

# INDUSTRY INSTITUTE PARTNERSHIP CELL

## KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE - 638 060, INDIA



Estd : 1984



CERT No : 99-100-20788  
ISO 9001 : 2015

Dr.T.Logeswaran, M.E., Ph.D

Associate Professor

BEE Certified Energy Auditor (Regd.No:EA13164)

Department of Electrical and Electronics Engineering

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Ref: KEC/GA/2019-2020/5912

10/01/2021

### GREEN AUDIT CERTIFICATE

This is to certify that, we have conducted a Green Audit in in Pandian Saraswathi Yadav Engineering College, Arasanoor, Thirumansolai Post, Madurai-Sivagangai Highway, Tamil Nadu - 630 561 on 5<sup>th</sup> January, 2021. The audit process investigates the following activities.

- I) Coverage of matured trees
- II) Reduction of heat island effects
- III) Inspection of the water conservation measures
- IV) Coverage of turf and landscape

Audited and Accounted for June2019 to May2020

Yours Truly

Dr.T.Logeswaran  
Associate Professor

DEPT. OF ELECTRICAL & ELECTRONICS ENGG.  
KONGU ENGINEERING COLLEGE,  
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### ENVIRONMENTAL AUDIT CERTIFICATE

This is to certify that we have conducted an Environmental Audit in in Pandian Saraswathi Yadav Engineering College, Arasanoor, Thirumansolai Post, Madurai-Sivagangai Highway, Tamil Nadu - 630 561 on 5<sup>th</sup> January, 2021. This audit process highlights the present CO<sub>2</sub> emission and methods adopted to neutralize the same in the college campus.

S.No.	Description	Type of fuel and their conversion process		
		Electrical energy consumed	Diesel	LPG
1	Annual Energy Consumption	93513 kWh	23982 lit	125 Nos.
2	CO <sub>2</sub> Emission standards	0.95 kg/kWh	2.68 kg/lit	56.2 kg/cyl.
3	Total CO <sub>2</sub> emission(tonne/Annum)	160.13		
4	Total No. of students and staff	784		
5	Per capita CO <sub>2</sub> emission per year	0.204 tonne (+)		
6	No. of Matured Trees (1 tree absorbs 22 kg CO <sub>2</sub> /year)	680		
7	CO <sub>2</sub> neutralised due to matured trees	14.96 tonnes		
8	CO <sub>2</sub> to be neutralised per capita per year	0.185 tonne (-)		

#### Systems Audited

- ✓ Electricity consumption
- ✓ Diesel consumption
- ✓ LPG consumption

#### Systems Inspected

- ✓ Solid & E waste handling & Management
- ✓ Usage of chemical, salts & acids
- ✓ RO system

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10/01/2021

**ENERGY AUDIT CERTIFICATE**

This is to certify that, we have conducted an Energy Audit in in Pandian Saraswathi Yadav Engineering College, Arasanoor, Thirumansolai Post, Madurai-Sivagangai Highway, Tamil Nadu - 630 561 on 5<sup>th</sup> January, 2021. The audit team has identified energy saving measures and the summary of Energy Audit Process is given below.

S.No.	Description	Parameters
1	Annual Energy/ fuel Consumption	23982 litres diesel, 125 cylinders of LPG & 93513 kWh electricity
2	Present Annual Energy Cost	Rs. 36,87,882
3	Proposed cost Savings due to the replacement 100 fans with BLDC fans	Rs. 78,750.00
4	Proposed cost savings per year due to the installation of 100 LED lights	Rs. 49,500.00
5	Proposed cost savings per year from LPG cylinders by efficient usage	Rs. 13,000.00
6	Initial Investment Required	Rs. 3,74,000.00
7	Total savings ((3) + (4) + (5))	Rs. 1,41,250.00
8	Payback period in years	2.64

**Equipment/Systems Audited**

Electrical Network

Inverter, UPS and Battery System

Lightings, Fans & Air Conditioning System

Diesel Fuel Consumption

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