



**7.1.3 *Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives.....
Green Audit Reports & certificate***

Index

SN	Details
1	Green / Environment Audit <ul style="list-style-type: none"> • Green Audit, • Environment Audit • Energy Audit Report, • Audit Certificates • AQI Index
2	Clean & Green campus initiatives <ul style="list-style-type: none"> • Tree Plantations • Lush Green Campus • Vehicle free zone • Green Campus Policy • Pedestrian friendly Pathway



Green Audit Report & Certificate.....

ENGRESS SERVICES

Yashashree, 26, Nirmal Bag Society, Near Muktangan English School,
Parvati, Pune 411 009 Tel: 09890444795 Email: engress123@gmail.com
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/IIMHRD/22-23/02

Date: 15/4/2023

This is to certify that we have conducted Green Audit at International Institute of Management & Human Resource Development (W), Nere Dattawadi, Near Hinjawadi IT Park, Pune 411 033, in the Year 2022-23.

The Institute has adopted following Green & Sustainable Practices:

- Usage of Energy Efficient LED Fittings
- Maximum usage of Day Lighting
- Installation of 5 kWp Roof Top Solar PV Plant
- Segregation of Waste at source
- Provision of Septic Tank, for liquid Waste Management
- Good Internal Road
- Internal Tree Plantation
- Creation of Awareness in respect of Energy Conservation by Display of Posters

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



GREEN AUDIT REPORT

**INTERNATIONAL INSTITUTE OF MANAGEMENT & HUMAN
RESOURCE DEVELOPMENT (W),**
Nere Dattawadi, Near Hinjawadi IT Park, Pune 411 033

Year: 2023-24

Prepared by:

ENGRSS SERVICES

Yashashree, 26, Nirmal Bag Society
Near Muktangan English School, Parvati, Pune 411009
Phone: 09890444795 Email: engr123@gmail.com



Registration Certificates: UDYAM, MEDA, ASSOCHAM GEM-CP, ISO: 9001 & 14001:

UDYAM REGISTRATION CERTIFICATE

UDYAM REGISTRATION NUMBER: UDYAM/MH/2023/0254858

NAME OF ENTERPRISE: ENGRSS SERVICES

Sl. No.	Classification Code	Enterprise Type	Classification Code
1	20232	Micro	0402000
2	20232	Micro	0402000
3	20232	Micro	2102000

NAME OF ENTITY: **INDIA**

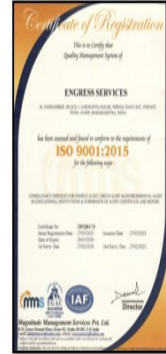
SOCIAL CATEGORY OF ENTREPRENEUR: GENERAL

NAME OF ENTITY: **INDIA**

OFFICE ADDRESS OF ENTERPRISE:

DATE OF COMMENCEMENT OF OPERATION: 09/06/2023

DATE OF CLOSURE OF OPERATION: 09/06/2023



MAHARASHTRA ENERGY DEVELOPMENT AGENCY
Maharashtra Energy Development Agency
4th/4th Road, Opposite Shri Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, 1st Floor, 2nd Cross, Shivajinagar, Pune - 411 005

CERTIFICATE OF REGISTRATION FOR CLASS 'A'

Name and Address of the Firm: ENGRSS SERVICES, Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune - 411 009

Registration Category: Regional / Central / Energy Conservation Programs for Class 'A'

Registration Number: MEDA/EN/2023/0254858

- Energy Conservation Programs intend to identify areas where wasteful use of energy occurs and to reduce the overall EE. Energy Conservation will also ensure steps to achieve the reduced energy savings.
- MEDA reserves the right to visit at any time without giving prior information to verify accuracy of the information provided by the firm and monitoring the registration, if the information is found incorrect.
- This registration is valid till 09/06/2025 from the date of registration. In case any change is made in the Energy Conservation Program.
- The District General, MEDA reserves the right to cancel the registration at any time without assigning any reason thereof.



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ACKNOWLEDGEMENT

We Engress Services, Pune, express our sincere gratitude to the management of International Institute of Management & Human Resource Development (W), Nere Dattawadi, Near Hinjawadi IT Park, Pune 411 033 for awarding us the assignment of Green Audit of their Campus for the Year: 2023-24.

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

EXECUTIVE SUMMARY

1. International Institute of Management & Human Resource Development (W), Pune consumes Energy in the form of Electrical Energy; used for various Electrical Equipment.

2. Present Energy Consumption & CO₂ Emission:

No	Particulars	Value	Unit
1	Annual Energy Purchased	30116	kWh
2	Annual CO ₂ Emissions	28.01	MT

3. Usage of Renewable Energy & Reduction in CO₂ Emission:

No	Particulars	Value	Unit
1	Annual Energy generated by Solar PV Plant	6000	kWh
2	Annual Reduction in CO ₂ Emissions	5.58	MT

4. Waste Management:

No	Head	Particulars
1	Solid Waste	Segregation of Waste at source
2	Organic Waste	Provision of Bio Gas Unit
3	Liquid Waste	Provision of Septic Tank & periodic Cleaning

5. Rain Water Management:

The Institute has yet to install Rain Water Management project.

6. Green & Sustainable Practices:

- > Maintenance of good Internal Road
- > Tree Plantation in the campus.
- > Creation of awareness on Water Conservation Display of Posters

7. Assumptions:

1. 1 kWh of Electrical Energy releases 0.93 Kg of CO₂ into atmosphere
2. Energy Consumption is computed based on Load Utilization Factor
3. Solar Energy generated: 4 kWh/kWp, Annual Generations Days: 300 Nos

8. References:

- For CO₂ Emissions: www.ccd.gujarat.gov.in
- For Solar Energy Generation: www.solarrooftop.gov.in

ABBREVIATIONS

BEE	Bureau of Energy Efficiency
kWh	Kilo Watt Hour
LPD	Liters Per Day
Kg	Kilo Gram
MT	Metric Ton
CO ₂	Carbon Di Oxide
Qty	Quantity

CHAPTER-I INTRODUCTION

1.1 Introduction:

A Green Audit is conducted at International Institute of Management & Human Resource Development (W), Pune.

1.2 Key Study Points:

No	Particulars
1	Study of Present Energy Consumption & CO ₂ Emission
2	Study of Usage of Renewable Energy
3	Study of Waste Management Practices
4	Study of Rain Water Management
5	Study of Green & Sustainable Initiatives

1.3 Institute Location Image:



CHAPTER-II

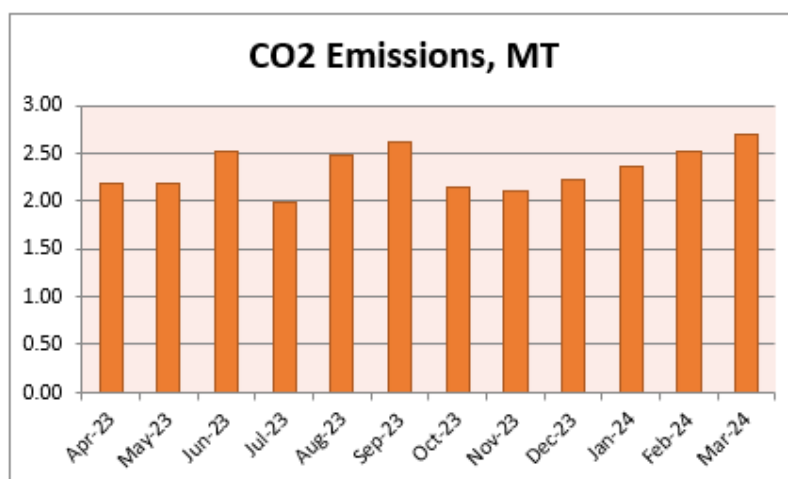
STUDY OF ENERGY CONSUMPTION & CO₂ EMISSION

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 0.93 Kg of CO₂ into atmosphere.

Table No 1: Month wise Energy Consumption & CO₂ Emissions:

No	Month	Energy Purchased, kWh	CO ₂ Emissions, MT
1	Apr-23	2345	2.18
2	May-23	2350	2.19
3	Jun-23	2705	2.52
4	Jul-23	2136	1.99
5	Aug-23	2668	2.48
6	Sep-23	2806	2.61
7	Oct-23	2314	2.15
8	Nov-23	2265	2.11
9	Dec-23	2398	2.23
10	Jan-24	2536	2.36
11	Feb-24	2698	2.51
12	Mar-24	2895	2.69
13	Total	30116	28.01
14	Maximum	2895	2.69
15	Minimum	2136	1.99
16	Average	2509.67	2.33

Chart No 1: Month wise CO₂ Emissions:



CHAPTER III

STUDY OF USAGE OF RENEWABLE ENERGY

The Institute has installed Roof Top Solar PV Plant of Capacity 5 kWp.

In this Chapter, we compute the reduction in CO₂ Emissions on account of Usage of Solar Energy.

Table No 2: Computation of Reduction in CO₂ Emissions:

No	Particulars	Value	Unit
1	Installed Capacity of Solar PV Plant	5	kWp
2	Average Energy Generated by Solar PV Plant	4	kWh/kWp
3	Annual Generation Days	300	Nos
4	Total Solar Energy Generated= $2*3*4$	6000	kWh
5	1 kWh of Electrical Energy is equivalent to	0.9	Kg of CO ₂
6	Reduction in CO ₂ Emissions in 22-23 = $4*5/1000$	5.4	MT

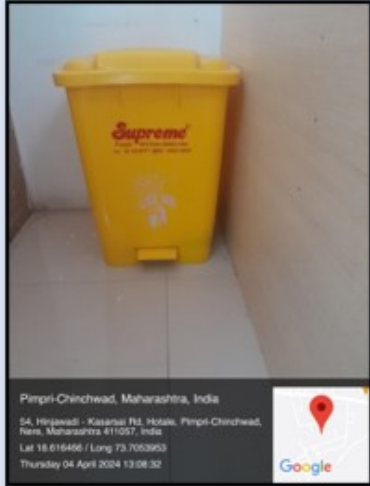

Photograph of Roof Top Solar PV Plant:



CHAPTER IV STUDY OF WASTE MANAGEMENT

In this Chapter, we present the Waste Management Practices, followed by the Institute.




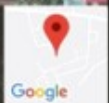
Details of Waste Management Practices:



No	Head	Observation	Photograph
1	Solid Waste	Segregation of Waste at Source: Provision of Waste Collection Bins	<p>Waste Collection Bin:</p>  <p>Pimpri-Chinchwad, Maharashtra, India SA, Hinjawadi - Kasarbai Rd, Hinjawadi, Pimpri-Chinchwad, Neri, Maharashtra 411057, India Lat 18.616466 / Long 73.705393 Thursday 04 April 2024 13:08:32</p>
2	Organic & Food Waste	Provision of Bio Gas Unit for conversion of Food Waste	<p>Bio Gas Unit:</p>  <p>Neri, Maharashtra, India J99+Q46, Neri, Maharashtra 410508, India Lat 18.618219° Long 73.705038° 08/04/24 12:45 PM GMT +05:30</p>
3	Liquid Waste	Provision of Septic Tank & Periodic Cleaning	

CHAPTER-VI
STUDY OF GREEN & SUSTAINABLE PRACTICES

In this Chapter, we present the Green & Sustainable Practices followed by the Institute.

Green & Sustainable Practices:

No	Head	Observation	Photograph
1	Easy Movement of Stake Holders	Provision of Good Internal Road within the Campus	<p style="text-align: center;">Internal Road:</p>  <p style="font-size: small;">Nero, Maharashtra, India JP84+P8C, Nero, Maharashtra 410506, India Lat 18.0164108 / Long 73.7051877 Thursday 04 April 2024 13:16:43</p> 
2	Tree Plantation	Internal Tree Plantation in the Campus	<p style="text-align: center;">Internal Tree Plantation:</p>  <p style="font-size: small;">Lat 18.0164008 / Long 73.7051928 Thursday 04 April 2024 13:10:15</p> 

3	Creation of Awareness among Stake Holders	Display of Poster on Water Conservation	<p>Poster on Water Conservation:</p>  <p>Pimpri-Chinchwad, Maharashtra, India 54, Hinjawadi - Karamod Rd, Hinjawadi, Pimpri-Chinchwad, Maharashtra 411057, India Lat 18.6163812 / Long 73.705307 Thursday 04 April 2024 14:06:06</p> 
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7.1.3 *Clean & Green Campus Initiatives @ IIMHRD.....*

Pedestrian-friendly pathways



SAIBALAJI EDUCATIONAL SOCIETY

INTERNATIONAL INSTITUTE OF MANAGEMENT & HUMAN RESOURCE DEVELOPMENT

IIMHRD For Women



(Affiliated to University of Pune & Approved by AICTE, Ministry of HRD, Govt. of India)

