

# **GREEN AUDIT REPORT**

**For period  
(Jan-Dec 2017)**

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## **1. Introduction**

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. 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.

## **2. Objectives of the Study**

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its sustainability
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use on the campus.
- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requires high cost.
- To bring out a status report on environmental compliance.

## **3. Methodology**

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summaries the present status of environment management in the campus:

- Water management
- Energy Conservation
- Waste management
- E-waste management
- Green area management

### Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit in 2016-17. The framework also lists the findings and observations for every criterion.

Control objective	Control(s)	Audit Observation
Maximize the proportion of waste that is recycled & minimize the quantity of non-	Reduce the absolute amount of waste that it produces from college staff offices.	YES, the college has adequate controls to reduce the absolute amount of waste that it produces from staff offices. Recycling of papers is widely used.
	Compost, or cause to be composted, all organic waste, green waste and un-recycled cardboard produced in or collected from kitchens, gardens, offices and rooms.	YES, the college has compost, or cause to be composted, all organic waste, green waste and un-recycled cardboard produced in or collected from kitchens, gardens, offices and rooms.
	Recycle or safely dispose of white goods, computers and electrical appliances.	YES. Safe disposal through authorized agents for computers and electrical wastes.
	Use reusable resources and containers and avoid unnecessary packaging where possible	YES, the college do use reusable resources and containers and avoided unnecessary packaging where possible
	Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated	YES, the college has provided sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated
	Make specific arrangements for events, such as cultural Events, internal and external seminars and conferences, where significant recyclable waste is likely to be produced, in order to both minimize the waste produced and maximize what is recycled/reused	YES the college have made specific arrangements for events, such as cultural Events, internal and external seminars and conferences, where significant recyclable waste is likely to be produced, in order to both minimize the waste produced and maximize what is recycled/reused
	Promote reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives	YES, the college has promoted reuse of items and waste recycling among staff, students and conference guests through training, posters and incentives
	Dispose all waste, whether solid or otherwise, in a scientific manner and ensure that it is not released directly to the environment	Yes, the college disposes all waste, whether solid or otherwise, in a scientific manner and ensures that it is not released directly to the environment.

Reduce energy consumption, especially of energy derived from fossil fuels	Give preference to the most energy efficient and environmentally sound appliances available, this includes only using energy-saving light bulbs	The College are using LED as much as practicable
	Encourage staff, students and conference guests to save energy. This particularly concerns turning off electrical appliances when not in use in both communal and residential rooms	Misuse of electricity is controlled by turning off the appliances when not required, through visible reminders, incentives and information to increase awareness.
	Monitor and understand the importance of different sources of college energy consumption, and set appropriate and measurable targets for a reduction in certain areas of consumption and/or in the overall consumption of energy.	The college has administrative committee which conducts internal review.
	Conduct switch off drills at regular intervals	YES, college do conduct switch off drills at regular intervals
	Ensures that all electronic and electrical equipment's, such as computers, are switched off when not in use.	YES, It is practiced. Most of the computers are generally configured in power saving mode when such option is available
	If there are equipment's running on standby mode, reduce the energy consumption on standby mode or minimize the running of equipment's on standby mode	No, there are no equipment's running on standby mode.
	Minimize the use of unsustainable transport	Make available information about bicycle and pedestrian routes, public transport services and car share schemes to staff and students.
Promote car sharing / car pool among the students and faculty members		YES, college does promote car sharing / car pool among the students and faculty members.
Minimize consumption of water.	Repair sources of water leakage, such as dripping taps and showers as quickly as possible.	YES, Regular checking and maintenance of pipelines are done to control water wastage.
	Install appliances which reduce water consumption	YES, Practised as much as possible.
	Encourage a decrease in water usage among staff, students and conference guests	YES, college does not encourage decrease in water usage among staff, students and conference guests.

	Use an efficient and hygienic water storage mechanism is to minimize the loss of water during storage	YES, college does use an efficient and hygienic water storage mechanism both at the underground tank and terrace water tanks.
	Minimize wastage of water and use of electricity during water filtration process, if used, such as RO filtration process and ensure that the equipment's used for such usage, are regularly serviced	All the departments have Water filter with RO (Aqua guard) and large water filter with cooler at the strategic locations in the college for the students. All are with AMC.
	Install Water recycling mechanism, such as rain water harvesting system	NO, have not installed. The college prospective plan has a provision for Installing Water recycling mechanism
Minimize the use of chemical pollutants	Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. are biodegradable and non-toxic, even where this exceeds the Control of Substances Hazardous to Health (COSHH) regulations	Negligible amount of washing liquids are used in the college and all the toilet cleaners are Eco friendly.
	Minimize the use of fertilizers and pesticides in college grounds, opting for the use of compost produced on site wherever possible	Negligible amount of fertilizers and pesticides are used in the college.
	Reduce the practice of burning plastic and other material that emits harmful gas on burning is prevented in the campus.	No such burning.
	Establish a Garden in the campus	College already has a well maintained green campus.
	Encourage the faculties and students to plant trees in the garden.	College NSS and Student Union do this.
Ensure that environmental awareness is created	Conduct environmental awareness workshops as a part of the program.	YES, College has an active NSS for monitoring this.
	Conduct events such as plant trees to spread environmental awareness among the students	YES, Seminars and awareness programmes are conducted periodically on Nature and natural resources, wildlife for the conservation of Biodiversity.
	Create awareness of environmental sustainability and takes actions to ensure environmental sustainability.	YES, Seminars and awareness programmes are conducted periodically on Nature and natural resources, wildlife for the conservation of Biodiversity.

	Reduce the rate at which the College contributes to the depletion and degradation of natural resources	College does not directly or indirectly participate in depletion and degradation of natural resources.
	Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service	UGC projects on Sustainable development/ natural resources. Compulsory ENVIS paper of 100 marks in the University Syllabus for all the students of all streams to develop Environmental Awareness (75 MCQ + 25 Project).
Ensure that the buildings conform to green standards	Review architecture of existing buildings and reviews ways, in consultation with experts, to reduce usage of energy for such buildings, offering greatest efficiency for energy and water usage, and reducing carbon emission	Constructions are in compliance with green standard.
Ensure that the Environmental Policy is enacted, enforced and reviewed	Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy	YES, College has an Environment Committee.
	Ensure that on the Environment committee there will be appropriate representatives of the relevant college departments and authorities – such as catering, gardening, maintenance, cleaning and finance	YES, Representative from all such departments.
	Ensure that on the Environmental Committee there will be the Green Officer from an external agency who is engaged in the profession of providing guidance on environmental impact	YES, college has green officer in the Environment Committee.
	Ensure that the Environmental Committee will review the Environmental Policy on an annual basis, and will monitor progress and set measurable targets wherever possible	YES, Ensured
	Ensure that the Environmental	YES, Green policy is enforced.

	Policy is enforced regardless of whether its requirements exceed the mandate of the law	
	Require that every staff and student member recognizes their responsibility to ensure that the commitments in the Environmental Policy are properly put into practice	YES, Members of Environment Committee are trying their best.
	Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings	Green audit is conducted annually since last two years.

### Recommendations

Following the audit, several recommendations were made to the management.

Criteria	Recommendation
<b>Green campus</b>	<ul style="list-style-type: none"> <li>• Reviews periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Give scientific names to the trees.</li> <li>• Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service.</li> <li>• Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.</li> <li>• Celebrate every year 5th June as 'Environment Day' and plant trees on this day to make the campus more Green.</li> </ul>
<b>Water Use</b>	<ul style="list-style-type: none"> <li>• In campus small scale/medium scale/ large scale reuse and recycle of water system is necessary.</li> </ul>
<b>Energy Use and Conservation</b>	<ul style="list-style-type: none"> <li>• Increase the use energy efficient lighting such as LED bulbs in campus.</li> </ul>
<b>Waste Generation</b>	<ul style="list-style-type: none"> <li>• Reduce the absolute amount of waste that it produces from college staff offices.</li> <li>• Make full use of all recycling facilities provided by City Municipality and private suppliers, including glass, cans, white, coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.</li> <li>• Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated.</li> <li>• Single sided papers to be used for writing and photocopy.</li> <li>• Important and confidential papers after their validity to be sent for pulping.</li> </ul>
<b>E-Waste Generation</b>	<ul style="list-style-type: none"> <li>• Recycle or safely dispose of white goods, computers and electrical appliances.</li> <li>• Use reusable resources and containers and avoid unnecessary packaging where possible.</li> </ul>

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|  | <ul style="list-style-type: none"><li>• Always purchase recycled resources where these are both suitable and available.</li></ul> |
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## **5. Conclusions**

Considering the fact that the institution is predominantly an undergraduate college, there is significant environmental initiatives both by faculty and students. The environmental awareness initiatives are substantial. The green campus, paperless work system and vermin composting practices are noteworthy. Besides, environmental awareness programmes initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development. As part of green audit of campus, we carried out the environmental monitoring of campus includes Illumination, Noise level, Ventilation and Indoor Air quality of the class room. It was observed that Illumination and Ventilation is adequate considering natural light and air velocity present. Noise level in the campus well within the limit i.e. below 50 dB at day time.

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