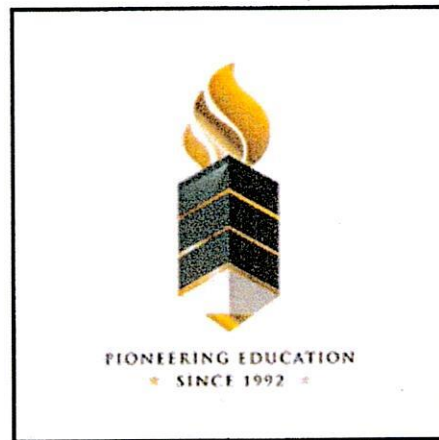


GREEN AUDIT REPORT

of

RAHUL COLLEGE OF EDUCATION

Navghar Raod, Bhayander (East), Thane 401 105



Year: 2021-22

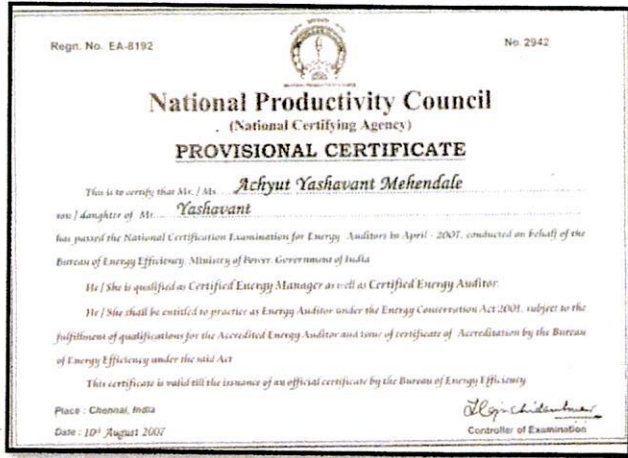
Prepared by:

ENGRESS SERVICES

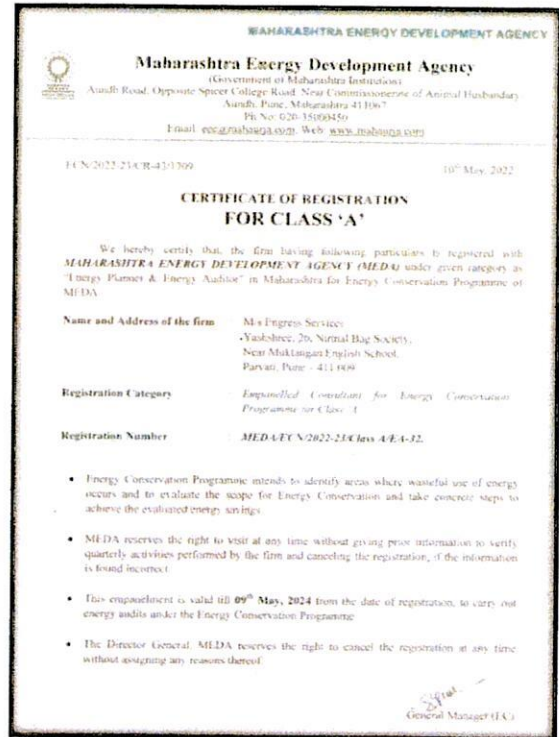
Yashashree, 26, Nirmal Bag Society,
Near Mukhtangan English School, Parvati, Pune 411009
Phone: 09890444795 Email: engress123@gmail.com



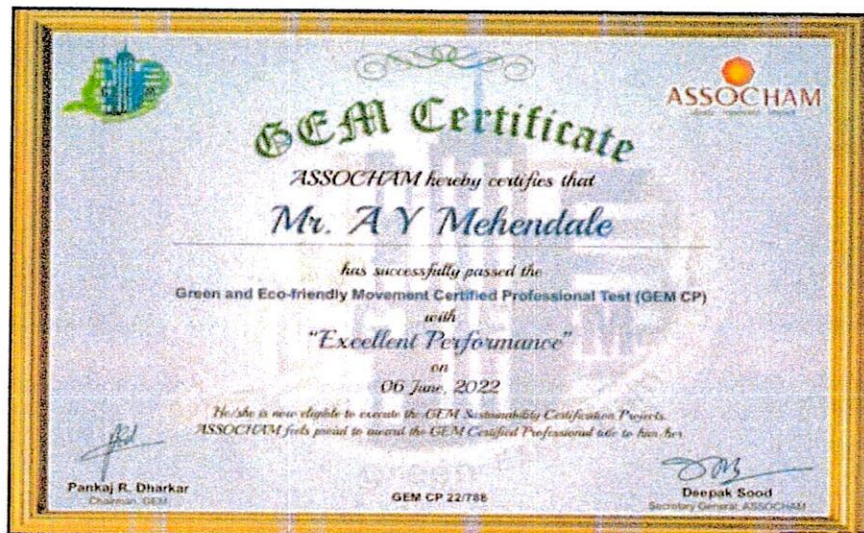
REGISTRATION CERTIFICATES



BEE AUDITOR CERTIFICATE



MEDA EMPANELMENT CERTIFICATE



ASSOCHAM GEM CP CERTIFICATE

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Mira Road (East), Thane - 401107.



ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society,
Near Mukhtangan English School, Parvati, Pune 411 009
Tel: 09890444795 Email: engress123@gmail.com

Ref: ES/RCOE/21-22/02

Date: 22/7/2022

CERTIFICATE

This is to certify that we have conducted Green Audit at Rahul College of Education, Bhayander (East) Thane 401 105, in the Academic year 2021-22.

The College has adopted following Green & Sustainable Practices:

- Usage of Energy Efficient LED Light Fitting
- Maximum Usage of Day Lighting
- Segregation of Waste at source
- Implementation of Rain Water Management Project
- Good internal Road
- Creation of Awareness on Energy Conservation by Display of Poster

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Engress Services,



A Y Mehendale,
Certified Energy Auditor, EA-8192
ASSOCHAM GEM Certified Professional: GEM: 22/788



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INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	5
II	Executive Summary	6
III	Abbreviations	7
1	Introduction	8
2	Study of Present Energy Consumption	9
3	Study of Carbon Foot Printing	10
4	Study of Usage of Renewable Energy	11
5	Study of Waste Management	12
6	Study of Rain Water Management	13
7	Study of Green & Sustainable Practices	14

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ACKNOWLEDGEMENT

We Engress Services, Pune, express our sincere gratitude to the management of Rahul College of Education, Bhayander (East) Thane 401 105, for awarding us the assignment of Green Audit of their Campus for the Year: 2021-22.

We are thankful to all Staff members for helping us during the field study.

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EXECUTIVE SUMMARY

1. Rahul College of Education, Bhayander, consumes Energy in the form of **Electrical Energy**; used for various Electrical Equipment.

2. Present Energy Consumption & CO₂ Emission:

No	Parameter/ Value	Energy Consumed, kWh	CO ₂ Emissions, MT
1	Total	24319	21.89
2	Maximum	2369	2.13
3	Minimum	1763	1.59
4	Average	2026.58	1.82

3. Usage of Renewable Energy:

- The College has yet to install Roof Top Solar PV Plant.

4. Waste Management:

4.1 Segregation of Waste at Source:

The Dry and Wet waste is segregated at the source. Waste collection Bins are kept at various points.

5. Rain Water Management:

The Rain water falling on terrace is used to increase the Underground Water Table.

6. Green & Sustainable Practices:

- Good internal road for easy movement of commuters
- Provision of Lift for Divyangajan
- Creation of Awareness by Display of Posters on Energy Conservation

7. Assumption:

1. **1 kWh** of Electrical Energy releases **0.9 Kg** of CO₂ into atmosphere

8. Reference:

- For CO₂ Emission Computation: www.tatapower.com

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ABBREVIATIONS

Kg	:	Kilo Gram
MT	:	Metric Ton
kWh	:	kilo-Watt Hour
LPD	:	Liters per Day
LED	:	Light Emitting Diode

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CHAPTER-I INTRODUCTION

1.1 Objectives:

1. To study present Energy Consumption
2. To compute CO₂ emissions
3. To Study Usage of Renewable Energy
4. To Study Waste Management Practices
5. To Study Rain Water Management
6. To Study Green & Sustainable Initiatives

1.2 Table No 1: General Details of College:

No	Head	Particulars
1	Name of College	Rahul College of Education
2	Address	Navghar Road, Bhayander (East) Thane 401 105
3	Affiliation	University of Mumbai

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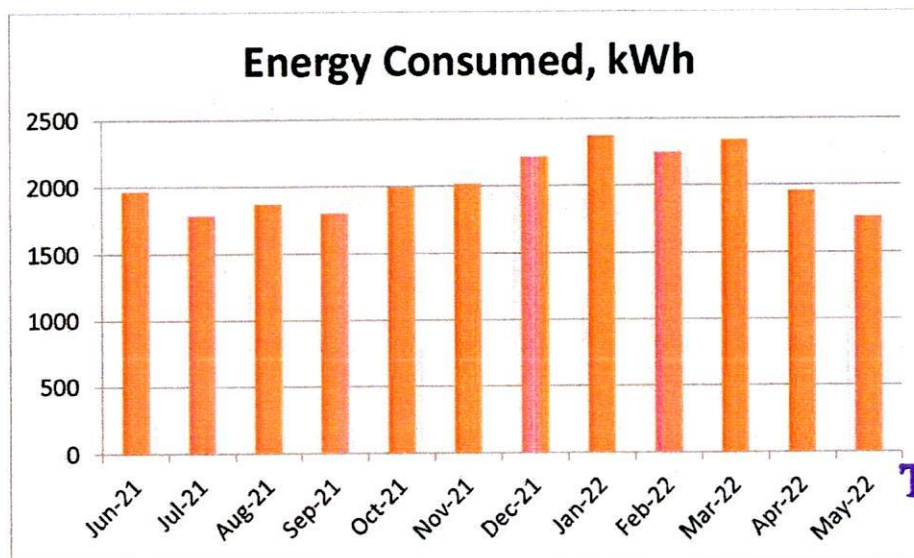
CHAPTER-II STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of last year Electrical Energy.

Table No 2: Electrical Energy Consumption Analysis: 2021-22:

No	Month	Energy Consumed, kWh
1	Jun-21	1965
2	Jul-21	1785
3	Aug-21	1869
4	Sep-21	1798
5	Oct-21	1996
6	Nov-21	2014
7	Dec-21	2218
8	Jan-22	2369
9	Feb-22	2247
10	Mar-22	2339
11	Apr-22	1956
12	May-22	1763
13	Total	24319
14	Maximum	2369
15	Minimum	1763
16	Average	2026.58

Chart No 1: To study the variation of Monthly Energy Consumption, kWh:



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CHAPTER III STUDY OF CARBON FOOT PRINTING

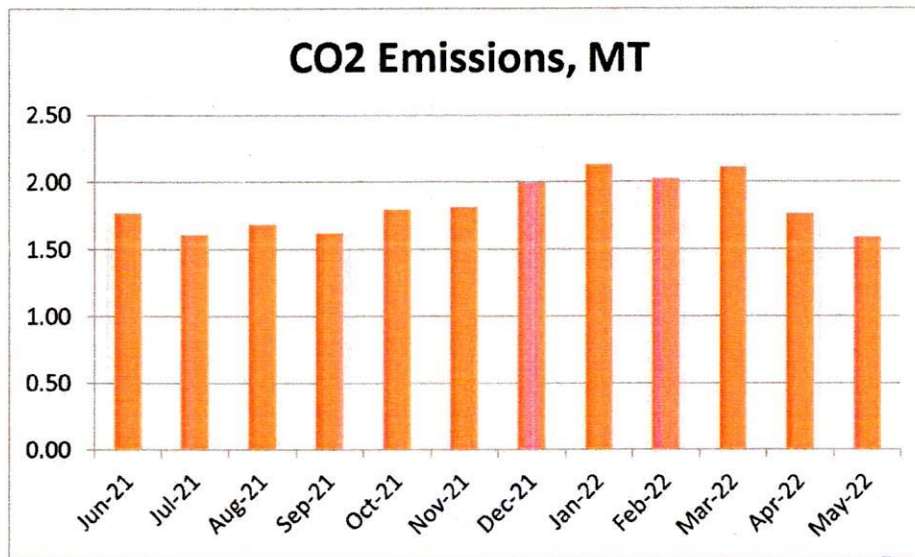
A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities. **Basis for computation of CO₂ Emissions:**

- 1 kWh of Electrical Energy releases 0.9 Kg of CO₂ into atmosphere

Table No 3: Month wise CO₂ Emissions:

No	Month	Energy Consumed, kWh	CO ₂ Emissions, MT
1	Jun-21	1965	1.77
2	Jul-21	1785	1.61
3	Aug-21	1869	1.68
4	Sep-21	1798	1.62
5	Oct-21	1996	1.80
6	Nov-21	2014	1.81
7	Dec-21	2218	2.00
8	Jan-22	2369	2.13
9	Feb-22	2247	2.02
10	Mar-22	2339	2.11
11	Apr-22	1956	1.76
12	May-22	1763	1.59
13	Total	24319	21.89
14	Maximum	2369	2.13
15	Minimum	1763	1.59
16	Average	2026.58	1.82

Chart No 2: Representation of Month wise CO₂ Emissions:



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CHAPTER IV
STUDY OF USAGE OF RENEWABLE ENERGY

The College has yet to install Roof Top Solar PV Plant.

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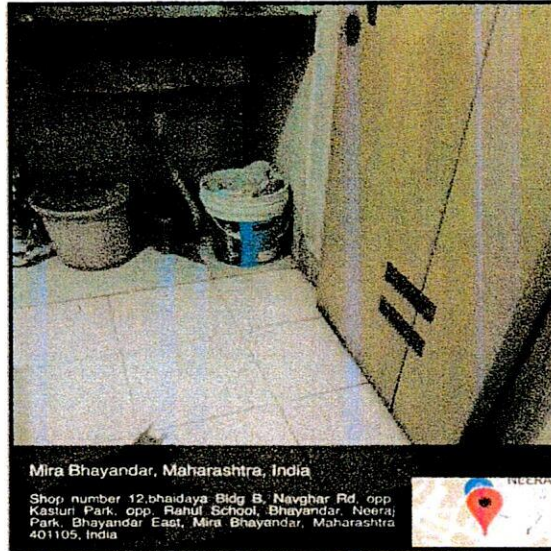


CHAPTER V STUDY OF WASTE MANAGEMENT

5.1 Segregation of Waste at Source:

The Dry and Wet waste is segregated at the source. Waste collection Bins are kept at various points.

Photograph of Waste Collection Bin:



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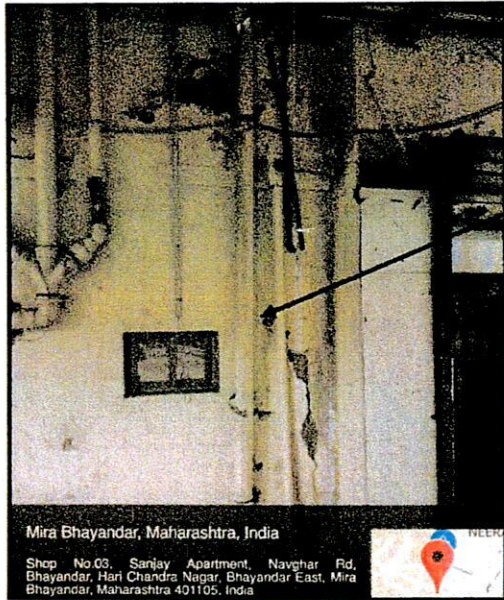
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CHAPTER-VI STUDY OF RAIN WATER MANAGEMENT

The Rain water falling on terrace is used to increase the Underground Water Table.

Photograph of Rain Water Collecting Pipe:



Rain Water
Carrying Pipe

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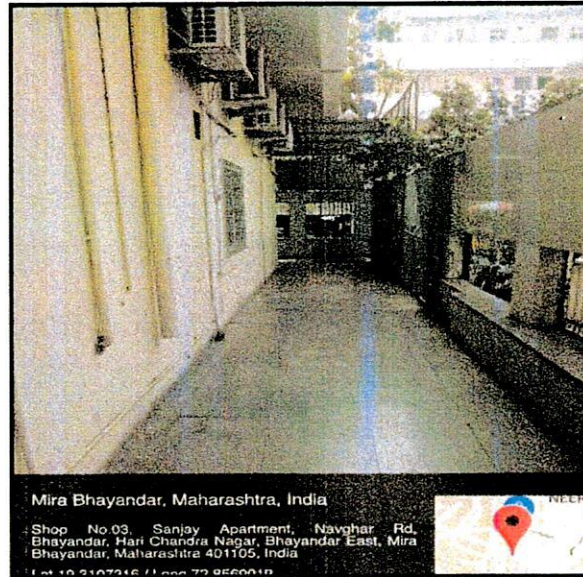


CHAPTER-VII STUDY OF GREEN & SUSTAINABLE PRACTICES

7.1 Pedestrian Friendly Road:

The College has well maintained internal road to facilitate the easy movement of the students within the campus.

Photograph of Internal Road inside the College Campus:



7.2 Creation of Awareness about Resource Conservation:

The College has displayed posters emphasizing on importance of Resource Conservation.

Photograph of Poster on Energy Conservation:



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