



CERTIFICATE FOR ENERGY AUDIT

Certificate Number: PSQC 205

This is to certify that, we have conducted an **ENERGY AUDIT** in NARAYANA COLLEGE OF NURSING, Chinthareddypalem, Nellore – 524003, A.P during 22/03/2023 – 23/03/2023. The Audit team has identified 07 Energy Conservation Proposals (ENCONs) and summary of the energy audit is given below.

Description/Year	2022-2023		
Annual Electricity Consumption (kWh)	2618465 kWh		
Annual LPG consumption (kg)	22945 kg		
Summary of Energy Conservation (ENCON) Proposals			
Description	Parameters		
	Present	After	Savings
Annual Energy Consumption	2618465 kWh + 22945 Kg of LPG	2487542 kWh + 21798 Kg of LPG	130923 kWh + 1147 kg of LPG
Annual Energy Cost	2.61 Cr	2.48 Cr	13.09 lakhs
Simple Payback Period	-	-	1.8 years

Equipment's/Systems Audited

Electrical System	Thermal System
All major electrical equipment's	Inverter, UPS and battery system
Electrical Distribution system	Diesel, generators, pumps and motors
Lightings, Fans and Air conditioning system	LPG for cooking application
Rooftop solar PV system	Boiler and Steam distribution System

The detailed Energy Conservation Proposals are presented in the Audit Report.

Authorized Auditor

G. ARIVARASAN

BEE Certified Energy Auditor (EA-21875)

Lead Auditor – ISO 14001, EMS

P S QUALITY CERTIFICATION PVT. LTD.

(Consultancy – Accreditation & Certification) Auditing & Training

E-mail: info@psqualitycertifications.com

Web Site: www.psqualitycertifications.com

CIN: U74999TN2020PTC138625



NARAYANA COLLEGE OF NURSING

Chinthareddypalem, Nellore - 524003. A.P.

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website: <https://www.narayanannursingcollege.com>



INITIATIVES TAKEN TO MAKE CAMPUS ECO-FRIENDLY

Energy Conservation

Initiatives are taken by conducting internal energy audits conducted by the maintenance department to optimize power consumption in the campus.

Some of the eco-friendly initiatives are

1. Burnt 40W Tube light fittings replaced with 20W LED Tube lights
2. Burnt 2x18 w CFL Lamps replaced with 15 w LED lights
3. Burnt low efficient fans(80w) replaced with Energy efficient fans(50w)
4. Metal halide & tube light street lights replaced with energy efficient LED Lights
5. Energy efficient LED lights are installed in new buildings
6. Power factor improved from 0.98 to 0.99 by adding capacitor banks at Feeders receiving ends
7. Low efficient split AC systems replaced with high efficient inverter AC systems
8. Energy saver invertors installed for lifts
9. Usage of 5 MW solar power for entire campus through 3RD party open access system for usage of renewable energy around 69% total consumption
10. 121.6 kwp solar power plant installed on roof tops of all buildings in the campus to optimise use of renewable energy

➤ Nursing campus total Avg energy consumption 4,78,000 KWH/YEAR

➤ Total co2 emission per year 4.30 Lakhs KGS or 430 Tons OF CO2 EMISSION

Use of Renewable energy

- 89.6 kwp roof top solar power plant installed on the roofs
- Usage of solar power through 3rd party open access system for usage of renewable energy (Purchasing from 3rd party solar plant)

Dr. B. Bhanu
Principal

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SOLAR ENERGY

ROOF TOP (28%)	1, 34,400 KWH/YEAR
3 RD PARTY SOLAR (66%)	3, 18,000 KWH/YEAR
TOTAL SOLAR POWER (94%)	4, 52,000 KWH/YEAR

- ❖ CO2 EMISSION PREVENTED PER YEAR DUE TO SOLAR POWER IS 4,52,000 UNITS X 0.9 KGS OF CO2 = 4.07 Lakhs KGS or 407 TONS OF CO2
- ❖ Balance CO2 emission after solar power is 0.23 Lakhs KGS or 23 TONS/YEAR (477000KGS-450000KGS)
- ❖ One big tree inhales around 20.3 Kgs of CO2 in a year
- ❖ Generator power generation per year is around 212 units (0.04%) of total consumption
- ❖ Diesel used per year around 70 lts

Dr. B. B. B. B.
Principal

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- ✓ To maintain the college campus eco friendly
- ✓ The sign boards for saving electricity to be placed in the college campus
- ✓ The Eco club organizes an awareness program for the students, faculty and staff regarding the conservation of energy and promotion of the environment.

Frequency: 5 years

Related documents: UGC/UNIVERSITY/INC

Custodian: Principal

PREPARED BY	VERIFIED BY	APPROVED BY
Mrs. T. LALITHA KUMARI	Dr. A. LATHA	Dr. B. VANAJA KUMARI

Dr. B. Anny
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A. S. Anny
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Dr. B. G. Srinivas
Principal

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Dr. B. Anurag
Principal

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GREEN IVY VENTURES PVT. LTD.,
SURVEY NO 504,
CHEMUDUGUNTA VILLAGE,
VENKATACHALAM MANDAL,
524320.

PIN NO	AACCN4041R	GST NO	37AACCN4041R1ZG
Billing Address		Tax Invoice	GRN NO : 834
NARAYANA NURSING COLLEGE NLR MCN-389 C/o Narayana Medical College Hospital Chinthareddy Palem-Nellore Andhra Pradesh-524003			Invoice No : 202405100013
			Invoice Dt : 10-May-2024

Sino	ITEMNAME	HSNCODE	BATCHNO	Qty	UNITPRICE	CGST(%)	SGST(%)	PRT	NETPRICE
1	CAPACITOR 2.5 MFD	85321000	C240400084	40.00	27.46	98.85 (9.00%)	98.85 (9.00%)	32.40	1,296.06
2	16 A SOCKET (MYLIC)	85361020	C240400082	10.00	127.02	114.32 (9.00%)	114.32 (9.00%)	149.89	1,498.86
3	6 & 3 PIN SOCKET (2MODEL) MYLIC	85361020	C240500011	25.00	82.08	184.68 (9.00%)	184.68 (9.00%)	96.85	2,421.36
4	FAN CUPS	3926	C240500017	50.00	29.16	131.22 (9.00%)	131.22 (9.00%)	34.41	1,720.44
5	15 W LED BATTEN (MAKE : CARVI)	94051010	C240400039	40.00	275.41	991.47 (9.00%)	991.47 (9.00%)	324.98	12,999.24

Bank Details YES BANK A/c Name: GREEN IVY VENTURES PVT. LTD. Address: Near V R College Nellore AP. A/c No: 063163700001000 IFSC Code: YESB0000631	Total Amount	16,060.11
	Disc. Amount	0.00
	Net Amount	16,060.11
	CGST	1937.93
	SGST	1937.93
	Misc. Amount	0.00
	Invoice Total	19,935.96
	Rupees Nineteen Thousand Nine Hundred Thirty-Five and Paise Ninety-Six	

Received
K. G. G. G. G.

Dr. B. B. B. B.
11.5.24

P. P. P. P.
10/5/24

GIVPL-CIVIL-WHS-1975

Stores Incharge

Authorized Signatory

NOTE: * This is computer generated invoice and does not require a signature and stamp*

Dr. B. B. B. B.
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