



**ENERGY AUDIT REPORT  
FOR  
POORNIMA INSTITUTE OF  
ENGINEERING AND TECHNOLOGY**



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## Table of Contents

<b>Content</b>	<b>Page No.</b>
Acknowledgement	3
Site Information	4
Executive Summary	5
Chapter-01 Introduction	6
Chapter-02 Energy Consumption & Analysis	8
Chapter-03 Lighting System	10
Chapter-04 Pumps and Motors	38
Chapter-05 Air Conditioning	39
Photographic Evidence	41
Conclusion	43
Disclaimer	44



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## Acknowledgement

Elion Technologies and Consulting Pvt Ltd places on record it's thanks to Poornima Institute of Engineering and Technology for entrusting the task of conducting energy audit study.

We acknowledge with gratitude the whole hearted support and cooperation extended by all team members while carrying out the study.



## Site Information

<b>Name of College</b>	Poornima Institute of Engineering and Technology
<b>College Address</b>	ISI - 2, Poornima Marg, Sitapura, Jaipur, Rajasthan, 302022
<b>Execution Partner</b>	ELION Technologies & Consulting Pvt Ltd
<b>Communication Address</b>	307, 3rd Floor DDA Lal Market H-Block Vikas Puri, New Delhi-110018
<b>Date of Audit</b>	6 <sup>th</sup> July 2023
<b>Year of Audit</b>	2023 – 2024
<b>Site Team who participated in the Study</b>	Dr. Gautam Singh – Registrar & Chief Proctor Dr. Sama Jain – Professor & HOD First Year Mr. Ashwani Lata – Director (Student Welfare)
<b>Main Energy Consuming Machines/Equipments considered for Energy Audit</b>	<ul style="list-style-type: none"> <li>• Lighting &amp; Fans</li> <li>• Air Conditioners</li> <li>• Motors &amp; Pumps</li> <li>• Desktops &amp; Printers</li> </ul>



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## Executive Summary

Poornima Institute of Engineering and Technology, was established in 2007 with the aim of imparting pragmatic technical education. In its magnificent journey of 12 years, PIET has set benchmarks and reached at new pinnacles in Engineering Education with dedication, perseverance and devotion. PIET is spearheading its outstanding voyage with the motto 'Success is not a destination, it's a journey'.

### Vision

To create knowledge based society with scientific temper through cutting-edge technologies, innovative research and to become valuable resource for enriching mankind.

### Mission

- To provide an environment that will allow students and faculty members to be skilled in creation and implementation of new ideas.
- To provide platform to improve questioning, observing, testing, analyzing and communication skills.
- To provide qualitative education and generate new knowledge with integration of emerging technologies and research.
- To practice and promote high standard of potential ethics, transparency and accountability.

### List of courses offered by the college:

- Computer Science Engineering
- Computer Science Engineering(R)
- Computer Science- Data Science (DS)
- Computer Science- Artificial Intelligence (AI)
- Artificial Intelligence & Data Science (AI & DS)
- Computer Science – IOT

Electricity is supplied by Jaipur Vidyut Vitran Nigam Limited and for backup power supply DG Sets are available of capacity 125KVA & 250KVA each.

The energy audit included detailed data collection, analysis of data and identification of specific energy saving proposals.



## Chapter 01: Introduction

Poornima Institute of Engineering and Technology evinced interest in availing the services of Elion Technologies and Consulting Pvt Ltd for conducting energy audit of their premises.

Elion Technologies and Consulting Pvt Ltd team conducted the detailed Energy audit on 6<sup>th</sup> July 2023.

This report is on the energy audit carried out at Poornima Institute of Engineering and Technology. The detailed energy audit comprised of the following activities:

- Data collection of power consuming equipment's.
- A brief session on energy management was conducted to seek more inputs from the personnel engaged in operation and maintenance of electro mechanical services.
- Analysis of collected data.
- Discussion with the officials on the identified proposals.
- Discussion and reporting of the findings of energy audit with the Engineers and management staff.

All the identified energy savings proposals have been discussed with the executives concerned before finalizing the projects.

The contents of the report are based solely on the data provided by Poornima Institute of Engineering and Technology officials during the energy audit.

The management should implement the suggestions made in the report after verifying requisite safety aspects.

### Methodology for Energy Audit:

The following is a list of general procedure and information undertaken during the energy audit:

- General information of the site.
- Baseline energy description.
- Past energy consumption bills which includes electricity bills.



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- On site data collection
  - Energy analysis of different sectors.
  - Recommendation of energy conservation measures.

The primary goal of the energy audit was to identify sources and areas of potential energy savings and cost saving throughout the Plant by measures of optimization, replacement, retrofitting, and on the other hand, to also provide recommendations on operational and maintenance practices improvements.



## Chapter 02: Energy Consumption Details

List of equipments present in the campus:

Rating of Transformers (in KVA)	750KVA
Year of installation of the Transformer	2008
Rating of DG Set (in KVA)	125KVA & 250KVA
Rating of Capacitor Bank (if present)	NA
Capacity of Solar Power Plant (if installed)	150KW

The main areas of energy consumption as observed during the audit are as follows:

- Air Conditioners
- Lighting & Fans
- Motors & Pumps
- Desktops & Printers

The main sources of energy to meet the required consumptions are as follows:

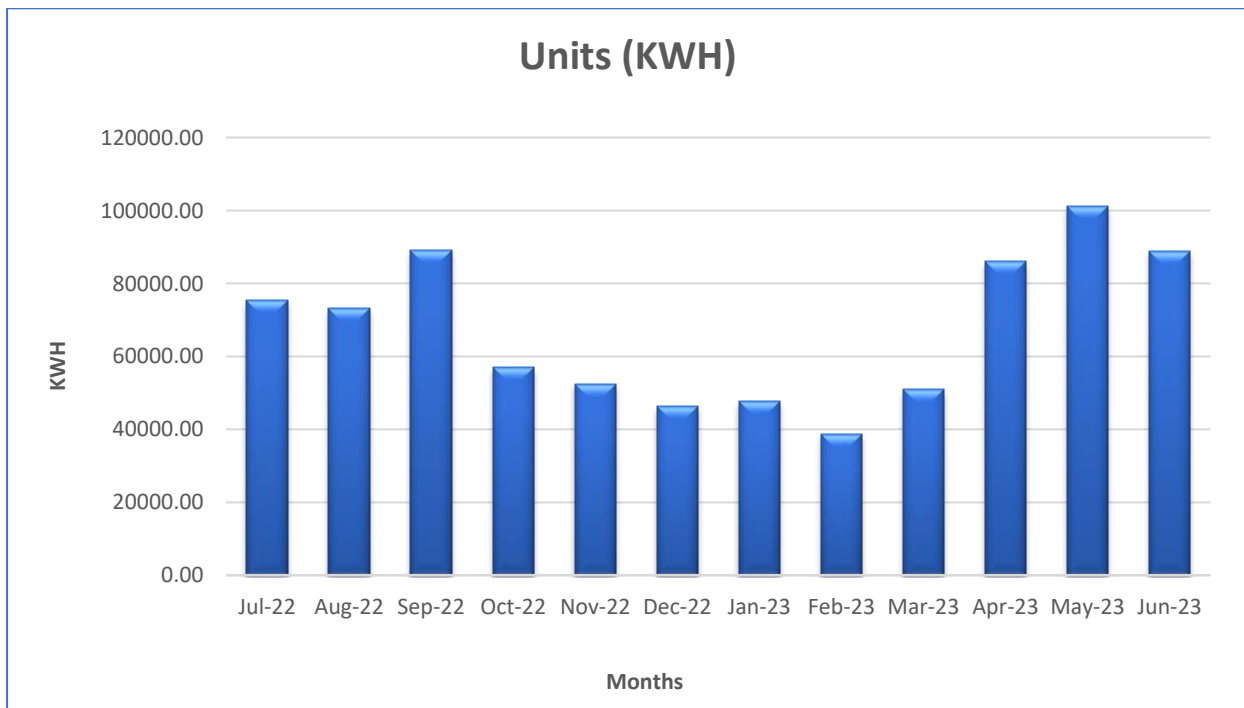
- Electricity supply from Power Distribution Company.
- DG sets of capacity 125KVA & 250KVA.
- Solar power plant of capacity 150KW.

Consumption pattern for energy is given below:

Available electricity bills for the past year were collected and following is the summary.



Months	Units (KWH)
Jul-22	75383.60
Aug-22	73131.60
Sep-22	89121.60
Oct-22	56989.60
Nov-22	52454.00
Dec-22	46234.00
Jan-23	47700.00
Feb-23	38690.00
Mar-23	51026.00
Apr-23	85954.00
May-23	101284.00
Jun-23	88932.00





## Chapter 03: Lighting System & Fans

The lighting and fans inventory of the colleges present in the campus were collected and following is the summary:

Type of Equipments	Location	Rating (W)	Quantity	No of Hours turn on
Fan	BF06	60	18	8
Tube light	BF06	36	20	8
Fan	AG01	60	6	8
Tube light	AG01	36	4	8
Fan	AG02	60	8	8
Tube light	AG02	36	5	8
Fan	AG03	60	9	8
Tube light	AG03	36	4	8
Fan	AG04	60	9	8
Tube light	AG04	36	6	8



Fan	AG06	60	8	8
Tube light	AG06	36	6	8
Fan	AG07	60	8	8
Tube light	AG07	36	6	8
Fan	AG08	60	8	8
Tube light	AG08	36	6	8
Fan	AB01	60	8	8
Tube light	AB01	36	4	8
Fan	AB02	60	9	8
Tube light	AB02	36	4	8
Fan	AB03	60	9	8
Tube light	AB03	36	5	8
Fan	AB04	60	12	8
Tube light	AB04	36	7	8



Fan	AB06	60	18	8
Tube light	AB06	36	10	8
Fan	AB07	60	2	8
Tube light	AB07	36	1	8
Fan	AB08	60	8	8
Tube light	AB08	36	6	8
Fan	AB09	60	8	8
Tube light	AB09	36	6	8
Fan	AB10	60	1	8
Tube light	AB10	36	1	8
Tube light	Corridor 1 floor	36	2	8
LED	Corridor 1 floor	15	9	8
Fan	Basement1 year	60	1	8
Tube light	Basement1 year	36	4	8



LED	Basement1 year	12	7	8
Fan	AG - 05(A)	60	1	8
Tube light	AG - 05(A)	36	1	8
Fan	AG - 05(B)	60	1	8
Tube light	AG - 05(B)	36	1	8
Fan	AG - 05(c)	60	1	8
Tube light	AG - 05(C)	36	1	8
Fan	AG - 05(D)	60	1	8
Tube light	AG - 05(D)	36	1	8
Fan	AG - 05(E)	60	1	8
Tube light	AG - 05(E)	36	1	8
Fan	EG - 05(A)	60	1	8
Tube light	EG - 05(A)	36	1	8
Fan	EG - 05(B)	60	1	8



Tube light	EG - 05(B)	36	1	8
Fan	EG - 05(c)	60	1	8
Tube light	EG - 05(C)	36	1	8
Fan	EG - 05(D)	60	1	8
Tube light	EG - 05(D)	36	1	8
Fan	EG - 05(E)	60	1	8
Tube light	EG - 05(E)	36	1	8
Fan	AF-06	60	8	8
Tube light	AF-06	36	6	8
Fan	AF-09	60	8	8
Tube light	AF-09	36	6	8
Fan	AF-10	60	8	8
Tube light	AF-10	36	6	8
Fan	AF-11	60	8	8



Tube light	AF-11	36	6	8
Fan	AF-05 A	60	1	8
Tube light	AF-05 A	36	1	8
Fan	AF-05 B	60	1	8
Tube light	AF-05 B	36	1	8
Fan	AF-05 C	60	1	8
Tube light	AF-05 C	36	1	8
Fan	AF-05 D	60	1	8
Tube light	AF-05 D	36	1	8
Fan	AF-05 I	60	1	8
Tube light	AF-05 I	36	1	8
LED	AF-01	15	9	8
Tube light	AS-06	36	4	8
Fan	AS-06	60	4	8



Tube light	AS-09	36	8	8
Fan	AS-9	60	6	8
Tube light	AS-10	36	8	8
Fan	AS-10	60	6	8
Tube light	AS-11	36	8	8
Fan	AS-11	60	5	8
Tube light	AS05 (A)	36	1	8
Fan	AS05 (A)	60	1	8
Tube light	AS05 (B)	36	1	8
Fan	AS05 (B)	60	1	8
Tube light	AS05 (C)	36	1	8
Fan	AS05 (C)	60	1	8
Tube light	AS05 (D)	36	1	8
Fan	AS05 (D)	60	1	8



Tube light	AS05 (E)	36	1	8
Fan	AS05 (E)	60	1	8
Tube light	AS05 (F)	36	1	8
Fan	AS05 (F)	60	1	8
Tube light	AS04 (A)	36	1	8
Fan	AS04 (A)	60	1	8
Tube light	AS04 (B)	36	1	8
Fan	AS04 (B)	60	1	8
Tube light	AS04 (C)	36	1	8
Fan	AS04 (C)	60	1	8
Tube light	AS04 (D)	36	1	8
Fan	AS04 (D)	60	1	8
Tube light	AS04 (E)	36	1	8
Fan	AS04 (E)	60	1	8



Tube light	AS04 (F)	36	1	8
Fan	AS04 (F)	60	1	8
LED	conference room	15	6	8
Tube light	corridor	36	12	8
Fan	corridor	60	4	8
Tube light	registrar office	36	8	8
Fan	registrar office	60	4	8
Tube light	BG-04 (B)	36	1	8
Fan	BG-04 (B)	60	3	8
PC	BG-04 (B)	280	2	8
LED	BG-04 (B)	15	5	8
LED	BG-04 ( C )	15	3	8
PC	BG-04 ( C )	280	1	8
Fan	BG-04 ( C )	60	2	8



Tube light	Examination cell	36	9	8
Fan	Examination cell	60	8	8
PC	Examination cell	280	4	8
Tube light	GS(2)	36	48	6
Fan	GS(2)	60	68	6
Tube light	GS(3)	36	101	6
Fan	GS(3)	60	75	6
Tube light	GS(4)	36	101	6
Fan	GS(4)	60	75	6
Tube light	GS(5)	36	101	6
Fan	GS(5)	60	75	6
Tube light	GS(6)	36	101	6
Fan	GS(6)	60	75	6
Tube light	GS(7)	36	101	6



Fan	GS(7)	60	75	6
Fan	mesh	60	26	20
Tube light	mesh	36	20	20
Fan	GYM	60	8	6
LED	GYM	15	12	6
Tube light	Tennis court	36	6	7
Fan	Tennis court	60	8	7
Fan	APG(1)	60	4	20
Tube light	APG(1)	36	5	12
LED	APG(1)	15	3	12
Fan	APG(2)	60	4	20
Tube light	APG(2)	36	5	12
LED	APG(2)	12	3	12
Fan	AP(3)	60	4	20



Tube light	APG(3)	36	5	12
LED	APG(3)	15	3	12
Fan	APG(4)	60	4	20
Tube light	APG(4)	36	5	12
LED	APG(4)	15	3	12
Fan	APG (5)	60	4	20
Tube light	APG (5)	36	5	12
LED	APG (5)	15	3	12
Fan	APG (7)	60	4	20
Tube light	APG (7)	36	5	12
LED	APG (7)	12	3	12
Fan	APG (8)	60	4	20
Tube light	APG (8)	36	5	12
LED	APG (8)	12	3	12



Fan	APF (1)	60	4	20
Tube light	APF (1)	36	5	12
LED	APF (1)	15	3	12
Fan	APF (2)	60	4	20
Tube light	APF (2)	36	5	12
LED	APF (2)	15	3	12
LED	APF (4)	15	3	12
Fan	APF (4)	60	4	20
Tube light	APF (4)	36	5	12
LED	APF (4)	15	3	12
Fan	APS (4)	60	4	20
Tube light	APS (4)	36	5	12
LED	APS (4)	15	3	12
Fan	APT (1)	60	1	14



Tube light	APT (1)	36	1	8
LED	APT (1)	15	3	8
Fan	APT (2)	60	1	14
Tube light	APT (2)	36	1	8
LED	APT (2)	15	3	8
Fan	APT (3)	60	1	14
Tube light	APT (3)	36	1	8
LED	APT (3)	15	3	8
Fan	APT (4)	60	1	14
Tube light	APT (4)	36	1	8
LED	APT (4)	15	3	8
Fan	APT (5)	60	1	14
Tube light	APT (5)	36	1	8
LED	APT (5)	15	3	8



Fan	APT (6)	60	1	14
Tube light	APT (6)	36	1	8
LED	APT (6)	15	3	8
Fan	APT (7)	60	1	14
Tube light	APT (7)	36	1	8
LED	APT (7)	15	3	8
Fan	APT (8)	60	1	14
Tube light	APT (8)	36	1	8
LED	APT (8)	15	3	8
Fan	APT (9)	60	1	14
Tube light	APT (9)	36	1	8
LED	APT (9)	15	3	8
Fan	APT (10)	60	1	14
Tube light	APT (10)	36	1	8



LED	APT (10)	15	3	8
Fan	APT (11)	60	1	14
Tube light	APT (11)	36	1	8
LED	APT (11)	15	3	8
Fan	APT (12)	60	1	14
Tube light	APT (12)	36	1	8
LED	APT (12)	15	3	8
Tube light	CS-08A	40	1	8
Tube light	CS-08B	80	2	8
Tube light	CS-08C	40	1	8
Fan	CS-08C	60	1	8
Tube light	CS-08D	40	1	8
Fan	CS-08D	60	1	8
Tube light	CS-08G	40	1	8



Fan	CS-08G	60	1	8
Tube light	CS-08H	40	1	8
Tube light	CS-08 I	80	2	8
Fan	CS-08 I	60	1	8
Tube light	CS-08 J	40	2	8
Fan	CS-08 J	60	1	8
Tube light	CS-08 K	40	1	8
Fan	CS-08 K	60	1	8
Tube light	CS-03	200	5	8
Fan	CS-03	480	8	8
Tube light	CS-04	200	5	8
Fan	CS-04	480	8	8
Tube light	CS-05	200	5	8
Fan	CS-05	480	8	8



Tube light	CS-06	40	1	8
Ceiling Light	CS-06	60	4	8
Tube light	CS-07	80	2	8
Fan	CS-07	240	4	8
Ceiling Light	CS-10	60	4	8
Fan	CS-10	120	2	8
Tube light	CS-10	80	2	8
Ceiling Light	CS-11	60	8	8
Fan	CS-11	60	1	8
Exhaust Fan	Corridor Block C second Floor	70	4	8
Bulb	Corridor Block C second Floor	12	2	8
Tube light	Corridor Block C second Floor	320	8	8
Fan	Corridor Block C second Floor	240	4	8
Tube light	CT-04	40	6	8



Fan	CT-04	60	8	8
Tube light	CT-05	40	4	8
Fan	CT-05	60	8	8
Tube light	CT-06	40	4	8
Fan	CT-06	60	8	8
Tube light	CT-07	40	4	8
Tube light	CT-08 (A)	20	2	8
Fan	CT-08 (A)	60	4	8
Tube light	CT-08	20	4	8
Fan	CT-09 (A)	60	1	8
Tube light	CT-09 (A)	40	1	8
Fan	CT-09(B)	60	1	8
Tube light	CT-09(B)	40	1	8
Fan	CT-09(C)	60	1	8



Tube light	CT-09(C)	40	10	8
Tube light	CT-11(B)	20	6	8
Tube light	CT-11(C)	20	6	8
Tube light	CT-12	20	5	8
Bulb	Corridor	40	6	8
Tube light	Corridor	40	1	8
Tube light	AF-05	40	8	8
Fan	AF-05	60	8	8
Tube light	AF-09	40	6	8
Fan	AF-09	60	8	8
Tube light	AF-10	40	6	8
Fan	AF-10	60	8	8
Tube light	AF-11	40	6	8
Fan	AF-11	60	8	8



Bulb	AF-01	20	9	8
Tube light	AF-02	40	4	8
Fan	AF-02	60	8	8
Bulb	Corridor	40	8	8
Tube light	Corridor	40	4	8
Tube light	CS-08A	40	1	8
Table fan	CS-08A	40	1	8
Tube light	CS-08B	80	2	8
Table fan	CS-08B	40	2	8
Tube light	CS-08C	40	1	8
Fan	CS-08C	60	1	8
Tube light	CS-08D	36	1	8
Fan	CS-08D	60	1	8
Tube light	CS-08G	40	1	8



Fan	CS-08G	60	1	8
Tube light	CS-08H	40	1	8
Table fan	CS-08H	40	1	8
Tube light	CS-08 I	80	2	8
Fan	CS-08 I	60	1	8
Tube light	CS-08 J	40	2	8
Fan	CS-08 J	60	1	8
Tube light	CS-08 K	40	1	8
Fan	CS-08 K	60	1	8
Tube light	CS-03	200	5	8
Fan	CS-03	480	8	8
Tube light	CS-04	200	5	8
Fan	CS-04	480	8	8
Tube light	CS-05	200	5	8



Fan	CS-05	480	8	8
Tube light	CS-06	40	1	8
Ceiling Light	CS-06	60	4	8
Tube light	CS-07	80	2	8
Fan	CS-07	240	4	8
Ceiling Light	CS-10	60	4	8
Fan	CS-10	120	2	8
Tube light	CS-10	80	2	8
Ceiling Light	CS-11	60	8	8
Fan	CS-11	60	1	8
Exhaust Fan	Corridor Block C second Floor	60	4	8
Bulb	Corridor Block C second Floor	12	2	8
Tube light	Corridor Block C second Floor	320	8	8
Fan	Corridor Block C second Floor	240	4	8



Tube light	AS-09	40	5	8
Fan	AS-09	60	8	8
Tube light	AS-08	40	6	8
Fan	AS-08	60	8	8
Tube light	AS-07	40	7	8
Fan	AS-07	60	8	8
Tube light	AS-06	40	5	8
Fan	AS-06	60	4	8
Exhaust Fan	AS-06	60	1	8
Tube light	AS-03	40	4	8
Fan	AS-03	60	8	8
Tube light	AS-05C	40	1	8
Fan	AS-05C	60	1	8
Tube light	AS-05D	40	1	8



Fan	AS-05D	60	1	8
Tube light	AS-05B	40	1	8
Fan	AS-05B	60	1	8
Tube light	AS-01	40	4	8
Fan	AS-01	60	4	8
Tube light	AS-02	40	5	8
Fan	AS-02	60	4	8
Tube light	AS-05E	40	1	8
Fan	AS-05E	60	1	8
Tube light	AS-05A	40	1	8
Fan	AS-05A	60	1	8
Tube light	AS-04A	40	1	8
Fan	AS-04A	60	1	8
Tube light	AS-04F	40	1	8



Fan	AS-04F	60	1	8
Tube light	AS-04B	40	1	8
Fan	AS-04B	60	1	8
Tube light	AS-04E	40	1	8
Fan	AS-04E	60	1	8
Tube light	AS-04D	40	1	8
Fan	AS-04D	60	1	8
Tube light	AS-04C	40	1	8
Fan	AS-04C	60	1	8
Bulb	A Block 2nd Floor Washroom	10	3	8
Tube light	A Block 2nd Floor Washroom	40	1	8
Tube light	A Block 2nd Floor Corridor	40	5	8
Fan	Arbuda (Hall)	60	12	4
LED	Arbuda (Hall)	54	8	4



Bulb	Arbuda (Hall)	40	12	4
Tube light	Girls Common	36	5	4
Fan	Girls Common	60	1	4
Tube light	Arbuda (Side)	36	10	4
Fan	Arbuda (Side)	60	8	4
LED	Arbuda (Side)	12	11	4
Tube light	Arbuda (Control room)	36	1	4
Fan	Arbuda (Control room)	60	1	4
Tube light	Arbuda (Guest room)	36	2	4
Fan	Arbuda (Guest room)	60	1	4
Tube light	Arbuda (Gali)	36	4	4
Fan	Arbuda (Boys changing room)	60	1	4
Tub light	Arbuda (Boys changing room)	36	3	4
Fan	Gate	60	4	12



Tube light	Gate	36	5	12
LED	Gate	12	4	12
Tube light	Faculty Apartment New	36	70	8
Fan	Faculty Apartment New	60	70	8
LED	Faculty Apartment New	15	160	8

**Observation:**

- It was observed that florescent tube lights and LED lights are used in the campus for lighting.
- College management is in process of replacement of conventional lights with energy efficient LED lights in a phased manner.

**Recommendation:**

- Regular cleaning of light fixtures to be done to get maximum lux level.
- Occupancy sensors can be installed in cabins and spaces where continuous lighting is not required.
- Sticker to SWITCH OFF LIGHT and SAVE ENERGY to be displayed.





## Chapter 04: Pumps and Motors

Submersible pumps are used in campus for water supply. The details of the pumps used are given below:

Name of Pump and make	Running Hours	Rated Capacity inKW	RPM
Submersible pump (main Gate)	16	3	1400
Submersible pump (2) panel room	16	5	1400
Submersible Pump (6) Hose	16	5	1400

Motor are used in the laboratory in the colleges. The details of the motors used are given below:

Name of motor	Running Hours	Rated capacity in HP	Ampere	RPM
Work shop(4)	8	1.5	5	1440
Work shop(1)	8	2	5	1440
Work shop (1)	8	2	5	1400
Welding Machine	8		250	

### Observation:

All pumps and motors are functioning properly and well maintained.

### Recommendation:

Proper maintenance and upkeep of pump and motor to be done.



## Chapter 05: Air Conditioning

Windows, Cassette and Split AC's are used in facility for air conditioning. Following is the list of ACs present in the campus:

S. No	Location	Type (window/split/package)	Capacity in Ton	Star Rating	Set Temperature	Running Hours	Whether performance satisfied or not
1	CT12	Cassette AC	2	5	18	8	YES
2	CT11(B)	Window AC-2	1.5	3	18	8	YES
3	CT11(C)	Window AC-2	1.5	3	18	8	YES
4	CT08	Window AC -2	1.5	3	18	8	YES
5	AF-01	Cassette AC -2	2	3	18	8	YES
6	AF-02	AC-2	1.5	3	18	8	YES
7	CS-06	AC-2	1.5	3	18	8	YES
8	CS-10	AC-1	1.5	3	18	8	YES
9	CS-09	AC-1	1.5	3	18	8	YES
10	AB01	SPLIT	1.5	3	18	8	YES
11	AB02	SPLIT	1.5	3	18	8	YES
12	AB02	SPLIT	1.5	3	18	8	YES
13	AF01	Cassette AC	2	3	18	8	YES
14	AF01	Cassette AC	2	3	18	8	YES
15	AF02	SPLIT	1.5	3	18	8	YES
16	AF02	SPLIT	1.5	3	18	8	YES
17	AS01	Window AC	1.5	3	18	8	YES
18	AS01	Window AC	1.5	3	18	8	YES
19	AS01	Window AC	1.5	3	18	8	YES
20	AS01	Window AC	1.5	3	18	8	YES
21	SIROHI Hall	Cassette AC	2	3	18	8	YES
22	SIROHI Hall	Cassette AC	2	3	18	8	YES
23	ARBUDA	SPLIT	1.5	3	18	8	YES
24	ARBUDA	SPLIT	1.5	3	18	8	YES
25	Ground Floor	SPLIT-1	1.5	3	18	8	YES
26	Ground Floor	SPLIT-2	1.5	3	18	8	YES



27	Ground Floor	SPLIT-3	1.5	3	18	8	YES
28	Ground Floor	SPLIT-4	1.5	3	18	8	YES
29	PBIC	SPLIT	1.5	3	18	8	YES
30	PBIC	SPLIT	1.5	3	18	8	YES
31	PBIC	Window AC	1.5	3	18	8	YES
32	PBIC	Window AC	1.5	3	18	8	YES
33	TP cell	SPLIT	1.5	3	18	8	YES

**Observation:**

- All air conditioners are found to be functioning properly and well maintained.
- Timely service and cleaning of the air conditioners are done.

**Recommendation:**

- All doors to be kept closed while using the air conditioners and regular annual service of AC's should be carried out.
- Set Temperature of Air Conditioner shall be maintained at 26°C.
- A reduction in 1°C set point temperature, the energy cost comes down by 5%. By carefully selecting the seasonal temperature in different areas as per requirement considerable saving on account of power consumption can be achieved.
- Whenever Air Conditioners are replaced in future, BEE 5 star rated air conditioners shall be considered which are energy efficient.
- College management should consider installation of programmable microprocessor based energy saver for air conditioners to achieve savings upto 30%.



## Photographic Evidence



Distribution transformer of 750KVA



Solar Power Plant on terrace



Air Conditioners



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## Conclusion

The energy audit conducted at Poornima Institute of Engineering and Technology has revealed that college is doing good work in having sustainable university. In house solar power plant is available in the campus and college is also exporting electricity.

To further reduce energy consumption, university should implement the recommendation made in report.

**End of Report**



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