KAMLA P.G. COLLEGE
&
KAMLA SHIKSHAK PRASHIKSHAN MAHAVIDHYALAYA

DHOLPUR, RAJASTHAN

ENERGY AUDIT REPORT

2023-2024

Prepared by

EHS ALLIANCE

TABLE OF CONTENT

TABLE OF CONTENT 1

CERTIFICATE 2

ACKNOWLEDGEMENT 3

DISCLAIMER 4

ABBREVIATION 5

OVERVIEW OF THE COLLEGE 6

AUDIT PARTICIPANTS 10

EXECUTIVE SUMMARY 10

ENERGY AUDIT - ANALYSIS 11

1. ENERGY CONSUMPTION 11

1.1 Summary of Monthly Electricity Consumption and Total Bill Amount 11

2. DIESEL CONSUMPTION 13

3. ANALYSIS OF DG SETS 13

4. AC SYSTEM 15

5. FANS ANALYSIS 16

6. ANALYSIS OF LIGHTING SYSTEM 18

6.1 Brief description of existing system 18

6.2 Inventory of Lighting 18

6.3 Lux Measurement 19

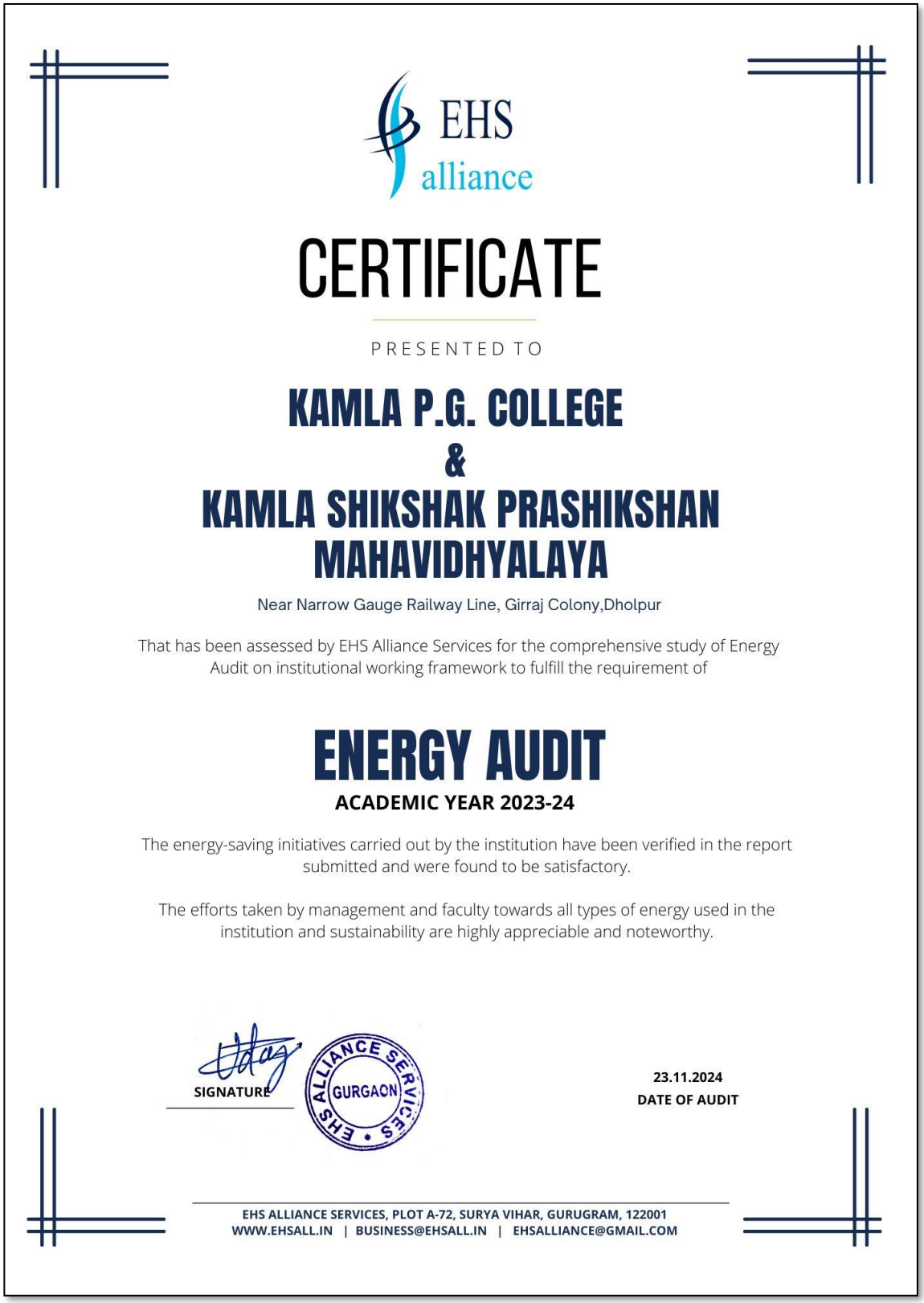
7. OTHER POWER CONSUMPTION 21

7.1 Inventory of IT Infrastructure 21

7.2 Water pump details 21

7.3 Other Loads 21

CERTIFICATE



EHS alliance

CERTIFICATE

PRESENTED TO

KAMLA P.G. COLLEGE
&
KAMLA SHIKSHAK PRASHIKSHAN MAHAVIDHYALAYA

Near Narrow Gauge Railway Line, Girraj Colony,Dholpur

That has been assessed by EHS Alliance Services for the comprehensive study of Energy Audit on institutional working framework to fulfill the requirement of

ENERGY AUDIT

ACADEMIC YEAR 2023-24

The energy-saving initiatives carried out by the institution have been verified in the report submitted and were found to be satisfactory.

The efforts taken by management and faculty towards all types of energy used in the institution and sustainability are highly appreciable and noteworthy.

SIGNATURE

EHS ALLIANCE SERVICES GURGAON

23.11.2024
DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
WWW.EHSALL.IN | BUSINESS@EHSALL.IN | EHSALLIANCE@GMAIL.COM

ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya for assigning this important work of Energy Audit. We appreciate the co-operation to the teams for completion of assessment.

First of all, we would like to thank ***Prof. R. R. L. Sharma – Chairman and Mr. Mandeep Sharma – Director Kamla Shikshak Prashikshan Mahavidhyalaya*** for giving us an opportunity to evaluate the environmental performance of the campus.

We would also like to thank ***Dr. P. S. Tiwari – Principal (PG College) and Dr. Yugal Bihari Parashar- Principal (B.Ed. College)***, for their continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Dr. Neeru Sharma *Asst. prof.*

Dr. O.P. Upadhyay *Asst. prof.*

Dr. L. P. Sharma *Assistant Professor*

Dr. Manju Tiwari *Assistant Professor*

DISCLAIMER

EHS Alliance Services Energy Audit Team has prepared this Energy Audit Report for Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya based on input data submitted by the representatives of college complemented with the best judgment capacity of the expert team.

While all reasonable care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

If you wish to distribute copies of this report external to your organization, then all pages must be included.

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Vijay Singh
Lead Auditor EMS & Energy

Dr. Uday Pratap
Co-Auditor EMS & Energy

ABBREVIATION

A	**Amps**
AC	**Air Conditioner**
AC	**Alternating Current**
AMET	**Academy of Maritime Education and Training**
CFL	**Compact fluorescent lamp**
CIP	**Comprehensive Inspection Programme**
DC	**Direct Current**
HSD	**High Speed Diesel**
Hz	**Hertz**
kg	**Kilogram**
kVA	**kilo-volt-ampere**
kW	**kilo Watts**
kWh	**kilowatt hour**
kWp	**Kilowatt peak**
LED	**Light Emitting Diode**
LPG	**Liquefied Petroleum Gas**
MMS	**Module mounting structure**
MPPT	**Maximum Power Point Tracker**
NAAC	**The National Assessment and Accreditation Council**
SEC	**Specific Energy Consumption**
SPV	**Solar Photovoltaic**
STC	**Standard Test Condition**
TV	**Television**
V	**Volts**
W	**Watts**
W/m2	**watt per square metre**

OVERVIEW OF THE COLLEGE

Kamla P.G. College, Dholpur, is permanently affiliated to Maharaja Surajmal Brij University, Bharatpur. College is situated at the heart of the city. Kamla P.G College founded in 2003 under the aegis of the Raman Society, and is a co-educational institute which provides equal opportunities of learning to both the boys and the girls. College is providing valued-based quality education in Science and Arts at both the Graduation and the Post-Graduation levels.

College has specific features, such as, well-experienced and qualified staff, innovative approach, discipline, healthy teaching-learning environment, spacious lush green campus, smart-room teaching through modern teaching aids, excellent infrastructure, central library, spacious laboratories, it has been attracting the students willing to build up their career in Science and Arts and to get a real higher education through hard work to join the courses here, and thus to prepare themselves to grab higher and higher horizons of achievements and success.

The college is dedicated to the pursuit of knowledge, striving for holistic excellence, emancipating and empowering the traditionally neglected girl-child through quality education and the ability to face peer pressure in a constantly evolving modern world.

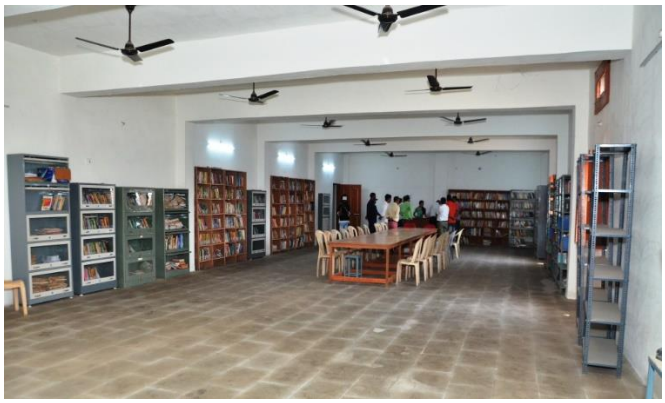
As a unique experiment, probably the first of its kind in the country to provide higher education to students, a well-formed institution, named "Kamla Shikshak Prashikshan Mahavidhyalaya, Dholpur, Rajasthan" was established by the Raman Society, Dholpur. The college provide full-fledged facilities for recreation, games, sports, music, etc. The students are coached to pursue studies leading to some programs. The Institute is inspired by a vision of a person drawn from life, and its prime purpose is the higher education and training of students. It extends its services to members of other communities to the extent possible. It also seeks to develop in its students the ability to think logically, critically, and creatively, and to communicate effectively. By striving after character formation based on the love of God and the service of people the college endeavors to contribute to the training of citizens who live by the principles of social justice, equality of opportunity, genuine freedom, and respect for religious and moral values enshrined in the constitution so that all people may live with human dignity and self-respect.

FACILITIES AT THE CAMPUS

LIBRARY

The Library is the heart of any Institution. Books, Readers and Staff are the basic trinity of the Library and the best interaction among these three basic constituents brings the desired effects in an institution.

The Library of KAMLA P.G. COLLEGE is an excellent well-stocked computerized one with all the required reading materials. The Library is enriched with books of academic interest, Journals, periodicals and various electronic information sources. The Library also provides Current Awareness Service (CAS) and Reprographic facility to the students. All students have access to college library, which offers facility and service on a wide range of materials to support academic pursuit of Students.



COMPUTER LAB

KAMLA P.G. COLLEGE has four spacious, air conditioned and centrally controlled and monitored Computer Laboratories. 200 well equipped and operational systems with current edition of antivirus, licensed software and latest configuration of hardware are made available to the students for their convenience in adapting to modern technology.

Aims and Objectives

To nurture, harness and explore the potential of the students with the principles of including educational, social, cultural and spiritual awakening has yielded better employability amongst the students.

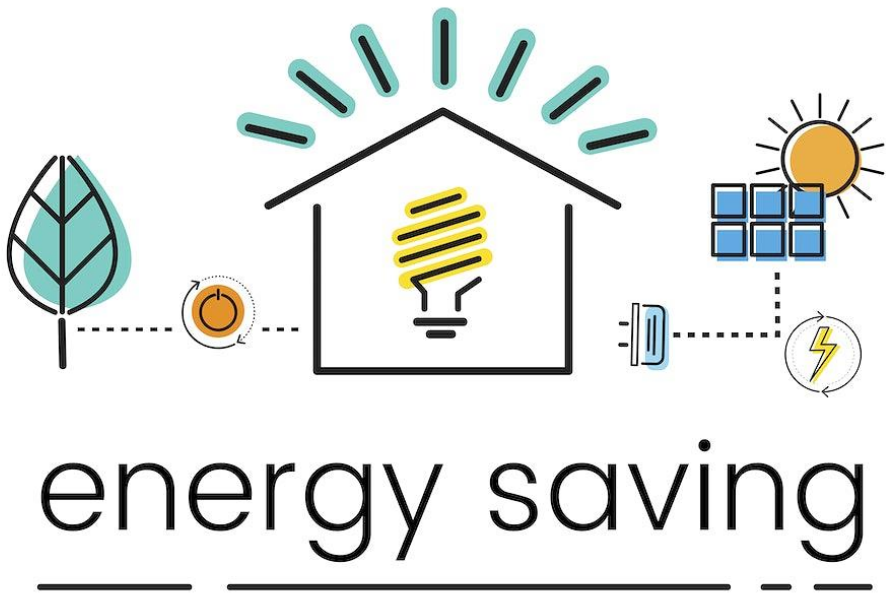
To provide specific need based education and training opportunities for continuous professional development and all round education to each student through enjoyable and innovative curriculum by giving individual guidance to each student "Who is going to mould our future citizens of India

Mission

- ✓ The vision of the college is the holistic development of the students by imparting traditional and modern education along with making them competent as digital learners for the upliftment of the future generations studying in the Schools of rural India.
- ✓ To focus on women's education for the real upliftment of future generations.
- ✓ To produce quality teachers competent in all aspects for imparting quality education in educational institutes.
- ✓ To promote skill development in youth, especially in rural backward areas.

Vision

- ✓ Committed to ensue the physical, mental and moral growth of the students for holistic development.
- ✓ To impart the fusion of traditional, modern and digital education to make them fine human being of digital India



AUDIT PARTICIPANTS

On behalf of college

P.G. College		B.Ed College	
Dr. P. S. Tiwari	*Principal*	*Dr. Yugal Bihari Parashar*	*Principal*
Dr. Neeru Sharma	*Asst. prof.*	*Dr. L. P. Sharma*	*Assistant Professor*
Dr. O.P. Upadhyay	*Asst. prof.*	*Dr. Manju Tiwari*	*Assistant Professor*
Dr. Archana Shama	*Asst. prof.*	*Dr. Nitu Sharma*	*Assistant Professor*
Dr. Abhayvir Singh	*Asst. prof.*	*Dr. Veenu Chaturvedi*	*Assistant Professor*
Dr. K. K. Upadhyay	*Asst. prof.*	*Mr. Pawan Kumar Tyagi*	*Assistant Professor*
Dr. Gauri Dixit	*Asst. prof.*	*Mr. Gajendra Giri*	*Assistant Professor*
Shri Krishan Murari	*Asst. prof.*	*Mr. Vishnu Shrotiya*	*Office Assistant*
Shri Neeraj Babu	*Asst. prof.*		
Shri Pushpendra Kumar	*Asst. prof.*		

On behalf of EHS Alliance Services

Name	Position	Qualifications
Mr. Vijay Singh	Lead Auditor	*M.Sc. M. Tech (Environment Science & Engineering), Energy Auditor, Post Diploma in Industrial Safety Management*
Dr. Uday Pratap	Co-Auditor	*Ph.D., EMS: Lead Auditor ISO14001:2015, QCI–WASH*

EXECUTIVE SUMMARY

The purpose of this Energy Audit was to seek opportunities to improve the energy efficiency of the Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya. Reducing the energy consumption despite improving the human comfort, health and safety were of primary concern.

Beyond just identifying the energy consumption pattern, this audit sought to detect and categorize the most energy efficient appliances. Additionally, some daily practices relating common appliances have been shared which may help reducing the energy consumption. Data collection for energy audit of the campus was carried out by the EHS Alliance Team. The Energy Audit Report accounts for the energy consumption patterns of the institution on actual survey and detailed analysis during the audit.

The work comprehends the area wise consumption traced using suitable equipment. The analysis was carried out by our team with the support of the staff members from Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya. The report provides a list of possible actions to preserve and efficiently access the available source, resources and their saving potential was also identified. We look forward towards optimization that the authorities, students and staff members would follow the recommendations in the best possible way. The report is based on certain generalizations including the approximations wherever necessary. The views conveyed may not reveal the general opinion. They merely represent the opinion of the team guided by the interviews of clients. We are happy to submit this Energy audit report to the Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya.

ENERGY AUDIT - ANALYSIS

1. ENERGY CONSUMPTION

To understand the Energy Consumption trends and for analyzing the average monthly consumption we have collected electricity energy bills from March 2022 to February 2023

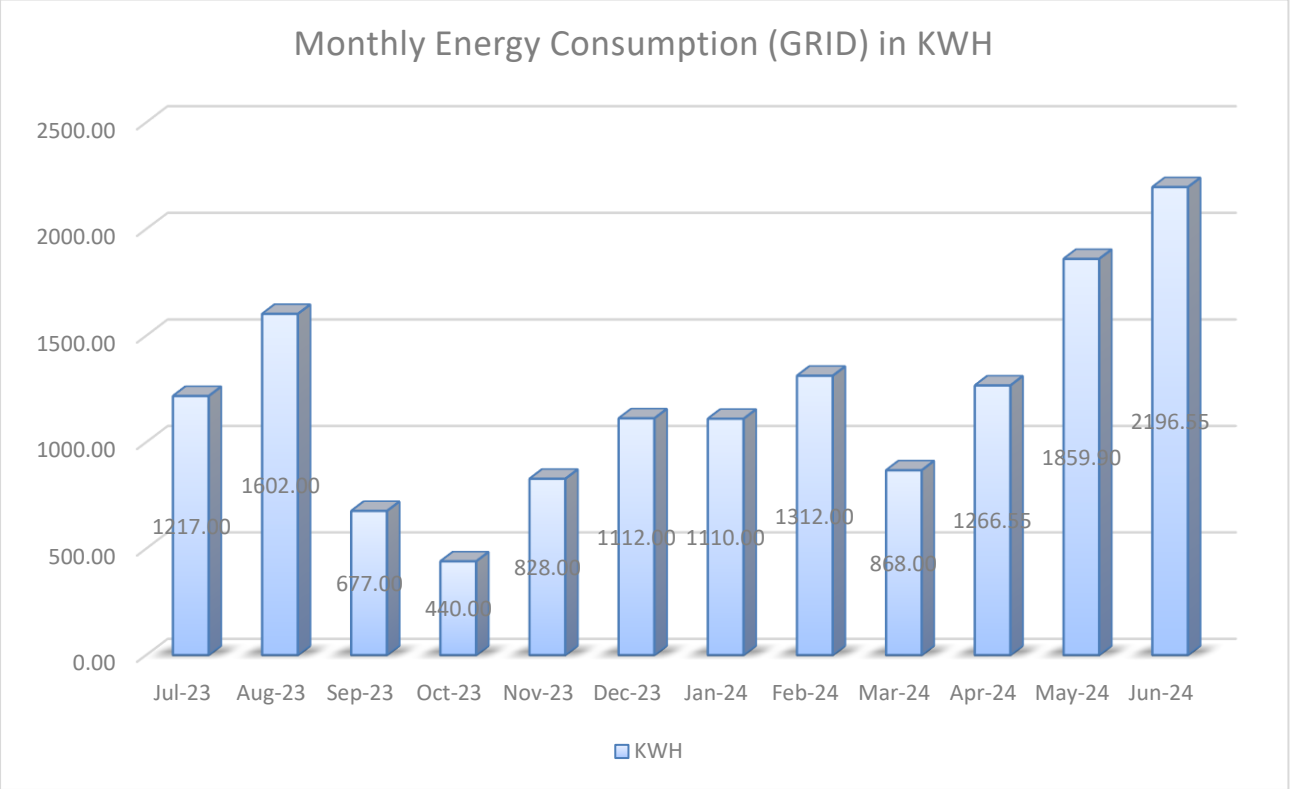
The details of **"Meter Connection"** at **"Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya"** are as follows-

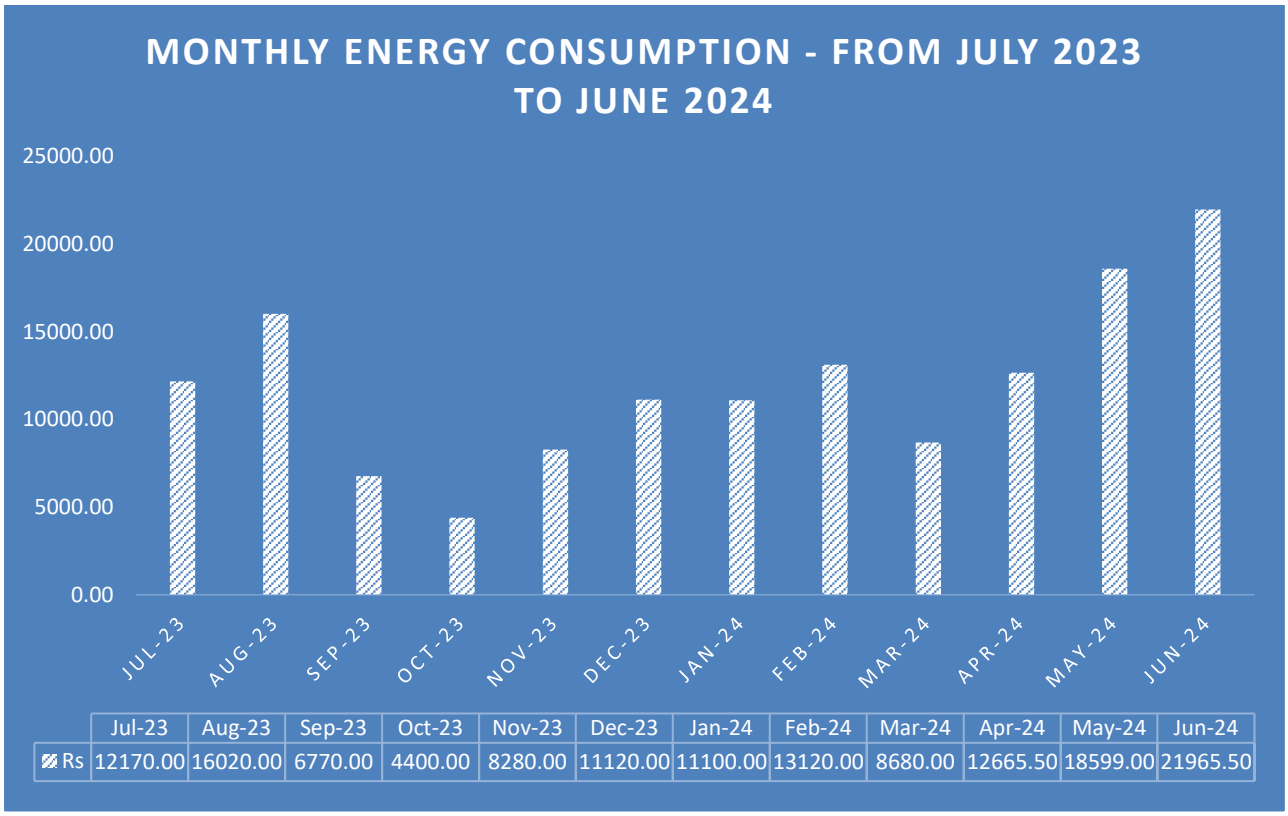
Name	-	Ram Raj Lal Sharma
CA No.	-	22060819

1.1 Summary of Monthly Electricity Consumption and Total Bill Amount

To understand the Energy consumption trend and for developing the baseline parameter we have collected monthly energy bill for the 12 months i.e. from July 2023 to June 2024

Month	Grid Units	Amount	Solar Units	Total Units	Amount
Jul-23	1217.00	10.00	-	1217	12170
Aug-23	1602.00	10.00	-	1602	16020
Sep-23	677.00	10.00	-	677	6770
Oct-23	440.00	10.00	-	440	4400
Nov-23	828.00	10.00	-	828	8280
Dec-23	1112.00	10.00	-	1112	11120
Jan-24	1110.00	10.00	-	1110	11100
Feb-24	1312.00	10.00	-	1312	13120
Mar-24	868.00	10.00	-	868	8680
Apr-24	1266.55	10.00	-	1267	12666
May-24	1859.90	10.00	-	1860	18599
Jun-24	2196.55	10.00	-	2197	21966
SUM	**14489**		**0**	**14489**	**144890**





	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
Rs	12170.00	16020.00	6770.00	4400.00	8280.00	11120.00	11100.00	13120.00	8680.00	12665.50	18599.00	21965.50

2. DIESEL CONSUMPTION

Below is the diesel consumption details in litres from July 2023 to June 2024.

Period	Diesel consumption (in litres)
Jul-23	100
Aug-23	100
Sep-23	100
Oct-23	100
Nov-23	100
Dec-23	100
Jan-24	100
Feb-24	100
Mar-24	100
Apr-24	100
May-24	100
Jun-24	100
Total	**1200.00**

The above data is the approximate data, provided by the college.

3. ANALYSIS OF DG SETS

In the campus, there is only one Diesel Generator (DG) set for its electrical power needs in case of Grid power failure. DG sets capacity is 25 kVA.

DG Set Design Details		
Description	***Unit***	***DG at Station 1***
Rated capacity	kVA	TI4435SPTA165032
Hz		25
Sl No.		50
Make		C178448
Volts	Volts	Tanwar Industries
PF		240
Phase		80
RPM		1
Amps	Amps	1200
Mfg.		75.5

DG Set Operation details		
Operating hours during testing	Hours	0.50
% Loading	%	69.78
Energy Generation	kWh	34.75
Load	kVA	75.54
Fuel consumption during testing	Litre	5
Specific energy generation	kWh/litre	3.02

Observation and Suggestions:-

Soundproof silent generators are an efficient tool to keep both noise and vibration at low levels. For the power backup of the institution, the soundproof model is installed in the institution.

As per the trial taken during the energy audit the percentage loading of DG set is 69.78% which is ok and specific energy consumption of DG Sets 3.02 kWh/Litre which is satisfactory because as per manufacturer recommendation, best practices for SEC in DG sets range from 3.0 to 3.5 kWh/Litre and above.

We recommend college to initiate stack monitoring of DG set through authorized lab.

4. AC SYSTEM

Energy Efficiency Ratio (EER): Performance of smaller chillers and rooftop units is frequently measured in EER rather than kW/ton. EER is calculated by dividing a chiller's cooling

Capacity (in Btu/h) by its power input (in watts) at full-load conditions. The higher the EER, the More efficient the unit. The cooling effect produced is quantified as tons of refrigeration (TR). The above TR is also called as air-conditioning tonnage.

There are 11 Split ACs with capacity 1.5 tons each, in Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya in various areas of various capacity which detail is given below:-

Sl No.	Location/Identification Location/Identification		Quantity	Room Temp. (°C)	AC-Tout (°C)	AC-Tin (°C)	Room-RH (%)	Area (m2)	Air velocity (m/s)	Enthalpy Hout	Enthalpy Hin	Heat Load in TR	KW supplied	(Eff.) Power per Ton (KW /TON)	EER
1	B.Ed. College	Principal Room	1	24.0	10.0	18.0	52.0	0.0	2.4	24.0	37.0	0.4	0.5	1.5	2.3
2	B.Ed. College	Staff Room	1	24.0	11.0	19.0	52.0	0.0	2.0	22.0	37.0	0.3	0.6	1.7	2.0
3	B.Ed. College	Smart Room	2	24.0	11.0	19.0	52.0	0.0	2.6	24.0	37.0	0.4	0.6	1.5	2.3
4	B.Ed. College	Library	2	24.0	10.0	18.0	52.0	0.0	2.4	24.0	37.0	0.4	0.5	1.5	2.3
5	P.G. College	Principal Office	1	24.0	11.0	19.0	52.0	0.0	2.0	22.0	37.0	0.3	0.6	1.7	2.0
6	P.G. College	Library	2	24.0	11.0	19.0	52.0	0.0	2.0	22.0	37.0	0.3	0.6	1.7	2.0
7	P.G. College	Staff Room	1	24.0	11.0	19.0	52.0	0.0	2.0	22.0	37.0	0.3	0.6	1.7	2.0

Remarks: - We have checked Energy Efficiency Ratio of AC's and EER of AC's is fairly OK. But in future you should purchase 5-Star rated invertor based split AC's because power consumption of Inverter based BEE 5-Star rated AC's is less than non-star rated AC's.

Also, we recommend Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya to organize periodic maintenance schedule and take corrective actions for insulating of AC's refrigerant lines in order to protect energy losses.

5. FANS ANALYSIS

In the Kamla P.G College and Kamla Shikshak Prashikshan Mahavidhyalaya, there are 251 fans installed, all are ceiling fans of 60W. The observation and suggestion are given below.

Sl No.	College Name	Location/ Identification	Ceiling Fan-70W
1	B.Ed. College	Principal Room	1
2	B.Ed. College	Chairman Room	1
3	B.Ed. College	Staff Room	1
4	B.Ed. College	IQAC Room	1
5	B.Ed. College	Office Room	1
6	B.Ed. College	Reception	2
7	B.Ed. College	Porch	4
8	B.Ed. College	Class Room 1	4
9	B.Ed. College	Class Room 2	4
10	B.Ed. College	Class Room 3	4
11	B.Ed. College	Class Room 4	4
12	B.Ed. College	Smart Room	4
13	B.Ed. College	Library	8
14	B.Ed. College	ICT Lab	2
15	B.Ed. College	Psychology Lab	1
16	B.Ed. College	Science Lab	2
17	B.Ed. College	Fine Art	2
18	B.Ed. College	Girls Common Room	1
19	B.Ed. College	Catin	1
20	B.Ed. College	Health Centre Room	1
21	B.Ed. College	Auditorium Hall	8
22	B.Ed. College	Store Room	1
23	B.Ed. College	Record Room	1
24	P.G. College	Conference Hall	12
25	P.G. College	Gallery Ground Floor	4

26	P.G. College	Gallery First Floor	4
27	P.G. College	Gallery Second Floor	4
28	P.G. College	Room No - 1	7
29	P.G. College	Room No - 2	7
30	P.G. College	Room No - 3	7
31	P.G. College	Room No - 4	7
32	P.G. College	Room No - 5	7
33	P.G. College	Room No - 6	7
34	P.G. College	Room No - 7	7
35	P.G. College	Room No - 8	7
36	P.G. College	Room No - 9	7
37	P.G. College	Room No - 10	7
38	P.G. College	Room No - 11	7
39	P.G. College	Room No - 12	7
40	P.G. College	Room No - 13	7
41	P.G. College	Room No - 14	7
42	P.G. College	Room No - 15	7
43	P.G. College	Room No - 16	7
44	P.G. College	Room No - 17	7
45	P.G. College	Room No - 18	7
46	P.G. College	Room No - 19	4
47	P.G. College	Room No - 20	4
48	P.G. College	Library	12
49	P.G. College	Seminal Hall	12
50	P.G. College	Labs	10
		TOTAL	251

Total no of Ceiling Fans (70W)	=	251	Nos.
Total wattage of 60W Ceiling Fans	=	17570	Watt
Total wattage of BEE 5 Star rated Fans (30W)	=	7530	Watt
Total saving in Wattage after replacement	=	10040	Watt
Operating hours per day	=	8	Hours
Operating days per annum	=	183	Days
Energy charges per unit in Rs.	=	10.0	INR
Saving in Rs./annum	=	108432	INR
Investment INR	=	715000	INR
Payback period	=	6.59	Years

Observation and Suggestions:-

In the college, all the ceiling fans are of 70 W but BEE 5 Star Rated of 30W Ceiling Fans are present in the market. We do not recommend college to replace existing fans to BEE 5 Star rated 30W fans, as the buying back period is more than 4 years. However we suggest college to consider purchasing BEE 5 star fans for all future purchases.

Note:- Energy saving will increase or decrease if operating hours of machine /equipment will be increased or decreased and payback period will also increase or decrease if cost of investment (Cost of machine/equipment/accessories of machine) will increase or decrease because cost of investment is taken on tentative basis.

6. ANALYSIS OF LIGHTING SYSTEM

6.1 Brief description of existing system

For assessing energy efficiency of lighting system, Inventory of the Lighting System has been noted / collected, with the aid of a lux meter, measurement and documentation of the lux levels at various locations at working level has been done.

6.2 Inventory of Lighting

Sl. No.	College Name	Location/ Identification	18W-LED Tube Light	36W Tube Light	12 W LED Bulb	200W-LED High Mast
1	B.Ed. College	Principal Room	2		1	
2	B.Ed. College	Chairman Room	1		1	
3	B.Ed. College	Staff Room	2			
4	B.Ed. College	IQAC Room	2			
5	B.Ed. College	Office Room	2		1	
6	B.Ed. College	Recpation	3		2	
7	B.Ed. College	Porch			4	
8	B.Ed. College	Class Room 1	4			
9	B.Ed. College	Class Room 2	4			
10	B.Ed. College	Class Room 3	4		2	
11	B.Ed. College	Class Room 4	4		2	
12	B.Ed. College	Smart Room	4			
13	B.Ed. College	Library	8		2	
14	B.Ed. College	ICT Lab	4		2	
15	B.Ed. College	Psychlogy Lab	2		2	
16	B.Ed. College	Science Lab	2		2	
17	B.Ed. College	Fine Art	4		2	
18	B.Ed. College	Girls Comman Room	2		1	
19	B.Ed. College	Canteen	2		2	
20	B.Ed. College	Helth Centar Room	1		1	
21	B.Ed. College	Auditorium Hall	5	4		2
22	B.Ed. College	Store Room	1		2	
23	B.Ed. College	Record Room	1		2	
24	PG College	Room No - 4	4		3	

25	PG College	Room No - 5	4		3	
26	PG College	Room No - 6	4		3	
27	PG College	Room No - 7	4		3	
28	PG College	Room No - 8	4		3	
29	PG College	Room No - 9	4		3	
30	PG College	Room No - 10	4		3	
31	PG College	Room No - 11	4		3	
32	PG College	Room No - 12	4		3	
33	PG College	Room No - 13	4		3	
34	PG College	Room No - 14	4		3	
35	PG College	Room No - 15	4		3	
36	PG College	Room No - 16	4		3	
37	PG College	Room No - 17	4		3	
38	PG College	Room No - 18	4		3	
39	PG College	Room No - 19	4		3	
40	PG College	Room No - 20	4		3	
41	PG College	Library	10	6	6	
42	PG College	Seminal Hall	10	4	8	
43	PG College	Labs	2		16	
44	PG College	Bathroom			4	
45	PG College	Play Ground				4
		TOTAL	**154**	**14**	**116**	**6**

6.3 Lux Measurement

Description	Lux	Remark
Class Rooms	120 to 235	Acceptable
Offices	130 to 240	Acceptable
Corridors	35 to 90	Acceptable
Washrooms	45 to 76	Acceptable
Outdoor	36 to 95	Acceptable
Computer Lab	150 to 289	Acceptable
Parking area	45 to 94	Acceptable
Canteen	69 to 185	Acceptable

Observation

College has initiated LED based lighting solution, but still there are 14 (36W) tube lights. LEDs save energy, the life span is much greater and emit virtually no heat. We recommend to replace the tube lights with LEDs.

Additionally, we recommend to install motion sensor-based lights in common areas such as library, washrooms, corridors, etc.

We also recommend to use solar lights for open areas like parking, ground, street lights, etc. and motion sensor lights for common areas such as library, corridors, washrooms, etc. Table below shows the performance characteristics comparison of all luminaries.

Table - Luminous Performance Characteristics of Commonly Used Luminaries

Type of Lamp	Lumens/Watt		Colour Rendering Index	Typical Application	Typical Life
	Range	Avg.			
Incandescent	8-18	14	Excellent (100)	Homes, restaurants, general lighting emergency lighting	1000
Fluorescent lamps	46-60	50	Good w.r.t coating (67-77)	Offices, shops, hospitals, homes	5000
Compact fluorescent Lamps (CFL)	40-70	60	Very Good (85)	Hotels, shops, homes, offices	8000-10000
High pressure mercury (HPMV)	44-57	50	Fair (45)	General lighting in factories, garages, car parking. flood lighting	5000
Halogen lamps	18-24	22	Excellent (100)	Display, flood lightening, stadium exhibition grounds, construction areas	2000 - 4000
High pressure sodium (HPSV) SON	67-121	90	Fair (22)	General lighting in ware houses, factories, street lighting	6000 - 12000
Low pressure sodium (LPSV) SOX	101-175	150	Poor (10)	Roadways, tunnels, canals, street lighting	6000 - 12000
Metal halide lamps	75-125	100	Good (70)	Industrial bays, spot lighting, flood lighting, retail stores	8000
LED Lamps	30-50	40	Good (70)	Reading lights, desk lamps, night lights, spotlights, security lights, signage lights.	40000 - 100000

7. OTHER POWER CONSUMPTION

7.1 Inventory of IT Infrastructure

Sl No.	College Name	Location/ Identification	Desktop - 60W	Laptop - 30W	Printer - 50W	Scanners	Smart Screen	Projector
1	B.Ed. College	Principal Room	1					1
2	B.Ed. College	Office Room	1		1	1		
3	B.Ed. College	Auditorium Hall	1					1
4	B.Ed. College	IQAC Room	1		1	1		1
5	B.Ed. College	Smart Class Room					1	
6	P.G. College	Printer			4			
7	P.G. College	Laptop		1				
8	P.G. College	Desktop	19					
		TOTAL	**23**	**0**	**6**	**2**	**1**	**3**

7.2 Water pump details

Sr. No.	Description	Unit	Pump No.-1	Pump No.-2
1	Rated Power of Motor	KW	0.75	0.746
2	Motor Eff.	%	80%	80%
3	Discharge Head	m	70	70
4	Suction Head	m	650	650
5	Pump Type	Submersible/ Monoblock/ Centrifugal Etc.	Submersible	Submersible

7.3 Other Loads

Sl No.	Location/ Identification		Air Coolers 600W	RO- 200W	Water Cooler- 200W
1	B.Ed. College	Porch		1	
2	B.Ed. College	Principal Room	1		
3	P.G. College	Ground Floor	2	2	1
4	P.G. College	Toilet (Ground Floor)	2		
5	P.G. College	Toilet (1st Floor)	2		
6	P.G. College	Toilet (2nd Floor)	2		
7	P.G. College	Toilet (3rd Floor)	2	1	
		TOTAL	**11**	**4**	**1**

ANALYSIS

There should be regular maintenance schedule of equipment like pumps, exhaust fans and IT equipment. Electronics such as computers, printers, scanners, etc. more than 3 year or 5 years (as per their life) should be replaced with new computers/laptops. Ideal Temperature should be maintained for all electronic appliances.

***** **END OF THE REPORT** ******