



**M. C. E. Society's  
M. A. Rangoonwala Institute of  
Hotel Management & Research, Pune**

**Azam Campus, Camp, Pune-411001.**

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**Tel.No. 020 - 26442261/62**

**(Recognized by Govt.of Maharashtra and Affiliated to Savitribai Phule Pune University)**

# **Energy Audit**

**2021-2022**

**Analysed By**

**Mrs.Vijayalaxmi Shinde**

**Head- Department of Environmental Science**

**Abeda Inamdar Senior College of Arts, Science**

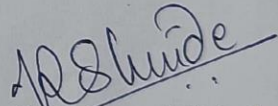
**and Commerce**

**Camp, Pune- 411001**

## Disclaimer

Mrs. Vijayalaxmi Shinde, Head- Department of Environmental Science, M.C.E. Society's Abeda Inamdar Senior College of Arts, Commerce and Science has analysed this report for the **Maharashtra Cosmopolitan Education Society's , M.A. Rangoonwala Institute of Hotel Management & Research, Pune, 2390- B, K.B. Hidayatullah Road, Azam Campus, Pune- 411001** based on input data submitted by the College .

The information has been compiled and carefully examined in accordance with the numerous requirements. The report was produced using a comparative examination of the facilities already in place. The analysis and investigation are reflected in the inputs. These will help to improve and build a sustainable institution.

  
**Mrs. Vijayalaxmi Shinde**  
HEAD  
Auditor  
Department of Environmental Science  
Abeda Inamdar Sr. College  
Camp Pune - 411001

## About the Maharashtra Cosmopolitan Education Society

Maharashtra Cosmopolitan Education Society (MCES), was established in the year 1948 by Late Mr. Abdul Kadir Khan and others, with an objective of providing education to the economically, educationally and socially weaker sections of the society. It is an educational society registered under the Society's Registration Act of 1860 and also a Public Trust registered under the Bombay Public Trust Act 1950. It is also registered under section 12(a) of Income Tax Act 1961 and is exempted u/s 80G of the said Act by the Income Tax Commissioner, Pune.

The M.C.E. Society is one of the oldest educational organizations of Pune & has done pioneering work in the field of education. Within a short span of time the M.C.E. Society from a humble beginning of 4 schools has been transformed into an excellent educational complex of higher, medical, technical and professional academic institutions in the field of Arts, Science, Commerce, Computer Science, Law, Education, Pharmacy, Management Sciences, Architecture, Dental Sciences, Hospitality Studies & Information Technology.

## Assessment of the College

Administrative details are as follows;

- The college is affiliated to Savitribai Phule Pune University for the Academic Year 2021-2022.
- Recognized by the Government of Maharashtra vide G.R.No. NGC 2006 (299/06) dated 03/06/2006 .

## Energy Audit Report

### Solar Panel

Photovoltaic and solar-thermal panels generate free electricity by converting sunlight into electricity. The use of solar panels to generate energy has many benefits, which include reductions in the costs involved in generating electricity. Solar panels are pollution-free power sources and afford new levels of independence to energy consumers. As solar panels convert light from the sun into electricity, they do not need other source of fuel.

#### **Reducing the Financial Costs of Electricity:**

As the sunlight is unlimited source of energy and available at no cost, solar panels do not require excessive fuel. Other than the installation cost. Solar panels operate for free and also require minimal maintenance cost. Electricity generated through the solar panels is used to reduce the use of electricity generated through other non-renewable sources

#### **Installation:**

The Solar panels are installed on the roof of the college. It has capacity of 128kWp.

#### **Initiatives taken by College:**

Dr. P. A. Inamdar, President M.C.E. Society took the initiative to make whole campus as 'Green Campus', under which solar panels are installed in the college. This helps the college to create awareness about importance of Renewable sources of energy.

### LED Conversion

Our campus has taken the initiative to convert its entire light sources into ones that are compatible with LED lights. This helps to reduce the power consumption at college level and increase tremendous energy efficiency.

**As per the M.C.E. Society's Electricity Bill,**

The total of 111343 units of electricity is generated by using Solar panels from November 2021- October 2022

<b>MSEB Bill without Solar Panel Installation</b>	Rs. 9119197 (Ninety One Lakhs Nineteen Thousands One Hundred Ninety Seven)
<b>MSEB Bill with Solar Panel Installation</b>	Rs. 7788071 ( Seventy Seven Lakh Eighty Eight Thousand Seventy One)
<b>Difference</b>	Rs. 1439417(Fourteen Lakh Thirty Nine ThousandFour Hundred Seventeen )

2021-2022	Solar Unit	MSCDL Unit	Solar + MSEB Unit	Solar Export Unit To MSEB	MSEB Bill After Solar Installation	MSEB Bill If Solar Not Installation	Solar Export Unit Bill Amount	Difference Of Bill
21-Nov	9795	35231	45026	368	528671.15	649072.54	3785.77	124187.16
21-Dec	9307	37168	46475	193	552645.97	665054.42	4228.12	116636.58
22-Jan	9639	30229	39868	246	467855.90	584163.30	2530.70	118838.10
22-Feb	9749	33150	42899	145	503923.00	621649.61	1491.67	119217.63
22-Mar	8661	53397	62058	13	790539.17	899385.13	133.74	108979.70
22-Apr	9438	54793	64231	63	1670136.14	1699348.69	130.00	29342.00
22-May	9136	48162	57298	446	762649.83	871029.73	4475.29	112855.19
22-Jun	13593	33445	47038	353	551516.71	723898.05	4116.12	176497.47
22-Jul	9381	42693	52074	168	779645.33	910504.60	2019.16	132878.43
22-Aug	11706	30560	42266	5473	532471.71	695109.94	65778.78	228417.00
22-Sep	10938	35883	46821	1631	648015.98	799980.87	19602.63	171567.52
22-Oct	12576	29353	41929	5115	483054.00	657622.17	61476.06	236043.66
	<b>111343</b>	<b>434711</b>	<b>546054</b>	<b>9099</b>	<b>7788071</b>	<b>9119197</b>	<b>108292</b>	<b>1439417</b>