Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

DVV CLARIFICATIONS

Sr. No.	Particular
1	Document includes the institution's environmental and energy usage policy, action taken reports and achievements related to green campus initiatives, audit reports, a certificate from an external accredited auditing agency (preferably a government department of the affiliating university), geo-tagged photos with captions and dates, and any other supporting documents related to environmental initiatives beyond the campus.

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

Institution's environmental and energy usage policy

Sr. No.	Particular
1.	Green Policy
2.	Energy Usage and Conservation Policy
3.	Water Usage and Conservation Policy

Laxmi Charitable Trust's
Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce
Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

GREEN POLICY

While designing and building the college infrastructure; environment consciousness and sustainability is taken into consideration for creating a positive change along with expansion in academics.

The focus of the policy where college strives to practise are:

- Clean & Green Campus Initiatives
- Landscaping Initiatives
- Open Air Ventilation

1] College premises (classrooms, labs, library, staffroom, offices, restrooms and open areas) are cleaned everyday. .

2] A clean and hygienic learning environment is maintained on the college campus.

3] College maintains greenery by regular gardening and planting activities thereby encourages pollution free campus

4] Students are encouraged to do environmental promotional activities beyond the campus.

5] The college restricts usage of single use disposal plastics. Students and staff encourage making paper bags, carrying cloth bags, etc. to achieve this.

6] As paper is a by-product of plants, the college strives to conserve the use of paper by utilising discarded papers that are printed on one side.

7] The old answer sheets of students are sold to vendors for recycling responsibily.

8] Wet, dry and e-waste are disposed off in an eco-friendly manner. Institution organises programs, workshops and seminars to increase the awareness about the disposal of e-waste in an eco-friendly way..

9] All stakeholders must utilise water in a responsible way.

I/C PRINCIPAL

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST) MUMBAI-69.

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

ENERGY USAGE AND CONSERVATION POLICY

College initiates a practice that lowers the college's energy consumption and reduces expenditures on energy.

1] Use of natural light is maintained by having proper ventilation in all classrooms and laboratories.

2] Conventional lighting systems are replaced with LED bulbs and tubelights.

3] Energy audit is conducted to identify the use, improvement and wastage of energy.

4] "SAVE ENERGY- SWITCH OFF WHEN NOT IN USE" stickers are displayed on switch boards as an initiative to conserve electricity.

5] Energy consumption and wastage is reduced with full participation of staff and students by maximising cross ventilation in the campus area.

6] Main power supply of the labs are shut down at the end of every working day as a safety measure.

7] All powered office equipment are turned off or placed on standby when not in use unless it is detrimental to the operation of the equipment to do so.

8] Personal safety is not compromised by taking hasty energy reduction decisions.

I/C PRINCIPAL

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE ANDHERI (EAST) MUMBAI-69.

Laxmi Charitable Trust's
Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce
Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

WATER USAGE AND CONSERVATION POLICY

The focus of the policy where college strives to practise are:

- Infrastructure and Maintenance
- Plantation and Landscaping
- Awareness Activities

1] Regularly the plumbing fixtures and pipelines are repaired to minimise leaks and wastage of water.

2] Through overhead tanks the water is uniformly distributed within the college campus.

3] BMC water is conserved by using borewell water for cleaning, gardening and in toilet flush.

4] All stakeholders are instructed to utilise water in a responsible way.

5] Sprinkler system is used to water the ground and perforated pipes to water the plants to avoid the wastage of water.

6] Posters like "Save Water" are displayed in washrooms to educate stakeholders for conservation of water.

I/C PRINCIPAL

SHETH L.U.J. & SIR M.V. COLLEGE OF ARTS, SCIENCE & COMMERCE
ANDHERI (EAST) MUMBAI-69.

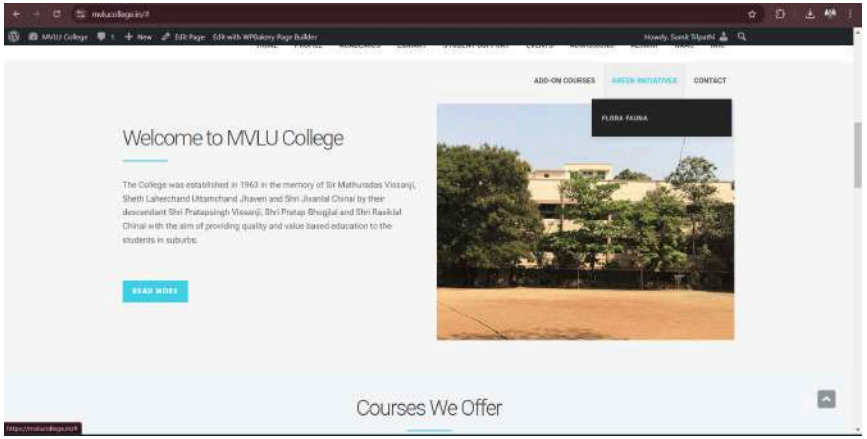
Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

Action Taken Report and Achievements related to Green Campus Initiative

Sr. No.	Suggestion by Auditor	Action Taken	Impact / Achievements
1.	Multi-colored waste management bins	The color-coded labels for all dustbins have been applied in the college.	Students become more aware of and adhere to proper waste disposal practices.  
2.	To undertake	Camphor potpourris has been placed in all	Camphor's strong scent effectively masked unpleasant odor, creating a more comfortable and safe environment.

	camphor tablets potpourri in the washrooms for hygiene	washrooms to neutralize odours.	Received letter of appreciation from the auditor.  Letter of Appreciation
3.	Provisions for replacement with energy- efficient appliances or new air conditioners that consume less power.	All newly purchased air conditioners are energy efficient which consume less power.	It ensured energy efficiency and contributed to the college's commitment to sustainability towards a green environment.
4.	Hanging wire fixation	All hanging wires on campus have been inspected and properly fixed.	It eliminated potential hazards and ensured safety.
5.	Require an immediate civil and structural up gradation.	Renovation work done with immediate effect.	Renovation enhanced the building's structural strength, making it more safe, and comfortable for students, staff and all stakeholders.

6.	Implementing the activity of printing and putting up awareness posters related to Waste, Water, Save Environment, Plastic awareness.	The Institute has printed awareness posters related to Waste Management, Save Water, Save Environment and Plastic awareness and put them at appropriate locations in the premises.	These posters encourage students, staff, and visitors to adopt eco-friendly practices, fostering a culture of environmental responsibility. 
7.	Tanks can be documented with mention of size, capacity usage, Institute name, and colour coding.	Both Borewell Tanks and BMC water tanks are labeled with College logo capacity.	This helped everyone to identify the water tank with its purpose and it's capacity.  
8	I/C Principal suggested that the documented	Under the guidance of I/C Principal Dr. Mahindra	Students successfully digitized and developed the website 'MVLU College Plant Encyclopedia' which is integrated with the college

	flora and fauna of the college should be made available for all the stakeholders.	Kanojia and Mrs. Sneha Gokrnkar, IT and CS students were appointed to digitize the data and develop mobile friendly website to give detailed information of the flora and fauna of the college.	website. Students engaged in this project learnt the website development methodology, excelled in software techniques utilized in the process. All stakeholders are able to view the salient information of each flora and fauna of the college on the website. https://eloquent-kitsune-4ece99.netlify.app/ 

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

Audit Reports

Sr. No.	Particular
1.	Environment Audit Report
2.	Green Audit Report
3.	Energy Audit Report

Environment Audit

Study Period (Two Years) 2022 – 2023 & 2023 - 2024

Sustainability study

AUDIT REPORT

Studied for

Laxmi Charitable Trust's

Sheth L.U.J. and Sir M.V. College

Dr.S.Radhakrishnan Marg, Andheri (East),

Mumbai - 400069, Maharashtra, India

Studied in the capacity of

Accredited and Certified GBP

Studied by

Website: https://thegreenviosolutions.co.in/

Email: greenviosolutions@gmail.com

Disclaimer

The Audit Team has prepared this report for the **Laxmi Charitable Trust's Sheth L.U.J. and Sir M.V. College** located *Dr.S.Radhakrishnan Marg, Andheri (East) Mumbai - 400069, Maharashtra, India* based on input data submitted by the Institute analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole depending on the decision taken by the internal team. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a period of time and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

Ar. Nahida Abdulla
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Developing Healthy and Sustainable Environments
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Acknowledgement

The Audit Assessment Team extends its appreciation to the **Laxmi Charitable Trust's Sheth L.U.J. and Sir M.V. College, Maharashtra** for assigning this important work of Environment Audit. We appreciate the cooperation extended to our team during the entire process.

Our special thanks are extended are due to everyone from the Management.

Our heartfelt thanks are extended to the Chairperson of the entire process **Dr. Mahendra Kanojia** (Principal) for the valuable inputs.

We are also thankful to Institute's Task force who have played a major role in data collection.

- Teaching staff member – ***Mrs. Sneha Gokarnkar, Dr. Priyanka Vartak, Mrs. Shweta Khopde, Ms. Merina Gheevarghese, Ms. Charmy Shah and Mrs. Manisha Sayani,*** *IQAC Coordinator*
- Non-teaching staff member – ***Mr. Kunal Gharat, Mr. Sankesh Karvanje***
- Admin staff member – ***Mr. Shashikant Gawade, Ms. Namrata Chiplunkar, Mr. Kiran Sawant, Mr. Akshay Salvi***

Sustainable Academe
Brand of Greenvio Solutions, Palghar District, Maharashtra- 401208

Contents

1. Introduction

1.1 About statements of the Institute

1.1.1 Aim

The Institute proposes "Excellence Compassion Integrity Responsibility Accountability Gender Equality Diversity Technological Advancement"

1.1.2 Mission

The Institute adheres and focuses

- *To provide exceptional progressive education to undergraduate students. To emphasize on students' intellectual, moral, spiritual, and emotional growth*
- *To aim at students' overall personality development through educational, co-curricular, and extracurricular activities*
- *To educate students to become individuals devoted to virtuous standards, ethics, human values, and full participation as leaders in society*
- *To Contribute the advancement of innovative perspectives in the field of knowledge throughout the quest of gender-based and other types of social justice*
- *To encourage research and innovation for the enhancement of life and the progress of the nation*

1.2 Assessment of the Institute

1.2.1 Affiliations

The course provided by the College is affiliated to the **University of Mumbai**, a Public State University in Mumbai, one of the largest university systems in the world.

1.2.2 Certification

The **All India Survey on Higher Education (AISHE)** code is C-33577

1.2.3 Recognitions

The College has been recognized under section *2 (f) of the UGC Act, 1956* by University Grants Commission, New Delhi.

2. Overview

2.1 Summarised Populace analysis for 2023-2024

2.1.1 Students data

The data (shared by the Institute) shows there were **518 students.**

2.1.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	04	01	**05**
2	Teaching staff	02	12	**14**
3	Non-Teaching staff	05	01	**06**
Total Staff Members		**11**	**14**	**25**

Table 1: Staff data of the Institution for 2023-2024

The staff data shows the Institute premises had **25 Staff Members.**

2.2 Summarised Populace analysis for 2022-2023

2.2.1 Students data

The data (shared by the Institute) shows there were **542 students.**

2.2.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	04	01	**05**
2	Teaching staff	02	12	**14**
3	Non-Teaching staff	06	01	**07**
Total Staff Members		**12**	**14**	**26**

Table 2: Staff data of the Institution for 2022-2023

The staff data shows the Institute premises had **26 Staff Members.**

3. Research

3.1 Total site and building spread area

The **site area is 2.57 acres** and the **Built-up area of the Institute is 13,998.74 sq. ft.**

3.2 Establishment

The Institute was established in **1963**.

3.3 Operation and Maintenance of the premises

The interview session was held with the staff regarding the operation and working hours. The Institution is open for 290 working days with the timings being 07:30 hours to 15:30 hours.

3.4 About the Audit

It is a systematic study of the aspects which make the Institution sustainable and healthy premises for its inhabitants.

4. Evidence

Plate 1: Discussion with the team

Plate 2: Investigation of the system (Laboratory and the Library)

Plate 3: Group photo with the team

5. Documentation

5.1 Open Spaces

The open ground is shared by both Institutes in the campus, it is well maintained wit huges varities of plantations.

Plate 4: Open ground in the premises

Plate 5: Seating provided for the stakeholders

However certain landscape beautification of the site can be undertaken, especially the backyard areas.

5.2 Flora audit

The common flora of the sister Institute and said premises as shared by the Internal team is documented below, the varities and types are common to both sister Institutes.

S. No.	Plant name	Type	Nos.	Planted by
1	*Areca Palm*	Plant	1	Gardener
2	*Phyllanthus Emblica*	Plant	1	Naturally
3	*Canna Musaefoliarubra*	Plant	2	Gardener
4	*Manilkara Subsericea*	Plant	1	Naturally
5	*Dracaena Sp*	Plant	1	Naturally
6	*Singhoda Tanda*	Tree	1	Naturally
7	*Canna Musaefoliarubra*	Plant	U.I.	Gardener
8	*Euphorbia Tithymaloides*	Shrub	3	Gardener
9	*Scheffelera*	Plant	1	Gardener
10	*Mimusops Balata*	Plant	1	Naturally
11	*Crinum Asiaticum*	Plant	1	Gardener
12	*Pedilanthus Tithymaloides*	Plant	1	Gardener
13	*Psychotrian Viridis*	Plant	1	Gardener
14	*Euphorbia Tithymaloides*	Shrub	U.I.	Gardener
15	*Fraxinus Americana*	Tree	1	Naturally
16	*Saraca Asoca*	Tree	6	Naturally
17	*Euphorbia Tithymaloides*	Shrub	U.I.	Gardener
18	*Mitragyna Speciosa*	Tree	2	Gardener
19	*Mitragyna Speciosa*	Tree	U.I.	Gardener
20	*Pithecellobium Dulce*	Plant	1	Naturally
21	*Cordyline Fruticosa*	Plant	5	Gardener
22	*Pritchardia Forbasiana*	Plant	1	Naturally
23	*Strobilanthes Crispa*	Plant	1	Naturally
24	*Manihot Esculant*	Plant	1	Naturally
25	*Aesculus Indica*	Plant	1	Naturally
26	*Chlorophytum Orchidastrum*	Plant	1	Naturally
27	*Strobilanthes Crispa*	Plant	1	Naturally
28	*Alstonia Macrophylla*	Plant	1	Naturally

29	*Prunus Amygdalus, Syn. Prunus Dulcis*	Tree	1	Naturally
30	*Acacia Mangium*	Tree	1	Naturally
31	*Asimina*	Plant	1	Gardener
32	*Monoon Longifolium*	Plant	1	Gardener
33	*Cordyline Fruticosa*	Plant	U.I.	Gardener
34	*Albizia Lebbeck (L.)Benth.*	Plant	2	Gardener
35	*Cordyline Fruticosa*	Plant	U.I.	Gardener
36	*Peltophorum Africanum*	Tree	1	Naturally
37	*Cordyline Fruticosa*	Plant	U.I.	Gardener
38	*Neolamarckia Cadamba*	Plant	1	Naturally
39	*Euphorbia Tirucalli*	Plant	1	Naturally
40	*Cordia Dichotoma*	Plant	1	Naturally
41	*Graptophyllum Pictum*	Plant	1	Naturally
42	*Betula Nigra*	Plant	1	Naturally
43	*Neem*	Tree	2	Staff
44	*Pritchardia Remota*	Plant	1	Naturally
45	*Japanese Laurel*	Plant	1	Gardener
46	*Neem*	Tree	U.I.	Staff
47	*Tamarindus Indica*	Plant	1	Naturally
48	*Cannonball Tree*	Plant	1	Gardener
49	*Pink Kapok Tree*	Tree	1	Gardener
50	*Eugenia Bojeri*	Plant	1	Naturally
51	*Terminalia Catappa*	Plant	4	Gardener
52	*Terminalia Catappa*	Plant	U.I.	Gardener
53	*Crinum Asiaticum*	Plant	1	Naturally
54	*Syzygium Aqueum*	Plant	1	Naturally
55	*Ficus Virens*	Plant	1	Naturally
56	*Terminalia Catappa*	Plant	U.I.	Gardener
57	*Murraya Paniculata*	Plant	1	Naturally
58	*Barringtonia*	Plant	1	Naturally
59	*Albizia Lebbeck*	Plant	U.I.	Gardener
60	*Common Ivy*	Plant	1	Staff

61	*Palm Tree*	Tree	2	Gardener
62	*Plum Tree*	Tree	1	Gardener
63	*Palm Tree*	Tree	U.I.	Gardener
64	*Indonesian Bay Leaf*	Plant	1	Gardener
65	*Dieffenbachia Seguine*	Plant	1	Naturally
66	*Prick Plant*	Plant	1	Naturally
67	*Ashok Plant*	Tree	U.I.	Gardener
68	*Dracaena Baby Doll*	Plant	1	Gardener
69	*Mangifera Indica*	Plant	3	Staff
70	*Caryota Mitis*	Plant	1	Naturally
71	*Mangifera Indica*	Plant	U.I.	Staff
72	*Mangifera Indica*	Plant	U.I.	Staff
73	*Terminalia Catappa*	Plant	U.I.	Gardener
74	*Shorea Robusta*	Plant	1	Naturally
75	*Magnolia Polyhypsophylla*	Plant	1	Naturally
76	*Cordyline Fruticosa*	Plant	U.I.	Gardener
77	*Cordyline Fruticosa*	Plant	U.I.	Gardener
78	*Ixora/West Indian Jasmine*	Plant	1	Naturally
79	*Dracaena*	Plant	1	Naturally
80	*Coconut Tree*	Tree	1	Staff
81	*Graptophyllum Pictum*	Plant	1	Gardener
82	*Pseuderanthemum*	Plant	1	Naturally
83	*Areca Concinna*	Plant	1	Naturally
84	*Tiger Orchid (Grammatophyllum Speciosum)*	Plant	1	Gardener
85	*Dracaena Angustifolia*	Plant	1	Naturally
86	*Catharanthus Roseus*	Plant	1	Naturally
87	*Acalypha Indica*	Plant	1	Naturally
88	*Ficus Microcarpa*	Plant	1	Naturally
89	*Ashoka Tree*	Plant	U.I.	Naturally
90	*Euphorbia Lactea*	Plant	2	Gardener
91	*Erythrina Subumbrans*	Plant	1	Naturally
92	*Ocotea Odorifera*	Plant	1	Naturally

93	*Calophyllum Inophyllum*	Plant	1	Naturally
94	*Argyrodendron Peralatum*	Tree	1	Gardener
95	*Euphorbia Lactea*	Plant	U.I.	Gardener
96	*Senna Surattensis*	Tree	1	Naturally
97	*Buchanania*	Plant	1	Naturally
98	*Berchemia Scandens*	Plant	1	Naturally
99	*Acacia Catechu*	Plant	1	Naturally
100	*Libidibia Ferrea, Dubbeld-Saamgestelde Blaar, Pretoria*	Tree	2	Gardener
101	*Taxus Wallichiana Zucc.*	Plant	1	Naturally
102	*Capparis Zeylanica*	Shrub	1	Staff
103	*Pterospermum*	Plant	1	Naturally
104	*Libidibia Ferrea, Dubbeld-Saamgestelde Blaar, Pretoria*	Tree	U.I.	Gardener
105	*Pseuderanthemum Maculatum*	Plant	1	Gardener
106	*Ficus Platyphylla*	Tree	1	Naturally
107	*Vonenina*	herb/shrub	2	Gardener
108	*Mango Tree Branch At Starting Stage*	Tree	6	Naturally
109	*Prioria Pinnata*	Plant	1	Gardener
110	*Cocos Capitata*	Plant	1	Naturally
111	*Cordyline Fruticos*	Plant	11	Gardener
112	*Dracaena*	Plant	12	Naturally
113	*Jamun Tree*	Tree	2	Naturally
114	*Piper Mikanianum*	Plant	1	Gardener
115	*Pseuderanthemum Latifolium*	Plant	3	Naturally
116	*Dracaena Fragrans*	Plant	2	Gardener
117	*Askhok Tree*	Tree	11	Gardener
118	*Colomo*	Plant	1	Gardener
119	*Mambog Na Tinanom*	Tree	1	Naturally
120	*Archontophoenix Alexandrae*	Plant	3	Gardener
121	*Cleistocalyx Operculatus*	Plant	1	Naturally
122	*Polyscias Fruticosa*	Plant	3	Naturally
123	*Phytolacca Dioica*	Tree	1	Naturally

124	*Archontophoenix Alexandrae*	Plant	3	Gardener
125	*European Ash*	Tree	1	Naturally
126	*Archontophoenix Alexandrae*	Plant	3	Gardener
127	*Chinese Ixora*	Shrub	1	Gardener
128	*Pritchardia Remota*	Plant	2	Gardener
129	*Bigtooth Aspen*	Plant	1	Naturally
130	*Longevity Spinach*	Plant	2	Gardener
131	*Polyalthia Longifolia*	Tree	12	Naturally
132	*Graptophyllum Pictum*	Plant	4	Gardener
133	*Senna Auriculata*	Tree	1	Naturally
134	*Gymneme Sylvestre*	Shrub	1	Gardener
135	*Mangifera Indica*	Tree	19	Naturally
136	*Potato Foliage*	Plant	1	Gardener
137	*Adenanthera Pavonina*	Tree	1	Naturally
138	*Arrowhead Plant*	Plant	6	Gardener
139	*Ravenea*	Plant	3	Naturally
140	*Longevity Spinach*	Plant	2	Gardener
141	*Polyalthia Longifolia*	tree	12	Naturally
142	*Ti/Cordyline Fruticosa*	Plant	11	Naturally
143	*Polyalthia Longifolia*	tree	12	Naturally
144	*145 Epipremnum Pinnatum*	Tree	1	Naturally
145	*Polyalthia Longifolia*	tree	12	Naturally
146	*Rhopaloblaste Singaporensis*	Tree	1	Naturally
147	*Areca Palm*	Plant	4	Gardener
148	*Mangifera Indica*	Tree	18	Naturally
149	*Polyalthia Longifolia*	Tree	12	Naturally
150	*Nyctanthes Arbor-Tristis Plant*	Plant	1	Gardener
151	*Fukuqi Tree*	tree	1	Naturally
152	*Paper Plant*	Plant	1	Gardener
153	*Kopsia Plant*	Plant	1	Naturally
154	*Jackfruit Tree*	tree	1	Naturally
155	*Tilef Plant*	Plant	1	Gardener
156	*Crecentia Alata*	tree	1	Naturally

157	*Cinnamomum Malabatrum Tree*	tree	1	Naturally
158	*Indian Almond*	tree	3	Naturally
159	*Jungle Geranium*	tree	2	Naturally
160	*Indian Almond*	tree	3	Naturally
161	*Monoon Longifolium*	Plant	2	Gardener
162	*Solanum Nigrum*	plant	1	Gardener
163	*Tecoma Stans*	Plant	1	Gardener
164	*Ravenea*	Tree	3	Naturally
165	*Polyalthia Longifolia*	Plant	12	Naturally
166	*Aidia*	Plant	1	Gardener
167	*Jungle Geranium*	Plant	2	Naturally
168	*Ponderosa Lemon*	Plant	1	Gardener
169	*Amalaki*	Plant	1	Gardener
170	*Solanum Diphyllum*	Plant	2	Naturally
171	*Draceana*	plant	1	Gardener
172	*Shoe Black Plant*	shrub	4	Gardener
173	*Cordyline Fruticosa*	Plant	10	Naturally
174	*Codiaum Variegattem*	Plant	1	Gardener
175	*Voacanga Africana*	Tree	1	Naturally
176	*Cassuarina Equisetifolia*	tree	2	Naturally
177	*Graprophwllum Pictum*	Plant	1	Gardener
178	*Ravenea*	plant	3	Naturally
179	*Syzygium Aqueum*	tree	3	Naturally
180	*Mangifera Indica*	tree	18	Naturally
181	*Populaer Alba*	tree	1	Naturally
182	*Cinnamomum Heyneanumnees*	Plant	1	Gardener
183	*Mangifera Indica*	tree	18	Naturally
184	*Black Night Shade*	Plant	1	Gardener
185	*Ceiba Pentandra*	tree	1	Naturally
186	*Mangifera Indica*	Tree	18	Naturally
187	*India Almond*	Tree	1	Gardener
188	*Flacourtia Jangomas*	Tree	1	Naturally
189	*Mangifera Indica*	tree	18	Naturally

190	*Bread Fruit*	tree	1	Naturally
191	*Ceibapentandra*	tree	1	Naturally
192	*Shoe Black Plant*	Plant	4	Naturally
193	*Polyalthia Longifolia*	tree	11	Naturally
194	*Ehretia Laevis*	plant	1	Gardener
195	*Syeda Batool*	Plant	1	Naturally
196	*Mitzuri*	Plant	1	Naturally
197	*Bogiboma*	Plant	1	Gardener
198	*Polyalthia Longifolia*	Tree	11	Naturally
199	*Cassuarina Equisetifolia*	tree	2	Naturally
200	*Swartiza Cubensis*	Tree	1	Naturally
201	*Coca*	tree	U.I.	U.I.
202	*Hibiscus Tree*	Plant	1	Naturally
203	*Syzygium Aqueum*	Tree	3	Naturally
204	*Polyalthia Longifolia*	Tree	11	Naturally
205	*Pterocarya*	Tree	1	Naturally
206	*Gynura Procumbens*	PLant	15	Gardener
207	*Polyalthia Longifolia*	Tree	11	Naturally
208	*Coprelylile Fruticosa*	PLant	1	Gardener
209	*Keitmango*	Tree	1	Naturally
210	*Chrysophyllum*	Tree	1	Naturally
211	*Pseuderantheumum*	Shrub	1	Gardener
212	*Theos Charis*	Plant	1	Gardener
213	*Cadamba*	Tree	1	Naturally
214	*Yadra Areca Palm*	Plant	1	Gardener
215	*Ficus Hispida*	Tree	1	Naturally
216	*Angiosperms*	Plant	1	Staff
217	*Excoecaria*	Shrub	1	Gardener
218	*Ti Plant*	Shrub	1	Staff
219	*The Golar Tree*	Tree	1	Naturally
220	*Ti Plant*	Shrub	1	Staff
221	*Kottukonam Mango Grafted Live Plant Dwarf Variety*	Plant	1	Gardener

222	*Pseuderanthemum*	Shrub	1	Staff
223	*Mangifera Indica*	Plant	1	Gardener
224	*Senna Surattensis*	Shrub	1	Staff
225	*Catharanthus Raseus*	herb	1	Gardener
226	*Solanum Nudum Humb*	Plant	1	Gardener
227	*Mangifera Indica*	Plant	1	Gardener
228	*Chias Orchid*	Plant	1	Gardener
229	*Flame Vine*	Plant	1	Gardener
230	*Ambal*	herb	1	Gardener
231	*Euclea*	Tree	1	Naturally
232	*Pterospermum Acerifolicen*	herb	1	Gardener
233	*Therapeutic Tree*	Plant	1	Staff
234	*Piper Dilateum*	Shrub	1	Gardener
235	*Pandanus Tectorium*	Plant	1	Gardener
236	*Kanan Pendari*	Plant	1	Gardener
237	*Mangifera Indica*	Plant	1	Gardener
238	*Morus Rubra*	Tree	1	Naturally
239	*Arrowhead Plant*	Plant	1	Gardener
240	*Arrowhead Plant*	Plant	1	Gardener
241	*The Golar Tree*	Plant	1	Gardener
242	*Ti Plant*	Shrub	1	Gardener
243	*Sterculia Fotida*	Tree	1	Naturally
244	*Caryota Cilly*	Herb	1	Gardener
245	*Beach Spider*	Plant	1	Staff
246	*Mahogany*	Tree	1	Naturally
247	*Panagal Trees*	Tree	1	Naturally
248	*Arrowhead Plant*	Plant	1	Gardener
249	*Kacanjparazg*	Tree	1	Naturally
250	*Solanum Schumannianum*	Shrub	1	Staff
251	*Japanese Laurel Aucuba*	Shrub	1	Staff
252	*Dracaena American*	Plant	1	Gardener
253	*Minatigreehouse Mango Plant*	Tree	1	Naturally
254	*Pinanga Bicolana*	Shrub	1	Gardener

255	*Pinanga Coronata*	Shrub	1	Gardener
256	*Tabebuia*	Shrub	1	Gardener
257	*Lysimachia Mitnisnt Sun*	Herb	1	Gardener
258	*Solanum Diphyllum*	Shrub	1	Gardener
259	*Eurphorbia Tithymaloites*	Shrub	1	Staff
260	*Strelius Asper Evergreen*	Tree	1	Naturally
261	*Wild Tree*	Tree	1	Naturally
262	*Peregrina*	Plant	1	Gardener
263	*Holy Basil*	Shrub	1	Staff
264	*Hamelia*	Herb	1	Gardener
265	*Couva*	Tree	1	Naturally
266	*Rose Plant*	Shrub	1	Staff
267	*Arabian Jasmin*	Herb	1	Staff
268	*Lepidocaryom Tree*	Plant	1	Gardener
269	*Papay*	Tree	1	Naturally
270	*Green View Zardalu*	Tree	1	Naturally
271	*Ficus Religiosa*	Tree	1	Naturally
272	*Indian Almond*	Tree	1	Naturally
273	*Fenugreek*	Herb	1	Staff
274	*Chilli*	Shrub	1	Staff
275	*Curry Leave Tree*	Shrub	1	Staff
276	*Euphorbia Geroldii*	Shrub	1	Gardener
277	*Mangifera Indica*	Plant	1	Gardener
278	*Pseuderanthemum*	Shrub	1	Gardener
279	*Fire Thorn*	Shrub	1	Gardener
280	*Terminaliacatappapictum*	Tree	1	Naturally
281	*Graptophyllumu*	Shrub	1	Gardener
282	*Ficus Altissima*	Tree	1	Naturally
283	*Emily Collins*	Plant	1	Gardener
284	*Akebia Quinata*	Shrub	1	Staff
285	*Ti Plant*	Shrub	1	Staff
286	*Ficus Microcarpa*	Tree	1	Naturally
287	*Eucalyptus Species*	Tree	1	Naturally

288	*Sauropus Fruticosa*	Shrub	1	staff
289	*Polyscias Fruticosa*	Shrub	1	Gardener
290	*Sauropus Androgynus*	Shrub	1	staff
291	*Malavar Nut*	Shrub	1	Gardener
292	*Polyscias Fruticosa*	Shrub	1	Gardener
293	*Sauropus Fruticosa*	Shrub	1	staff
294	*Sauropus Fruticosa*	Shrub	1	staff
295	*Justicia Gondaerussa*	Shrub	1	staff
296	*Lemon Beebrush*	Shrub	1	staff
297	*Psychotria Viridis*	Shrub	1	Gardener
298	*Pseuderanthernum*	Shrub	1	Gardener
299	*Pseuderanthernum*	Shrub	1	Gardener
300	*Kalpueng*	Shrub	1	Gardener
301	*Kalpueng*	Shrub	1	Gardener
302	*Kalpueng*	Shrub	1	Gardener
303	*Kalpueng*	Shrub	1	Gardener
304	*Cirinum Asiaticum*	Herb	1	staff
305	*Cirinum Asiaticum*	Herb	1	staff
306	*Toona Ciliata*	Tree	1	Naturally
307	*Magnolia Champaca*	Tree	1	Naturally
308	*Justicia*	Shrub	1	Gardener
309	*Gynura Procumbens*	Shrub	1	Gardener
310	*Pollination*	Plant	1	Staff
311	*Gynura Procumbens*	Shrub	1	Gardener
312	*Gynura Procumbens*	Shrub	1	Gardener
313	*Gynura Procumbens*	Shrub	1	Gardener
314	*Gynura Procumbens*	Herb	15	Gardener
315	*Gynura Procumbens*	Herb	15	Gardener
316	*Gynura Procumbens*	Herb	15	Gardener
317	*Holy Basil*	Herb	3	Gardener
318	*Ocimum Tenuiflorum*	Herb	3	Gardener
319	*Justicia Brandegeeana*	Shrub	3	Gardener
320	*Gynura Procumbens*	Herb	15	Gardener

321	*Gynura Procumbens*	Herb	15	Gardener
322	*Ocimum Tenuiflorum*	Shrub	3	Gardener
323	*Gynura Procumbens*	Herb	15	Gardener
324	*Gynura Procumbens*	Herb	15	Gardener
325	*Gynura Procumbens*	Herb	15	Staff
326	*Ocimum Tenuiflorum*	Herb	3	Gardener
327	*Gynura Procumbens*	Herb	15	Gardener
328	*Catharanthus Roseus*	Shrub	7	Staff
329	*Peacock Flower*	Shrub	1	Gardener
330	*Gynura Procumbens*	Herb	15	Gardener
331	*Catharanthus Roseus*	Shrub	7	Gardener
332	*Pacific Poison Oak*	Shrub	1	Gardener
333	*Hibiscus Rose*	PLant	U.I.	U.I.
334	*Aquilaria*	Tree	1	Naturally
335	*Euphorbia Tithymalodies*	Shrub	5	Staff
336	*Leaf Almond Tree*	Tree	1	Naturally
337	*Catharanthus Roseus*	Shrub	7	Gardener
338	*Arabian Jasmine*	Shrub	1	Staff
339	*Vernonica Amygdalina*	Shrub	3	Staff
340	*Vernonica Amygdalina*	Shrub	3	Staff
341	*Catharanthus Roseus*	Shrub	7	Gardener
342	*Shoeblack Plant*	Shrub	3	Gardener
343	*Vernonica Amygdalina*	Shrub	3	Gardener
344	*Perivincal*	Shrub / Herb	1	Gardener
345	*Chiuri Plant*	Tree	1	Naturally
346	*Aspidistra Elatior*	Plant	1	Gardener
347	*Arrowhead Plant*	Plant	6	Gardener
348	*Catharanthus Roseus*	Shrub	7	Gardener
349	*Morus Alba*	Tree	1	Gardener
350	*Peregrina*	Shrub	2	Gardener
351	*Holybasil*	Herb	1	Gardener
352	*Pinwheel Flour*	Shrub	1	Staff
353	*Justicia Plant*	Shrub	1	Gardener

354	*Pachsandra Axillaris*	Plant	1	Staff
355	*Graptophyllum*	Shrub	6	Gardener
356	*Holy Basil*	Herb	3	Gardener
357	*Premna Serratifolia*	Shrub/Small Tree	1	Gardener
358	*Chloranthus Erectus*	Shrub	1	Gardener
359	*Shoeblack Plant*	Shrub	3	Gardener
360	*Catharanthus Roseus*	Shrub	7	Staff
361	*Euphorbia Tithymalodies*	Shrub	5	Gardener
362	*Peregrina*	Shrub	2	Gardener
363	*Longevity Spinach*	Plant	4	Gardener
364	*Mango Tree*	Tree	2	Gardener
365	*Shoeblack Plant*	Shrub	3	Gardener
366	*Justicia*	Shrub	10	Staff
367	*Justica*	Shrub	1	Gardener
368	*Fokein Tea Tree*	Shrub	2	Gardener
369	*Justicia*	Shrub	10	Gardener
370	*Fokein Tea Tree*	Shrub	2	Gardener
371	*Justicia*	Shrub	10	Staff
372	*Pseuderanthemum Latifolium*	Plant	3	Gardener
373	*Pseuderanthemum Latifolium*	Plant	3	Gardener
374	*Caapi*	Shrub	1	Gardener
375	*Dracaena Fragrans*	Plant	2	Gardener
376	*Cirinum Asiaticum*	Herb	4	Staff
377	*Graptophyllum Pictum*	Shrub	4	Naturally
378	*Cirinum Asiaticum*	Herb	4	Gardener
379	*Euphorbia Tithymalodies*	Shrub	5	Gardener
380	*Euphorbia Tithymalodies*	Shrub	5	Gardener
381	*Euphorbia Tithymalodies*	Shrub	5	Gardener
382	*Grey Ghost Castus*	Plant	1	Naturally
383	*Albizia Acle*	Plant	1	Naturally
384	*Justicia Brandegeeana*	Shrub	3	Gardener
385	*Justicia Brandegeeana*	Shrub	3	Gardener

386	*Shoe Black Plant*	Shrub	2	Gardener
387	*Pyrostegia Venusta*	Shrub	1	Gardener
388	*Organic Salvia Oxyphora*	Herb/Shrub	1	Gardener
389	*Trichostigma Octandrum*	Shrub	1	Gardener
390	*Ti Plant*	Shrub	1	Gardener
391	*Longevity Spinach*	Plant	4	Naturally
392	*Shoe Black Plant*	Shrub	2	Gardener
393	*Cordyline Fruticosa*	Shrub	10	Naturally
394	*Justicia Gendarussa*	Shrub	1	Gardener
395	*Red Sandalwood Tree*	Tree	1	Naturally
396	*Bay Laurel*	Tree/Shrub	1	Naturally
397	*Chamaecostus Cuspidatus*	Herb	1	Staff
398	*Avacado Tree*	Tree	U.I.	U.I.
399	*Cordyline Fruticosa (L.) A.Chev.*	Shrub	1	Naturally
400	*Madagascar Periwinkle*	Shrub/Herb	1	Gardener
401	*Aloe Vera*	Shrub	1	Gardener
402	*Giant Ferns Of Bulusan*	Herb	1	Staff
403	*Terminalia Catappa*	Tree	2	Naturally
404	*Senna Surattensis*	Shrub/small tree	3	Staff
405	*Terminalia Bellirica*	Tree	7	Naturally
406	*Terminalia Bellirica*	Tree	7	Naturally
407	*Curry Leave Tree*	tree	U.I.	U.I.
408	*Mimusops Elengi*	Tree	1	Naturally
409	*Cyclantheropsis Parviflora*	Herb	1	Gardener
410	*Terminalia Catappa*	Tree	2	Naturally
411	*Cocos Nucifera*	Tree	18	Naturally
412	*Alangium Salviifolium*	Shrub	2	Gardener
413	*Alangium Salviifolium*	Shrub	2	Gardener
414	*Saraca Asoca*	Tree	6	Naturally
415	*Teak Tree*	Tree	1	Naturally
416	*Cocos Nucifera*	Tree	U.I.	Naturally
417	*Terminalia Bellirica*	Tree	7	Naturally

418	*Strychnos Pungens*	Tree	U.I.	U.I.
419	*Cocos Nucifera*	Tree	U.I.	Staff
420	*Neolamarckia Cadamba*	Unidentified. Not known	U.I.	Naturally
421	*Cocos Nucifera*	Tree	U.I.	Staff
422	*Cocos Nucifera*	Tree	U.I.	Staff
423	*Cocos Nucifera*	Tree	U.I.	Staff
424	*Oenocarpus Bacaba*	Unidentified. Not known	U.I.	Naturally
425	*Cocos Nucifera*	Tree	U.I.	Staff
426	*Bauhinia Picta*	Plant	1	Naturally
427	*Anthracnose*	Plant	1	Naturally
428	*Mangifera Indica*	Tree	1	Naturally
429	*Calliandra Antioquiae*	Plant	1	Naturally
430	*Castilla Elastica*	Plant	1	Naturally
431	*Albizia Subdimidiata (Splitg.)*	Tree	1	Naturally
432	*Konkani*	Tree	1	Naturally
433	*Caryota Mitis*	Plant	1	Naturally
434	*Carica Papaya*	Tree	5	Staff
435	*Ficus Religiosa*	Tree	1	Naturally
436	*Cocos Nucifera*	Tree	U.I.	Gardener
437	*Carica Papaya*	Tree	1	Staff
438	*Cocos Nucifera*	Tree	U.I.	Staff
439	*Carica Papaya*	Tree	1	Gardener
440	*Terminalia Bellirica*	Tree	1	Naturally
441	*Saraca Asoca*	Tree	U.I.	Naturally
442	*Cocos Nucifera*	Tree	U.I.	Naturally
443	*Cocos Nucifera*	Tree	U.I.	Naturally
444	*Mangifera Indica*	Tree	1	Naturally
445	*Carica Papaya*	Tree	1	Staff
446	*Searsia Pyroides,*	Tree	1	Naturally
447	*Coconut Tree*	Tree	U.I.	Gardener
448	*Giant Calotrope*	Plant	1	Naturally

449	*Cocos Nucifera*	Tree	U.I.	Gardener
450	*Terminalia Bellirica*	Plant	1	Naturally
451	*Carica Papaya*	Tree	1	Staff
452	*Cocos Nucifera*	Tree	U.I.	Staff
453	*Cocos Nucifera*	Tree	U.I.	Staff
454	*Saraca Asoca*	Tree	U.I.	Naturally
455	*Cocos Nucifera*	Tree	U.I.	Staff
456	*Mangifera Indica*	Tree	1	Naturally
457	*Cocos Nucifera*	Tree	U.I.	Staff
458	*Saraca Asoca*	Tree	U.I.	Naturally
459	*Mangifera Indica*	Tree	1	Naturally
460	*Nakuda Tree*	Tree	1	Gardener
461	*Saraca Asoca*	Tree	U.I.	Naturally
462	*Quercus Arizonica*	Tree	1	Naturally
463	*Arrowhead Plant*	Plant	1	Naturally
464	*Mangifera Indica*	Tree	1	Naturally
465	*Cape Jasmine*	Plant	1	Naturally
466	*Quercus Arizonica*	Tree	1	Naturally
467	*Litsea Monopetala*	Plant	1	Naturally
468	*Dracaena Angustifolia Care*	Tree	1	Naturally
469	*Caryota Mitis*	Plant	1	Naturally
470	*Terminalia Bellirica*	Plant	1	Naturally
471	*Jamun Tree*	Tree	U.I.	Naturally
472	*Terminalia Bellirica*	Plant	1	Naturally
473	*Putranjiva*	Plant	1	Naturally
474	*Plathymenia*	Tree	1	Naturally
475	*Tilia*	Tree	U.I.	U.I.
476	*Ancistrocladus Heyneanus*	Tree	1	Naturally
477	*Veitchia*	Plant	1	Naturally
478	*Pedilanthus Tithymaloides*	Plant	1	Naturally
479	*Sageraea Laurina*	Plant	1	Naturally
480	*Polyalthia Longifolia*	Tree	1	Naturally
481	*Swietenia Mahagoni*	Tree	1	Naturally

482	*Caryota Urens*	Plant	1	Gardener
483	*Polyscias Cissodendron*	Tree	1	Naturally
484	*Kigelia Africana Susp.*	TRee	U.I.	U.I.
485	*Caryota Urens*	Plant	1	Naturally
486	*Jatropha*	Plant	1	Naturally
487	*Selenicereus Setaceus*	Plant	1	Naturally
488	*Afrocarpus Mannii*	Tree	1	Naturally
489	*Caryota Urens*	Plant	1	Naturally
490	*Terminalia Catappa*	Tree	1	Naturally
491	*Calophyllum Inophyllum L.*	Tree	1	Naturally
492	*Calophyllum Inophyllum L.*	Tree	1	Naturally
493	*Ficus Benghalensis*	Tree	1	Naturally
494	*Magnifera Indica*	tree	U.I.	U.I.
495	*Mango*	Tree	1	Naturally
496	*Caryota Mitis Lour*	Tree	1	Naturally
497	*Bursera Simaruba*	tree	U.I.	U.I.
498	*Devil's Ivy*	Plant	1	Naturally
499	*Caryota Mitis Lour*	Plant	1	Naturally
500	*Caryota Mitis Lour*	Plant	1	Naturally
501	*Caryota Mitis Lour*	Plant	1	Naturally
502	*Cocos Nucifera*	Tree	U.I.	Staff
503	*Cocos Nucifera*	Tree	U.I.	Staff
504	*Caryota Mitis Lour*	Plant	1	Naturally
505	*Ficus Religiosa*	Tree	1	Naturally
506	*Ficus Religiosa*	Tree	1	Naturally
507	*Rauvolfia Caffra*	Tree	1	Naturally
508	*Cocos Nucifera*	Tree	U.I.	Gardener
509	*Bamboos*	Tree	1	Naturally
510	*Neem*	Tree	1	Naturally
511	*Cyrtomium Falcatum*	Plant	1	Gardener
512	*Dracaena Sanderiana*	Plant	1	Student
513	*Catharanthus*	Plant	1	Student
514	*Potted White Ginger Lily Camis*	Plant	1	Gardener

515	*Euphorbia Tithymaloides*	Plant	1	Staff
516	*Areca Palm*	Tree	1	Naturally
517	*Dracaena Braunii: Ribbon Plant*	Plant	1	Naturally
518	*Dracaena Marginata*	Plant	1	Naturally
519	*Epipremnum Aureum*	Plant	1	Naturally
520	*Euphorbia Tithymaloides*	Plant	1	Naturally

Table 3: Details of the Flora in the premises

At present there are more than 1,150 plantations in the premises.

Plate 6: Varieties of flora in the premises

Plate 7: Shaded area with huge canopy cover in the premises

5.3 Noise Audit

On a macro level the Institute is surrounded by residential and educational areas; however given close proximity to public modes of transport the noise levels are comparatively higher.

However there are no up gradations required.

5.4 Carbon Footprint Audit – Heat Island Reduction

The heat island effect refers to the study of micro climatic feature within a site. There are multiple factors that add on to the feature such as external temperature, internal temperatures, site context including available and site adjacent facilities. The site is located in an urban area with a lot of concretized spaces and congestion all over the suburb, to a certain extent the heat island effect is experienced. However, it cannot be overlooked that the site also has open spaces and plantation cover within the site.

The study suggests the current practices are good, the terrace areas be covered with 'COOLTOP' paint two coats and maintained every two years.

5.5 Fire Safety

Fire and life safety are an important consideration of the National Building Code 2016. This aspect is touched upon as part of this study in the capacity of an Architect registered with the Council of Architecture. As part of the research, fire safety audit was considered from the 'Building systems' perspective. There are only fire extinguishers available.

Plate 8: Fire extinguisher inside the campus

The study suggests the current practices up gradation in applicable spaces

- ***The study suggests that there should be an increase in nos. of 'FIRE BALLS' in the premises for life safety purposes.***
- ***There should be additional provisions in the LABORATORIES including:***
  - ***Eye washers***
  - ***First aid box***
  - ***Concealing of exposed wiring***
  - ***Display chart about the 'dos and don'ts, a workshop for stakeholders about fire and life safety***
  - ***Rubber flooring as an electrical safety measure***

6. Inferences

6.1 General suggestions

The following suggestions are to be considered as a ***first priority*** and should be implemented ***within 1.5 to 2.5 years from the date of the Report submission.***

- **Extra care for the rooftop areas**
  - Introduce the signboards about 'No students are allowed to enter this area'
  - Upgrade the space as cool roof by painting it with cooltop material.
  - Undertake feasibility study of before and after temperature reading.
  - Take precautions to keep terrace areas free of any kind of storage materials

- **Messages on the beam area**

  Include quotes and messages from eminent personalities all over the premises on beam for inspiration and beautification.

- **Inspirational timelines on the blank interior facades**

  Include quotes, messages, timelines, details about specific subject or career prospects in the interior areas for inspiration and beautification.

- **General aspects**
  - Introduce zone wise details at relevant locations
  - Introduce information boards everywhere
  - Placards and manuals for awareness
  - Upgrade the website w.r.t. green initiatives

6.2 Section-wise suggestions

The following suggestions are to be considered as a ***second priority*** and can be implemented ***in next 2.5 years*** from the date of the Report submission.

6.1.1 Site beautification

Garden development - *The landscape redesign and ecological redesign* – This should be done to increase the shade cover in the entire premises.

6.1.2 Heat island reduction

- **Cool rooftops** - The Terrace rooftops should be painted with Cooltop – reflective materials to reflect the harsh sun rays and reduce the heat absorption in the top most floor and surrounding areas of the building.

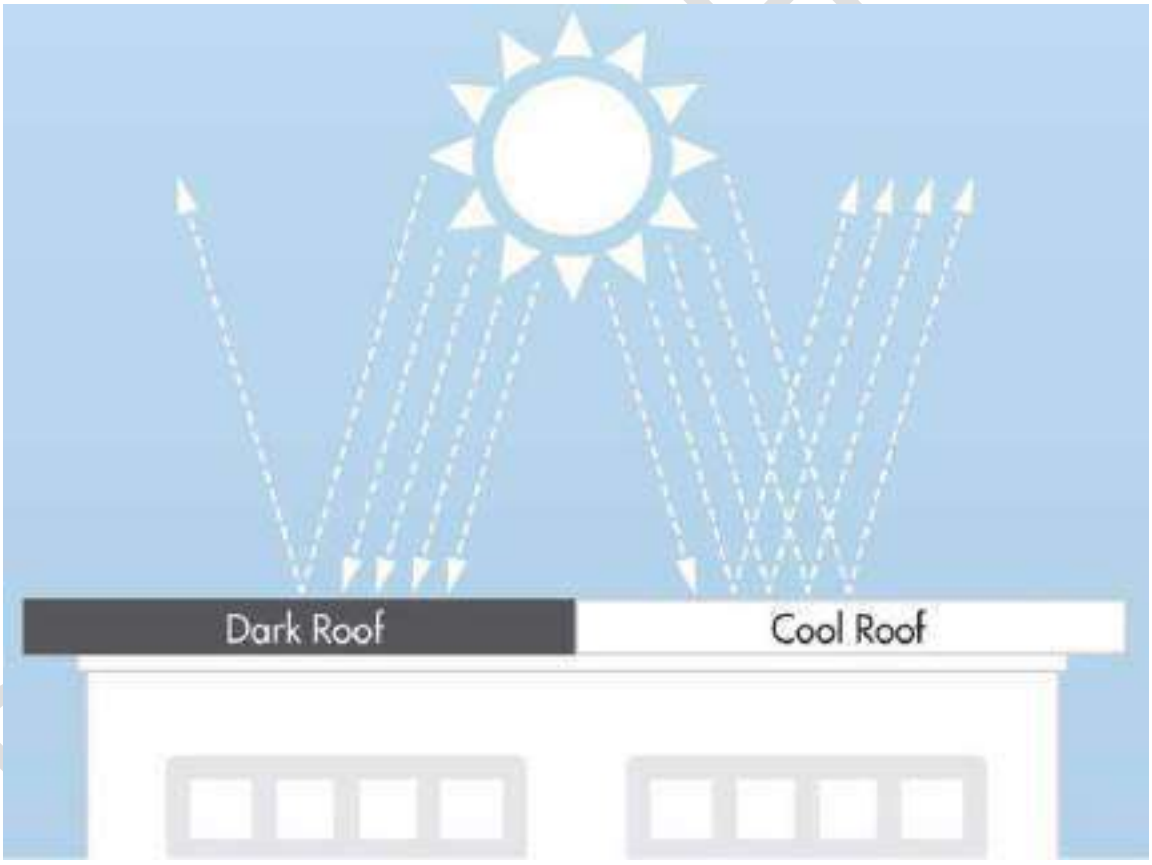

Plate 9: Cool roof comparative analysis (For reference purpose only)

Source: Image by https://www.gaf.com/en-us/blog/six-truths-about-cool-roofs-281474980105387

6.1.3 Life safety

- **Mandate fire extinguisher in spaces** - One fire extinguisher should mandatorily be there in every space which has an air conditioner/ gas cylinder.

- **Combustible equipment** - Every space which has a gas cylinder or combustible equipment should have a provision for the barricade around the gas cylinders, appropriate safety board's mentioning 'danger sign' and 'Do not touch' with an additional small fire extinguisher close by.

- The **fire and life safety signages (Including exit signages)** should be increased and displayed.

- There should be a **PASS Board** alongside every fire extinguisher and a **RACE Board** at the location of extreme populace/ footfalls.

Reference suggestions 1: PASS Board display

6.1.4 Pollution Control

- **Promote the use of Eco-friendly vehicles -** There can be student and staff sensitization program on eco-friendly and battery-operated vehicles/ low emission vehicles for daily use.

- **Battery charging points for Eco-friendly vehicles -** There can be provision for battery charge points, this would inspire students to change their mode of transportation and adopt sustainable practices.

- **Bicycles as a gift -** As an appreciation gesture maybe the student's toppers/ staff best performers can be awarded a bicycle occasionally.

7. Compilation

The study is based on the data collected, analyzed, rechecked, and confirmed through multiple modes. For the quality study, some standards/ notes have been referred to. These are listed and noted below. However, no direct references have been used anywhere. These are used as a base to analyze and study the data collected.

- Uniform Plumbing Code – India, 2008
- IGBC Green Existing Buildings – Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
- IGBC Green Landscape Rating system, March 2013
- BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST – Canada
- Used only for understanding Universal design - Universal accessibility Guidelines for Pedestrian, Non-motorizes vehicle and Public Transport Infrastructure – Report guidelines by Samarthyam (National centre for Accessible Environments) – an initiative supported by Shakti Sustainable Energy Foundation.

GREEN AUDIT

STUDY PERIOD (TWO YEARS) 2022 – 2023 & 2023 - 2024

Sustainability study

AUDIT REPORT

Studied for

Laxmi Charitable Trust's

Sheth L.U.J. and Sir M.V. College

Dr.S.Radhakrishnan Marg, Andheri (East),

Mumbai - 400069, Maharashtra, India

Studied in the capacity of

Accredited and Certified GBP

Studied by

Website: https://thegreenviosolutions.co.in/

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Background reference image Sasin Tipchai on unsplash

Disclaimer

The Audit Team has prepared this report for the **Laxmi Charitable Trust's Sheth L.U.J. and Sir M.V. College** located *Dr.S.Radhakrishnan Marg, Andheri (East) Mumbai - 400069, Maharashtra, India* based on input data submitted by the Institute analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole depending on the decision taken by the internal team. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a period of time and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

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Acknowledgement

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1. Introduction

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1.1.2 Mission

The Institute adheres and focuses

- *To provide exceptional progressive education to undergraduate students. To emphasize on students' intellectual, moral, spiritual, and emotional growth*
- *To aim at students' overall personality development through educational, co-curricular, and extracurricular activities*
- *To educate students to become individuals devoted to virtuous standards, ethics, human values, and full participation as leaders in society*
- *To Contribute the advancement of innovative perspectives in the field of knowledge throughout the quest of gender-based and other types of social justice*
- *To encourage research and innovation for the enhancement of life and the progress of the nation*

1.2 Assessment of the Institute

1.2.1 Affiliations

The course provided by the College is affiliated to the **University of Mumbai**, a Public State University in Mumbai, one of the largest university systems in the world.

1.2.2 Certification

The **All India Survey on Higher Education (AISHE)** code is C-33577

1.2.3 Recognitions

The College has been recognized under section *2 (f) of the UGC Act, 1956* by University Grants Commission, New Delhi.

2. Overview

2.1 Summarised Populace analysis for 2023-2024

2.1.1 Students data

The data (shared by the Institute) shows there were **518 students.**

2.1.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	04	01	**05**
2	Teaching staff	02	12	**14**
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Total Staff Members		**11**	**14**	**25**

Table 1: Staff data of the Institution for 2023-2024

The staff data shows the Institute premises had **25 Staff Members.**

2.2 Summarised Populace analysis for 2022-2023

2.2.1 Students data

The data (shared by the Institute) shows there were **542 students.**

2.2.2 Staff data

S. No.	Type	Male	Female	Total
1	Admin staff	04	01	**05**
2	Teaching staff	02	12	**14**
3	Non-Teaching staff	06	01	**07**
Total Staff Members		**12**	**14**	**26**

Table 2: Staff data of the Institution for 2022-2023

The staff data shows the Institute premises had **26 Staff Members.**

3. Research

3.1 Total site and building spread area

The **site area is 2.57 acres** and the **Built-up area of the Institute is 13,998.74 sq. ft.**

3.2 Establishment

The Institute was established in **1963**.

3.3 Operation and Maintenance of the premises

The interview session was held with the staff regarding the operation and working hours. The Institution is open for 290 working days with the timings being 07:30 hours to 15:30 hours.

3.4 About the Audit

It is a systematic study of the aspects which make the Institution sustainable and healthy premises for its inhabitants.

4. Evidence

Plate 1: Discussion with the team

Plate 2: Investigation of the system (Laboratory and the Library)

Plate 3: Group photo with the team

5. Documentation

5.1 Green Practices Audit

The increasing global warming and climate change have made us realise that apart from the enormous strategies the individual small efforts need to be taken by individuals and Educational Institutes as the younger generations are the future of the world and once they are taught about these practices only then can we assume a better future.

5.1.1 Green practices

We observed the following points during the investigation data verification of the premises.

- **Team work** – *The best quality of the Institute is its coordinating and cooperative staff members, as for a building the foundation plays the most important role for its future similarly for an educational institute its staff members do.*
- **Waste management** - *All the laboratories, classrooms, and cabin corridors are having dust bins. Laboratories are having dustbins wastage.*

5.1.2 Community development

There are no ***extension initiatives*** undertaken by the Institute towards environment and social upliftment specifically through NSS/ NCC/ UBA etc. However, following activities have been undertaken as Neighborhood development scheme.

- A donation drive was initiated by MVLU Care Club of Sheth L. U. J. and Sir M. V. College in the month of September & October 2023 to help underprivileged students **headed by Asst. Prof. Charmy Shah**
- E- Waste Management Awareness Drive was conducted in collaboration with Vissanji Academy on 15th December 2023. Students and teachers of Vissanji Academy donated good amount of E-waste **headed by Asst. Prof. Merina Gheevarghhese**
- Students and staff of MVLU College actively participated in the rally organised by Mumbai Traffic Police, Sahar Division on 3rd February 2024 for creating awareness on traffic rules & regulations headed by **Asst. Prof. Shweta Khopde and Dr. Priyanka Vartak.**

The details of the ***environmental activities*** conducted as part of the extension initiatives by the Institute documented below:

S. No.	Initiative	Type	Date
Academic year 2023-2024 (June 2023 to February 2024)			
1	**Campus Cleanliness Drive and World Environment Day was celebrated** To create cleaning awareness, promote plastic free campus & to sustain green healing. It was attended by teaching and non-teaching staff and students of the college. The event began with an introductory speech given by third-year Biotechnology Student Ms. Chitrangana in each class, which had a very positive impact on the students, and they voluntarily started cleaning their own classrooms with materials provided by the housekeeping staff. After classroom cleaning, The HOD of all departments, along with other teaching staff and students, planted saplings on college ground.	Physical	27-06-2023
Academic year 2022-2023 (June 2022 to May 2023)			
1	**Sheth L U J and Sir M V College organised free medical camp** in collaboration with the NGO Health Satya Foundation on 14th September 2022 for students, teaching and non-teaching staff.	Physical	14-09-2022

Table 3: Details of the environmental initiatives undertaken by Institute

The study suggests to increase the initiatives and its documentation.

5.2 Waste Audit

Waste is an inevitable part of our lives. Over the years the awareness about waste management techniques has given a rise to rethink how the waste can be avoided being sent to the landfills. The audit provides an approximation of the types of waste generated, location of waste collections, disposal techniques used, waste segregation methodologies adopted, and waste management strategies that are implemented in addition to the newer ways that can be adopted aiming to make the premise clean and sustainable.

5.2.1 Waste produced

S. No.	Type	Current practice	Proposed practice
1	Solid waste (Toilets)	Let into storm water drain	***Introduce a biogas plant that if functional and utilised***
2	Organic waste (Regular)	Handed over to Brihanmumbai Municipal Corporation (BMC)	***Introduce a compost pit***
3	Liquid waste (Toilets, wash basins)	Canteen liquid waste given to BMC and Toilet , wash basin waste goes to drainage	***Introduce a sewage treatment plant within the premises***
4	Chemical waste from laboratories	First it is autoclaved and then neutralized and let into stom water drain.	***Neutralize well and dig a pit 20 ft. from the main building where the waste can be disposed***
5	Toxic waste from laboratories		
6	E-waste	MOU signed with ReGreen Recycling Pvt. Ltd. They are the licensed recyclers and E-wate collected from lab, students and staff, and recycling done through this firm in a eco-friendly way.	Continue with the practice
7	Plastic waste	Brihanmumbai Municipal Corporation (BMC) collects all plastic waste	***Tie-up with Bisleri's Bottles for change, undertake eco-walls project and other practices***
8	Bio-waste (Sanitary)	Brihanmumbai Municipal Corporation (BMC) collects all bio waste	***Introduce sanitary vending and incinerator mahcines along with sani bins in all female washrooms and common rooms***

Table 4: Waste management system by the Institute

Currently, there are thirty-seven dustbins inside the premises and one outside.

Plate 4: E-waste awareness drive area banner and dustbins inside the premises

5.3 Water Audit

Water is one of the basic needs. Pure drinking water is a resource that needs to be preserved efficiently. A water audit helps to identify the sources of water consumption, and the water requirement by the premises is met by these sources.

The effective usage of water without any wastage should be a mandatory practice. Understanding the techniques as per site context to increase water conservation in terms of awareness and practice can be identified and executed as part of this exercise.

5.3.1 Water availability and consumption

5.3.1.1 Source of Primary water supply

The Institute requires water from the Local Municipality for drinking water purposes. The documentation below related to water tanks in the premises.

S. No	Type	Capacity	Numbers
1	Underground water tank	20,000	1
2	Overhead water tank	10,000	2

Table 5: Water tanks in the premises

The study suggests that the space requires of tanks can be documented with mention of size, capacity usage, Institute name, colour coding and last maintenance date mentioned on each facility.

5.3.1.2 Source of Secondary water supply

The Institute uses the following sources of water supply for secondary usages such as watering plants, kitchen, toilets, and wash basins and other spaces. There is one bore well.

5.3.1.3 Source of Tertiary water supply

The tertiary source of water is the source of water harvesting.

We suggest adopting practice of rain water bunds around the block and connecting the overflow pipes of the rain water harvesting pits/ syntax tank with 10,000 litres capacity; however, as the building is located in a shared campus within the suburban locality of urban Mumbai there are certain restrictions of Management and Government approval to undertake both of these recommendations.

Plate 5: Water areas in the premises

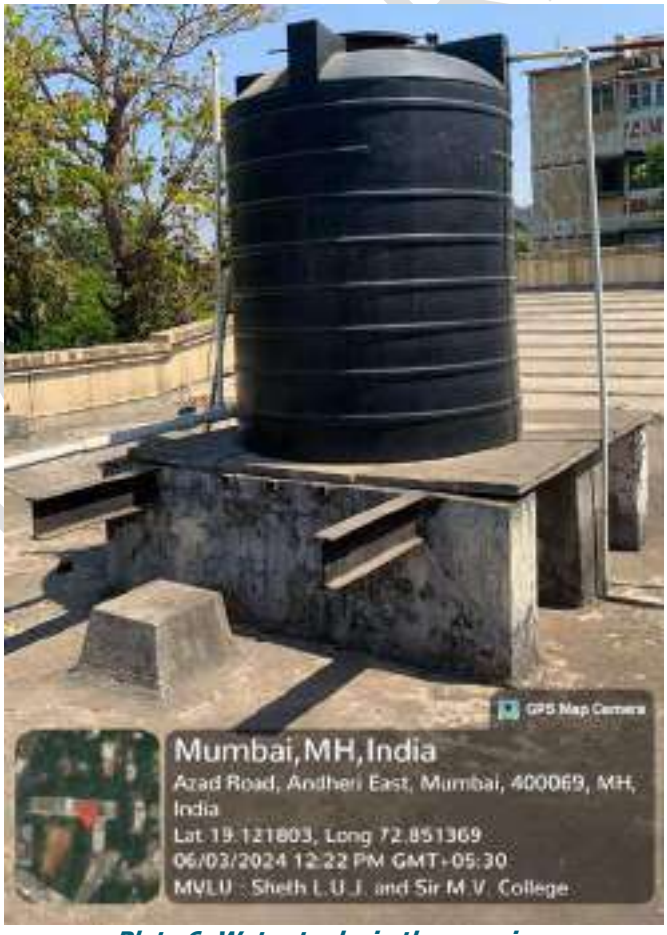


Plate 6: Water tanks in the premises

5.3.1.4 Source of Reusing waste water

This initiative is not practiced.

The study suggests that keeping the site context and constraints in mind the waste water treatment plant can be explored.

5.3.2 Areas of water usage

Based on the inventory done and data shared by the staff we found that the premise has the facilities such as:

- General toilets for male, female
- Taps for gardens and toilet facilities
- Drinking water cooler

The study suggests that daily documentation of water supply should be undertaken.

5.4 Health and Hygiene Audit

The hygiene is a part and parcel of our daily life. It is extremely essential to keep the surroundings clean in the same manner as we would want our houses to be. Educational Institutes have a bigger role to play in order to affect the young minds in the positive manner through better hygienic practices.

Sheth L U J and Sir M V College organised free medical camp in collaboration with the NGO Health Satya Foundation on 14th September 2022 for students, teaching and non-teaching staff.

They have plastic free campus and well maintained open area for recreational activities and ground area for various sports activities.

Overall, the premise requires major up gradation in terms of cleanliness and hygiene in common washrooms, steps have to be undertaken on an immediate basis; camphor tablets potpourri can be included in the washrooms for hygiene.

6. Inferences

6.1 General suggestions

The following suggestions are to be considered as a ***first priority*** and should be implemented ***within 1.5 to 2.5 years from the date of the Report submission.***

- **Water tanks in all areas**
  - Include the information about size, capacity and usage
  - Paint the tank in light blue colour
  - Add *signboards* about the usage such as 'Drinking' or 'Secondary'
  - Add *signboard and map* about the process/ system in practice

- **General aspects (Indoors areas)**
  - Zoning of the site w.r.t. space wise analysis
  - Signboards, signages, information and display boards at relevant locations.

- **Carpets**
  - Green carpets could be placed outside drinking water and toilet blocks.
  - This will add to hygiene areas and keep the water spillage under control.

- **Awareness displays**
  - Going paperless, Print less etc. awareness boards could be displayed.

6.2 Section-wise suggestions

The following suggestions are to be considered as a ***second priority*** and can be implemented ***in next 2.5 years*** from the date of the Report submission.

6.2.1 Green practices audit

- **Environmental awareness -** There can be various slogans in local and national language on the compound wall giving the message of saving the environment through the joint efforts of the students and staff thereby making the student socially and environmentally responsible citizens.

- **Increase the green awareness practice** – This should be in terms of the physical and virtual events which will be beneficial for all stakeholders in the shared premises. (Basically the frequency of the lectures should be increased)

6.2.2 Waste Audit

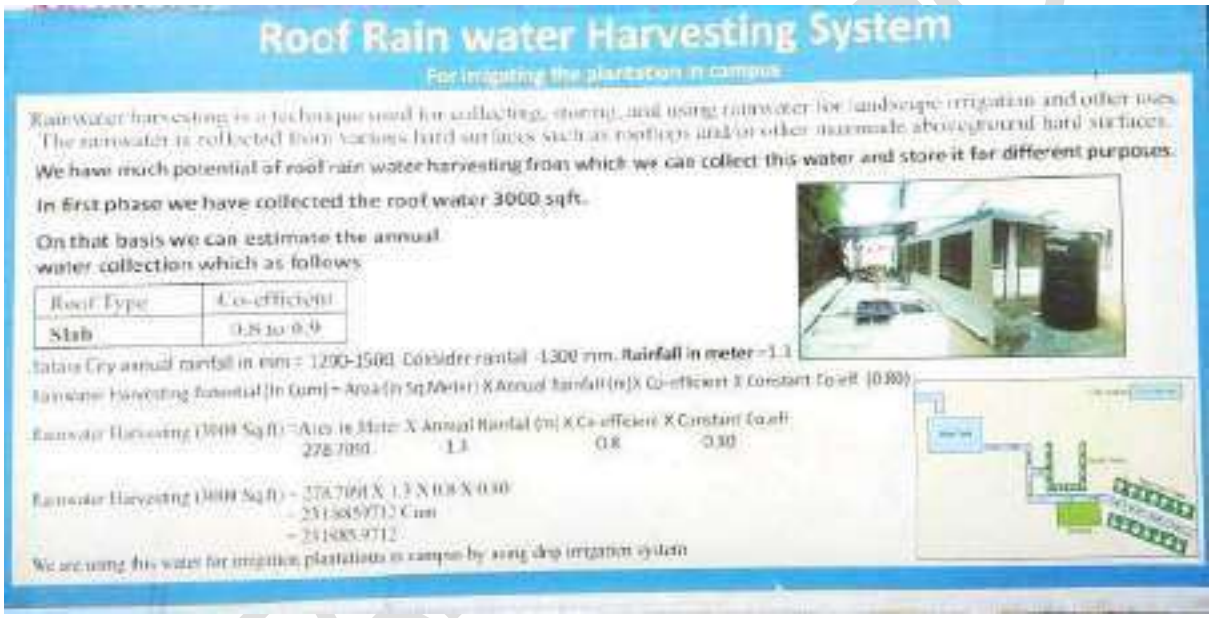
- **Multi-colored waste management bins -** There should be more number of dual litter dustbins at various locations in areas such as Canteen, and open spaces. This would inculcate the awareness of waste segregation among students. Whereas a single type of dry waste dustbin should be available inside the teaching areas.

Reference suggestions 1: Twin litter dustbins in the premises

- **Signages -** Messages about avoiding wastage should be placed at appropriate locations.
- Tie up with **Bisleri International regarding their 'Bottles for change program'** also with **'Thereco'** for their waste management.
- Invite companies such as **'Thaely'** and **'Recharkha'** to undertake skill development workshops.

6.2.3 Water Audit

Manual about the functioning of the system – There should be manual such as follows to increase sensitization about the facility and its operations.



Reference suggestions 2: Roof rain water harvesting system

6.2.4 Health and Hygiene Audit

- **Sanitary vending and incinerator -** There should be provision for sanitary vending, incinerator machine and incinerator in every ladies common room, and toilet on the premises.
- **Compound wall** – The compound wall should have awareness messages about 'No Smoking' and 'No Tobacco'
- **Toilet hygiene** – There should be facilities such as potpourri, camphor tablets in the toilet to avoid smell and health related issues.

7. Compilation

The study is based on the data collected, analyzed, rechecked, and confirmed through multiple modes. For the quality study, some standards/ notes have been referred to. These are listed and noted below. However, no direct references have been used anywhere. These are used as a base to analyze and study the data collected.

- Uniform Plumbing Code – India, 2008
- IGBC Green Existing Buildings – Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
- IGBC Green Landscape Rating system, March 2013
- BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST – Canada
- Used only for understanding Universal design - Universal accessibility Guidelines for Pedestrian, Non-motorizes vehicle and Public Transport Infrastructure – Report guidelines by Samarthyam (National centre for Accessible Environments) – an initiative supported by Shakti Sustainable Energy Foundation.
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ENERGY AUDIT

STUDY PERIOD (TWO YEARS) 2022 – 2023 & 2023 - 2024

Sustainability study

AUDIT REPORT

Studied for

Laxmi Charitable Trust's

Sheth L.U.J. and Sir M.V. College

Dr.S.Radhakrishnan Marg, Andheri (East),

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Studied in the capacity of

Accredited and Certified GBP

Studied by

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Background reference image Janko Ferlic on pexels

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The Institute was established in **1963**.

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4. Evidence

Plate 1: Discussion with the team

Plate 2: Investigation of the system (Laboratory and the Library)

Plate 3: Group photo with the team

5. Documentation

5.1 Sources of energy consumption

5.1.1 Primary sources

- **Electrical (Metered) –** Light, Fans, Equipments, Pumps comprise these sources.
- **Alternate sources of energy consumption–** There are **NO SOURCES** available.

5.1.2 Secondary sources

The premise does not have any data or battery back-up sources available. It only has gas cylinder in the common canteen that has been leased to an external vendor. However, there are four stabilizers present.

5.2 Actual electrical consumption as per bills

The information was shared for the single meter available in the premises.

S. No.	Month	Year	Amount	(A) Total units consumed	(B) Solar units generated	(C = A-B) Gross units consumed after deduction
Academic year 2022-23 (Meter No 1- Meter No.L1001642)						
1	June	2022	18,800	2,196	0	2,196
2	July	2022	22,630	2,144	0	2,144
3	August	2022	26,330	2,476	0	2,476
4	September	2022	27,050	2,541	0	2,541
5	October	2022	24,390	2,312	0	2,312
6	November	2022	19,240	1,817	0	1,817
7	December	2022	20,740	1,907	0	1,907
8	January	2023	19,550	1,787	0	1,787
9	February	2023	26,030	2,403	0	2,403
10	March	2023	27,430	2,547	0	2,547
11	April	2023	25,200	2,288	0	2,288

12	May	2023	13,190	118	0	118
Academic year2023-24						
1	June	2023	24,090	2,181	0	2,181
2	July	2023	28,170	2,562	0	2,562
3	August	2023	36,080	3,288	0	3,288
4	September	2023	28,280	2,574	0	2,574
5	October	2023	35,060	3,191	0	3,191
6	November	2023	22,250	2,015	0	2,015
7	December	2023	23,490	2,130	0	2,130
8	January	2024	25,480	2,312	0	2,312
Academic year 2022-23 (Meter No 2 - Meter No.9108872)						
1	June	2022	2,340	283	0	283
2	July	2022	4,210	352	0	352
3	August	2022	5,850	512	0	512
4	September	2022	6,350	556	0	556
5	October	2022	4,620	391	0	391
6	November	2022	2,990	236	0	236
7	December	2022	3,930	316	0	316
8	January	2023	4,860	403	0	403
9	February	2023	5,100	425	0	425
10	March	2023	6,410	547	0	547
11	April	2023	5,790	479	0	479
12	May	2023	3,410	261	0	261
Academic year 2023-24						
1	June	2023	5,300	433	0	433
2	July	2023	4,240	337	0	337
3	August	2023	7,870	669	0	669
4	September	2023	5,660	469	0	469

5	October	2023	6,280	523	0	523
6	November	2023	3,610	281	0	281
7	December	2023	3,690	287	0	287
8	January	2024	5,360	440	0	440

Table 3: Details of the electrical consumption

The observation related to above information states:

- The **total amount** spent in past two years is **Rs. 5,91,350/-**
- The **average amount** spent every month are **Rs. 14,784/-**
- The **total units** consumed in past two years **~ 52,989 units (Electrical)**
- The **average units** consumed every month are **~ 1,325 units (Electrical)**
- **The percentage of energy met by alternate (solar panels (renewable)) source is zero in terms of electrical contribution.**

5.3 Investigation of certain features

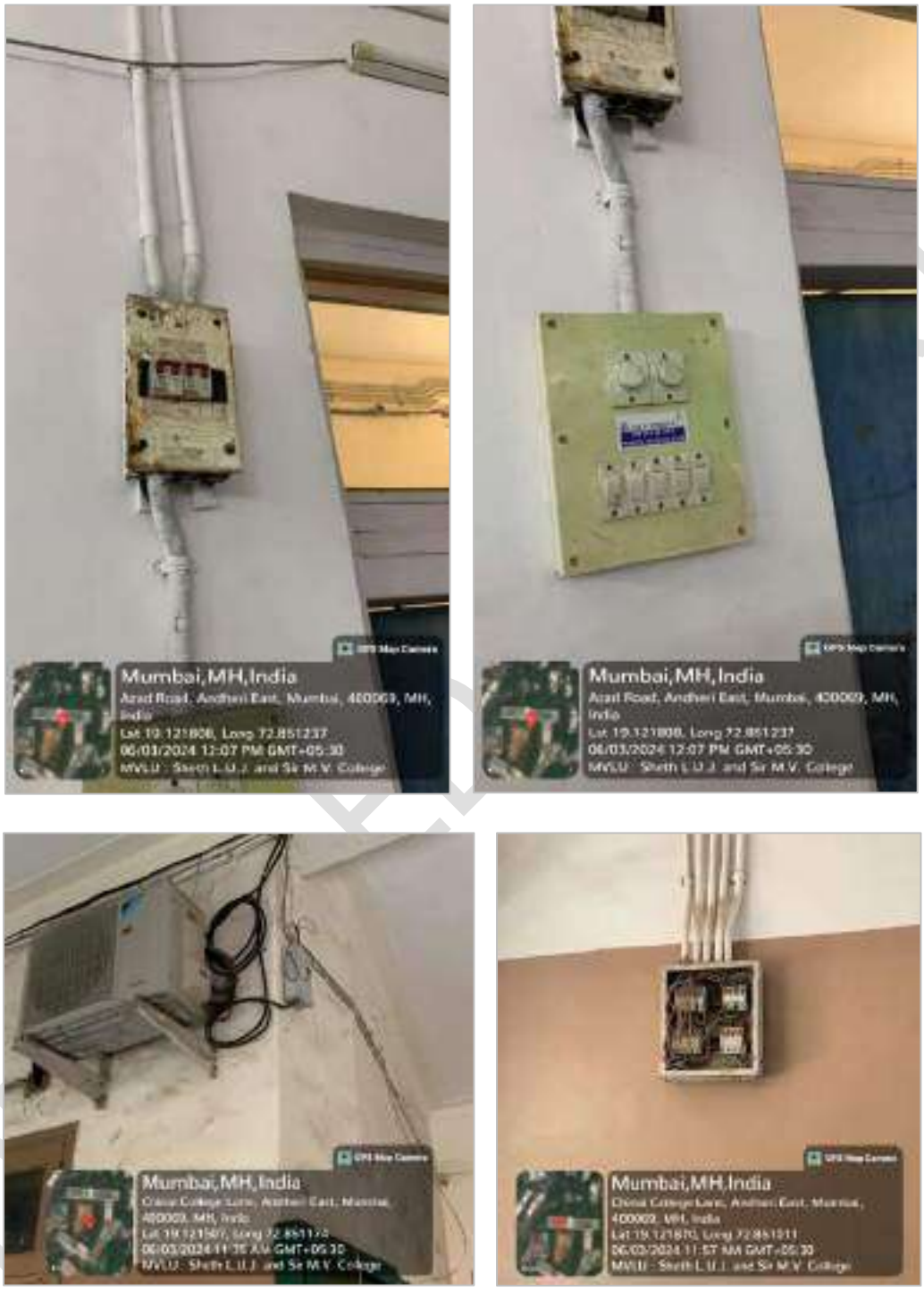

Plate 4: Wiring study of the site

The study suggests that in some areas the wirings were exposed and overloaded, the switchboads were not closed properly, the old systems have rusted; these areas could be fabricated and loads could be distributed evenly through multiple switchboards.

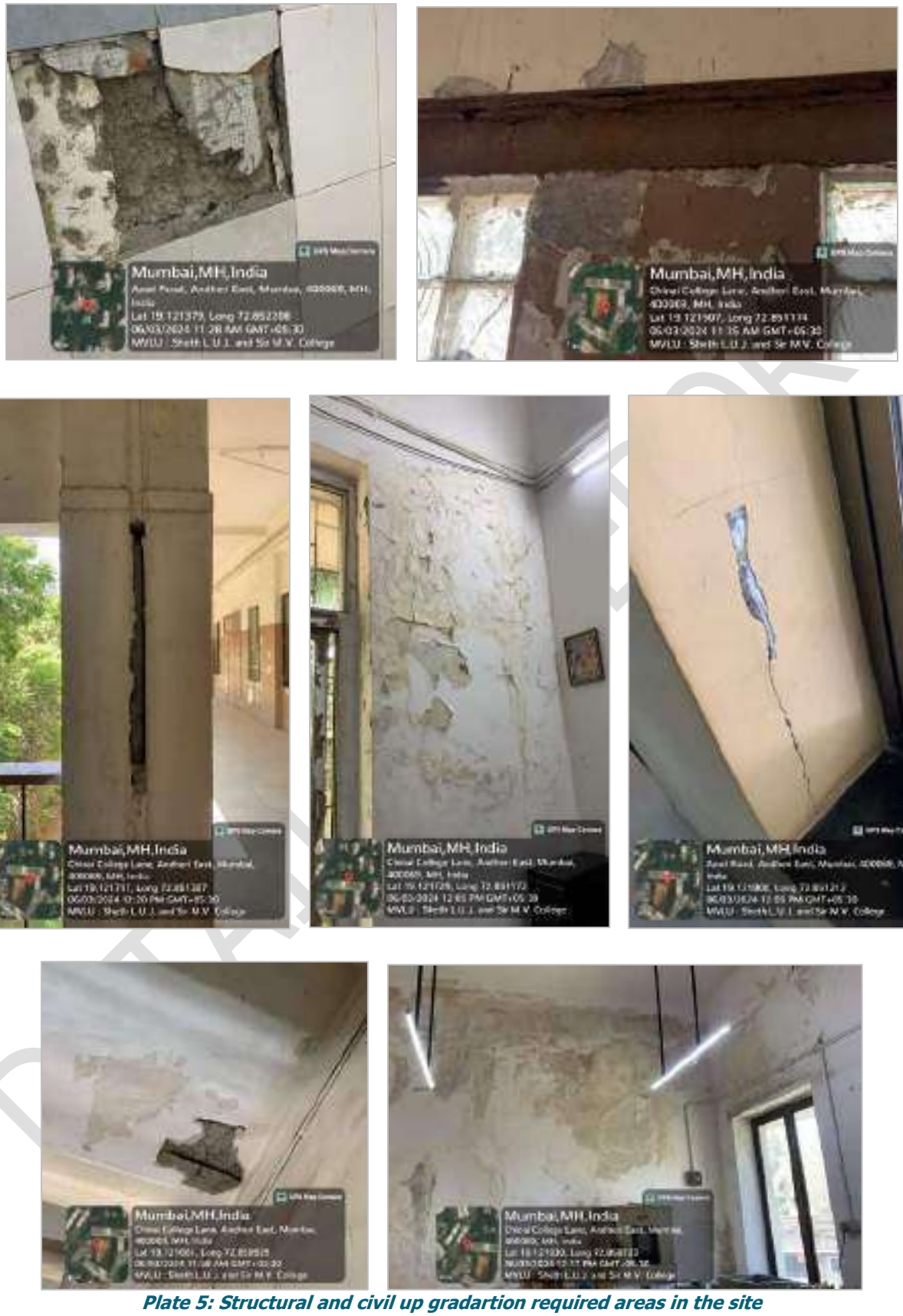

Plate 5: Structural and civil up gradartion required areas in the site

The study suggests that certain areas as above require an immediate civil and structural up gradation.

5.4 Calculated Electrical Consumption as per inventory

The electricity bills provide actual consumption data. The following is the calculated consumption. It is done to understand the percentage of energy usage in the premises by various applications. It is based on the inventory collected and interviews with the staff.

The additional data such as wattage is taken from market research. In terms of electrical consumption, the main sources are lights, fans, air conditioner, and equipment. The inventory and data collection for sources of energy consumed in the premise in summarised in the following sections.

The following documentation is based on the consumption practice of the premises on a regular working day.

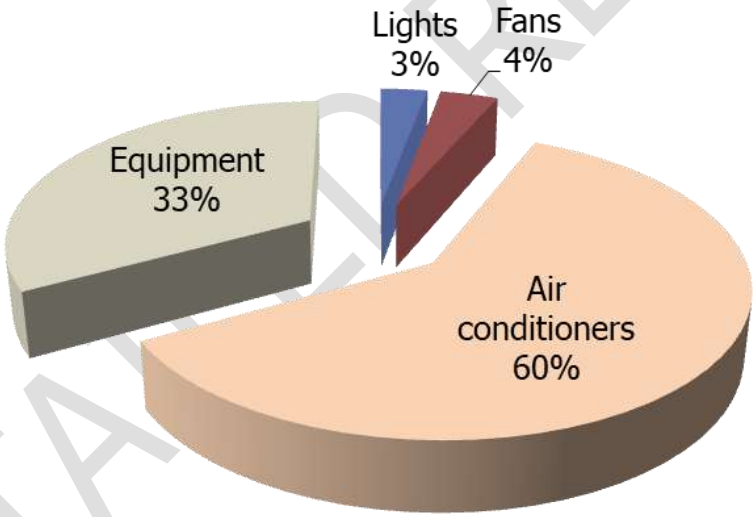

Figure 1: Summary of the calculated electrical consumption as per inventory

The above graph shows that air conditioners consume 60% whereas the equipment consume 33% while the fans consume 4% and the lights consume 3% of the total calculated electrical energy.

Note: The Institute has to undertake a lot of structural and electrical work on an urgent basis.

5.5 Lights

5.5.1 Types of lights based on the numbers

There are **415 lights on the premises;** the following table shows the various types of lights on the premises.

S. No.	Type	Nos.
1	**LED lights** *(Energy efficient appliance)*	347
2	**Non-LED lights** *(Non-Energy efficient appliance)*	68

Table 4: Summary of the types of lights on-premise

5.5.2 Types of lights based on the power consumption

The energy consumption of lights is **11,265 kWh** of energy.

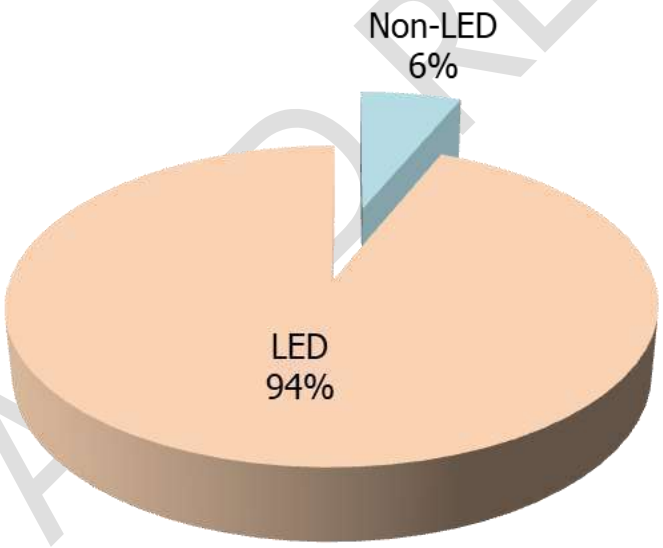

Figure 2: Energy consumed by types of lights in the premise based on the usage study

The analysis of the types of Lights on-premises (percentage of energy consumed by specific type of light) shows that the **LED lights consume 94%** whereas the **Non-LED lights consume 6%** of the total power consumed by lights.

5.6 Fans

5.6.1 Types of fans based on the numbers

There are **165 fans** on the premises as follows:

S. No.	Type	Nos.
1	Ceiling fans	161
2	Wall Mounted fans	04

Table 5: Summary of the types of fans in the premises

5.6.2 Types of fans based on the power consumption

The energy consumption of fans is **13,891 kWh** of the energy.

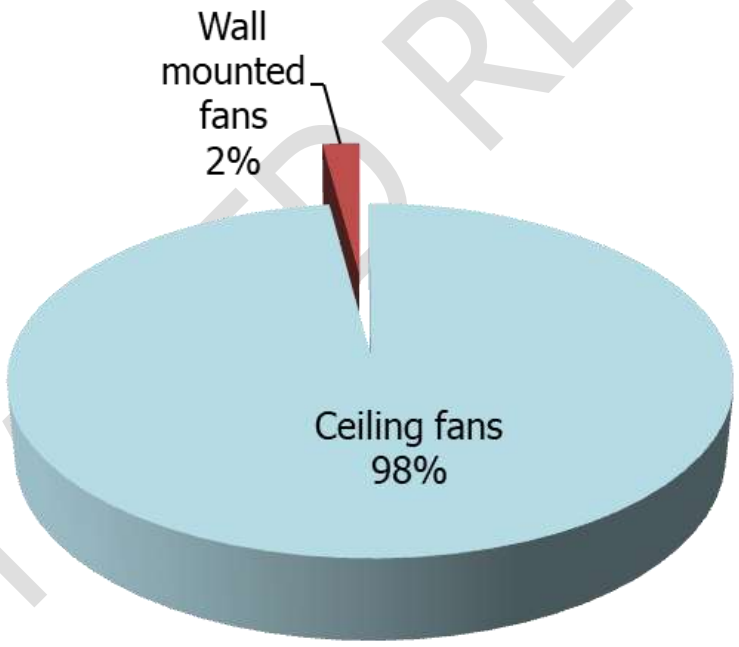

Figure 3: Types of fans based on power consumption

The above analysis shows **Ceiling fans consume 98%** whereas the while the **wall mounted fans consume 2%** of the total power consumed by fans.

5.7 Air conditioners

5.7.1 Types of air conditioners based on the numbers

There are **43 nos. of air conditioners** on the entire premises**.**

5.7.2 Building-wise consumption analysis

The energy consumption of air conditioners is **2,33,304 kWh** of energy.

5.7.3 About the replacement of current air conditioners

- The current air conditioners are well maintained
- Though there is not an immediate requirement for replacement, whenever the Institute undergoes redevelopment there can be provisions for replacement with energy-efficient appliances or new air conditioners that require less power consumption.

5.8 Equipment

5.8.1 Types of Equipment

There are **223 nos. of equipment** in the Educational sector.

5.8.2 Types of equipment as per their energy contribution

The energy consumption of equipment is **1,27,659 kWh** of energy.

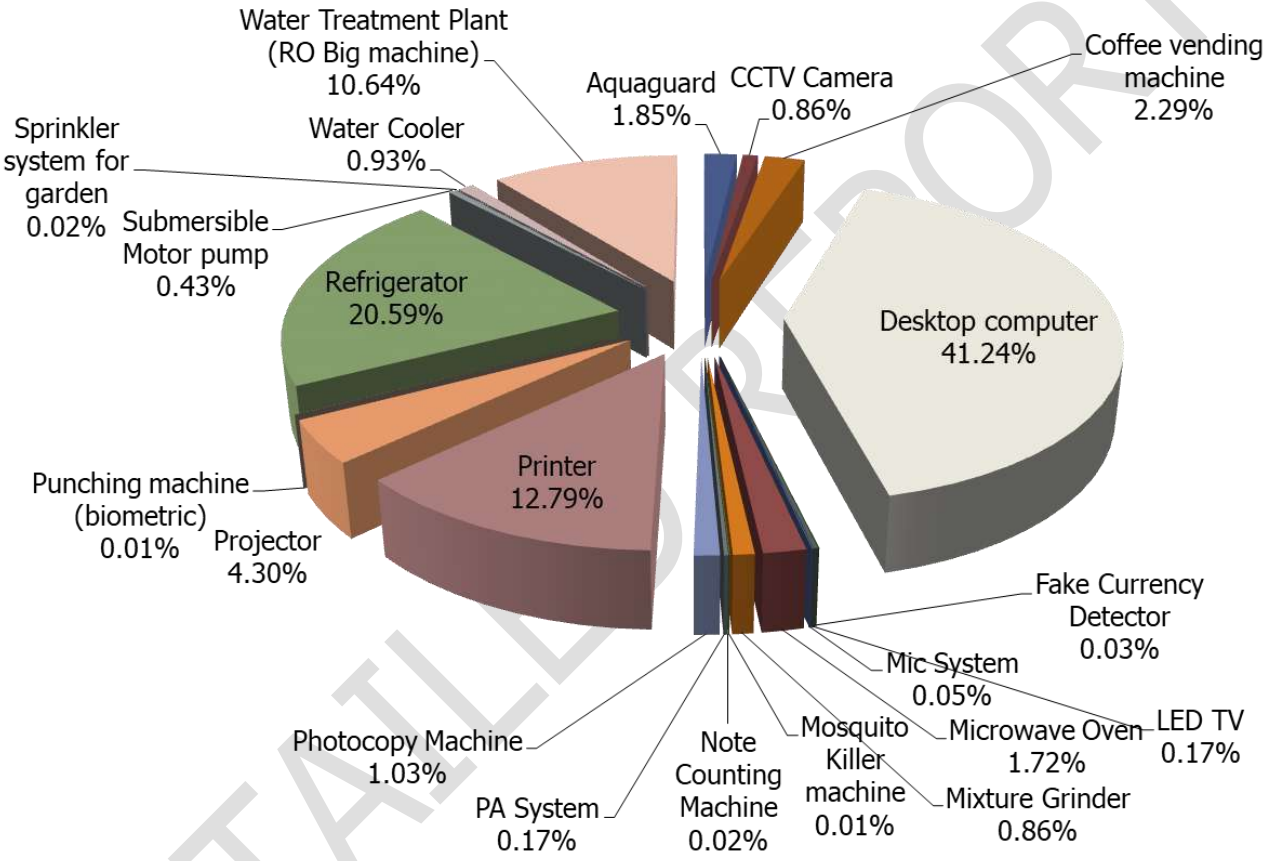

Figure 4: Energy consumed by types of equipment in the educational sector based on the usage study

The above summary shows that the **desktop computer consumes 41.24%** while the **refrigerator consumes more energy at 20.59%** whereas the **printer consumes 12.79%** and the **water treatment plant (RO Big machine) consumes 10.64%** these are the maximum consumers as compared to other equipment.

6. Suggestion

6.1 Section-wise suggestions

The following suggestions are to be considered as a ***first priority*** to **be executed within the next 1.5 to 2.5 years from the date of the Report submission.**

6.1.1 Electromechanical systems – Electrical and Lighting

Section 1 – Non-LED lights

The current light analysis shows that Non-LED lights consume anywhere between 50W to 54W and even more when in use; these should be replaced with LED lights which consume on an average 12-16W when in use.

Our technical research shows that there would be a reduction of an average of **67% reduction** in energy consumption if replaced with energy efficient appliance. It will be suggested to either replace these now if the Institute can have certain plans else the replacement can be done when fans get damaged or are not in working condition.

Section 2 – Ceiling fans

The current Fans are in proper working conditions and maintained well. The ceiling fans are in more quantity and consume at least 45W when in use. These should be replaced with energy efficient fans consuming 14W when in use.

Our technical research shows that there would be a reduction of an average of **69% reduction** in energy consumption if replaced with energy efficient appliance. It will be suggested to either replace these now if the Institute can have certain plans else the replacement can be done when fans get damaged or are not in working condition.

6.2 General suggestions

The following are consolidated study related to 'entire Institute' should be considered as ***second priority*** once section wise recommendations are implemented.

6.2.1 Alternatives towards Smart premises mechanisms

6.2.1.1 Facility management systems, controls

(Includes electromechanical systems – Electrical, Water)

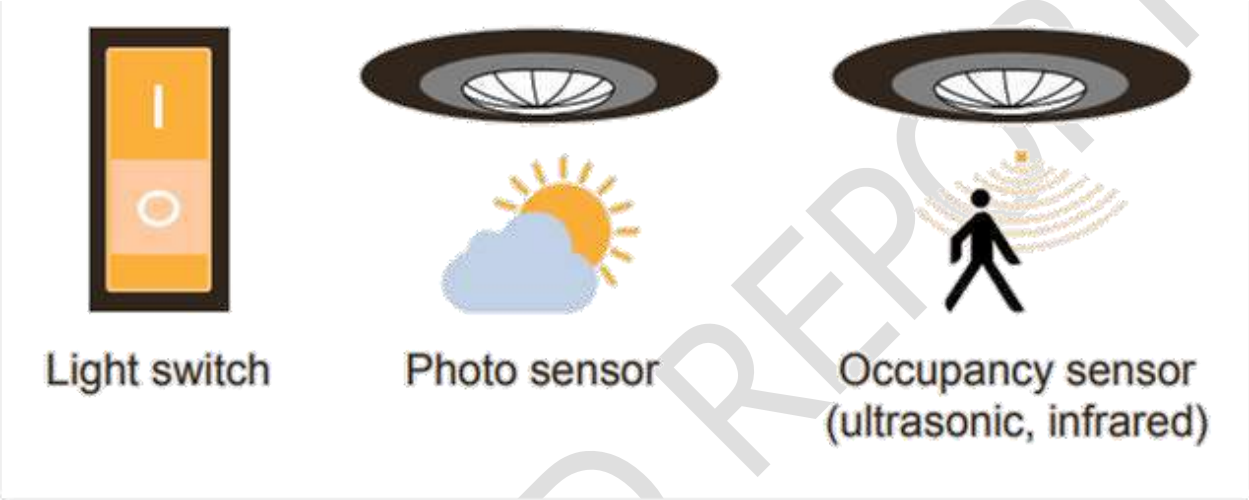

Plate 6: Understanding the lighting concepts

Source: https://seors.unfccc.int/applications/seors/attachments/get_attachment?code=NG125PFE4WHMWSYAK8TCAKIHMWX0F4QD

The above diagram provides a detailed study of how the system controls should be incorporated in the premises as fare as lighting systems are considered. The suggestions for this sub-section are listed below.

- Install PIR control of the lighting in the toilet areas.
- Install push button timer control in all rooms lighting and ceiling fans.
- Install Power Electronics control of the Foyer notice board lighting.
- Installation of intelligent lighting controller will help in controlling the lighting energy.
- Use of photo sensor switch for street light controlling helps in conserving the lighting energy.

6.2.1.2 Smart gardening

The Institute can undertake a Smart Gardening system using IoT Technology. This will result in saving time by scheduling time for watering; saving money through automated water schedules tracking dampness of soil to know when, how much water garden needs.

Plate 7: Solar farm concept for the Institute (For reference purpose only)

Image source: https://housing.com/news/smart-gardening/

Data source: https://www.happysprout.com/inspiration/what-is-smart-gardening/

7. Compilation

The study is based on the data collected, analyzed, rechecked, and confirmed through multiple modes. For the quality study, some standards/ notes have been referred to. These are listed and noted below. However, no direct references have been used anywhere. These are used as a base to analyze and study the data collected.

Specific references for study related to energy

- https://www.energy.gov/eere/buildings/zero-energy-buildings
- https://www.dsaarch.com/zero-net-positive-energy
- U.S. Energy Information Administration
- https://www.happysprout.com/inspiration/what-is-smart-gardening/
- https://housing.com/news/smart-gardening/
- Inference study reference image

  https://seors.unfccc.int/applications/seors/attachments/get_attachment?code=NG125PFE4WHMWSYAK8TCAKIHMWX0F4QD

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

Certificates from an external accredited auditing agency

Sr. No.	Particular
1.	Environment Audit Certificate
2.	Green Audit Certificate
3.	Energy Audit Certificate

GV/ENVT/03-24/277

Environment Audit Certificate (As per Green Building Parameters)

The study is conducted as per Indian and International Green Building Standards initiated in the capacity of an Accredited & Certified Green Building Professional

It is awarded for **2022-2023 and 2023-2024** to the Esteemed Institution

(Analysed for 2 years and extended validity for 1 year, thus total 3 years)

Laxmi Charitable Trust's

Sheth L.U.J. and Sir M.V. College

Dr.S.Radhakrishnan Marg, Andheri (East) Mumbai - 400069, Maharashtra, India

(Site visit held on 06 March 2024)

As part of the Institution's initiatives for a Healthy & Sustainable Institute the audit was conducted.
We appreciate the immense efforts taken by Staff and students towards the Environment Protection and Conservation.

Issued on **Monday, 18 March 2024** and valid till **28 February 2025**

Ar. Nahida Abdulla Shaikh

"Elite 100 Green Architects of India" Econaur, 2022

Certified G.B.P. (Registration. No. 22/718)

Project Head and Green Building Professional-Consultant:
Sustainable Academe I Sustainability Department of Greenvio Solutions, Naigaon
An environment Design and Consultancy developing Healthy and Sustainable Environments
Email: **sustainableacademe@gmail.com** I **greenviosolutions@gmail.com**

Website: https://thegreenviosolutions.co.in/

GV/GA/03-24/ 277

Green Audit Certificate (As per Green Building Parameters)

The study is conducted as per Indian and International Green Building Standards initiated in the capacity of an Accredited & Certified Green Building Professional

It is awarded for **2022-2023 and 2023-2024** to the Esteemed Institution

(Analysed for 2 years and extended validity for 1 year, thus total 3 years)

Laxmi Charitable Trust's

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Certified G.B.P. (Registration. No. 22/718)

Project Head and Green Building Professional-Consultant

Sustainable Academe I Sustainability Department of Greenvio Solutions, Naigaon

An environment Design and Consultancy developing Healthy and Sustainable Environments

Email: **sustainableacademe@gmail.com** I **greenviosolutions@gmail.com**

Website: https://thegreenviosolutions.co.in/

GV/EA/03-24/274

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Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

Geo-tagged photos with captions and dates and Supporting documents related to environmental initiatives beyond the campus.

Sr. No.	Particular
1.	Geotagged Photos of Awareness About Cleanliness and Energy Conservation in Campus
2.	Geotagged Photos of Clean and Green Campus Initiative
3.	Supporting documents for Environmental Promotional activities conducted beyond the campus during last 5 years (Academic year 2019-20 to 2023-24)

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

1.Awareness About Cleanliness and Energy Conservation in Campus

1.Awareness about Cleanliness in the College Campus - Dedicated cleaning staff make sure that college campus is clean and pollution free. They clean classrooms, labs, office, footpath and ground on a regular basis.

Ban on Use of Plastic

2.Waste Management in the Campus- Dry and wet waste are segregated and disposed in a proper way. BMC Collects dry waste on a regular basis. E-waste is handed over to certified recycler- Regreen Recycling Pvt. Ltd. and recycled responsibly.

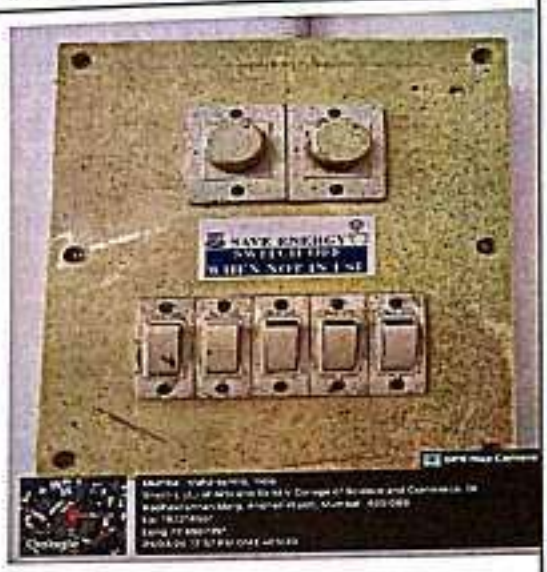
Solid and Liquid Waste Management

E-Waste Management

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST)
MUMBAI

1.Awareness About Cleanliness and Energy Conservation in Campus

3.Energy Conservation Awareness Stickers on all Switch Boards



4.Energy conservation drive - With the increasing demand for energy and the rate at which we use our energy resources, the day isn't far when we will completely deplete natural sources. To achieve the same and do our part for the environment, MVLU college has used energy-efficient tube lights. The Energy conservation drive (ECD) ensures that each year the tube lights of the premises are repaired, recycled, or if replaced, it is replaced by LED lights known to consume less energy.

SHETH L.U.J. & SIR M. V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (E),
MUMBAI-69.

1.Awareness About Cleanliness and Energy Conservation in Campus

5. Water Conservation	
Water Conservation Awareness Stickers In Washrooms 	To conserve water Washroom taps are fitted with auto close faucets 
Small and long Flush buttons in Toilets 	BMC water is conserved by using bore well water for cleaning, gardening and in flush tanks. 

6.Posters to educate students about environmental consciousness	
	

1.Awareness About Cleanliness and Energy Conservation in Campus

Appreciation Letters from Green Auditor

Appreciation Letter from Green Auditor for Recognition of Efforts towards a Healthy and Sustainable Premises

Appreciation Letter from Green Auditor for implementation of the recommendation related to 'Health and Hygiene

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution

2.Clean and Green Campus Initiative

1.Environment Day celebration and Campus Cleanliness Drive

Every year on June 5th, the world celebrates International Environment Day to bring attention to our duties to protect the environment. MVLU College students, teaching, and non-teaching staff celebrated International Environment Day with great enthusiasm on 27th June 2023. The students of each department made posters on the 'Environment Day' theme. The Coordinators of all departments, along with other staff and students, planted saplings on the college ground.

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST)
MUMBAI

2.Clean and Green Campus Initiative

2. "ElectroWarriors- A proactive approach in tackling Electronic Waste"

This webinar gave a lot of information to all staff and students related to electronic waste and how to recycle it from the resource person Mrs. Sujatha Kotian on 14th October 2023. Towards the end of the webinar, questions and doubts were answered by participants.

3. "ElectroWarriors- A proactive approach in tackling Electronic Waste" in collaboration with Regreen Recycling Pvt Ltd.

The E-waste drive was launched on October 14, 2023 by MVLU College in collaboration with Regreen Recycling Pvt Ltd. Students, faculties and non- teaching staff all actively contributed to the e- waste collection. The college and Vissanji Academy also donated to the cause. This idea was expanded upon during our Electrowarriers Vibes Fest 2024, which also included an e-waste drive.

SIR M.V. COLLEGE OF SCIENCE & COMMERCE * SHETH L.U.J. ANDHERI (EAST) MUMBAI

2.Clean and Green Campus Initiative

4. Trash to Treasure: An Ecopreneurship Endeavour

On 6th March 2024, a seminar on "Trash to Treasure: An Ecopreneurship Endeavour" was conducted by the Department of Information Technology in collaboration with IQAC. The purpose of this seminar was to create and spread awareness about recycling of waste, its reduction and conservation of resources. Turning the trash into treasure is a great way to reduce waste, conserve resources and create a more sustainable future.

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST)
MUMBAI

2.Clean and Green Campus Initiative

5. "34th Road Safety Campaign 2024" Competitions

On 31st January 2024, Competitions on "34th Road Safety Campaign 2024" were conducted by the Department of Biotechnology and Sahar Traffic Division, Andheri (East) in collaboration with IQAC. The guest speaker was Incharge Police Inspector, Yogesh Tandale. The purpose of these competitions were to create awareness about road safety rules and environmental consciousness.

COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST)
MUMBAI-69.

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

2.Clean and Green Campus Initiative

1.Handmade Book-Marks Distributed to First Year Students During Orientation:
Senior students made bookmarks with colourful and meaningful quotes and distributed them to first year students during FY orientation program in the month of July 2022.

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE ANDHERI (E) MUMBAI-69.

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

Criteria No. with Title : 7. Institutional Values and Best Practices
Metric No. with Title : 7.1 Institutional Values and Social Responsibilities
Sub Metric No. with Title : 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution.

2.Clean and Green Campus Initiative

2. "Green Healing and Plastic Free campus"- The college has initiated Green Healing and Plastic Free campus as the best practice in the A. Y. 2021-22 by developing creative methods for increasing greenery and reducing plastic on campus and it further inspired students to adopt sustainable values in their own lives too.

3.COVID- ART - During the A. Y. 2020-2021 students of CS/ IT came up with awareness and precautionary drawing related to COVID 19. They were drawing the attention of community both within and outside the campus in breaking the chain of Covid- 19 and creating an environment free from the pandemic.

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (E) MUMBAI-69.

2.Clean and Green Campus Initiative

BMM/ BAMMC FEST - MATINEE TADKA: The theme of the Media Fest Matinee Tadka was Mumbai chi matinee in December 2019. The theme was selected keeping in mind the lifestyle of Mumbaikars. All the decorations and the stage setup were done using environment-friendly materials and avoiding thermocol.

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE
ANDHERI (EAST)

3. Supporting Document for Beyond the Campus Environmental Promotional Activities

Laxmi Charitable Trust's
Tel.: 6699 2022

SHETH L. U. JHAVERI COLLEGE OF ARTS
AND
SIR M. V. COLLEGE OF SCIENCE & COMMERCE

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai - 400 069.

Associate College : Shri Chinai College of Commerce & Economics, Andheri (East)
E-mail : info@mvlucollege.in

Letter of Collaboration

No. MVLU/225
Date: 6-11-2023

To,
The Principal,
Vissanji Academy,
Andheri (East),
Mumbai-400069.

In accordance with our collaborative objectives for a sustainable future, we have developed a program titled "Electrowarriors - A Proactive Approach in Tackling Electronic Waste". This program is of academic interest and of intellectual exchange with the goal of building a long-term mutually beneficial solidarity. Our college is at the forefront of efforts to reduce the negative environmental impact of e-waste through promoting the recycling and suitable disposal of electronic equipment.

We were pleased to approach Vissanji Academy with a proposal for a collaborative project. We feel that it would not only help our local community but also improve the educational and environmental consciousness of your students and staff. We are proposing a collaboration between Sheth L.U.J and Sir M.V. College of Arts, Science and Commerce, Vissanji Academy, and ReGreen Recycling Pvt. Ltd. to work on different initiatives. We propose to hold an E-Waste drive on your campus.

The following goals will be accomplished through this collaborative effort:

1. Engage and educate Vissanji Academy students and staff on the significance of appropriate e-waste disposal and its environmental impact.
2. To raise awareness among students by the school through activities such as poster creation, presentations, plays and so on.
3. Set up e-waste collection sites on your property, such as an e-bin, for old cell phones, laptops, printers, and other electronic equipment. We will make certain that the goods collected are recycled and disposed of in an ecologically responsible and certified manner by ReGreen Recycling Pvt. Ltd.
4. Encourage students and faculty to participate in sustainability initiatives and promote awareness of e-waste reduction through responsible use and recycling.
5. In order to accomplish this, the fundamental objective of e-waste management is to reduce, reuse, and recycle. The school needs to make sure that students are safe as the e-waste is being collected.

If you believe our plan aligns with the values and mission of your school, we welcome the opportunity to collaborate with you. We appreciate you taking a look at our proposal. We are excited about the possibility of collaborating to have a positive influence on our environment and community.

We accept the innovative proposal and look forward to the collaborative effort as early as possible.

06/11/23

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE ANDHERI (EAST) MUMBAI-69.

I/C Principal

L.R.S.S.M. VISSANJI ACADEMY MUMBAI 400 069

Laxmi Charitable Trust's
Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce
(Affiliated to University of Mumbai)
Dr. S. Radhakrisnan Marg, Andheri (East) Mumbai 400 069
☎: 22-66992022/23 | ✉: info@mvlucollege.in | www.mvlucollege.in

COLLABORATION & E-WASTE DRIVE REPORT

Date: 16-12-2023
By: Asst. Prof. Merina Gheevarghese

Title: Joining Hands for a Sustainable Future "ElectroWarriors- A proactive approach in tackling Electronic Waste" in collaboration with Vissanji Academy

Department: IQAC **Collaboration:** Vissanji Academy

Date: 25-10-2023 & 15-12-2023 **Time:** 8:00 am to 9:00 a.m. (assembly) & 8:00 am to 2:00 p.m. (drive)

Venue: Vissanji Academy Ground **Teaching Staff Attended** : 01 (MVLU) 40 (Vissanji)

Students Attended: 02 (MVLU), 800 (Vissanji Academy)

Resource Person: Ms. Merina Gheevarghese, **Contact No.**:9867651568

Objective: To create awareness about e-waste and understand the potential solutions for recycling e-waste.

Outcome: The participants got a deeper understanding of e-waste management and its challenges and actively contributed to the drive.

Brief Report: On the occasion of Sustainability Day, i.e., October 25, 2023, Asst.Prof.Merina Gheevarghese addressed the students and teachers of Vissanji Academy on e-waste management and potential solutions for recycling them. In the end, she also asked everyone to pledge that they would in the future manage their e-waste carefully by giving it to the desired recycler. In agreement with this, we hosted an e-waste collection drive in Vissanji Academy on December 15, 2023, to which many teachers and students contributed.

Documents Attached:
Photos: https://drive.google.com/drive/folders/1i5bUViXs_3ddqMZ1eafkzipsWoeR2eKT?usp=sharing
YouTube Link: https://youtu.be/4XbtIkO6Dw8?si=wy9ry1JBdKw4HWwe
Link for website: https://mvlucollege.in/

Program Coordinator
Ms. Merina Gheevarghese

IQAC Coordinator
Mrs. Manisha Sayani

I/C Principal
Dr. Mahendra Kanojia

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE ★ ANDHERI (EAST) MUMBAI-69.

Laxmi Charitable Trust's

Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai 400 069.

No. MVLU/SN/142/23-24

Date: 29 January, 2024

NOTICE

34th Road Safety Campaign 2024

With reference to the advertisement No. जा. क्र.६४ /प्रपोनि सहार वाहतुक विभाग/२४ issued by Sahar Traffic Division, Andheri (East) dated 25th January 2024, a rally is organized.

Interested participants are required to be present as per given schedule.

Rally Details:

Date: 3rd February 2024.

Time: 4.00 PM

Assembly Location: Shree N.D. Bhuta High School, Andheri East, Mumbai

College ID is compulsory.

Registration link:

https://forms.gle/HMujEu7otEyCqKKq9

Scan to register

C.C. -

1) Principal

Office

Ad Department

Student notice board

PRINCIPAL SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE ANDHERI (EAST) MUMBAI-69.

Program In Charge

I/C Principal

Forwarded to
Ms. Shweta
to coordinate &
organise
(signature)
27/1/24

दुरध्वनी क्रमांक-०२२-२६८३१६४५
Email-sahar.traffic@mahapolice.gov.in

सत्यमेव जयते
महाराष्ट्र शासन
गृह विभाग

सहार वाहतुक विभाग,
अंधेरी उड्डाणपुलाच्या खाली, पश्चिम द्रुतगती महामार्ग,
गोल्ड स्पॉट जंक्शन, अंधेरी (पुर्व)
मुंबई. ४०००६९

जा.क्र.६४ /प्रपोनि/सहार वाहतुक विभाग/२४

~~दि. २२/०१/२४~~
दि. २४/०१/२०२४

प्रति,
SETH. LUJ & SHR.,
M.V. COLLEGE Of,
ART SCIENCE &,
COMMERCE.

याव्दारे आपणास विनंती करण्यात येते की, सध्या केंद्र व राज्य शासनामार्फत **" ३४ वा रस्ता सुरक्षा अभियान २०२४ "** सुरू असून सदर उपक्रमांअंतर्गत दि. १५/०१/२०२४ ते दि. १४/०२/२०२४ शालेय शिक्षण व विदयार्थी यांचे मार्फतीने रस्ता सुरक्षा व वाहतुक नियमनबाबत जनजागृती कार्यक्रम करणेबाबत शासनाकडून आदेश प्राप्त झालेले आहेत.

नमुद अनुषंगाने आपणास विनंती करण्यात येते की, आपण आपले शाळा/कॉलेज मध्ये नमुद कालावधीमध्ये ६ वी ते १५ वी च्या विदयार्थीकरीता खालील उपक्रम यांचे आयोजन करावे व केलेल्या आयोजनाबाबत आगावू आमचे विभागाचे खालील नमुद अधिकारी यांना त्याबाबत दोन दिवस आधी अवगत करावे. जेणेकरून नमुद दिवशी नमुद अधिकारी हे आपले शाळा कॉलेजमध्ये उपस्थित राहून सेमिनार अथवा संवादामार्फत देशाचे भावी भविष्य असणारे विदयार्थीमध्ये वाहतुक नियमन व रस्त्याने चालताना घ्यावयाच्या दक्षतेमध्ये बाबत व रस्ता सुरक्षेबाबत अवगत करतील.

<u>घ्यावयाचे उपक्रम :- प्रत्येक स्पर्धेकरीता किमान २० मुले असणे आवश्यक</u>

I. <u>वक्तृत्व स्पर्धा **(Speech Compitition)** आणि निबंध लेखन **(Essay Writing)** करीता खालील प्रमाणे विषय असतील</u>

१. मी मुंबईचा रस्ता सुरक्षेचा राजदुत. (*I am a Road Safety Ambassador of Mumbai.*)
२. मी वाहतुक पोलीस झालो तर .....? (*If I Become a Traffic Cop.*)
३. रस्ता सुरक्षा — माझी जबाबदारी (*Road Safety – My Responsiblity*)
४. स्वच्छ मुंबई, शिस्तबध्द मुंबई, गतीमान मुंबई (*Clean Mumbai, Discipline Mumbai, Speedier Mumbai*)

II. चित्रकला (***Drawing***), घोषवाक्य (***Slogan***) करीता खालील प्रमाणे विषय असतील.

१. रस्ता सुरक्षा (*Road Safety*)

२. वाहतुकीचे नियम (*Traffic Rules*)

३. जीवन दुत (*Traffic Rules*)

४. झेब्रा क्रॉसींग (*Zebra Crossing*)

III. घोषवाक्य (***Slogan***) करीता खालील प्रमाणे विषय असतील.

रस्ता सुरक्षा विषयक सकारात्मक घोषवाक्य

IV. रस्ता सुरक्षा अभियान रॅली

तरी नमुद कार्यक्रमांचे आयोजन करून सोबत जोडण्यात आलेले फॉर्ममध्ये स्पर्धकांची यादी तयार करून यादी ही सहार वाहतुक विभागाचे पो.उ.नि. जससिंग नाईक, मो.क्र. ९८२१९३३७०२, मपोउनि अमिता मराठे, मो.क्र. ९८१९८८१६३०, फान्सीस रेगो, मो.क्र. ८७७९७३८६८४ यांना संपर्क करणे ही विनंती.

Amita marathe

for प्रभारी पोलीस निरीक्षक,
सहार वाहतुक विभाग,
अंधेरी पुर्व, मुंबई.

Laxmi Chand Jain Trust's
Sheth L.U.J. College of Arts & Sir M.V. College of Science & Commerce
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☎: 22-66992022/23 | : info@mvlucollege.in | www.mvlucollege.in

REPORT ON: Rally for "34th Road Safety Campaign 2024"

Date: 4/02/2024
By – Dr. Priyanka Vartak

Title: Rally on"34th Road Safety Campaign 2024"

Guest Speaker: Incharge Police Inspector, Yogesh Tandale

Target audience: Students of MVLU College

Organized by: Department of Biotechnology and Sahar Traffic Division, Andheri (East).

Collaboration: IQAC

Date:03/02/2024 **Duration:**04:00 pm– 05:00pm **Venue:** Shree N.D. Bhuta High School, Andheri.

Students Attended: 04

Objective: To create awareness and promote road safety among students.

Brief Report: Rally for "34th Road Safety Campaign 2024"wasorganized by Department of Biotechnology and Sahar Traffic Division, Andheri (East) in collaboration with IQAC. The guest speaker was Incharge Police Inspector, Yogesh Tandale. The purpose of this rally was to create awareness about road safety rules to be followed by every citizen of India.

Outcome: Awareness was spread across the students. This rally raised public awareness about traffic rules and ultimately aimed to reduce casualties due to road accidents.

Documents Attached:
Brochure/Notice : tiny.cc/mvlurally
Photos:https://drive.google.com/drive/folders/1keFzPhBySMOpkcHjUO5m9pkh38yr5NMe?usp=drive_link
Attendance:
https://drive.google.com/drive/folders/16eUfJYfmyp74KcrJtDz5-WEfvRK05LDi?usp=drive_link
Feedback: NA

Biotech Department Organizer	IQAC Coordinator	I/C Principal
Dr. Priyanka Vartak	Manisha Sayani	Dr. Mahendra Kanojia

SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE & COMMERCE * ANDHERI (EAST) MUMBAI-69.

Laxmi Charitable Trust's

Sheth L.U.J College of Arts and Sir M.V. College of Science and Commerce

Information Technology Department In Association with

MVLU IQAC

GREEN-TECH INTERCOLLEGIATE POWER POINT PRESENTATION COMPETITION

TOPIC:

GREEN TECHNOLOGY PROBLEMS AND SUSTAINABLE SOLUTIONS

Instructions:

- Identify the problems/ issues related to topic and state the sustainable solutions for the same.
- Each Participant will get 5-8 minutes for the presentation.
- Participants can prepare 10-15 slides on above mentioned Topic.
- Judges decision will be final.
- Use of abusive words and anti-religion or anti-national slides are prohibited.
- There will be two rounds of Selection:
  - 1st Round: Participants must submit their presentation in pdf format through registration form on or before 2nd March, 2022.
  - 2nd Round: Selected participants from 1st round will be intimated to give presentation on 8th March, 2022.

Who can Participate?

Undergraduate student across all streams. (Free Registration)

- Winners will be awarded with Winning Certificate.
- E-certificate will be provided to all the participants.

Organizing Committee

Asst. Prof. Sneha Gokarnkar (H.O.D.)

Asst. Prof. Rohini Jagadale

Asst. Prof. Merina Gheevarghese

Asst. Prof. Sumit Tripathi

Registration Link: https://forms.gle/m4GodKpijT5qYKML6

Date :- 8th March, 2022

Time:- 11:00 am to 2:00 pm

GOOGLE MEET

Office - 022 6699 2022

www.mvlucollege.in

Student Coordinator
Pratik Aeraple - +91 9987394282

feedback system

Laxmi Charitable Trust's Tel.: 6699 2022

SHETH L. U. JHAVERI COLLEGE OF ARTS AND SIR M. V. COLLEGE OF SCIENCE & COMMERCE

Dr. S. Radhakrishnan Marg, Andheri (East), Mumbai - 400 069.

Associate College : Shri Chinai College of Commerce & Economics, Andheri (East)

E-mail : info@mvlucollege.in

IQAC

Proposal Form

To,
The Chairperson,
IQAC.

Date: 01 / 02 / 2022

Proposal For ☐ Seminar ☐ Webinar ☐ Workshop ☐ Others: Competition

Event Type Inter-Collegiate Event

Session Title 'Green-Tech' Power Point Presentation Competition

Proposed Date and Time 8th March, 2022 & Time: 11:am. to 2p.m

Department Information Technology

Organizing Committee Mrs. Sneha Gokarnkar

Contact Number (+91) 9987394282

Email ID it@mvlucollege.in

Resource Person Details –

- Name
- Department / Specialization –
- Organization / Institute
- Phone Number
- Email ID

Intended Audience Undergraduate Students

Learning Objectives
Describe what participants will gain from this session To spread awareness on Green-computing best Practices

IQAC Coordinator

IQAC Chairperson

Proposed by

LAXMI CHARITABLE TRUST'S

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DR. S. RADHAKRISHNAN MARG, ANDHERI(EAST), MUMBAI - 400069

GREEN-TECH POWERPOINT PRESENTATION COMPETITION - Participant List

Academic Year : 2021-2022

Sr. No.	Name
1	Aasiya Qureshi
2	Abhishek Singh
3	Abhishek Vishwakarma
4	Aditi Jaiswar
5	Aditi Suvarna
6	Amruta Uttare
7	Ankit Gupta
8	Anklesha Tripathi
9	Aqeel Khan
10	Ashley Swamy
11	Atul Sharma
12	Avinash Mandal
13	Ayesha Quraishi
14	Bhuvana Nadar
15	Chaitrali Bagwe
16	Chinmay Kadam
17	Dharmesh Mungekar
18	Ganesh Mishra
19	Gayatri Umesh Kulkarni
20	Sheetal Chauhan
21	Harsh Jeetkar
22	Ammarah Momin
23	Jyoti Yadav
24	Karthik Kandasamy
25	Kashish Mishra
26	Khan Noorsaba
27	Khan Shahbaz Alam
28	Komal Gupta
29	Krishna Mandal
30	Manjunath Gowda
31	Mathew Anograh
32	Misba Shaikh
33	Mohan Bhagat
34	Mohit Sharma
35	Nayankumar Gupta
36	Nikita Vishwakarma
37	Noor Saba
38	Noorhera Khan
39	Parth Panchal
40	Piyush Singh
41	Pooja Gupta

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42	Prashant Jaiswal
43	Pratik Ambadskar
44	Raunak Sharma
45	Raunak Vishwakarma
46	Ritu Singh
47	Rohan Tiwari
48	Roshan Yadav
49	Rutansh Paras Dusara
50	Dheeraj Gupta
51	Keshav Mishra
52	Vanshita Sawant
53	Rahul Yadav
54	Sandesh Pal
55	Sandhya Prajapati
56	Sanjiv Sharma
57	Satyam Tiwari
58	Shah Wahid
59	Shibani Padhy
60	Shiv Shankar Gupta
61	Shiv Vishwakarma
62	Shivam Kesharwani
63	Shivam Tiwari
64	Subhi Singh
65	Sujit Belhavare
66	Sushant Salunkhe
67	Tanashree Poyarekar
68	Tannu Sharma
69	Ujjwal John
70	Vikas.R. Yadav
71	Vishal Jaiswar

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ANDHERI (EAST)
MUMBAI-69.

Program Incharge.

(Jyoti Ma'am)

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POWERPOINT PRESENTATION COMPETITION REPORT

Date: 11.03.2022
By Mrs. Sneha Gokarnkar

Title: Green Technology Problems and Sustainable Solutions

Department: I.T. Department **Criteria:** IT/CS students **Collaboration:** MVLU IQAC
Date: 08 March 2022 **From:** 11 A.M. to 2:00 P.M. **Venue:** Google Meet
Teaching Staff Attended: 4 **Students Attended:** 49 students from 14 colleges

Objective: To bring awareness about Green Technology, interpret the damage done to the environment in the past, and conserve the Earth's natural resources.

Outcome: Students learned the green technology solutions to curb the issues of carbon footprint, e-waste, and consumption of energy & water.

Brief Report: Intercollegiate Green Tech PowerPoint Presentation Competition First round was conducted on 02nd March 2022. Forty-Nine participants had submitted their entries in the first round, out of which 15 participants were selected for the final round. On 8th Match 2022, the event started with the welcome speech by Ms. Gayatri Kulkarni. The college introduction was given by Ms. Ayesha Qureshi. The event was graced by honorable Director Mrs. Jyoti Gaitonde and IQAC Head Dr. Mahendra Kanojia. Judges for the competition were namely Asst. Prof. Sneha Gokarnkar, Asst. Prof. Rohini Jagadale, Asst. Prof. Merina Gheevarghese & Asst. Prof. Sumitkumar Tripathi. During the competition participants actively gave their PowerPoint presentations & also provided various green-tech solutions to tackle environmental issues. The judges finalized the First, Second & Third position winners of the competition, they were also felicitated with certificates. A vote of thanks was given by Mr. Parth Panchal. Later on, E-Certificates were given to all the participants to encourage them.

Documents Attached:
Brochure: https://drive.google.com/file/d/1s6vekIJelZUrnowOyp I_M81 gC5RING/view?usp=saring
Profile of resource person: NA
Photos : https://drive.google.com/drive/folders/1X4py1IY6-Il-pFNLDzdLolOyy4OS_d?usp=sharing
Attendance: https://drive.google.com/file/d/1PKeplq221QJ3VKckRNXh72plbuKqB pr/view?usp=sharing
Feedback:https://docs.google.com/spreadsheets/d/1_UapMVuXw1Ba-OfMCBKVcoeXEzxSRjw/edit?usp=sharing&ouid=103601034510799428918&rtpof=true&sd=tru
YouTube Link: https://www.youtube.com/watch?v=5whZCKWM5zQ
Link for website: https://mvlucollege.in/

Program Coordinator	IQAC Coordinator	Director
Mrs. Sneha Gokarnkar	Dr. Mahendra Kanojia	Mrs. Jyoti Gaitonde

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Distribution of Paper Bags Report

Date: 25-4-2021
By Ms. Rohini Jagadale

Title: Distribution of Paper Bags to the Nearest Community

Department: I.T. Department **Criteria:** IT Students

Venue: Nearest Community **Teaching Staff included :** 4

Students Participated: approx. 10

Objective : To cut down on usage of plastic bags by making and handing out paper bags, promoting eco-friendly habits and environmental awareness on campus and in the nearby community.

Outcome : Students created paper bags & distributed it in the campus & nearest community. They also explained how paper bags save our environment.

Brief Report : Usage of plastic bags is widespread and concerning so students from the first year of the IT department created paper bags and distributed them across the campus and the surrounding area to support the college's environmental ethos. They also outlined the benefits of utilizing paper bags, such as how easily they can be recycled and decomposed, how they can replace single-use plastic bags, and how they are biodegradable.

Supporting Documents Attached:

Link for photo -
https://drive.google.com/drive/folders/1ek8fLURKVZ7AlnuoTyM1Nx9HLHXy4Dwq?usp=drive_link
Link for website : https://mvlucollege.in/

Program Incharge

IQAC Coordinator
Ms. Mahendan

Director
Dr. Jyoti Madan

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