

Carried Out By
GREENDASH ENVIRONOMICAL SOLUTIONS PVT. LTD.
MIIC, MNIT Campus,

Malaviya National Institute of Technology, Jaipur CONTACT DETAILS:- 8003097697

E Mail:-greendashindia@gmail.com



Contents

Sr.No.	Торіс	PageNo.	
1	Introduction	3	
2	College Campus Location	4	
3	Green Audit	5	
3.1	Use of Natural Resource	5	
3.2	Green Environment	7	
3.3	Water Management	8	
3.4	Wastewater Management	8	
3.5	Power Management	9	
3.6	Paper Usage Management	10	
3.7	Solid Waste Management	11	
3.8	Rain water Harvesting	11	
3.9	Green Initiatives	12	
4	Recommendations/Suggestions	14	
4.1	Improving energy consumption	14	
4.2	Water conservation	14	
5.0	Air Quality	15	





1.0 INTRODUCTION

Shri Pragya Mahavidyalaya was established in the year 1972 in the memory of Shri Panna Lal ji Maharaj sa keeping in view of his teachings and loving concern for the people.

The college is only 65 kilometre away from Ajmer on N.H. 79 enroute of Bhilwara, ChittorgarhUdaipur.by,road.

The college is built on 35 Bighas of land which consists of mainly 5 blocks - Main Administrative Block, Arts Block, Library, Management Block and Indoor Stadium. College had begun with the humble mission of imparting higher education to the deprived and the poor students of the nearby areas as they had to travel long distances in order to fulfil their ambitions.

Details of the infrastructure of college is as per below:

Plot Area -

5.5915 Acres

Constructed Area - 9104.497 Sq. Mtrs

Green Belt -

15000 Sq Feet

Road -

200 Mtr

Parking -

1000 Sq Feet

Pathway -

800 Mtr

Total Rooms -

28 Nos.

Greendash team interacted following person during audit.

1. Dr Navalsingh Jain

Director

2. Dr Durga Mewara

Dean

3. Mr Ramesh

Astt Professor





2.0 COLLEGE CAMPUS LOCATION

The Campus is situated at Beawar Road, Bijainagar, Bijaynagar, Rajasthan 305624 Campus is surrounded by Greenery maintained by the College administration.



Figure -1:- Location of College

GPS coordinates of the college:

Lattitude - 25.929073 Longitude - 74.639375





3.0 GREEN AUDIT

For Green Audit following 9 major areas were covered and compliance/initiatives under these areas were verified /validated.

- 1. Use of Natural Resources (Ventilation & Day Light)
- 2. Green Environment
- 3. Water Management
- 4. WastewaterManagement
- 5. Power Management
- 6. PaperWasteManagement
- 7. Solid Waste Management
- 8. Rain Water Harvesting
- 9. GreenPrograms(Greeninitiatives)

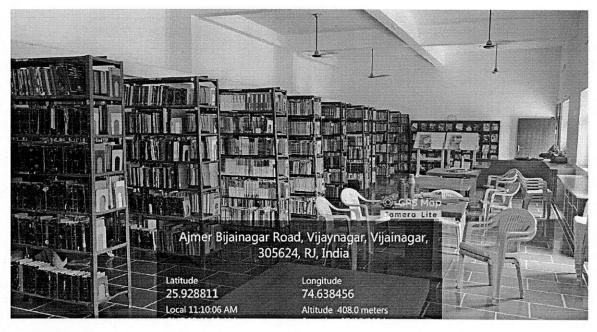
3.1 Use of Natural Resources (Ventilation & Day Light)

- College Building is designed and constructed with taking care of Natural Ventilation and lighting on priority.
- > Corridors are wide and good ceiling height is also taken for proper ventilation. Most of the corridors and rooms receive good daylight.
- > Classrooms, Labs and Library have large windows. Windows are kept open for adequate day light. (See Fig. 2)
- > On the other side Curtains are also provided to avoid the reflection and distraction to the students.
- > Classrooms are designed in a way to provide easy and safe exit during any emergency as well as provides good ventilation and sunlight also.

Director







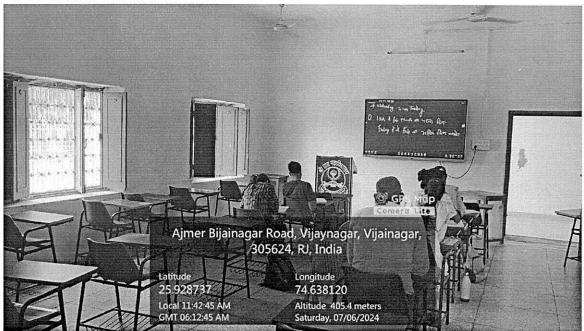


Figure -2:-Provision for Natural light and Ventilation in the rooms





3.2 Green Environment: -

College has planted more than 600 trees with the involvement of Teachers, Students, Visitors in the campus for increasing the green Quotient as well as awareness among the students about the importance of trees in one's life.

College also have a policy for adopting a tree for society stakeholders. They can pay nominal charge to college and plant a tree in the campus, which will be taken care by the college.

College also has alumni students who take active part in improvements in the college. Few of Geo Tag pictures of trees are provided as below







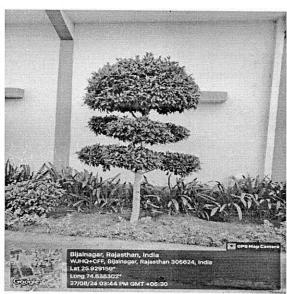


Figure 3- Green College Ground





3.3. Water Management:

Source of fresh Water is river Government supply and one borewell available in the campus.

Drinking water to all students, faculty and staff is provided from the government supply through the Water Purifier RO Plant in college building. Borewell water is used for other purposes apart from drinking.

- Storage tanks were installed at various locations for storage of water for various purposes to avoid frequent running of pumping system to keep the water line under pressure.
- ➤ Water meter is not installed to monitor the quantity of water from borewell as well as government supply. Charges are paid on fixed basis. Due to this exact water consumption is not being tracked.
- Normally mops are used for floor cleaning to avoid the water wastage during floor cleaning
- Water saving taps can be installed in the washrooms.
- > Water conservation Signage can also be displayed in the water usage points to create awareness among users and increase water conservation.
- > Sensor based Taps can also be Installed to eliminate the water wastage.
- Regular maintenance is carried out by the institution for all water pipes and taps.

3.4 Wastewater Management:

Sewage Treatment Plant (STP) is not installed in the college for treating the domestic waste water. Septic tank is used for disposal of domestic waste water.





3.5 Power Management:

Electricity:

Electricity is supplied by local electricity department. Connected load is 31 kW. Power Factor is 0.975 (Average). The major electrical equipments installed in the campus are given in following table

SI No.	Major Energy Consuming Equipments	Quantity
1	FAN	150
2	COMPUTERS	42
3	A/C	8
4	PRINTER	10
5	SMART BOARD	13
6	WATER MOTOR	4
7	WATER COLLER	3
8	TUBLIGHT	115
9	COLLER	3
10	DVR	2
11	WIFI RUTOR	5
12	CAMERA	13
13	LEB EQUIPMENT	77
14	SWITCH BOARD	250

The institute has taken the following Initiatives for energy conservation.

- ➤ In every classroom and LAB under the Electrical switch board the sticker are pasted to convey and appeal the students and faculty to Switch off the light and fans when they are not in use.
- Awareness program has been conducted on energy conservation.
- > Use of energy efficient LED tube lights and bulbs are used in the campus
- > The LED monitors are used in Computer Machines instead of CRT type monitors.
- Use of Uninterrupted Power only at unavoidable places such as Server Rooms, Sound and PPT presentations at Seminar Hall, Accounts section, Principal Office etc
- Automatic Start mode of DG set is kept in manual mode to avoid the frequent on-off during power cuts. Only emergency supply is given by UPS and DG. Auto-mode is started during examination and emergency.
- Use of Air conditioners are avoided expect few locations
- The pumps to lift the water in overhead tanks are in manual mode and timely uplifting the water as per the need of the campus.
- Every Class room and LAB has been naturally illuminated because of the environment friendly architectural design of the building.
 Director



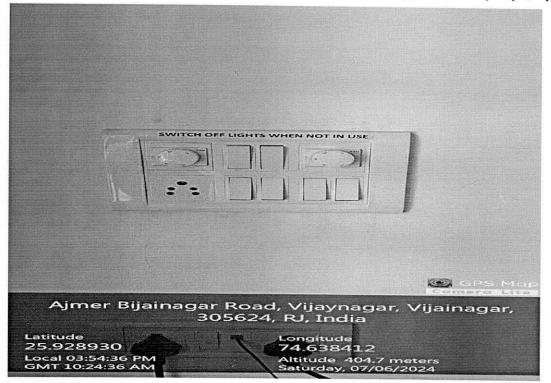


Figure 4:- Signage on Switch Boards

3.6 Paper Usage Management:

In an educational institute papers are used widely for any type of communication, record, documentation etc. leading it to generation of waste paper.

The College has taken many steps to optimize and avoid paper usage. Following are the observations:

- Both side of paper is used for print out or photo copy.
- > Most of the internal communications are done through digital mode.
- Innovative practices are followed by staff as Used papers are used for rough work, file marker, page separator etc.
- Old papers are given to vendor for recycling.

Director

Shrl Pragya Mahavidyalaya

Bijainagar-305624





3.7 Solid Waste Management:

It was observed that:

- > College maintains the waste collection facility in the college for segregated waste collection.
- Outside Vendor is identified for disposal of the waste collected from the college as per the defined frequency and will dispose as per the waste characteristic.
- > Single use utensils are not promoted in the campus. Reusable utensils are encouraged widely and various sessions are being organized for the same. College has procured stainless steel utensils which are in used during any functions also.

3.8 Rain water Harvesting:

It was observed hat:

- College is using the rain water by storing in the tank wherever possible.
- > It is recommended to install the Rain water recharging structure in the campus.

Director Shrt Pragya Mahavidyalaya

Bijainagar-305624





3.9 Green Initiatives:

In addition to the regular academics, there are several co-curricular and extra-curricular activities are conducted for the holistic development of student. Several value-added programs are conducted for technical growth of the students. Students undergo many co-curricular and extra-curricular activities like NSS camps, social and environmental cause events, International Yoga Day Celebration, Sports, Cultural Events, Induction Programmes, Farewell Programmes, Art workshops, Quizzes, Veteran's Visits, Celebrity Visits etc.

College is organizing various awareness campaigns to create awareness among students such as

- Environment Day
- > Tree Plantation Drive
- Earth Day
- Single Use Plastic awareness
- Energy Conservation
- Green Environment Campaign
- Road Safety Week etc.

Glimpses of the events is shown in the Figure 5,6





Figure 5- No to Plastic Pollution Drive







Figure 6- Alumni involvement in plantation during World Environment Day





4.0 Recommendation

4.1 For Improving Energy Efficiency:

- Central control switch / MCB can be installed in each classroom.
- Installation of automatic light switch sensors can be considered.
- Whenever new equipments are being procured, Life cycle assessment can be made for the equipment and based on those eco-friendly products can be preferred depending upon the usage.
- Energy consumption can be tracked on regular basis to identify the major energy consuming equipments / processes and consumption optimisation can be planned upon them.
- The institute can install motion detection lighting mechanism in all the washrooms so that the washrooms lights are only used whenever there is need.

4.2 Water Conservation:

- Being Water a very critical resource in the coming near future, water plays a vital role in every one's life. As students will be our brand ambassadors for improving the water conservation habits among society. Awareness sessions for water conservation can be planned for the students.
- Minimize/ reduce water usage by installing water saving faucets.
- Waterless urinals can be considered to reduce water consumption in the washrooms.
- Water balance chart to be prepared to identify the major water consumption areas.
 Water meters to be installed at key areas. Based on the consumption data water consumption projects / initiatives can be taken.

Director





5.0 Indoor Air Quality:

Nature of Sample - Ambient Air

Campus Sample Received on - 7th June 2024

Sampling Method - BIS/APHA

PARAMETER	UNIT	RESULT	PERMISSIBLELIMIT	STANDARDS
SPM (Suspended Particulate Matter)PM _{2.5}	ug/m3	41.1	60	CPCB Guidelines
SPM (Suspended Particulate Matter)PM ₁₀	ug/m3	61.0	100	IS:5182
Sulphur Dioxide(As SO ₂)	ug/m3	3.2	80	IS:5182
Nitrogen Dioxide(As NO ₂)	ug/m3	9.3	80	IS:5182
Carbon Monoxide(As CO)	ug/m3	1001	4000	IS:5182
Lead(as Pb)	ug/m3	ND	1.0	IS:5182
Ammonia(AsNH ₃)	ug/m3	4.5	400	IS:5182
Nickle (as Ni)	ug/m3	ND	0.02	IS:5182
Ozone	ug/m3	3.1	100	NAAQS
Carbon Dioxide (AsCO ₂)	ug/m3	<5.0	350	NAAQS
Methane(AsCH ₄)	ug/m3	ND	5	SNEA

BDL=Below Detectable Limit,

ASHRAE = American Society of Heating, Refrigerating and Air Conditioning Engineers, OSHA=Occupational Safety and Health, Association,

NIOSH = National Institute of Safety & Health,

NAAQS=National Ambient Air Quality Standards

SNEA=Singapore National Environmental Agency

ACGIH = American Conference of Governmental Industrial Hygienists,

mg/m³= milligram per cubic meter,

PPM = parts per million,

PPB=parts per billion,

ND = Not Detectable/Not present.

Director

Shri Pragya Mahavidyalaya Bijainagar-305624

, (T.E.

5.1 Observation:

The indoor air quality survey has revealed that indoor air parameter is within the limit.