# **GREEN AUDIT REPORT**

of

# SHREE L. R. TIWARI COLLEGE OF LAW,

Shree L. R. Tiwari Educational Campus, Mira Road (East) Thane 401 107



Year: 2021-22

Prepared by:

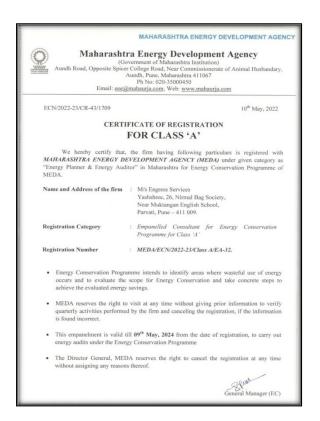
# **ENGRESS SERVICES**

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#### REGISTRATION CERTIFICATES





#### **BEE AUDITOR CERTIFICATE**

#### MEDA EMPANELMENT CERTIFICATE



#### ASSOCHAM GEM CP CERTIFICATE

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Green Audit Report: Shree. L. R. Tiwari College of Law: 2021-22

#### **ACKNOWLEDGEMENT**

We Engress Services, Pune, express our sincere gratitude to the management of Shree L. R. Tiwari College of Law, Shree L. R. Tiwari Educational Campus, Mira Road (East) Thane 401 107, for awarding us the assignment of Green Audit of their Campus for the Year: 2021-22.

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

#### **EXECUTIVE SUMMARY**

1. Shree L. R. Tiwari College of Law, Mira Road, consumes Energy in the form of Electrical Energy; used for various Electrical Equipment.

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

No	Parameter/ Value	Energy Consumed, kWh	CO <sub>2</sub> Emissions, MT
1	Total	37328	33.60
2	Maximum	3457	3.11
3	Minimum	2879	2.59
4	Average	3110.67	2.80

#### 3. Usage of Renewable Energy:

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

#### 4. Waste Management:

#### 4.1 Segregation of Waste at Source:

The Dry and Wet waste is segregated at the source. Waste collection Bins are kept at various points.

#### **4.2 Organic Waste Management:**

The College has made provision of a Bio Composting Pit for conversion of Organic Waste.

#### 5. Rain Water Management:

The Rain water falling on terrace is collected through Pipe and is stored in an underground Water Tank and used for domestic purpose.

#### 6. Green & Sustainable Practices:

- Good internal roads for easy movement of commuters
- Internal tree plantation in the campus
- Provision of Sloppy structure for Divyangajan
- Creation of Awareness by Display of Posters on Energy Conservation
- Conducting Cleanliness Drive in the College Campus

#### 7. Assumptions:

- 1. Energy Consumption is computed based on Load Utilization Factor
- 2. 1 kWh of Electrical Energy releases 0.9 Kg of CO<sub>2</sub> into atmosphere

#### 8. Reference:

• For CO<sub>2</sub> Emission Computation: www.tatapower.com

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### **ABBREVIATIONS**

KgKilo GramMTMetric TonkWhkilo-Watt HourLPDLiters per Day

LED : Light Emitting Diode

# CHAPTER-I INTRODUCTION

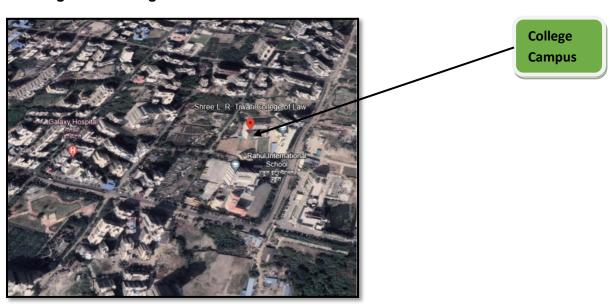
#### 1.1 Objectives:

- 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
1	Name of College	Shree L. R. Tiwari College of Law
2	Address	Shree L. R. Tiwari Educational Campus, Mira Road (East) Thane 401 107
3	Affiliation	University of Mumbai

#### 1.3 Google Earth Image:



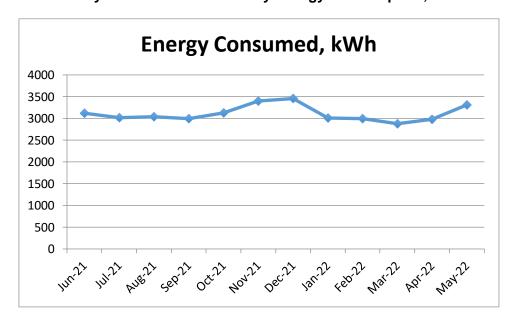
## CHAPTER-II STUDY OF PRESENT ENERGY CONSUMPTION

In this chapter, we present the analysis of last year Electrical Energy.

Table No 2: Electrical Energy Consumption Analysis: 2021-22:

No	Month	Energy Consumed, kWh
1	Jul-21	3118
2	Aug-21	3017
3	Sep-21	3036
4	Oct-21	2998
5	Nov-21	3125
6	Dec-21	3398
7	Jan-22	3457
8	Feb-22	3008
9	Mar-22	2997
10	Apr-22	2879
11	May-22	2980
12	Jun-22	3315
13	Total	37328
14	Maximum	3457
15	Minimum	2879
16	Average	3110.67

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



# CHAPTER III STUDY OF CARBON FOOT PRINTING

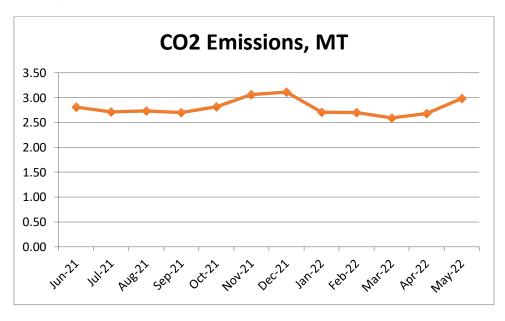
A Carbon Foot print is defined as the Total Greenhouse Gas emissions, emitted due to various activities. Basis for computation of CO<sub>2</sub> Emissions:

• 1 kWh of Electrical Energy releases 0.9 Kg of CO₂ into atmosphere

Table No 3: Month wise CO<sub>2</sub> Emissions:

No	Month	Energy Consumed, kWh	CO₂ Emissions, MT
1	Jul-21	3118	2.81
2	Aug-21	3017	2.72
3	Sep-21	3036	2.73
4	Oct-21	2998	2.70
5	Nov-21	3125	2.81
6	Dec-21	3398	3.06
7	Jan-22	3457	3.11
8	Feb-22	3008	2.71
9	Mar-22	2997	2.70
10	Apr-22	2879	2.59
11	May-22	2980	2.68
12	Jun-22	3315	2.98
13	Total	37328	33.60
14	Maximum	3457	3.11
15	Minimum	2879	2.59
16	Average	3110.67	2.80

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



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# 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 Segregation of Waste at Source:**

The Dry and Wet waste is segregated at the source. Waste collection Bins are kept at various points.

#### **Photograph of Waste Collection Bin:**



#### **5.2 Organic Waste Management:**

The College has made provision of a Bio Composting Pit, for conversion of Organic Waste.

#### **Photograph of Bio Composting Pit:**



#### **CHAPTER-VI**

#### STUDY OF RAIN WATER MANAGEMENT

The Rain water falling on terrace is collected through Pipe and is stored in an underground Water Tank and used for domestic purpose.

**Photograph of Rain Water Collecting Pipe:** 



## 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 Green Landscaping with Trees and Plants:

The College has maintained Lawn in the Campus.

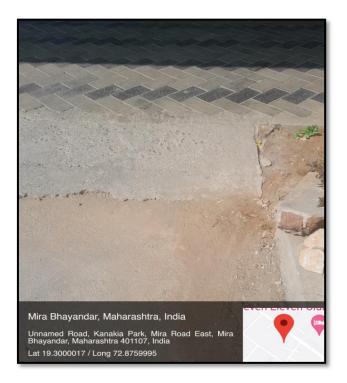
#### Photograph of Lawn and Tree Plantation in the College campus:



#### 7.3 Provision of Sloppy structure for Divyangajan:

The College has made provision of a sloppy structure for Divyangajan.

#### Photograph of Sloppy structure at the main entrance:



#### 7.4 Creation of Awareness about Energy Conservation:

The College has displayed posters emphasizing on importance of Energy Conservation. **Photograph of Poster on Energy Conservation:** 



### 7.5 Cleanliness Drive in the Campus:

The College executed Cleanliness Drive program in the College Campus. **Photograph of Cleanliness Drive program:** 

