

LOKNETE DR.BALASAHEB VIKHE PATIL. (PADMA BHUSHAN AWARDEE) Establishment 4 August 2004 PRAVARA RURAL EDUCATION SOCIETY'S

ARTS, COMMERCE & SCIENCE COLLEGE, ALKUTI

ID.No. PU/AN/ACS/78/2004 College code No.757

A/p.Alkuti, Tal.Parner, Dist.Ahmednagar.Pin-414305

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Self-Study Report: 2023 (1st Cycle)

DVV CLARIFICATION



Criteria - 7

Institutional values and Best Practices

KEY INDICATOR : 7.1

stitutional Values and Social Responsibilities

7.1.3: (QnM) Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following 1. Green audit / Environment audit 2. Energy audit 3. Clean and green campus initiatives 4. Beyond the campus environmental promotion activities

Energy, Green / Environment Audit Reports

1 About College

Arts, Commerce and Science College in Alkuti, Parner began operating in 2004 with 7 teachers and 160 students in the F.Y. BA/BCom department. With time, we have amplified into an institute of 8 departments and 34 teachers handling the educational responsibility of 28 staff and 821 students in 2022-23.

Wide ranging academic facilities endow the institute with great infrastructure for classroominstruction, library study, laboratory practical's, and indoor plus outdoor sports. The college has produced winners at university level wrestling and powerlifting competitions in recent years.

In keeping with the overall obligation to social responsibility, college students participate in Paani Foundation Camp, cleaning of Historical Places, Save Girl Child, and Clean India: Green India. Moreover, our students are actively involved in Nadi Parikrama Shibir, Sangamner and Parner Festival organized by Janseva Foundation, Pravaranagar.Mission

1.1 Mission

To impart moral values and the spirit of fair competition for developing academically sound and socially responsible students.

1.2 Vision

To enable prosperity and holistic personality development by making available avenues of higher education to rural and financially weak students.

2 Energy Audit

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbonfootprints.

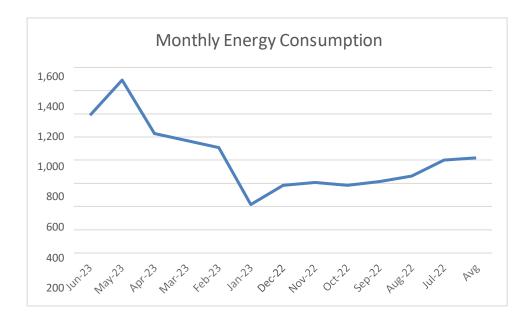
2.1 Electricity Bill Analysis

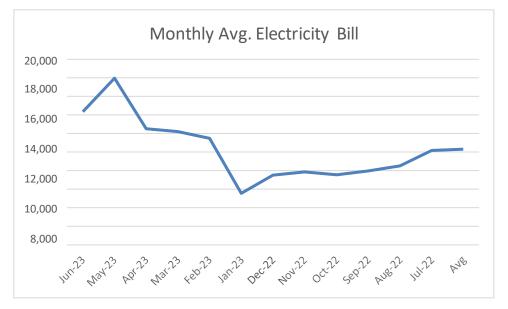
At present, one electricity meter is there for all campus

Bill analysis for consumer number 150920008455 shown below

Consumer : PRINCIPAL ART COMMERCE SCIENCE COLLAGE ALKUTI							
Consumer No.: 150920008455							
Utility : MSEDCL							
Contract Demand (KVA) : 6							
40% Of Contract Demand (KVA) : 2.40							
Month	Billed KWh	Bill (Rs)	Rate (Rs./kWh)				
Jun-23	1,188	14,352	12.1				
May-23	1,491	17,968	12.1				
Apr-23	1,030	12,519	12.2				
Mar-23	97 0	12,217	12.6				
Feb-23	91 0	11,493	12.6				
Jan-23	41 8	5,559	13.3				
Dec-22	58 2	7,537	12.9				
Nov-22	60 9	7,863	12.9				
Oct-22	58 3	7,549	12.9				
Sep-22	61 7	7,959	12.9				
Aug-22	66 4	8,526	12.8				
Jul-22	80 0	10,166	12.7				
Av g	82 2	10,309	12.7				

Below graph shows the Monthly billed unit consumption





2.2 Observations

- \Box Monthly average billed energy consumption is 822 units.
- \Box Monthly average electricity bill is 10,309 Rs.
- \Box Avg. unit rate is 12.7 Rs./kWh.

2.3 Connected Load List – Lighting							
Area	Type of Light (LED/Conventi	Watt	Tot al	Daily Runni	Month	Lo ad	Month
	(LED/Convenu onal)		Qty	ng Hrs.	ly Worki ng Days	in kW	ly kWh
Princi pal Cabin	LED	18	3	8	24	0.05 4	10.4
History	LED	18	3	8	24	$0.05 \\ 4$	10.4
Office	LED	18	5	8	24	0.09	17.3
Exam	LED	18	1	8	24	0.01 8	3.5
F.Y.B.A.	LED	18	4	8	24	0.07	13.8
F.Y.Bco m	LED	18	6	8	24	0.10	20.7
S.Y.Bco m	LED	18	3	8	24	0.05	10.4
Store	LED	18	2	8	24	0.03	6.9
Boy as Toil et	LED	18	3	8	24	0.05	10.4
Botany	LED	18	5	8	24	0.09	17.3
Physics	LED	18	5	8	24	0.09	17.3
Zoology	LED	18	3	8	24	0.05	10.4
Chemistr y	LED	18	6	8	24	0.10 8	20.7
Physica l Chemis try	LED	18	1	8	24	0.01 8	3.5
T.Y.B.A.	LED	18	5	8	24	0.09	17.3
Library	LED	18	4	8	24	0.07	13.8

2.3 Connected Load List – Lighting

N.S.S.	LED	18	3	8	24	0.05	10.4
Staff Room	LED	18	3	8	24	0.05	10.4
English	LED	18	1	8	24	0.01 8	3.5
Ladi es Toil et	LED	18	4	8	24	0.07 2	13.8
Sport	LED	18	2	8	24	0.03 6	6.9
T.Y.Bco m	LED	18	4	8	24	0.07	13.8
S.Y.B.A	LED	18	4	8	24	0.07	13.8
Т.Ү.В.А.	LED	18	4	8	24	0.07	13.8
Semin ar Hall	LED	18	11	8	24	0.19 8	38.0
Geograp hy		18	1	8	24	0.01 8	3.5
Commer ce		18	1	8	24	$\begin{array}{c} 0.01 \\ 8 \end{array}$	3.5
Jeena	LED	18	5	8	24	0.09 0	17.3

Area	Type of Light (LED/Conventi onal)	Watt	Tot al Qty	Daily Runni ng Hrs.	Mont hly Worki ng Days	Lo ad in kW	Mont hly kWh
1St Flower Ladi es Toil et	LED	18	2	8	24	0.03 6	6.9
Gents Toilet	LED	18	1	8	24	0.01 8	3.5
Porch	LED	14	13	8	24	0.18 2	34.9
Fro nt Por ch	LED	14	6	8	24	0.08 4	16.1
Left Side		18	1	8	24	0.01 8	3.5
Right Side	LED	18	1	8	24	0.01 8	3.5
Total			126			2	421

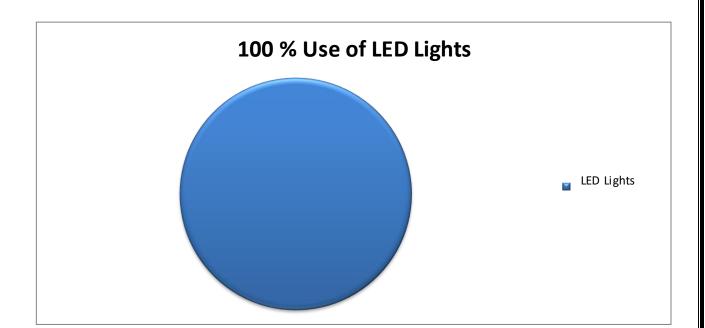
2.4 Connected Load List – Fans

Area	Watt	Total Qty.	Daily Runni ng Hrs.	Mont hly Worki ng Days	Load in kW	Mont hly kWh
Principal Cabin	80	2	2.5	24	0.16	9.6
History	80	1	2.5	24	0.08	4.8
Office	80	3	2.5	24	0.24	14.4
Exam	80	1	2.5	24	0.08	4.8
F.Y.B.A.	80	3	2.5	24	0.24	14.4
F.Y.Bcom	80	3	2.5	24	0.24	14.4
S.Y.Bcom	80	3	2.5	24	0.24	14.4
Botany	80	3	2.5	24	0.24	14.4
Physics	80	2	2.5	24	0.16	9.6
Zoology	80	3	2.5	24	0.24	14.4
Chemistry	80	3	2.5	24	0.24	14.4
Physical Chemistry T.Y.B.A.	80	1	2.5	24	0.08	4.8
	80	2	2.5	24	0.16	9.6
Library	80	4	2.5	24	0.32	19.2
N.S.S.	80	1	2.5	24	0.08	4.8
Staff Room	80	1	2.5	24	0.08	4.8
English	80	1	2.5	24	0.08	4.8
Ladies Toilet	80	1	2.5	24	0.08	4.8
Sport	80	1	2.5	24	0.08	4.8
T.Y.Bcom	80	2	2.5	24	0.16	9.6
S.Y.B.A	80	2	2.5	24	0.16	9.6
T.Y.B.A.	80	2	2.5	24	0.16	9.6
Seminar Hall	80	6	2.5	24	0.48	28.8
Geography	80	1	2.5	24	0.08	4.8
Commerce	80	1	2.5	24	0.08	4.8
Total		53			4	254

2.5 Percentage Wise Distribution of Lighting

All the tubes used are of LED type.

Type of Light	Total Nos.	% Use	
LED	126	100%	
Total	126		



3 Requirements of NAAC

3.1 Alternative Energy Initiative

3.1.1 Percentage of lighting power requirement met through LED bulbs

= (Lighting power requirement met through LED bulbs / Total lighting power requirement) X100

= (126/126) X 100

= 100 %

3.1.2 Percentage of lighting power requirement met through renewable energy sources

= (Lighting power required met through renewable sources / Total lighting power requirement) X 100

= (0 / 822) X 100

= 0 %

4 Green Audit

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon-Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade a, Grade B or Grade C according to the scores assigned at the time of accreditation.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

4.1 Goals of Green Audit

- □ The objective of carrying out Green Audit is securing the environment and cut downthe threats posed to human health.
- □ To make sure that rules and regulations are taken care of
- \square To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
- □ To suggest the best protocols for adding to sustainable development

4.2 Benefits of Green Audit

- □ It would help to shield the environment
- □ Recognize the cost saving methods through waste minimizing and managing
- □ Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
 Empower the organizations to frame a better environmental performance
- □ It portrays a good image of a company which helps building better relationships with the group of stakeholders
- □ Enhance the alertness for environmental guidelines and duties

5 Initiatives by College

5.1 Tree Plantation

Tree-planting is the process of transplanting tree seedlings, generally for forestry, land reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of tree seeds.

In silviculture the activity is known as reforestation, or afforestation, depending on whether the area being planted has or has not recently been forested. It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity. Tree planting is carried out in many different parts of the world, and strategies may differ widely across nations and regions and among individual reforestation companies. Tree planting is grounded in forest science, and if performed properly can result in the successful regeneration of a deforested area. Reforestation is the commercial logging industry's answer to the large-scale destruction of old growth forests, but a planted forest rarely replicates the biodiversity and complexity of a natural forest.

Because trees remove carbon dioxide from the air as they grow, tree planting can be used as agro engineering technique to remove CO2from the atmosphere. Desert greening projects are also motivated by improved biodiversity and reclamation of natural water systems, but also improved economy and social welfare due to increased number of jobs in farming and forestry.

College has planted the trees campus area to make it more environments friendly. Below are some records, photos which shows the





5.2 Awareness Program on Ozone Day

College has taken initiative to create awareness on effect of greenhouse gases on ozone layer depletion

. Below are some photos of same

PHOTOGALLARY

Ozan Day







5.3 Restricted entry of automobiles

As the college is located in the rural area, there is low frequency of public transportation. Most of the students do not afford private auto vehicles due to their weak financial condition. Thus, students prefer bicycles to commute from home to college and vice versa. College has set up bicycle stands as a part of discipline and security. Along with this the institute has encouraged the students and staff to observe No Vehicle Day to reduce pollution level and conserve energy. Vehicles are parked near the entrance to reduce noise and air pollution.





6 Scope for Improvement

It is recommended that to explore below project at college level

- Solid waste management Vermicompost plant
- Liquid waste management Rain water harvesting
- E- waste management Collection of E waste and submission of it to Govt.



Principal Ari's,Commerce & Science College Alkuti,Tal.Parner,Dist,A'nagar