# GREEN AUDIT REPORT of RAHUL COLLEGE OF EDUCATION

Navghar Raod, Bhayander (East), Thane 401 105



Year: 2022-23

Prepared by:

# **ENGRESS SERVICES**

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



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MEDA Registration No: ECN/2022-23/CR-43/1709 ISO: 9001-2015 Certified (Cert No: 23EQKC13), ISO: 14001-2015 Certified (Cert No: 23EEKW20)

# **GREEN AUDIT CERTIFICATE**

Certificate No: ES/RCOE/22-23/02

This is to certify that we have conducted Green Audit at Rahul College of Education, Bhayander (East) Thane 401 105, in the Academic year 2022-23.

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 Water 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,

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B E- Mech, M Tech-Energy, Certified Energy Auditor, EA-8192 ASSOCHAM GEM Certified Professional: GEM: 22/788

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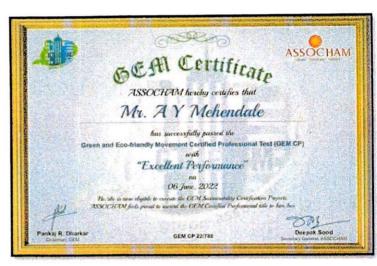
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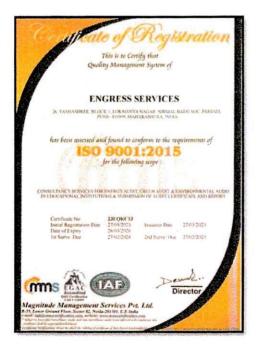
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### REGISTRATION CERTIFICATES

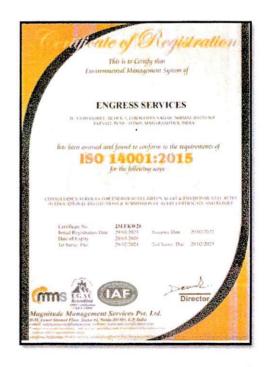




#### MEDA REGISTRATION CERTIFICATE



#### ASSOCHAM GEM CP CERTIFICATE



ISO: 9001-2015 Certificate

ISO: 14001-2015 Certificate

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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: 2022-23.

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

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#### **EXECUTIVE SUMMARY**

- Rahul College of Education, Bhayander, consumes Energy in the form of Electrical Energy; used for various Electrical Equipment.
- 2. Present Energy Consumption & CO<sub>2</sub> Emission:

No	No Particulars		Unit	
1	Annual Energy Consumed	24324	kWh	
2	Annual CO <sub>2</sub> Emissions	21.89	MT	

- 3. Usage of Renewable Energy:
  - The College has yet to install Roof Top Solar PV Plant
- 4. Waste Management:

No	Head	Particulars	
1	Solid Waste	Segregation of Waste at source	

#### 5. Rain Water Management:

The College has installed Pipes from the terrace and the Rain water falling on the terrace is collected through Pipes and is used to increase the underground Water Table.

- 6. Green & Sustainable Practices:
  - Maintenance of good Internal Road
  - Provision of Lift for Divyangajan
  - Creation of awareness on Water Conservation Display of Posters
- 7. Assumption:
  - 1. 1 kWh of Electrical Energy releases 0.9 Kg of CO2 into atmosphere
- 8. Reference:

For CO<sub>2</sub> Emissions: <u>www.tatapower.com</u>

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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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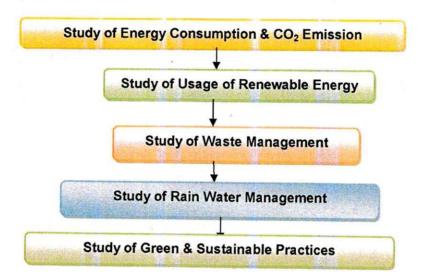
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# CHAPTER-I INTRODUCTION

#### 1.1 Introduction:

A Green Audit is conducted at Rahul College of Education, Bhayander (East) Thane.

# 1.2 Audit Procedural Steps:



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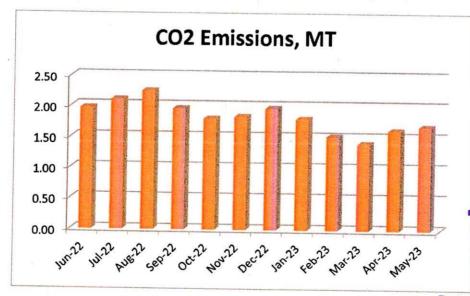
# CHAPTER-II STUDY OF ENERGY CONSUMPTION & CO<sub>2</sub> EMISSION

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities. Basis for computation of CO<sub>2</sub> Emissions:. 1 kWh of Electrical Energy releases 0.9 Kg of CO<sub>2</sub> into atmosphere.

Table No 1: Month wise CO<sub>2</sub> Emissions:

No	Month	Energy Consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Jun-22	2185	1.97
2	Jul-22	2337	2.10
3	Aug-22	2496	2,25
4	Sep-22	2178	1.96
5	Oct-22	1998	1.80
6	Nov-22	2036	1.83
7	Dec-22	2187	1.97
8	Jan-23	1997	1.80
9	Feb-23	1687	1.52
10	Mar-23	1559	1.40
11	Apr-23	1796	1.62
12	May-23	1868	1.68
13	Total	24324	21.89
14	Maximum	2496	2.25
15	Minimum	1559	1.40
16	Average	2027.00	1.82

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



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# CHAPTER III STUDY OF USAGE OF RENEWABLE ENERGY

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

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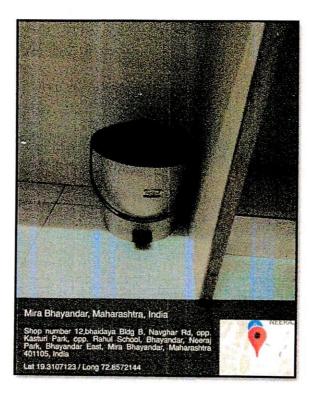
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#### **CHAPTER IV**

#### 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.

Photograph of Waste Collection Bin:



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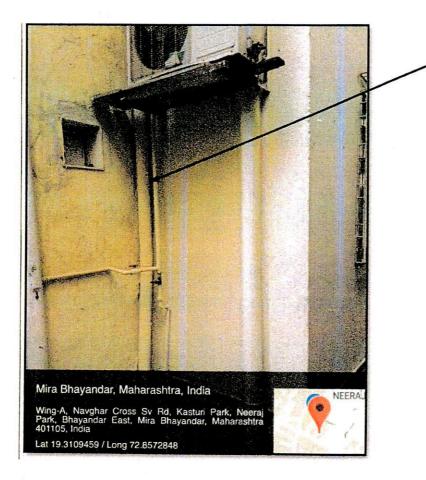
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# CHAPTER-V STUDY OF RAIN WATER MANAGEMENT

The Rain water falling on terrace is collected through Pipe and is stored in an underground Water Tank and used for domestic purpose.

Photograph of Rain Water Collecting Pipe:



Rain Water Carrying Pipe

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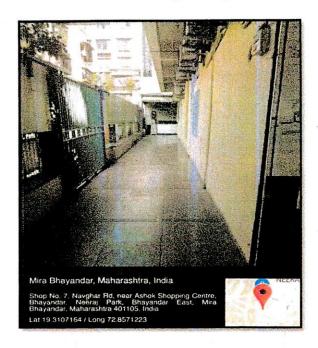
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# CHAPTER-VI STUDY OF GREEN & SUSTAINABLE PRACTICES

#### 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 Water Conservation:

The College has displayed posters emphasizing on importance of Water Conservation. Photograph of Poster on Water Conservation:



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