

GREEN AUDIT REPORT

SAMARTH RURAL EDUCATION INSTITUTE'S, SAMARTH COLLEGE OF COMPUTER SCIENCE,

A/P Belhe, Tal: Junnar, Dist: Pune 412 410



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

S.No.	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 : GENERAL

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.

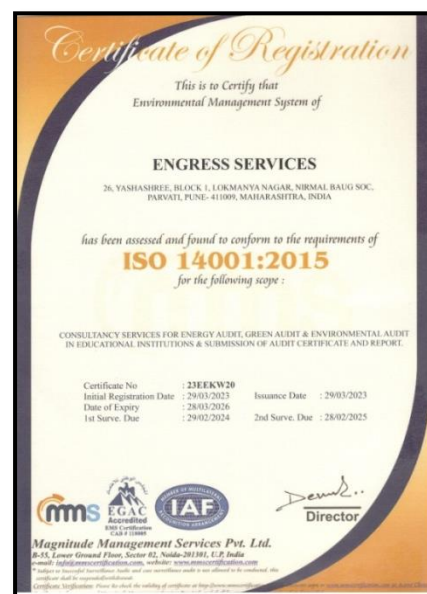
Name and Address of the firm : M/s Engress Services
Yashashree, 26, Nirmal Bag Society,
Near Mukhtangan English School,
Parvati, Pune - 411 009.

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 thereof.

General Manager (EC)



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ACKNOWLEDGEMENT

We at Engress Services, Pune, express our sincere gratitude to the management of Samarth Rural Education Institute's Samarth College of Computer Science, A/P Belhe, Tal: Junnar, Dist: Pune, 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. Samarth College of Computer Science, A/P Belhe, Tal; Junnar, Dist: Pune consumes Energy in the form of **Electrical Energy**; used for various Electrical Equipment, office & other facilities.

2. Present Energy Consumption & CO₂ Emission:

No	Particulars	Value	Unit
1	Annual Energy Consumed	28530	kWh
2	Annual CO ₂ Emissions	26.53	MT

3. Usage of Renewable Energy:

- Installation of 2000 LPD Solar Water Heating System

4. Waste Management:

No	Head	Particulars
1	Solid Waste	Segregation of Waste at source
2	Food Waste	Provision of Bio Gas Plant
3	E Waste	Recommended to dispose of through Authorized Agency

5. Rain Water Management:

The rain water falling on the terrace is collected and is used to crease 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 Energy 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

8. Reference:

- 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

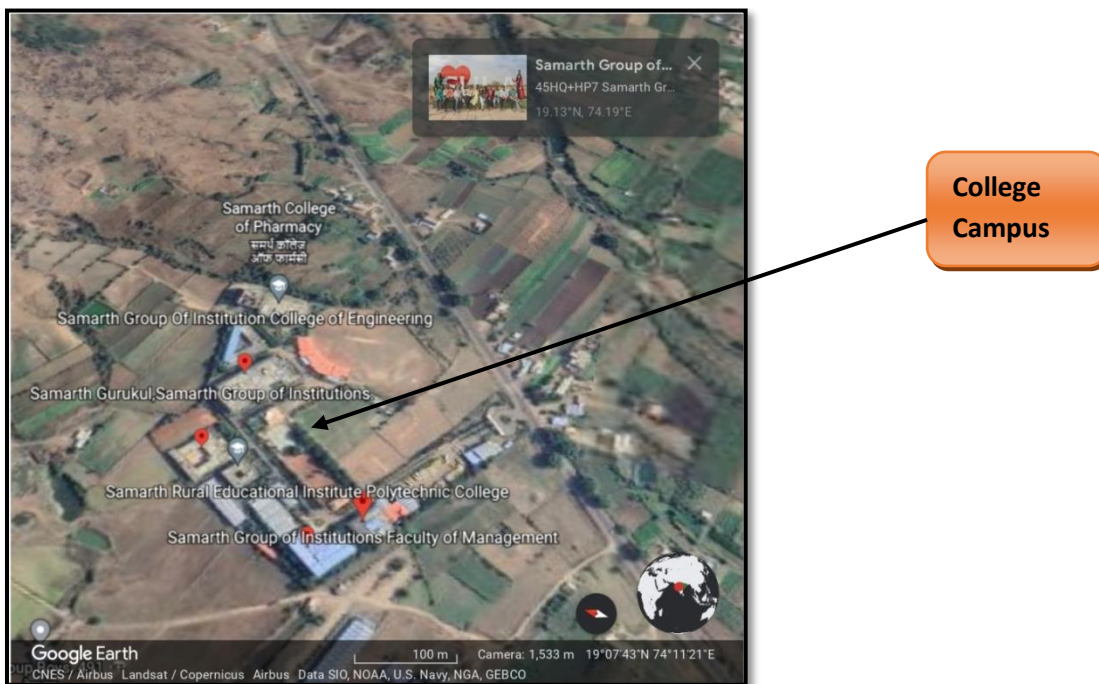
1.1 Introduction:

A Green Audit is conducted at Samarth Rural Education Institute's Samarth College of Computer Science, A/P Belhe, Tal: Junnar, Dist: 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 College Location Image:



CHAPTER-II

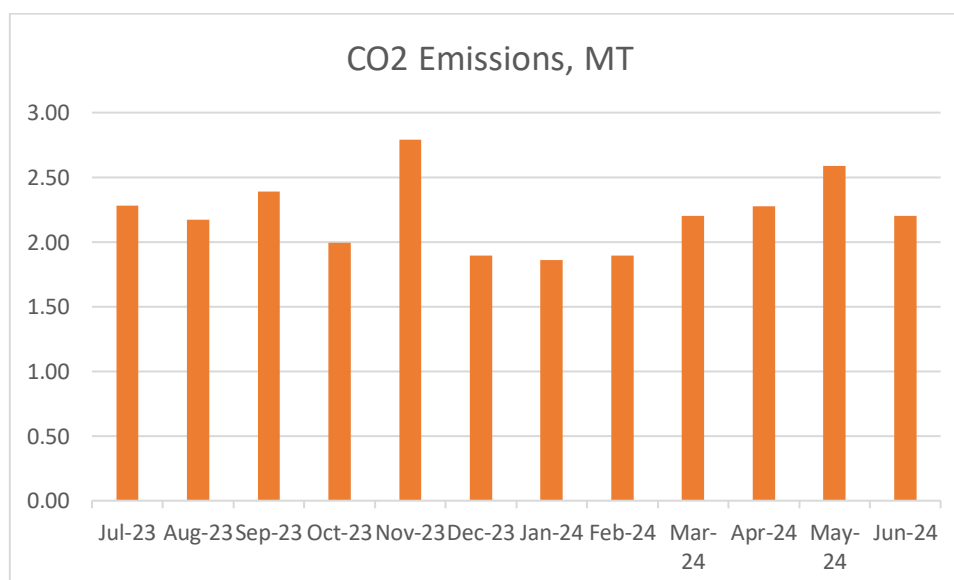
STUDY OF ENERGY CONSUMPTION & CO₂ EMISSION

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 CO₂ Emissions:

No	Month	Energy Consumed, kWh	CO ₂ Emissions, MT
1	Jul-23	2450	2.28
2	Aug-23	2336	2.17
3	Sep-23	2569	2.39
4	Oct-23	2145	1.99
5	Nov-23	2998	2.79
6	Dec-23	2036	1.89
7	Jan-24	1998	1.86
8	Feb-24	2036	1.89
9	Mar-24	2369	2.20
10	Apr-24	2445	2.27
11	May-24	2780	2.59
12	Jun-24	2368	2.20
13	Total	28530	26.53
14	Maximum	2998	2.79
15	Minimum	1998	1.86
16	Average	2377.5	2.21

Chart No 1: Month wise CO₂ Emissions:



CHAPTER III

STUDY OF USAGE OF RENEWABLE ENERGY

The College has installed Solar Thermal Water Heating System.

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

Photograph of 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	<p>Waste Collection Bin</p> 
2	Food Waste	The Food Waste is converted in to Bio gas in a Bio Gas Plant.	<p>Bio Gas Plant:</p> 
3	E Waste	Recommended to dispose of through Authorized Agency.	

CHAPTER-V

STUDY OF RAIN WATER MANAGEMENT

The College has installed the Rainwater Management project, the rain water falling on the terrace 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	<p>Internal Road:</p>  <p>GPS Map Camera Bangarwadi, Maharashtra, India 45jr+24c, Sgoe Coe Rd, Bangarwadi, Maharashtra 412410, India Lat 19.13041° Long 74.190205°</p>
2	Tree Plantation	Internal Tree Plantation in the Campus	<p>Internal Tree Plantation:</p>  <p>GPS Map Camera Bangarwadi, Maharashtra, India 45jr+8f7, Bangarwadi, Maharashtra 412410, India Lat 19.132455° Long 74.191383°</p>

3	Facilities for Divyangajan	Provision of Ramp Structure for Divyangajan	<p>Ramp for Divyangajan:</p> 
4	Creation of Awareness among Stake Holders	Display of Poster on Energy Conservation	<p>Poster on Energy Conservation:</p> 

ANNEXURE-1:
LIST OF TREES AND PLANTS:

No	Common Name	Number
1	Poptree	75
2	Jackfruit	1
3	Guava	2
4	Almond	18
5	Umbar	2
6	Ashoka	11
7	Shevari	11
8	Mango	2
9	Kadunimb	8
10	Coconut	8
11	Vad	3
12	Peepal	3
13	Krishnazad	3
14	Chikoo	1
15	Khair	1
16	Shenga	6
17	Kaghalshevari	1
18	Nirgundi	4
19	Sitafal	1
20	Papaya	1
21	Total	162