



7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Sengunthar Engineering College is committed to "zero waste" and reducing the environmental impact of its activities through its philosophy of "reduce-reuse-recycle". It advocates conservation of resources, especially natural resources, to generate minimal waste and manage it from its inception to its final disposal. Routine waste is daily collected in dustbins at different locations, segregated into different types of bio and non-bio degradable waste and non-bio degradable wastes taken to the dumping yard. Biodegradable wastes are converted into nutrient rich manure in the Vermicomposting Plant.

Efforts for Waste Management include the following:

- 1. The Vermicomposting Plant is established to decompose the biodegradable wastes generated at our college campus and also demonstrated to the students about the construction of the plant. Solid waste such as fallen leaves and kitchen wastes are collected from the various points of sources and segregated according to their nature. Nutrient rich manure is produced from the biodegradable wastes by the Vermicomposting **Process**. The vermi compost is used in the College garden.
- 2. Used Papers, old newspapers, damaged note books and files are given for recycling to the external agencies. Double sided printing is encouraged to minimize the paper waste.

3. E-waste management:

The e-waste is limited in the campus by maintaining a repair centre for computers and computer-based items. The computer maintenance and repair is centralized for better coordination and all the repair or non-operating complaints are streamlined and the report of the repair service is monitored. The irreparable systems are discarded and the usable parts are used for the replacements. The discarded parts of the systems and other electronic equipment are sold out to vendors for their own recycling process.

4. Food waste: 15 Kgs of food waste is generated from the hostel and canteen per day which is sent to piggeries. Quantity of food waste generated in the Hostel is monitored by the Warden and the Management periodically and the necessary steps have been taken to reduce the food waste by giving awareness among the students.





5. Stopping or limiting the usage of non-biodegradable material like plastic bags inside the campus.





7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)



Vermicomposting Plant



Vermicompost is used in the Garden





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







Demonstration of Vermicomposting Plant to the Students





Food Waste - Awareness Posters in the Hostel





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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.	Energy Consumption & CO ₂ Emission			CO ₂ Neutralization		
No.	Description	Energy Quantity (Annum)	CO2 Emission (Tons/Annum)	Description	Energy Usage	CO2 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	3,153	4.3
3.	LPG Consumption	1,428 kg	4.3	from DG	kWh	
4.	Total Emission		136.8	Total-Neutralized		6.9
5.	Balance CO2 to be Neutralized = 129.9 Tons/Annum & Per Capita CO ₂ Consumption = 0.17 Tons/Annum ¹					

(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

Α

Audit conducted and verified by,

S.R. Simo

(Dr. S.R. SIVARASU)

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CERTIFICATE FOR GREEN AUDIT PROCESS

This is to certify that, we have conducted a <u>GREEN AUDIT</u> 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).

Audit conducted and verified by,

3.R.8:2

(Dr. S.R. SIVARASU)

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