

# GREEN AUDIT

STUDY PERIOD (TWO YEARS) 2020-2021 AND 2021-2022

Sustainability study

## AUDIT REPORT

Studied for

Maharshi Karve Stree Shikshan Samstha's  
**Cummins College of Engineering for Women**  
Karvenagar, Pune – 411052

Studied in the capacity of

An accredited & Certified Green Building Professional



Studied by

**Greenenvia**  
Solutions

Valid till **October 2023**

# Disclaimer

The Audit Team has prepared this report for the **Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women** located at Karvenagar, Pune – 411052 based on input data submitted by the Institute and analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on a comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase-wise or as a whole depending on the decision taken by the Hon'ble Management and Institute. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements, or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a while and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

## Greenvio Solutions

*Developing Healthy and Sustainable Environments*

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our department for conducting Audits

Palghar District, Maharashtra- 401208

[sustainableacademe@gmail.com](mailto:sustainableacademe@gmail.com)

## Introduction

### About the Institution

**Cummins College of Engineering for Women is the first all women engineering college in India** established with the support of Cummins Diesel (India) Foundation. Parent institution of Cummins College is Maharshi Karve Stree Shikshan Samstha (MKSSS). 'Bharat Ratna' Recipient, Maharshi Karve, established MKSSS in 1896 with the mission of women empowerment through education.

**The Institute is recognized for its rigor in academics and dedicated faculty, successful alumnae being its outcome.** It has a strong association with the industry and is recognized for providing quality recruits for the industry.

### Assessment of the Institute

- The Institute is affiliated to **Savitribai Phule Pune University**, one of the premier universities in India, is positioned in the North-western part of Pune city.
- NIRF – Participated in the National Institutional Ranking Framework and has secured position in rank band 200 -250 for the year 2022 and 2021. The institute secured rank 173 in 2020.
- AISHE – The All India Survey of Higher Education code is C-42242.

### Total Institute Area & Institute Building Spread Area

The **total site area is 4 acres** and the **total Built-up area of the Institute is 40,870.57 sq. ft.** for a **total of 3,000 footfalls.**

## Green Practices Audit

The Institution has undertaken the following initiatives towards environment measures.

- **Practices like Rainwater Harvesting, Segregation of Waste, etc are followed.**
- **Virtual plantations drive held between 27 to 31 July 2021.**
- **Celebration of the Earth day through lectures on 'Energy form waste – circular economy' and 'Biodiversity' on 22 April 2022.**



# ENERGY AUDIT

STUDY PERIOD (TWO YEARS) 2020-2021 AND 2021-2022

Sustainability study

## AUDIT REPORT

Studied for  
Maharshi Karve Stree Shikshan Samstha's  
**Cummins College of Engineering for Women**  
Karvenagar, Pune – 411052

Studied in the capacity of  
An accredited & Certified Green Building Professional



Studied by

**Greenenvia**  
Solutions

Valid till **October 2023**

# Disclaimer

The Audit Team has prepared this report for the **Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women** located at Karvenagar, Pune – 411052 based on input data submitted by the Institute and analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on a comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase-wise or as a whole depending on the decision taken by the Hon'ble Management and Institute. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements, or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a while and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

## Greenvio Solutions

*Developing Healthy and Sustainable Environments*

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our department for conducting Audits

Palghar District, Maharashtra- 401208

[sustainableacademe@gmail.com](mailto:sustainableacademe@gmail.com)

# Introduction

## About the Institution

**Cummins College of Engineering for Women is the first all women engineering college in India** established with the support of Cummins Diesel (India) Foundation. Parent institution of Cummins College is Maharshi Karve Stree Shikshan Samstha (MKSSS). 'Bharat Ratna' Recipient, Maharshi Karve, established MKSSS in 1896 with the mission of women empowerment through education.

**The Institute is recognized for its rigor in academics and dedicated faculty, successful alumnae being its outcome.** It has a strong association with the industry and is recognized for providing quality recruits for the industry.

## Assessment of the Institute

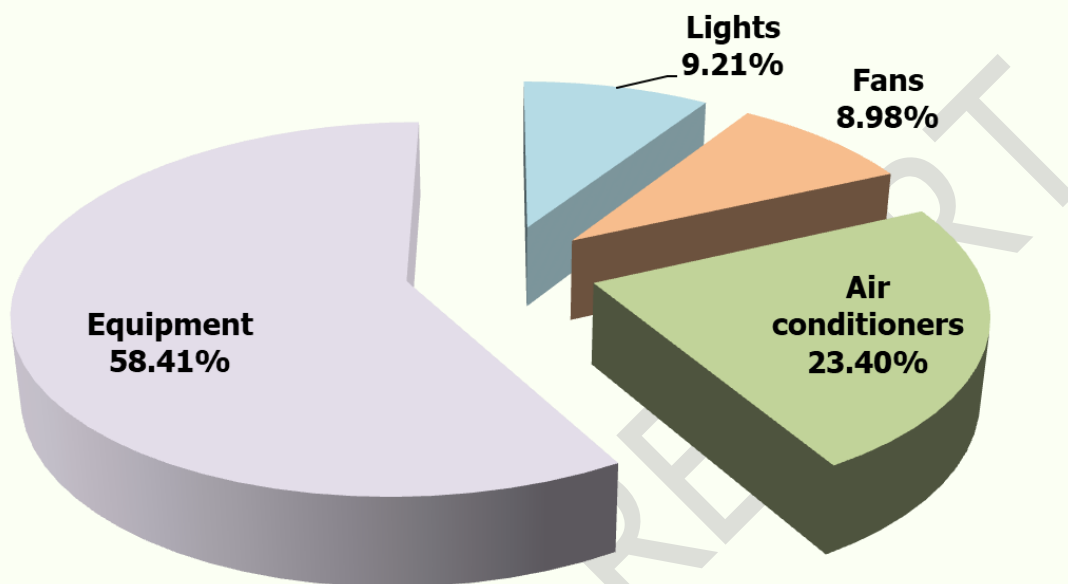
- The Institute is affiliated to **Savitribai Phule Pune University**, one of the premier universities in India, is positioned in the North-western part of Pune city.
- NIRF – Participated in the National Institutional Ranking Framework and has secured position in rank band 200 -250 for the year 2022 and 2021. The institute secured rank 173 in 2020.
- AISHE – The All India Survey of Higher Education code is C-42242.

## Total Institute Area & Institute Building Spread Area

The **total site area is 4 acres** and the **total Built-up area of the Institute is 40,870.57 sq. ft.** for a total of **3,000 footfalls.**

## Energy Audit

The following analysis is combined for the entire premise taking into consideration the duration before the pandemic to understand the consumption pattern on a regular day.



*Figure 1: Summary of the calculated electrical consumption as per inventory*

The above graph shows that equipment consumes 58.41% followed by air conditioners at 23.40% the lights at 9.21% and the fans consume 8.98% of the total calculated electrical energy.





# ENVIRONMENT AUDIT

STUDY PERIOD (TWO YEARS) 2020-2021 AND 2021-2022

Sustainability study

## AUDIT REPORT

Studied for

Maharshi Karve Stree Shikshan Samstha's  
**Cummins College of Engineering for Women**  
Karvenagar, Pune – 411052

Studied in the capacity of

An accredited & Certified Green Building Professional



Studied by

**Greenenvia**  
Solutions

Valid till **October 2023**

# Disclaimer

The Audit Team has prepared this report for the **Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women** located at Karvenagar, Pune – 411052 based on input data submitted by the Institute and analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on a comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase-wise or as a whole depending on the decision taken by the Hon'ble Management and Institute. The warranty or undertaking, expressed or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements, or forecasts in the report.

The audit is a thorough study based on the inspection and investigation of data collected over a while and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied or regenerated in any form.

## Greenvio Solutions

*Developing Healthy and Sustainable Environments*

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our department for conducting Audits

Palghar District, Maharashtra- 401208

[sustainableacademe@gmail.com](mailto:sustainableacademe@gmail.com)

# Introduction

## About the Institution

**Cummins College of Engineering for Women is the first all women engineering college in India** established with the support of Cummins Diesel (India) Foundation. Parent institution of Cummins College is Maharshi Karve Stree Shikshan Samstha (MKSSS). 'Bharat Ratna' Recipient, Maharshi Karve, established MKSSS in 1896 with the mission of women empowerment through education.

**The Institute is recognized for its rigor in academics and dedicated faculty, successful alumnae being its outcome.** It has a strong association with the industry and is recognized for providing quality recruits for the industry.

## Assessment of the Institute

- The Institute is affiliated to **Savitribai Phule Pune University**, one of the premier universities in India, is positioned in the North-western part of Pune city.
- NIRF – Participated in the National Institutional Ranking Framework and has secured position in rank band 200 -250 for the year 2022 and 2021. The institute secured rank 173 in 2020.
- AISHE – The All India Survey of Higher Education code is C-42242.

## Total Institute Area & Institute Building Spread Area

The **total site area is 4 acres** and the **total Built-up area of the Institute is 40,870.57 sq. ft.** for a total of **3,000 footfalls.**

## Environment Audit

A flora survey was carried out to identify the total number of plants and trees.

The detailed study is as follows.

S. No.	Plant name	Type	Nos
1	<i>Spathodea Campanulata</i>	Tree	27
2	<i>Dalbergia Sisso</i>	Tree	3
3	<i>Azadirachta Indica</i>	Tree	22
4	<i>Tamarindus Indica</i>	Tree	8
5	<i>Pithecellobium Dulce</i>	Tree	8
6	<i>Psidium Guajava</i>	Tree	3
7	<i>Millingtonia Hortensis</i>	Tree	24
8	<i>Polyalthia Longifolia</i>	Tree	57
9	<i>Ficus Religiosa</i>	Tree	7
10	<i>Eucalyptus Globulus</i>	Tree	64
11	<i>Gmelina Arborea</i>	Tree	1
12	<i>Delonix Regia</i>	Tree	21
13	<i>Syzygium Cumini</i>	Tree	40
14	<i>Cascabela Thevetia</i>	Shrub	6
15	<i>Grevillea Robusta</i>	Tree	8
16	<i>Ficus Benjamina</i>	Tree	23
17	<i>Terminalia Catapa</i>	Tree	12
18	<i>Acacia Horrida</i>	Tree	1
19	<i>Tectona Grandis</i>	Tree	3
20	<i>Cocos Nucifera</i>	Tree	4
21	<i>Ficus Benghalensis</i>	Tree	9
22	<i>Mangifera Indica</i>	Tree	58
23	<i>Ficus Racemosa</i>	Shrub	16
24	<i>Casuarina Equisetifolia</i>	Tree	9
25	<i>Annona Reticulata</i>	Tree	1
26	<i>Jacaranda Mimosifolia</i>	Tree	10
27	<i>Peltophorum Pterocarpum</i>	Tree	8

<b>28</b>	<i>Ficus Elastica</i>	Tree	6
<b>29</b>	<i>Areca Palm</i>	Shrub	5
<b>30</b>	<i>Plumeria Alba</i>	Shrub	1
<b>31</b>	<i>Caryota Urens</i>	Tree	3
<b>32</b>	<i>Bauhinia Tomentosa</i>	Shrub	2
<b>33</b>	<i>Callistemon</i>	Shrub	1
<b>34</b>	<i>Plumeria</i>	Shrub	9
<b>35</b>	<i>Saraca Ashoka</i>	Tree	3
<b>36</b>	<i>Tabebuia</i>	Shrub	6
<b>37</b>	<i>Cassia Fistula</i>	Tree	6
<b>38</b>	<i>Samanea Saman</i>	Tree	7
<b>39</b>	<i>Roystonea Regia</i>	Tree	23
<b>40</b>	<i>Caesalpinia Pulcherrima</i>	Shrub	7
<b>41</b>	<i>Putranjiva Roxburgii</i>	Tree	1
<b>42</b>	<i>Cassia Grandis</i>	Tree	1
<b>43</b>	<i>Plumeria Rubra</i>	Shrub	7
<b>44</b>	<i>Araucaria Columnaris</i>	Tree	3
<b>45</b>	<i>Calliandra Haematocephal A</i>	Shrub	1
<b>46</b>	<i>Tabernaemont Ana Divaricata</i>	Shrub	1
<b>47</b>	<i>Eucalyptus Tereticornis</i>	Tree	15
<b>48</b>	<i>Ficus Elastica</i>	Tree	5
<b>49</b>	<i>Bauhinia Variegata</i>	Tree	7
<b>50</b>	<i>Erythrina Indica</i>	Tree	1
<b>51</b>	<i>Musa Acuminata</i>	Large Herb	2
<b>52</b>	<i>Gliricidia Sepium</i>	Tree	35
<b>53</b>	<i>Aiphanes Erosa</i>	Tree	1
<b>54</b>	<i>Sandulum Album</i>	Tree	1
<b>55</b>	<i>Leucaena Leucocephala</i>	Tree	1
<b>56</b>	<i>Holoptelia Integrifolia</i>	Tree	1
<b>57</b>	<i>Artocarpus Heterophyllus</i>	Tree	8
<b>58</b>	<i>Moringa Oleifera</i>	Tree	3
<b>59</b>	<i>Hardwickia Binata</i>	Tree	1

<b>60</b>	<i>Plumeria Obtusa</i>	Shrub	3
<b>61</b>	<i>Tecoma Stans</i>	Shrub	3
<b>62</b>	<i>Carpentaria Acuminata</i>	Tree	1
<b>63</b>	<i>Albizia Lebbeck</i>	Tree	1
<b>64</b>	<i>Seena Siamea</i>	Tree	3
<b>65</b>	<i>Michelia Champaca</i>	Shrub	1
<b>66</b>	<i>Khaya Senegalensis</i>	Tree	3
<b>67</b>	<i>Senna Spectabilis</i>	Tree	1
<b>68</b>	<i>Tabernaemont Ana Coronaria</i>	Shrub	3
<b>69</b>	<i>Wrightia Tinctoria</i>	Tree	1
<b>70</b>	<i>Pongamia Pinnatia</i>	Tree	2
<b>71</b>	<i>Murraya Koenegi</i>	Tree	1
<b>72</b>	<i>Areca Catechu</i>	Tree	1
<b>73</b>	<i>Casabella Thevetia</i>	Shrub	1

**Table 1: Details of the Flora in the premises**

**At present, there are 651+ plantations on the premises.**

