

# 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: 2023-24

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, नपु 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

City: Pune

State: MAHARASHTRA District: PUNE, Pin 411009

Mobile: 8767447244 Email: engress12@gmail.com

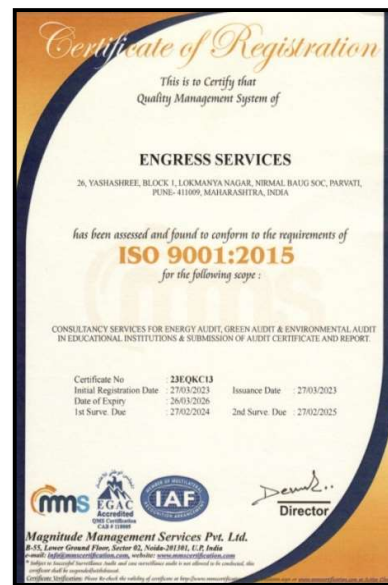
DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE: 13/04/2021

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@maharaja.com, Web: www.maharaja.com

ECN/2022-23/CR-43/1709 10<sup>th</sup> 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.

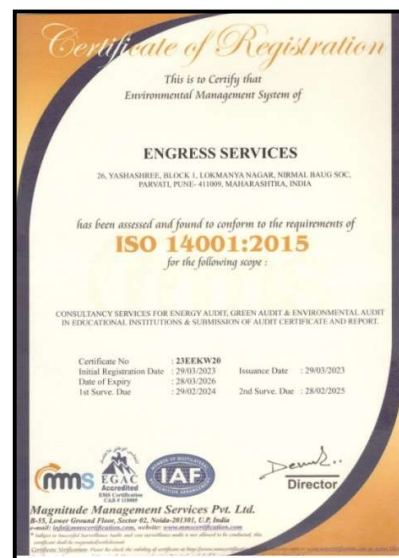
Name and Address of the firm: M/s Engress Services  
Yashashree, 26, Nirmal Bag Society, Near Muktangan English School, Parvati, Pune - 411 009.

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

Registration Number: MEDA/ECN/2022-23/Class A/EA-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 **09<sup>th</sup> 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.

*Deepak Sood*  
General Manager (EC)



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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: 2023-24.

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

## EXECUTIVE SUMMARY

1. Pune Vidyarthi Griha's College of Engineering and Technology & G K Pate (Wani) Institute of Management, Pune consumes Energy in the form of **Electrical Energy**; used for various Electrical Equipment, office & other facilities.

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

No	Particulars	Value	Unit
1	Annual Energy Consumed	<b>254276</b>	kWh
2	Annual CO <sub>2</sub> Emissions	<b>228.85</b>	MT

### 3. Usage of Renewable Energy:

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

### 4. Waste Management:

No	Head	Particulars
1	Solid Waste	Segregation of Waste at source
2	Organic Waste	Provision of Bio Composting Bed
3	Sanitary Waste	Installed Sanitary Waste Incinerator
4	E Waste	Disposed of through Authorized Agency

### 5. Rain Water Harvesting:

The College has installed the Rain Water Harvesting project; the rain water falling on the terrace is collected and is used for recharging 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
- Starting of Value added **Sustainable Development Course**
- Conductance of Visits to Study **Ecosystem**
- 

### 7. Assumption:

1. **1 kWh** of Electrical Energy releases **0.9 Kg of CO<sub>2</sub>** into atmosphere

### 8. Reference:

- For CO<sub>2</sub> Emissions: [www.tatapower.com](http://www.tatapower.com)

## **ABBREVIATIONS**

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

## CHAPTER-I INTRODUCTION

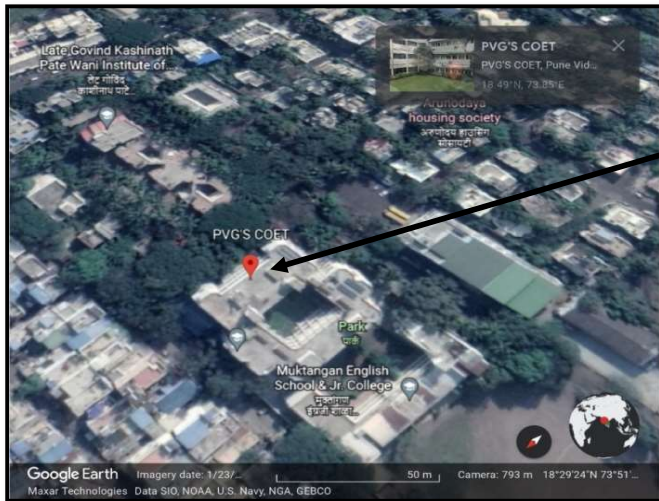
### 1.1 Introduction:

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:

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

### 1.3 College Location Image:



College  
Campus

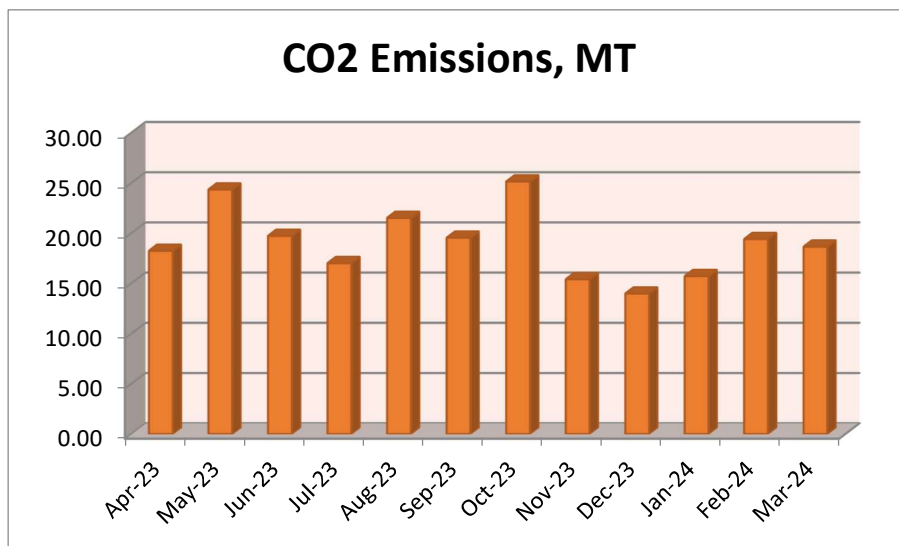
## CHAPTER-II STUDY OF ENERGY CONSUMPTION & CO<sub>2</sub> EMISSION

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 Energy Consumption & CO<sub>2</sub> Emissions:**

No	Month	Energy Consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Apr-22	20278	18.25
2	May-22	27064	24.36
3	Jun-22	21936	19.74
4	Jul-22	18914	17.02
5	Aug-22	23924	21.53
6	Sep-22	21726	19.55
7	Oct-22	27946	25.15
8	Nov-22	17136	15.42
9	Dec-22	15550	14.00
10	Jan-23	17484	15.74
11	Feb-23	21582	19.42
12	Mar-23	20736	18.66
13	Total	254276	228.85
14	Maximum	27946	25.15
15	Minimum	15550	14.00
16	Average	21189.67	19.07

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

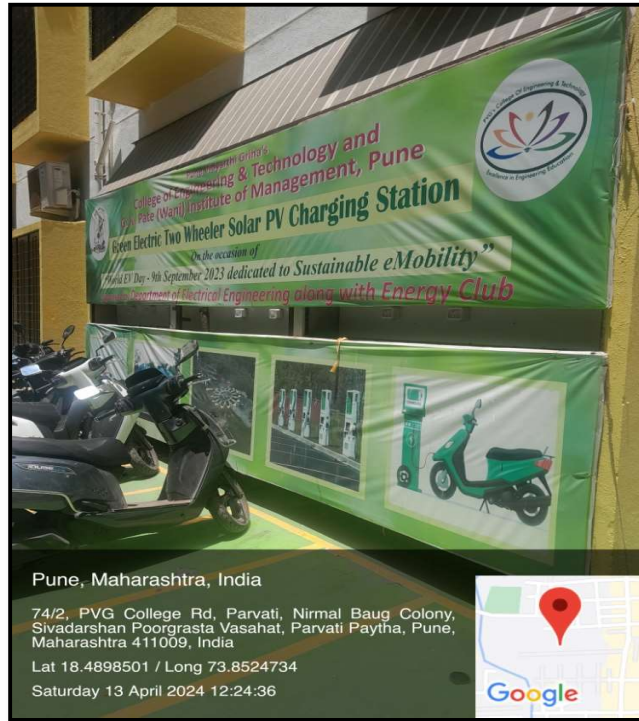


### CHAPTER III

## 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 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>  <p>Pune, Maharashtra, India FV03+XC4, Nirmal Baug Colony, Sivadarshan Poorgrasta Vasahat, Parvati Paytha, Pune, Maharashtra 411009, India Lat 18.4897888 / Long 73.8536263 Saturday 13 April 2024 12:12:38</p>
2	<b>Organic Waste</b>	Provision of Bio Composting Bed: For conversion into Bio Compost	<p><b>Bio Composting Bed:</b></p>  <p>Pune, Maharashtra, India FV03+XC4, Nirmal Baug Colony, Sivadarshan Poorgrasta Vasahat, Parvati Paytha, Pune, Maharashtra 411009, India Lat 18.489799° Long 73.853449° 26/04/24 11:33 AM GMT +05:30</p>

<p>3</p>	<p><b>Sanitary Waste</b></p>	<p>Provision of Sanitary Waste Incinerator</p>	<p><b>Sanitary Waste Incinerator:</b></p> 
<p>4</p>	<p><b>E Waste</b></p>	<p>Disposed through Authorized Agency</p>	

## CHAPTER-V STUDY OF RAIN WATER HARVESTING

The College has implemented Rain Water Harvesting Project. The College has installed Pipes from the terrace and the Rain water falling on the terrace is channelized in an underground water storage pit and further used for recharging the Underground Water Table.

### Photograph of Rain Water Collecting Pipe & Storage Point:



Rain Water  
Collecting Pipe &  
Sand Filter Unit


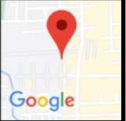

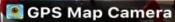





Rain Water  
Storage point

## 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><b>Internal Road:</b></p>  <p>Pune, Maharashtra, India 4411/9, Nirmal Baug Colony, Vidya Nagari Sahakar Nagar No 2, Parvati, Pune, Maharashtra 411009, India Lat 18.4894186 / Long 73.8534845 Saturday 13 April 2024 12:26:22</p> 
2	Tree Plantation	Internal Tree Plantation in the Campus	<p><b>Internal Tree Plantation:</b></p>  <p>Pune, Maharashtra, India FVQ3+XC4, Nirmal Baug Colony, Sivadarshan Poorgrasta Vasahat, Parvati Paytha, Pune, Maharashtra 411009, India Lat 18.489781° Long 73.853531° 04/04/24 11:47 AM GMT +05:30</p>  
3	Facilities for	Provision of Ramp &	<b>Ramp for Divyangajan:</b>

	<p><b>Divyangajan</b></p>	<p>Lift for Divyangajan</p>	
<p>4</p>	<p><b>Creation of Awareness among Stake Holders</b></p>	<p>Display of Poster on Water Conservation</p>	<p><b>Poster on Water Conservation:</b></p> 

**5. Started Starting of Value added Sustainable Development Course**

**6. Conductance of Visits to Study Ecosystem**

**ANNEXURE-1:  
LIST OF TREES& PLANTS IN THE CAMPUS:**

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			