

# GREEN AUDIT REPORT FOR ST. WILFRED'S PG COLLEGE



# Elion Technologies & Consulting Private Limited

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Madhyam Marg, Mansarovar, Jaipur Green Audit Report No: GA01082023



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# Acknowledgment

Elion Technologies and Consulting Pvt Ltd places on record it's thanks to St. Wilfred's PG College for entrusting the task of conducting green audit study.

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

Madhyam Marg, Mansarovar, Jaipur Green Audit Report No: GA01082023



# **Site Information**

Name of College	St. Wilfred's PG College
College Address	Sector-10, Meera Marg, Madhyam Marg, Mansarovar, Jaipur 302020
Execution Partner	Elion Technologies & Consulting Pvt Ltd
Communication Address	307, 3rd Floor DDA Lal Market H-Block Vikas Puri, New Delhi-110018
Date of Audit	1 <sup>st</sup> August 2023
Year of Audit	2023 – 2024
Audit Participants	Dr. Kapila Parihar (Principal)
Total Covered Area of College	7650 Sq. Meter
Total Green Area	1912.5 Sq. Meter

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## Overview of Institute

St. Wilfred's PG College has its campus in Jaipur the capital city of Rajasthan and the famous tourist and business city in north-western India. The campus is located around the prime location of Jaipur and is well connected with all parts of the city. St. Wilfreds is driven by the spirit of innovation-led research.

St. Wilfred's PG College offers a brilliant group of courses in all the fields. The new age of technology focuses on the changing needs of industry and jobs in preparing our students for successful careers by offering new age specializations.

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#### List of courses offered by the institute:

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- B.SC
- B.COM
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## Introduction

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyses environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students' better understanding of green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus, it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO2 from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

#### Advantages of Green Audit:

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. Some main advantages of green Audit are:

- It helps to shield the environment.
- Minimizing the waste and managing the cost.
- Authenticate conformity with the implemented laws.
- Minimizing the energy consumptions and focus on green and clean energy.
- Ambient Environmental Condition.
- Awareness and Training on Sustainability for Students.
- Awareness about environmental guidelines and duties.

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# **Environment Setting**

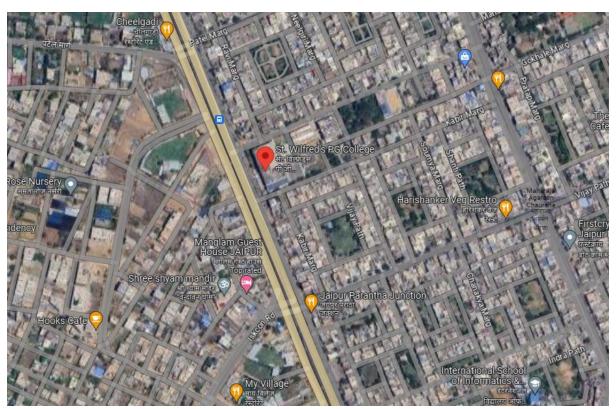
The land use around the campus is mainly comprised of residential and commercial land with shops, residential complexes and other infrastructure in vicinity.



ST. WILFRED'S PG COLLEGE

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Location of St. Wilfred's PG College

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## **Green Audit**

For Green Audit following 13 major areas (including their subsections) were covered and compliance/ initiatives under these areas were verified/ validated.

- a) Good Daylight Design and Ventilation
- b) Water Efficiency
- c) Wastewater Management
- d) Indoor Air Quality
- e) Energy Efficiency
- f) On-site Energy Generation
- g) Temperature and Acoustic Control
- h) Paper Waste Management
- i) E-Waste Management
- j) Canteen and Solid Waste Management
- k) Universal Access and Efficient Operation and Maintenance of Building
- I) Green Belt
- m) Green Programs (Green initiatives)

#### 3.1 Good Daylight Design and Ventilation

a) Corridors are wide with good ceiling height. All the corridors receive good daylight.





- b) Classrooms, Labs and Library have large windows. Adequate daylight is received through the windows during daytime.
- c) Classroom walls, corridors and labs are white-washed, this enhances the daylight received.

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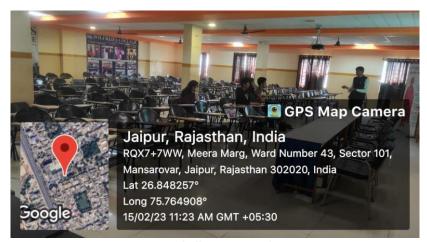






**Class Rooms Geo-Tag Photos** 

d) Curtains are provided on some of the windows to avoid glare.



Seminar halls Geo-Tag Photo

e) Laboratories and washrooms are provided with exhaust fans to disperse heat, fumes and odors.

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**Laboratories Geo-Tag Photos** 

f) Stair cases receive daylight through windows provided at various levels.



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Stair-Cases

#### 3.2 Water Efficiency:

- a) Ground water is the main source for water supply in the campus.
- b) Water coolers are used for drinking purposes. There are 3 coolers available one is installed on Ground Floor, Second Floor and one is installed on Fifth floor.





Water Coolers provided

- c) Normally mops are used for floor cleaning and hose is used for cleaning once a week.
- d) Dual flushing system is not provided in the washrooms.
- e) Signages are provided in washrooms emphasizing water conservation.
- f) At present, rejected water from air conditioners and purifier is not used anywhere. It is recommended to use rejected Water from air conditioning unit and reject water from water purifiers for watering gardening and flower pots.
- g) Water saving faucet are used in washrooms as informed to us.

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h) Rain water harvesting system is available in the college.

#### 3.3 Wastewater Management:

a) Sewage treatment plant is not available in the campus.

#### 3.4 Indoor Air Quality;

Indoor Air Quality (IAQ) refers to the air quality within and around buildings and structures, as it relates to the health and comfort of building occupants. Some common indoor pollutants are listed as below:

- Molds and other allergens This may arise from water seeping into the building envelope or skin, plumbing leaks, condensation due to improper ventilation, or from ground moisture penetrating a building part.
- Carbon monoxide Sources of carbon monoxide are incomplete combustion of fossil fuels.
- Volatile organic compounds (VOCs) VOCs are emitted by paints and lacquers, paint strippers, pesticides, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions etc.
- Carbon dioxide Due to human respiration
- Particulate matter Due to construction and maintenance activities

Major observations under indoor air quality are as below:

- a) In classrooms the mode of ventilation is natural (through windows) and is enhanced by fans. Air conditioners are used in some of the rooms.
- b) Heating Ventilation and Air Conditioning (HVAC) system does not exist. Total 26 numbers of Split and Windows Air conditioners are used for cooling inside the campus.

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AC's provided inside the Campus

c) Indoor plants are seen in the College. Indoor plants can be plotted not only for the aesthetic appearance but also for health benefits. Refer Annexure 1 for details.



Indoor plants provided

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- d) Exhaust fans are provided in the washrooms and labs.
- e) Green belts have been set up in campus area.





**Green Campus** 

f) Indoor Air Quality tests have not been carried out. Same needs to be carried out at least once a year.

#### 3.5 Energy Efficiency:

#### Electricity:

Power is supplied by Jaipur Vidyut Vitran Nigam Limited. The major electricity consuming Computer Labs, Accounts Office, ICT Rooms, AC Class Rooms etc. Electrical appliances that are being used in campus are Computers, Air Conditioners, LED Lights, Fans, LED Tube lights, Refrigerators, Printers, Scanners, Water Coolers, Microwave Oven, Induction etc.





Printer & Scanner in Office

#### Following are details of energy consumption:



#### It was observed that:

- a) Campus has air conditioners which are in good working condition.
- b) LED lights are installed in the entire campus.



**Air Conditioners** 

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c) Solar panel is installed in the campus.



**Solar Power Plant** 

#### 3.6 On Site Energy Generation (usage of LPG/ Natural Gas):

- a) LPG and induction are provided in the canteen for cooking.
- b) Solar Power plant of capacity 60KW is provided in the college.



Solar Panel in the Campus

#### 3.7 Temperature and Acoustic Control

a) White washed rooms & corridors and white/ off-white flooring improve the lighting conditions.

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White-Washed Classes Geo-Tag Photo

b) The campus has done tree plantation all around which helps in reducing temperature.



**Potted Plant** 



Landscaping Trees and Plants in College Campus

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Landscaping Trees and Plants in College Campus

c) There is no noise pollution around the campus.

#### 3.8 Paper Waste Management:

Being academic institution, waste paper is the main solid waste generated in the premises. The College has taken steps to minimize and avoid paper usage.

It was observed that:

- a) Rough papers are used for art and craft purposes such as paper bags and crafts.
- b) Prints and photocopies are taken on both sides of the pages to avoid excess paper usage. Rather than photocopy, digitalization (scanning) is practiced.
- c) Internal notices and communications are through E-mail/WhatsApp/Paper Notices.
- d) Faculty and administration staff uses old papers and envelops for internal usages as rough work, file markers, page separators etc.

#### 3.9 E-Waste Management:

- a) The campus is digitalized to a large extent. This includes classrooms, library, internal mails etc.
- b) E-waste is collected and stored in respective department and deposit to vendors.

#### 3.10 Solid Waste Management:

It was observed that:

a) Wet waste and dry waste segregation is practiced in the premises. Separate bins are provided for wet biodegradable and dry recyclable waste.





Separate Bins are provided

b) The college dispose-off its waste by identifying and dispatching the segregated waste through NNJ Vehicles.

#### 3.11 Universal Access and Efficient Operation and Maintenance of Building:

It was observed that:

a) College is easily accessible. Staircase are provided for staff and students.



Staircases Provided

b) Fire Extinguishers are provided for emergency.





Fire extinguishers provided

- c) Directional exit signages and floor markings are present on every floor of the
- d) Regular Fire Safety Trainings is given to staff of the college on regular basis.

#### 3.12 Green belt/ Landscaping:

a) Some Large trees and plants are planted in the premises. Plantation also helps maintaining lower temperatures of the area.





**Green Campus** 

b) Potted plants are also kept around the campus.

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**Potted Plants provided** 

#### 3.13 Green Initiatives:

- a) College is regularly celebrating cultural programs along with Environment Day, Yoga Day, Earth Day etc.
- b) Solar power plant is available in the campus.



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# Recommendations/Suggestions

#### For Improving Energy Consumption:

- a) Every classroom and lab with central switch board can have a diagram linking location of a tube light, fan etc. with corresponding switch. This will ensure that correct fitting is switched on/ off and can save time & unnecessary operation.
- b) Installation of automatic lights with sensors can be considered.
- c) Standard Operation Procedures (SOPs) should be prepared and followed for green purchasing. Equipment with star rating, using eco-friendly materials; with safe disposal policy to be preferred. Policy of returning equipment at the end of life span to the supplier to be preferred.
- d) For purchasing new electronic appliances, star rating provided by Bureau of Energy Efficiency (BEE) should be considered. The equipment which has maximum star ratings could be purchased, which will consume less energy, ensure environmental sustainability and also operate at low cost.
- e) Usage of light reflectors is recommended as the reflectors can spread light to relatively large areas.
- f) If possible, computers should be switched off from main power connections.
- g) Notices/signages can be put up/displayed near switches and on notice boards, informing students and staff to switch off all electrical appliances when not in use.
- h) Control sensors can help to reduce consumption by automatically dimming lights when people are not around, and keeping blinds open to use natural light & reduce energy consumption.
- i) Raise awareness:
  - Encourage students to help in monitoring energy consumption & implement corrective actions.
  - Integrate energy education into classroom learning.

#### Water Conservation:

- a) Provide information on water usage and savings to students/ staff through notices, screen savers in computer labs.
- b) Dry sweep or use a sponge broom, when possible, instead of using a hose to clean floors, sidewalks, or other hard surfaces.
- c) Minimize/ reduce water usage by installing water saving faucets such as pressmatic taps, tap aerators, jet sprays etc.
- d) Installation of waterless urinals can be considered to reduce water consumption.
- e) Water balance diagram can be prepared to quantify the water consumption by installing water meters at key points. Based on data gathered, appropriate measures can be taken to reduce the water consumption.

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f) At present, rejected water from air conditioners and purifier is not used anywhere. It is recommended to use rejected Water from air conditioning unit and reject water from water purifiers for watering gardening and flower pots.

#### Paper and other Solid Waste Reduction:

- a) Inventories of all solid waste generated in the premises must be maintained.
- b) Enhance recycling. This can be done by creating a group where students can recycle books, personal clothes and other material to needy students. This can be an initiative under green program.
- c) Standard Operating Procedures (SOP) for Solid and E-waste management and for recycling of waste should be prepared & practiced. The SOP's may include collection, segregation and reuse of different types of wastes, if any (e.g. biodegradable waste for composting). This will help in safe disposal of waste to recycle agencies.
- d) Training as well as awareness programs should be organized on segregation of biodegradable waste and recycling of waste. Efforts should be taken to inform students about recycling options and signs should be posted on appropriate bins indicating what could be dumped in each bin.
- e) The college can introduce online app, which can be useful for conducting internal exams, assignment/ reports submission. This system can also be used for displaying important notices, timetables.
- f) Paper usage shall be monitored to understand the impact of digitization in the facility.

#### Others:

- a) Water from air conditioning unit and reject water from water purifiers is not used anywhere, same should be utilized.
- b) Indoor Air Quality tests have not been carried out. Same needs to be carried out at least once a year.
- c) Environmental advisory committee could be formed. The discussions/ information sharing among different departments can generate lot of ideas and awareness on green issues.
- d) Maintain minutes of meetings of environmental committees; evaluate the effectiveness of various environmental programs conducted by the institutes. Set annual targets for Green Initiatives & monitor them closely. Create 'Green Champions'.
- e) Since each student uses computer lab, the screen savers can be set up for creating environmental awareness. (Ergonomics, water conservation etc.). Short 30 second pop up can be displayed on computer screens when they are on standby mode. Or wallpapers informing students about environment conservation can be created.
- f) Consider detailed energy audit (energy consumption, thermal emission, visual comfort) and water audit.

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g) Adopt environmentally responsible purchasing policy, and work towards creating and implementing a strategy to reduce environmental impact of its purchasing decision.



# Annexure 1 – Indoor Gardening Details

Indoor plants are commonly used for their aesthetics benefits but they also have vital role reducing airborne pollution. The right choice of plants can be an excellent way of improving indoor air quality and general health. Local landscape contractor can be contacted for supply and rotation of these plants.

Plants	VOC it removes	Indoor source of VOC's	Plant care
Aloe Vera	Formaldehyde, Trichloroethylene and Benzene	Chemical based cleaners and paints	Easy to grow with enough sunlight
Bamboo Plant	Formaldehyde, Trichloroethylene and Benzene	Paints, Plastics, Wood products etc.	Thrives under low light conditions as well as easy to maintain
Chinese Evergreen	Benzene	Paints	Low maintenance plant that prefers low light conditions.

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English Ivy	Formaldehyde, Benzene, Air borne fecal matter particles	Wood, Paper products, Air borne fecal – matter particles from pests	Easy to maintain
Janet Craig	Formaldehyde, Benzene and Trichloroethylene	Paints, Plastics, Wood products etc.	Medium to low light tolerant plant. Requires little water for growth.
Golden Pothos or Devils Ivy	Formaldehyde, Cleanses air	Exhaust fumes, carpeting materials, panelling and furniture products made with particle board	Extremely easy to maintain under low to bright light conditions. Fast growing and grows well under Fluorescent light.
Mass Cane	Formaldehyde, benzene and trichloroethylene	Paints, Plastics, Wood products etc.	Medium to low light tolerant plant. Requires little water for growth.

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Snake plant	Formaldehyde and trichloroethylene	cooking fuels, wood products, facial tissues, personal care products and waxed papers	Drought resistant and Tolerates a variety Of light conditions. Hard to damage or kill.
Peace Lily	Formaldehyde, benzene and trichloroethylene	Paints, Plastics, Wood products etc.	Relatively easy to maintain. Survives in low light conditions.
Red-edged Dracaena	Formaldehyde and trichloroethylene	cooking fuels, wood products, facial tissues, personal care products and waxed papers	Drought resistant and Tolerates a variety of light conditions. Hard to damage or kill.
Spider Plant	Formaldehyde, benzene, carbon monoxide and xylene	cooking fuels, wood products, Printing	Easy to maintain under medium to bright light condition.

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Purifies indoor air - Easy to maintain

Parlor Palm

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#### DISCLAIMER

All information contained in this report is based on the data available and observations made during the audit. All recommendations made in this audit report should be duly evaluated by the management before implementation.

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For giving us necessary inputs to carry out this very vital exercise of Environment Audit. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

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# Concept

The term 'Environmental audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environmental Audit, many leading companies/ institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

The European Commission, in its proposed regulation on environmental auditing, has also adopted the ICC definition of Environmental Audit.

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## Introduction

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.

Environmental Management Systems (EMS) is very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the world have started adopting compatible environmental management systems either voluntarily or for promoting standards by external certification. International environmental standards do not suit the existing Indian educational system.

A very simple indigenized system has been devised to monitor the environmental performance of educational institutions. It comes with a series of questions to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance. This innovative scheme is user- friendly and totally voluntary. The environmental monitoring system helps the institution to set environmental examples for the community and to educate young learners. It can be adapted to urban and / or rural situations.

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# **Overview of Campus**

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# **Audit Objectives**

The broad aims/ benefits of the eco-auditing system would be -

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Reduction in resource use
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the college campus and its environment
- Enhancement of university profile
- Developing an environmental ethic and value systems in young people

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# **Executive Summary**

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

This is second environmental audit of campus for NACC affiliation; QS Program and doing their bid towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.

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# **Environmental Audit - Questionnaire**

The areas of eco/environmental/green auditing to be followed/practiced by participating institutions:

- I. Waste Minimization and Recycling
- II. Greening
- III. Energy Conservation
- IV. Water Conservation
- V. Clean Air
- VI. Animal Welfare
- VII. Environmental Legislative
- VIII. General Practices

Is any Environmental Audit conducted earlier? No.

What is the total permanent population of the Campus?

	Male	Female	Total
Students	1992	1187	3179
Teachers	64	100	164
Non-Teaching Staff	23	50	73
Sub Total	2079	1337	3416
Approximate Number of Visitors (Per day)	25		
What is the total number of working days o	165		

#### Where is the campus located?

The campus is Located at Mansarovar, Jaipur, Rajasthan.

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#### Which of the following are available in your campus?

1	Garden area	Yes
2	Playground	Yes
3	Kitchen	Yes
4	Toilets	Yes
5	Garbage Or Waste Store Yard	No
6	Laboratory	Yes
7	Canteen	Yes
8	Hostel Facility (Numbers)	Yes
9	Guest House	No

#### Which of the following are found near your campus?

1	Municipal dump yard	No
2	Garbage heap	Yes
3	Public convenience	Yes
4	Sewer line	Yes
5	Stagnant water	No
6	Open drainage	No
7	Industry – (Mention the type)	No
8	Bus / Railway station	No
9	Market / Shopping complex / Public halls	Yes

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#### I - WASTE MINIMIZATION AND RECYCLING

1.	Does your campus generate any waste? If so, what are they?	Yes, paper waste.
2.	What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	15Kg/day.
3.	How is the waste generated in the campus managed? By  1 Composting  2 Recycling  3 Reusing  4 Others(specify)	Reusing
4.	Do you use recycled paper in campus?	Yes
5.	Do you use reused paper in campus?	Yes
6.	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	NA
7.	Can you achieve zero garbage in your campus? If yes, how?	NA

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#### II – GREENING THE CAMPUS

1.	Is there a garden in your campus?	Yes
2.	Do students spend time in the garden?	Yes
3.	Total number of Plants in Campus	200
4.	Provide some names of trees and plants in the campus.	Jamun, Neem, People etc.
5.	Is the university campus having any Horticulture Department?	No
	If yes, number of Staff working in Horticulture Department?	NA
6.	Number of Tree Plantation Drives organized by institute per annum.(If Any)	2
7.	Number of Trees Planted in Last year.	35
	Survival Rate	50%
8.	Plant Distribution Program for Students and Community	Yes
9.	Plant Ownership Program	Yes

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#### III – ENERGY

1.	List down ways that you use energy in your campus. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	<ol> <li>Electricity supply from Distribution Company.</li> <li>LPG.</li> </ol>
2.	Are there any energy saving methods, equipments, techniques employed in your campus? If yes, please specify. If no, suggest some	Solar Energy
3.	Give an estimate of number of lights installed in your campus along with numbers?	200
4.	Are any alternative energy sources employed/ installed in your campus? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.	Solar Energy.
5.	Do you run "switch off" drills at campus?	Yes
6.	Are your computers and other equipment's put-on power-saving mode?	Yes
7.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	No

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#### **IV - WATER CONSERVATION**

1.	List all the uses of water in your campus?	<ul><li> Drinking water</li><li> Gardening</li><li> Sanitary Purpose</li></ul>
2.	How does your campus store water? (mention tanks with capacity) Are there any water saving techniques followed in your campus?	NA
3.	If there is water wastage, specify why and how can the wastage be prevented/ stopped?	No wastage as such.
4.	Locate the point of entry of water and point of exit of waste water in your campus.  Entry-  Exit-	NA
5.	Write down few ways that could reduce the amount of water used in your campus?	By various awareness programs.
6.	Record water use from the campus water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many litres of water have been used.	NA
7.	Does your campus harvest rain water? (Please explain the method and uses)	Yes, storage in underground tank.

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8. Is there any water recycling System. NA

#### V - CLEAN AIR

1.	Are the Rooms in Campus are Well Ventilated?	Yes					
2.	Number of windows per room (aggregate value to be provided)	3 per room.					
3.	What is the ownership of the vehicles		Yes				
	used by your institute? (Please Tick √only one)	✓	Ор	erator-	owned	vehicle	S
	v only one,		Inst	Institute-owned vehicles			
		A combination of camp owned and operator-ov vehicles		•			
4.	Provide details of institute-owned motorized vehicles?	Buses	Cai	rs \	/ans	Other	Total
	No. of vehicles	-	1		-	-	1
	No. of vehicles more than five years old	-	-		-	-	-
	No. of Air conditioned vehicles	-	-		-	-	-
	PUC done	-	-		-	-	-
5.	Specify the type of fuel used by your institute's vehicles:	Buse	uses Cars		,	Vans	Other
	Diesel	-		-		-	-
	Petrol	-	✓		-		-
	CNG	-		-		-	-
	LPG	-		-		-	-
	Electric					-	
6.	Air Quality Monitoring Program (If Any)	No					
7.	Students suffer from respiratory ailments? (If Any)	No					

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8.	Details of Diesel/Gas Generator. (Rating &	NA
	Make)	

#### VI – ANIMAL WELFARE

1.	List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.) (if any)	No
2.	How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	No
3.	Does your campus have a Biodiversity  Programme or a KARUNA CLUB?	No

#### VII - ENVIRONMENTAL LEGISLATIVE COMPLIANCE

1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your campus have any rules to protect the environment? List possible rules you could include.	Yes
3.	Dose Environmental Ambient Air Quality  Monitoring conducted by the Campus?	Yes
4.	Dose Environmental Water and Wastewater  Quality monitoring conducted by the  Campus?	Yes
5.	Dose stack monitoring of DG sets conducted by the Campus?	No

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6.	Is any warning notice, letter issued by state government bodies?	No
7.	Dose any Hazardous waste generated by the Campus? If yes explain its category and disposal method.	No
8.	Dose any Bio medical waste generated by the Campus? If yes explain its category and disposal method.	No

#### **VIII - GENERAL**

1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your campus have any rules to protect the environment? List possible rules you could include.	Yes
3.	What is the housekeeping schedule of garden and common areas in your campus?	Yes
4.	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes
5.	Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. celebrated in your Campus?	Yes
6.	Does Campus participated in National and Local Environmental Protection Movement?	Yes
7.	Does Campus have any Recognition/certification for environment friendliness?	Yes
8.	Is Campus using renewable energy?	Yes
9.	Does Institution conducts a green/environmental audit of its campus?	No

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10.	Has the institution been audited/	No
	accredited by any other agency such as	
	NABL, NABET, TQPM, NAAC etc.?	

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## Recommendations

- Environment Policy to be adopted by the Campus.
- Water Meter should be installed at the bore well and daily consumption of water shall be recorded to keep a check on water usage.
- Equipments when not in use shall be switched off and should not run in standby modes or ideal.
- Testing for indoor air quality and drinking water should be carried out on a regular basis for monitoring purpose.



# **Photographic Evidences**



Tree Plantation around Campus



Playground

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**Solar Power Plant** 





**Tree Plantation** 

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## Conclusion

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. Overall, large amount of campus is for landscaping. The audit has identified several observations for making the campus premise more environmentally friendly. The recommendations are also mentioned with observations for university campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. There are no major observations but recommendation is made in this report which would further strengthen the goal to achieve 100% environment friendly campus.

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### References

- The Environment [Protection] Act 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle
- Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control of Pollution] Act 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Water [Prevention & Control of Pollution] Cess Act-1977 (Amended 2003) and Rules- 1978
- The Air [Prevention & Control of Pollution] Act 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules 2016 (Replaces the Gas Cylinder Rules 1981
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement)
   Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices

### **End of Report**

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#### DISCLAIMER

All information contained in this report is based on the data available and observations made during the audit. All recommendations made in this audit report should be duly evaluated by the management before implementation.

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# Elion Technologies & Consulting Pvt Ltd Certificate

This is to certify that Green Audit at St. Wilfred's PG College, Sector-10, Meera Marg, Madhyam Marg, Mansarovar, Jaipur, 302020 was carried out for the year 2023 - 24.

College has submitted necessary data and credentials for scrutiny. The activities and measures carried out by the college have been verified. The efforts taken by the college towards environment and sustainability is highly appreciated and commendable.

Audit Date – 01/08/2023 Valid Up to – 31/07/2024



Certificate Number GA/2023/SWPGC

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This is to certify that Environment Audit at St. Wilfred's PG College, Sector-10, Meera Marg, Madhyam Marg, Mansarovar, Jaipur, 302020 was carried out for the year 2023 - 24.

Campus has submitted necessary data and credentials for scrutiny. The college is using renewable source of power in solar energy and the college also has rain water harvesting system for storing in underground water tank.

Audit Date – 01/08/2023 Valid Up to – 31/07/2024



Certificate Number ENV/2023/SWPGC