Quality Audit Reports and Certificate

SL No.	Reports
1.	Environment Audit Certificate 2022-2023
2.	Environment Audit Certificate 2021-2022
3.	Environment Audit Report 2022-2023
4.	Environment Audit Report 2021-2022

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE MANJERI
NARUKARA P.O
MALAPPURAM (Dt)
Date

PRINCIPAL
Korambayil Ahamed Haji
Memorial Unity Women's
College, Manjeri

Environment Audit Certificate 2022-2023

No: 2023051310003

Certification & Inspection
ISO/IEC 17020: 2012

035-CB-EMS
ISO 9001 : 2015 Certified (22DQJE85)
ISO 14001:2015 Certified (22DEJE84)

OTTOTRACTIONS
Energy-Engineering-Environment

Environment Audit Certificate

This is to certify that the data collection has been carried out diligently and truthfully;

All data monitoring devices are in good working condition and have been calibrated or certified by approved agencies authorised and no tampering of such devices has occurred;

All reasonable professional skill, care and diligence had been taken in preparing the audit report and the contents thereof are a true representation of the facts;

Adequate training provided to personnel involved in daily operations after implementation of recommendations; and

The Environment Audit for the year 2022-23 has been carried out in accordance with various rules and regulations in India.

This Certificate is issued to Korambayil Ahamed Haji Memorial Unity Women's College, Manjeri on their request.

Dated this 13th day of May 2023.

SURESH BABU B V
ACCREDITED ENERGY AUDITOR
AEA-33, BUREAUOF ENERGY EFFICIENCY
GOVERNMENT OF INDIA

OTTOTRACTIONS * EMPANELED ACCREDITED ENERGY AUDITOR, BEE * AEA- 0033

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Date

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Environment Audit Certificate 2021-2022

No: 2023051310006

Certification & Inspection ISO/IEC 17020:2012

035-CB-EMS
ISO 9001 : 2015 Certified (22DQJE85)
ISO 14001:2015 Certified (22DEJE84)

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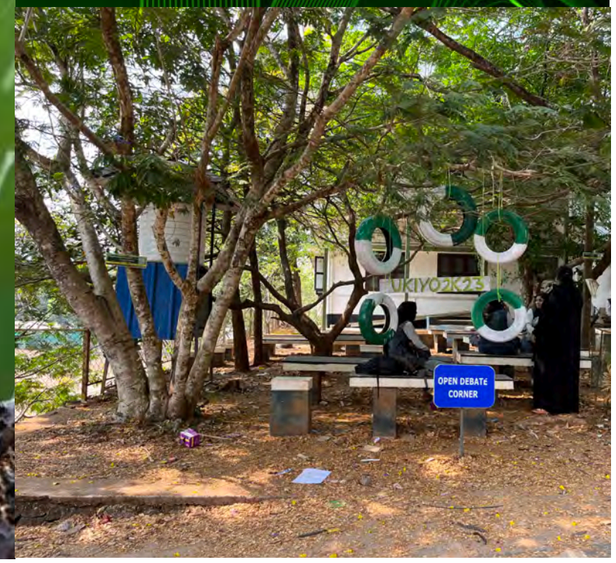

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE

MANJERI

2023

Executed by

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ENVIRONMENT AUDIT REPORT

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE

MANJERI

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Environment Audit Report
KAHM, Unity women's College, Manjeri
EA 1000, 2023

Audit Team

Ottotractions

1	Er. Suresh Babu B V,	Accredited Energy Auditor, AEA 33
2	Er. B. Zachariah,	Director, Ottotractions
3	Er. Abin Baby,	Project Engineer,
4	Er. Joemon J S	Project Engineer,
5	Ms.Amrutha	Data Analyst
6	Ms.Anjana	Project Assistant

About OTTOTRACTIONS

OTTOTRACTIONS established in 2005, is an organization with proven track record and knowledge in the field of energy, engineering, and environmental services. They are the first Accredited Energy Auditor from Kerala for conducting Mandatory Energy Audits in Designated Consumers as per Energy Conservation Act-2001. Government of Kerala recognized and appreciated OTTOTRACTIONS by presenting its prestigious "The Kerala State Energy Conservation Award 2009" for the best performance as an Energy Auditor. Ottotractions is an ISO 9001-2015 and ISO 14001-2015 Certified organization, which ensures the quality of its services.

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Acknowledgment

We were privileged to work together with the administration and staff of KAHM Unity women's College, Manjeri for their timely help extended to complete the audit and bringing out this report.

With gratitude, we acknowledge the diligent effort and commitments of all those who have helped to bring out this report.

We also take this opportunity to thank the bona-fide efforts of team OTTOTRACTIONS for unstinted support in carrying out this audit.

We thank our consultants, engineers and backup staff for their dedication to bring this report.

Thank you.

B V Suresh Babu
Accredited Energy Auditor
AEA 33, Bureau of Energy Efficiency
Government of India

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College, Manjeri

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INTRODUCTION

KAHM Unity Women's College, Manjeri has entrusted Ottotractions to carry out an environmental audit of their campus building.

Each section contains recommendations for improvements relating to environmental issues, which are consolidated in the action plan in section 4.

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BACKGROUND

K.A. H. M. Unity women's College, Manjeri was established in 1991 and is run by Muslim Educational and Cultural Association (MECA), a registered society and as the first women's educational institution in the field of higher education in Malappuram district in Kerala. The college was founded by the visionary, Janab Korambayil Ahamed Haji. He envisaged the institution as a center based on the values of integrity and social commitment, promoting learning and culture. The

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college strives to produce intellectually competent, morally upright and spiritually inspired citizens in the service of the nation.

A sprawling green campus spread over 17 acres; the college is located in Pulpatta village, about 1.6 kilometers away from Manjeri- Calicut Road. Affiliated to Calicut University, Thenhiipalam, the institution is known for its academic excellence and research potential. The college has 10 academic departments, with around 1600 students and 72 faculty members.

The college has been rated as a 'B++' Grade institution by the National Assessment and Accreditation Council (NAAC) in the third cycle with 2.77 points.

Occupancy Details		
Particulars	2021-22	2022-23
Total Students	1667	1704
Staffs	104	104
Total Occupancy of the college	1771	1808

Total student strength of the campus is 1808. For calculating per capita carbon emission estimation, the student strength is taken into account.

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ENVIRONMENTAL ISSUES

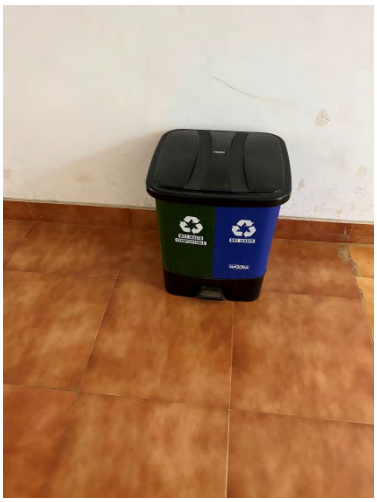
This section is broken down into the following different areas: waste, water, energy, resource and materials use and procurement. A final 'other' section is also included for any additional issues.

1.1. Waste

The way communities generate and manage their waste plays an absolutely key role in their ability to use resources efficiently. All buildings contain bins for both general

waste and mixed recyclables (plastic bottles, card, cans and paper). On average each floor in the buildings areas has its own general waste bin and one recycling bin. When the bins are emptied by the cleaning staff. Bins are marked and kept in different colors for identification, however in some locations throughout the building it was unclear which bins were for which waste streams.

There are four basic ways in which campus can do **plastic** recycling **collection** services for **plastic** bottles and containers – curbside, drop-off, buy-back or deposit/refund programs. The first, and most widely accessible, **collection** method is curbside **collection** of recyclables. The campus is installed bins to collect plastic bottles and single use plastics. The college has given a proper awareness on plastic waste problems and they are discouraging the students or teachers to carry plastics to the campus. The Bhoomitra Sena Club is very active in the campus and do a verity of programs to build awareness on waste management. The reports on different activities of the club are attached as technical supplement of this report.



The major concern of waste management will be focused on the solid waste produced by the campus. Solid wastes produced in the campus are mainly of three types, food waste, paper waste, and plastic waste. Food wastes produced in the campus are mainly by two means. The vegetable wastes produced in the kitchen during the food preparation. The food waste produced by the students and staffs of the campus after the consumption of meals. The degradable waste is treated in the biogas plant the biogas generated is used in the kitchen. A state of art sewage treatment plant is installed in the campus

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Degradable Waste Generation		
KAHM Unity Women's College, Manjeri		
Particulars	2021-22	2022-23
Total Occupancy	1771	1808
Waste generated in kg /day	35.42	36.16
Waste generated in kg /Yr	7792.4	7955.2

Burning plastics shall be strictly restricted inside the campus. **Burning plastic** and other wastes releases dangerous substances such as heavy metals, Persistent Organic Pollutants, and other toxics into the air and ash waste residues. Such pollutants contribute to the development of asthma, cancer, endocrine disruption, and the global burden of disease.

Solid non degradable Waste Generation		
KAHM Unity Women's College, Manjeri		
Particulars	2021-22	2022-23
Total Occupancy	1771	1808
Waste paper generated in kg /day	0.3542	0.3616
Waste plastic generated in kg /day	0.5313	0.5424
Waste paper generated in kg /Yr	77.92	79.55
Waste plastic generated in kg /Yr	116.89	119.33

WASTE MINIMIZATION AND RECYCLING			
1	Does your institute generate any waste?		Yes, Solid waste, Canteen waste, paper, plastic, Horticulture Waste etc.
	If so, what are they?		
2	What is the approximate amount of waste generated per day? (in Kilograms/) (approx.)		27
3	How is the waste generated in the institute managed? By		Reuse of one side printed Paper for internal communication. Kitchen waste is used to generate manures and biogas. Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste.
	1	Composting	In-house
	2	Recycling	In-house
	3	Reusing	In-house
	4	Others (specify)	

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4	Do you use recycled paper in institute?	Yes
5	Do you use reused paper in institute?	Yes
6	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Number of awareness programs through Nature Club, Biodiversity Club and NSS Camp
7	Can you achieve zero garbage in your institute? If yes, how?	Not yet achieved. Possible through waste management plan.

Green Cover Audit			
1	**Is there a garden in your institute?**	**Yes**	
2	Do students spend time in the garden?	Yes	
3	Total number of Plants in Campus	Plant type	Approx. number
		Trees	244
		Ornamental	Not estimated
4	Number of Tree Plantation Drives organized by School per annum. (If Any)	Yes, through Nature Club and Biodiversity club plantation drives are organized.	
5	Number of Trees Planted in Last FY.	20	
	Survival Rate	90%	

All the activities including energy consumption and waste management have their equivalent carbon emission and they positively contribute to the carbon footprint of the campus. Carbon sequestration is the reverse process, at which the emitted carbon dioxide will get sequestrated according to the type of carbon sequestration employed. Even though there are many natural sequestration processes are involved in a campus, the major type of sequestration among them is the carbon sequestration by trees.

Trees sequestrate carbon dioxide through the biochemical process of photosynthesis and it is stored as carbon in their trunk, branches, leaves and roots. The amount of carbon sequestrated by a tree can be calculated by different methods. In this study, the volumetric approach was taken into account, thus the details including CBH

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(Circumference at Breast Height), height, average age, and total number of the trees, are required. Detailed table is included in the technical supplement.

Carbon Sequestration		
Particulars	2021-23	2022-23
Total No of Trees	244	244
Carbon sequestrated by trees in the campus (tCO2e)	10.3	10.80

Carbon sequestrated by a tree can be found out by using different methods. Since this study is employed the volumetric approach, the calculation consists of five processes.

- Determining the total weight of the tree
- Determining the dry weight of the tree
- Determining the weight of carbon in the tree
- Determining the weight of CO_2 sequestrated in the tree
- Determining the weight of CO_2 sequestrated in the tree per year

Carbon sequestrated by each species of trees in the campus compound is given in the Table. Detailed calculation results are listed out in the tables provided in the technical supplements of 'Carbon sequestration'.

List of Trees and Plants		
Sl. No.	Scientific Name	QTY
1	Phyllanthus emblica	18
2	Tecoma stans	1
3	Murraya paniculata	6
4	Ficus benjamina	1
5	Elaeis guineensis	3
6	Peltophorum pterocarpum	0
7	Polyalthia longifolia	2
8	Pongamia pinnata	3
9	Mangifera indica	5
10	Averrhoa bilimbi	2
11	Tamarindus indica	4
12	Psidium guajava	6
13	Hevea braziliensis	2
14	Pterocarpus marsupium	7
15	Syzygium cumini	1

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16	Ficus reliogiosa	3
17	Caesalpinia coriaria	7
18	Leucaena leucocephala	2
19	Saraca asoca	5
20	Caesalpinia pulcherrima	2
21	Acacia auriculiformis	3
22	Albizia saman	4
23	Callistemon citrinus	4
24	Anacradium occidentale	4
25	Hamelia patens	4
26	Chrysophyllum cainito	4
27	Ficus auriculata	5
28	Bougainvillea spectabilis	2
29	Casuarina equisitifolia	3
30	Tabernaemontana divericata	7
31	Cycas circinalis	4
32	Cocos nucifera	1
33	Ficus benghalensis	1
34	Swietenia mahagony	2
35	Plumeria rubra	5
36	Plumeria pudica	1
37	Allamanda cathartica	1
38	Codiaeum variegatum	1
39	Hibiscus rosa-sinensis	5
40	Terminalia catappa	7
41	Terminalia bellerica	3
42	Alstonia scholaris	2
43	Ixora javanica	2
44	Asperagus recemoses	1
45	Annona squamosa	1
46	Dracaena marginata	1
47	Dracaena Jragrans	3
48	Jatropha curcas	5
49	Gmelina arborea	8
50	Syzygium malaccense	1
51	Senna auriculata	4
52	Caesalpinia sappan	7
53	Hydnocarpus pentandra	1
54	Vernonia elliptica	1
55	Heliconia acuminate	2
56	Mimusops elengi	1
57	Euphorbia thirukkalli	1
58	Cocos nucifera	1

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59	Glyricidia sepium	1
60	Simarouba amara	5
61	Passiflora edulis	1
62	Acacia mangium	4
63	Manilkara zapota	1
64	Santa/um album	1
65	Eucalyptus globulus	1
66	Tectona grandis	3
67	Briedelia retusa	1
68	Bambusa bambos	2
69	Bambusa arundinacea	6
70	Hibanobambusa tranquillans 'shiroshima'	4
71	Hymenocal/is littoralis	5
72	Vitex nigundu	2
73	Macaranga peltata	7
74	Abrus precatorius	2
75	Helicteres isora	3
76	Azadiracta indica	2
77	Lawsonia inermis	4
78	Justicia adathoda	1
79	Justicia gendarossa	4
80	Holarrhena antidysenterica	1
81	Cinnamomum zelanicum	3
82	Pimenta dioica	2
83	Annona reticulata	2
84	Moringa oleifera	2
85	Pterocarpus santalinus	1
86	Touteria campechiana	1
Total		244

3.1.1 ENERGY

a. Electricity

The total emission of the carbon dioxide per student is 20.68 kg per year. Emission reduction plans were prepared to bring the existing per capita carbon footprint to zero or below so as to bring the campus a carbon neutral or carbon negative campus. All energy efficiency projects shall be implemented, So, the effective specific carbon emission per student is -1.23 kg of CO_2 per year only

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This can be achieved in many ways but, every alternate plan must be in such a way that, it must fulfill the actual purpose of each activity that is considered.

Here, three major methods are taken in to account as the plans for reducing the carbon emission of the campus.

- Resource optimization
- Energy efficiency
- Renewable energy

Electricity Consumption

Electricity Connection Details		
KAHM Unity Women's College, Manjeri		
1	Name of the Consumer	KAHM Unity Women's College, Manjeri
2	Tariff	LT-6A 3Ph
3	Consumer Numbers	1165467009325, 1165460033834, 1165465013047, 1165467065227, 1165464065206, 1165460013720, 1165463063712
5	Connected Load Total (kW)	98
6	Annual Electricity Consumption (kWh)	53945

Annual Electricity Consumption (kWh)			
Consumer No	**2021-22**	**2022-23**	Connected Load (kW)
1165467009325	27099	33557	80
1165460033834	29258	14698	8
1165465013047	4299	5150	10
1165467065227	0	0	1
1165464065206	0	0	1
1165460013720	1016	502	3
1165463063712	325	38	2
Total	**61997**	**53945**	**105**

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RESOURCE OPTIMISATION

The effective use of resources can limit its unnecessary wastage. Optimal usage of the resources (such as fuels) can save the fuel and can also reduce the carbon emission due to its consumption. This technique can be effectively implemented in the 'transportation' and 'waste' sectors of the campus.

WASTE MINIMISATION

Optimal utilization of paper and plastic stationaries can reduce the frequency of purchase of items. This can reduce the unnecessary wastage of money as well as the excess production of waste. In the case of food, proper food habits and housekeeping practices can optimize its usage.

Currently, College is taking an appreciable effort to reduce the unnecessary production of wastes. But the campus still has opportunities to reduce the generation of waste and can improve much more. Resource optimization can be effectively implemented in all type of waste generated in the campus and the campus can expect about 50% reduction the total waste produced.

ENERGY EFFICIENCY

Energy efficiency is the practice of reducing the energy requirements while achieving the required energy output. Energy efficiency can be effectively implemented in all the sectors of the campus.

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FUELS FOR COOKING

The campus can install a solar water heater to rise the water temperature to a much higher level, then it has to consume only very less amount of thermal energy for preparing the same amount of food. This can make a positive benefit to the campus by saving money, energy and can reduce the carbon emission of the campus due to thermal energy consumed for cooking.

TRANSPORTATION

Energy efficiency of the transportation sector is mainly depended on the fuel efficiency of the vehicles used. Here mileage of the vehicle (kmpl - Kilometres per Litre) is calculated to assess the fuel efficiency of the vehicle. Percentage of closeness is the ratio of actual mileage of the vehicle to its expected mileage. If the percentage of closeness of mileages of each vehicle is greater than that of its average, then the efficiency status of the vehicle is considered as 'Above average' and else, it is considered as 'Below average'

Renewable Energy

45kWp solar power plant is installed in the campus which helps offsetting the carbon foot print. The details of these projects are given in the concerned chapters.

After analyzing the historical and measured data the following projects are proposed to make the campus carbon neutral. The projects are from energy efficiency and renewable energy. The further additions in the green cover increase will also give positive impact in the carbon mitigation.

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OTTOTRACTIONS- ENERGY AUDIT						
KAHM Unity Women's College, Manjeri						
Greenhouse Gas Mitigation through Major Energy Efficiency Projects						
Sl No	Projects	Energy saved(Yearly)		Sustainability (Years)	First year ton of CO2 mitigated	Expected Tons of CO2 mitigated through out life cycle
		(kWh)	MWh	Years		
1	Energy Saving in Lighting by replacing existing 6 No's T5 (28W) Lamps to 18W LED Tube	95	0.10	10	0.07	0.69
2	Energy Saving in Lighting by replacing existing 69 No's T8 (40W) Lamps to 18W LED Tube	1093	1.09	10	0.80	7.98
3	Energy Saving in Lighting by replacing existing 17 No's CFL(15W) Lamps to 9W LED Bulb	73	0.07	10	0.05	0.54
4	Energy Saving by replacing existing 276 No's in-efficent ceiling fans with Energy Efficient Five star fans	7790	7.79	10	5.69	56.87
Total		**9051**	**9**	**10**	**6.61**	**66.07**

OTTOTRACTIONS- ENERGY AUDIT						
KAHM Unity Women's College, Manjeri						
Greenhouse Gas Mitigation through Renewable Energy Projects						
Sl No	Projects	Energy saved(Yearly)		Sustainability (Years)	First year ton of CO2 mitigated	Expected Tons of CO2 mitigated throughout life cycle
		(kWh)	MWh	Years		
1	Installation of 25kWp Solar Power Plant	34219	34.22	25	24.98	624.49
	Total	34219	34	25	24.98	624

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General Environmental Awareness Questionnaire	
Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
Does your institute have any rules to protect the environment? List possible rules you could include.	Yes
Dose Environmental Ambient Air Quality Monitoring conducted by the Institute?	No
Dose Environmental Water and Wastewater Quality monitoring conducted by the Institute?	Yes
Dose stack monitoring of DG sets conducted by the Institute?	No
Is any warning notice, letter issued by state government bodies?	No
Dose any Hazardous waste generated by the Institute? If yes explain its category and disposal method	No
Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
Does your institute have any rules to protect the environment? List possible rules you could include.	Yes
Does housekeeping schedule in your campus?	Yes
Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes
Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes
Does Institute participate in National and Local Environmental Protection Movement?	Yes
Does the institute have any Recognition/certification for environment friendliness?	No
Does the institute use renewable energy?	Yes
Does the Institution conduct a green/environmental audit of its campus?	Yes
Has the institution been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	Yes (NAAC)

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Best Practices and Initiatives	
Renewable Energy	Yes
Solar Power Plant	Yes
Energy Audit and Green Audit Conducted	Yes
Biogas Plant installed	No
Biodiversity Conservation	Yes
Green Cover	Yes
Tree Plantation Drives	Yes
ECO clubs	Yes
Groundwater Recharge	Yes
Rain Water Harvesting System.	Yes
Pollution Reduction Public Transportation	Yes
E Waste Management	Yes
Connected to authorized recycler	Yes
Solid Waste Management	Yes
Lifting of garbage from the campus on alternate days by the Municipal Corporation.	No
Adoption of Village	Yes
CSR	Yes
Water Conservation	Yes
Energy Conservation	Yes

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NARUKARA P.O
MALAPPURAM (Dt)
Date

PRINCIPAL
Korambayil Ahamed Haji
Memorial Unity Women's
College, Manjeri

PRINCIPAL
Korambayil Ahamed Haji
Memorial Unity Women's
College, Manjeri

RECOMMENDATIONS

1. Implement a utility monitoring program.
    - Allocate staff to carry out meter readings for electricity, waste and water on regular basis
    - Add monitoring data to spreadsheet so results can be viewed graphically
    - Compare with the utility bills meter readings in order to ensure accuracy;
2. Consider adopting and implementing a sustainable procurement policy which takes into account the whole life cycle of a product, and make sure

environmental issues are written into tenders when contracting out.

3. Consider trialing recycled paper again – many recycled brands today, such as Evolve, are just as good as virgin paper.
4. Trial the use of re-manufactured (i.e., refilled) ink and toner cartridges rather than purchasing new ones.
5. Consider producing some designated 'environmental' pages on the intranet to make it easier for staff to find environmental information. If possible, a discussion forum could be set up to allow easy internal communications and staff to make suggestions for environmental improvements.
6. Environmental training could be formalized and carried out for all staff. It does not have to be too long or onerous, providing it covers key points, particularly in relation to waste so all staff are aware of the legal requirements. At the very least, environmental information should be included in the induction pack.
7. It is strongly recommended that environmental information is also given to students and staff during induction. It is particularly important for them to be aware of what waste they can dispose of on site and where they can dispose of it, and what waste streams they must take away with them.
8. Consider implementing an environmental management system to incorporate all improvements and monitoring requirements. It does not need to be a complex system certified to any particular standard, merely a way of ensuring that baselines are set and progress is measured. Formation of Environment Policy and communicated to all faculties and other staff.
9. Plan for Zero Waste Campus Project
10. E-waste monthly inventory be maintained at campus as per E waste rules 2016.
11. A Water Meter should be installed at the institute for monitoring of water consumption per capita.
12. Increase in Environmental promotional activities for spreading awareness at campus.
13. Environment/Green committee formation for regulating eco-friendly initiatives at campus premises and periphery.

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CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on a wide range of issues related to Environmental aspects. The audit has identified several observations for making the campus premise more environmentally friendly. The recommendations are also mentioned with observations for Bharata Mata School of Legal Studies team to initiate actions.

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Carbon Foot Print					
Sl. No.	Particulars	2021-22	tCO2e	2022-23	tCO2e
1	Electricity (kWh)	64256	52.69	55687	45.66
2	Diesel (L)	6072	19.43	11942	38.21
3	LPG (kg)	195.00	0.29	165.00	0.25
4	Biogas (m3)	0.00	0.00	0.00	0.000
5	Degradable Waste in kg/yr.	7792.4	4.91	7955.2	5.01
6	Paper Waste in kg/yr	77.92	0.04	79.55	0.04
Total Carbon Foot Print tCO2e/yr			77.37		89.18

Net Carbon Emission after implementing Energy Efficiency projects and Renewable Energy Projects Proposed		
1	Total Carbon Foot Print tCO2e/yr	89.18
2	Carbon Sequestrated tCO2e/yr	10.80
3	Carbon mitigated by Renewable Energy tCO2e/yr (Installed)	47.14
4	Carbon mitigated by Renewable Energy tCO2e/yr (Proposed)	24.98
5	Carbon mitigated by Energy Efficiency (Proposed) tCO2e/yr	6.61
6	Effective Carbon footprint tCO2e/yr	-0.35
7	Total No of Students	1704
8	Specific Carbon Footprint kg CO2e/Student/Yr	-0.21

However, there is scope for further improvement, particularly in relation to waste minimization and energy monitoring. By implementing a basic environmental management system, current good practice can be formalized and a framework can be set up for monitoring, implementation of action plans and continual improvement.

The audit team observed that the overall site is maintained well from an environmental perspective. There are no major observations but few things are important to initiate urgently are waste management records by monthly inventory of hazardous waste, rainwater harvesting recharge; water balance cycle and periodic inspection of buildings; environment policy and initiation of composting at campus.

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References

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle
- Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Water [Prevention & Control Of Pollution] Cess Act-1977 (Amended 2003) and Rules- 1978
- The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices

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TECHNICAL SUPPLEMENTS

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE MANJERI
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Sl.No	Location	Lights						Fans			IT			Others			
		LED-T	LED-B	T8	T5	T12	CFL	CF	EF	WF	Printer	Projector	PC	TV	AC (1TR)	AC (1.5)	AC (3TR)
1	Psychology department	1						1			1		1				
2	4 Classrooms		8					8									
3	Maths	3	1					4									
4	Corridor	8	1														
5	Classrooms	3			1			2		2							
6	Hall									4		1					3
7	Zoology Department			2				2	1								
8	Zoology Lab		12		5			4		4				1			
9	Zoology Class	3		1				4									
10	Psychology	2		2				3									
11	Malayalam department	1						1					1				
12	Bsc Chemistry		1					3									
13	Bsc		1					3						1			
14	Bsc Botany	3						3									
15	Msc Hsc		3					1				1	2				
16	BA History	1	1					4				1		1			
17	Biochemistry Lab	2	26					14	1				2		1		
18	Home science Department	1						2									
19	Home science Lab	2	8	12		1		5	1								
20	Department	1						1									
21	Manager Room	2						2							2		
22	Department of Language	1						1		1			1				
23	Library		24					16					27				
24	Botany Department	9	2	2				10			1	1	1				
25	Lab	17	1	1				12				2					
26	Instrumentation Room		1										7				
27	Studio	6	2										4	1		2	
28	IQAC						16			2	1		2				
29	BA English	1						3									
30	SeminarHall		35												4		
31	Physics Department			1				1									
32	Corridor	6	4	3													
33	Store		1				1	1									
34	B.Com			2				4						1			
35	BA History		2					2									
36	Computer Lab									10		1	49			4	4
37	Bsc CS		1					2									

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38	Bsc CS		1					2				1					
39	Bcom		1					3						1			
40	Msc CS		1					2									
41	Exam Hall	2		8				21									
42	History Department	1						2			1		1				
43	Class Room			1				4									
44	Department of Computer science			2				5					1				
45	Class Room	1						3						1			
46	Reception Block	1						1			1		1				
47	Canteen	12	5					8									
48	Auditorium		20					20		6							
49	Chemistry Block	2	21					24				1					
50	Indoor Stadium			32													
51	Block 3		63					47									
52	Non Resident student	10	9					15									
Total		**102**	**256**	**69**	**6**	**1**	**17**	**276**	**3**	**29**	**5**	**9**	**100**	**7**	**7**	**6**	**7**

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College, Manjeri

250|23

CALL

1912

CUSTOMER CARE 24X7

KSEB

Demand/Disconnection Notice
As per Reg 122 of Supply Code-2014)
Manjeri South Section
0483-2766170
KSEBL-GSTIN:32AAECK2277N8Z1

C#: 1165460033834

Bill# : 6546230319630
Conn Id : 9721965
Name : M.P.M.HASSAN MAHMOO
SECRETARY, MUSLIM E
C Status : Connected
Pole : AU-51/1
Trans : UNITY COLLEGE
Meter# : 4511791
Bill Area : A06/13/170
Bill Date : 16/03/2023
Due Date : 27/03/2023
Disconn Dt: 13/04/2023
Tariff : LT-6B NDom
Purpose : Hostel of NON-S
S Deposit : 23103

83834

Prev. Payment

Prv Paid Dt : 20-01-2023
Prv Paid Amt : 25904

Main Meter

Meter(MM)Status OK
Load : 8 KW
C Demand : 7.75 KVA
Phase : 3
Prv Rd Dt : 18/01/2023
Prs Rd Dt : 16/03/2023
Mt Rd(OMF): 1

Readings & Cons. (MM)

Unit	Curr	Prev	Cons	Avg
KWH/A/I	15455	12212	3243	2460

Bill Details

Fixed Charges	:	1440.00
Meter Rent	:	35.40
Energy Charges	:	23187.45
Duty	:	2318.74
Fuel Sur.	:	214.04
Round off	:	0.37

Bill Amount : 27196.00
Payable : 27196.00

Remarks
Fuel Sur. @ Rs.09/unit
Mtr Rent:30 CGST 9%: 2.7 SGST 9%: 2.7

Pay Online https://wss.kseb.in
AKSHAY M
9207124
Meter Reader
SBM:VT -1.46 /11002226
16-03-2023 10 :59:46 AM

Gs. Electricity bill
87
16/3/23

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE, MANJERI
NARUKARA P.O
MALAPPURAM (Dt)
Date
16/03/23

PRINCIPAL
Korambayil Ahamed Haji Memorial Unity Women's College, Manjeri

KERALA STATE ELECTRICITY BOARD LTD

RECEIPT

Ele. Section 502-Manjeri NorthfCollCenter: Electrical Section Manjeri North

Receipt No 6547022053010117 2 Original # 1 Date : 30-05-2022 15:26:04 IST

Consumer 1165467009325 THE PRINCIPAL of Electrical Section Manjeri South

Payment Mode: Cash

Sl.	Bill No.	Description	Amount due	Surcharge	Total paid	Balance
	6547220500075	RaCC	15826.00 0		15826.00 4.00	
		Total	15826.00		15830.00	

Rupees 15830.00(Rupees Fifteen Thousand Eight Hundred and Thirty Only)

Principal incharge
KAHM Unity Women's College, Manjeri

Remarks: COUNTER

Cashier

Next time pay online visit www.kseb.in

AMBILI U 1107131

Last Billed Rdg. Date	Prev. Rdg. Date	Prev. Meter Rdg. Status	Prst. Rdg. Date	Prst. Meter Rdg. Status
01-04-2022	01-04-2022	Working	03-05-2022	Working

Power Unit	Zone	Trading	Initial Reading(IR)	Final Reading(FR)	OMF	Units*
KWH	Cumulative	Import	464.00	554.00	20	1800
KWH	Cumulative	Export	454.00	457.00	20	60

Remarks :

Last Paid Amount - Rs.33515.00

Last Payment Date - 02-04-2022

Bill Details			[INR] Amount(Rs.)
a)	Fixed Charges	Fixed Charge[FC]	5200.00
		Sub Total	**5200.00**
b)	Energy Charges	Energy Charge[EC]	11310.00
		Sub Total	**11310.00**
c)	Other Charges	Electricity Duty[ED]	1131.00
		Sub Total	**1131.00**
		Sub Total	**0.00**
e)	**Total Amt.(Bill#6546220500075)**	*(a+b+c)*	**17641.00**
f)	Surcharge		0.00
g)	Reconnection Fee		0.00
h)	Interim Bills		0.00
i)	Arrears		0.00
j)	Less paid/adj.		-1815.00
k)	Less Advance		-0.00
	Net Payable*(e+f+g+h+i-j-k)*		**15826.00**

Demand for 5/2022 is Rupees Seventeen Thousand Six Hundred and Forty One Only

Payment Options: Cash/Cheque/DD,MO. Online: www.kseb.in (Debit/Credit Cards,Net Banking). Other Platforms: BBPS,Friends,Akshaya,CSC,NACH

Senior Superintendent

Bill printed @ 30/05/2022 15:26:04

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE MANJERI
NARUKARA P.O
MALAPPURAM (DT)
Date

23/6/22
Principal incharge
KAHM Unity Women's College, Manjeri

PRINCIPAL
Kerambayil Ahamed H
Memorial Unity Women
College, Manjeri

KERALA STATE ELECTRICITY BOARD LTD

RECEIPT

Ele. Section

Receipt No. 5870220302101101 Original * 1

Consumer 1165467009325 THE PRINCIPAL of Electrical Section Manjeri South

Payment Mode

Date

Sl.	Bill No.	Description	Amount due	Surcharge	Total paid	Balance
1	Advance		0		33515.00	
		Total	0.00	33515.00		

Received Rs. 33515.00(Rupees Thirty Three Thousand Five Hundred and Fifteen Only)

Remarks: Direct Advance@ONCOUNTER

Next time pay online visit wss.kseb.in

Cashier

AMBILI . U [illegible]

Principal Incharge
KAHM Unity Women's College, Manjeri

C#: 1165467009325

IIS : 6546220400070
nn. Id : 9692014
: THE PRINCIPAL
UNITY WOMANS COLLEG
Status : Connected
e : AU-51/8
ns : UNITY COLLEGE
er# : X1413909
l Area : MD1/1/66
l Date : 01/04/2022
Date : 11/04/2022
:onn Dt: 26/04/2022
ff : LT-6A NDom
ose : Educational Ins
posit : 38250
r(MM) Status OK
: 80 KW
and : 79.505 KVA
: 3
id Dt : 02/03/2022
d Dt : 01/04/2022
(OMF): 20

iv. Payment

id Dt : 04-03-2022
id Amt : 27520

dings & Cons.

Curr	Prev	Cons	Avg
464	265	3980	173
454	453	20	0

Details

arges	:	5200.00
nt	:	0.00
	:	0.00
arges	:	25740.00
	:	25740.00
nt	:	33514.00
le	:	33514.00

Remarks
ster

MEMORIAL UNITY WOMEN'S COLLEGE MANJERI * KOLAKKARA P.O MANJERI PURAM (DT)

Make payment 20/6/22

PRINCIPAL
Kerambayil Ahamed Haji
Memorial Unity Women's
College, Manjeri

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE, MANJERI

STUDENTS STRENGTH AS ON FEBRUARY 2023

Sl. No	Nature & Name of	At the beginning of the			Admission during the			Withdrawal during			At the end of the Month		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		1 Year	II Year	III Year	1 Year	II Year	III Year	1 Year	II Year	III Year	1 Year	II Year	III Year
1	B.Sc. Computer Sc	46	41	47				1	1		45	40	47
2	B. Sc. Chemistry	41	45	50							41	45	50
3	B. Sc. Botany	43	48	46							43	48	46
4	B. Sc. Family & Community Science	40	39	44							40	39	44
5	B. Sc. Mathematic	39	45	50							39	45	50
6	B.A. English	64	53	47							64	53	47
7	B.A. History	69	64	63							69	64	63
8	B. Com. Co-operati	67	66	60							67	66	60
9	M. A. Englsih	29	3	0							29	3	0
10	M. Sc. Chemistry	19	20	0	1						20	20	0
11	M. Sc. Botany	19	11	0							19	11	0
	Year - wise Total	476	462	407	**1**			1	**1**		476	461	407
	Grand Total	**1345**			**1**			**2**			**1344**		

KORAMBAYIL AHAMED HAJI MEMORIAL UNITY WOMEN'S COLLEGE MANJERI
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