## GANESH LAL CHOUDHURY COLLEGE

Barpeta Road, Barpeta -781315, Assam

## **ENERGY AUDIT REPORT-2022**

It is to certify that G L Choudhury College, Barpeta Roadis committed to create an ecofriendly sound campus by implementing some standard practicesto identify green energy initiatives adopted by the college. Dr Jaya Biswas Kunda, Principalof the College deserves the appreciation for her initiative in conducting the Energy Audit for the college. The Audit team is thankful to all the students, officiating members of Offices and faculty members of the college for their support and co-operation to compile and complete this report on time.

A few suggestions were also made with the report to take appropriate measures to control the use of electricity etc. It is hoped that the report will certainly receive due attention of the concerned authority and the College shall implement the green practices whatever suggested for better future of all stakeholders of the G L Choudhury College.

Dr. Partha Pratim Baruah

Auditor

G L Choudhury CollegeGreen and Energy Audit-2022

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Chairman, Green Audit Committee

Gauhati University, Guwahati-781014, Assam

ENERGYAUDIT

As per Energy Conservation Act, 2001; the Energy Audit must include Verification, monitoring, and analysis of the use of energy including submission of a technical report containing recommendations for improving energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption. The scope of the energy audit hence includes the collection of all relevant data, documents, electricity bills, log books relating to electricity use & operations etc., inspection of the buildings & installations and then, to analyze the data to evaluate and assess energy use and also, to suggest measures to reduce energy use and improvement of performance. The present audit therefore aimed to cover the aggregate consumption of electrical and natural gas energy in G L Choudhury College, Barpeta Road covering all academic and administrative blocks and hostels. Energy use is clearly an important aspect of campus sustainability and thus, requires no explanation for its inclusion in the assessment.

## Source and consumption of Energy

In GL Choudhury College, Barpeta Road, energy is mainly used to manage and run the 1) lighting's load, 2) office equipment's, 3) air conditioners, 4) water cooler 5) fan, 6) water pump and 7) Cleaning and construction gadgets and 8) laboratory purposes.

The primary source of the energy for G L Choudhury College, Barpeta Road is the electricity received from Assam Power Distribution Company Limited supplied through a 42 KW connected load with the Consumer No. 063010060088 under the HT IV BULK SUPPLY (GOVERNMENT EDUCATION) Category. The College has also 01 Diesel run generator of 40 KW capacity which is mainly used during power failure during the Examination seasons. LPG are utilised in Canteen, laboratories and Hostels only.



Principal ilc

G.L. Choudhury College
Barpeta Road

## Table 6: Energy consumption in GL Choudhury College, Barpeta Road

Annual Electrical Energy consumption :: INR 18193.00 per month

(In terms of money)

(2021-2022) The second second

LPG requirement per year

: 18 Nos

Generator

:01 No (40KW)

Fuel (Diesel)

:60 litre

Water Pump

: 07 (0.5 & 1.0 HP)

No of energy efficient AC

: 04 Nos.

Refrigerator

:01 No

Xerox machine

: 03 Nos.

Water Purifier/Cooler: 09 Nos.

Online UPS

Inverter

: 09 Nos. :01 No

Fan

: 212 Nos

Percentage replacement of

Non-energy efficient machines in last 2 years

:40%

Installation of energy installation machine in last 2 years: 6 Nos.

No of LED installation at present:

: 109 LED Tube light

: 214 LED Bulb

Percentage of increase of LED installation in last 2 years: 90%

Building energy performance index

: 4.49 Kwh/m<sup>2</sup>/year

