# **GREEN AUDIT REPORT**

of

Pragnya Education Trust's,

## PRAGNYA COLLEGE OF MANAGEMENT & COMPUTER STUDIES,

S. No. 26/1/1, Handewadi Chowk, Hadapsar, Pune 412 308

Year: 2017-18

Prepared by

#### **Enrich Consultants**

Yashashree, 26, Nirmal Bag Society,
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#### MAHARASHTRA ENERGY DEVELOPMENT AGENCY



## Maharashtra Energy Development Agency

(A Government of Manarashtra undertaking)

2nd Floor, MHADA Commercial Complex, Opp. Tridal Nagar, Yerwada, Pune 411 006
Ph No: 020-26614393/266144403, Fax No: 020-26615031
Email: econ@mahaurja.com, Web. www.mahaurja.com

ECN/2017-18/CR-01/5726

30th November 2017

# 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 under Save Energy Programme of MEDA.

Name and Address of the firm :

Enrich Consultants

Yashashree, Plot No. 26, Nirmal Baug

Society, Parvati, Pune - 411009

Registration Category

Empanelled Consultant for Save Energy

Programme.

Registration Number

MEDA/ECN/CR-01/2017-18/EA-37

- The Save Energy 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 the firm at any time without giving any prior information and canceling the registration, if the information is found incorrect.
- This empanelment is valid upto 3 year from the date of registration, to carry out energy audits under the Save Energy Programme of MEDA.
- The Director General, MEDA reserves the right to cancel the registration at any time without assigning any reasons thereof.

(Smita Kudarikar) Manager (EC)



# **Enrich Consultants**

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Tel: 09890444795 Email: enrichcons@gmail.com

Ref: EC/ PETPCOMCS /17-18/02

Date: 12/6/2018

## CERTIFICATE

This is to certify that we have conducted Green Audit at Pragnya Education Trust's Pragnya College of Management & Computer Studies, S. No. 26/1/1, Handewadi Chowk, Hadapsar, Pune 412 308 in the Year 2017-18.

The College has adopted following Green practices:

- Maximum Usage of Day Lighting
- Usage of Energy Efficient LED Fittings
- Segregation of Waste at source
- > Tree Plantation in the campus
- Good internal roads in the campus

We appreciate the support of Management, involvement of faculty members and students in the process of Energy Conservation & making the campus Green.

For Enrich Consultants,

A Y Mehendale,

Certified Energy Auditor, EA-8192

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## ACKNOWLEDGEMENT

We at Enrich Consultants, Pune, express our sincere gratitude to the management of Pragnya Education Trust's Pragnya College of Management & Computer Studies, S. No. 26/1/1, Handewadi Chowk, Hadapsar, Pune 412 308, for awarding us the assignment of Green Audit of their Handewadi Campus for the Year: 17-18.

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



### **EXECUTIVE SUMMARY**

- Pragnya Education Trust's Pragnya College of Management & Computer Studies, S.
   No. 26/1/1, Handewadi Chowk, Hadapsar, Pune 412 308 consumes Energy in the form of Electrical Energy; used for various gadgets, Office & other facilities.
- 2. Present Energy Consumption & CO<sub>2</sub> Emission:

No	Parameter/ Value	Energy Consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Total	2492	1.99
2	Maximum	792	0.63
3	Minimum	100	0.08
4	Average	207.67	0.17

### 3. Waste Management:

### Segregation of Waste at Source:

The Dry and Wet waste is segregated at the source and is handed over to Authorized Agency for further action.

### 4. Rain Water Management:

The College has yet to implement the Rain Water Harvesting Project.

#### 5. Green Practices:

- Good internal road for easy movement of commuters
- Internal tree plantation in the campus

#### 6. Assumption:

1. 1 kWh of Electrical Energy releases 0.8 Kg of CO2 into atmosphere



## **ABBREVIATIONS**

LED : Light Emitting Diode

kWh : kilo-Watt Hour MT : Metric Ton

CO<sub>2</sub> : Carbon Di Oxide

# CHAPTER-I INTRODUCTION

### 1.1 Objectives:

- 1. To study present Energy Consumption
- 2. To compute CO<sub>2</sub> emissions
- 3. To Study Usage of Renewable Energy
- 4. To Study Waste Management Practices
- 5. To Study Rain Water Harvesting
- 6. To Study Green & Sustainable Initiatives

## 1.2 Table No 1: General Details of College:

No	Head	Particulars	
		Pragnya Education Trust's Pragnya College of Management & Computer Studies	
2	Address	S. No. 26/1/1, Handewadi Chowk, Hadapsar, Pune 412 308	
3	Affiliation	Savitribai Phule Pune University	



# CHAPTER-II STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of last year Electricity Bills Table No 2: Electrical Energy Consumption Analysis- 2017-18:

No	Month	Energy Consumed, kWh	
1	Apr-17	792	
2	May-17	173	
3	Jun-17	144	
4	Jul-17	137	
5	Aug-17	140	
6	Sep-17	174	
7	Oct-17	153	
8	Nov-17	100	
9	Dec-17	176	
10	Jan-18	276	
11	Feb-18	115	
12	Mar-18	112	
13	Total	2492	
14	Maximum	792	
15	Minimum	100	
16	Average	207.67	

Chart No 1: To study the variation of Monthly Energy Consumption, kWh:

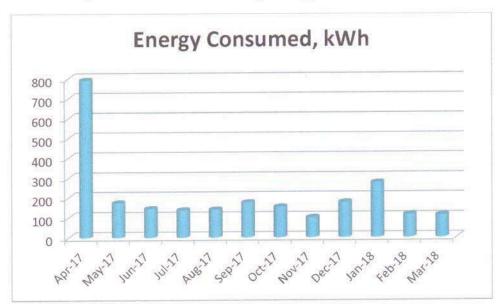




Table No 3: Various Important Parameters:

No	Parameter/ Value	Energy Consumed, kWh
1	Total	2492
2	Maximum	792
3	Minimum	100
4	Average	207.67



# CHAPTER III CARBON FOOT PRINTING

A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities.

In this we compute the emissions of Carbon-Di-Oxide, by usage of the various forms of Energy used by the College for performing its day to day activities. The College uses Electrical Energy for various Electrical gadgets.

## Basis for computation of CO<sub>2</sub> Emissions:

1 kWh of Electrical Energy releases 0.8 Kg of CO<sub>2</sub> into atmosphere.

Table No 4: Month wise CO<sub>2</sub> Emissions:

No	Month	Energy Consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Apr-17	792	0.63
2	May-17	173	0.14
3	Jun-17	144	0.12
4	Jul-17	137	0.11
5	Aug-17	140	0.11
6	Sep-17	174	0.14
7	Oct-17	153	0.12
8	Nov-17	100	0.08
9	Dec-17	176	0.14
10	Jan-18	276	0.22
11	Feb-18	115	0.09
12	Mar-18	112	0.09
13	Total	2492	1.99
14	Maximum	792	0.63
15	Minimum	100	0.08
16	Average	207.67	0.17



Chart No 2: Representation of Month wise CO<sub>2</sub> Emissions:

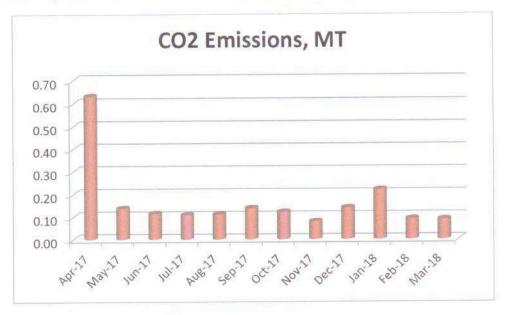


Table No 5: Various Important Parameters:

No	Parameter/ Value	Energy consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Total	2492	1.99
2	Maximum	792	0.63
3	Minimum	100	0.08
4	Average	207.67	0.17



## CHAPTER IV STUDY OF USAGE OF RENEWABLE ENERGY

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



## CHAPTER V STUDY OF WASTE MANAGEMENT

### 5.1 Solid Waste Management:

The Waste is segregated at source and is handed over to Agency for further action.

## Photograph of Waste Collection Bin:





## CHAPTER VI STUDY OF RAIN WATER MANAGEMENT

The College has yet to implement the Rain Water Management Project.



## CHAPTER VII STUDY OF GREEN & SUSTAINABLE PRACTICES

### 7.1 Pedestrian Friendly Road:

The College has well maintained internal road to facilitate the easy movement of the students within the campus.

Photograph of Internal Road inside the College Campus:



#### 7.2 Internal Tree Plantation:

The College has well maintained Tree Plantation in the campus. Photograph of Tree Plantation Campus:



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