12.2.4 Policy Waste Disposal - Landfill Policy

2024-2025

AASTMT is actively implementing innovative and sustainable waste management practices to minimize environmental impact and align with global sustainability standards. The institution emphasizes the importance of reducing reliance on traditional landfill disposal by adopting a comprehensive approach that prioritizes reducing, reusing, recycling, and recovering waste products. These initiatives not only minimize waste generation but also promote efficient resource utilization, encouraging practices such as material recovery and resource optimization. Through these efforts, AASTMT transforms waste management into an opportunity to create value while fostering a culture of environmental responsibility. By integrating environmentally friendly strategies into its operations, AASTMT reaffirms its commitment to sustainability, contributing to a cleaner, healthier environment for future generations and demonstrating leadership in environmental stewardship. Under its Consumption and Recycling Policy, reproduced below, AASTMT measures the waste sent to landfill and recycled: Section 3 commits the Academy to measuring and weighing the amount of waste generated, and Section 4 (Disposal) to tracking disposed items through a third party that records their quantity and cost. In 2025, AASTMT generated 1,048 tonnes of waste, of which 922 tonnes (88%) were recycled and 126 tonnes were sent to landfill, as reported in 12.3.1.

CONSUMPTION AND RECYCLING POLICY

1. Introduction

AASTMT recognizes the growing global challenges arising from the excessive pressure on natural resources, escalating greenhouse gas emissions, rising sea levels, pollution, and inefficient waste management. These environmental issues threaten both present and future generations, underscoring the urgent need for responsible consumption and effective recycling practices. In alignment with its Environmental Change and Social Responsibility Policy, AASTMT is committed to advancing the Sustainable Development Goals by promoting a culture of sustainability across all its campuses and operations. The Consumption and Recycling Policy reflects this commitment by emphasizing waste reduction, resource efficiency, and responsible material use.

Through this policy, AASTMT aims to minimize environmental impact by prioritizing waste prevention, reusing materials whenever possible, and ensuring proper recycling and disposal in compliance with environmental regulations. By fostering awareness and sustainable habits within its community, the University seeks to create a cleaner, safer, and more resilient environment for future generations.

2. Scope

This policy applies to all AASTMT employees, students, and contractors who are involved in handling, managing, or storing any form of waste, including hazardous and non-hazardous materials. It establishes the framework for ensuring that all waste management activities prioritize recycling, reuse, and responsible disposal in line with the university's sustainability objectives.

Recycling must be integrated at every stage of the waste management process—beginning with proper segregation and collection, followed by safe processing and reuse wherever feasible. A designated responsible person or unit shall oversee the recycling and disposal of materials to ensure compliance with environmental standards and the adoption of the most sustainable methods available.

By embedding recycling practices into daily operations, this policy aims to minimize environmental impact, promote resource efficiency, and support AASTMT's broader commitment to sustainable development and environmental stewardship.

3. Aims of the Policy

The AASTMT policy considers end-of-life disposal costs and environmental impacts when making acquisition decisions involving the construction of new or renovated facilities.

AASTMT adopts the waste hierarchy: prevention, preparation for re-use, recycling, other recovery and, as a last resort, disposal. AASTMT applies processes, methods and activities that comply with environmental legislation and best practice, in order to reduce the overall waste produced and to prevent waste wherever possible. AASTMT also measures and weighs the waste it generates, to track it and to identify the best ways to reduce or recycle it.

4. Procedures

The Waste Treatment Progressive System and Stages Incorporates:

Prevention

- Using less material in design; keeping items in use for longer; using less hazardous material.
- Reduce landfill waste and boost the usage of reusable, biodegradable, and recyclable materials.
- Promote awareness and training programs to encourage responsible consumption and waste minimization across all departments.

RE-USE

- Preparing for re-use: cleaning, repairing and refurbishing.
- Reduce single-use packaging, such as coffee cups, and increase the use of reusable packaging.

Recycle

- Turning waste into another substance or product, including compost for the soil.
- Anaerobic digestion (conversion to biogas for power generation) and incineration with energy recovery.

- Establish accessible recycling stations across campus and ensure regular collection and monitoring of recyclable materials.

Disposal

- Reduce disposal to a minimum, and send hazardous materials only through licensed contractors to authorised hazardous-waste facilities.
- Track disposed items through a third party that records their quantity and disposal cost, record the quantities of waste recycled and sent to landfill from these weights, and report the totals annually.
- Ensure all disposal methods comply with environmental laws and safety standards to minimize ecological and health risks.

Ethical Sourcing of Food and Supplies

AASTMT provides healthy food, including vegetarian options, to students, staff and residents across its campuses and student housing. Food and catering services are sourced against the following criteria:

a. Catering operators and food suppliers must hold a valid food-safety certification (ISO 22000 or HACCP), presented before contract award and at each renewal.

b. Local and seasonal produce from Egyptian growers is preferred, to reduce transport emissions and support the local economy.

c. Catering contracts include fair-labour clauses: compliance with the Egyptian Labour Law, no child or forced labour, and safe working conditions for catering staff.

5. Policy Statement

The AASTMT seeks to implement ethical and sustainable practices on all of its campuses. Therefore, the AASTMT has taken crucial measures to implement these practices, such as ecological practices and corporate social responsibility. Through the exchange of information within the Academy's supply chain, these food ethics and practices enable AASTMT to ensure the transparency of information about all suppliers.

- **Trusted suppliers**

  To accomplish supply chain transparency, one of the primary goals of AASTMT is to identify the most reliable and reputable partners who share the same ethical practices, objectives, and data. To accomplish ethical and sustainable practices, the first step is to identify the most suitable suppliers.

- **Secure Relationships**

  The interaction with suppliers is the second step to keep secure relationships between partners and to reduce the risk. AASTMT is seeking to build a platform and application to increase communication and share important information. That would give the suppliers and partners access to the internal systems they need based on their roles within the ecosystem, sustainability practices, and the food ethics of AASTMT.

- **Tracing the food supplies**

  AASTMT traces the origin of its food supplies through supplier certificates (certificates of origin and food-safety certificates), which are checked at delivery and kept with the delivery inspection records before food is accepted on campus.

- **Evaluation of the process**

  AASTMT is monitoring the overall processes between its partners to guarantee healthy and sustainable food for students, staff, and Residents. Based on this monitoring, errors must be fixed, and corrective action must be taken.

  AASTMT complies with guidelines, legislation and best practice to limit the risk of immediate and future pollution or harm to health when carrying out its operations.

6. Actions

- AASTMT operates a coordinated waste-management system across all its campuses that oversees the segregation, collection, recycling and disposal of every waste stream the Academy generates.
- AASTMT has stopped the use of single-use plastics on campus, replacing them with a mix of alternative materials, and has stopped the sale of bottled water on campus.
- AASTMT recognises the harm caused by plastic waste from production to disposal, including pollution of the marine environment, and works to reduce plastic use and waste on all its campuses. The following measures are in place for staff and students:
- Single-use plastic catering items (food packaging, disposable coffee cups and cutlery) have been replaced with compostable alternatives in all AASTMT food outlets.
- AASTMT continues to reduce waste by reviewing new products and services that lower plastic use and plastic waste.
- AASTMT segregates hazardous waste at source by stream: chemical, biological, medical, electronic waste, batteries and fluorescent tubes. Each stream is collected by a licensed contractor (Nahdet Misr), a handover record is signed for every collection, and the waste is treated and disposed of in line with the Egyptian Waste Management Law No. 202 of 2020.
- AASTMT manages all hazardous-waste activities under its control, as far as reasonably practicable, so as to minimise harm to human health and the environment.
- AASTMT has procedures that enable staff to meet their duty of care for hazardous waste, and monitors these procedures to ensure compliance.
- AASTMT runs awareness and training programmes for students, staff and contractors on sustainable waste management, recycling and the safe handling of hazardous materials.
- AASTMT records the weight of waste generated, recycled and sent to landfill across its campuses and reports these figures annually.

7. Objectives

Waste should be prevented or minimised wherever possible. AASTMT encourages staff, students and employers to limit plastic and carton waste, and raises awareness of ways to reduce disposable items.

8. Review Program

Document Control	
Policy title:	Consumption and Recycling Policy
Date created:	May 2019
Approving body:	SDG workforce committee
Version:	5
Last review date	Dec 2025
Next review date:	Dec 2027
Policy owner:	• Material Affairs and Logistics department, • Facilities, Maintenance department, • Nutrition Affairs Management
Lead contact:	• Head of Facilities and Logistics Department, • Head of the Facilities at the Facilities and Maintenance Department, • Director of the Department of Nutrition Affairs
Approval Signature	Dean of Scientific Research and Innovation

You can read our Consumption and Recycling Policy on AASTMT website

AASTMT Carbon Emissions Reduction and Sustainability Progress Report 2024 (target: divert at least 70% of campus waste from landfill by 2030) on AASTMT webpage

More activities are applied and practiced in the AASTMT.

AASTMT Promotes Organic Waste Recycling to Support Water Quality Protection

During the 2024/2025 academic year, AASTMT's campus composting programme processed food waste from cafeterias, restaurants and student accommodation, together with landscaping residues, using a mechanical composter and vermicomposting with Eisenia fetida earthworms. Separating and treating organic waste at source keeps it out of landfill and reduces the risk of water and groundwater pollution from uncontrolled disposal. The

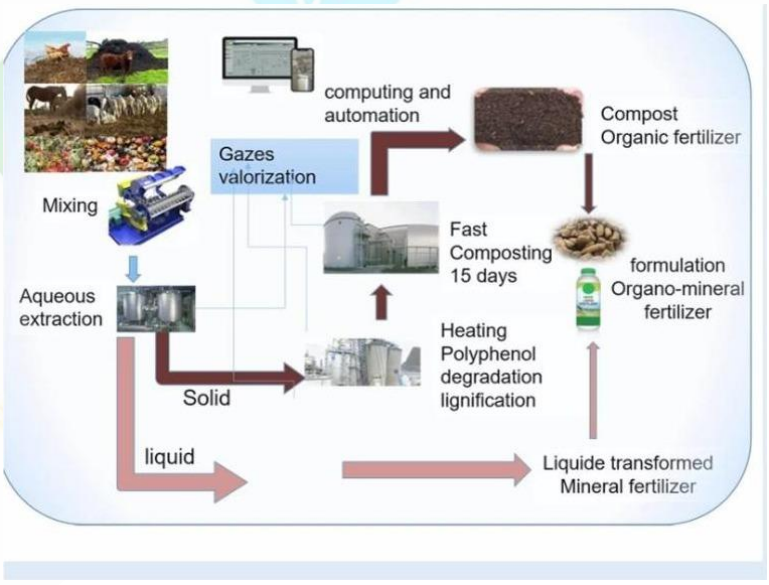
programme produced 15 tonnes of compost, which was used to fertilise campus lawns in place of chemical fertiliser.



AASTMT Promotes Organic Waste Recycling to Support Water Quality Protection on AASTMT webpage

Supporting: ECo-FertiS: PRIMA-Funded Project Turning Manure and Plant Residues into Sustainable Fertilisers

AASTMT is a partner in ECo-FertiS, a project funded under the EU-supported PRIMA programme that runs from May 2024 to May 2027. The project develops an improved process for recycling manure, biowaste and plant residues into mineral, organic and organo-mineral fertilisers, tested through Living Labs in Egypt, Greece, Italy, Morocco, Spain and Tunisia. By returning agricultural residues to the soil as fertiliser, ECo-FertiS keeps this material out of landfill and reduces dependence on synthetic fertilisers, carrying the circular-economy approach of the Academy's campus composting programme to farms across the Mediterranean.



ECo-FertiS on AASTMT UI GreenMetric webpage

ECo-FertiS project webpage

Supporting: AASTMT Supports the Handover of a New Sanitary Landfill Cell in Damietta

On 23 October 2024, Egypt's Ministries of Environment and Local Development handed over a new sanitary landfill cell in Abu Griada, Faraskour District, Damietta Governorate, as part of the national programme to replace open dumping with engineered disposal. The joint committee overseeing the handover included AASTMT alongside the Ministry of Defence, represented by the Military Technical College and the Arab Organization for Industrialization, and Damietta Governorate. The new 7-feddan cell cost EGP 45 million and is equipped with administrative buildings, generator rooms, fuel tanks, water reservoirs and a leachate drainage system, bringing total investment in Damietta's waste system beyond EGP 146 million.



AASTMT Supports the Handover of a New Sanitary Landfill Cell in Damietta on AASTMT webpage

Supporting: Handover of a New Sanitary Landfill Cell in Juhayna, Sohag Governorate

On 16 November 2024, the Ministries of Environment and Local Development handed over a new sanitary landfill in Juhayna, Sohag Governorate, built at a cost of EGP 60 million. The joint committee included AASTMT, the Arab Organization for Industrialization, the Military Technical College and the local Sohag authorities. The 10-feddan landfill serves the Juhayna and El-Maragha districts and must meet environmental standards that prevent soil and groundwater contamination from leachate. Total investment in Sohag's waste management system has reached EGP 230.5 million across landfills, recycling facilities and transfer stations.



Handover of a New Sanitary Landfill Cell in Suhag to Advance Sustainable Waste Management by AASTMT on AASTMT webpage

Supporting: AASTMT Delivers 23 Sanitary Landfills for Waste Management Across 16 Governorates

In a statement published on 31 October 2024, AASTMT reported on its four-year role (2019–2023) in developing Egypt's solid waste management system, during which it participated with the relevant ministries in building the infrastructure of the new waste system and in training and qualifying governorate staff to operate, manage and monitor it across collection, transport, treatment and final disposal. The Academy also supported the adaptation of international systems and modern waste technologies to Egyptian conditions and raised awareness among decision makers of global strategies for all waste streams. Its stated aim was to steer national plans towards integrated waste management and to maximise the return on public investment in the sector.



Arab Academy for Sciences Handing over 23 sanitary landfills in 16 governorates on AASTMT webpage