





University : Karunya Institute of Technology and Sciences
 Country : India
 Web Address : www.karunya.edu

[5] Transportation (TR)

[5.9] Zero Emission Vehicles (ZEV) Policy on Campus

	
<p>Example of Charging points for EV (KITS, Coimbatore)</p>	<p>Electrical Vehicles (KITS, Coimbatore)</p>

Description:

Number of Electrical Vehicle : 01
Number of Seater : 11+1
Size of the Vehicle : 10X8X5 feet
Charging Station : 01
Battery Quantity Required : 6
Controller : 48V - 350A controller
Net vehicle weight : 746kg
Max speed : 25kmph
Drive Motor Type : 5kW 3-phase AC induction drive motor
Country of Origin : Made in India

The Roots Company 12 seater electrical vehicle is a highly reliable and efficient transportation solution designed specifically for professional use. With its spacious interior and seating capacity, it offers a comfortable and convenient mode of transport for large groups or organizations.



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION

AICTE Approved & NAAC Accredited

COIMBATORE – 641 114, Tamil Nadu, India

POLICY ON ENVIRONMENTAL SUSTAINABILITY –
GREEN CAMPUS, ENVIRONMENT AND
ENERGY CONSERVATION



1. BACKGROUND

There has been a realization on the fundamental interdependence among environment and the physical, biological, social surroundings and their interactions that sustain life. The Institution has a special responsibility to conduct its activities in an environmentally sound and sustainable manner. The Institution also understands the legal framework within which it must operate. This prompted KITS to take initiatives to establish scientific treatment of sewage water and to produce biogas from the waste and to adopt solid waste management. The reuse of treated liquid waste for gardening and irrigating the plants in the experimental farm by using micro-irrigation technique has been introduced. Solid waste is converted into conventional and vermi-compost for the agricultural experimental stations. Rainwater harvesting and other water conservation techniques are practised in the campus. Sustainable energy sources like solar and biogas are harnessed and the wastage of energy is prevented. Regular energy, water and environment auditing is conducted.

2. RELEVANCE OF THE POLICY

Through this policy, KITS aims:

- To develop environmentally sustainable campus that will inculcate sustainability values and principles through the participation of all concerned
- To work towards a sustainable development jointly with other educational institutions at national and international levels
- To comply with all applicable legal requirements to which the Institution subscribes
- To create awareness on sustainability issues by supporting sustainability related curricular and extra-curricular activities
- To reduce the emission of greenhouse gases in the Institution campus with proper planning
- To reduce the environmental impact through the conservation of its material resources
- To promote 3-R policy (reduce, re-use and recycle) in waste management
- To encourage the utilization of green materials for new building activities
- To ensure that this policy is reviewed periodically, documented, implemented and maintained to ensure continual improvement in the environmental performance through environmental audit
- To take positive action to promote biodiversity on sites that the Institution manages and the areas surrounding it.

3. SCOPE

- This policy provides a framework for environmentally sustainable practices, activities, and operations at KITS
- The policy applies to all KITS staff, students, and visitors.

4. DEFINITIONS

4.1 Sustainability

Creating a balance between the environment, social issues and economics, in order to meet the needs of the present, without compromising the needs of future generations.

4.2 Environment

Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

4.3 Environmental aspect

Element of an organisation's activities or products or services that can interact with the environment.

4.4 Environmental Impact

Any change to the environment whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.

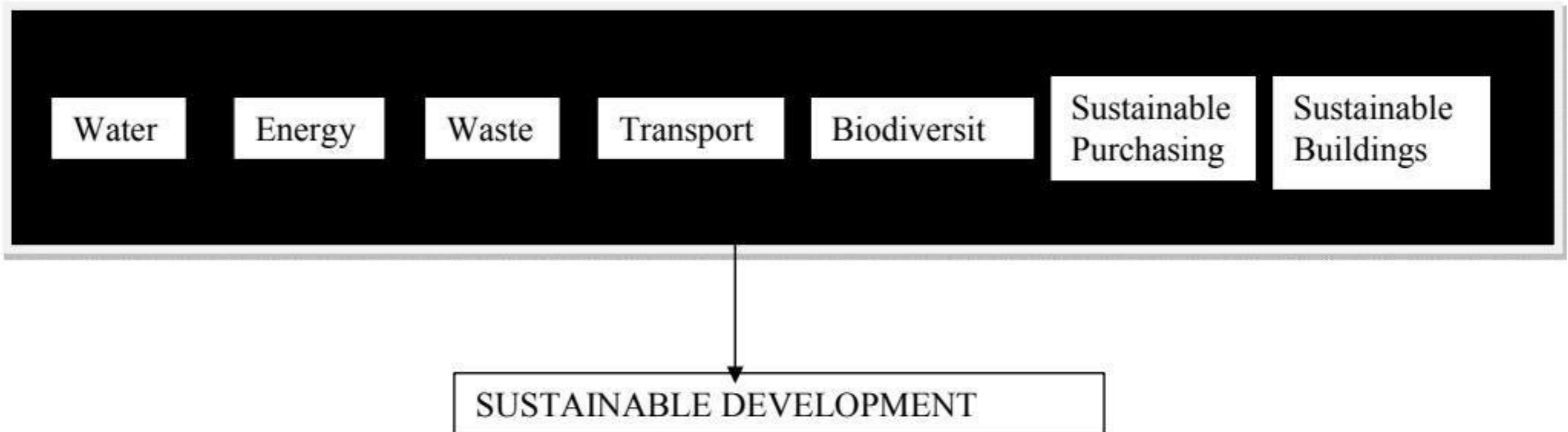
4.5 Environment Management System

Part of an organisation's management system used to develop and implement its environment and sustainability policy and mitigate its adverse environmental impacts.

4.6 Continual Improvement

Recurring process of enhancing the environment management system to achieve improvements in overall environmental performance consistent with the organisation's environment and sustainability policy.

5. ENVIRONMENTAL POLICY STATEMENTS



5.1 Water

Water conservation and management practiced in KITS are to provide safe water, review opportunities and implement measures in water conservation, treatment, and to reduce pollution entering into its water courses through storm water drains and sewers. KITS ensures that regular assessment of both surface and ground water quality and quantity is carried out, keeping in view the Sustainable Development Goals of the UN.

5.2 Management of Greenhouse Gases/ Sustainable Energy Sources

KITS endeavours to reduce the emission of greenhouse gases (GHGs) deriving out of energy utilization and such other activities that contribute to global warming. The Institution thrives for the environmental aspect by minimising the carbon footprint of goods and services through

sustainable procurement and resource conservation programmes. KITS ensures that renewable energy sources are utilized to the maximum to conserve energy and reduce the carbon foot print.

5.3 Resources Utilization

KITS ensures that all resources that have an environmental impact are used efficiently and effectively.

5.4 Sustainable Buildings

The Institution initiates steps to build environmentally sustainable buildings. The curricula and syllabi cover topics on Green Buildings and Smart Buildings. Awareness creation forms an integral part of the activities of the Institution in all relevant spheres.

5.5 Waste

KITS regularly reviews opportunities and implement measures to redesign or implement processes that close the material loop, to reduce the resources consumption by reusing the products whenever possible. It also ensures that recycling bins are provided. Minimum quantity of waste is generated by the Institution. Refurbishment of buildings will be done to maximize the efficiency of environmental performance and minimize the environmental impact of works, including the reuse and recycling of wastes from demolition and construction. Treatment of the entire sewage waste from the hostels, biogas generation and paper recycling, reduction of solid waste and resource recovery form part of the environment management system in the campus.

5.6 Sustainable purchase practices

The KITS takes steps to purchase products and services that reduce the Institution's environmental impacts locally and globally, and minimise direct or indirect pollution to land, air and water. Consideration shall be given to those products or services that:

- Contain reused and reusable materials,
- Requires minimal packaging,
- Contain materials that biodegrade naturally and rapidly, and/or
- Contain recycled and post-consumer content.

KITS endeavors to ensure that this principle is applied on an Institution-wide basis, to increase the use of sustainable products, and products that can be recycled after use.

5.7 Biodiversity

KITS is conscious of the rich biodiversity in its campus as it is situated in the foothills of the Western Ghats, adjacent to the Nilgiri Biosphere Reserve and a rainforest belt. Institution is keen to preserve, and where possible, enhance the habitats in non-urban and urban environments owned by, or related to KITS, and reduce the environmental impacts on biodiversity both locally and globally. The Institution envisages to achieve this through a strategy that takes into account the varied activities within KITS.

5.8 Transport

Institution is committed to sustainable modes of transport within the campus; a motor-vehicle-free campus is envisioned and electric vehicles are encouraged for the physically disabled to move around the campus.

6. RESPONSIBILITIES OF RELEVANT AUTHORITIES / COMMITTEES

Committees constituted from time to time for the environmental sustainability of the campus supervise and oversee the initiatives and strategies in this area. The faculty members and students together with the Team of Director (Students), Campus Manager and Construction and Maintenance Department ensure the management of Green Campus and Energy Conservation and Management in the academic campus and hostel premises. The Department of Agriculture manages the experimental farms of 329 acre along with the Farm Manager. The integrated water resources management of the campus is taken care of under the guidance of the Water Institute. The Energy Management is carried out by the Electrical Wing of the Construction and Management Department under the guidance of experts from EEE Department.

7. ENERGY, WATER AND ENVIRONMENT AUDIT

Internal audits are periodically conducted by the experts trained in the Institution. External Audit Teams and certified agencies conduct External Audit of Energy and Environment. Their reports are studied and appropriate actions initiated by the authorities on a time-based and participatory mode.