

# ENERGY AUDIT REPORT

ST JOSEPH'S COLLEGE OF PHARMACY

CHERTHALA

Executed by



2023



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Accredited Energy Auditor: AEA-33  
Empanelled Accredited Energy Auditor: EmAEA-33  
Bureau of Energy Efficiency,  
Government of India.



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

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# ENERGY AUDIT REPORT

## ST. JOSEPH'S COLLEGE OF PHARMACY

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### CHERTHALA





Energy Audit Report  
St. Joseph's College of Pharmacy, Cherthala  
Report No: EA 985  
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  
A joint Venture of SIDBI, SBI, Indian Bank, Oriental Bank of Commerce  
& 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.

## Acknowledgment

We were privileged to work together with the administration and staff of St. Joseph's College of Pharmacy, Cherthala

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 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.

B V Suresh Babu  
Accredited Energy Auditor  
AEA 33, Bureau of Energy Efficiency  
For OTTOTRACTIONS

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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)



Executive Summary					
Consolidated Cost Benefit Analysis of Energy Efficiency Improvement Projects					
St. Joseph's College of Pharmacy					
Sl No	Projects	Investment	Cost saving	SPB	Energy saved
		(Lakhs Rs)	(Lakhs Rs)/Yr	Months	kWh/Yr
1	Energy Saving in Lighting by replacing existing 300 No's T8 (40W) Lamps to 18W LED Tube	0.75	0.382	23.56	4245
2	Energy Saving by replacing existing 600No's in-efficient ceiling fans with Energy Efficient Five star fans/BLDC Fans	15.00	1.012	177.81	12197
	<b>Total</b>	<b>15.75</b>	<b>1.39</b>	<b>100.68</b>	<b>16442</b>
(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.)					

# 1

## Introduction

A detailed energy audit has been carried out at St. Joseph's College of Pharmacy, Cherthala by OTTOTRACTIONS in December 2022. 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

St. Joseph's College of Pharmacy is one of the pioneers in the field of pharmacy education in Kerala. It is a unit of Nirmala Province of the Medical Sisters of St. Joseph (MSJ Dharmagiri), Aluva, Kerala, India. The Medical Sisters of St. Joseph is a Christian Congregation dedicated to St. Joseph, started in the year 1944 by Servant of God Rev. Msgr. Joseph. C. Panjikaran. (Photo) We are called to the Congregation of Medical Sisters of St. Joseph in order to experience the merciful love of the Father, revealed through Jesus Christ and to reciprocate that love through loving service to the poor, the sick and the least of the brethren, to share it in our community and to attain holiness of life. The Founder was a highly qualified person with a divine vision, the vision of the great prophet Isaiah. "The spirit of the Lord is upon me, because he has anointed me to preach good news to the poor. He has sent me to proclaim release to the captives

and recovering of sight to the blind, to set at liberty those who are oppressed to proclaim the acceptable year of the Lord".

<b>Occupancy Details</b>	
<b>Particulars</b>	<b>2022-23</b>
<b>Total Students</b>	<b>439</b>
<b>Staffs</b>	<b>62</b>
<b>Total Occupancy of the college</b>	<b>501</b>

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. Devan J, Project Engineer
5. Jomon J S, Project Engineer

# 2

## Process description

The energy audit has been carried out at St. Joseph's College of Pharmacy. The following is the baseline data of this building.

BASELINE DATA SHEET FOR GREEN AUDIT							
1	Name of the Organisation	St. Joseph's College of Pharmacy					
2	Address (include telephone, fax & e-mail )	St. Joseph's College of Pharmacy, Dharmagiri College Campus, Naipunnya Road, Cherthala, Kerala 688524					
3	Year of Establishment	1944					
4	Name of building and Total No. of Electrical Connections/building	7 Blocks					
5	Total Number of Students	Boys		Girls		Total	439
6	Total Number of Staff	62					
7	Total Occupancy	501					
8	Total area of green cover (hectare)	2.02					
9	Type of Electrical Connection	HT	0	LT	7		
10	Total Connected Load (kW)	85					
11	Average Maximum Demand (KVA)	-					
12	Total built up area of the building (M²)	7964					
13	Number of Buildings	7					
14	Average system Power Factor	0.98					
15	Details of capacitors connected	0					
16	Transformer Details (Nos., kVA, Voltage ratio)	TR 1	Remarks				
		0					
17	DG Set Details (kVA, )	DG1	DG2	DG3	DG4	DG5	Remarks
		62.5					
18	Details of motors	Rating		Nos.		Remarks	
		5 to 10		2			
		10 to 50					
		Above 50					

# 3

## Energy and utility system description

### 3.1.1 Electricity

Electricity is purchased from KSEB under 7 LT Connections, the details are given below.

Base Line Energy Data		
St. Joseph's College of Pharmacy		
		2022-23
1	Electricity KSEB (kWh)	27061
2	Electricity Solar Consumption (kWh)	23122
3	Electricity (KSEB + Solar) kWh	50183
4	Electricity Solar Export (kWh)	15203
5	Diesel (L)	6151
6	LPG (kg)	570
7	Biogas (m <sup>3</sup> )	28000

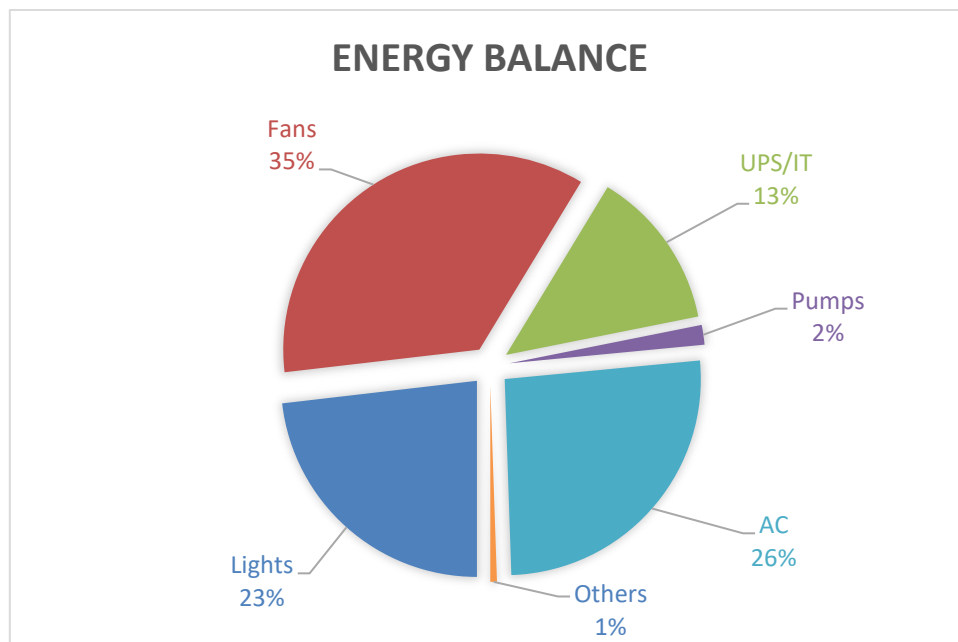
### 3.2. Thermal Energy / Transportation

There are Three vehicles. A Jeep and Innova operated from college for transportation. LPG and biogas are used for cooking. Diesel is also used for operate generator.

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# 4

## Energy Balance



35% is consumed for the operation of fans. 23 % of the total energy consumed in this facility is used to operate Lights. UPS and IT uses 13% AC uses 26%, Others uses 1% and Pumps uses 2%.



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# 5

## 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 **9.00 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

<b>Animal House (1155127001836)</b>	
<b>2022-23</b>	
<b>Month</b>	<b>kWh</b>
Feb-22	32
Apr-22	29
Jun-22	22
Aug-22	7
Oct-22	12
Dec-22	93
<b>Total</b>	<b>195</b>

<b>B-Pharm (1155127020395)</b>	
<b>2022-23</b>	
<b>Month</b>	<b>kWh</b>
Feb-22	781
Mar-22	950
Apr-22	1031
May-22	283
Jun-22	965
Jul-22	833
Aug-22	1015
Sep-22	751
Oct-22	598
Nov-22	740
Dec-22	846
Jan-23	787
<b>Total</b>	<b>9580</b>

<b>Hostel (1155127024177)</b>	
<b>2022-23</b>	
<b>Month</b>	<b>kWh</b>
Feb-22	898
Mar-22	1066
Apr-22	1220
May-22	298
Jun-22	1149
Jul-22	1402
Aug-22	921
Sep-22	726
Oct-22	637
Nov-22	820
Dec-22	1119
Jan-23	845
<b>Total</b>	<b>11101</b>

<b>M-Pharm (1155121023494)</b>	
<b>2022-23</b>	
<b>Month</b>	<b>kWh</b>
Feb-22	241
Mar-22	245
Apr-22	309
May-22	66
Jun-22	337
Jul-22	308
Aug-22	195
Sep-22	209
Oct-22	184
Nov-22	236
Dec-22	275
Jan-23	212
<b>Total</b>	<b>2817</b>

Mess Hall (1155127001759)		Convent (1155120024402)		Security Room (1155126023569)	
2022-23		2022-23		2022-23	
Month	kWh	Month	kWh	Month	kWh
Feb-22	145	Feb-22	101	Feb-22	12
Apr-22	160	Apr-22	371	Apr-22	10
Jun-22	283	Jun-22	543	Jun-22	16
Aug-22	308	Aug-22	382	Aug-22	41
Oct-22	249	Oct-22	145	Oct-22	37
Dec-22	476	Dec-22	56	Dec-22	33
<b>Total</b>	<b>1621</b>	<b>Total</b>	<b>1598</b>	<b>Total</b>	<b>149</b>

Annual Electricity Consumption (kWh)				Connected Load
Sl.No	Location	Consumer No	2022-23	
1	Animal House	1155127001836	195	2
2	B-Pharm	1155127020395	9580	38
3	Hostel	1155127024177	11101	17
4	M-Pharm	1155121023494	2817	15
5	Mess Hall	1155127001759	1621	4
6	Convent	1155120024402	1598	8
7	Security room	1155126023569	149	1
<b>Total</b>			<b>27061</b>	<b>85</b>

## Diesel

The campus has three vehicles in operation. The details of Diesel consumption is given below.

Diesel Consumption Details				
	Vehicles	Generator	Total	cost
	in L	in L	in L	Rs
2022-23	5930	221	6151	590501

Base Line Energy Data		
St. Joseph's College of Pharmacy		
		2022-23
1	Electricity KSEB (kWh)	27061
2	Electricity Solar Consumption (kWh)	23122
3	Electricity (KSEB + Solar) kWh	50183
4	Electricity Solar Export (kWh)	15203
5	Diesel (L)	6151
6	LPG (kg)	570
7	Biogas (m <sup>3</sup> )	28000

Energy Consumption Profile			
SI No	Fuel	2022-23	
		kCal	kWh
1	Electricity	43157380	50183
2	Diesel	64586053	75100
3	LPG	6840000	7953
4	Biogas	6160000	7163
<b>Total</b>		<b>120743433</b>	<b>140399</b>

## Solar Power Plant

Solar Power Plant Details				
Particulars	Plant 1	Plant 2	Plant 3	Total
Capacity kWp	10	5	15	30
Type	On-Grid	Off-Grid	On-Grid	
Annual generation (kWh)	12775	6388	19163	38325
Total kWh Exported	843	0	14360	15203
Total kWh Consumed	11932	6388	4803	23122

## Biogas

Biogas Consumption				
	m3	kcal/m3	Daily production	Annual production (kCal)
Biogas plant 1	6	3500	21000	4620000
Biogas plant 2	2	3500	7000	1540000

## LPG

LPG Consumption Details	
Particulars	2022-23
No Cylinders	30
LPG Consumption in kg	570
Total in kg	570



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# 6

## 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		
St. Joseph's College of Pharmacy		
Energy Performance Index (EPI)		
SI No	Particulars	2022-23
1	Total building area (m <sup>2</sup> )	7964
2	Annual Energy Consumption (kCal)	120743433
3	Annual Energy Consumption (kWh)	140399
4	Total Energy in Toe	12.07
5	Specific Energy Consumption kWh/m <sup>2</sup>	17.63

**The Energy Performance Index (EPI) is**

**17.63 kWh/m<sup>2</sup>**

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.

#### ST. JOSEPH'S COLLEGE OF PHARMACY CHERTHALA

#### 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 Solar Power Plant

# 8

## Energy Conservation Measures and Recommendations

Executive Summary					
Consolidated Cost Benefit Analysis of Energy Efficiency Improvement Projects					
St. Joseph's College of Pharmacy					
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	<b>Total</b>	<b>15.75</b>	<b>1.39</b>	<b>100.68</b>	<b>16442</b>
(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.)					

OTTOTRACTIONS- ENERGY AUDIT	
Energy Saving Proposal Code 1	
Energy Saving in Lighting by replacing existing 300 No's T8 (40W) Lamps to 18W LED Tube	
<b>Existing Scenario</b>	
300 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%.	
<b>Proposed System</b>	
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)	
<b>Financial Analysis</b>	
Annual working hours (hr)	1760
No of fittings	300
Total load (kW)	12.00
Annual Energy Consumption (kWh)	6336
Expected Annual Energy saving for replacing all fittings (kWh)	4245
Cost of Power	9.00
Annual saving in Lakhs Rs (1st year)	0.38
Investment required for complete replacements [@Rs 250 per fittings](Lakhs Rs)	0.75
Simple Pay Back (in Months)	23.56

OTTOTRACTIONS- ENERGY AUDIT	
Energy Saving Proposal Code 3	
Energy Saving by replacing existing 600No's in-efficient ceiling fans with Energy Efficient Five star fans/BLDC Fans	
Existing Scenario	
There are 600 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 55% with higher service value (air delivery/watt). The operating factor is taken as 50%	
Financial Analysis	
Annual working hours (hrs)	1760
Total numbers of ordinary fans	600
Total load (kW)	42.00
Annual Energy Consumption (kWh)	22176
Expected Annual Energy saving, for total replacement(kWh)	12197
Cost of Power (Rs)	8.30
Annual saving in Lakhs Rs (1st year)	1.01
Investment required for a total replacement (Lakhs Rs)[ @2500 Rs per Fan with 30W at full speed]	15.00
Simple Pay Back (in Months)	177.81

Energy Saving Proposal Code 4	
Installation of 30 kWp Solar Power Plant	
<b>Existing Scenario</b>	
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 in the roof top it will help improving RTTV (Roof Thermal Transmittance Value) of the building.	
<b>Proposed System</b>	
It is proposed to install a 30kWp Solar Power Plant in addition to the existing one. 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.	
<b>Financial Analysis</b>	
Proposed Solar installed Capacity (kW)	30
Total average kWh per day expected (3.5kWh/day average)	105.00
Annual generation kWh	38325
Cost of energy generated annually Lakhs Rs	3.18
Investment required (INR lakh)(Approx)	16.50
Simple Pay Back (in Months)	62.25
Life cycle in Yrs	25
Total Saving in Life Cycle (Approx) RS lakh	79.52



# KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala				Phone#	0478-2812504		Customer Care	1912						
Consumer#	1155126023569				Reg. Mob# 996xxxx055			Regular CC Bill		KSEBL GSTIN: 32AAECK2277NBZ1					
Name & Mailing Address					For redressing complaints/grievance approach the concerned CGRF										
ADMINISTRATOR					South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220										
ST\IV JOSEPH PHARMACY COLLEGE, C M C.-2., CHE					Central: Chairperson,CGRF(Central),KSEB Ltd, Power House Building Ernakulam-682018, Ph:0484-2394288										
RTHALA P.O, CHERTHALA					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#	5512221206858				Bill Area	B01/18		DTR		ST JOSEPH					
Billing Period	12/2022[Bi-Monthly]				Tariff/Phase	LT-7A/Single		Pole#		STJ/S/					
Bill Date	21-12-2022				Due Date	31-12-2022		DC Date		16-01-2023					
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]				Connected Load	860 Watts		Security Deposit		Rs.549.00					
Meter#	L&T001010055349370				Average consumption(Monthly)										
Meter Digits	6.0				Power Unit/Zone	CUMULATIVE									
Meter Type/Owner	TOD/KSEB				KWH	16									
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status			Prst. Rdg. Date		Prst. Meter Rdg. Status						
21-10-2022		21-10-2022		Working			21-12-2022		Working						
Power Unit	Zone		Trading	Initial Reading(IR)		Final Reading(FR)		OMF		Units*					
KWH	Cumulative		Import	990.00		1023.00		1		33					
Remarks :					Bill Details					[INR] Amount(Rs.)					
Last Paid Amount - Rs.394.00  Last Payment Date - 17-01-2023					a)	Fixed Charges		Fixed Charge[FC]		160.00					
								Sub Total		160.00					
					b)	Energy Charges		Energy Charge[EC]		199.65					
								Sub Total		199.65					
					c)	Other Charges		Electricity Duty[ED]		19.97					
								Meter Rent[MR]		12.00					
								Sub Total		31.97					
					d)	GST		MR-CGST		1.08					
								MR-SGST		1.08					
								Sub Total		2.16					
					e)	Round Off				0.22					
					f)	Total Amt.(Bill#5512221206858)				(a+b+c+d+e)		394.00			
					g)	Surcharge				0.00					
					h)	Reconnection Fee				0.00					
					i)	Interim Bills				0.00					
					j)	Arrears				-0.00					
					k)	Less paid/adj.				-394.00					
					l)	Less Advance				-0.00					
										Net Payable(f+g+h+i+j-k-l)		0.00			
					Demand for 12/2022 is Rupees Three Hundred and Ninety Four 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

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

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Name & Mailing Address				For redressing complaints/grievance approach the concerned CGRF									
THE ADMINISTRATOR				South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220									
ST JOSEPH\\\\\\S HOSPITAL, DHARMAGIRI, CHERTHALA				Central: Chairperson,CGRF(Central),KSEB Ltd, Power House Building Ernakulam-682018, Ph:0484-2394288									
P O				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#	5512221206859			Bill Area	B01/18		DTR		ST JOSEPH				
Billing Period	12/2022[Bi-Monthly]			Tariff/Phase	LT-7A/Single		Pole#		STJ/S/				
Bill Date	21-12-2022			Due Date	31-12-2022		DC Date		16-01-2023				
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	2200 Watts		Security Deposit		Rs.1800.00				
Meter#	L&T00SCM0093228496			Average consumption(Monthly)									
Meter Digits	5.1			Power Unit/Zone	CUMULATIVE								
Meter Type/Owner	TOD/KSEB			KWH	5								
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date		Prst. Meter Rdg. Status					
21-10-2022		21-10-2022		Working		21-12-2022		Working					
Power Unit	Zone		Trading	Initial Reading(IR)		Final Reading(FR)		OMF	Units*				
KWH	Cumulative		Import	1329.00		1422.00		1	93				
Remarks :				Bill Details					[INR] Amount(Rs.)				
Last Paid Amount - Rs.1113.00  Last Payment Date - 17-01-2023				a)	Fixed Charges		Fixed Charge[FC]		480.00				
							Sub Total		480.00				
				b)	Energy Charges		Energy Charge[EC]		562.65				
							Sub Total		562.65				
				c)	Other Charges		Electricity Duty[ED]		56.27				
							Meter Rent[MR]		12.00				
							Sub Total		68.27				
				d)	GST		MR-CGST		1.08				
							MR-SGST		1.08				
							Sub Total		2.16				
				e)	Round Off				-0.08				
				e)	Total Amt.(Bill#5512221206859) (a+b+c+d+e)					1113.00			
				f)	Surcharge				0.00				
				g)	Reconnection Fee				0.00				
				h)	Interim Bills				0.00				
				i)	Arrears				-0.00				
				j)	Less paid/adj.				-1113.00				
				k)	Less Advance				-0.00				
								Net Payable(e+f+g+h+i-j-k)				0.00	
				Demand for 12/2022 is Rupees One Thousand One Hundred and Thirteen Only									

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

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala			Phone#	0478-2812504		Customer Care	1912				
Consumer#	1155127001759			Reg. Mob# 808xxxx470		Regular CC Bill		KSEBL GSTIN: 32AAECK2277NBZ1				
Name & Mailing Address				For redressing complaints/grievance approach the concerned CGRF								
ADMINISTRATER				South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220								
ST JOSEPH HOSPITAL TRUST, CMC 2, CHERTHALA				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#	5512221206860			Bill Area	B01/18		DTR		ST JOSEPH			
Billing Period	12/2022[Bi-Monthly]			Tariff/Phase	LT-7A/Single		Pole#		STJ/S/			
Bill Date	21-12-2022			Due Date	31-12-2022		DC Date		16-01-2023			
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	3514 Watts		Security Deposit		Rs.7332.00			
Meter#	L&T0B9730099499454			Average consumption(Monthly)								
Meter Digits	6.2			Power Unit/Zone	CUMULATIVE							
Meter Type/Owner	LCD/KSEB			KWH	140							
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date		Prst. Meter Rdg. Status				
21-10-2022		21-10-2022		Working		21-12-2022		Working				
Power Unit	Zone		Trading	Initial Reading(IR)		Final Reading(FR)		OMF	Units*			
KWH	Cumulative		Import	1268.00		1744.00		1	476			
Remarks :				Bill Details					[INR] Amount(Rs.)			
Last Paid Amount - Rs.4581.00 Last Payment Date - 17-01-2023				a)	Fixed Charges		Fixed Charge[FC]		640.00			
							Sub Total		640.00			
				b)	Energy Charges		Energy Charge[EC]		3570.00			
							Sub Total		3570.00			
				c)	Other Charges		Electricity Duty[ED]		357.00			
							Meter Rent[MR]		12.00			
							Sub Total		369.00			
				d)	GST		MR-CGST		1.08			
							MR-SGST		1.08			
							Sub Total		2.16			
				e)	Round Off				-0.16			
				e)	Total Amt.(Bill#5512221206860)		(a+b+c+d+e)		4581.00			
				f)	Surcharge				0.00			
				g)	Reconnection Fee				0.00			
				h)	Interim Bills				0.00			
				i)	Arrears				0.00			
				j)	Less paid/adj.				-4581.00			
				k)	Less Advance				-0.00			
								Net Payable(e+f+g+h+i-j-k)				0.00
				Demand for 12/2022 is Rupees Four Thousand Five Hundred and Eighty One Only								

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

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala			Phone#	0478-2812504		Customer Care	1912	
Consumer#	1155120024402			Reg. Mob# 974xxxx668		Regular CC Bill		KSEBL GSTIN: 32AAECK2277NBZ1	
Name & Mailing Address				For redressing complaints/grievance approach the concerned CGRF					
ADMINISTRATOR				South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220					
ST.JOSEPHS COLLEGE OF FHARMACY, DHARMAGIRI				Central: Chairperson,CGRF(Central),KSEB Ltd, Power House Building Ernakulam-682018, Ph:0484-2394288					
COLLEGE, CHERTHALA PO, NAIPUNNIYA COLLEG				North: Chairperson,CGRF(North),KSEB Ltd,Gandhi Road,Kozhikode-32, Ph:0495-2367820					
E NEAR				State Electricity Ombudsman, Pallikkavil Building,Mamangalam, Edappally, Kochi-682024 Ph:0484-2346488					
Bill#	5512221206861			Bill Area	B01/18		DTR	ST JOSEPH	
Billing Period	12/2022[Bi-Monthly]			Tariff/Phase	LT-6F/Three		Pole#	STJ/S/1	
Bill Date	21-12-2022			Due Date	31-12-2022		DC Date	16-01-2023	
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	7346 Watts		Security Deposit	Rs.12087.00	
Meter#	L+G020190004912720			Average consumption(Monthly)					
Meter Digits	5.1			Power Unit/Zone	CUMULATIVE				
Meter Type/Owner	TOD/KSEB			KWH	178				
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date		Prst. Meter Rdg. Status	
21-10-2022		21-10-2022		Working		21-12-2022		Working	
Power Unit	Zone		Trading	Initial Reading(IR)	Final Reading(FR)		OMF	Units*	
KWH	Cumulative		Import	9973.00	10029.00		1	56	
Remarks :  Last Paid Amount - Rs.3125.00  Last Payment Date - 17-01-2023					Bill Details				[INR] Amount(Rs.)
					a)	Fixed Charges	Fixed Charge[FC]		2720.00
							Sub Total		2720.00
					b)	Energy Charges	Energy Charge[EC]		336.00
							Sub Total		336.00
					c)	Other Charges	Electricity Duty[ED]		33.60
							Meter Rent[MR]		30.00
							Sub Total		63.60
					d)	GST	MR-CGST		2.70
							MR-SGST		2.70
							Sub Total		5.40
					e)	Total Amt.(Bill#5512221206861) (a+b+c+d)			3125.00
					f)	Surcharge			0.00
					g)	Reconnection Fee			0.00
					h)	Interim Bills			0.00
					i)	Arrears			0.00
					j)	Less paid/adj.			-3125.00
					k)	Less Advance			-0.00
						Net Payable(e+f+g+h+i-j-k)			0.00
					Demand for 12/2022 is Rupees Three Thousand One Hundred and Twenty Five Only				

E&amp;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

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala			Phone#	0478-2812504		Customer Care	1912					
Consumer#	1155121023494			Reg. Mob# 808xxxx470		Regular CC Bill		KSEBL GSTIN: 32AAECK2277NBZ1					
Name & Mailing Address  SR.JOVANA  ADMNISTRATOR,ST.JOSEPH COLLEGE OF PHARMACY, C MC-2/28G, NEW BLOCK, NEAR NAIPUNYA COLLEGE				For redressing complaints/grievance approach the concerned CGRF									
				South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220									
				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#	5512230100140			Bill Area	M02/2	DTR	ST JOSEPH						
Billing Period	1/2023[Monthly]			Tariff/Phase	LT-7A/Three	Pole#	STJ/S/						
Bill Date	03-01-2023			Due Date	13-01-2023	DC Date	28-01-2023						
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	14700 Watts	Security Deposit	Rs.9038.00						
Meter#	L&T00SCM0018438385			Average consumption(Monthly)									
Meter Digits	6.1			Power Unit/Zone	CUMULATIVE								
Meter Type/Owner	TOD/KSEB			KWH	232								
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date		Prst. Meter Rdg. Status					
01-12-2022		01-12-2022		Working		03-01-2023		Working					
Power Unit	Zone		Trading	Initial Reading(IR)	Final Reading(FR)		OMF	Units*					
KWH	Cumulative		Import	10600.00	10812.00		1	212					
Remarks :  Last Paid Amount - Rs.4174.00  Last Payment Date - 17-01-2023					Bill Details			[INR] Amount(Rs.)					
					a)	Fixed Charges	Fixed Charge[FC]	2400.00					
							Sub Total	2400.00					
					b)	Energy Charges	Energy Charge[EC]	1590.00					
							Sub Total	1590.00					
					c)	Other Charges	Electricity Duty[ED]	159.00					
							Meter Rent[MR]	15.00					
							Sub Total	174.00					
					d)	GST	MR-CGST	1.35					
							MR-SGST	1.35					
							Sub Total	2.70					
					e)	Round Off		0.30					
					f)	Total Amt.(Bill#5512230100140) (a+b+c+d+e)			4167.00				
					g)	Surcharge		7.00					
					h)	Reconnection Fee		0.00					
					i)	Interim Bills		0.00					
					j)	Arrears		0.00					
					k)	Less paid/adj.		-4174.00					
					l)	Less Advance		-0.00					
						Net Payable(f+g+h+i+j-k-l)			0.00				
					Demand for 1/2023 is Rupees Four Thousand One Hundred and Sixty Seven Only								

E&amp;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

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala			Phone#	0478-2812504	Customer Care	1912
Consumer#	1155127024177			Reg. Mob# 944xxxx570	Regular CC Bill	KSEBL GSTIN: 32AAECK2277NBZ1	
Name & Mailing Address				For redressing complaints/grievance approach the concerned CGRF			
ADMINISTRATOR ST.JOSEPH COLLEGE DHARMAGIRI, CMC 30, NORTH O F IRUVELY BRIDGE, CHERTHALA				South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220			
				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#	5512230100166			Bill Area	M02/4	DTR	ST JOSEPH
Billing Period	1/2023[Monthly]			Tariff/Phase	LT-6F/Three	Pole#	STJ/S/1
Bill Date	03-01-2023			Due Date	13-01-2023	DC Date	28-01-2023
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]			Connected Load	16519 Watts	Security Deposit	Rs.22437.00
Meter#	GPIOCUST00A4535320			Average consumption(Monthly)			
Meter Digits	6.2			Power Unit/Zone	CUMULATIVE		
Meter Type/Owner	NET Meter/Customer			KWH	1600		
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date	
03-12-2022		03-12-2022		Working		03-01-2023	
Power Unit		Zone		Trading		Units*	
KWH		Cumulative		Import		845	
KWH		Cumulative		Export		1304	
Remarks :				Bill Details			
Last Paid Amount - Rs.2913.00				[INR] Amount(Rs.)			
Last Payment Date - 17-01-2023				a) Fixed Charges Fixed Charge[FC]			
				2890.00			
				Sub Total			
				2890.00			
				Sub Total			
				0.00			
c) Other Charges ED[Self Generation]				19.93			
				Sub Total			
				19.93			
				Sub Total			
				0.00			
e) Round Off				0.07			
f) Total Amt.(Bill#5512230100166) (a+c+e)				2910.00			
g) Surcharge				3.00			
h) Reconnection Fee				0.00			
i) Interim Bills				0.00			
j) Arrears				0.00			
k) Less paid/adj.				-2913.00			
l) Less Advance				-0.00			
Net Payable(f+g+h+i+j-k-l)				0.00			
Demand for 1/2023 is Rupees Two Thousand Nine Hundred and Ten Only							

E&amp;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)

Consumer No.	1155127024177	Consumer Name	ADMINISTATOR
SPIN	551200017	Plant Capacity	15 KW
Grid Connected On	01-09-2021		

### Bank Statement for 202301 (Generator)

Units Imported	845 kWh	Units Exported	1304 kWh
Bank Opening	1029	Billed Consumption	0 kWh
Bank Closing	1488		



# Consumption Adjustment Report

Bill Month	Consumer #	Zone Code	Import	Export	Export + Bank	Solar Energy (Bank Energy X Factor)	Adjusted from bank	Billed Cons.	Banked Balance
202301	24177	A	845	1304	2333	2333	845	0	1488

Page 1

FACTOR : 0-Reading Not Accepted/Door Lock 0.9415-Applying Wheeling Charges 1/0.9415-Resetting Wheeling Charges

## KERALA STATE ELECTRICITY BOARD LIMITED

## DEMAND CUM DISCONNECTION NOTICE

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

Section	[5512]-Electrical Section Cherthala				Phone#	0478-2812504		Customer Care	1912																																
Consumer#	1155127020395				Reg. Mob# 996xxxx055		Regular CC Bill	KSEBL GSTIN: 32AAECK2277NBZ1																																	
Name & Mailing Address					For redressing complaints/grievance approach the concerned CGRF																																				
MOTHER SUPERIOR					South: Chairperson,CGRF(South),KSEB Ltd, Vidythi Bhavanam,Kottarakkara-691506, Ph:0474-2060220																																				
ST JOSEPH PHARMACY COLLEGE, CMC 2, NORTH WEST					Central: Chairperson,CGRF(Central),KSEB Ltd, Power House Building Ernakulam-682018, Ph:0484-2394288																																				
OF ERUVELI BRIDGE/ /NRC NO CW 4626, CHERTHAL					North: Chairperson,CGRF(North),KSEB Ltd,Gandhi Road,Kozhikode-32, Ph:0495-2367820																																				
A NORTH					State Electricity Ombudsman, Pallikkavil Building,Mamangalam, Edappally, Kochi-682024 Ph:0484-2346488																																				
Bill#	5512230100167				Bill Area	M02/4	DTR	ST JOSEPH																																	
Billing Period	1/2023[Monthly]				Tariff/Phase	LT-6F/Three	Pole#	STJ/S/																																	
Bill Date	03-01-2023				Due Date	13-01-2023	DC Date	28-01-2023																																	
Contract Demand	(Nil) VA [75% : 0KV, 130% : 0KV]				Connected Load	37860 Watts	Security Deposit	Rs.45900.00																																	
Meter#	SCM020180000819403				Average consumption(Monthly)																																				
Meter Digits	6.1				Power Unit/Zone	CUMULATIVE																																			
Meter Type/Owner	NET Meter/Customer				KWH	744																																			
Last Billed Rdg. Date		Prev. Rdg. Date		Prev. Meter Rdg. Status		Prst. Rdg. Date		Prst. Meter Rdg. Status																																	
03-12-2022		03-12-2022		Working		03-01-2023		Working																																	
Power Unit	Zone		Trading	Initial Reading(IR)		Final Reading(FR)		OMF	Units*																																
KWH	Cumulative		Import	40052.00		40839.00		1	787																																
KWH	Cumulative		Export	8396.00		8603.00		1	207																																
Remarks :					Bill Details																																				
<div>Arrears(Disputed) : Rs.146894/-</div> <div>Last Paid Amount - Rs.12385.00</div> <div>Last Payment Date - 17-01-2023</div> <table><tr><th colspan="8">Solar Generation</th></tr><tr><th>Description</th><th>Date</th><th>Zone</th><th>Tr.</th><th>IR</th><th>FR</th><th>MF</th><th>Units</th></tr><tr><td>Regular</td><td>03-01-2023</td><td>WAL</td><td>I</td><td>33323.00</td><td>34121.00</td><td>1</td><td>798</td></tr><tr><td>Reading Point</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>					Solar Generation								Description	Date	Zone	Tr.	IR	FR	MF	Units	Regular	03-01-2023	WAL	I	33323.00	34121.00	1	798	Reading Point								a)		Fixed Charges	Fixed Charge[FC]	6460.00
					Solar Generation																																				
					Description	Date	Zone	Tr.	IR	FR	MF	Units																													
					Regular	03-01-2023	WAL	I	33323.00	34121.00	1	798																													
					Reading Point																																				
									Sub Total	6460.00																															
					b)		Energy Charges	Energy Charge[EC]	5365.00																																
									Sub Total	5365.00																															
					c)		Other Charges	Electricity Duty[ED]	536.50																																
									ED[Self Generation]	9.58																															
									Sub Total	546.08																															
									Sub Total	0.00																															
					e)		Round Off			-0.08																															
					e)		Total Amt.(Bill#5512230100167)			(a+b+c+e)	12371.00																														
					f)		Surcharge			14.00																															
					g)		Reconnection Fee			0.00																															
					h)		Interim Bills			0.00																															
					i)		Arrears			0.00																															
j)		Less paid/adj.			-12385.00																																				
k)		Less Advance			-0.00																																				
		Net Payable(e+f+g+h+i-j-k)			0.00																																				
Demand for 1/2023 is Rupees Twelve Thousand Three Hundred and Seventy One Only																																									

E&amp;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)

Consumer No.	1155127020395	Consumer Name	MOTHER SUPERIOR
SPIN	551200002	Plant Capacity	10 KW
Grid Connected On	14-11-2018		

### Bank Statement for 202301 (Generator)

Units Imported	787 kWh	Units Exported	207 kWh
Bank Opening	0	Billed Consumption	580 kWh
Bank Closing	0		

# Consumption Adjustment Report

Bill Month	Consumer #	Zone Code	Import	Export	Export + Bank	Solar Energy (Bank Energy X Factor)	Adjusted from bank	Billed Cons.	Banked Balance
202301	20395	A	787	207	207	207	207	580	0

Page 1

FACTOR : 0-Reading Not Accepted/Door Lock 0.9415-Applying Wheeling Charges 1/0.9415-Resetting Wheeling Charges

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