



J·N·N
INSTITUTE OF
ENGINEERING

An ISO 9001:2015 Certified Institution

Approved by AICTE New Delhi | Affiliated to Anna University, Chennai

90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.

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**7.1.6. QUALITY AUDITS ON
ENVIRONMENT AND ENERGY ARE
REGULARLY
UNDERTAKEN BY THE INSTITUTION**



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REPORTS ON ENVIRONMENT AND ENERGY AUDITS SUBMITTED BY THE AUDITING AGENCY



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ACADEMIC YEAR 2018-2019

AUDIT REPORT

Date: 22/01/2019

This Report contain Green audit, Environment audit and Energy audit carried out at JNN Institution of Engineering, Chennai – Periyapalayam Highway, Thiruvallur, Tamilnadu for the Period: Jan-2018 to Dec-2018

Assessment Team:

(Internal)

Dr. G. Gunasekaran, Principal

Mr. C.R Ravisankar, Administrative Officer

Mrs. Tharakeswari V, Associate Professor, Department of Science & Humanities

(External)

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Mr. Vignesh J, Technical Auditor, BMQR Certifications Pvt Ltd



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Prepared by

**BMQR CERTIFICATIONS PVT LTD
CHENNAI.**

ACKNOWLEDGEMENT

We thank Hon'ble Founder & Chairman Shir S. Jayachandran and Vice Chairman Mr. Naveen Jayachandran for assigning this important work of Green, Environment and Energy Audit. We appreciate the cooperation extended to our team during the entire process.

Our Special thanks are due to:

Dr. G. Gunasekaran, Principal

Mr. C.R Ravisankar, Administrative Officer

For giving us necessary guidance and inputs to carry out this very important exercise of Green, Environment and Energy Audit.



Director
BMQR Certifications Pvt Ltd
Chennai



INTRODUCTION

Green Audit aims to analyze the environmental practices within the institution, which will have adverse impact on the eco-friendly ambience, by identification, recording, reporting and analyzing components of environmental diversity of the institution. The process of Green audit enables the institution to determine how and where they are using the most energy or water or other resources and provide a direction on improving the condition of environment and reveals the way in which an institution can reduce energy consumption, water use and reduction in emission of carbon dioxide in the environment. The Institution can then consider how to implement changes and make savings through reduction of resource use.

Green audit also creates health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. Thus, it is imperative that the institution evaluate its own contribution towards a sustainable future.

Green audit is assigned to the criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India which declares the institution as Grade A, B or C according to the scores assigned during the accreditation.



METHODOLOGY

In order to perform Green, Environment and Energy audit, the methodology included different tools such as physical inspection of the campus, observation, review of the documentation, interviewing key persons, data analysis, measurements and recommendations.

The study covered the following areas to summarize the present status in the campus:

1. Water management
2. Waste management
3. Green area management
4. Biodiversity conservation
5. Energy consumption patterns



OBSERVATIONS AND RECOMMENDATIONS

1. Water Management:

This indicator address water consumption to determine the use and hence improving the efficiency of its use.

Observations

The institution has installed Sewage Treatment Plant (STP)

Drinking water is dispensed through water coolers

Recycled water is used for plantations.

Plantations placed inside the block in such way that it receives rainfall

Importance of water is communicated during general meetings

No leakage of water is observed inside the campus

Recommendations

Water conservation activities to be promoted in the campus

Rooftop rain water harvesting

Record of water consumption to be maintained

Quality of water to be checked periodically

Water management plan can be developed and implemented

Plumbing and water related accessories maintenance check to be carried out

2. Waste Management:

This indicator address waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc.

Observations

The waste management is well organized in the Institution

Excess food is sent to nearby ashram

Buffet system is in place for effective food distribution in canteen/mess

Don't waste food poster is placed inside canteen/mess

Disposal of waste is communicated to all staff and students inside the campus



Recommendations

Institution can enroll with certified waste disposal agency

Promote zero waste policy inside the campus

Minimize the use of paper

Ensure wastes are disposed as per norms/local law/regulation

Increase numbers of dustbins inside the campus

Install biogas plant

Can take record of waste generated month on month and implement action plan to minimize

3. Green area management:

This indicates the plants, greenery and sustainability of the campus to ensure the available practices.

Observations

Plantation is done surrounding the institute

Institution is maintaining the existing and also added plantation to the landscape environment

Recommendations

Encourage the use of common transport for staff and students

More trees can be planted in the surrounding areas of campus

Plantation can be done inside the blocks as per the space available

Take photograph yearly on the development green areas

Organize/Promote tree plantation drive

Institution can implement and get certified on Environment management system certificate (ISO 14001)

4. Bio diversity conservation:

This indicates the extent of flora and fauna inside the campus and initiatives adopted by the institution for maintenance and conservation

Observations

Garden and lawns are well maintained

Campus is lush green with plantations of trees, shrubs



Recommendations

- Place feasible plantations on classroom floors and on terrace
- Promote community program and create awareness on conservation activities
- Pollution check for vehicles to be performed periodically
- Environment friendly manure/pesticides to be used
- Botanical garden with wide variety of plants can be planted
- Create awareness on biodiversity and its importance for everyone in the campus

5. Energy consumption patterns:

This indicates the existing energy consumption pattern, setting reference points and areas of improvement

Observations

- General awareness on electricity is orally communicated
- Most Classrooms has adequate natural lights

Recommendations

- Old wirings to be replace, as this leads to loss of energy
- Automatic turn on/off electricity switches can be installed at possible place
- Solar pump can be installed
- Poster on turning off electricity can be pasted
- Record energy consumption data/pattern on individual block/room for better control
- Institution can implement and get certified on Energy management system certificate (ISO 50001)

END OF REPORT

