



KONGU ENGINEERING COLLEGE (Autonomous)

PERUNDURAI, ERODE - 638 060, INDIA



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Professor

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To whomsoever it may concern

This is to certify that, we have conducted an **Energy Audit** in M/s. **Hajee Karutha Rowther Howdia College**, Uthamapalayam, Tamil Nadu on 20 March 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 Consumption	52302 kWh + 6005 lit LPG + 20420 lit diesel
2	Present Annual Energy Cost	Rs 23,35,788
3	Annual Energy Savings due to the installation of solar PV and wind	Rs 1,01,400
4	% Energy Savings due to solar PV and	30 % (15600 kWh)
4	Proposed % Energy Savings	8 % Electrical + 7 %LPG + 4% diesel
5	Proposed annual Energy Savings	Rs 1,20,000
6	Initial Investment Required	Nil

Equipment/Systems Audited

Electrical Network

Solar PV system

Inverter, UPS and Battery System

Lightings, Fans & Air Conditioning System

LPG Consumption for Cooking Application

Fuel Consumption

Audited and Accounted for Jan-2020 to Dec-2020

Yours Truly


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This is to certify that, we have conducted a **Green Audit** in M/s. **Hajee Karutha Rowther Howdia College**, Uthamapalayam, Tamil Nadu on 20 March 2021. This audit process investigates the following activities;

- I) Coverage of 388 matured trees,herbal garden and rain water harvesting pit
- II) Inspection of Rooftop Solar PV Plant
- III) Inspection of Wind turbines.

Audited and Accounted for Jan-2020 to Dec-2020

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This is to certify that we have conducted an **Environmental Audit** in M/s. **Hajee Karutha Rowther Howdia College**, Uthamapalayam, Tamil Nadu on 20 March 2021. 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	52302 kWh	20420 lit	6005 lit
2	CO ₂ Emission (tonne/Annum)	49.6	54.7	9.06
	CO ₂ Emission standards	0.95 kg/kWh	2.68 kg/lit	1.51 kg/lit
3	Total CO ₂ emission	113 t		
4	Total No. of students and staff	2793		
5	Per capita CO ₂ emission	0.040 t (+)		
6	Energy from solar PV (51 kWh/day for PV and 1 kWh/day for wind for 300 days)	15600 Kwh		
7	CO ₂ neutralised due to Renewables	14.82 t (-)		
8	No. of Matured Trees (1 tree absorbs 22 kg CO ₂ /year)	388		
9	CO ₂ neutralised due to trees	8.5 t (-)		
10	Per Capita CO ₂ Emission to be Neutralized	0.032 t		

System Audited	Systems Inspected
Electricity consumption and generation	Solid & E waste handling & Management
Diesel consumption	Usage of chemical, salts & acids
LPG consumption	RO system

Audited and Accounted for Jan-2020 to Dec-2020

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This is to certify that 1 m³ capacity Biogas plant is in function at M/s. **Hajee Karutha Rowther Howdia College**, Uthamapalayam, Tamil Nadu and it is verified during the **Environmental Audit**.



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