

ENERGY AUDIT REPORT

M.E.S ASMABI COLLEGE

P.VEMBALLUR

Executed by



2023



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Bureau of Energy Efficiency,
Government of India.



Empanelled Energy Auditor: EMCEEA-0211F,
EMC (Energy Management Centre-Kerala)

ENERGY AUDIT REPORT
M.E.S ASMABI COLLEGE
P.VEMBALLUR





Energy Audit Report
M.E.S Asmabi College, P.Vemballur
Report No: EA 1076
2023



Empaneled Accredited Energy Auditor, AEA 33
Bureau of Energy Efficiency
Government of India



Empaneled Energy Auditor, EMCEEA-0211F,
Energy Management Centre
Government of Kerala.



Authorized Energy Auditor, GEDA/ENC/EAC: Autho/2014/8/103/2316,
Gujarat Energy Development Agency
Government of Gujarat



Empaneled Energy Auditor, India SME Technology Services Ltd
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& Indian Overseas Bank

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” for the best performance as an Energy Auditor. Ottotractions is an ISO 9001-2015, ISO 17020-2012 and ISO 14001-2015 Certified organization, which ensures the quality of its services.

Acknowledgement

We were privileged to work together with the administration and staff of M.E.S Asmabi College, P.Vemballur. We are grateful to them for the 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 audit team 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.

For OTTOTRACTIONS

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

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Certification

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 energy 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 energy audit has been carried out in accordance with the Bureau of Energy Efficiency (Manner and Intervals of Time for the Conduct of Energy Audit) Regulations, 2010.

SURESH BABU B V
ACCREDITED ENERGY AUDITOR (AEA 33)
BUREAU OF ENERGY EFFICIENCY
GOVERNMENT OF INDIA

Executive Summary					
Consolidated Cost Benefit Analysis of Energy Efficiency Improvement Projects					
M.E.S Asmabi College, P.Vemballur					
Sl No	Projects	Investment	Cost saving	SPB	Energy saved
		(Lakhs Rs)	(Rs)/Yr	Months	kWh/Yr
1	Energy Saving in Lighting by replacing existing 18 No's T12 (55W) Lamps to 18W LED Tube	0.05	0.03	18.96	392
2	Energy Saving in Lighting by replacing existing 11 No's T8 (40W) Lamps to 18W LED Tube	0.03	0.015	26.06	174
3	Energy Saving by replacing existing 285 No's in-efficient ceiling fans with Energy Efficient Five star fans	8.55	1.41	72.64	16197
4	Installation of 35kWp Solar Power Plant	19.25	6.37	36.26	47906
	Total	27.89	7.83	153.92	64669.65
(The saving are projected as per the assumed operation time observed based in the discussions with the plant officials. The data of saving percentages are taken from BEE guide books and field measurements.)					

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Introduction

A detailed energy audit has been carried out at M.E.S ASMABI College ,P.Vemballur by OTTOTRACTIONS in October 2023. During the energy audit energy saving opportunities has been identified to help improving energy efficiency of the facility. OTTOTRACTIONS is an Accredited Energy Auditor of Bureau of Energy Efficiency and Empaneled Energy Auditor of Energy Management Centre, Government of Kerala.

This energy audit report complies with the clauses in *Energy Conservation Act, 2001* on mandatory energy audit (**Form 4** [refer regulation 6(2)] guidelines for preparation of energy audit report) and complies with the G.O (Rt) No.2/2011/PD dated 01.01.2011 issued by Government of Kerala on mandatory energy audit.

1.1. General Building details and descriptions

M.E.S. Asmabi College, a premier educational institution managed by the Muslim Educational Society (Regd.) Calicut, owes its existence to the remarkable foresight and unremitting zeal of the late Dr. P.K. Abdul Gafoor, the late P.K. Abdulla I.A.S., Dr. M.A. Abdulla and late Dr. A.K. Siddiq Karikulam Azhikode. The institution was established in the year 1968 at P.Vemballur, Kodungallur, a remote coastal backward village in the S.N. Puram Panchayath, of Thrissur District. The main objective of the institution is to uplift the educationally backward community, especially Muslims of the area who had been denied of the right to education for generations.

The college now caters to the needs of the students throughout Kerala and Lakshadweep, cutting across the barriers of class, caste, creed and religion. Hajee Ismail Essa Sait of Cochin initially donated the land and building and the college was named after his mother "Asmabi".

The college which enjoys 2F and 12B status of the U.G.C. is affiliated to the Calicut University. At present it provides higher education to 2500 above students in seventeen Under Graduate Programmes, six Post Graduate Programmes and three Research centres. The College is re-accredited by the NAAC at B++ level in March 2019.

Occupancy Details					
Particulars	2018-19	2019-20	2020-21	2021-22	2022-23
Total Students	1896	2113	2360	2544	2566
Staffs	114	121	120	125	118
Total Occupancy of the college	2010	2234	2480	2669	2684

For calculating specific energy consumption, the total built-up area is taken into account.

Energy audit team

The Energy Audit team is listed below. Besides this list various domine experts also participated in this project.

1. Suresh Babu B V, Accredited Energy Auditor, AEA 33
2. B. Zachariah, Chief Technical Consultant
3. Abin Baby, Project Engineer
4. Jomon J S, Project Engineer
5. Amrutha A M, Data Analyst
6. Anjana B S, Project Assistant

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Process description

The energy audit has been carried out at M.E.S Asmabi College, P.Vemballur. The following is the baseline data of this building.

BASELINE DATA SHEET FOR GREEN AUDIT							
1	Name of the Organisation	M.E.S Asmabi College, P.Vemballur					
2	Address (include telephone, fax & e-mail)	M.E.S Asmabi College Thrissur P. Vemballur P.O., Kodungallur,680671 Ph. No 0480 - 2850596, 2851171 principal.mesasmabi@gmail.com					
2	Year of Establishment	1968					
3	Name of building and Total No. of Electrical Connections/building	MES Asmabi College (5)					
4	Total Number of Students	Boys	-	Girls	-	Total	2566
5	Total Number of Staff	118					
6	Total Occupancy	2684					
7	Total area of green cover	60%					
8	Type of Electrical Connection	HT	-	LT	4		
9	Total Connected Load (kW)	89					
10	Average Maximum Demand (KVA)	NA					
11	Total built up area of the building (M ²)	13358					
12	Number of Buildings	5					
13	Average system Power Factor	0.99					
14	Details of capacitors connected (kVAr)	NA					
15	Transformer Details (Nos., kVA, Voltage ratio)	TR 1					
		NA					
15	DG Set Details (kVA,)	DG1	DG2	DG3	DG4	DG5	Remarks
		62.5					
16	Details of motors	Rating		Nos.		Remarks	
		5 to 10		3			
		10 to 50					
		Above 50					

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Energy and utility system description

3.1 Electricity

Electricity is purchased from KSEB under Four LT Connections, the details are given below. A 62.5 kVA Diesel Generator are in operation at this campus

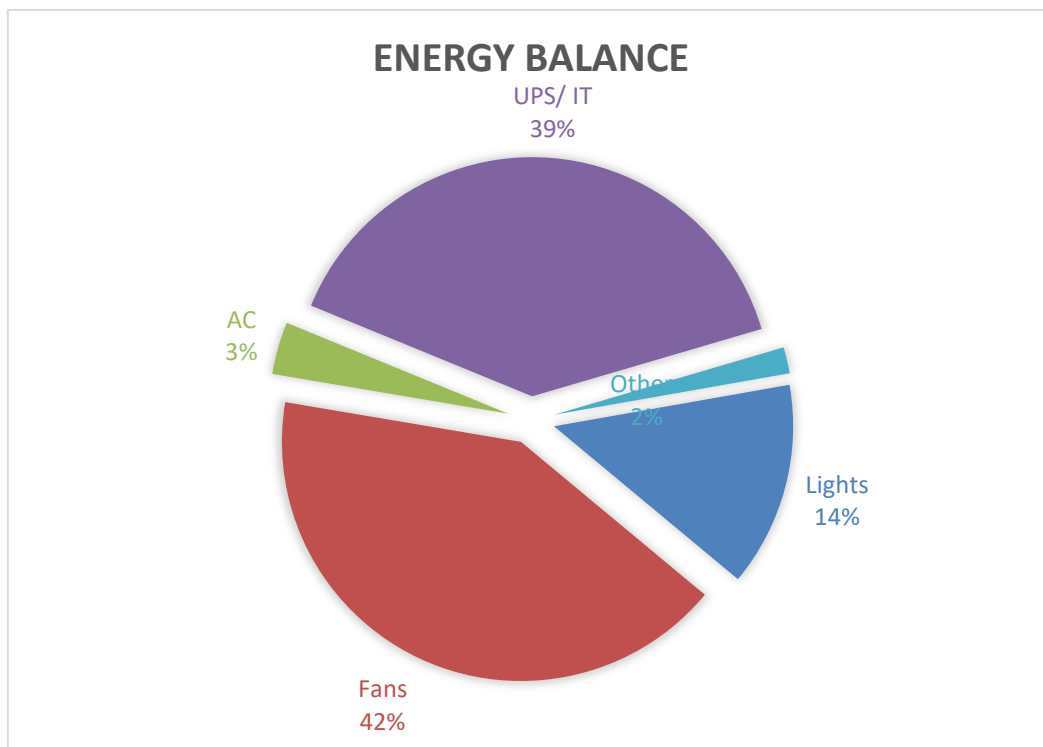
Electricity Connection Details		
M.E.S Asmabi College, P.Vemballur		
1	Name of the Consumer	M.E.S Asmabi College, P.Vemballur
2	Tariff	LT-6A Ndom, LT-6F Ndom, LT-6B Ndom
3	Consumer Numbers	1156615000409, 1156611032948, 1156619000713, 1156616007485
5	Connected Load Total (kW)	89
6	Annual Electricity Consumption (kWh)	74999

3.2. Thermal Energy / Transportation

One Bus is operated from college for transportation. LPG and biogas are used for cooking in the canteen and diesel is used to operate Diesel Generators.

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Energy Balance



42 % of the total energy consumed in this facility is used to operate Fans. Lighting uses 14% UPS and IT Uses 39%. AC uses 3% and Others uses 2%.

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Performance evaluation of major utilities and process equipment's /systems.

5.1. List of equipment and process where performance testing was done.

5.1.1. Electrical System

5.1.2. Lighting & Fans

5.2. Results of performance testing

5.2.1. Electrical System

The average unit cost of electricity is **8.72 Rs/kWh**. This is taken as the basis for the financial analysis of electrical energy efficiency projects. The information on average energy consumption is taken from the historical electricity bill analysis.

Electricity Consumption

Electricity Bill Details (2022-23)						
Name of the Consumer		M.E.S Asmabi College, P.Vemballur				
Connected Load (kW)		65	Consumer no		1156615000409	
Tariff		LT-6A Ndom		Section	Mathilakom	
Month	kWh	Fixed charge (Rs)	Energy charge (Rs)	Duty (Rs)	Meter rent (Rs)	Total amount to be paid (Rs)
Apr-22	4519	4620	30006	3001	70	38030
Jun-22	3120	4620	20717	2072	70	27709
Aug-22	3792	4620	25177	2518	70	32664
Sep-22	3243	4620	21531	2153	70	28613
Oct-22	3000	4620	19921	1992	70	26824
Nov-22	3549	4620	23568	2357	70	30877
Jan-23	3082	4620	20466	2047	70	27430
Feb-23	3374	4620	22406	2241	70	29585
Mar-23	4420	4620	29348	2935	70	37299

Electricity Bill Details (2022-23)						
Name of the Consumer		M.E.S Asmabi College, P.Vemballur				
Connected Load (kW)		12	Consumer no		1156611032948	
Tariff		LT-6F Ndom		Section	Mathilakom	
Month	kWh	Fixed charge (Rs)	Energy charge (Rs)	Duty (Rs)	Meter rent (Rs)	Total amount to be paid (Rs)
Apr-22	927	1680	6158	616	17.7	8540
May-22	2661	1680	17669	1767	17.7	21330
Jul-22	815	1680	5414	541	17.7	7713
Aug-22	818	1680	5432	543	17.7	7733
Nov-22	2152	1680	14288	1429	17.7	17573
Jan-23	783	1680	5196	520	17.7	7471
Feb-23	759	1680	5041	504	17.7	7299
Mar-23	1021	1680	6777	678	17.7	9228

Electricity Bill Details (2022-23)						
Name of the Consumer		M.E.S Asmabi College, P.Vemballur				
Connected Load (kW)		3	Consumer no		1156619000713	
Tariff		LT-6B Ndom		Section	Mathilakom	
Month	kWh	Fixed charge (Rs)	Energy charge (Rs)	Duty (Rs)	Meter rent (Rs)	Total amount to be paid (Rs)
May-22	939	480	6233	623	14.6	7420
Jul-22	543	480	3607	361	14.6	4502
Sep-22	1160	480	7703	770	14.6	9054
Nov-22	1088	480	7224	722	14.6	8521
Jan-23	905	480	6012	601	14.6	7175
Mar-23	914	480	6069	607	14.6	7238

Electricity Bill Details (2022-23)						
Name of the Consumer		M.E.S Asmabi College, P.Vemballur				
Connected Load (kW)		9	Consumer no		1156616007485	
Tariff		LT-6B Ndom		Section	Mathilakom	
Month	kWh	Fixed charge (Rs)	Energy charge (Rs)	Duty (Rs)	Meter rent (Rs)	Total amount to be paid (Rs)
May-22	1136	1440	7543	754	35.4	9857
Jul-22	283	480	1878	188	14.6	2581
Sep-22	294	480	1955	196	14.6	2667
Nov-22	416	480	2762	276	14.6	3564
Jan-23	453	480	3008	301	14.6	3837

Annual Electricity Consumption (kWh)						
Consumer No	2018-19	2019-20	2020-21	2021-22	2022-23	Connected Load (kW)
1156615000409	49566	20967	23737	36609	42799	65
1156611032948	29419	0	0	0	14904	12
1156619000713	23598	11293	1725	2773	11099	3
1156616007485	18607	12620	9948	9778	6198	9
Total	121189	44880	35410	49160	74999	89

5.2.2. Diesel

The campus has a Diesel Generator. The details of Diesel consumption are given below.

Diesel Consumption Details				
	Transportation	Generator	Total	Cost
	in L	in L	in L	in Rs
18-19	225.0	25.0	249.9	23745
19-20	683.4	75.9	759.4	72140
20-21	181.6	20.2	201.8	19167
21-22	152.2	16.9	169.1	16064
22-23	1053.6	117.1	1170.7	111218

Base Line Energy Data						
M.E.S Asmabi College, P.Vemballur						
		2018-19	2019-20	2020-21	2021-22	2022-23
1	Electricity KSEB (kWh)	121189	44880	35410	49160	74999
2	Electricity DG (kWh)	75	228	61	51	351
3	Electricity Solar - Off grid (kWh)	5647	5771	5895	6260	6388
4	Electricity (KSEB + Off grid) kWh	126911	50878	41365	55471	81738
5	Electricity Grid Tied (kWh)	22586	23083	23579	25039	25550
6	Diesel (L)	250	759	202	169	1171
7	LPG (kg)	425.00	372.00	258.00	463.00	501.00
8	Biogas (m3)	29.40	27.90	27.30	29.40	30.00

Energy Consumption Profile						
SI No	Fuel	2018-19	2019-20	2020-21	2021-22	2022-23
		(kCal)	(kCal)	(kCal)	(kCal)	(kCal)
1	Electricity	109143324	43755062	35574168	47704689	70294849
2	Diesel	2624447	7973368	2118458	1775495	12292516
3	LPG	5100000	4464000	3096000	5556000	6012000
4	Biogas	22638000	21483000	21021000	22638000	23100000
Total		139505771	77675430	61809626	77674184	111699365

5.2.3. Solar Power Plant

Solar Power Plant					
Capacity (kWp)	2018-19	2019-20	2020-21	2021-22	2022-23
	Annual Generation				
20	22586	23083	23579	25039	25550

5.2.4. Lighting

Sl.No	Buildings	Location	Lights				
			LED-T	LED B	LED(18W)	T8	T12
1	Hostel Building	Kitchen	5				
2		Store				1	1
3		24 Rooms	24				
4		Corridor	10				
5	Auditorium Building	Auditorium			36		
6		Library	11		40		1
7	Bvoc Building	3 Classrooms	6				
8		Corridor	5				
9		Staffroom Mass Communication Department	2				
10		Wash Room		1			
11		Bvoc Department	2				
12		4 Classrooms	8				
13		3 Classrooms	6				
14	Commerce Block	Exam Hall			24		
15		2 Class Rooms	4				
16		Classroom	2				
17		Corridor	18				
18		2 Class Rooms	2				
19		3 Hall	6				
20		Staffroom	2				
21		Computer Lab			13		
22		Classroom				4	
23		2 Class Rooms	4				
24		M Com Marketing	1				1
25		Psychology	3				

26		Bcom Finance				2	
27		Department of Commerce	3				
28		Bcom Cooperation	2				1
29		3 Classrooms	6				
30		Classroom	1			1	
31		2 Class Rooms	4				
32		Physics Lab	2				
33		Staffroom	2				
34		II BBA					2
35		Psychology Lab	3				1
36		Staffroom	2				
37		Classroom	2				
38		Lab	2				
39		III Bcom Cooperation	1				1
40		III Bcom CA	2				
41		I Bcom CA	2			1	
42		Bvoc Fish Processing Technology Lab	4				
43	Abdul Kareem Block	Zoology Department	1	1		1	
44		Corridor	5				
45		Bsc Aquaculture	1				
46		Zoology Lab	2				7
47		Agriculture Department	3				
48		AquaCulture Lab	4				
49		3 Classrooms	6				
50		Main Building	IQAC	1	1		
51	Biochemistry		6				
52	Corridor		7				
53	Botany Lab			8			
54	Smart Class					14	
55	Botany Research		3				
56	Office					25	
57	Principal					8	
58	Exam Control Room					8	
59	Classroom		1				1
60	Corridor		14				
61	2 Labs		2				
62	Physics Lab		2	2			1
63	Mathematics Dept		1	1			
64	3 Economics		6				
65	Classroom		1				1
66	Economics Dept		2				
67	6 Classrooms		12				
68	Physics Classrooms	1				1	
		Total	240	14	168	11	18

5.2.5. Lux Measurement

M.E.S Asmabi College, P.Vemballur		
Sl. No	Location	Avg. Lux
1	Audtorium	128
2	Library	112
3	Staffroom Mass Communication Department	101
4	Bvoc Department	98
5	Exam Hall	101
6	Staffroom	89
7	Computer Lab	98
8	M Com Marketing	98
9	Psychology	101
10	Bcom Finance	89
11	Department of Commerce	98
12	Bcom Cooperation	128
13	Physics Lab	112
14	Staffroom	101
15	II BBA	98
16	Psychology Lab	101
17	III Bcom Cooperation	101
18	III Bcom CA	89
19	I Bcom CA	98
20	Bvoc Fish Processing Technology Lab	128
21	Zoology Department	131
22	Bsc Aquaculture	142
23	Zoology Lab	134
24	Agriculture Department	121
25	AquaCulture Lab	145
26	IQAC	175
27	Biochemistry	132
28	Corridor	143
29	Botany Lab	153
30	Smart Class	128
31	Botany Research	131
32	Office	142
33	Principal	134
34	Exam Control Room	121
35	Physics Lab	145
36	Mathematics Dept	153
37	Economics Dept	128

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Energy efficiency in utility and process system

The specific energy consumption is normally taken as the ratio of total energy consumed to the total area of building.

OTTOTRACTIONS- ENERGY AUDIT						
M.E.S Asmabi College, P.Vemballur						
Energy Performance Index (EPI)						
Sl No	Particulars	2018-19	2019-20	2020-21	2021-22	2022-23
1	Total building area (m ²)	13358	13358	13358	13358	13358
2	Annual Energy Consumption (kCal)	139505771	77675430	61809626	77674184	111699365
3	Annual Energy Consumption (kWh)	162216	90320	71872	90319	129883
4	Total Energy in Toe	13.95	7.77	6.18	7.77	11.17
5	Specific Energy Consumption kWh/m ²	12.14	6.76	5.38	6.76	9.72

The Energy Performance Index (EPI) is

9.72 kWh/m²

The EPI of 2022-23 may be taken as benchmark.

7

Evaluation of energy management system

Energy management policy

There is no written energy policy available, but environment policy is available which includes energy conservation also. A draft energy management policy is given below. The management may constitute an energy management policy and display the same in the plant to motivate the staff.

**M.E.S ASMABI COLLEGE,
P. VEMBALLUR**

ENERGY POLICY

(Draft)

We are committed to optimally utilize various forms of energy in a cost effective manner to effect conservation of energy resources. We are committed to conserve the energy which is a scarce resource with the requisite consistency in the efficiency, effectiveness in the cost involved in the operations and ensuring that production quality and quantity, environment, safety, health of people are maintained. We are also committed to increase the renewable energy share of the total energy we use.

We are also committed to monitor continuously the saving achieved and reduce its specific energy consumption by minimum of 2% every year.

Date -----

Head of the Institution

7.1. Energy management monitoring system

- **Energy Management Cell** has to be constituted with an objective to revise action plan for energy conservation thereby reducing the production cost.
- Energy conservation tips/ posters are displayed in crucial points.
- Use of renewable energy has to be encouraged.

7.2. Training to staff responsible for operational and Documentation.

- The staff and students need to be made more aware of the importance of energy saving and management.
- Log books shall be maintained to record Electricity Consumption and Diesel consumption.
- Meter reading shall be taken and compared with KSEB regularly.
- Better operating practices regarding appliances and fixtures should be taught to the staff.

7.3. Best Practices

- Have solid waste management program
- Conducted Green Audit.
- Have different social and environmental clubs
- Installed LED bulbs
- Conducted Energy Conservation Training Programs
- Installed 20kWp Solar power plant.

8

Energy Conservation Measures and Recommendations

OTTOTRACTIONS- ENERGY AUDIT	
Energy Saving Proposal Code 01	
Energy Saving in Lighting by replacing existing 18 No's T12 (55W) Lamps to 18W LED Tube	
Existing Scenario	
18 numbers of T12(55 W) lamps were identified during the energy audit field survey in the facility. During discussion with officers it is observed that the average utility of these fittings are of 30%.	
Proposed System	
The existing T12 may be replaced to LED Tube of 18W in phased manner and the savings will be of 55% (inclusive of improved light output and reduced energy consumption)	
Financial Analysis	
Annual working hours (hr)	2400
No of fittings	18
Total load (kW)	0.99
Annual Energy Consumption (kWh)	713
Expected Annual Energy saving for replacing all fittings (kWh)	392
Cost of Power	8.72
Annual saving in Lakhs Rs (1st year)	0.03
Investment required for complete replacements [@Rs 300 per fittings](Lakhs Rs)	0.05
Simple Pay Back (in Months)	18.96

OTTOTRACTIONS- ENERGY AUDIT	
Energy Saving Proposal Code 02	
Energy Saving in Lighting by replacing existing 11 No's T8 (40W) Lamps to 18W LED Tube	
Existing Scenario	
11 numbers of T8(40 W) lamps were identified during the energy audit field survey in the facility. During discussion with officers it is observed that the average utility of these fittings are of 30%.	
Proposed System	
The existing T8 may be replaced to LED Tube of 18W in phased manner and the savings will be of 55% (inclusive of improved light output and reduced energy consumption)	
Financial Analysis	
Annual working hours (hr)	2400
No of fittings	11
Total load (kW)	0.44
Annual Energy Consumption (kWh)	317
Expected Annual Energy saving for replacing all fittings (kWh)	174
Cost of Power	8.72
Annual saving in Lakhs Rs (1st year)	0.015
Investment required for complete replacements [@Rs 300 per fittings](Lakhs Rs)	0.03
Simple Pay Back (in Months)	26.06

OTTOTRACTIONS- ENERGY AUDIT	
Energy Saving Proposal code 03	
Energy Saving by replacing existing 285 No's in-efficient ceiling fans with Energy Efficient Five star fans	
Existing Scenario	
There are 285 numbers of ceiling fans installed in the facility with minimum 8 hrs a day operation. All are conventional type and most of them are very old.	
Proposed System	
There is an energy saving opportunity in replace the existing fans with new five star labelled fans. The five star labelled fans give a savings up to 30% with higher service value (air delivery/watt).	
Financial Analysis	
Annual working hours (hrs)	2400
Total numbers of ordinary fans	285
Total load (kW)	22.80
Annual Energy Consumption (kWh)	43776
Expected Annual Energy saving, for total replacement(kWh)	16197
Cost of Power (Rs)	8.72
Annual saving in Lakhs Rs (1st year)	1.41
Investment required for a total replacement (Lakhs Rs)[@3000 Rs per Fan with 50W at full speed]	8.55
Simple Pay Back (in Months)	72.64

Energy Saving Proposal	
Installation of 35kWp Solar Power Plant	
Existing Scenario	
<p>There is a good potential of solar power electricity generation. The availability of sunlight is very high. There are some canopies available in the proposed site, but by having proper trimming of trees this may be avoided. If the SPVs are placed on the roof top it will help in improving RTTV (Roof Thermal Transmittance Value) of the building.</p>	
Proposed System	
<p>It is proposed to have a Solar Power Plant of 35kW at the beginning stage. The state and central government is pushing and giving good assistance to the installation. It can be installed as an internal grid connected system which is much cheaper than off grid system. Now days the technology provides trouble free grid interactive and connected system. The installation will provide 25yrs trouble free generation with only 20% efficiency loss at the 25th year.</p>	
Financial Analysis	
Proposed Solar installed Capacity (kW)	35
Total average kWh per day expected (3.5kWh/day average)	131.25
Total annual Generating Capacity (kWh)	47906
Cost of energy generated annually Lakhs Rs	6.37
Investment required (INR lakh)(Approx)	19.25
Simple Pay Back (in Months)	36.26
Life cycle in Yrs	25
Total Saving in Life Cycle (Approx) RS lakh	159.29

Technical Supplements

M.E.S Asmabi College, P.Vemballur																						
Sl.No	Buildings	Location	Lights					Fans			IT			UPS				A/C	Others			
			LED-T	LED B	LED(18W)	T8	T12	CF	BLDC	WF	Printer	Photostat	Projector	PC	1kVA	2kVA	3kVA	5kVA	1 TR	PA	Water Dispenser	Fridge
1	Hostel Building	Kitchen	5					2													1	1
2		Store				1	1	2														
3		24 Rooms	24						24													
4		Corridor	10																			
5	Auditorium Building	Audtorium			36		20				1							1				
6		Library	11		40	1	15		5			16		1								
7	Bvoc Building	3 Classrooms	6								3											
8		Corridor	5																1			
9		Staffroom Mass Communication Department	2				2					1										
10		Wash Room		1																		
11		Bvoc Department	2				2					1										
12		4 Classrooms	8				12					4										
13		3 Classrooms	6				6					3										
14	mer ce Bl	Exam Hall			24		17											1				

15		2 Class Rooms	4				10					2							
16		Classroom	2				3					1							
17		Corridor	18																
18		2 Class Rooms	2				4												
19		3 Hall	6				9												
20		Staffroom	2				4												
21		Computer Lab			13		12					90			1	1			
22		Classroom			4		2												
23		2 Class Rooms	4				4					2							
24		M Com Marketing	1			1	2					1							
25		Psychology	3				3					1							
26		Bcom Finance			2		2					1							
27		Department of Commerce	3				4	1		1		1							
28		Bcom Cooperation	2			1	2					1							
29		3 Classrooms	6				6					3							
30		Classroom	1		1		3												
31		2 Class Rooms	4				8					2							
32		Physics Lab	2				6												
33		Staffroom	2				3												
34		II BBA				2	2					1							
35		Psychology Lab	3			1	2					1							
36		Staffroom	2				1			1		1							
37		Classroom	2				2												
38		Lab	2				4						2						
39		III Bcom Cooperation	1			1	2					1							
40		III Bcom CA	2				2					1							
41		I Bcom CA	2			1	2												
42		Bvoc Fish Processing Technology Lab	4				5					1							1
43	Abdul Kareem Block	Zoology Department	1	1		1	2			1		1							
44		Corridor	5																

KERALA STATE ELECTRICITY BOARD LIMITED
DEMAND CUM DISCONNECTION NOTICE

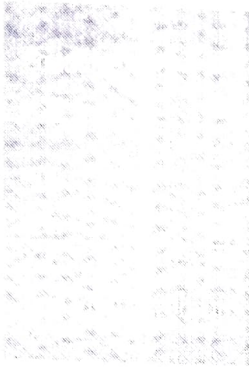
(As per Regulation 122 & 123 of Kerala Electricity Supply Code 2014)

Section	[5661]-Electrical Section Mathilakom			Phone#	0480-2850155	Customer Care	1912
Consumer#	1156615000409			Reg. Mob# 808xxxx078	Regular CC Bill	KSEBL GSTIN: 32AAECK2277NBZ1	
Name & Mailing Address				<i>For redressing complaints/grievance approach the concerned CGRF</i>			
PRINCIPAL				South: Chairperson,CGRF(South),KSEB Ltd, Vydythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220			
M E S ASMABI COLLEGE, ASMABI				Central: Chairperson,CGRF(Central),KSEB Ltd, Power House Building Ernakulam-682018, Ph:0484-2394288			
				North: Chairperson,CGRF(North),KSEB Ltd,Gandhi Road,Kozhikode-32, Ph:0495-2367820			
				State Electricity Ombudsman, Pallikkavil Building,Mamangalam, Edappally, Kochi-682024 Ph:0484-2346488			
Bill#	5661221009449			Bill Area	M02/1	DTR	ASMABI COLLAGE EAST
Billing Period	10/2022[Monthly]			Tariff/Phase	LT-6A/Three	Pole#	PA/108
Bill Date	12-10-2022			Due Date	22-10-2022	DC Date	07-11-2022
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	65012 Watts	Security Deposit	Rs.42752.00
Meter#	L&T020180016497006			Average consumption(Monthly)			
Meter Digits	6.2			Power Unit/Zone	CUMULATIVE		
Meter Type/Owner	NET Meter/KSEB			KWH	2840		
Last Billed Rdg. Date	Prev. Rdg. Date	Prev. Meter Rdg. Status		Prst. Rdg. Date	Prst. Meter Rdg. Status		
13-09-2022	13-09-2022	Working		12-10-2022	Working		
Power Unit	Zone	Trading	Initial Reading(IR)	Final Reading(FR)	OMF	Units*	
KWH	Cumulative	Import	4972.00	5123.30	20	3026	
KWH	Cumulative	Export	707.00	707.00	20	0	
Remarks :				Bill Details			
Last Paid Amount - Rs.55437.00				[INR] Amount(Rs.)			
Last Payment Date - 12-10-2022				a) Fixed Charges	Fixed Charge[FC]	4620.00	
					Sub Total	4620.00	
				b) Energy Charges	Energy Charge[EC]	20122.90	
					Sub Total	20122.90	
				c) Other Charges	Electricity Duty[ED]	2012.29	
					Meter Rent[MR]	70.00	
					Sub Total	2082.29	
				d) GST	MR-CGST	6.30	
					MR-SGST	6.30	
					Sub Total	12.60	
				e) Round Off		0.21	
				f) Total Amt.(Bill#5661221009449)	(a+b+c+d+e)	26838.00	
				g) Surcharge		0.00	
				h) Reconnection Fee		0.00	
				i) Interim Bills		0.00	
				j) Arrears		0.00	
				k) Less paid/adj.		-26838.00	
				l) Less Advance		-0.00	
				Net Payable(f+g+h+i+j-k-l)		0.00	
Demand for 10/2022 is Rupees Twenty Six Thousand Eight Hundred and Thirty Eight Only							

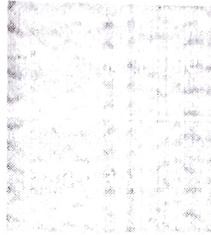
E&OE Payment Options: Cash,Cheque,DD,MO. Online: www.kseb.in (Debit/Credit Cards,Net Banking). Other Platforms: BBPS, Friends, Akshaya, CSC, NACH

Senior Superintendent

Solar OnGrid Consumer (Generator)



1156615000409



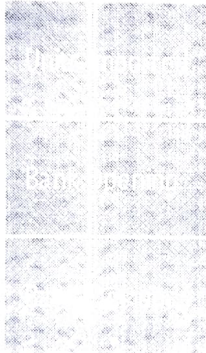
PRINCIPAL

566100009

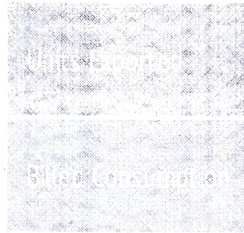
10 KW

16-03-2018

Bank Statement for 202210 (Generator)



3026 kWh



0 kWh

0.000

3026 kWh

0.000