SUNSHUBH TECHNOVATIONS PVT LTD

#402, Hill view apartment, Adarshnagar 2nd Cr, HUBLI-580 029. Karnataka, INDIA Germany off: NeuerWeg 166, 47803 Krefeld, Dusseldorf.

WATER	ENERGY	POLLUTION	ORGANIC
Harvesting	Efficiency	Minimize	Farming
Conservation	Conservation	Eliminate	Worm compost
Management	Generation	Manage	Benefits



Regd: Certified Energy Auditors. GOI (EA 3485), Germany: Anbieter-Nr 1041388
www.sunshubhrenewables.com, Email: ceo@sunshubhrenewables.com, Ph: 94492 83505, 94490 33505
CIN: U74999KA2020PTC136321, PAN:ABECS0250Q, TAN:BLRS77362F GST No: 29ABECS0250Q1ZX

SPECIFIC ENERGY COMPUTATION CERTIFICATE

I, Mallikarjun A Kambalyal, certify that, the Energy Use data of KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH, Belagavi has been verified and the specific energy has been confirmed.

The inference is drawn based on the information and energy bills made available for evaluation for the operating period upto June 2024.

Computation of Energy consumption per Unit floor area.

	Academic Year 2023	Academic Year 2024
Total Energy consumed from all Sources	16,44,464	143,62,000
Floor area as of June	1,99,322	2,15,580
Energy in KWh/Sq Mtrs	74.02	72.45
Reduction in Specific Er over the previous year	nergy demand per SqMtr	1.57 KWh/M ²

Reduction in Specific Energy consumption: 1.57 KWh/SqMt.

This Certificate is issued based on the documents made available by the institute.

Authorised Auditor.

Mallikarjun A. Kambalyal B.E (E&C)

Certified Energy Auditors EA-3485.

1SO 50001:2011 & ISO14001 12001 | Karistal Autor | Certified Energy Auditor EA 3485 | ISO 50001:2011, ISO 14001:2015

LEAD AUDITOR

Date: 9.11.2024

NOVA

Hubli. India

SOLAR WATER HEATING PANELS

SL NO	PLACE	SOLAR WATER PANELS	ENERGY SAVED IN
			KWH
1	CHANAKYA HOSTEL	94	9400
2	CHARAKA HOSTEL	40	6000
3	SANGAM HOSTEL	40	6000
4	NRI HOSTEL	42	6300
5	RC HOSTEL	84	12600
6	GANGAMBIKA HOSTEL	32	4800
8	CAN HOPSTEL	32	4800
9	KARNATAKA HOSTEL	24	3600
10	NILAMBIKA HOSTEL	64	9600
11	AKKAMAHADEVI HOSTEL	64	9600
12	NURSING HOSTEL	72	10800
14	CHARITABLE HOSPITAL	179	26850
15	STAFF QUATERS	210	31500
	TOTAL	977	141850



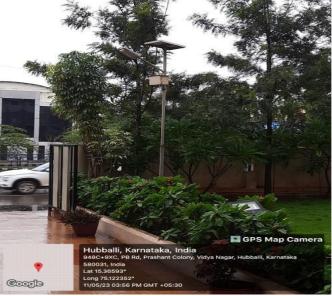
(Formerly known as KLE University)
(Deemed-to-be-University established u/s 3 & 12B of the UGC Act, 1956)
Accredited A+ Grade by NAAC (3rd Cycle) Placed in Category 'A' by MoE (Gol)

SOLAR ENGERY IN THE CAMPUS











1.

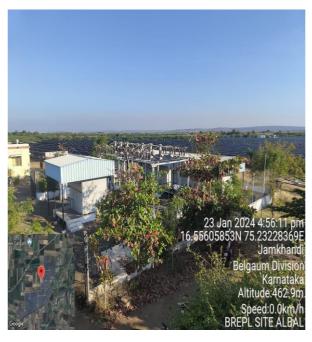
KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH

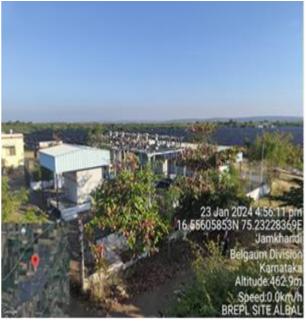
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BIOGAS PLANT



WHEELING TO THE GRID







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SENSOR-BASED ENERGY CONSERVATION











JNMC Solar Power Plant - Annual Energy Production Report

Location: Belgaum, India

Period Covered: September 2023 to August 2024

System Capacity: 640 kWp

Overview

This report provides a snapshot of the energy generated by the JNMC Solar Power Plant over one year 2023-24.

Key Highlights

Total Recorded Generation: 802252 kWh

• Expected Generation: 1,216,482 kWh (from PVsyst model)

System Performance Ratio (PR): 75.54%

The Performance Ratio (PR) reflects the system's efficiency in real-world conditions.
 The PR of 75.54% indicates that the plant's actual performance captures about three-quarters of its potential efficiency, influenced by factors like seasonal weather, system maintenance, and environmental conditions.

Monthly Generation - Actual vs Expected (kWh)

Month	Actual Generation
July 2023	43299 kWh
August	62998 kWh
September 2023	56,208 kWh
October 2023	72,498 kWh
November 2023	60,863 kWh
December 2023	62,587 kWh



Total	802252 kWh
July 2024	36,870 kWh
June 2024	50,558 kWh
May 2024	75,833 kWh
April 2024	73,668 kWh
March 2024	76,410 kWh
February 2024	64,346 kWh
January 2024	66,114 kWh

Sunlight and Performance

• Average Effective Sunlight: 5.9 hours/day

The effective sunlight hours refer to the average daily hours with optimal sunlight levels, based on local weather and irradiation data for Belgaum.

Observations and Insights

1. Production Levels:

The actual generation over the year was lower than expected by about 38%. This may be due to weather variability, shading, maintenance downtimes, or unexpected system losses.

2. Monthly Performance:

- o Highest Generation Month: May 2024 (75,833 kWh recorded).
- Lowest Generation Month: July 2024 (36,870 kWh recorded), likely impacted by monsoon cloud cover.

3. System Efficiency:

The Performance Ratio (PR) of 75.54% reflects typical system losses. Seasonal maintenance, fine-tuning of the PV modules, and consistent monitoring can help improve PR over time.

Summary

This report highlights the real-world performance of the JNMC Solar Power Plant. The recorded generation data offers insights into the seasonal trends in energy production and helps identify months where efficiency can be optimized.

Date: 08-11-2024 Place: Hyderabad

Report Prepared by:

Mustfeez Desai (Site Engineer)

Signed By:

Rahul Kodali (Head of Operations)









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[Declared as Deemed-to-be-University ws 3 of the UGC Act, 1956 vide Government of India Notification No F.9-19/2006-U.3(A)] Placed in Category 'A' by MHRD (GoI)

Office of the Registrar, KLB University.

JNMC Campus, Nehru Nagar, Belagavi-590 010, Karnataka State, India

3. 0831-2444444 FAX: 0831-2493777 Web: http://www.kleuniversity.edu.in E-mail: info@kleuniversity.edu.in

Ref No: 209

Dated: 27-5-2024

To.

Shrinidhi Enterprises, D.No-2-1-7/7, Shop No.2, Manasa Residency, Chilimbi, Urwa, Mangalore-575006 Ph-0824-2459152

Sub:- Supply of Blue Star Make Water Cooled Screw Model:LCW1-290V1047-49 to KLE New Cancer Hospital, Belagavi.

Ref:- 1. Your quotation No. Nil dated:10.01.2023

With reference to the above, we are pleased to release purchase order for Sir, Supply of Blue star make Water Cooled VFD Screw Chiller to KLE New Cancer Hospital, Belagavi , already approved rate of 5445000/ 2990 =18775.86 per TR for KLES New Cancer Hospital Belagavi.

		Otre	Rate / TR	Amount
No 1	Description Supply of Blue star make AHRI Certified 290TR Capacity Water Cooled VFD Screw Chiller package unit, Model:LCW1- 290V1047-49 to KLE NEW CANCER HOSPITAL,BELAGAVI	Qty 1 no	Rs.18775.86/-	5445000/-

Terms and conditions:-

- The total quoted price is F.O.R Hospital site inclusive of all taxes, duties, transit insurance, unloading, installation, testing and commissioning.
- Warranty: Warranty period will be three years from the date of commissioning, which includes guarantee against manufacturing defects 2 and comprehensive maintenance including labour and wpare parts.
- Up time Guarantee: You will guarantee the performance of the system for 95% of the operational time, which will be calculated on the basis of Hospital machine operation of the system every day for entire 365 days in 3 the year. Any breakdown shall be attended within 4 hous of intimation.

cademy of Higher Education Descarch, Bot AGANI

OFFICE OF THE REGISTRAR KLE Academy of Higher Education & Rocearch, BELAGAM

(Formerly known as KLE University)
[Declared as Deemed-to-be-University ws 3 of the UGC Act, 1936 vide Government of India Notification
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8: 0831-2444444 FAX: 0831-2493777 Web: http://www.kleuniversity.edu.in E-mail: info@kleuniversity.edu.in

- Delivery period:- Chiller shall be supplied within 10-12 weeks from the date of receipt of order with advance payment or else penalty in between 0.5% to 2% of order value per wor will be levied.
- Payment 50% advance with order, 40% against proforma invoice before 5 dispatch and balance 10% against performance Bank Guarantee for a period of one year.
- All legal transactions are subject to Belagavi jurisdiction only. 6

Kindly acknowledge the receipt and expendite the supply.

Thanking you,

Yours faithfully,

EXECUTIVE ENGINEER, KAHER

(K.L.E.University) Belagavi

Yours faithfully

REGISTRAR, KAHER

(K.L.E.University) Belagavi

Copy fwcs to Finance Officer, KAHER Belagavi with request an advance paymen Rs.2722500.00 to the firm under information to this office

Net amount SGST CGST BILL AMOUNT 2722500/-245025/-245025 /-2232450 /-

Signorise plan