

# GREEN AUDIT REPORT

Pune Vidyarthi Griha's  
**COLLEGE OF ENGINEERING AND TECHNOLOGY & G K PATE (WANI)**  
**INSTITUTE OF MANAGEMENT,**  
Vidyanagari, Parvati, Pune 411 009



Year: 2024-25

Prepared by:

## ENGRESS SERVICES

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



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

भारत सरकार  
Government of India  
सूक्ष्म, नन्व एवं मध्यम उद्यम विभाग  
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: SERVICES

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.	Name of Premises/Building	Village/Town	Block
26	Yashashree	Pune	1

Road/Street/Lane: Lokmanya Nagar/Nirmal Bag Soc  
City: Pune  
State: MAHARASHTRA District: PUNE, Pin 411009  
Mobile: 8767447244 Email: engress12@gmail.com

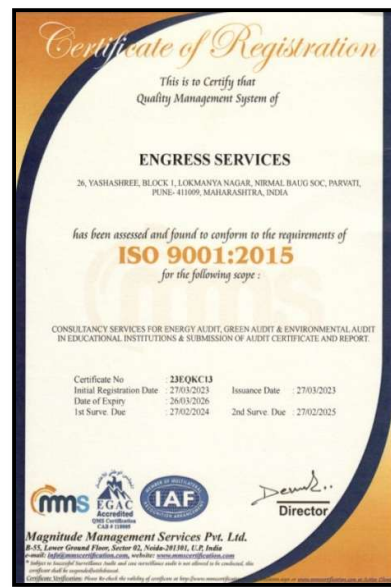
DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE: 13/04/2021

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

S.No.	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit	Activity
1	79 - Activities of head offices; management consultancy activities	7920 - Management consultancy activities	79200 - 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: eee@mahauria.com, Web: www.mahauria.com

ECN/2024-25/CR-02/389 8<sup>th</sup> October, 2024

**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  
Yashshree, 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/2024-25/Class A/EA-22

- 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 **7<sup>th</sup> October, 2026** 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 (FC)



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## **ACKNOWLEDGEMENT**

We Engress Services, Pune, express our sincere gratitude to the management of Pune Vidyarthi Griha's College of Engineering and Technology & G K Pate (Wani) Institute of Management, Vidyanagari, Parvati, Pune 411 009 for awarding us the assignment of Green Audit of their Campus for the Year: 2024-25.

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

## EXECUTIVE SUMMARY

1. A Green Audit was conducted at Pune Vidyarthi Griha's College of Engineering and Technology & G K Pate (Wani) Institute of Management, Pune

### 2. Present Energy Consumption & CO<sub>2</sub> Emission:

No	Particulars	Value	Unit
1	Total Energy Purchased	<b>234068</b>	kVAh
2	Annual CO <sub>2</sub> Emissions	<b>210.66</b>	tCO <sub>2</sub> e

### 3. Usage of Renewable Energy:

- The College has installed 5 kWp Roof Top Solar PV Vehicle Charging Station.

### 4. Study of Green Cover:

No	Particulars	Value	Unit
1	Total Green Cover Area	<b>4800</b>	m <sup>2</sup>
2	Total Plot Area	<b>16148</b>	m <sup>2</sup>
3	% of Green Cover to Total Plot area	<b>30</b>	%

### 6. Study of Waste Management:

No	Head	Particulars
1	Solid Waste	Segregation of Waste at source
2	Sanitary Waste	Provision of Sanitary Waste Incinerator
3	Paper & Plastic Waste	MoU with City Chakra for Paper Waste & TAA- Sagarmitra for Plastic Waste
4	E Waste	MoU for Disposal of E Waste

### 7. Study of Water Management:

7.1 Water Sources: The Main sources of Water are: Municipal Supply and bore well

#### 7.2 Rain Water Management:

The College has installed Pipes from the terrace and the Rain water falling is collected through Pipes and is used for stored in an underground Storage Pit; further used for recharging the underground Water Table.

### 8. Sustainable Living Practices:

No	Head	Particulars
1	<b>Initiatives on National Mission on Green India</b>	<ul style="list-style-type: none"> <li>➤ Internal Tree Plantation in the Campus.</li> <li>➤ Tree Plantation Drives outside the Campus</li> </ul>

<b>2</b>	<b>Initiatives on National Sustainability Scheme</b>	<ul style="list-style-type: none"><li>• Conductance on Value added Course on Sustainable Development</li><li>• Conducting Visits to Study Eco- System &amp; Environmental Awareness</li></ul>
<b>3</b>	<b>Initiatives on Swatch Bharat Abhiyan</b>	<ul style="list-style-type: none"><li>• Conductance of Cleanliness Drive Events</li></ul>
<b>4</b>	<b>Initiatives for CO<sub>2</sub> Emission Reduction</b>	<ul style="list-style-type: none"><li>• Usage of Roof Top Solar PV Plant</li><li>• Usage of Energy Efficient Equipment: LED Tubes &amp; STAR Rated Equipment</li></ul>
<b>5</b>	<b>Facilities for Divyangajan</b>	<ul style="list-style-type: none"><li>• Provision of Ramp</li><li>• Provision of Dedicated Washrooms</li><li>• Provision of Lift</li></ul>

### 9. Assumptions:

1. Emission Fator of Electricity: **0.93 Kg of CO<sub>2</sub> / kWh**
2. CO<sub>2</sub> Emissions are computed For **Scope- 2**
3. CO<sub>2</sub> Emissions are computed based on Electrical Energy purchased

### 10. Reference:

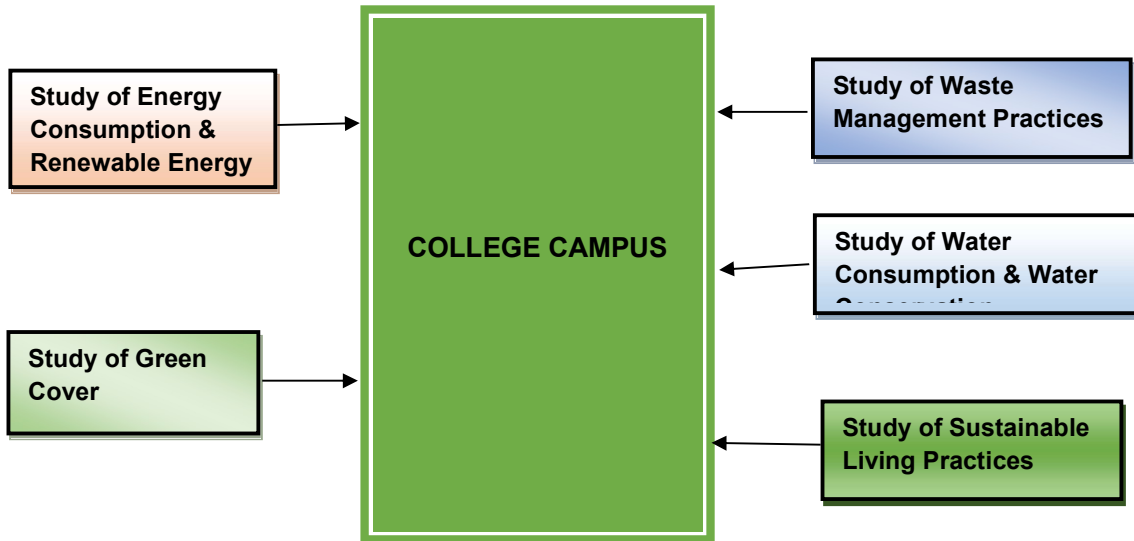
- For CO<sub>2</sub> Emissions: [www.ccd.gujarat.gov.in](http://www.ccd.gujarat.gov.in)

# CHAPTER-I INTRODUCTION

## 1.1 Introduction:

A Green Audit is conducted at Pune Vidyarthi Griha's College of Engineering and Technology & G K Pate (Wani) Institute of Management, Vidyanagari, Parvati, Pune 411 009.

## 1.2 Key Study Points:



## 1.3 College Location Image:



## CHAPTER-II STUDY OF ENERGY CONSUMPTION & RENEWABLE ENERGY

### 2.1 Study of Present Energy Consumption:

In this Chapter, we present the Energy Consumption, CO<sub>2</sub> Emission and Usage of Renewable Energy & Reduction in CO<sub>2</sub> Emission.

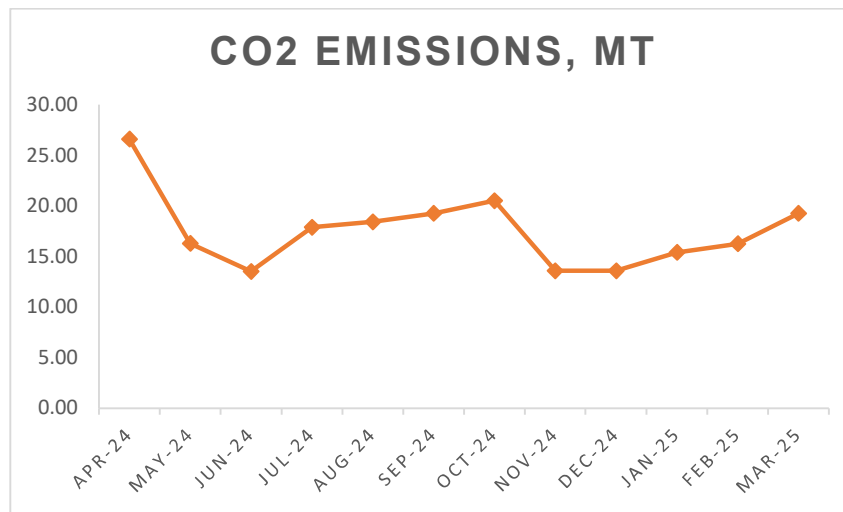
A **Carbon Foot print** is defined as the Total Greenhouse Gas emissions, emitted due to various activities. The CO<sub>2</sub> Emission is computed for **Scope-2**

**Emission Factors** Emission Fator of Electricity: **0.93 Kg of CO<sub>2</sub>/kWh**

**Table No 1: Month wise CO<sub>2</sub> Emissions: For Scope-1 & Scope-2:**

No	Month	Energy Consumed, kVAH	CO2 Emissions, MT
1	Apr-24	29566	26.61
2	May-24	18096	16.29
3	Jun-24	15038	13.53
4	Jul-24	19896	17.91
5	Aug-24	20482	18.43
6	Sep-24	21398	19.26
7	Oct-24	22798	20.52
8	Nov-24	15098	13.59
9	Dec-24	15104	13.59
10	Jan-25	17106	15.40
11	Feb-25	18086	16.28
12	Mar-25	21400	19.26
13	Total	234068	210.66

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



## 2.2 Study of Usage of Renewable Energy:

The College has installed Solar PV based Vehicle Charging Station of Capacity **5 kWp**.

**Photograph of 5 kWp Capacity Solar PV Based Vehicle Charging Station:**



### CHAPTER III STUDY OF GREEN COVER

In this Chapter, we present the **Green Cover** of the Total Campus.

**Green Cover** of an Institution is the Ratio of Area covered by Trees to Total Plot Area. To compute the Green Cover, we use the Goole Earth Image of the Campus.

**Table No 3: Computation of Green Cover:**

No	Particulars	Value	Unit
1	Total Green Cover Area	<b>4800</b>	m <sup>2</sup>
2	Total Plot Area	<b>16148</b>	m <sup>2</sup>
3	% of Green Cover to Total Plot area	<b>30</b>	%



**Photograph of Internal Tree Plantation inside the Campus:**



## 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	<b>Solid Waste</b>	Segregation of Waste at Source: Provision of Waste Collection Bins	<p><b>Waste Collection Bin</b></p> 
2	<b>Sanitary Waste</b>	Provision of Sanitary Waste Incinerator	<p><b>Sanitary Waste Incinerator:</b></p> 
3	<b>Paper &amp; Plastic Waste</b>	MoU with City Chakra for Paper Waste & TAA- Sagarmitra for Plastic Waste	
4	<b>E Waste</b>	MoU for Disposal of E Waste	

## CHAPTER-V STUDY OF WATER MANAGEMENT

### 5.1 Water Sources:

Now we compute the Per Capita Water Consumption.

There are 2 sources of Water, namely:

- 1 Municipal Water Supply
- 2 Bore well

### 5.2 Study of Rain Water Management:

The College has installed Pipes from the terrace and the Rain water falling is collected through Pipes and is used for stored in an underground Storage Pit; further used for recharging the underground Water Table.

#### Photograph of Rain water Collecting Pipe:






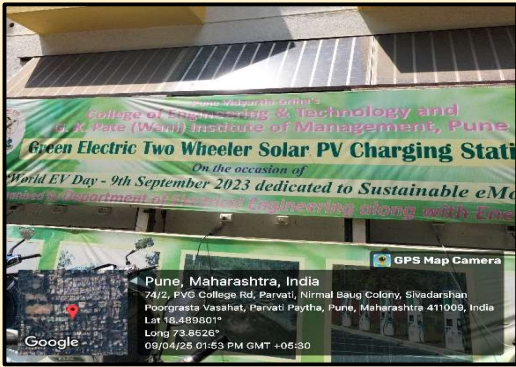

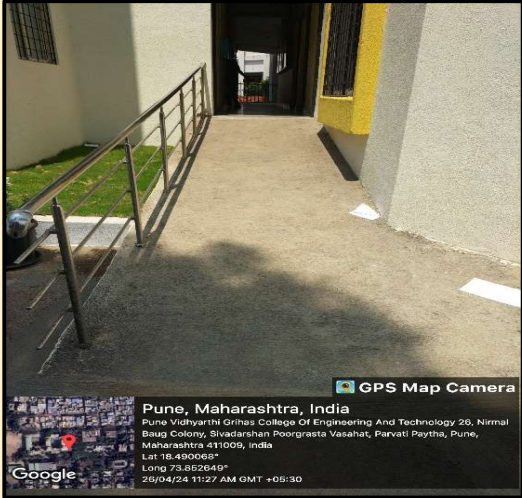
Rain Water  
Collection Pipe &  
Sand Filter Unit

## CHAPTER-VI STUDY OF SUSTAINABLE LIVING PRACTICES

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

### Sustainable Living Practices:

No	Head	Action Taken	Photograph
1	Initiatives on National Mission on Green India	Tree Plantation Drive	<p><b>Tree Plantation at the Taljai Hill:</b></p> 
2	Initiatives on National Sustainability	<p>2.1 Starting Course on Sustainable Development</p> <p>2.2 Visits to study Eco-System</p>	<p><b>Visit for Eco-System Study:</b></p> 
3	Initiatives on Swatch Bharat Abhiyan	Conductance of Cleanliness Drive	<p><b>Cleanliness Drive at Parvati:</b></p> 

<p>4</p>	<p><b>Actions taken for CO<sub>2</sub> Emission Reduction</b></p>	<p>4.1 Installation of 5 kWp Solar PV based Vehicle Charging Station</p>	<p><b>Solar PV Based Vehicle Charging Station:</b></p> 
		<p>4.2 Usage of Energy Efficient Equipment: LED Tubes</p>	<p><b>LED Light:</b></p> 
<p>5</p>	<p><b>Facilities for Divyangajan</b></p>	<p>8.1 Provision of Ramp</p>	<p><b>Ramp:</b></p> 
		<p>8.2 Provision of Dedicated Washrooms</p>	
		<p>8.3 Provision of Lift</p>	

**ANNEXURE**  
**LIST OF TREES & PLANTS**

No	Common Name	Qty	No	Common Name	Qty
1	Ashok	12	21	Karanj	1
2	Ram Phal	1	22	Subabhul	1
3	Bor	1	23	Karanj	1
4	Tabebuia	2	24	Cherry	3
5	Kadulimb	1	25	Bherlimad	1
6	Gulmohor	3	26	Palm	1
7	Coconut	10	27	Cycus	1
8	Mango	5	28	Fanpalm	1
9	Jambhul	2	29	Traveller's Palm	1
10	Chinch	3	30	Shankasur	1
11	Umbar	1	31	Champa	1
12	Pichkari	1	32	Badam	1
13	Pimpal	2	33	Buch	1
14	Banyan	2	34	Rosewood	1
15	Bel	1	35	Putrajiva	1
16	Phycus	1	36	Kateri Palm	1
17	Bahava	3	37	Bamboo	1
18	Shirish	3	38	Silver Oak	1
19	Kanguni	1	39	Bakana	
20	Bottlebush	1			