



CERTIFICATE FOR ENVIRONMENTAL AUDIT PROCESS

This is to certify that, we have conducted an **ENVIRONMENTAL AUDIT** in **SENGUNTHAR ENGINEERING COLLEGE**, Tiruchengode, Namakkal – 637 205, Tamil Nadu on **17 DECEMBER 2021**. This audit process highlights the **energy balance sheet** indicating various energy carriers associated with the regular activities of the college and their CO₂ mapping.

S. No.	Energy Consumption & CO ₂ Emission			CO ₂ Neutralization		
	Description	Energy Quantity (Annum)	CO ₂ Emission (Tons/Annum)	Description	Energy Usage	CO ₂ Neutralized (Tons/Annum)
1.	Electrical Energy	1,36,530 kWh	112.0	Mature Trees	195 No's	2.6
2.	Diesel (Transport + DG)	7,797 Litres	20.6	Energy generation from DG	3,153 kWh	4.3
3.	LPG Consumption	1,428 kg	4.3			
4.	Total Emission		136.8	Total-Neutralized		6.9
5.	Balance CO₂ to be Neutralized = 129.9 Tons/Annum & Per Capita CO₂ Consumption = 0.17 Tons/Annum¹					

(¹ Total strength of students, Teaching & technical staff = 783)

Systems Audited:

• Electricity Consumption	• Usage of Chemical, Salts & Acids
• Diesel Consumption (Transport + DG)	• Cleaning Agents
• LPG Consumption	• RO Plant and Water Distribution System
• Solid and E-Waste Handling & Management	• STP and Waste Water Utilization

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Audit conducted and verified by,

(Dr. S.R. SIVARASU)

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CERTIFICATE FOR GREEN AUDIT PROCESS

This is to certify that, we have conducted a **GREEN AUDIT** in **SENGUNTHAR ENGINEERING COLLEGE**, Tiruchengode, Namakkal – 637 205, Tamil Nadu on **17 DECEMBER 2021**. The audit process investigates the following activities;

1. Coverage of matured trees (nearly 195 trees available in the college campus)
2. Implemented many flowers, shrubs and ornamental plants
3. Planning for indoor plants and improvement of indoor and ambient air quality
4. Pollution certificates for all transport vehicles
5. Innovative ways to harvest rain water (Both from buildings and road run-off)
6. Identification of expansion of green coverage for planting more trees
7. Assessment of RO plant & water distribution network
8. Evaluation of Solid & E-waste management system
9. Possibilities to implement various Renewable Energy Systems for regular activities (like solar hot water system for water preheating, bio-manure generation, waste to electricity, waste to wealth etc.,)
10. Recommendation to implement Rooftop Solar PV Plant (50 kW Grid Interactive Model).

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CERTIFICATE FOR ENERGY AUDIT PROCESS

This is to certify that, we have conducted a detailed **Energy Audit** in **SENGUNTHAR ENGINEERING COLLEGE**, Tiruchengode, Namakkal – 637 205, Tamil Nadu on **17 DECEMBER 2021**. The audit team has identified **9 Energy Conservation Proposals (ENCONs)** and summary of the Energy Audit Process is given below.

Summary of Energy Conversion (ENCON) Proposals		
S. No.	Description	Parameters
1.	Present Annual Energy Consumption	1,36,530 kWh + 1,428 kg of LPG
2.	Present Annual Energy Cost	Rs. 15.1 Lakhs
3.	Proposed % of Energy Savings	10.0 % Electrical + 15.0 % LPG
4.	Proposed Annual Energy Savings	13,653 kWh + 214 kg of LPG
5.	Proposed Financial Savings	Rs. 1.6 Lakhs
6.	Initial Investment Required	Rs. 2.5 Lakhs
7.	Simple Payback Period	Nearly 1.6 Years

Equipments/Systems Audited:

Electrical System	Thermal System
<ul style="list-style-type: none">All major electrical equipment's	<ul style="list-style-type: none">Diesel Generators, Pumps and Motors
<ul style="list-style-type: none">Electrical Distribution system	<ul style="list-style-type: none">Boiler and Steam Distribution System
<ul style="list-style-type: none">Lightings, Fans & Air Conditioning System	<ul style="list-style-type: none">LPG for cooking application
<ul style="list-style-type: none">Inverter, UPS and Battery System	<ul style="list-style-type: none">Proposal for Rooftop Solar PV System

The detailed Energy Conservation Proposals are presented in the Audit Report.

Audit conducted and verified by,

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SENGUNTHAR ENGINEERING COLLEGE (AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956
NAAC Accredited with 'A' Grade

TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU



Green Campus Policy



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GREEN CAMPUS POLICY

Sengunthar Engineering College (Autonomous) should demonstrate higher sensitivity and responsibility in implementing green concepts in the campus. The campus sustainability initiatives are established with the aim of promoting green practices in and beyond the institution and develop best practices strategies in environmental management. Although establishment and maintenance of green campus is important, spreading awareness on the green practices among students and educating stakeholders is our priority.

The policy starts with information and ends with a plan of action. In turn, SEC will fairly manage water resources, waste management, conserve natural resources, and provide eco-friendly and recommend minimal paper use. College will implement following practices towards establishment and maintenance of green campus and adopt the awareness and green initiatives beyond the campus too. This will result in a safe environment that is a better place to live, learn and play.

Clean Air Initiatives

We encourage our students and staff to use public transportation.

The entry of automobiles inside the campus is restricted to discourage the use of private vehicles.

Smoking Free Campus - the college prohibits smoking and the use of other tobacco products.

Promoting the use of Bicycles and provision of Pedestrian Friendly pathways.

The college administration strictly bans the use of single use plastics in its premise to make it a 'Plastic Free Campus'.

Enhancement of green cover by landscaping with trees and plants.

Water Management

Always practice and implement rainwater recycling and harvest rain water to resolve and manage water scarcity problems in future

Protect the environment towards climatic changes and conservation of sources for drinking water.

Regularly inspect taps for draining and repair immediately to avoid loss of potable water.

Promote effective water management practices like sprinkling irrigation to garden and rain water harvesting.

Waste Management

Spread the awareness amongst society about the waste management for ecosystem and methods for its disposal.

Promoting 3R principle (reduce, reuse, recycle) among the students and staff for minimizing waste generation.





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Renewable Energy

Improve awareness about renewable energy.

Promote adaptation of solar power equipment/converters.

Adopt and promote power saving electrical equipment.

Beware of the role of scientific electrification and the use of bulbs and equipment in saving power.

Paperless Office

Advocate the benefits of paperless work in reducing waste production and green practices.

Digital Library.

Save Energy TIPS:

1. Activate power management features on your computer and monitor so that it will go into a low power "sleep" mode when you are not working on it.
2. Turn off your monitor when you leave your table.
3. Activate power management features on your laser printer.
4. Whenever possible, shut down rather than logging off.
5. Turn off unnecessary lights and use daylight instead.
6. Avoid the use of decorative lighting.
7. Use LED bulbs.
8. Keep lights off in conference rooms, classrooms, lecture halls when they are not in use.
9. Use the fans only when they are needed.

SEC has to work out the time bound strategies to implement **green campus initiatives** for healthy ecosystems.

