



ST. ANNE'S COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai)

ANGUCHETTYPALAYAM, PANRUTI – 607 106.

Best Practice II

1. Title of the Practice:

Creation and maintenance of an Eco-friendly Campus

An eco-friendly environment is developed in the SANCET campus to reduce the overall impact of the built-up environment on human health and the natural environment, through the efficient use of energy, water conservation, waste management, green initiatives and sustainable development.

2. Objective of the Practice

- The objective of the practice is to make the students and staff members to inculcate environmental values and consciousness.
- This practice ensures the protection of environment through green energy initiatives, energy conservation, renewable energy sources, ground water recharging, effective waste management measures, e-waste management and hazardous waste management.
- To raise environmental awareness among students, resulting in better environmental management, greater sustainability and an improvement in the quality of life for all the people associated with the campus.

3. The Context

Saving “Mother Earth” is an integral part of our institution education. Keeping the growing ecological concerns in mind, there is a dire need for immediate action to be carried out and promote eco-friendly practices. The environment has gone through drastic change due to factors like pollution, over usage of plastic and mismanagement of natural resources. In order to control the devastating environmental changes, awareness regarding environmental issues is served through the numerous green initiatives and practices have been taken in the campus.

SANCET has been nurturing sustainable practices to impart knowledge to create a green, clean and eco friendly campus. This practice of our institution helps students to develop an attitude of concern in eco friendly environment.

4. The Practice

Eco-Friendly Practices followed by both the faculty and the students on the campus are:

a) Energy Efficiency

- A solar roof top photovoltaic system has been installed for generating 600 Watt on the roof top to promote renewable energy consumption in our Institution. This solar energy generation is completely used for street lights and pathway lights on the campus.



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- The CFL fittings of higher wattage are replaced with the 65 numbers of LED fittings of lower wattage with the same luminous level for the Street Lights on the campus and corridor to promote the efficient utilization of energy.
- We use 376 numbers of LCD Monitors for consuming less power in our campus.
- A five star rating refrigerator has been installed in the Institution.

b) Waste Management

- Separate bins are kept in various places on the campus to collect degradable and non-degradable waste.
- Liquid waste is directed to the gardens for watering the plants.
- E-waste such as malfunctioning, damaged circuit boards, keyboards, monitors, mouse, printers and headphones are collected in separate bins and disposed to Sri Bala Computers, Panruti, to provide e-waste management service.
- The waste papers, plastic, metal waste such as metal scrap, metal cuttings waste, bars, rods, sheets, damaged steel chairs and vehicle waste tyres are collected and properly disposed to Kavinila Waste Paper Mart, Panruti, to provide waste management service.
- The mass collection of the biodegradable organic waste is dumped into the compost pit (250 ft²) and it is used as manure to the plants on the campus.
- The inorganic waste is safely disposed into the earthen pits with safety precautions.

c) Water Conservation

- Rainwater harvesting is available at Annai Annammal block in order to make the Institution self-sufficient in water resources and used for domestic purposes. It improves the green belt, particularly the lawn and Herbal garden and Orchard.
- The rooftop rain water from all other blocks is directed to reach our gardens.
- The bore well near the Library premises is used to replenish rain water. Bore well recharge technique makes sure the storage naturally filtered rainwater. The ground water level rises when the bore well is recharged.
- The bunds are used to help hold water on sloped ground, which helps recharge groundwater and increase soil moisture.
- The waste water from the RO plant and the water cooler in Administrative Block is used for watering the butterfly garden.



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d) Green Campus Initiatives

- Security personnel at the main gate restrict public vehicle entry into the campus. Only staff members, students and guest vehicles are allowed inside the campus.
- All roads on the campus are pedestrian-friendly as vehicle movement is limited on the campus.
- The campus is made plastic-free. Students and faculty members have been educated on the importance of reducing plastic usage, particularly the use of single-use plastics.
- All the buildings on the College campus are surrounded by 88 varieties of trees, flowering and non-flowering plants. Plants are grown on both the sides of the roads to make the entire campus an environment-friendly place.
- Plantation is a continuous process and dead plants are replaced by new plants. A chief guest invited for any event/function planted saplings in our campus.

5. Evidence of Success

- The Institution has signed an MOU with Kavinila Waste Paper Mart, Panruti and Sri Bala Computers, Panruti to provide paper waste & metal waste management service and e-waste management service respectively.
- The campus has a green cover of about 65-70% (Refer: Green Audit Report 2022, p.53). Great care is taken for the systematic maintenance and robust growth of trees and plants.
- Green Audit and Energy Audit was done and honoured with Best Green Campus Award by Nature Science Foundation, Coimbatore on 21.12.2022.
- Through periodical tree plantations, flora, avian fauna and chordates on the campus have been enriched, resulting in the transformation of the campus into an eco-friendly one.
- Concentration of CO₂ in the atmosphere is found to be low which did not exceed the critical limit of CO₂. All the locations in the campus are having pure air with good air exchange which are free from pollutants and CO₂ level is within permissible limits that extends from 425 ppm to 503 ppm. (Refer: Energy Audit Report 2022, p.27).
- The campus has a maximum number of more oxygen releasing and carbon dioxide assimilating plants such as Areca palm, Banana tree, Money plant, Neem tree, Arali, Gulmohar tree, Pagoda tree, Java plum tree, Indian rosewood tree, Ficus species, Flame of the forest tree, Sandal wood tree, Teak tree, Almond tree, Goosberry tree, Coconut tree, Plantain tree, Ceylone satinwood tree, Caribbean trumpet tree, Pongamia trees including some of the shrub and herbal plants.



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- The campus has a proper waste management system that is tailored to handle the various types of waste produced. This system includes separate dust bins for non-degradable and degradable waste.
- Green power generation by using solar panel compact the use of conventional electricity ingestion.
- The green initiatives and environmentally friendly practices implemented at SANCET have resulted in a beautiful campus that is soothing and refreshing to be around.

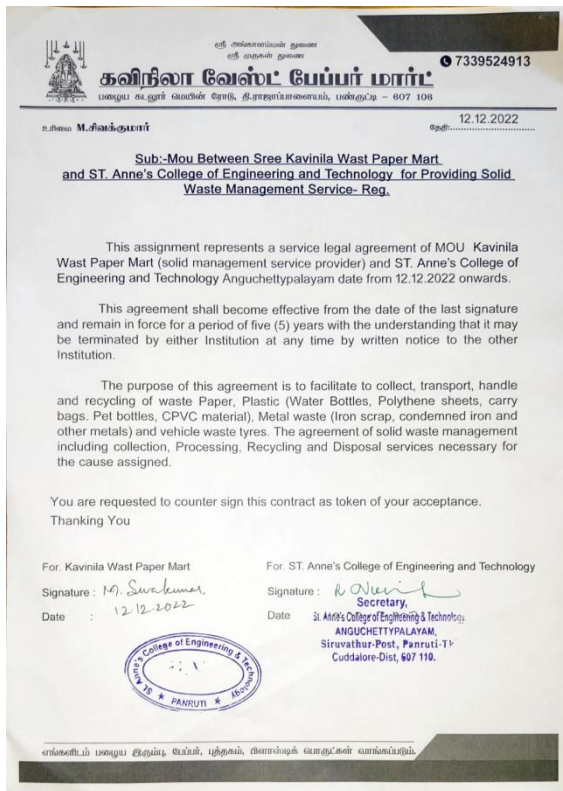


Figure 1 - MoU with Kavinila Waste Paper Mart

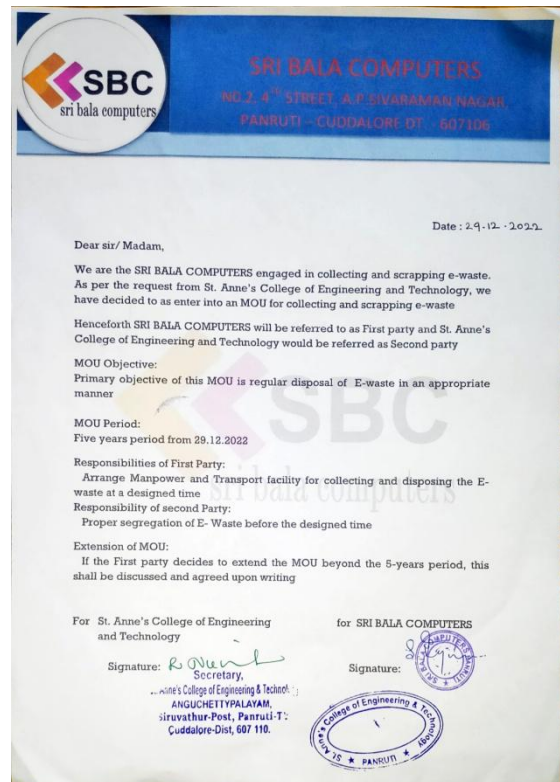


Figure 2 - MoU with Sri Bala Computers



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Figure 3 - Certificate of Green Campus Audit



Figure 4 - Certificate of Energy Audit



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Figure 5 - Best Green Campus Award



*Figure 6 - Tree Planting Programme on
6.11.2019*



*Figure 7 - Students Planting Trees on
24.09.2021*



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Figure 8 - Pedestrian Pathways



Figure 9 - Solar Panel and Street Lights

6. Problems and Resources

- Sufficient manpower and money is needed to maintain green practices.
- To strengthen the Eco Club to create awareness on implementing more programmes on greening the nature conservation and environmental protection among the students.

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