



## Alternate sources of energy and energy conservation measures

### Solar Energy

The state is most encouraging at all levels to use the renewable energy sources.

Electricity manufactured (52 kWp on a bright sunny day) through solar panels is attached to the state electricity grid. Solar water heaters are installed in all hostels for supplying hot water to students. The solar energy takes care of 20 % of the total power supply we need.

### Energy conservation has been a top priority in our college campus and the following measure are taken

- Copper chokes in tube lights were replaced with electronic chokes. Now these tube lights are slowly replaced by LED tube lights
- LED street lights have been installed in our campus to save electrical energy
- Energy efficient fans and lights are installed in new class rooms and replaced with the existing ones in class rooms, in staff rooms, in hostels and in staff quarters
- ELCB (Earth Leakage Circuit Breakers) are being installed in all our Electrical Laboratories. Steps have been taken to install ELCB in each floor of the lecture buildings. Installation of ELCB, helps to cut off the power supply completely when not needed and prevent leakage of current when in use.
- A few Lecture classes are fitted with motion sensors, which will put off all the electrical fittings, fans etc. when nobody is present in the class. In addition to these motion sensors, the respective student class representative will put off the lights and fans when not in use
- A "Go Green Club" is functioning in our campus with two student representatives from each class, faculty and staff representative from each department, representatives from administrative and maintenance department as its members. They meet once in two weeks and conduct programs to create awareness about energy use and savings in the campus. Talks are arranged for students and staff on energy misuse and methods to conserve energy.
- Posters and placards on energy conservation are displayed in class rooms, computer labs and administrative office.
- Minor steps like shutting down computers when not in use, turning off computer monitors or other electric appliances at the end of the class or at the end of the day etc. are practiced.



# VIMAL JYOTHI ENGINEERING COLLEGE

**JYOTHI NAGAR, CHEMPERI - 670632, KANNUR, KERALA**

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NAAC Cycle 2

Criterion: 7.1.2

SN	DESCRIPTION	PAGE No.
1	Solar field	3
2	Connected to Kerala State Electricity Board Grid	4
3	Roof Top Solar Panels	5
4	Solar water heaters	6
5	Biogas plant	7
6	Auto Light-off Sensors fitted in the class room	8
7	LED street lights-1	9
8	LED street lights-2	10
9	LED tube lights and LED bulbs in Quarters	11
10	Bill for purchase of 9W LED bulbs-50 nos.	12
11	Bill for purchase of 20W LED Tube Lights-100 nos.	13





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NAAC Cycle 2

Criterion: 7.1.2



50 kW Solar Field – Various Views





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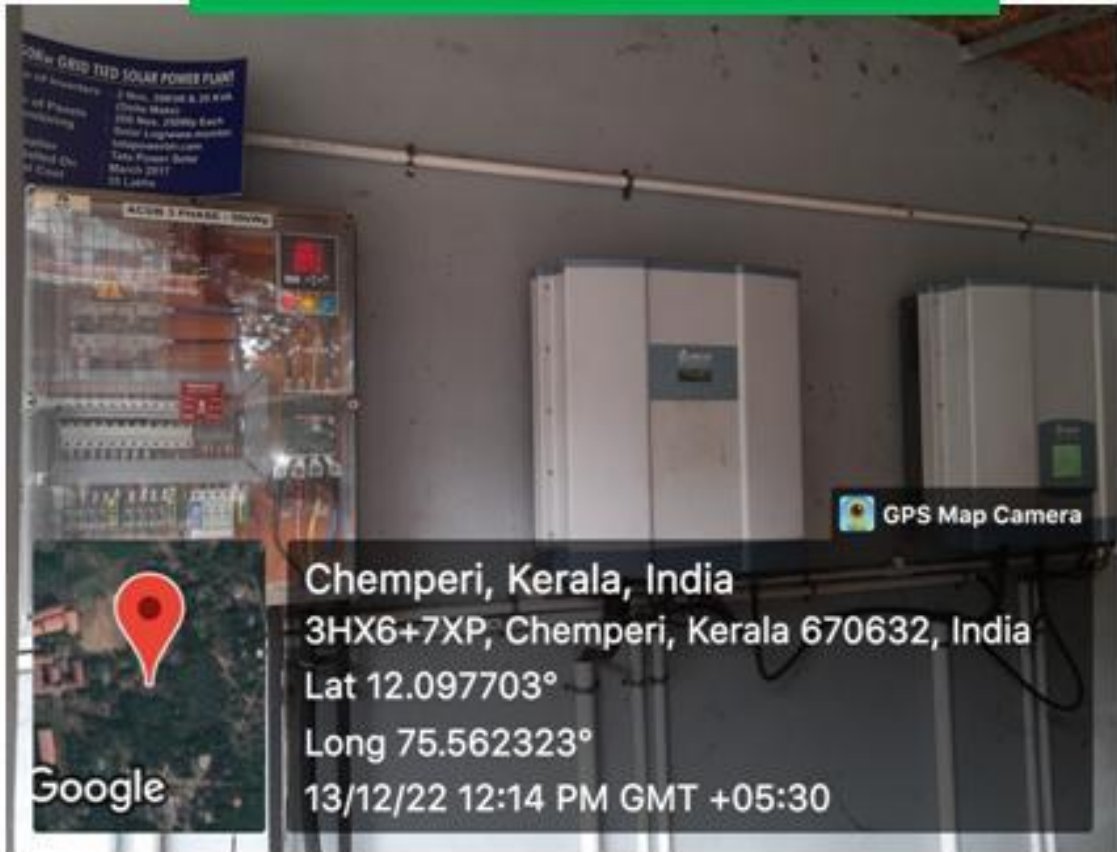
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NAAC Cycle 2

Criterion: 7.1.2



50 kW Solar panel connected to the KSEB Grid



GPS Map Camera

Chemperi, Kerala, India  
3HX6+7XP, Chemperi, Kerala 670632, India  
Lat 12.097703°  
Long 75.562323°  
13/12/22 12:14 PM GMT +05:30





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**JYOTHI NAGAR, CHEMPERI - 670632, KANNUR, KERALA**

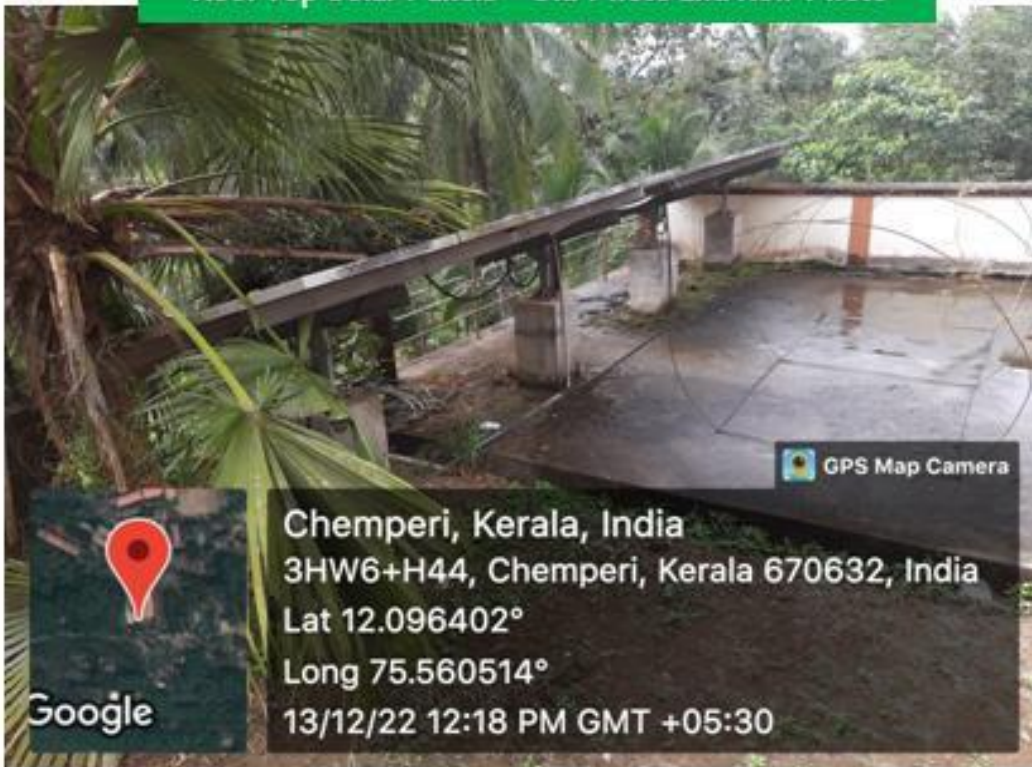
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NAAC Cycle 2

Criterion: 7.1.2



Roof Top Solar Panels – Old Photo and New Photo





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NAAC Cycle 2

Criterion: 7.1.2



Solar Water Heaters in Hostels





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NAAC Cycle 2

Criterion: 7.1.2



Bio Gas feeding end



Bio Gas Stove and units



Bio Gas Cooking



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NAAC Cycle 2

Criterion: 7.1.2

## AUTO LIGHT-OFF SENSOR FITTED IN THE CLASS ROOM







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NAAC Cycle 2

Criterion: 7.1.2

## LED STREET LIGHT DURING DAY TIME





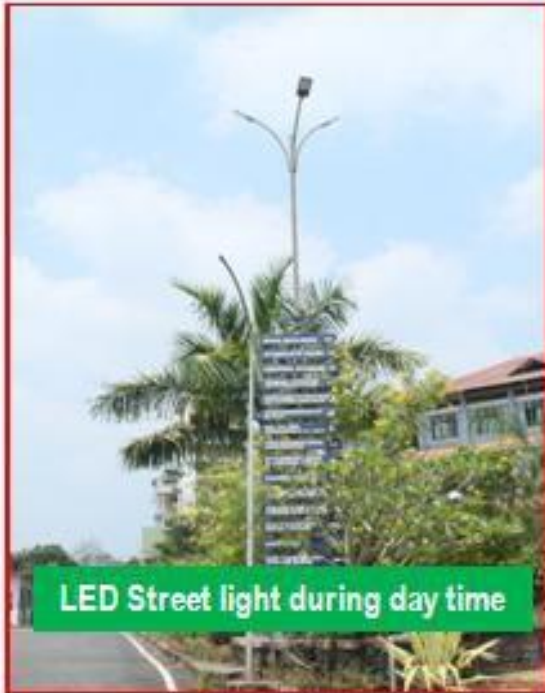
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NAAC Cycle 2

Criterion: 7.1.2



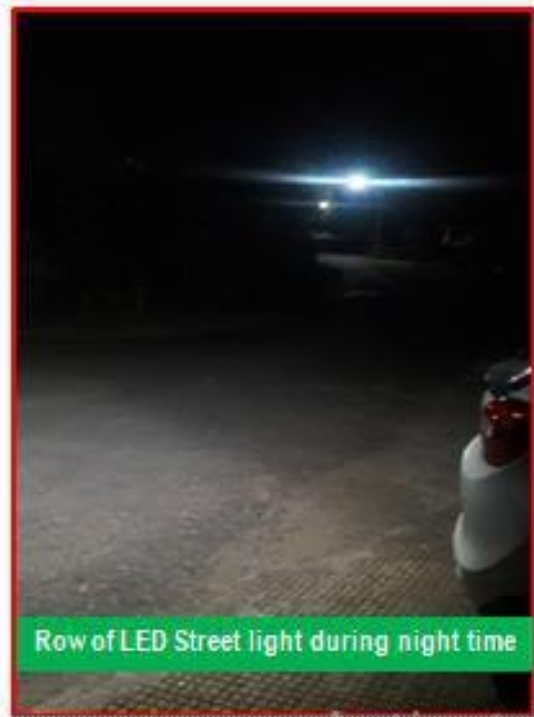
LED Street light during day time



LED Street light during night time



LED Street light during dusk



Row of LED Street light during night time



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NAAC Cycle 2

Criterion: 7.1.2



Chemperi, Kerala, India  
3HX4+8FX, Chemperi, Kerala 670632, India  
Lat 12.098259°  
Long 75.556375°  
13/12/22 07:19 AM GMT +05:30

**LED Tube Light and LED Bulb in Staff Quarters**





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NAAC Cycle 2

Criterion: 7.1.2

## BILL FOR PURCHASE OF 50 LED BULBS

282

**NEW POWER HOUSE**  
 KHAMAM COMPLEX, THIRUVANANTHAPURAM  
 THANA, KANNUR DISTRICT, KERALA PIN CODE: 670632  
 GSTIN No. 32AANR0781JW

Company for Warehouse  
 Duplicate for Transport  
 Duplicate for Supply

CREDIT

**TAX INVOICE**

Invoice No: C 307      State: KERALA      Date: 18/07/2022  
 Date: 18/07/2022      State Code: 32      Time: 11:10 AM  
 Bill to: VIMAL JYOTHI ENGINEERING COLLEGE  
 C TO 301(2)

Sl	Particulars	HSN Code	Qty	Rate	Amount	Taxable Amt	Taxable Amt	Taxable Amt	CGST		SGST		Total
									%	Amount	%	Amount	
1	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
2	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
3	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
4	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
5	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
6	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
7	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
8	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
9	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
10	50 LED BULB (5W/4000K)	8539	50	20.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	2000.00
<b>Total</b>													25000.00

PO No: 46/22-23  
 Store of electrical Engineering  
 Vimal Jyothi Engineering College  
 Chemperry  
 18/07/22

Dep Bulbs

Received in Stock  
 Date: 19/07/22  
 Store Keeper

Received in Stock  
 Date: 19/07/22  
 Store Keeper

Freight Charges: 0.00  
 Packing/Loading Charges: 0.00  
 Bonded Oil: 0.00  
 Net Amount: 25,000.00

For NEW POWER HOUSE  
 Authorized Signatory





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NAAC Cycle 2

Criterion: 7.1.2

## BILL FOR PURCHASE OF 100 LED TUBE LIGHTS

532

**NEW POWER HOUSE**  
KHARAM COMPLEX, DHANALAXMI HOSPITAL ROAD  
THANA, KANNUR-670 002, KERALA Ph:8921357462, 9746132172  
GSTIN No: 32AASFN0376LIZW

Original for Receipt  
 Duplicate for Transport  
 Triplicate for Supplier

**TAX INVOICE**

Invoice No. C 1818	State KERALA	Transportation Mode	Time 04:36 PM	<b>CREDIT</b>
Date 01/12/2022	State Code 32	Vehicle No.		
Billed To: <b>VIMALJYOTHI ENGINEERING COLLEGE</b> (CHEMPERI)				
State: <b>KERALA</b> State Code: <b>32</b>				

Particulars	HSN Code	Qty.	Rate	Amount	Less Disc.	Taxable	CGST %	CGST		SGST		Total
								%	Amount	%	Amount	
100 LED TUBE LIGHT	8403	100.000	220.34	22033.90		22033.90	0.00	1983.05	0.00	1983.05	26000.00	
<b>Total</b>				22033.90		22033.90		1983.05		1983.05	26000.00	

4265

Freight Charges	
Packing/Loading Charges	0.00
Round Off	-0.04
<b>Net Amount</b>	<b>26,000.00</b>

Terms and Conditions: Certified that the particulars given above are true & correct

Supplier's Signature: \_\_\_\_\_  
Authorized Signatory: \_\_\_\_\_

26,000/-

P.O No-97/22-23  
Items 2 to 5 ok.  
Justin G. Pullumman  
02/12/22

