



**J·N·N**  
INSTITUTE OF  
ENGINEERING

An ISO 9001:2015 Certified Institution

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

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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 2015-2016**

## AUDIT REPORT

Date: 18/01/2016

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-2015 to Dec-2015

### **Assessment Team:**

(Internal)

Dr. P. Karthik, Principal

Mr. C.R Ravisankar, Administrative Officer

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

(External)

Mr. T.G Ganesan, Lead Auditor, BMQR Certifications Pvt Ltd



**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. P. Karthik, 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.

#### Recommendations

Use water from within the campus source such as well

Employ recycling system for water form Air conditioners

Use Smart flushing in toilets

Promote percolation of water using recharge trenches or permeable pavements

Automatic taps

### 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

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

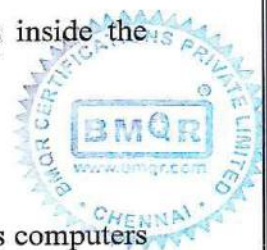
Don't waste food poster is placed inside canteen/mess

Communication is made with respect to minimize/prohibit the use of plastic's inside the campus

#### Recommendations

Make use of recycling facility available with municipality or corporation

Make use of buy back policy for electronics systems or donate old systems such as computers to NGO





Dispose e-waste in an environmentally friendly method

Place different category of dustbins as per the waste generated and ensure its accessibility to everyone inside the campus

Install biogas plant

### **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**

Use draught tolerant plants

Review the list of trees planted

Take photograph yearly on the development green areas

Organize/Promote tree plantation drive

### **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**

Organize Eco clubs within the campus for staffs and students

Botanical garden with wide variety of plants can be planted

Replace disposable and single use plastic within the campus as much as possible

Plantation on important days such as "environment day"

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

### **Recommendations**

Carryout planned maintenance/service of equipment's within the campus

Promote the use of solar vehicle inside the campus

Poster on turning off electricity can be pasted

Record energy consumption data/pattern on individual block/room for better control



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**END OF REPORT**