



Kalpataru Vidya Samsthe (R) Estd: 1961

KALPATARU INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belgaum & Recognized by A.I.C.T.E., New Delhi)

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Green Audit Report

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Green Audit Report-2019



KALPATARU INSTITUTE OF TECHNOLOGY TIPTUR 572201

1. INTRODUCTION

The green audit aims to analyse environmental practices within and outside the college campuses, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the green audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the green audit.

1.1 NEED FOR GREEN AUDITING

Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in common areas. Now, it is necessary to check whether our processes are consuming more than required resources? Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

1.2 GOALS OF GREEN AUDIT

University has conducted a green audit with specific goals as:

1. Identification and documentation of green practices followed by college.
2. Identify strength and weakness in green practices
3. Analyze and suggest solution for problems identified.
4. Assess facility of different types of waste management.
5. Increase environmental awareness throughout campus
6. Identify and assess environmental risk.
7. Motivates staff for optimized sustainable use of available resources.
8. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

1.3 OBJECTIVES OF GREEN AUDIT

1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
2. To identify and analyze significant environmental issues.
3. Setup goal, vision, and mission for Green practices in campus.
4. Establish and implement Environment Management in various departments.
5. Continuous assessment for betterment in performance in green

1.4 BENEFITS OF GREEN AUDIT TO EDUCATIONAL INSTITUTIONS

There are many advantages of green audit to an Educational Institute:

1. It would help to protect the environment in and around the campus.
2. Recognize the cost saving methods through waste minimization and energy conservation.
3. Empower the organization to frame a better environmental performance.
4. It portrays good image of institution through its clean and green campus. Finally, it will help to built positive impression for through green initiatives the upcoming NAAC visit

2. OBJECTIVE AND SCOPE

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
- Sustainable use of natural resource in the campus.
- 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 College profile
- Developing an environmental ethic and value systems in young people

3.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 audit report contains observations and recommendations for improvement of environmental consciousness.

4.KIT INFRASTRUCTURE

4.1DETAILS OF TREES AND PLANTS IN CAMPUS

SL.NO	Botanical Name	Common Name
1	Psidium	Guava
2	Artocarpus heterophyllus	Jackfruit
3	Cocos nucifera	Coconut
4	Jasminum	Jasmin
5	Mangifera indica	Mango
6	Azadirachata indica	Neem tree
7	Syagrus romanzoffiana	Queen Palm
8	Microlaena	Grass
9	Cupressus sempervirens	Italian Cypress
10	Weeping Grass	Microlaena
11	Hamelia patens	Firebush
12	Hibiscus rosa -sinensis	Hibiscus
13	Plumeria rubra	Red Frangipari
14	Plumeria obtuse	Singapore graveyard flower
15	Santalum album	Sandalwood tree
16	Arecanut	Areca catechu

4.2 ROOF TOP SOLAR PANELS

Roof top solar water heaters are installed in the KIT hostel building.

Details of Solar Cells Used for Water Heating

S.No	Hostel	No. of Panels	Capacity of Water Tank (lts)
1	Boys hostel	NIL	NIL
2	Girls hostel	14	500lts (38 TUBES)

4.3 LIBRARY

The Library is housed in Administrative block occupies an area about 1500 square meters. The Library department comprises four sections Viz., Issue section, Reference section, Digital Library and Reading Hall. The reference section and reading hall can accommodate about 250 students at a time for studies. Our library has always been the brain of the engineering college which houses valuable information for reference and caters to the educational needs of users. The aim is to motivate and support the process of self learning. Our Library is extremely proud of itself on having more than **68,042 volumes** of which about 13500 titles cover all disciplines in Science and Technology.

Library subscribes **57** technical journals in print form. Library is maintaining back volumes of more than **2330** since 1986 and student's projects for reference. Library is also subscribing e-consortium through VTU e-portal **IEEE-ASPP-POP, Springer E-journals and E-books, Taylor and Francis Online, CRC Netbase, Elsevier Science Direct, ASCE e-journals, IET Digital Library, ProQuest Management Collection and Knimbus database**. Users can access 24X7 in the campus.

Library is maintaining Digital repository using D space software. Digital Library is having more than 25 systems, each provided with internet connectivity. Our library is fully automated using LIBSOFT 10.0.0 and providing OPAC (Online Public Access Catalogue) services to the users. Collection of books databases is available through WEBOPAC module also. Users can search books using their member ID as login and password-library by default. The working hours of the library and Information centre is from 9.00 AM to 9.00 PM on all working days. Reading Hall functions 24 hours in a day. Library has taken the membership of DELNET and NAL. Library has created E-learning environment to use NPTEL, VTU E-learning, MIT etc to the maximum extent. Library Awareness Programme will be conducted to train the users.



4.4 AUDITORIUM

The auditorium can accommodate 250 students, aimed at conducting events like department functions, club activities and meeting of various student support organization. **The college has** an excellent and well furnished Auditorium with CFL lamps illumination. This is also saving a lot of energy and the monthly Electricity Bill reasonably gets reduced. Presents a picturesque inside view of the Auditorium.

INSIDE & FRONT VIEWS OF AUDITORIUM WITH LED LAMPS



HEALTH CENTER



4.5 SEWAGE GENERATED IN KIT CAMPUS

Sewage is a type of wastewater that is produced by a community of people. It is typically transported through a sewer system. Sewage consists of wastewater discharged from residences and from commercial, institutional and public facilities that exist in the locality.

Quantity of sewage generated in KIT campus 59760lit/day and it is carried through municipal sewer

VIEWS OF GREENERY





SIGN BOARDS IN CAMPUS OF KIT





4.6 WASTE MANAGEMENT

The food waste generated inside the campus is diverted to a nearby farm on a daily basis. The farm owner takes the food waste and uses it to his needs.

AERIAL VIEW OF GREENERY IN CAMPUS



4.7 WATER MANAGEMENT

Water conservation is a key activity as water availability affects on the development of the campus as well as on all area of development such as farming, industries, etc. Keeping this view water conservation activity is carried out.

4.8 SOURCES OF WATER

Bore water

A Main source of water is Ground water is extracted to full the requirement. At present there are 02 are bore wells. The college stores the water in overhead tank. The source of wastewater is Domestic Waste Water i.e., Sewage water. The Sewage water mainly comes from Toilets of college, hostel, kitchen and canteen will be carried through municipal sewer

4.9 ENERGY MANAGEMENT

DIESEL GENERATOR DETAILS

The Kalpataru Institute of Technology has installed 3# of Diesel Generator. The following table provides the Diesel generator capacity in the college campus.

S.No	Equipment Name	Make	Capacity in (kVA)
1	Diesel Generator	KOHLER	250KVA



TRANSFORMER DETAIL

The Kalpataru Institute of Technology has installed 2# of Transformer. The following table provides the transformer capacity in the college campus.

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1	TRANSFORMER	250KVA

Vanamahatsova-2019

24th August 2019





Van mahotsav is an annual tree planting movement in India which initially began in 1950. The name Van mahotsav means the festival of trees. It has gained significant importance every year. Millions of saplings are planted across India in observation of van mahotsav.

The festival raises the awareness of trees among people and highlights the need for planting and tending trees as one of the best ways to prevent global warming and reduce pollution.

It is celebrated in almost all parts of India, but usually begins between 1st July to 7th July.

5. SUMMARY

Green Audit is one of the important tools to check the balance of natural resources and its judicial use. Green auditing is the process of identifying and determining whether institutional practices are eco-friendly and sustainable. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area.

Kalpataru Institute of Technology has conducted a “Green Audit” in the academic year 2019-2020. The main objective to carry out green audit is to check the green practices followed by KIT and to conduct a well-defined audit report to understand whether the KIT is on the track of sustainable development.

6. CONCLUSION

From the green audit following are the conclusions, which can be taken for improvement in the campus.

- 1) All departments generate paper waste. Especially, academic building is using more one paper for printing and writing is good practices.
- 2) Food waste generated in campus is mostly from is collected from BOYS hostel areas. The food waste is diverted to nearby farm.
- 3) E- waste are segregated, handled and disposed properly in an eco-friendly manner.
- 4) Reducing the use of one-time use plastic bottles, cups, folders, pens, bouquets, decorative items will be useful to solve the problem of plastic pollution to some extent.
- 5) Wear Mask Signs are provided in the facility.

7. RECOMMENDATIONS

Following are some of the key recommendations for improving campus environment:


- 1) An environmental policy document has to be prepared with all the recommendations and current practice carried by KIT.
- 2) A frequent visit should be conducted to ensure that the generated waste is measured, monitored and recorded regularly and information should be made available to administration.
- 3) The solid waste should be reused or recycled at maximum possible places.
- 4) Rain water harvesting should be implemented.
- 5) The KIT campus should require its own sewage treatment facility



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Green Audit Report-2022



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VIEWS OF GREENERY





RAINWATER HARVESTING

The rainwater harvesting strengthens the water supply to the campus lakes as well as enhance water level of wells in the campus through ground water recharging process.



SIGN BOARDS IN CAMPUS OF KIT



AERIAL VIEW OF GREENERY IN CAMPUS



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The World Environmental Day - 2022

Celebration June 5th, 2022



World Environment Day is a global platform for inspiring positive change. People from more than 150 countries participate in this United Nations international day, which celebrates environmental action and the power of governments, businesses and individuals to create a more sustainable world.



SWACHH BHARATH ABHIYAN - 2022



The Swachh Bharat Mission is a countrywide campaign by the government of India named as the Bharat Abhiyan or the Clean India Mission that was initiated in 2014 that aims at eliminating open excretion and also the management of solid waste is being improved. Its main slogan is one step towards cleanliness.

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10. RECOMMENDATIONS

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- 2) A frequent visit should be conducted to ensure that the generated waste is measured, monitored and recorded regularly and information should be made available to administration.
- 3) Install a water meter to record water usage in the college KIT premises.
- 4)The KIT campus should require its own sewage treatment facility



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