AASTMT Environmental Sustainability Policy

Climate, Ocean and Land (SDGs 13, 14 and 15)

Description

The AASTMT Environmental Sustainability Policy is the Academy's overarching commitment to Climate Action (SDG 13), Life Below Water (SDG 14) and Life on Land (SDG 15). It sets out what AASTMT will do across its campuses, ships, research, teaching and partnerships to cut its carbon footprint, protect the sea and the land, use resources wisely and manage waste safely. Version 6 reframes the policy around five clear commitments, states where AASTMT stands today with measured figures, sets targets to 2030 with named owners, and links to the specific AASTMT policies and guidelines that put each commitment into practice.

Vision

To be a leading Arab institution in integrating environmental sustainability into education, research, campus operations and community action, with campuses that are low-carbon, water-wise, rich in biodiversity and close to zero waste.

Mission

AASTMT protects the climate, the sea and the land through measurable action on its own campuses and ships, through research and education that build solutions for Egypt and the Arab region, and through partnerships with government, industry and communities.

1. Scope

- All AASTMT campuses in Egypt: 11 campus locations in 6 governorates (Alexandria, Cairo, Giza, Matrouh, Port Said and Aswan), including the 213,646 m² main campus at Abu Qir and the AASTMT Alamein Hospital.
- AASTMT training ships and sea-training voyages, field training sites and research facilities.
- All students, academic and administrative staff, contractors, suppliers and service providers working for or on behalf of AASTMT.

2. Principles

- **Evidence-based:** decisions rest on measured data and AASTMT research.
- **Prevention first:** avoid harm before reducing, treating or offsetting it.
- **Precaution:** where an activity may harm the environment, act to prevent harm even before full scientific certainty.
- **Whole-institution:** every college, campus and department shares responsibility.
- **Transparency:** progress is measured and published every year.

3. Policy Statement: Five Commitments

AASTMT commits to:

1. **Act on climate (SDG 13):** AASTMT commits to reducing greenhouse gas emissions across its campuses, university-controlled facilities and training ships; improving energy efficiency; expanding renewable and other qualifying low-carbon energy sources; and strengthening climate resilience and adaptation. AASTMT shall develop, approve, publish and periodically update an institution-wide Climate Action Plan with a documented emissions baseline, measurable reduction targets, a formal carbon-neutrality target year, clearly defined emissions scopes, assigned responsibilities and annual progress reporting. The Plan shall address climate education, disaster preparedness, early warning, collaboration with relevant government authorities, local communities and non-governmental organizations (NGOs).

- **2. Protect water and the sea (SDG 14):** conserve water, discharge no polluted water, keep plastic and chemicals out of the sea, and support sustainable fisheries and marine conservation.
- **3. Protect land and biodiversity (SDG 15):** maintain and extend the green areas and habitats of its campuses, protect threatened species, reduce the impact of alien species, and fight land degradation and desertification.
- **4. Use resources wisely and manage waste safely:** prevent waste, reduce single-use plastics, recycle, and dispose of hazardous waste only through licensed routes.
- **5. Learn, discover and partner:** teach sustainability in every college, research solutions to environmental challenges, and work with communities, government, industry and international partners.

4. Where We Stand& Baseline

Area	Latest figure
Campuses	11 campus locations in 6 governorates; main campus at Abu Qir 213,646 m², 45% open space
Energy	Abu Qir campus electricity use 8,655,357 kWh (2024); about 96% LED lighting (over 240,000 LED lamps)
Renewable energy	50 kW rooftop PV (Abu Qir), 150 kW PV (Aswan), 10 kW solar irrigation and water-treatment pumping (Abu Qir), smart solar EV charger (El Alamein)
Carbon	Carbon footprint of the main campus assessed for 2018–2021 (published July 2025)
Water	13 borehole wells irrigate the Abu Qir gardens; 27.8% of campus water from non-potable sources; discharge guidelines Version 3 (2026)
Green areas and biodiversity	62,000 m² planted vegetation at Abu Qir (about 30%); own planting nurseries; 23 plant taxa recorded in the 2026 baseline
Non-hazardous waste	Inorganic waste cut from 307 to 282 tons (−8.1%); 198 tons (70.2%) recycled or reused
Hazardous waste	2.20 tons, 100% treated; laboratory chemicals cut from 1.89 to 1.70 tons; e-waste 0.50 tons recycled

5. Latest Total Carbon Footprint (tCO2e) 2024-2025

AASTMT's latest reported greenhouse gas inventory indicates a total carbon footprint of 38,253 tonnes of carbon dioxide equivalent (tCO_2e) across its four campuses: Abu Qir, Misr El-Gedida, Smart Village, and South Valley. The assessment provides a comprehensive overview of the Academy's greenhouse gas emissions, covering all three emission scopes (Scope 1, Scope 2, and Scope 3), as detailed in the table below.

Indicator	AASTMT Reported Results
Total Carbon Footprint	38,253 tCO_2e
Scope 1 – Direct GHG Emissions	2,855 tCO_2e
Scope 2 – Purchased Energy	10,440 tCO_2e
Scope 3 – Other Indirect Emissions	24,958 tCO_2e

6. Objectives and Targets to 2030

Commitment	Indicator	Target	Lead
Climate	LED lighting share	100% by 2027	Energy Management Team
Climate	University-wide energy accounting	Measure and report total energy use and qualifying low-carbon energy use annually across all campuses and relevant university-controlled operations, beginning in 2027	Energy Management Team
Climate	On-site renewable capacity	From about 210 kW to 1 MW by 2030	Energy Management Team
Climate	Carbon footprint inventory	Published every year from 2027, with a net-zero roadmap	Sustainability Office
Climate Resilience	Cooperative disaster planning	Participate in and document relevant local and regional cooperative climate-disaster planning with government authorities.	SDG 13 Officer
Climate Partnerships	NGO collaboration on adaptation	Document climate-adaptation collaborations with eligible NGOs and report activities and results annually.	SDG 13 Officer and relevant partnership
Climate Research	Climate action research outputs	Monitor and report climate-action publications, funded projects and research outputs annually.	Deanery of Scientific Research
Water and sea	Water from non-potable sources	From 27.8% to 35% by 2028	Facilities
Water and sea	Campuses testing their discharge	Every campus, at least quarterly, by 2027	Facilities
Water and sea	Coastal and beach clean-ups	At least two a year on the coastal campuses	College of Fisheries and Aquaculture Technology
Land and biodiversity	Campus biodiversity surveys	Every campus surveyed at least once a year from 2027	SDG 15 officer
Land and biodiversity	Native and drought-adapted species in new planting	At least 70%	Facilities and nurseries
Resources and waste	Total waste generation	15% less by 2030; zero-waste campus by 2049	Sustainability Office
Resources and waste	Inorganic waste recycled or reused	From 70.2% to 85% by 2030	Sustainability Office
Resources and waste	Hazardous waste treated through licensed routes	100% every year, at every campus	Facilities and laboratories
Learn and partner	Courses with climate, ocean or land content	Every programme by 2028	Deans

Commitment	Indicator	Target	Lead
Learn and partner	SDG 13, 14 and 15 publications and funded projects	Increase every year	Deanery of Scientific Research and Innovation

7. Linked Policies and Guidelines

Each commitment is put into practice through a specific AASTMT policy or guideline:

Commitment	Policy or guideline
Climate	Green Energy and Energy Management Policy; Institutional Climate Action Plan; Greenhouse Gas Inventory and Reporting Procedure; Carbon Neutrality Commitment and Emissions Reduction Roadmap.
Water and sea	AASTMT Standards and Guidelines for Discharge of Wastewater (Version 3, 2026)
Land and biodiversity	AASTMT Biodiversity Policy and Campus Development Plan, Egypt 2026–2030; Policy for Identifying, Monitoring and Protecting IUCN Red List and National Conservation List Species; Policy for Reducing the Impact of Alien Species on Campus
Resources and waste	Consumption and Recycling Policy; Policy on Plastic Waste Reduction; Policy on Hazardous Waste Disposal (Version 2, 2026)
Learn and partner	AASTMT Strategic Plan; SDGs Workforce programme

Action Plans

Climate Action (SDG 13)

- **Energy efficiency:** complete LED lighting, upgrade split air conditioners to efficient units, extend VRF and variable-speed central cooling, and run yearly energy audits through the smart energy monitoring system.
- **Renewable energy:** extend rooftop and ground PV on every campus, building on the Abu Qir and Aswan plants, and add solar pumping and EV charging.
- **Carbon accounting:** publish a yearly carbon footprint for every campus, building on the 2018–2021 study of the main campus. Establish a university-wide greenhouse gas inventory covering all relevant campuses and university-controlled activities. Quantify Scope 1 direct emissions, Scope 2 purchased-energy emissions, and relevant Scope 3 indirect emissions.
- **Transport:** expand inter-campus and campus buses, electric vehicles, cycling and walking.
- **Resilience and education:** research and teach coastal climate risk, sea-level rise and adaptation, and run disaster-preparedness campaigns with local authorities.
- **Climate Action Plan and carbon neutrality:** Develop, approve, publish and periodically update a university-wide Climate Action Plan with a formal carbon-neutrality target year, interim emissions-reduction targets, responsibilities, milestones and annual performance reporting. Share the Plan with relevant local government authorities and local community groups.
- **Low-carbon energy measurement:** Establish a common energy-accounting system covering all campuses and relevant university-controlled operations. Record total energy use and qualifying low-carbon energy use separately, convert both to gigajoules (GJ), and publish annual results.
- **Climate education and cooperative disaster planning:** Implement local climate education programmes addressing climate risks, mitigation, adaptation, impact reduction, disaster preparedness and early warning. Participate, where relevant, in cooperative local and regional climate-disaster planning with government authorities and document activities and outcomes.
- **Government and NGO partnerships:** Support relevant local or regional government climate-risk monitoring and early-warning activities through appropriate scientific and technical expertise. Establish and document collaborations with eligible NGOs on climate adaptation and resilience, including objectives, activities, partners, and results.

Life Below Water (SDG 14)

- **Clean water:** apply the discharge guidelines on every campus, test discharges, and increase the reuse of groundwater, rainwater, and treated water.
- **No plastic and chemicals at sea:** phase out single-use plastics, keep hazardous waste out of drains, and run coastal and beach clean-ups with students and communities.
- **Ships:** operate training ships under MARPOL and the Ballast Water Management Convention, and teach green shipping and ship recycling.
- **Fisheries and marine research:** support sustainable fisheries, stock assessment and the protection of threatened marine species with national and Mediterranean partners.

Life on Land (SDG 15)

- **Green campuses:** maintain and extend planted areas from the AASTMT nurseries, protect mature trees, and favor native and drought-adapted species.
- **Species:** survey and monitor campus biodiversity, protect IUCN Red List and nationally protected species, and contain and replace invasive alien species using GIS and AI mapping.
- **Land:** conserve soil through compost and drip irrigation, plan every new building with local biodiversity in mind, and support research on desertification, land reclamation and remediation.
- **Community:** work with communities and NGOs on afforestation, greening and the fight against wildlife trafficking.

Resources and Waste

- Apply the waste hierarchy: prevent, reduce, reuse, recycle, recover, and only then dispose.
- Run the Campus Smart Recycling System and composting units, and send all hazardous waste to licensed contractors under supervision.

Education, Research and Partnerships

- Include climate, ocean and land topics in every programme and in student orientation.
- Fund and publish research on climate resilience, marine ecosystems and biodiversity, and support student projects and start-ups.
- Partner with ministries, governorates, UN agencies, NGOs, industry and international universities.

Governance, Monitoring and Review

Governance

- **SDGs Workforce Committee:** approves the policy, its targets and action plans, and reviews progress every year.
- **Environmental Sustainability Committee:** members from colleges, campuses, facilities, students and external stakeholders; coordinates implementation and meets every quarter.
- **Departmental action plans:** every college and campus sets out its yearly contribution to the five commitments.

Roles and Responsibilities

Role	Responsibility
Dean of Scientific Research and Innovation	Approves the policy and its reviews
Dean of Scientific Research for Maritime Affairs	Policy owner; leads climate and ocean commitments
SDG 13, 14 and 15 officers and the Sustainability Office	Track indicators, coordinate action and publish the yearly report
Deans	Update courses with climate, ocean and land content and follow up implementation
Facilities, energy and landscape teams	Run campus energy, water, green areas and waste systems
Academic staff	Research, publish and supervise student projects on SDGs 13, 14 and 15
Students	Take part in initiatives, clean-ups, surveys and campaigns
Contractors and suppliers	Follow this policy and its linked policies under their contracts

Monitoring and Reporting

- Indicators in Section 5 are measured every year for every campus.
- An annual environmental sustainability report, with achievements, gaps and next steps, is published on the AASTMT website.
- Students, staff and communities can propose initiatives and give feedback through the initiative suggestion form.

Review Program

Item	Detail
Policy title	AASTMT Environmental Sustainability Policy (Climate, Ocean and Land)
Date created	January 2019
Approving body	SDGs Workforce Committee
Version	6
Last review date	October 2026
Next review date	2029 (every three years), with a yearly review of targets
Policy owners	Dean of Scientific Research for Maritime Affairs; Head of Aquaculture Department, College of Fisheries and Aquaculture Technology; the Sea Training Institute; SDG 15 Officer
Lead contacts	Prof. Dr. Kareem Tonbol; Dr. Haiam Aboul-Ela; Eng. Mohamed Elbawab
Approval signature 	Dean of Scientific Research and Innovation

Version	Date	Changes
1–4	2019–2023	Earlier versions of the AASTMT Environmental Policy
5	2024	Environmental Policy for SDGs 13, 14 and 15: vision, mission, objectives, commitments, procedures and action plans
6	October 2026	Reframed around five commitments and five principles; scope set to all 11 campus locations in Egypt, ships and contractors; measured baseline added; targets to 2030 with indicators and owners; linked policies table; alien species points moved from the climate section to Life on Land; governance, monitoring and review updated