

INDUSTRY INSTITUTE PARTNERSHIP CELL

KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE - 638 060, INDIA



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Ref: KEC/GA/2021-2022/5912

18/10/2022

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 11th October, 2022. The audit process investigates the following activities.

- I) Coverage of matured trees
- II) Site Preservation
- III) Reduction of heat island effects
- IV) Inspection of the water conservation measures
- V) Pedestrian network
- VI) Energy efficiency
- VII) Health and well-being facilities

Audited and Accounted for June 2021 to May 2022

Yours Truly

Dr. T. Logeswaran

Certified Energy Auditor EA-13164,
IGBC – AP, ISO 14001:2015 - Environmental
Management Systems Lead Auditor

DEPT. OF ELECTRICAL & ELECTRONICS ENGG
KONGU ENGINEERING COLLEGE,
THOPPUPALAYAM (PO)
PERUNDURAI (TK), ERODE - 638 060

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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 11th October, 2022. This audit process highlights the present CO₂ 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	82611 kWh	8640 lit	40 Nos.
2	CO ₂ Emission standards	0.95 kg/kWh	2.68 kg/lit	56.2 kg/cyl.
3	Total CO ₂ emission(tonne/Annum)	103.88		
4	Total No. of students and staff	691		
5	Per capita CO ₂ emission per year	0.1503 tonne (+)		
6	No. of Matured Trees (1 tree absorbs 22 kg CO ₂ /year)	753		
7	CO ₂ neutralised due to matured trees (tonne/Annum)	16.566 tonnes		
8	CO ₂ to be neutralised per capita per	0.1264 tonnes(-)		

Systems Audited

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

Systems Inspected

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

Audited and Accounted for June 2021 to May 2022

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Estd : 1984



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

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18/10/2022

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 11th October, 2022. 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	8640 litres diesel, 40 LPG cylinders & 82611 kWh electricity
2	Present Annual Energy Cost	Rs.18,80,749.00
3	Proposed cost Savings due to the replacement 100 fans with BLDC fans	Rs. 75,000.00
4	Proposed cost Savings per year from LPG cylinders by efficient usage.	Rs. 34,000.00
5	Proposed cost savings per year due to the installation of 50 kW solar PV Plant.	Rs. 4,62,000.00
6	Initial Investment Required	Rs. 19,00,000.00
7	Total savings ((3)+(4)+(5))	Rs. 5,71,000.00
8	Payback period in years	3.33

Equipment/Systems Audited

Electrical Network

Inverter, UPS and Battery System

Lighting, Fans & Air Conditioning System

Diesel Fuel Consumption

Audited and Accounted for June 2021 to May 2022

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