

Green, Energy & Environment Audit Report
KET's V.G. Vaze Collage of Arts, Science & Commerce

Report

On

GREEN, ENERGY & ENVIRONMENT AUDIT

For

**The Kelkar Education Trust's
V.G. Vaze Collage of Arts, Science & Commerce
Mulund (East), Mumbai**

Prepared

By

**Senergy Consultants Pvt Ltd
Mumbai**

April – 2024

Helping You to Conserve Energy

Green, Energy & Environment Audit Report
KET's V.G. Vaze Collage of Arts, Science & Commerce

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I

Introduction

Green & Energy Audit was undertaken at The Kelkar Education Trust's V. G. Vaze Collage of Arts, Science & Commerce, Mithagar Road, Mulund East, Mumbai 400 081, During the month of April 2024.

The organization is very keen to promote green culture wherever possible, as a commitment towards better environment and conservation of energy. A lot of efforts have already been put up to bring down the carbon footprint. To further optimize consumption and identify saving opportunities, M/s Senergy Consultants was assigned to carry out Green & Energy Audit of the premises.

This Audit Report presents the analysis of the data collected, observations made at the facility and is governed by the objectives, scope of work, methodology etc. discussed in the ensuing paragraphs.

Team:

The team members of the audit study.

- Mr Ravindra Datar
- Mr Nitesh Kharche
- Mr Vikas Kharatmol

Acknowledgment:

We wish to express our gratitude towards Dr. Preeta Nilesh (Principal), Prof. C.A. Anil Naik (Vice Principal), Mrs. Supriya Kambli (In charge Registrar) for having given us the opportunity for conducting the study and the support provided during the study.

We are thankful to Dr. Ajit Kengar (Convenor, Green Initiative and Nature club) for extending necessary help and co-operation from their side.

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II

Executive Summary

The premises were evaluated against the various criteria laid down by the National Assessment and Accreditation Council (NAAC). The major observations are.

Renewable Energy:

- The college has installed Rooftop Solar Photovoltaic System with Net Metering Facility.
- There are no applications for Solar hot water.
- The quantity of plate waste (organic waste with higher starch contents) is negligible, consequently, there is no Potential for biogas generation

Air Quality & Ventilation:

- The classrooms and other areas are well ventilated to ensure proper air quality.
- The fans are appropriately installed to ensure proper air circulation.
- The indoor as well as outdoor plants have also been provided to improve the environment.
- The air-conditioned rooms are provided with proper ventilation and fresh air.

Lighting System:

- The usage of natural light is optimized through well designed structures and windows.
- Almost all the lamps are replaced with energy efficient LED lamps.
- It is suggested to automate the switching of lamps in the common areas and washrooms with sensor-based control.

Green Campus Initiative:

- The movement of vehicle inside the campus is restricted with vehicles of Staff and Special Dignitaries are allowed to enter the campus with designated parking area.
- Pedestrian friendly pathways have been constructed for easy movement inside the campus.
- The use of plastic has been reduced inside the campus.
- The campus is surrounded by a lot of greenery, trees, and proper landscaping.
- The college has internal committee for conservation of resources like energy, water.
- The student participation are also encouraged in such activities through student clubs and groups.

Environment & Energy Initiative:

- Green Consumerism and Green Entrepreneurship workshop are conducted to create awareness related to the environment.
- Dry waste and E-waste collection drive was conducted by students inside the campus.

Water Quality & Conservation:

- The water is supplied by the Municipal Corporation, which is a common practice in and around Mumbai, Thane & Navi Mumbai.
- Water purifiers & coolers are provided on individual floors and convenient locations.
- The distribution network and piping are satisfactory and adequate.
- Rainwater harvesting has been incorporated for ground water recharge.

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Waste Management:

- The effluent water is discharged in the municipal drain, which is a common practice in and around Mumbai, Thane & Navi Mumbai.
- The organic waste is segregated and disposed through the municipal system, which may be converted into manure by installing composting pits / waste collector machine.
- The electronic gadgets / waste is either donated if useful or handed over to appropriate waste collectors.
- General solid waste is disposed through municipal corporation.

Infrastructure usage:

- Ramps and lifts are provided on the ground floor to address the needs of differently abled persons.
- The on-campus movement is distributed with multiple staircases.
- The fire extinguishers are provided at key areas.
- The draining system for washrooms is efficient and effective.
- There were no seepages observed in the building premises.

Air Conditioning System:

- The Air Conditioners are operated as required with manual control. The operation is minimal consequently automation may not be economical.
- The room temperature is maintained at 24 to 25 °C, which is well within the recommended values.
- The Air Conditioners are serviced regularly and properly maintained.
- Most of the Air Conditioners units are energy efficient with 3 star rating.
- The air conditioned space is properly sealed to prevent air ingress / cold air loss.

Green IT culture:

- Energy efficient computers and laptops have been procured.
- Electronic communication is encouraged to minimize usage of papers.
- Most of the papers are reused for double sided printing to further minimize usage of paper.

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III Electrical Gadget

Gadget List

Light Fittings:

Sr No.	Location	LED Lamps
Ground Floor		
1	Classroom 101	10
2	Classroom 102	3
3	Classroom 103	11
4	Commerce Lab 104	7
5	GD Lab 105	8
6	Classroom 108	8
7	Gymkhana	12
8	Passage Area & Washroom	25
First Floor		
9	Classroom 101	10
10	Classroom 102	7
11	Classroom 103	7
12	Classroom 104	6
13	Classroom 105	7
14	Classroom 106	6
15	Classroom 107	6
16	Passage Area & Washroom	25
17	Physics Lab-I	19
18	Physics Lab-II	10
19	Staff Room / HOD Room	6
20	Dark / Staff Room	15
21	Infotech Room I	15
22	Infotech Room II	12
23	E-Learning	6
Second Floor		
24	Classroom 201	6
25	Classroom 202	6
26	Classroom 203	5
27	Classroom 204	4
28	Classroom 205	4
29	Classroom 206	7
30	Classroom 207	7
31	Classroom 208	7
32	Classroom 209	20
33	Classroom 210	6
34	Classroom 211	6
35	Classroom 212	6

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Sr No.	Location	LED Lamps
36	Classroom 213	6
37	Classroom 214	6
38	Classroom 215	10
39	Classroom 216	10
40	Classroom 217	10
41	Classroom 218	7
42	Classroom 219	13
43	Classroom 220	6
44	Classroom 221	6
45	Classroom 222	6
46	Classroom 223	7
47	Classroom 224	6
48	Classroom 225	9
49	Classroom 226	6
50	Passage Area & Washroom	30
Third Floor		
51	Classroom 301	8
52	Classroom 304	7
53	Classroom 305	7
54	Classroom 306	6
55	Classroom 307	6
56	Classroom 308	2
57	Classroom 309	6
58	Trust Room	12
59	Passage Area	16
60	Washroom	15
Fourth Floor		
61	Classroom 401	12
62	Classroom 402	12
63	Classroom 403	12
64	Classroom 404	12
65	Classroom 405	12
66	Passage Area	12
67	Washroom	4
Total		624

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Ceiling Fans:

Sr No.	Location	Celling Fans
Ground Floor		
1	Classroom 101	10
2	Classroom 102	5
3	Classroom 103	10
4	Commerce Lab 104	3
5	GD Lab 105	3
6	Classroom 108	8
7	Gymkhana	11
8	Passage Area	3
First Floor		
9	Classroom 101	10
10	Classroom 102	9
11	Classroom 103	7
12	Classroom 104	7
13	Classroom 105	5
14	Classroom 106	6
15	Classroom 107	6
16	Physics Lab-I	11
17	Physics Lab-II	10
18	Staff Room / HOD Room	4
19	Dark / Staff Room	6
20	Infotech Room I	5
21	Infotech Room II	3
22	E-Learning	7
Second Floor		
23	Classroom 201	6
24	Classroom 202	6
25	Classroom 203	2
26	Classroom 204	3
27	Classroom 205	3
28	Classroom 206	7
29	Classroom 207	7
30	Classroom 208	7
31	Classroom 209	6
32	Classroom 210	5
33	Classroom 211	7
34	Classroom 212	7
35	Classroom 213	7
36	Classroom 214	7
37	Classroom 215	10
38	Classroom 216	10
39	Classroom 217	10
40	Classroom 218	7
41	Classroom 219	13

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Sr No.	Location	Celling Fans
42	Classroom 220	9
43	Classroom 221	9
44	Classroom 222	9
45	Classroom 223	8
46	Classroom 224	9
47	Classroom 225	6
48	Classroom 226	6
Third Floor		
49	Classroom 301	7
50	Classroom 304	7
51	Classroom 305	5
52	Classroom 306	7
53	Classroom 307	5
54	Classroom 308	2
55	Classroom 309	5
56	Trust Room	2
Fourth Floor		
57	Classroom 401	9
58	Classroom 402	9
59	Classroom 403	9
60	Classroom 404	9
61	Classroom 405	9
Total		420

Air Conditioning Units:

Sr No.	Lab Name	Floor	Type	Quantity
1	Principal Madam Office	Ground	Window	1
2	Vice Principal	Ground	Split	2
3	Account Office	Ground	Split	1
4	Conference Room	Ground	Split	2
5	Adv. Chemistry Lab	Ground	Split	2
6	Auditorium	Ground	Split	7
7	IQAC	Ground	Window	1
8	Commerce Lab	Ground	Split	1
9	Language Lab	Ground	Split	1
10	Group Discussion Room	First	Split	2
11	E-learning Lab	First	Split	2
12	Exam Cell	First	Split	2
13	IT Lab	First	Split	8
14	New Auditorium	First	Split	2
15	Room no-218	First	Split	2
16	Multimedia Lab	First	Split	1
17	Room no-209	First	Split	2
18	Botany Research Lab	Second	Split	2
19	Perfume Lab	Third	Split	3

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Sr No.	Lab Name	Floor	Type	Quantity
20	Store Room	Third	Split	3
21	Personal Care Lab	Third	Split	3
22	Decorative lab	Third	Split	3
23	D.S.T Fist Lab	Third	Split	3
24	Bio Tech Lab CPE	Third	Split	1
25	Computer Lab PGD (PCM)	Third	Split	1
26	Trust Office	Third	Split	3
27	Ladies Canteen	Third	Split	1
	Total			62

Observations & Suggestions:

- Almost all the lamps are replaced with energy efficient LED lamps.
- The fans are of standard efficiency, which may be replaced with high efficiency fans.
- The air conditioning Units have Above 3-star ratings, which are intrinsically operate at high energy efficiency.
- The Air Conditioners are operated as required with manual control. The operation is minimal consequently automation may not be economical.
- The temperature is maintained at 24 to 25 ° C for air conditioning spaces, which is within the recommended values.
- The rooms are well ventilated and provided with fans at appropriate location for proper air circulation.
- The gadgets are services properly and maintained in good condition.

Electricity Bill:

Consumer Name: M/S K.E.T'S V.G. VAZE COLLEGE	
Tariff Category: 146 HT-VIII B	Maharashtra State Electricity Distribution Co. Ltd.
Meter No.: 055-X1093821	Contract Demand : 301.50 KW Consumer No.- 022919022570

Description	Unit	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
Energy Consumption	KWH	27818	33141	31377	36627	30936	37965
Bill	Rs	469306	561367	532350	609500	561492	649587
Cost	Rs/KWH	16.87	16.94	16.97	16.64	18.15	17.11

Description	Unit	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
Energy Consumption	KWH	28614	30320	29874	28082	29625	31307
Bill	Rs	511639	529707	531599	500508	522960	543638
Cost	Rs/KWH	17.88	17.47	17.79	17.82	17.65	17.36

The power consumption & cost is within the normal range.

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IV Environmental System

Ventilation & Air Quality:

- The air ventilation is adequate.
- Several indoor & outdoor plants have been installed to improve air quality.



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- Natural light is been used for maximum illumination during daytime.
- It has been a general practice to switch off the fans & lights in an occupied area.



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Indoor & Outdoor Plants:

Sr No	Name of the Plants	
1	DILLENIACEAE	Dillenia Indica (Elephant Apple)
2	MANGOLIACEAE	Michelia Champaca (Sonchampa)
		Mangolia Cocoa (Egg Mangolia)
3	ANNONACEAE	Annona Squamosa (Sitaphal)
		Annona reticulata (Ramphal)
		Cananga odorata (Ylang-Ylang)
		Artabotrys Hexapetalus (Green Champa)
4	MENISPERMACEAE	Polyalthia Longifolia (False Ashok)
		Tinospora Cordifolia (Gulvel)
5	BIXACEAE	Cocculus Hirsutus
6	PORTULACACEAE	Bixa orellana (Annatto, Shendri)
7	CLUSIACEAE (GUTTIFERAE)	Talinum fruticosum (Ceylon Spinach)
		Mesua ferrea
		Garcinia indica
8	DIPTEROCARPACEAE	Calophyllum inophyllum
9	MALVACEAE	Dipterocarpus
10	BOMBACACEAE	Hibiscus rosa-sinensis
11	STERCULIACEAE	Ceiba pentandra
12	GERANIACEAE	Theobroma cocoa
13	AVERRHOACEAE	Pelargonium Geranium
		Averrhoa carambola

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Sr No	Name of the Plants	
14	OXALIDACEAE	Oxalis corniculata
15	RUTACEAE	Murraya koenigii
		Citrus
		Ravenia spectabilis
		Aegle marmelos
16	SIMAROUBACEAE	Ailanthus triphysa
17	BURSERACEAE	Commiphora wightii
18	MELIACEAE	Azadirachta indica
19	ICACINACEAE	Nothapodytes foetida
20	VITACEAE	Vitis vinifera
		Cissus quadrangularis
21	SAPINDACEAE	Nephelium chinensis
		Sapindus trifoliatus
22	ANACARDIACEAE	Mangifera indica
		Spondias dulcis
		Schinus terebinthifolius
23	PAPILLIONACEAE	Pterocarpus santalinus
		Desmodium longiceps
		Pongamia pinnata
		Clitoria,
		Mucuna
24	CESALPINACEAE	Bauhinia purpurea
		Cassia fistula
		Delonix regia
		Peltophorum ptoocarpum
25	MIMOSACEAE	Albizia lebbek
		Acacia auriculiformis
		Adenantha pavonia
		Calliandra haematocephala
		Mimosa pudica
		Parkia biglandulosa
		Samanea saman
26	HYDRANGEACEAE	Hydrangea macrophylla
27	CRASSULACEAE	Bryophyllum pinnatum
28	COMBRETACEAE	Terminalia arjuna
		Terminalia catappa
29	MYRTACEAE	Syzygium cumini
		Syzygium jambos
		Syzygium malaccense
		Eucalyptus globulus
		Pimenta dioica
30	LECYTHIDACEAE	Barringtonia racemosa
31	MELASTOMACEAE	Memecylon umbellatum

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Sr No	Name of the Plants	
32	LYTHRACEAE	Lagerstroemia speciosa
		Punica granatum
		Cuphea hyssopifolia
33	CUCURBITACEAE	Coccinea grandis
34	CARICACEAE	Carica papaya
35	CACTACEAE	Opuntia
36	APIACEAE	Eryngium foetidum
		Centella asiatica
		Hydrocotyle verticillata
37	ARALIACEAE	Schefflera arboricola
		Schefflera actinophylla
38	RUBIACEAE	Mitragyna parvifolia
		Ixora coccinea
		Gardenia jasmonoides
		Morinda citrifolia
		Coffea Arabica
		Hamelia patens
39	ASTERACEAE	Wedelia chinensis
		Stevia reboudiana
40	GOODENIACEAE	Scaevola sericea
41	PLUMBAGINACEAE	Plumbago zeylanica
42	SAPOTACEAE	Mimusops elengi
		Manilkara zapota
		Manilkara hexandra
		Pouteria
43	OLEACEAE	Jasminum laurifolium
		Nyctanthes arbor-tristis
44	APOCYNACEAE	Catharanthus rosea
		Tabernamontana divaricata
		Wrightia religiosa
		Allamanda
		Cascabela thevetia
		Plumeria alba
		Strophanthus caudatus
Vallaris solanacea		
45	ASCLEPIDACEAE	Hemidesmus indicus
		Tylophora
		Hoya wightii
		Gymnema sylvestre
46	BIGNONIACEAE	Mansoa alliacea
		Jacaranda
		Tecoma stans
		Millingtonia hortensis

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Sr No	Name of the Plants	
47	SOLANACEAE	Capsicum annum
48	SALVADORACEAE	Salvadora persica
49	ACANTHACEAE	Andrographis paniculatus
		Pseuderanthemum
		Ecobolium viridis
		Adhatoda vasica
50	VERBENACEAE	Vitex negundo
		Clerodendrum inerme
		Duranta plumerei
		Clerodendrum thomsoniae
51	LAMIACEAE	Ocimum sanctum
		Ocimum basilicum
		Plectranthus amboinicus
		Mentha
52	NYCTAGINACEAE	Pogostemon cablin
		Boerhavia
53	AMARANTHACEAE	Bougainvillea
		Achyranthus aspera
54	BASELLACEAE	Basella alba
55	PIPERACEAE	Piper longum
		Peperomia
56	MYRISTICACEAE	Myristica
57	LAURACEAE	Cinnamomum verum
		Cinnamomum tamala
58	THYMELEACEAE	Aquilaria agallocha
59	PROTEACEAE	Grevillea robusta
60	SANTALACEAE	Santalum album
61	EUPHORBIACEAE	Euphorbia pulcherrima
		E. milii
		Acalypha
		Jatropha integerrima
		Manihot
		Emblica officinalis
		Sauropus androgynus
		Phyllanthus acidus
62	ULMACEAE	Trema orientalis
63	MORACEAE	Ficus benjamina
		Ficus religiosa
		Artocarpus heterophyllus
		Artocarpus altilis
		Morus alba
64	MUSACEAE	Musa
65	BROMELIACEAE	Ananas

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Sr No	Name of the Plants	
66	AMARYLLIDACEAE	Crinum asiaticum
		Allium cepa
		Hymenocallis littoralis
67	ORCHIDACEAE	Acampe praemorsa
		Phaius tankervilleae
		Vanilla planifolia
		Smithsonia viridiflora
		Dendrobium barbatulum
		Cotonia peduncularis
68	ZINGIBERACEAE	Hedychium coronarium
		Zingiber cernuum
		Curcuma longa
		Curcuma
		Costus woodsonii
		Cardamomum
69	LILIACEAE	Asparagus
		Draceana
		Chlorophytum comocum
		C. filipendulum
		Aloe vera
70	COMMELINACEAE	Tradescantia spathacea
71	ARACEAE	Anthurium
		Aglaonema
		Alocasia
		Spathiphyllum
		Colocasia esculenta
		Syngonium
		Caladium
		Dieffenbachia
		Philodendron
		Epipremnum
		72
Areca catechu		
Roystonea regia		
Cyrtostachys renda		
73	PANDANACEAE	Pandanus dubius
		P. amaryllifolius
74	POACEAE	Arundinaria
		Cymbopogon flexuosus
		C. citratus
		C. martini
		Chrysopogon zizanoides

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V Water Management

Water Source:

The water supplied by the municipal corporation is used for drinking & other requirements. The incoming water from the municipal corporation is metered.



The consumption pattern was analyzed by the water bills. The details are as under.

Period	Days	Consumption	Bill Amount	Cost	Total No. of Person	Water Consumption
		KL	Rs	Rs/KL		L/Person/Day
Connection No- TXG4600002						
05-01-2023 to 08-04-2023	90	1395	30212	21.66	7512	2.06
08-04-2023 to 07-07-2023	90	1350	29238	21.66	7512	2.00
07-07-2023 to 10-10-2023	90	1425	30864	21.66	7512	2.11
10-10-2023 to 09-01-2024	90	1365	29563	21.66	7512	2.02

Observations:

- The water consumption & cost is generally within the norms.

Water Coolers & Purifiers:

The water purifiers and coolers are provided at on individual floors, the details are as under.

Sr no.	Location	Total
1	Ground Floor	2
2	First Floor	1
3	Second Floor	2

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Sr no.	Location	Total
4	Third Floor	1
5	Fourth Floor	2
	Total	8



Water Distribution System:

The distribution network and piping are more or less satisfactory and adequate.

Rainwater Harvesting:



The rainwater is fed to the rainwater harvesting pit for ground water recharge.

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VI Waste Generation & Management

Sewage & Wastewater:

The sewage is fed into the municipal drainage. This is a common practice and the municipal corporation which charges towards the sewage charges.

Solid Waste:

- The waste is segregated and disposed through municipal disposal system.
- The dustbins for Recyclable waste and Non-Recyclable Waste have been provided at appropriate locations.
- The organic waste is segregated and disposed through municipal waste management system.
- The electronic gadgets with residual life may be donated while the electronic waste is properly segregated and handed over to appropriate scrap collector.



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VII Infrastructure & Safety



Movement on-campus (Distributed / non-distributed leading to crowds)

- The premises are provided with multiple staircases with necessary entrances to ensure quick and effective movement in normal as well as emergency conditions.
- The movement of vehicle inside the campus is allowed for the staff to enter the campus with designated parking area & All students using public transport system which is very convenient due to proximity to railway station and bus services.

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- The use of plastic has been reduced inside the campus.
- Ramps & Wheelchair are provided on the ground floor to address the needs of differently abled persons.

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Parking space:



There is adequate parking space for vehicles. However, only faculty members are Allowed to Parked vehicle & All students using public transport system which is very convenient due to proximity to railway station and bus services.

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Firefighting & fire escape system:



There are efficient fire extinguishers in the premises, which are checked / refilled as per the stipulated frequency.

Sr no.	Location	Quantity
1	Ground Floor	14
2	First Floor	5
3	Second Floor	3
4	Third Floor	12
5	Fourth Floor	6
	Total	40

The premise is provided with multiple staircases with requisite entrances to ensure quick and effective movement in emergency conditions.

Draining system:

The drains from the washrooms are connected to the municipal drainage, which is a common practice in the colleges in and around Mumbai, Thane & Navi Mumbai.

The municipal corporation charges for water disposal.

Seepage in the building:

The premise was visually inspected for seepages. No seepages were observed in any of the places.

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VIII Green Culture



Computers/Laptops:

1. The LED / LCD monitors & Laptops has been procured, which are energy efficient.
2. These monitors are not only energy efficient but also generate minimal heat and cut down on air conditioning load.

The following steps may be initiated to further enhance efficiency of the systems.

1. An efficient power management system may be incorporated to
 - a. Switch off the display if not in use.
 - b. Put the computer in Sleep mode / switching off the machines, if not used for prolonged period.
2. Optimize brightness of the screen.
3. Discourage use of screen savers, which has similar power consumption.

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KET's V.G. Vaze Collage of Arts, Science & Commerce

Computers:

Sr. No.	Lab. Name	Floor	Computers
1	Office	Ground	31
2	Chemistry	Ground	4
3	IQAC	Ground	1
4	Commerce Lab / GD Kelkar	Ground	1
5	Language	Ground	17
6	Psychology	Ground	1
7	Bhatt Madam Lab	Ground	4
8	Gymkhana	Ground	1
9	Library	First	19
10	Multimedia	First	32
11	Old IT lab	First	49
12	New IT lab	First	40
13	E-Learning	First	43
14	Physics	First	1
15	Staff Room	First	4
16	Exam Cap Room	First	3
17	Biology Lab	Second	4
18	Trust Office	Third	2
19	PGDPCM Library	Third	9
20	PGDPCM Staff Room	Third	1
21	Biotech Lab	Third	1
	Total		268

Paper-less communication:

The major internal as well as external communication is through electronic medium.

Re-using one sided paper for printing:

It was observed that two side printing / printing on the back side of used paper almost 100 %.

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Green Environmental Activities :

- **Empowering Farmers with Organic Farming: A Transformative Workshop in Collaboration with PRASAD Chikitsa Charity** - The program was organized on the occasion of the International Day for the Preservation of the Ozone Layer, a transformative workshop took place at Ganeshpuri Village, Maharashtra, aimed at empowering local farmers with Organic farming and its importance. The challenge with organic farming and modern approach towards farming with scientific techniques were also focused. The workshop was a collaborative effort between the Department of Botany, Nature club & Green Initiative and PRASAD Chikitsa.



Mr. Milind Nargund briefing the Farmers.



Prof. Dr. Ajit Kengar Guiding to the Farmers.



Participants at the workshop.



Compost: Best from Waste



Dr. Rajani: compost Layering

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Team Botany, Nature Club and Green Initiative and PRASAD chikitsa with Participants.

- **A Nature Trail at Tetavali Eco Restoration Site (Rabale), Hariyali NGO** - The objective of the field visit was to study the Flora, medicinal plants and Environment Conservation and eco restoration practices.



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- **Kokedama and Kitchen Gardening Workshop** - To inculcate environmental awareness and enhance indoor gardening skills among students, the Department of Botany and Green Initiative & Nature Club conducted a workshop on "Kokedama and Kitchen Gardening" at KET'S V.G. Vaze College of Arts, Science and Commerce.



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- **E- Waste Collection Drive** - The electronic gadgets / waste is either donated if useful or handed over to appropriate waste collectors.



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IX Renewable Energy

Solar Photovoltaic:

The college has installed roof-top solar photovoltaic system with net metering facility.



Solar Thermal:

There is no application of solar thermal system and does not find attractive in this case.

Biogas Plant:

There is no possibility of installing biogas plant for cooking as the quantity of plate waste is negligible.

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