

ADHIYAMAAN COLLEGE OF ENGINEERING

(An Autonomous Institution)

[Approved by AICTE, Affiliated to Anna University,

Accredited by NBA (CSE, ECE, EEE, IT, BME, Biotech & MCA) and NAAC with "A" Grade]

Dr. M.G.R. Nagar, HOSUR - 635 130, Krishnagiri (Dist.), Tamil Nadu, India.

Dr.R.Radhakrishnan, M.E., Ph.D.,
Principal

INTEGRATED WASTE MANAGEMENT AND RESOURCE RECOVERY POLICY

Document No.: ACE/IQAC/IWMRR/2025-26/01

Effective Date: 01.06.2025

Review Period: Once in Two Years

Approved By: Governing Body

1. Introduction

Adhiyamaan College of Engineering (Autonomous), Hosur, recognizes that effective waste management is fundamental to environmental sustainability, public health and responsible institutional governance. As a premier institution committed to quality education and sustainable development, the College strives to minimize waste generation, maximize resource recovery and promote circular economy principles through systematic waste management practices.

ACE believes that waste should be regarded not merely as a disposal challenge but as a valuable resource that can be reduced, reused, recycled, or recovered through appropriate technologies and responsible practices. This policy establishes a comprehensive framework for integrated waste management across the campus, emphasizing waste minimization, segregation, recycling, composting and environmentally sound disposal.

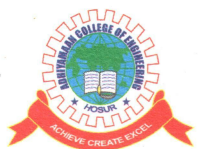
The policy aligns with the Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016, E-Waste (Management) Rules, 2022, Hazardous and Other Wastes Rules, 2016, Bio-medical Waste Management Rules, 2016 (where applicable), NEP 2020, AICTE Green Campus Initiatives, and the United Nations Sustainable Development Goals (SDGs 11, 12, and 13).

2. Policy Statement

ACE is committed to establishing a clean, healthy, and environmentally sustainable campus through responsible waste management practices. The institution shall adopt an integrated approach that prioritizes waste prevention, segregation at source, reuse, recycling, composting, resource recovery, and safe disposal of residual waste.

ACE shall continuously improve its waste management systems by encouraging stakeholder participation, promoting environmental awareness, strengthening infrastructure, and ensuring compliance with all applicable environmental regulations.

3. Objectives



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The objectives of this policy are to:

- minimize waste generation through sustainable consumption practices;
- promote segregation of waste at the point of generation;
- maximize recycling and resource recovery;
- encourage reuse of materials wherever feasible;
- reduce the quantity of waste sent to landfills;
- ensure environmentally responsible disposal of hazardous and electronic waste;
- integrate waste management into teaching, research, and extension activities;
- promote a circular economy culture within the campus; and
- establish measurable indicators for continual improvement.

4. Scope

This policy applies to all academic departments, laboratories, workshops, administrative offices, hostels, cafeterias, libraries, sports facilities, residential areas, and common spaces within the campus.

The policy applies to:

- Students
- Faculty Members
- Administrative Staff
- Support Staff
- Contractors
- Vendors
- Visitors

5. Institutional Commitments

The College is committed to implementing an integrated waste management system that emphasizes prevention before disposal. All campus activities shall be planned to minimize waste generation while maximizing resource utilization.

The institution shall:

- implement source segregation of waste;
- establish colour-coded waste collection systems;
- encourage paperless administrative practices;
- promote reusable materials over disposable products;
- strengthen recycling partnerships with authorized agencies;
- compost biodegradable waste;
- ensure scientific disposal of hazardous waste;
- continuously monitor waste generation and recycling performance.

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6. Waste Hierarchy



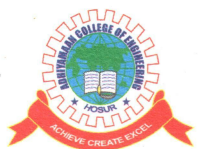
7. Waste Segregation

Waste shall be segregated at the source into appropriate categories to facilitate efficient collection, treatment, recycling, and disposal.

The institution shall maintain separate collection systems for:

- Biodegradable waste
- Recyclable dry waste
- Paper waste
- Plastic waste
- Metal waste
- Glass waste
- Electronic waste (E-waste)
- Laboratory waste
- Hazardous waste
- Sanitary waste

Clearly labelled, colour-coded bins shall be provided throughout the campus.



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8. Recycling and Resource Recovery

The institution shall maximize recycling opportunities by collaborating with authorized recyclers and encouraging responsible resource recovery practices.

Priority shall be given to recycling:

- Paper
- Cardboard
- Plastic
- Glass
- Metals
- Electronic waste
- Printer cartridges
- Packaging materials

Biodegradable waste generated from cafeterias and gardens shall be composted and utilized for campus landscaping wherever feasible.

9. Plastic Waste Reduction

The College is committed to reducing single-use plastics through awareness, procurement practices, and behavioural change.

The institution shall encourage:

- reusable bottles;
- cloth bags;
- steel utensils;
- refillable stationery;
- eco-friendly packaging; and
- alternatives to disposable plastics.

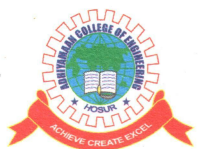
10. E-Waste Management

Electronic waste shall be handled separately and disposed of only through government-authorized e-waste recyclers.

The institution shall maintain records of:

- obsolete computers;
- printers;
- UPS batteries;
- laboratory electronics;

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- communication equipment; and
- other electronic devices.

11. Hazardous Waste Management

Laboratory chemicals, used oils, paints, batteries, fluorescent lamps, and other hazardous materials shall be handled in accordance with statutory regulations.

Hazardous waste shall be stored safely, labelled appropriately, and handed over only to authorized treatment and disposal agencies.

12. Awareness and Capacity Building

The institution shall organize regular awareness programmes to strengthen stakeholder participation.

Activities may include:

- Green Campus Campaigns;
- Swachh Bharat activities;
- Recycling drives;
- Waste segregation campaigns;
- Clean Campus initiatives;
- Poster competitions;
- Workshops;
- Student projects.

13. Roles and Responsibilities

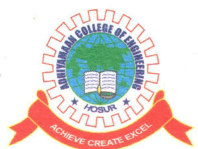
The **Management** shall provide policy direction, financial support, and infrastructure.

The **Principal** shall oversee implementation and institutional compliance.

The **IQAC** and **Green Campus & Environmental Sustainability Committee** shall monitor implementation, review waste management practices, and coordinate Green Audits.

The **Estate and Maintenance Department** shall ensure proper collection, segregation, storage, transportation, and disposal of waste.

Heads of Departments shall encourage waste minimization and recycling within their departments.



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Faculty members shall integrate sustainable waste management into teaching and student projects.

Students shall practice source segregation, avoid littering, participate in recycling initiatives, and support Green Campus activities.

14. Monitoring and Evaluation

The institution shall periodically review waste generation and recycling performance through:

- Waste Audits;
- Green Audits;
- Recycling Records;
- Vendor Disposal Records;
- Campus Inspections;
- Stakeholder Feedback;
- IQAC Reviews.

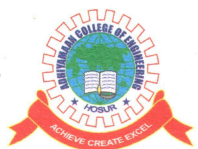
Corrective actions shall be implemented wherever improvement opportunities are identified.

15. Key Performance Indicators

Performance Indicator	Institutional Target
Source Segregation	100%
Recycling of Recyclable Waste	Increase annually
Paper Consumption	Reduce annually
Single-use Plastic	Continuous reduction
Composting of Organic Waste	Maximum feasible
Waste Audit	One per year
Green Awareness Programmes	Minimum Four per Year
Student Participation	Above 70%

16. Compliance

ACE shall comply with:



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16. Compliance

ACE shall comply with:

- Solid Waste Management Rules, 2016
- Plastic Waste Management Rules, 2016
- E-Waste (Management) Rules, 2022
- Hazardous and Other Wastes Rules, 2016
- Environment (Protection) Act, 1986
- AICTE Green Campus Guidelines
- UGC Environmental Sustainability Guidelines
- Applicable Government of Tamil Nadu regulations

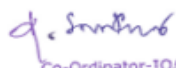
17. Policy Review

This policy shall be reviewed once every two years or earlier whenever required due to changes in statutory regulations, audit recommendations, technological advancements, or institutional priorities.

ACE reaffirms its commitment to environmental sustainability through the implementation of an integrated waste management system that emphasizes waste minimization, resource recovery, and circular economy principles. By promoting responsible consumption, source segregation, recycling, composting, and environmentally sound disposal, the institution seeks to reduce its ecological footprint and create a clean, healthy, and sustainable campus.

The successful implementation of this policy depends upon the active participation of students, faculty, staff, contractors, and visitors. Through shared responsibility, innovation, and continual improvement, the College aims to serve as a model institution in sustainable waste management and environmental stewardship.

Prepared by IQAC


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