

GREEN AUDIT: ONE STEPS TOWARDS SUSTAINABLE DEVELOPMENT

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Introduction

Green auditing is a means of assessing environmental performance (Welford, 2002). It is a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements (EPA, 2003). It is otherwise the systematic examination of the interactions between any operation and its surroundings. This includes all water, air, solid waste, energy noise status examination.

The term 'Green' means eco-friendly or not damaging the environment. This can acronymically be called as "Global Readiness in Ensuring Ecological Neutrality" (GREEN). An environmental audit as defined in ISO 14000 is a systematic, documented verification process of objectively obtaining and evaluating audit evidence to determine whether specified environmental activities, events, conditions, management systems, or information about these matters conform with audit criteria, and communicating the results of this process. "Green Auditing", an umbrella term, is known by another name 'Environmental Auditing'. To implement the green audit other important aspects such as objective of green audit. Drivers of green audit, future scope, benefits, and advantages are necessary to understand. The green audit practically involves energy conservation, use of renewable sources, rain water harvesting, efforts of carbon neutrality, plantation, hazardous waste management & E-waste management etc. The parameters such as activity, waste management, noise, soil, air and water pollution risks of the site are tested and corrective measures to be implemented (if the particular site threatens the surroundings with potential of damage) are suggested. Establishment of green cover through tree plantation and use of non conventional energy resources are included in the survey of a site for determining its environmental safety.

It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience. Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. 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.

Goals

1. To conduct a baseline survey to know the reality status of green practices.
2. To identify strength and weakness in green practices conducted in college campus.
3. To analyze and suggest solution for problems identified from Audit Report.
4. To increase environmental consciousness throughout the campus among all the stakeholders.

5. To identify and assess if some environmental risks inside the college campus.
6. To motivate staff as well as students for optimized sustainable use of available natural resources.
7. To give the direction to work on some local environmental issues.

Objective

1. Develop a green policy (vision document) and framework for the college
2. To map the Geographical Location of the college
3. To document the floral and faunal diversity of the college
4. To examine the current practices which can have impact on the environment such as of resource utilization, waste management, energy conservations, etc.
5. Detecting any leakage, spills or other such problems with the operations and processes
6. To identify and analyze significant environmental issues in campus
7. To introduce and aware students to real concerns of environment and its Sustainability
8. To identify gaps and suggest recommendations to improve the Green Campus status of the college
9. Measuring the environmental impact of each and every process and operation on the air, water, noise, solid waste, energy etc.
10. Measuring the environmental performance of an organization against best practices
11. Providing a database for corrective action and future plans
12. Communicating its environmental performance to its stakeholders though reporting will enhance the image of the company

Methodology

Following methodology adapted for conducting green audit

General steps

1. Define the time line and existing resources for audit
2. Systematic and comprehensive data collection required for green audit
3. Collection and reading of documentation with physical evidences
4. Independent periodic evaluation with regulatory requirements and appropriate standards
5. Systematic review of existing environmental policy

The audit process

Following action should be follow for performing green audit of educational institute.

Pre-audit activities

The pre-audit activities include the following:

1. The purpose of audit, the procedure and the time schedule were discussed.
2. The sites / area /division that are to be audited need to be determined and selected.
3. Questionnaires prepared for actual green auditing in the college campus
4. The green audit scope and objective were identified.
5. The audit plan was designed in such a way that it accommodated changes based on information gathered during the audit and effective use of resources.
6. The audit team collect the entire document which essential for performing green audit.
7. Audit team and assignment of responsibility were established.
8. The background information on the facility including the facility' organization, layout and processes, and the relevant regulations and standards, were collected.

Onsite audit activities

The onsite audit includes:

1. Collect information about land use pattern and land use analysis of college campus.
2. Site inspection is the first step for onsite activity. In this step the audit team discovered matters which are important to the audit but which were not identified at the planning stage.
3. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
4. Gathering audit evidence ie, collecting data and information using audit protocol.
5. Evaluated the audit evidence against the objectives established for the audit.
6. Monitoring of air, water and noise parameter is performing.
7. Collection and site inspection of data regarding to solid waste, energy and leakages of water.
8. An exit meeting to explain the audit findings.

Post Audit Stage

The post audit stage includes the data analysis and preparation of green audit report and follow up plan. All data collected through survey by questionnaire, review of documents and records, review of policies, interviewing of key persons (stakeholders), physical inspection of college campus, monitoring and analysis of air, water, noise quality, were cross checked during the personal visit. All data were tabulated in excel spreadsheets and further analysed by using different software to find out the result in percentile format. For better understanding of the results and to avoid complications, averages and percentages of the tables were calculated. Audit findings are generated by evaluating the audit evidence collected before and during the site inspection against the audit criteria. Interpretation of the overall outcomes is included in final green audit report with possible recommendations. Only information that has been verified should be used as audit evidence. In follow up plan include periodic monitoring of environmental status of campus and the implementation of recommendation suggested by green audit expert etc will be follow.

Conclusion

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. 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.

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