintenance & repairs

Type of waste – Hazardous waste

Approximate annual quantity- Nil

Source of waste – NA

Handling methods- NA

Measures to reduce the waste quantity- NA

Type of waste – Garden waste

Approximate annual quantity- 2-3 kg/month



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



Source of waste – Trees, Shrubs & Herbs

Handling methods- Collected and Deposited in a Pit for vermicompost for sale

Measures to reduce the waste quantity- Collected

Type of waste – Food waste Approximate annual quantity- 3-4kg/month

Source of waste – During function & gatherings leftover food

Handling methods- Given to dogs, etc

Measures to reduce the waste quantity- Prepare the food according to requirements

7.2 Composting Plant

How much organic waste is generated in a day? What type of organic waste is generated?	Organic waste generated amounts to 5 kg per month. This waste primarily comprises leaves, branches and debris.
Details & capacity of compost plan installed in the organisation.	Approximate 10 kg/month vermicompost produced
Details of composting method used	Vermicompost by decomposition of garden wastes
Compost facility maintenance & inspection plan	Vermicompost tank
Observations: <ul style="list-style-type: none"> It is recommended to adopt a proper segregation of wastes, as few plastics food wrappers found inside the composting tank. 	



5, Middleton St, Kankaria Estates, Park Street area, Kolkata, West Bengal 700071, India
 Latitude 22.5489974° Longitude 88.35206457°
 Local 03:25:57 PM Altitude 12 meters
 GMT 09:55:57 AM Friday, 28.03.2025



Kolkata, West Bengal, India
 5, Middleton St, Kankaria Estates, Park Street Area, Kolkata, West Bengal 700071, India
 Lat 22.548977° Long 88.352134°
 24/03/25 09:50 AM GMT +05:30

7.3 Rainwater Harvesting

Provide details of the rainwater harvesting facility.	Not available. It is recommended the institution should install rainwater harvesting to minimize water waste.
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Rainwater harvesting system maintenance plan	--
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8.0 POST AUDIT STAGE

8.1 Consolidated Audit Findings

We hope that students and stakeholders have already developed a greater appreciation and understanding of the impact of their actions on the environment. They have successfully been able to determine the impacts on the environment through the various auditing exercises. Participating in this green auditing procedure have helped them gain knowledge about the need of sustainability of the college campus. It will create awareness on the use of the Earth's resources in their home, college, local community and beyond.

8.2 Summary of Green Auditing and Environmental Auditing

- The environmental awareness initiatives need to be more improved
- There should be adequate **Plastic free** signages in the College campus pasted in prominent places in the college campus.
- Fire extinguishers operation training and awareness are inadequate.
- No Emergency Exit signage available a places of gathering have been noticed.
- There is an environmental awareness cell in the form of Nature Club at the College which works towards maintaining sustainable environment for community development.
- Green zones noticed in the College premises
- Medicinal plants were evident, they need to be labeled incorporating QR code.
- Uses of signages are not adequate to reduce over exploitation of natural resources. There is room for improvement.
- Programs on green initiatives are conducted throughout the year and provisions are there to increase them
- Initiatives are inadequate to maintain carbon footprint free and wastes free zones.
- Process to introduce rainwater harvesting system, re-use of water system can be considered.

Water Audit

- ❖ There is no water consumption monitoring system in the College campus.
- ❖ The college does not have wastewater treatment system for wastewater generated from laboratories, canteen, kitchen, washrooms and office rooms.
- ❖ The wastewater from canteen and kitchens is not suitably channelized in re-use for gardening.
- ❖ The College has to take action to strengthen rainwater harvesting.
- ❖ Display boards against misuse of water use are available.

Energy Audit

- The communication process for awareness in relation to energy conservation is found inadequate.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



- Assessment of electrical load calculation is yet to be done by the College.
- Monthly use of electricity in the college can be reduced by developing more awareness on energy conservation. The college has taken a step forward by integrating solar powered electricity with the CESC power grid (net metering system with CESC, the power supplier) for energy conservation.
- All lights, fans and ACs are power saving devices. Mostly LEDs are used for lighting arrangements. Tube lights and CFL are in use. College has taken a policy that change of light will be with LED only.
- Most of the floors of the College have better access to sunlight so electricity can be used less.

Waste Audit

- Solid waste bins are available in the college in different locations need with label.
- The college is in communication with the local body for regular collection of solid waste from the campus.
- Implementation of sustainable projects to attain set environmental goals is not in place.
- Proper composting system is lacking.
- For E-waste management, College is collecting e-wastes and disposed to the authorised vendor. A Register is also started to ensure proper collection of e-waste together.
- Teachers and students were also encouraged to collect their personal e-waste and dispose in the same bin.

Green Campus Audit

- College has not yet taken any initiative for carbon accounting.
- Encourage students for plantation and labeling of plants.
- Minimum % of the energy is used from Non-conventional power.

Implemented Air Quality management		
Sl No	Indicator	Weightage
1	Carbon & Smoke free	H
2	Exhaust fans & Ventilation	M
3	Emission of GHGs	M
4	Indoor Plants	H

H - management policy level above 60%

M - management policy level 40%-60%

L - management policy level below 40%



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



Major Audit Observations		
Sl. No	Sectors/Indicators	Weightage
1	Water efficiency Audit	L
2	Energy efficiency Audit	M
3	Air Quality & Carbon foot print Audit	M
4	Waste Audit	H
5	Green & Biodiversity Audit	H

H - management policy level above 25%

M - management policy level 15%-25%

L - management policy level below 15%

Conclusion & Recommendations

Green audit assists in the process of testing performance in the environmental arena and is fast becoming an indispensable aid to decision making in a college. The green audit report assists in the process of attaining an ecofriendly approach to the sustainable development of the college. Hope that the observations provided in the Green Audit report will serve as a guide for educating the college community on the existing environment related practices and resource usage at the college as well as spawn new activities and innovative practices. A few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the promising future in context of Green Campus and thus sustainable environment and community development. Most of the trees in the campus labeled with their scientific names and common names. A medicinal garden is maintained; it is always recommended that more medicinal plants will be helpful. It has been shown frequently that the practical suggestions, alternatives, and observations that have resulted from audits have added positive value to the audited organisation. Moreover these standpoints often help staff who have been too close to problems or methods, to see the value of alternative approaches. This report is a powerful and valuable communication tool to use when working with various stakeholders, who need to be convinced to run things are running smoothly and place systems and procedures, coping with natural changes and modifications that occur. Emergency Exit signages were found in place. Fire Extinguisher at strategic location with proper signage are installed.

Common Recommendations

- ✓ Adhere to the environmental policy decided for the college
- ✓ Establish a purchase policy for procurement of environment friendly materials
- ✓ Conduct more seminars and group discussions on environment education
- ✓ Students and staff can be encouraged to solve local environment problems
- ✓ To impart more periodic training for use of Fire Extinguisher in emergency situation.



LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



- ✓ Quantifiable environment objectives to be established
- ✓ Environment policy to be put into place
- ✓ Waste management policy to be put in place

Criteria wise Recommendations

Water

- College is using Pump with sensor. Consumption pattern of water not available as pump running status not established. Water meters or any means of determining water consumption for Toilets, canteen drinking water cleaning etc to be established
- Drip irrigation for gardens and vegetable cultivation can be initiated.
- Establish re-use of water management methods.
- Use posters /signage for water conservation
- Awareness programs on water conservation to be conducted.
- Rain water harvesting need to be established.

Energy

- ✓ Conduct more save energy awareness programs for students and staff.
- ✓ Observe a power saving day every quarter.
- ✓ Automatic power switch off systems may be introduced.

Air Quality & Carbon Foot Print

- ❖ Air quality to be checked while class is in progress.
- ❖ Encourage students and staff to use metro rails, as metro station is nearby.
- ❖ Discourage usage of oil consuming two wheelers amongst students for commuting.

Waste

- ❖ E-waste Register to maintain.
- ❖ Practice of waste segregation to be improved.
- ❖ Establish a plastic free campus.
- ❖ Avoid paper plates and cups for all functions in the College, where wastage of paper will be more.

Green Campus

- ✓ Increase more indoor plants. Grow potted plants at corridors, classrooms and Laboratories.
- ✓ Create automatic drip irrigation system during summer holidays.
- ✓ Not just celebrating environment day but making it a daily habit.
- ✓ Providing funds to Nature Club for making campus more green
- ✓ Encouraging students not just through words, but through action for making the campus green
- ✓ Conducting green initiative competitions among departments for making students more interested in making the campus green.

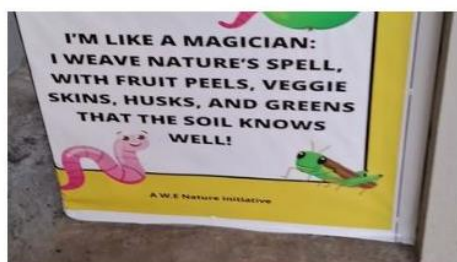


LORETO COLLEGE, KOLKATA

GREEN & ENVIRONMENT AUDIT REPORT



Few Pictures of different activities



--End of Report -