

GREEN AUDIT REPORT

Shri Wagheshwar Gramvikas Pratishthan's,
LOKNETE SHRI DADA PATIL PHARATE
COLLEGE OF PHARMACY,
Mandavgan Pharata, Taluka: Shirur, District: Pune



Year: 2023-24

Prepared by:

ENGRESS SERVICES

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

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

भारत सरकार
Government of India
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
Ministry of Micro, Small and Medium Enterprises

UDYAM REGISTRATION CERTIFICATE

UDYAM REGISTRATION NUMBER: UDYAM-MH-26-0135636

NAME OF ENTERPRISE: ENGRESS SERVICES

SNo.	Classification Year	Enterprise Type	Classification Date
1	2023-24	Micro	03/02/2024
2	2022-23	Micro	26/06/2022
3	2021-22	Micro	27/07/2021

TYPE OF ENTERPRISE * **SERVICES**

MAJOR ACTIVITY **GENERAL**

SOCIAL CATEGORY OF ENTREPRENEUR

NAME OF UNIT(S)

S.No.	Name of Unit(s)
1	Engress Services

OFFICIAL ADDRESS OF ENTERPRISE

Flat/Door/Block No.	26	Name of Premises/ Building	Yashashree
Village/Town	Pune	Block	1
Road/Street/Lane	Lokmanya Nagar, Nirmal Baug Soc	City	Pune
State	MAHARASHTRA	District	PUNE, Pin 411069
Mobile	8767447244	Email:	engress123@gmail.com

DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE: 13/04/2021

DATE OF COMMENCEMENT OF PRODUCTION/BUSINESS: 13/04/2021

S.No.	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit	Activity
1	70 - Activities of head offices; management consultancy activities	7020 - Management consultancy activities	70200 - Management consultancy activities	Services

NATIONAL INDUSTRY CLASSIFICATION CODE(S)

DATE OF UDYAM REGISTRATION: 27/07/2021



MAHARASHTRA ENERGY DEVELOPMENT AGENCY
Maharashtra Energy Development Agency
(Government of Maharashtra Institution)
Aundh Road, Opposite Spicer College Road, Near Commissionerate of Animal Husbandary,
Aundh, Pune, Maharashtra 411067
Ph No: 020-35000450
Email: ee@mahaurja.com, Web: www.mahaurja.com

ECN/2022-23/CR-43/1709 10th May, 2022

**CERTIFICATE OF REGISTRATION
FOR CLASS 'A'**

We hereby certify that, the firm having following particulars is registered with
MAHARASHTRA ENERGY DEVELOPMENT AGENCY (MEDA) under given category as
"Energy Planner & Energy Auditor" in Maharashtra for Energy Conservation Programme of
MEDA.

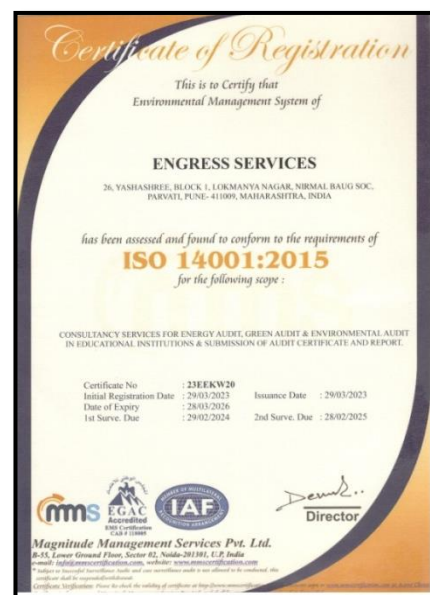
Name and Address of the firm : M/s Engress Services
Yashashree, 26, Nirmal Bag Society,
Near Muktangan English School,
Parvati, Pune - 411 009.

Registration Category : Empanelled Consultant for Energy Conservation
Programme for Class 'A'

Registration Number : MEDA/ECN/2022-23/Class A/E-4-32.

- Energy Conservation Programme intends to identify areas where wasteful use of energy occurs and to evaluate the scope for Energy Conservation and take concrete steps to achieve the evaluated energy savings.
- MEDA reserves the right to visit at any time without giving prior information to verify quarterly activities performed by the firm and canceling the registration, if the information is found incorrect.
- This empanelment is valid till 09th May, 2024 from the date of registration, to carry out energy audits under the Energy Conservation Programme
- The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons therefor.

General Manager (EC)



INDEX

Sr. No	Particulars	Page No
I	Acknowledgement	4
II	Executive Summary	5
III	Abbreviations	6
1	Introduction	7
2	Study of Energy Consumption & CO ₂ Emission	8
3	Study of Usage of Renewable Energy	9
4	Study of Waste Management	10
5	Study of Rain Water Management	12
6	Study of Green & Sustainable Practices	13
	Annexure	
I	List of Trees & Plants	15

ACKNOWLEDGEMENT

We Engress Services, Pune, express our sincere gratitude to the management of Shri Wagheshwar Gramvikas Pratishthan's Loknete Shri Dada Patil Pharate College of Pharmacy, Mandavgan Pharate, Taluka: Shirur, District: Pune, for awarding us the assignment of Green Audit of their Mandavgan campus for the Year: 2023-24.

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

EXECUTIVE SUMMARY

1. Shri Wagheshwar Gramvikas Pratishthan's Loknete Shri Dada Patil Pharate College of Pharmacy, Mandavgan Pharate, Taluka: Shirur, District: Pune consumes Energy in the form of **Electrical Energy**; used for various gadgets, Office & other facilities.

2. Present Energy Consumption & CO₂ Emission:

No	Particulars	Value	Unit
1	Annual Energy Consumed	21295	kWh
2	Annual CO ₂ Emissions	19.80	MT

3. Usage of Renewable Energy:

- The College has installed Solar Thermal Water Heating System at Hostel.

4. Waste Management:

No	Head	Particulars
1	Solid Waste	Segregation of Waste at source
2	Sanitary Waste	Installed Sanitary Waste Incinerator
3	Chemical Fumes	Provision of a Fumigation Chamber
4	Liquid Waste	Provision of Septic Tank

5. Rain Water Management:

The College has installed Rainwater Management Project. The rain water falling on the terrace is collected through pipe and is used to increase the underground water table.

6. Green & Sustainable Practices:

- Maintenance of good Internal Road
- Tree Plantation in the campus.
- Provision of Ramp for Divyangajan
- Creation of awareness on Clean & Green Campus by Display of Posters

7. Assumptions:

- 1 kWh of Electrical Energy releases **0.93 Kg of CO₂** into atmosphere
- Energy Consumption is computed on the basis of Load Utilization Factor

8. References:

- For CO₂ Emissions: www.ccd.gujarat.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 Shri Wagheshwar Gramvikas Pratishthan's Shri Vasantao Pharate Patil Arts, Commerce & Science College, Mandavgan Pharate, Taluka: Shirur, District: Pune 412 211

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 College Location Image:



College
Campus

CHAPTER-II

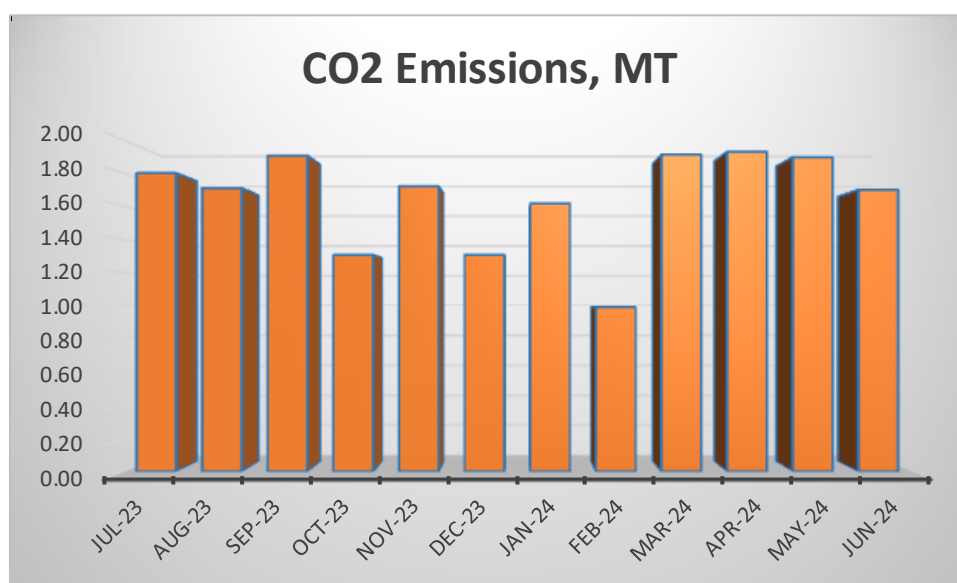
STUDY OF ENERGY CONSUMPTION & CO₂ EMISSION

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 Consumed, kWh	CO ₂ Emissions, MT
1	Jul-23	1936	1.80
2	Aug-23	1839	1.71
3	Sep-23	2050	1.91
4	Oct-23	1406	1.31
5	Nov-23	1852	1.72
6	Dec-23	1406	1.31
7	Jan-24	1740	1.62
8	Feb-24	1067	0.99
9	Mar-24	2057	1.91
10	Apr-24	2075	1.93
11	May-24	2039	1.90
12	Jun-24	1828	1.70
13	Total	21295	19.80
14	Maximum	2075	1.93
15	Minimum	1067	0.99
16	Average	1774.58	1.65

Chart No 1: Month wise CO₂ Emissions:



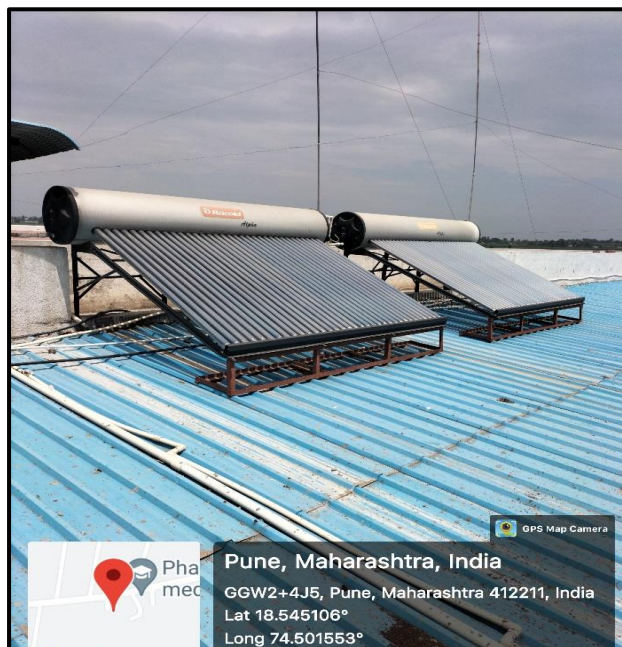
CHAPTER III

STUDY OF USAGE OF RENEWABLE ENERGY

The College has installed Solar Thermal Water Heating System at the Hostel Block

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

Photograph of Roof Top Solar Thermal Water Heating System:



CHAPTER IV STUDY OF WASTE MANAGEMENT

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

Details of Waste Management Practices:

No	Head	Observation	Photograph
1	Solid Waste	Segregation of Waste at Source: Provision of Waste Collection Bins	Waste Collection Bin:  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.5454324 / Long 74.5019093 Wednesday 03 April 2024 11:39:30
2	Sanitary Waste	Provision of Sanitary Waste Incinerator to Dispose of the sanitary Waste	Sanitary Waste Incinerator  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.545099° Long 74.501568° 21/03/23 12:53 PM

3	Chemicals' Storage & Fumes'	Hazardous chemicals are kept away from the reach of students in the fumigation Chamber.	Fumigation Chamber: 
4	Liquid Waste	Arrangement of Septic Tank, for disposal of Liquid Waste and is cleaned periodically.	

CHAPTER-V

STUDY OF RAIN WATER MANAGEMENT

The College has implemented the Rain Water Management Project. The College has installed Pipes from the terrace and the Rain water falling on the terrace is gathered and is used to increase the underground water table.

Photograph of Rain Water Collecting Pipe:



CHAPTER-VI

STUDY OF GREEN & SUSTAINABLE PRACTICES

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

Green & Sustainable Practices:

No	Head	Observation	Photograph
1	Easy Movement of Stake Holders	Provision of Good Internal Road within the Campus	Internal Road:  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.5453305 / Long 74.5017208 Wednesday 03 April 2024 11:59:34
2	Tree Plantation	Internal Tree Plantation in the Campus	Internal Tree Plantation:  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.5453223 / Long 74.5017237 Wednesday 03 April 2024 11:58:49

3	Facilities for Divyangajan	Provision of Ramp for Divyangajan	Ramp for Divyangajan:  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.5453861 / Long 74.5017725 Wednesday 03 April 2024 11:58:19 Curved College Google
4	Creation of Awareness among Stake Holders	Display of Poster on Clean & Green Campus	Poster on Clean & Green Campus:  Pune, Maharashtra, India GGW2+4J5, Pune, Maharashtra 412211, India Lat 18.545355 / Long 74.5017411 Wednesday 03 April 2024 12:13:00 Curved College Google

ANNEXURE I

LIST OF TREES & PLANTS IN THE CAMPUS

1. List of Trees:

No	Common Name of Tree
1	Royal Palm
2	Arica Palm
3	Queen palm
4	Rubber
5	Spanish Cherry
6	Saptaparni
7	Mango
8	Ficus
9	Champa
10	Swarnachampa
11	Nagchampa
12	Papaya
13	Chinese Thuja
14	English Chinch
15	Vad

2. List of Plants:

No	Name of Plant
1	Mogra
2	Jasmine
3	Rose
4	Kavath
5	Vala
6	Ganeshvel
7	Panphuti
8	Kanher
9	Mint
10	Curry Leaves
11	Sabja
12	Kharik
13	Nivdunga
14	Hibiscus
15	Aboli
16	Lantana