

Arab Academy for Science, Technology & Maritime Transport



Arab Academy
for Science, Technology & Maritime Transport



Report 2021/2022

SDG 12

Our Aim in 2021-2022

- The AASTMT aims to increase awareness regarding hazards of plastic waste and improve waste recycle and management procedures.

THE Impact Ranking Scores 2020-2021

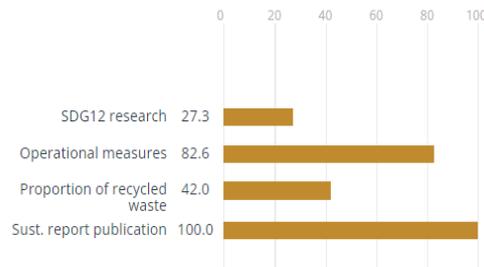


12 ∞

RESPONSIBLE CONSUMPTION AND PRODUCTION

RANK
SCORE **201-300**
60.1 out of 674 institutions

[Details](#)



SDG 12

RESPONSIBLE CONSUMPTION AND PRODUCTION

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Our Progress through 2021-2022

Education

Environmental Engineering Postgraduate program

This program offers a variety of postgraduate courses that cover different aspects of waste, waste disposal, recycling, and production. An example of these courses is a course entitled “Management of Solid, Hazardous and Radioactive Waste Postgraduate Course” which enables the student to identify the characteristics of different Solid waste and hazardous, acquire the methods of solid waste storage and recycling, and evaluate the effects of radioactive waste on health and vegetation.

[M.Sc. in Environmental Engineering](#) on the AASTMT news page

Funded Projects

Campus Smart Recycling System To Turn Food Organic Wastes And Recyclables Into Economic Value Products.

The proposed project is about building and implementing a sustainable self-sufficient recycling system to turn AASTMT campus food organic wastes and recyclables into valuable products that have economical values, which can be used to reduce the campus running expenses. The proposed system targets only 3 types of campus waste (Organic food remains -Plastic tableware - aluminum cans). The main objectives of the project are: â€¢ Adding an economic value to the organic food waste instead of dumping it. â€¢ Reducing the campus running cost by: Producing a percentage of the campus disposable plastic tableware using an AASTMT-owned plastic injection machine residing at ISC. Reducing the campus budget for purchasing Fertilizers used in campus cultivated areas. â€” Aluminum raw materials for students' graduation projects. These objectives will be achieved by manufacturing: â€¢ Portable compost unit that produces organic fertilizer from garbage molds for the AASTMT plastic injection machine. â€¢ Plastic washing, drying, and disinfection unit to recycle the plastic tableware. â€¢ Aluminum can crusher machine to reduce the storage size of the cans until melting it. â€¢ Electrical furnace to melt aluminum cans into raw bars.

[Campus Smart Recycling System To Turn Food Organic Wastes And Recyclables Into Economic Value Products.](#) on the AASTMT news page

“Composting The Organic Wastes Into Organic Fertilizers Using The Earthworm Eisenia Fetida (Red Wiggler)”

The AAST has a funded project entitled “COMPOSTING THE ORGANIC WASTES INTO ORGANIC FERTILIZERS USING THE EARTHWORM EISENIA FETIDA (RED WIGGLER)”. This project aims to build a sustainable composting unit for the disposal of organic waste using the earthworm which will feed on them. After digesting the worms for these organic wastes, it produced a cast called vermicompost which is very rich in organic nutrients as well as growth hormones which will be very useful for plant

growth. Moreover, the production rate of these worms is very high and its protein content reaches 70%. So, the dried worm meal can be used as a supplementary feed for fish and poultry. This in turn will decrease the fish and poultry production cost and hence decrease the overall prices of such important human food. So, the current project is trying to solve the problem of organic wastes in cities and also converting them to a valuable and important product. Moreover, such techniques will decrease the overall emission of greenhouse gases.



[“Composting The Organic Wastes Into Organic Fertilizers Using The Earthworm Eisenia Fetida \(Red Wiggler\)”](#) on the AASTMT news page

The Faculty of Engineering and Technology family is pleased to extend its sincere congratulations to Dr. Mohamed Khamis Hassan, Assistant Professor in the Department of Industrial and Administrative Engineering - Faculty of Engineering and Technology, Headquarters in Abu Qir, on the occasion of the victory of the project submitted by him in cooperation with one of the Egyptian companies working in the field of waste recycling, and by participating in the training and exchange project presented by German Aid

German Development Cooperation

And for a project

“German-Egyptian SME Training and Exchange Program in Waste Management”

This came out of the state’s interest in climate change and reducing polluting emissions, and considering Egypt’s hosting of the COP27 climate conference and the research efforts made at the Faculty of Engineering and Technology at the main headquarters.



[German-Egyptian SME Training and Exchange Program in Waste Management](#) on social media

Other Activities

Go Green Initiative

An initiative by students of the Computer Engineering Department - Faculty of Engineering and Technology at the Arab Academy for Science, Technology and Maritime Transport - Alexandria headquarters - "Go Green" initiative "GO GREEN: Save your Planet Earth using GREEN ICT Technology" "GREEN ICT TECHNOLOGY" coinciding with Egypt's hosting of the COP27 climate conference and achieving for sustainable development goals. The initiative comes within the framework of the national strategy for sustainable development, "Egypt 2030," and aims to change behaviors, spread environmental awareness, and encourage participation in preserving the environment in the field of "green information technology" and environmentally friendly (green) communications and information technology technologies, which aim to reduce harmful environmental impacts. And heat emissions resulting from the expansion of the use of communications and information technology devices. Green information technology works to protect the environment from the negative risks of technology by following sound environmental and scientific methods and methods for safe disposal of waste.



[GREEN ICT TECHNOLOGY](#) on social media
[GREEN ICT TECHNOLOGY](#) on the AASTMT news page

Raise Public Awareness Campaign Of Environmental Protection And Egypt's Readiness

Within the framework of the Arab Academy for Science, Technology and Maritime Transport's keenness to apply concepts of sustainability and based on the Academy's strategic plan to conduct campaigns to raise public awareness of environmental protection and Egypt's readiness to organize the "COP 27" climate summit.

The Department of Community Service and Environmental Affairs - the Institute of Productivity and Quality - organized a campaign to raise awareness among the people of the Nubaria region about the United Nations Sustainable Development Goals by holding awareness workshops and participating in the presidential initiative "100 million Trees" in one of the farms. Engineer Rania Rajeh gave a workshop on The United Nations #sustainable development goals and the impact of animal production in achieving them, and a discussion of replacing plastic in packaging with environmentally friendly materials.

The attendees toured the farm and participated in planting seedlings as a contribution from the Academy under the slogan of the Presidential Initiative 100 million Trees.

[campaigns to raise public awareness of environmental protection and Egypt's readiness to organize the "COP 27" climate summit.](#) On social media



[campaigns to raise public awareness of environmental protection and Egypt's readiness to organize the "COP 27" climate summit.](#) On social media

“No Plastic Bags” An Environmental Initiative To Raise Awareness Among Students Of The Arab Academy Of Sciences

Prof. Dr. Alaa Abdel Bari, Vice President of the Arab Academy for Science, Technology and Maritime Transport, announced that the Academy’s President decided to launch the “Academy Free of Plastic Bags” initiative by the new academic year, indicating the

Academy's interest in adapting to climate change by rationalizing the use of energy and water and relying on renewable energy.



[Without plastic bags." Environmental Initiative to Educate Arab Academy for Science Students](#) on Elwatan News page

Translating A Documentary Film On The Difficulties Of Recycling Plastic And Negative Impact On Environment

“Dawarha fe Demaghak” is the graduation project of 9 students at the Language and Translation Department, College of Language and Communication, Arab Academy for Science, Technology and Maritime Transport, Alexandria Campus. The project is translating the documentary “The Recycling Lie”, produced by “The Why Foundation”. The documentary is about the recycling of plastic, its difficulty and negative impact on the environment.

[Dawarha fe Demaghak project](#) on social media

[Plastic Pollution» Graduation Projects of «Translation» students at the Faculty of Language and Media in Alexandria](#) on elaosboa news page



Towards a Green and Sustainable Future Campaign

The "Towards a Green and Sustainable Future" initiative was launched by the Academy's Deanship of Scientific Research and Innovation under the chairmanship of Prof. Dr. Yasser Jaber Al-Desouki with the Sustainable Development Team, where the College of Engineering and Technology at the Arab Academy for Science, Technology and Maritime Transport hosted the Deanship of Prof. Dr. Akram Suleiman Al-Salami's activities today.

The initiative comes within the framework of strengthening the role of the Academy to spread awareness and its role to advance and serve society and open ways of cooperation between the Academy and schools to educate students and educational institutions about the goals of sustainable development. Today's activities were attended by more than 70 individuals, including students and representatives of 7 different schools, in addition to the presence of Engineer Jwaida Ali Suleiman - Vice President of the Alexandria Water Company and Engineer Nihal Abdel Aziz Ammar - Project Engineer at the Alexandria Water Company.



[Towards a Green and Sustainable](#) on social media

The Arab Academy For Science, Technology, And Maritime Transport's Organized "Always Green Academy" Campaign

From the headquarters of the Academy at the Smart Village, AASTIANS Go Green is an initiative that started in 2020 till present which exhibited a series of awareness and activities events with AAST and the community. This initiative is part of the Academy's social responsibility and in line with the cooperation agreement signed with His Excellency Major General Mahmoud Shaarawy, the Minister of Local Development, and His Excellency Professor Dr. Ismail Abdel Ghaffar Ismail, the President of the Arab Academy for Science, Technology, and Maritime Transport, regarding the planning and implementation of the "Always Green Academy" campaign.

The Arab Academy for Science, Technology, and Maritime Transport launched the "Arab Youth Green Venture" project at the Smart Village on Tuesday, March 15, 2022. The project was held under the patronage of Professor Dr. Ismail Abdel Ghaffar Ismail Farag, the President of the Academy, and in the presence of Dr. Sherin Fikry, the Assistant Minister of Environment for Environmental Policies, representing Dr. Yasmine Fouad, the Egyptian Minister of Environment. This initiative was part of Egypt's hosting of the COP 27 Global Climate Conference in Sharm El-Sheikh.

The day included various activities, such as the opening of an exhibition showcasing environmental protection projects and activities by distinguished students and graduates of the Academy, which were discussed with the Assistant Minister of Environment and the Academy's President. Additionally, a sports marathon was launched with the slogan "AASTIANS Go Green," involving the participation of officials, employees, and students, creating an enthusiastic atmosphere. This marathon was organized by the Student Affairs Deanship in the Smart Village, as part of its ongoing support for students in educational, health, and recreational aspects.

This day was organized within the framework of the Arab Academy for Science, Technology, and Maritime Transport's participation in the environmental initiative "Prepare for Green," launched by the Ministry of Environment under the patronage of President Abdel Fattah El-Sisi, as part of the National Sustainable Development Strategy "Egypt 2030."





[The launch of the Green Project for Arab Youth at the Arab Academy in Smart Village](#) on Dostor news page

[The launch of the Green Project for Arab Youth at the Arab Academy in Smart Village](#) on al masry el youm news page

Community Engagement

College Of Language & Communication (Alexandria) Students' Visit To The Solid Wastes Recycling Plant At Port Said

The College of Language and Communication (Alexandria) at the Arab Academy for Science, Technology and Maritime Transport continues to show its keenness to actively participate in Egypt's presidential initiative "Go Green" by holding different environment-related activities.

On Thursday, 24th of February 2022, college students' activists of "Haylef w Yergalak", or "It Comes Back to You," campaign paid a visit to the recycling plant of solid wastes in Port Said.

During the visit, the students handed in the plastic wastes they collected on Friday, February the 11th, in order to be recycled as a part of the college's campaign to raise awareness on the negative impact of using single-use plastic products on the environment and the importance of recycling.

This is done under the guidance of the Minister of Environment Dr. Yasmine Fouad, his Excellency the President of the Academy Prof. Dr. Ismail Abdel Ghafar, the Vice

President of the Academy for Training and Community Service Prof. Dr. Ismail Taha, and the Dean of the College of Language and Communication Prof. Dr. Abeer Refky.



[College of Language & Communication \(Alexandria\) Students' Visit to The Solid Wastes Recycling Plant at Port Said](#) on the AASTMT news page

Blue Color Initiative

Because children have the power to change our future, the AAST decided that we must start raising awareness among them. The AAST started an initiative to spread awareness among children on the hazards of plastic.





[awareness among children on the hazards of plastic 1](#) On social media
[awareness among children on the hazards of plastic 2](#) On social media

College Of Language & Communication (Alexandria) Students Launch A Campaign To Collect Plastic Wastes

Students of the College of Language and Communication (Alexandria) at the Arab Academy for Science, Technology and Maritime Transport launch a campaign called "Haylef w Yergalak," or "It Comes Back to You," to raise awareness on the negative impact of using single-use plastic products on the environment and the importance of recycling, as a part of Egypt's presidential initiative "Go Green".

On Friday, February the 11th 2022, the campaign members launched a campaign to collect and recycle plastic wastes found in the vicinity of the college Miami Campus in order to create a clean environment free of the pollution caused by plastic wastes.



[College of Language & Communication \(Alexandria\) Students launch a Campaign to Collect Plastic Wastes](#) on the AASTMT news page

Training Program For Workers In The Waste Management System In The Eastern Province

Within the role of the Ministry of Environment in implementing the new waste management system: The Minister of Environment directs the rapid implementation of the infrastructure of the waste management system and the qualification of the cadres working in the system.

The Ministry of Environment, in cooperation with the Arab Academy for Science, Technology and Maritime Transport, implemented a two-day training program for workers in the waste management system in the Eastern Province, to qualify cadres and workers in the waste system as part of capacity building efforts to raise the level of performance, in a way that facilitates the implementation of the system in the best way and achieves its effectiveness and use, through definition. The Waste Management Law and the role of the Waste Management Regulatory Authority in this field, and an introduction to the infrastructure that is being implemented and the best ways to operate and sustain it. It also includes practical training for workers in the sanitary landfill in Belbeis in Sharqia.



[Within the role of the Ministry of Environment in implementing the new waste management system](#) on social media

Removing 200 Thousand Tons Of Historical Accumulations Of Waste From The City Of Idku In The Bahaira City

The Arab Academy for Science, Technology, and Maritime Transport in collaboration with the Executive Unit for Waste Sector Management of the Ministry supervised the transfer of waste and safe burial of approximately 200,000 tons of historical accumulations in the city of Idku in the lake to the safe sanitary landfill that was established in Badr City in the lake.

This came in the presence of Mr. Ahmed Atef, Director of the Ministry's Waste Unit, Dr. Abdel Moneim Sanad and Dr. Tariq Eid from the Arab Academy for Science, Technology and Maritime Transport, the head of the Badr Center and City, and representatives of the governorate's waste management, noting that the transfer operations are carried out in coordination with the Arab Organization for Industrialization and companies working in the hygiene system. The actual lifting of the backlog has begun, which will be completed within the next few days.



[ocal Development: Removing 200,<> tons of historical accumulations of waste from the city of Idku in the lake Cairo24 news](#)
[Ministry of Local Development](#) on social media

Contribution of AASTMT To Support The Egyptian Government In Implementing The National Waste Management Plan

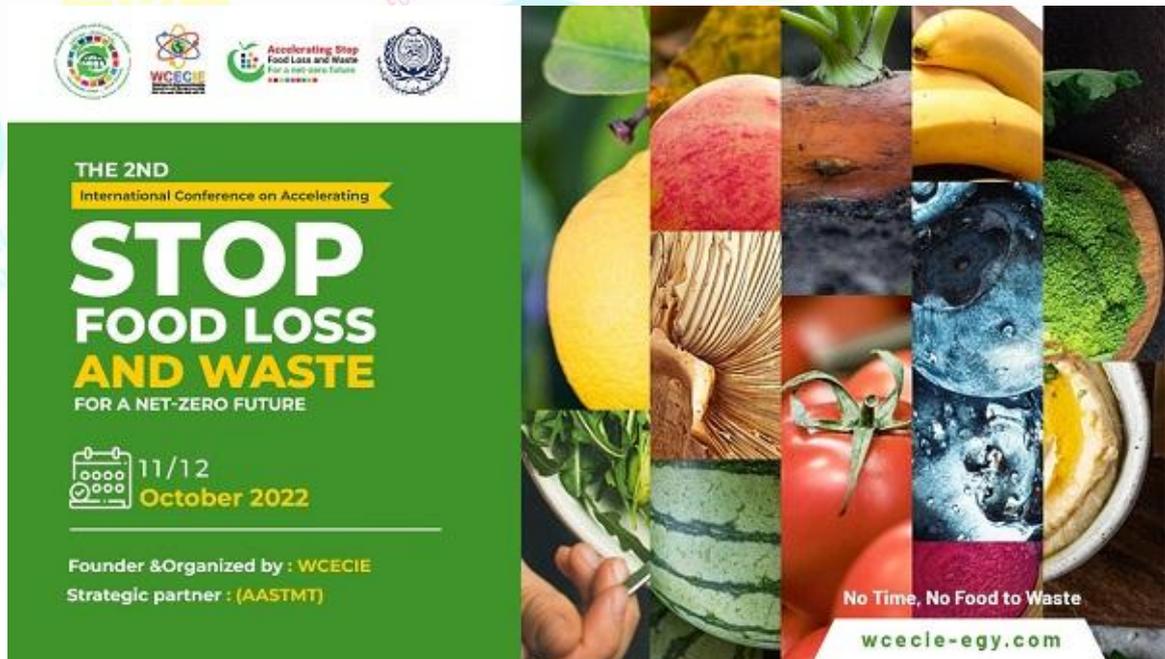
The AASTMT has several contributions to support the Egyptian Government in Implementing the National Waste Management Plan. This includes consultancy such as “korimate recycling complex” project. This project has several activities involving waste water collection lines treatment unit, solid waste treatment, solid waste separation, plastic recycling, glass recycling, paper and carton recycling, metal recycling, wood recycling, tire recycling, slaughterhouse waste treatment.

[Contribution of AASTMT to support the Egyptian Government in Implementing the National Waste Management Plan](#)

Events

The 2nd International Conference On Green Climate And Smart Waste Management

The Arab Academy for Science, Technology and Maritime Transport (as a strategic partner) hosts the Second International Conference on Green Climate and Smart Waste Management. The second edition of the conference is entitled "Accelerating to Stop Food Waste and Loss for a Net Zero Emission Future."



[The 2nd International Conference on Green Climate and Smart Waste Management](#) on the AASTMT news page

IEEE YESIST12-2023 Competition – Global

The AASTMT organized a competition called IEEE YESIST12-2023. The competition aims to achieve the goals of the United Nations for sustainable development through innovative projects. The preliminary stage was conducted, for the second year in a row, in Egypt for all five tracks, under the patronage of Prof. Ismail Abdel Ghafar, President of the Arab Academy for Science, Technology & Maritime Transport (AASTMT). The prelim stage was organized by the IEEE Eta Kappa Nu - Mu Beta Chapter (Egypt-Section), at Arab Academy in technical partnership with College of Engineering and Technology- Abu Kir Campus, IEEE Egypt Section Industry Engagement Committee, and the EME Innovation Hub - BORG. The activities of the preliminary stage were conducted over two days on Sunday and Monday, July 16-17, 2023, under the title:

“Preparing for the Future - Sustainable Transformative Technologies”

In the prelim stage, 58 project abstracts were received from 33 universities and schools from all over Egypt in addition to international participation from universities and schools from India in the five different tracks of the competition. The competition was held in Hybrid-mode.



[IEEE YESIST12-2023 Competition](#) on social media

Climate Summit Conference

Within the framework of the Arab Academy for Science, Technology and Maritime Transport’s interest in participating in international conferences, Professor Dr. Alaa Abdel Bari - Vice President of the Academy and Professor at the Institute of Basic and Applied Sciences - Faculty of Engineering and Technology participated in the Climate Summit Conference by presenting a lecture entitled: Sharm El-Sheikh. The session

titled “German African Mediterranean Cooperation Toward”. Prevention of Marine Litter This is in the axis Raising the African coordination and awareness on waste to reduce impact on the natural ecosystem, which was managed by the environment ministers of Egypt, Gabon and Senegal.



[German African Mediterranean Cooperation Toward](#) on social media