1972 - 2022

Years Of Excellence

SUSTAINABLE
DEVELOPMENT
GOALS

ARAB ACADEMY FOR SCIENCE,
TECHNOLOGY & MARITIME TRANSPORT
SDGs REPORT 22/23

SUSTAINABLE DEVELOPMENT GOALS

AASTMT's KEY ACHIEVEMENTS

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) has made significant strides in **the Times Higher Education Impact Rankings**, which evaluate universities' contributions toward the United Nations Sustainable Development Goals (SDGs). The results, based on **the academic year 2021-2022**, highlight AASTMT's leadership in sustainability, education, and societal impact.

Global and Regional Rankings:

Ranked **306th** globally out of **1,963** universities worldwide.

Achieved **3rd** place among universities in Egypt.

Ranked **19th** in the Arab region.

Leading Performance Across SDGs:

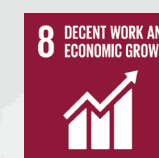### AASTMT ranked **1st in Egypt** for key Sustainable Development Goals:

4 QUALITY EDUCATION | 7 AFFORDABLE AND CLEAN ENERGY | 8 DECENT WORK AND ECONOMIC GROWTH | 14 LIFE BELOW WATER

Notable Global Rankings:

Ranked **6th** **globally** for 7 AFFORDABLE AND CLEAN ENERGY

Ranked **84th** **globally** for 4 QUALITY EDUCATION

Achieved **Top 100 global rankings** for:

8 DECENT WORK AND ECONOMIC GROWTH | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 14 LIFE BELOW WATER

Regional Leadership in SDGs:

1st place in **the Arab region** for 7 AFFORDABLE AND CLEAN ENERGY

12th place in **the Arab region** for 4 QUALITY EDUCATION

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INTRODUCTION

We are pleased to present this annual report, showcasing the **Arab Academy for Science, Technology & Maritime Transport's (AASTMT)** ongoing commitment to advancing the **United Nations Sustainable Development Goals (SDGs)**. These SDGs provide a global blueprint for addressing crucial issues such as poverty, inequality, gender equality, and **environmental protection**. With **17 interconnected goals** and **169 specific targets**, they call for immediate, collaborative efforts to tackle challenges like **climate change,** improving **education access,** and supporting **vulnerable populations,** including **refugees**. AASTMT has fully integrated these goals into its **academic programs**, **research initiatives**, and **community outreach** to drive impactful change.

As a prominent institution of **higher education**, we acknowledge our vital role in confronting these global challenges. Over the past year, we have made notable progress in embedding **sustainability** and **social responsibility** throughout our operations. From enhancing our **curriculum** with sustainability-driven content to pioneering **research** that addresses critical global concerns, our initiatives align directly with the SDGs, ensuring both **local relevance** and a **global footprint**. Our partnerships—local and international—further magnify our efforts, benefitting not just our **students** but also the **broader community**.
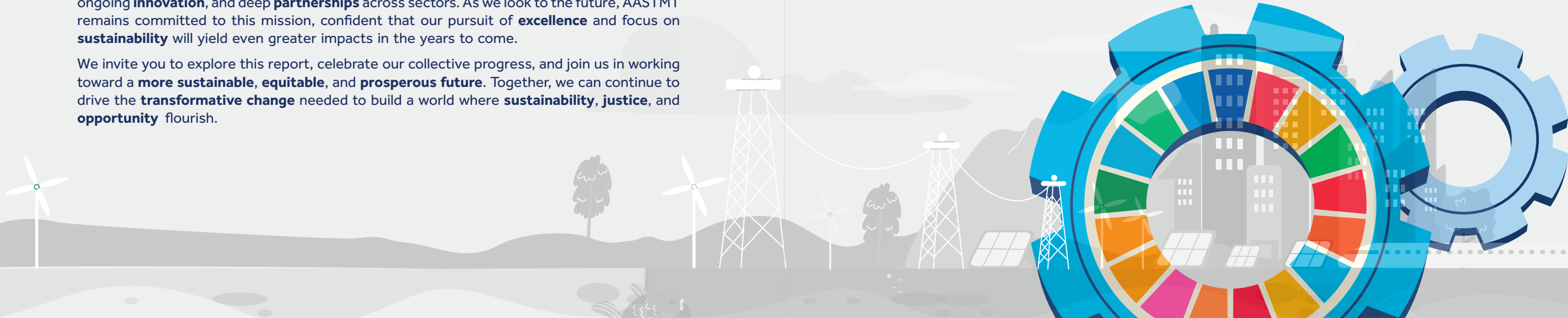
This report offers an overreview of our progress toward each **SDG**, showcasing our **key accomplishments**, challenges, and insights gained. It is a reflection of the dedication of our entire **university community—**from students and faculty to administrations and partners—who have been instrumental in moving this mission forward. Through their **commitment** and **collaborative spirit**, we have achieved significant advances in areas like **climate adaptation**, **gender equality**, and **sustainable development**.

While we are proud of these successes, we recognize that achieving the SDGs requires continuous effort. The complexity and ambition of these goals necessitate **long-term vision**, ongoing **innovation**, and deep **partnerships** across sectors. As we look to the future, AASTMT remains committed to this mission, confident that our pursuit of **excellence** and focus on **sustainability** will yield even greater impacts in the years to come.

We invite you to explore this report, celebrate our collective progress, and join us in working toward a **more sustainable**, **equitable**, and **prosperous future**. Together, we can continue to drive the **transformative change** needed to build a world where **sustainability**, **justice**, and **opportunity** flourish.

CONTENTS

GOAL 1 **- NO POVERTY**

OUR AIM 2022-2023

In order to c ontribute to achieving the primary goal of **SDG1** which is eradicating poverty in all its forms everywhere, AASTMT has attempted to increase the proportion of students receiving financial aid, develop university anti-poverty programmes and develop community anti-poverty programmes.

THE IMPACT RANKING SCORES 2021-2022

1
NO POVERTY

SCORE **58.3**

RANK **201– 300** out of **1093** institutions

SDG1 research	48.0
% financial aid (poverty)	60.1
Anti-poverty prog - uni	60.0
Anti-poverty prog - community	66.7

KEY MILESTONES IN 2022-2023

Student Scholarships and the Number of Students receiving Financial Aid for the Fiscal Year 2022/ 2023
There has been a remarkable increase in the number of students receiving financial aid during the Academic year 2022/ 2023. Out of the total number of students which is **2,134**, a number of **10,231** received financial aid representing **31.8%.**

Start-up School
AAST Startup School acts as the educational arm of the Entrepreneurship Centre. The main objective of this program is equipping early-stage entrepreneurs with the essential, substantial, and core knowledge & skills.

On another side, supporting existing startups through advanced trainings and technical, industry-related mentorship programs. Also, the school provides AAST EC incubators with the required educational support to achieve the impactful incubation experience.

Spin-offs (2022 - 2023)
New companies directly created from the research and program at *EC-AASTMT* [8] are defined as registered companies set up to exploit intellectual property that has originated from EC-AASTMT:

Good Will Incubator for AASTMT Students
The 1st Business Incubator for Entrepreneurs with Disabilities, established in cooperation and sponsorship between Rowad 2030, project of the Ministry of Planning and Economic Development and the Entrepreneurship Center at the Arab Academy for science, technology and

maritime transport. Goodwill Incubator is designed to support entrepreneurs with varying disabilities and startups that have innovative solutions for people with disabilities. Goodwill Incubator works on helping them develop their business ideas and turn it into real business through training, mentorship, consultation and prototype development.

We believe that Entrepreneurship and self-employment is one of most viable fields for people with disabilities who are looking to enter the job market on their own terms.

Grants: Entrepreneurship Center and Google -Training Entrepreneur Program

A new Corporation with Google Foundation with the Entrepreneurship Center in the Arab Academy for Science and Technology with total fund **100.000 €**. The Fund cover a training professional , the program provided and organized from Entrepreneurship center to the Entrepreneurs inside the Arab Republic of Egypt, Saudi Arabia and United Arab Emirates.

Cooperation with KIT, The Karlsruhe Institute of Technology

A joint cooperation and sponsorship agreement between the Entrepreneurship Center at the academy and KIT, The Karlsruhe Institute of Technology- TECH*grow program*, the support provided to programs organized by the Entrepreneurship Center.

TECH*grow* is a two-phase module, with the first phase taking place in the African partner country. Participants take part in a custom-made accelerator, which leads to a pitch event including a nomination in front of investors. The winners go on a soft landing trip to Germany as part of the second phase.

Target group: Start-ups in the roll-out phase in the market

Training courses provided by the Institute of Technical and Vocational Studies at the Industry Service Complex during 2022/ 2023
The mission of the Institute of Technical and Vocational Studies is to efficiently integrate out technical, managerial, training, consultation, and laboratory facilities to proactively create market-driven resources to provide a high-quality educational environment, help solve business problems, and fulfill industrial needs.

Electrical and Electronics Engineering	Automotive Engineering
• Electronic maintenance of factories	• Operation and maintenance of diesel engines
• Electrical maintenance of factories	• Identifying car faults using a fault analysis device
• AC and DC machines	• Gasoline engines
• Maintenance and protection of transformers	• Mechanical clutch and manual gearbox
• Identifying faults in electrical power systems	• Electronic injection systems for gasoline engines
• Electrical switches	• Car air conditioning systems
• Analysis and protection of electrical power systems	• Advanced Brake System (ABS)
• Traction equipment for AC motors and their applications	
• Traction equipment for DC motors and their applications	
• Electrical and electronic theory	

Training courses by the Institute of Technical and Vocational Studies for Sudanese Refugees

Cooperation Protocol between the Institute of Technical and Vocational Studies and Sinmar Company

A cooperation protocol between the Institute of Technical and Vocational Studies and Sinmar Company has been conducted to provide training courses for the people of Port Said Governorate in 2022/ 2023, with 180 trainees for 12 training courses in the fields of Principles of gas and arc welding, Heating, ventilation and air conditioning systems, Electrical maintenance of factories, Electronic maintenance of factories, Principles of hydraulic and Introduction to solar cells and renewable energy.

COMMUNITY ENGAGEMENT

Courses provided by the Community Service and Continuing Education Center during 2022/ 2023

The Community Service and Continuing Education are an integral part of AASTMT, as it is the social corporate responsibility of AASTMT where it provides charged services to serve the community at large with discounts exceeding 50%. The Center for Adult and Continuing Education is considered to be one of the most highly acclaimed training centers directed to aid the companies and business organizations in Egypt and the Arab World.

Courses provided by Arab Institute for Leadership Development (AILD) during 2022/ 2023

Believing in the importance of leadership in all industries, situations and across all levels, the Arab Institute for Leadership Development (AILD) - in partnership with the world's best institutions and distinguished experience in the field - is dedicated to promote the best practices of leadership through offering post-graduate educational programs, specialized training courses and consulting services, and the implementation of projects that serve corporate, governmental and community development sectors, aligning with the global sustainable development goals.

Community Anti-Poverty Initiatives

Initiative	Distribution of Iftar meals and dates
Execution Timing	22 April 2022
Place of Execution	Abou Qir General Hospital
Community Service Description	Academy Al-Kheir CLC students have distributed Iftar meals to different families in the Abu Qir area and Abou Qir General Hospital. They also distributed dates at breakfast hour.
Execution Pictures	

Initiative	Distribution of iftar meals to orphans
Execution Timing	17 April 2022
Place of Execution	El Matar Youth Centre
Community Service Description	Volunteers from Academy Al-Kheir CLC distributed Iftar meals and bags of candy to orphans at El Matar Youth Centre to celebrate the holy month of Ramadan.
Execution Pictures	

EVENTS

Entrepreneurship Centre Initiatives during 2022/ 2023

- Series of Workshops "Support Innovation & Entrepreneurship in the Smart Industry".
- Training Bootcamp -Entrepreneurship Society - Port Said Branch.
- Workshops exploring common ground with startup ecosystems in Middle East and North Africa.
- GoodWill Entrepreneurship Incubator, Training Sessions.
- Session "Entrepreneurship Orientation ".
- Online Lecture "Call for Entrepreneurs".
- Online Session "Discover the Essential Skills & Mindset needed to Overcome Challenges and Achieve your Entrepreneurial Goals".
- Rally Accelerate Advisory board
- Rally Accelerate Competition 2023, Training BootCamp.

UPCOMING GOALS

Initiative 1

Support economically disadvantaged students and community members by providing scholarships and vocational training. The initiative aims to reduce poverty by empowering individuals with the skills and knowledge necessary to improve their economic situation.

Implementation:

In continuation of the Academy's initiative to provide financial support at a rate ranging between 10% and 15% for new students in each semester, provided that supporting documents are submitted, the percentage can be increased to 15% - 20% for students whose financial circumstances prevent them from continuing their studies.

As a continuation of this initiative that the Academy is currently undertaking, it is possible to organize with the Center for International Agreements and Cooperation to conclude agreements with a number of other charitable institutions, which will contribute to increasing scholarships for students.

Initiative 2

Create a comprehensive financial literacy and support program that provides workshops, mentorship, and financial assistance to economically disadvantaged students. The program will provide participants with the knowledge and tools necessary to manage finances, access higher education, and secure stable employment opportunities.

Implementation:

As a continuation of the training programs the Academy provides to members of the local community through a number of centers and institutes, including Community Service Centers, the Industry Service Center, the Productivity and Quality Institute, and the Entrepreneurship Center, the following can be implemented:

- Holding workshops .
- Communicating with the competent authorities within the aforementioned academy to provide free or reduced-fee training programs for members of the local community.
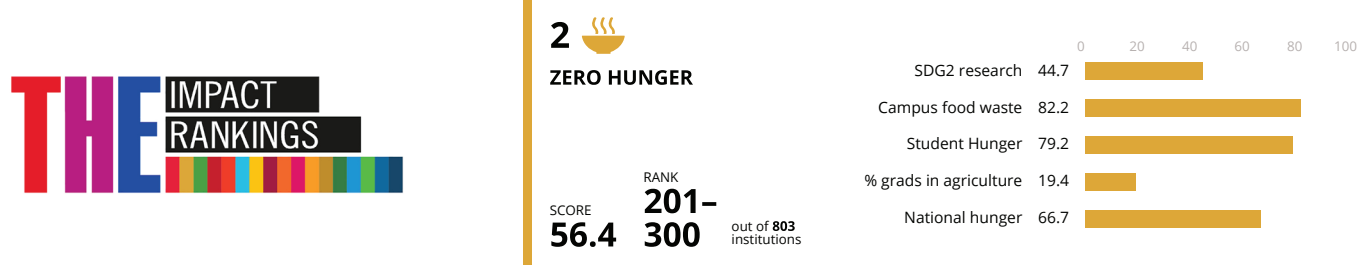
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2 ZERO HUNGER

GOAL 2 - ZERO HUNGER

OUR AIM IN 2022-2023

Enhance sustainability by expanding plant-based food options, sourcing local and seasonal produce, reducing food waste, and promoting nutrition education, while also supporting vulnerable students through scholarships and subsidized meal plans, in alignment with its commitment to food security and environmental responsibility.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

2 ZERO HUNGER

SCORE **56.4**

RANK **201–300** out of **803** institutions

	0 20 40 60 80 100
SDG2 research	44.7
Campus food waste	82.2
Student Hunger	79.2
% grads in agriculture	19.4
National hunger	66.7

KEY MILESTONES IN 2022-2023

AASTMT made significant strides in advancing its food sustainability initiatives in the 2022-2023 academic year, with key achievements including:

Introduction of Plant-Based Food Stations: In response to growing demand for plant-based diets, AASTMT introduced dedicated vegetarian and vegan food stations. This initiative provides students and staff with easy access to healthy and environmentally friendly plant-based options, aligning with the university's commitment to sustainability.

Expansion of Local and Seasonal Produce Initiatives: AASTMT expanded its sourcing of locally grown, seasonal produce. By reducing its carbon footprint and supporting local farmers, the university reinforced its commitment to sustainable sourcing practices. This initiative helped to decrease food miles and foster stronger connections between the university and local agricultural communities.

Reduction in Food Waste: The university implemented several strategies to minimize food waste, including portion control practices, composting initiatives, and launching food donation programs. These efforts not only reduced the environmental impact but also contributed to community welfare by donating surplus food to local charities and food banks.

Scholarships for Vulnerable Students: AASTMT demonstrated its commitment to social justice and equity by offering scholarships to students with special financial or social needs, as well as those excelling academically or athletically but facing financial challenges. These scholarships empower students to reach their full potential and contribute to a sustainable future.

Strategic Collaboration with Local Farmers: The university strengthened its relationships with local food producers, including a strategic cooperation

agreement with the Ministry of Agriculture and Food Industries (MAFI). This partnership, focused on integrating cutting-edge technologies like AI and robotics into the agri-food industry, aims to foster innovation, improve efficiency, and enhance sustainable agricultural practices.

COMMUNITY ENGAGEMENT

AASTMT is deeply committed to engaging with the community through its sustainable food initiatives and building strong relationships with local farmers and food producers:

Nutrition Education Programs: The university's Nutrition Affairs Department has been actively promoting healthy eating habits, food safety, and the importance of a balanced diet. These educational initiatives empower students to make informed food choices, fostering a culture of wellness across the campus.

Collaboration with Local Farmers: By sourcing fresh, local produce, AASTMT has supported local agriculture, reduced dependence on external supply chains, and fostered sustainable practices within the community. This collaboration strengthens ties with local farmers, ensuring that the food provided to students is fresh and environmentally sustainable.

Scholarships and Subsidized Meal Plans: Through its scholarship programs, AASTMT has made education accessible to vulnerable students, including refugees and those facing financial hardship. These scholarships, combined with subsidized meal plans, help ensure that all students, regardless of their financial background, have access to nutritious and healthy food options.

Empowerment through AI and Agriculture: AASTMT's Alamein Campus College of Artificial Intelligence has

facilitated the collaboration between academia and local farmers. By providing access to university facilities, technology, and training, the university empowers local agricultural stakeholders to improve sustainable farming practices, contribute to food security, and address environmental sustainability.

EVENTS

AASTMT has held a number of impactful events aimed at promoting sustainable food choices and engaging the campus community:

Sustainable Food Campaigns: Various awareness campaigns have been organized to reduce food waste, encourage plant-based diets, and educate students on the environmental impact of their food choices. These initiatives further highlighted the university's commitment to sustainability and health, helping to foster a more environmentally conscious campus community.

Healthy Eating Workshops: Workshops have been conducted to educate students and staff on the benefits of balanced diets, the importance of locally sourced produce, and practical tips for reducing food waste. These workshops have been successful in encouraging healthier food choices across the campus.

Food Donation Drives: In collaboration with local charities, AASTMT launched food donation drives to distribute surplus food to those in need, contributing to the university's commitment to social equity, food security, and sustainability. These events also created a platform for students to actively participate in community service.

UPCOMING GOALS

Looking to the future, AASTMT is focused on further advancing its sustainable food initiatives to create a more inclusive,

environmentally friendly, and supportive campus environment:

Increase Plant-Based Offerings: The university plans to further expand its plant-based food options to provide students and staff with even more sustainable, health-conscious choices. The continued increase in plant-based offerings supports the university's goal of promoting healthy and sustainable eating habits across the campus.

Expansion of Meal Subsidy Programs: AASTMT is exploring ways to expand its subsidized meal programs to make healthy, affordable food accessible to more students, especially those facing financial constraints. The aim is to ensure that all students, regardless of their socio-economic background, can access nutritious meals.

Enhanced Community Partnerships: The university plans to deepen its partnerships with local farmers, food producers, and community organizations to further enhance sustainable agriculture practices. By strengthening these relationships, AASTMT aims to support local economies and improve the sustainability of food production in the region.

Zero-Waste Initiatives: AASTMT is committed to implementing more comprehensive zero-waste practices within its dining facilities. This includes expanding composting and food recycling efforts, reducing single-use plastics, and promoting sustainable consumption practices across the campus.

Technological Integration in Agriculture: AASTMT's collaboration with the Ministry of Agriculture and Food Industries (MAFI) aims to incorporate AI and robotics into the agriculture sector. By leveraging these cutting-edge technologies, the university aims to improve operational efficiency, sustainability, and food security.

3 GOOD HEALTH AND WELL-BEING

GOAL 3 - GOOD HEALTH AND WELL-BEING

OUR AIM 2022-2023

AASTMT aspires to ensure good health and promoting well-being for all. We focus on key targets to boost the health of local community through different ways; awareness events, medical convoys, sharing facilities and regulatory policies.
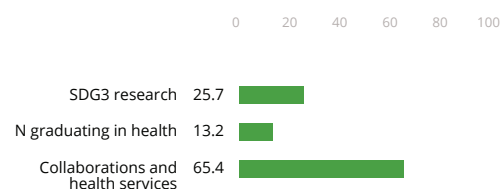
THE IMPACT RANKING SCORES 2021-2022

3
GOOD HEALTH AND WELLBEING

SCORE **36.6**   RANK **1001+**   out of **1498** institutions

SDG3 research	25.7
N graduating in health	13.2
Collaborations and health services	65.4

KEY MILESTONES IN 2022-2023

AASTMT is always committed to develop different initiatives in the aim to reach out for disadvantaged people and rural areas and help raising health awareness in the local community.

The number of students graduating from AASTMT health institutions has been dramatically increased with the aim to have highly skilled health practitioners boosting the health standards of the local community.

AASTMT recognizes the great importance of building advanced, knowledgeable, well trained health entities with international standards. In recognition of its pivotal role, several memorandum of agreements have been signed with a variety of healthcare facilities, institutions and universities whether on the national or the international level. New collaborations have been established with prestigious organizations such as, but not limited to; UNESCO, American Council for Pharmacy Education (ACPE), UClan, Monach, Bellarussian, Genova, Minnesota,.... universities, PHARCO and Pharaonia pharmaceutical companies.

AASTMT's campuses are equipped with advanced health and sports facilities that support holistic well-being and are accessible to local communities. These resources promote physical, mental, and reproductive health through fitness programs, counseling services, awareness campaigns, and partnerships with national hospitals and clinics.

COMMUNITY ENGAGEMENT

In recognition of AASTMT important role of raising awareness and community service, different events and medical convoys have been sent to rural places in the aim of helping the local community of having a better health and health education.

Opening of AASTMT Dental Clinics
Arab Academy for science, technology and Maritime (AASTMT) officially opened dental clinics in Alamein Campus, on Sunday 21-5-2023 as a cooperation agreement signed out between AASTMT and the Italian University of Genoa.

AASTMT visit to Disabled People and Orphanages
Arab Academy Medical Students Association - AMSA AAST has arranged a visit to disabled people and orphanages on 21st March 2-23.

AASTMT Participation in the National Campaign "100 Days of Health"
AASTMT student have participated in the national initiative "100 days of health". Students roamed the streets of Port-Said/Port-Fouad to spread awareness about the risks of breast cancer, and chronic diseases such as diabetes and hypertension.

EVENTS

Anxiety and Stress Disorders Awareness Sessions:

Improving Mental Health in the Workplace Seminar:

The Arab Academy for Science, Technology and Maritime Transport held a seminar on "Improving mental health in the workplace" delivered by Dr. Kamal El-Fawal, a psychiatric and neurological diseases consultant. The seminar aimed to discuss the significance of mental health in the workplace and its role in enhancing the institution's excellence and productivity. The event was attended by Dr. Mahmoud El-Damaty and Dr. Mohamed Abu Suleiman, and was followed by the Institute's dean, Dr. Mohamed Hassan Abd Rabou, praising and thanking Dr. Kamal for his contribution.

No Smoking Awareness

Awareness Sessions:
Smoking is a harmful habit that affects millions of people around the world. It causes various diseases and reduces the quality of life. Jana Elbialy, was our speaker about the harmful effects of smoking on the physical and mental health, she also mentioned some strategies that would help a smoker quit and the health benefits of quitting.

World No Tobacco Day:
AASTMT celebrated world no tobacco day, a day to raise awareness about the dangers of tobacco and its impact on

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health and the environment. Say no to tobacco and yes to a healthier and happier life!

No Smoking Symposium:
The College of Pharmacy received a scientific symposium on "The Harms of Smoking and the Psychology of Addiction" under the supervision of Dr. Muhammad Atman, Professor of Pharmacology at the college.

UPCOMING GOALS

In the upcoming year, AASTMT plans to enhance its commitment to SDG 3: Good Health and Well-being through expanded partnerships with national and international hospitals, clinics, and universities to improve training opportunities and healthcare outcomes. The institution aims to launch new initiatives, including awareness campaigns on mental health, sexual and reproductive health, and disease prevention, while establishing wellness hubs on campus to provide specialized workshops and fitness programs. Additionally, AASTMT will organize community engagement projects such as health screening events, vaccination drives, and mobile health clinics to extend its impact beyond the campus and foster a healthier society.
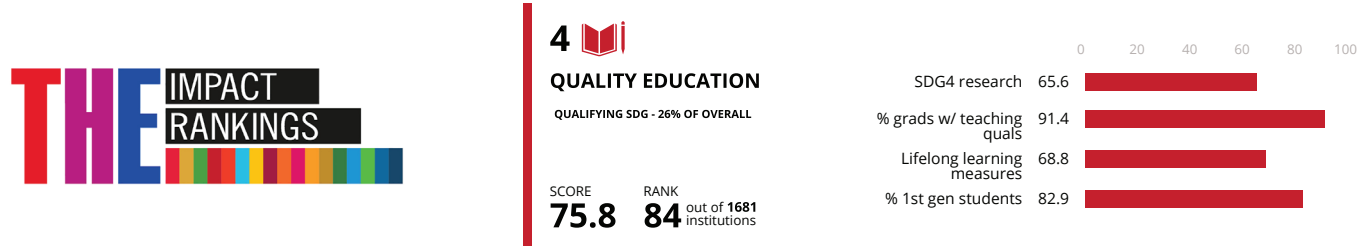
4 QUALITY EDUCATION

GOAL 4 - **QUALITY EDUCATION**

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OUR AIM IN 2022-2023

- Ensure that all boys and girls have access to quality early childhood development, care, and pre-primary education, ensuring that they are ready for primary education.
- Ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes.
- Encourage equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university.
- Ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
- Build and upgrade education facilities that are child, disability, and gender-sensitive and provide safe, non-violent, inclusive, and effective learning environments for all.
- Substantially Increase the Number of Scholarships to increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship.
- Enhance Global Citizenship Education to ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

4 QUALITY EDUCATION

QUALIFYING SDG - 26% OF OVERALL

SCORE
75.8

RANK
84 out of **1681** institutions

	0	20	40	60	80	100
SDG4 research	65.6					
% grads w/ teaching quals	91.4					
Lifelong learning measures	68.8					
% 1st gen students	82.9					

KEY MILESTONES IN 2022-2023

Teaching

Mapping the Courses Studied at the AASTMT with SDGs:

AASTMT has taken significant steps to align its curriculum with the Sustainable Development Goals (SDGs), initiating a comprehensive evaluation that revealed varying levels of alignment across different goals, as depicted in the accompanying chart. While the curriculum broadly addresses most SDGs, areas such as SDG1, SDG2, SDG6, SDG7, SDG13, SDG14, and SDG15 have been identified as requiring enhanced integration. Building on this, the initiative has already been expanded during the current term to include more colleges, marking a pivotal step toward a more cohesive and comprehensive approach. This effort reflects AASTMT's commitment to embedding sustainability across all academic disciplines and levels. To further this progress, plans are in place to refine the evaluation process for greater accuracy and to generalize its application, ensuring that the alignment with SDGs is systematically integrated not only at the university level but also at the college and department levels, fostering a holistic adoption of sustainability principles across the institution.

Mapping the Courses Studied at the AASTMT with SDGs
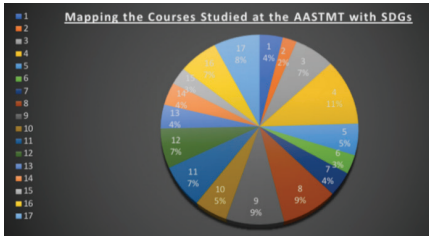
Toward a Green and Sustainable Future - 2023 School Initiative

"Toward a Green and Sustainable Future" is an initiative that involves a visit by teachers and students to the Arab Academy for Science, Technology & Maritime Transport (AASTMT) at the Abu Kir campus. This visit aims to raise awareness about the United Nations' Sustainable Development Goals (SDGs). The program included two professional talks, a laboratory tour, and a visit to the planetarium, during which participants engaged in discussions focused on strategies for minimizing energy consumption.

Global Finale of IEEE-YESIST12-2023

The global finale of IEEE YESIST12 2023 took place on September 2nd and 3rd, 2023, at the Arab Academy for Science, Technology & Maritime Transport (AASTMT) in Alexandria, Egypt. This event is part of an international initiative aimed at promoting social responsibility and ethical practices among young engineers through innovative projects that address humanitarian and social issues. The finale was conducted in a hybrid format, allowing participants to attend either physically or virtually. Participants included students and young professionals showcased their innovative ideas, contributing to the overall goal of fostering service-oriented engineering practices with more than 450 participants from more than 20 countries.

COMMUNITY ENGAGEMENT

A Training Camp with The Chinese Expert Richard Ping (EOI 2022)

A training camp was organized for students participating in the Egyptian Olympiad in Informatics, featuring Chinese expert Richard Ping. He is a lecturer at an American university and has a proven track record of training students from various countries who have achieved gold medals in the International Olympiad in Informatics. Around 50 thirty participants attended the event.

Future Sustainable Technology Day and Workshop with Certificate

Participants had the opportunity to engage in interactive sessions designed to inspire innovative thinking and foster

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a deeper understanding of sustainable practices. The workshop aimed to equip both teachers and students with the knowledge and skills necessary to address environmental challenges through technology. Attendees also participated in hands-on activities, encouraging collaborative problem-solving and creative solutions. This immersive experience was designed not only to educate but also to ignite passion and curiosity in the fields of science and technology, empowering the next generation of innovators and leaders. The event had 40 students and 3 teachers.

The Egyptian Programming Competition for University Youth in Cooperation (ECPC) 2023
The Egyptian Programming Competition for University Youth (ECPC) 2023, in collaboration with the Ministry of Communications and Information Technology (MCIT) and supported by the Innovators and Geniuses Fund of the Ministry of Higher Education and Scientific Research, concluded at the Arab Academy in Alexandria. The 2023 edition of the competition saw participation from 96 colleges and institutes within the engineering and computer sectors, as well as various schools across Egypt. Over the course of two weeks, participants honed their skills in the Software and IT sector—an essential driver of economic development—aiming to establish their entrepreneurial ventures and shape

the future of industry. The event was honored by the presence of Prof. Bill Poucher, President of the International ICPC Foundation for Programming Competitions for University Students.

Robocop Cup Egypt 2023
Founded in 1997, this initiative aims to create a robot soccer team that can defeat ,the human FIFA World Cup champion by 2050. RoboCup has established various soccer platforms for robotics research, including RoboCupJunior, which focuses on engaging primary and secondary students in educational robotic events. The Egypt Robotics Robocop Cup 2023, hosted by the Arab Academy for Science, Technology and Maritime Transport (AASTMT) and supported by the National Telecom Regulatory Authority (NTRA), involved 830 students. The competition included two categories: the Junior School Students Competition (February 14-17) and the University Students Competition @Home (February 10-17).

Egypt Rally Startup Competition 2023
The Egypt Rally Startup Competition is a comprehensive fundraising program designed specifically for Egyptian startups seeking to scale their businesses. Out of more than 1,800 startup ideas submitted, 35 finalists were chosen to compete. Each finalist was allotted three minutes to present their pitch, followed by three minutes for questions and answers to persuade the judges.

Prelim Stage of IEEE-YESIST12-2023
The preliminary stage of the 2023 IEEE-YESIST12 challenge is now underway, providing a global platform to showcase your innovative projects and gain recognition within an international community. This initiative serves as an opportunity for participants to highlight their valuable contributions. IEEE-YESIST12 is structured as a two-tier global competition featuring five distinct tracks across two phases. The preliminary stage, organized by the Mu Beta chapter, was hosted by the College of Engineering and Technology at the Arab Academy for Science, Technology & Maritime Transport in Abu Kir, scheduled for July 16-17, 2023. Finalists from each track subsequently competed in the Global Finale, which was held in a hybrid format in Egypt in September 2023. The competition encompasses five tracks catering to various categories, including a special track for school students known as the Junior Einstein track.

EVENTS

The League of Arab States Youth "Summer Camp" at AASTMT
The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) hosted a summer camp for the General Secretariat of the League of Arab States' youth. Held from September 15-18, 2022, the event featured a visit to AASTMT's educational facilities, seminars on artificial intelligence in the Arab region, and a lecture on supporting joint Arab action.

The Satellites and Geographical Survey Information Systems Workshop at AASTMT Heliopolis Campus College of Engineering and Technology
The workshop was organized by AASTMT's Heliopolis Campus, focusing on satellites and geographical survey information systems. The closing event featured key figures, including AASTMT President and representatives from the National Authority for Remote Sensing and Space Sciences. Students participated in practical training, launching educational satellites (CANSAT), and successfully receiving data with expert guidance.

2nd Bioinformatics and Computational Biology Workshop
AASTMT's Cairo College of Computing and Information Technology hosted its second workshop on Bioinformatics

and Computational Biology on October 15-16, 2022. The event was part of AASTMT's Golden Jubilee celebrations, featuring academic staff and students. It aimed to promote research and collaboration in bioinformatics, with support from AASTMT President Prof. Dr. Ismail AbdelGhafar Ismail Farag.

Closing Ceremony of the Egyptian Collegiate Programming Contest "ECPC 2023"
The closing ceremony for ECPC 2023 was held at AASTMT's AbuKir Campus, marking the culmination of the contest, which involved 7,500 students from 96 Egyptian universities. The event was attended by notable figures, including AASTMT's president, ICPC officials, and representatives from the Ministry of Communications and sponsoring companies. ECPC 2023 was supported by the Innovators Support Fund.

AASTMT and Alamein International University Host Joint Lecture on Research Ethics
AASTMT and Alamein International University held a lecture led by Prof. Dr. Mariam Abbas from Sudan University of Science and Technology. The lecture emphasized research ethics, focusing on informed consent and promoting quality research standards. This event reflects both universities' commitment to educational collaboration and academic integrity.

AASTMT Hosts Workshop on Nano Resonators
AASTMT and Damanhour University organized a workshop focused on the research project "Nano Resonators Under Theory of Two-Temperature Generalized Thermoelasticity Based on Thermomass Motion," funded by the Science, Technology & Innovation Funding Authority (STDF). The event, held at AASTMT's AbuKir campus, involved faculty, researchers, and postgraduate students from eight universities, highlighting the project's progress and research in mathematics.

UPCOMING GOALS

AASTMT has set ambitious goals to further advance its commitment to SDG 4 in the upcoming year. AASTMT plans to expand its curriculum alignment initiative to achieve full integration of SDGs across all colleges and departments, ensuring a holistic approach to sustainability in education. Upcoming projects include developing specialized training programs for educators to embed SDG-focused teaching methodologies and fostering interdisciplinary research initiatives that address global challenges. AASTMT also aims to establish new partnerships with international universities and organizations to promote knowledge exchange and collaborative projects. Additionally, plans are underway to launch community engagement programs, such as workshops and competitions, to inspire students to apply innovative solutions to real-world problems. These initiatives reflect AASTMT's dedication to empowering learners and contributing to the global pursuit of inclusive and equitable quality education.

4

5 GENDER EQUALITY

GOAL 5 - GENDER EQUALITY

OUR AIM IN 2022-2023

As part of its commitment to sustainable development goals, AASTMT highly promote Gender Equality through creating an inclusive atmosphere that encourages and facilitates the full involvement of all genders in both academic and professional efforts.
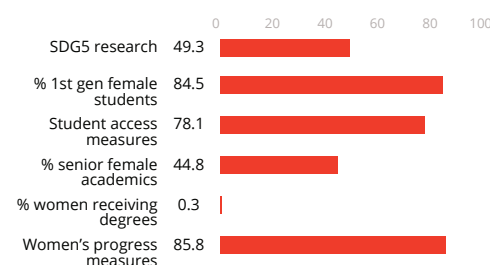
THE IMPACT RANKING SCORES 2021-2022

5 GENDER EQUALITY

SCORE **58.4**

RANK **301–400**

out of **1361** institutions

	0 20 40 60 80 100
SDG5 research	49.3
% 1st gen female students	84.5
Student access measures	78.1
% senior female academics	44.8
% women receiving degrees	0.3
Women's progress measures	85.8

KEY MILESTONES IN 2022-2023

Regarding SDG 5: *Gender Equality*, AASTMT has made significant progress in promoting gender equality throughout the 2022–2023 academic year. This progress is the result of targeted actions and strategic initiatives aimed at fostering an inclusive culture and ensuring equal opportunities for all members of our academic community, regardless of gender.

One of the key areas of focus has been the implementation of *Women's Access Schemes*, which include tailored mentoring programs, scholarships, and other support mechanisms designed to empower women students. These initiatives have created pathways for

women to thrive academically and professionally, addressing potential barriers to their success.

Additionally, AASTMT has introduced policies and programs that actively promote gender inclusivity within its governance, faculty, and student body. This includes leadership development opportunities for women, workshops on gender equity, and the integration of gender equality principles into the curriculum and institutional practices.

Our commitment extends beyond the academic sphere, as demonstrated by proposals such as the establishment of an on-campus nursery. This facility aims

to support students, faculty, and staff with young children, thereby reducing gender disparities in work and study environments by alleviating the childcare burden often disproportionately shouldered by women.

Through these focused actions, AASTMT not only supports the goals of SDG 5 but also positions itself as a leader in the promotion of gender equality in higher education. Our continued dedication to these significant objectives ensures that we are building an academic community where everyone has the opportunity to succeed and contribute meaningfully.

COMMUNITY ENGAGEMENT

In the 2022–2023 academic year, AASTMT dedicated significant efforts to community-centered initiatives aimed at addressing Sustainable Development Goal (SDG) 5: *Gender Equality*. These initiatives emphasized the empowerment of women and the promotion of gender equality across various sectors, focusing particularly on enhancing literacy, fostering lifelong learning, and bridging educational gaps in under-resourced areas. Key Initiatives and Achievements:

Literacy and Educational Programs
AASTMT launched targeted literacy programs designed to improve educational outcomes for women and girls in underserved communities. These programs provided essential literacy skills, fostering greater independence and opening up new opportunities for personal and professional growth.

Lifelong Learning Opportunities
Recognizing the importance of continuous education, AASTMT implemented workshops and training sessions aimed at women of all ages. These sessions covered topics such as digital literacy, vocational skills, and entrepreneurial training, equipping participants with the tools needed to adapt to evolving economic landscapes.

Community Engagement and Partnerships
AASTMT actively collaborated with local organizations, NGOs, and governmental bodies to expand the reach and impact of its gender equality initiatives. By involving students and external partners, the Academy facilitated a community-driven approach to sustainable development, ensuring that programs were tailored to meet the specific needs of local populations.

Workshops and Awareness Campaigns
To foster a deeper understanding of gender equality, AASTMT organized a series of workshops and awareness campaigns on campus and in local communities. These events focused on challenging gender stereotypes, promoting inclusive practices, and encouraging dialogue about the importance of equal opportunities in education and the workforce.

Support for Under-Resourced Areas
Special attention was given to regions with limited access to quality education. AASTMT deployed resources and expertise to these areas, establishing educational hubs and providing access to learning materials and technology. This helped to bridge the educational divide and empower women in marginalized communities.

Through these comprehensive initiatives, AASTMT not only advanced the goals of SDG 5 but also reinforced its role as a catalyst for positive change in society. By prioritizing gender equality and integrating community-centered approaches, the Academy continues to make significant strides in promoting a more inclusive and equitable educational landscape.

Here are some women's mentoring schemes:

- **Professional Development Workshops:**
  Through workshops on leadership, negotiation, and career planning specifically for women.

- **Alumni Mentorship Networks:**
  Creating networks where women alumni mentor current students, sharing their learning experience, and providing insights into career paths and opportunities.

- **Mentorship for Underrepresented Groups:**
  Focusing on mentoring females from marginalized faculties or communities.

EVENTS

"AASTMT President" - "Student Council" Meeting (DEC 27, 2023)
The Arab Academy for Science, Technology, and Maritime Transport's (AASTMT) commitment to advancing the educational process and maintaining strong communication with its student body, H.E. Prof. Ismail Abdel Ghafar Ismail Farag, AASTMT President, held a meeting with the **AASTMT Student Council** on Tuesday, December 26, 2023, at the AASTMT Abukir Campus. The meeting discussed students' needs, academic enhancement suggestions, and plans for the 2023-2024 academic year. The President emphasized the council's role as ambassadors and partners in decision-making.

"Thanawiya Amma" Top Students' Honoring Ceremony at AASTMT (AUG 13, 2023)
The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) hosted the honoring ceremony for "Thanawiya Amma" Top Students (batch of 2023), at AASTMT's Alamein Campus from August 11-12, 2023.

The event was graced by the presence of H.E. Prof. Dr. Reda Hegazy, Minister of Education and Technical Education, H.E. Major General Khaled Shuaib, Governor of Matrouh, and H.E. Prof. Dr. Ismail Abdel Ghafar Ismailg Farag, AASTMT President.

THE FIGURE SHOWS "AASTMT SCHOLARSHIPS FOR THANAWEYA AMMA TOP DISTINGUISHED STUDENTS" (AUG 15, 2024)

In line with the Arab Academy for Science, Technology, and Maritime Transport's (AASTMT) commitment to excellence in education, the institution continually seeks to improve its educational services and maintain high standards of educational quality. This commitment aims to graduate highly skilled professionals who enrich the labor market and foster public confidence. On Wednesday, August 14, 2024, AASTMT hosted an event for the top "Thanaweya Amma" students (batch of 2024) at the AASTMT Alamein Campus.

3rd Place for AASTMT Students in the International MATE ROV Competition for Robotic Submarines (JUL 04, 2023)

H.E. Prof. Ismail Abdel Ghafar Ismail Farag, AASTMT President, extends his heartfelt congratulations to the AASTMT students for securing third place in the final qualifiers of the International MATE ROV Competition, held from June 22-24, 2023, in Colorado, USA. The competition saw the participation of 63 teams from 12 countries and was supported by the US National Science Foundation and the Marine Technology Society.

"Egypt Entrepreneurship Rally 2023" Finale (SEP 06, 2023)

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT), in partnership with the National Bank of Egypt as a strategic partner, hosted the "Egypt Entrepreneurship Rally 2023" from September 3-5, 2023, at AASTMT's El Alamein Campus. The event, organized by AASTMT's Center of Entrepreneurship, brought together university youth from various governorates to engage in entrepreneurial activities and competition. The event featured participation from local and international experts, entrepreneurs, universities, research centers, and individuals interested in entrepreneurship and supporting new business ventures, as well as a group of AASTMT officials.

The International Day of Women and Girls in Science Celebration at AASTMT (FEB 08, 2024)

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT), in cooperation with the UNESCO Regional Bureau for Science in the Arab States, is organizing a celebration of The International Day of Women and Girls in Science (IDWGIS), to be held on February 10 – 11, 2024, at AASTMT's Abukir Campus. The IDWGIS is celebrated annually on February 11, emphasizing the global effort to promote gender equality in science. This celebration aims to empower young women by encouraging them to pursue education and enhancing opportunities for women and girls in science, technology, engineering, and related fields. The event brought together 150 high-level participants from diverse generations and fields, showcasing AASTMT's commitment to advancing women's roles in science and ensuring gender equity in STEM fields.

UPCOMING GOALS

In alignment with our commitment to Sustainable Development Goal (SDG) 5: *Gender Equality*, we propose the establishment of an on-campus nursery at the Smart Village Campus. This initiative aims to address one of the key barriers to gender equality in both academic and professional settings: the challenge of balancing childcare responsibilities with educational and career advancement.

By providing an accessible and high-quality nursery, we offer crucial support to students, faculty, and staff members who have young children. This facility will not only ease the burden of childcare but also enable parents, particularly women, to pursue their academic and professional goals without the added stress of finding reliable childcare off-campus. This, in turn, promotes greater participation and retention of women in higher education and the workforce.

The on-campus nursery will be designed to offer a safe, nurturing, and stimulating environment for children, ensuring their well-being and development while their parents are engaged in academic or professional activities. Additionally, it will contribute to a more inclusive and supportive campus culture by recognizing and addressing the diverse needs of our community members.

This initiative reflects our broader commitment to fostering a work and study environment where gender equity is prioritized, enabling all individuals, regardless of their family responsibilities, to fully participate and excel in their roles. By integrating this supportive resource into the campus infrastructure, we are taking a significant step toward creating a more balanced and equitable environment for everyone at the Smart Village Campus.

6 CLEAN WATER AND SANITATION

GOAL 6 - CLEAN WATER AND SANITATION

6

OUR AIM IN 2022-2023

In 2022-2023, AAST collaborated with Idku Governorate on a waste management initiative, relocating 200,000 tons of historical waste to a sanitary landfill in Badr City to reduce water pollution and improve sanitation. AAST provided technical training for local workers in wastewater treatment and effluent management, supporting sustainable water practices. Community outreach programs were also conducted to raise awareness about water conservation and sustainable waste management. The Badr City landfill follows international environmental standards, ensuring groundwater protection and emissions control. Additionally, AAST's Abukir campus implemented sustainable underground water extraction through eco-friendly solar-powered pumps and nanofiltration, with future plans to integrate desalination and ICT technologies for efficient water reuse.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

6 CLEAN WATER AND SANITATION

SCORE **61.2**

RANK **201– 300** out of **867** institutions

Category	Score
SDG6 research	45.5
Water consumption per person	33.7
Water usage and care	70.0
Water reuse	66.6
Water in the community	96.7

KEY MILESTONES IN 2022-2023

AAST Collaborates on Waste Management Strategy with Idku Governorate

Minister of Local Development Hisham Amna announced the removal of 200,000 tons of historical waste from Idku, transferring it to a sanitary landfill in Badr City as part of Egypt's new solid waste management system. AAST contributes through technical expertise, such as training local staff in wastewater treatment, effluent management, and maintaining water quality.

Project Details and Objectives

1. Mitigating Water Pollution and Improving Sanitation:
The waste removal effort directly impacts SDG 6, by reducing the risk of water pollution from improper waste disposal. By relocating waste to a controlled and environmentally monitored landfill, the project decreases the likelihood of waste leaching into local water bodies.

2. AASTMT's Technical Contribution:
AASTMT provides technical expertise and capacity-building programs for local workers. Through workshops and hands-on training, AASTMT specialists have educated local personnel on effective wastewater treatment processes, effluent management, and water quality maintenance techniques.

3. Community Engagement and Awareness:
Recognizing the importance of community involvement in waste management, the project includes educational outreach programs led by AASTMT.

4. Environmental Standards Compliance:
The sanitary landfill in Badr City adheres to international environmental standards, designed to minimize the environmental footprint of waste disposal.

وزير التنمية المحلية: رفع 200 ألف طن مخلفات تاريخية من إدكو في البحيرة (صور)

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وزير التنمية المحلية: رفع 200 ألف طن مخلفات تاريخية من إدكو في البحيرة (صور)

Enactus AAST's Student-Driven Solutions for Sustainability and Social Impact

Enactus is a student-led organization that has been in action for more than 12 years empowering students to identify real-world problems, propose entrepreneurial solutions, and implement them. Enactus AAST is involved in several innovative projects that contribute to sustainability and entrepreneurship, such as Lazarus, Sprouting, and Mycelium:

1. Lazarus:
By using agricultural waste, Lazarus offers an eco-friendly alternative to plastic packaging that decomposes naturally, aligning with sustainability goals.

2. Sprouting:
The project aims to enhance urban farming by developing vertical farming solutions, allowing communities to grow their own food in limited spaces while using less water and resources.

3. Mycelium:
This innovative project harnesses the power of fungi (mycelium) to create sustainable materials, such as eco-friendly building materials and packaging alternatives. Mycelium's potential to replace non-renewable materials makes it a promising solution for various industries, reducing environmental impact.

In 2022, **Enactus Project REDEEM Project** secured THE AAST TEAM the 3rd place on Egypt in the last National competition. Redeem is a tailored solution which is a mixture of organic bacteria and agriculture wastes that solves the salinity of the soil and helps the soil to get back to it's normal state. Redeem directly impacted 2560 people including farmers, agriculture engineers, empowered women and children who got the chance to be back into schools instead of working.

AAST Collaborative Free Workshop with Freie Universität Berlin on Meteorology

In accordance with the DAAD "Ta'ziz Partnership - Short-term Measures 2023," involving staff and student exchange, a collaborative workshop was organized between Freie Universität Berlin and the AASTMT in Alexandria, Egypt. The workshop, held from December 10-18, 2023, focused on environmental issues, particularly meteorology and water management for teaching students and staff. The workshop covered the following topics:

- **Innovative Water Treatment Systems:**
The workshop featured lectures on renewable and integrated methods of water treatment, crucial for ensuring sustainable access to clean water.

- **Groundwater Quality Monitoring:**
The program included an in-depth exploration of groundwater quality in Alexandria. The participants learned about techniques for assessing and improving water quality, eliminating dumping, and minimizing hazardous chemical and material releases.

- **Practical Sessions:**
Hands-on sessions included water sampling and analysis, offering practical experience in environmental management. These activities provided the participants with the skills needed to apply theoretical knowledge.

COMMUNITY ENGAGEMENT

The Community Service and Environmental Development Council reviews the Rainwater Management Strategy Project with AASTMT and Alexandria University

The Community Service and Environmental Development Council's review of the rainwater management strategy emphasizes the importance of water management and addresses issues such as water scarcity and water pollution. The strategy integrates sustainable practices like rainwater harvesting and stormwater management to mitigate contaminated water risks, enhance water quality, and ensure efficient water treatment processes. The project is a collaboration with AAST, Alexandria University and local government bodies, such that the plan focuses on improving sewage treatment systems and utilizing advanced wastewater treatment techniques to support irrigation and groundwater restoration efforts.

Updates for Mobilizing new Areas of Investments and Together Aiming to increase Quality of life for All MAIA TAQA Funded Project (2019- 2024)

The MAIA-TAQA (Mobilizing new Areas of Investments And Together Aiming to increase the Quality of life for All) project is EU funded with a total funding to 200,865 Euro focusing on promoting resource efficiency and renewable energy solutions in the Mediterranean region. The project emphasizes sustainable energy, wastewater treatment, and resource management. Key partners include AASTMT (Egypt), CEEBA (Egypt), Industrial Research Institute (Lebanon), Jordan Chamber of Commerce, and other regional stakeholders

- **2019-2020:** The project started with the identification of key pilot areas and stakeholders in Egypt, Lebanon, and Jordan. It also began designing innovative water and energy solutions.

- **2021:** Pilot projects in wastewater treatment implemented in Lebanon at the Industrial Research Institute (IRI) in Hadat and solar energy in Egypt through the installation of a 100 kW photovoltaic system at the El-Ameria Wholesale Market in Alexandria.

- **2022-2023:** The project's pilot projects were operationalized, focusing on the reuse of treated water for irrigation and significant solar energy deployment to power treatment processes.

The AASTMT played a crucial role in the MAIA-TAQA project, particularly in Egypt, where it hosted and supported the implementation of renewable energy solutions. AASTMT organized key activities, including launching the Innovation One-Stop-Shop (IOSS) to promote resource efficiency services. AASTMT also facilitated pilot projects like the 100 kWp photovoltaic system at El-Ameria Wholesale Market, demonstrating the institution's commitment to advancing sustainability, energy efficiency, and clean water solutions.

Mobilizing new Areas of Investments And Together

EVENTS

Tech Innovation Challenge: Empowering Youth to Develop AI Solutions for Sustainable Development (2021-present)

The Tech-Innovation Challenge hosted by AASTMT has been on for the second round as an initiative to promote conscious water usage among young generations through technology. It is an initiative where students from schools and universities develop Artificial Intelligence (AI) applications to address challenges across sectors such as health, agriculture, education, and traffic. By integrating AI into sustainable practices, participants can create technological solutions that enhance water conservation and promote clean water access. Moreover, it fosters awareness about the global importance of efficient water use in different sectors.
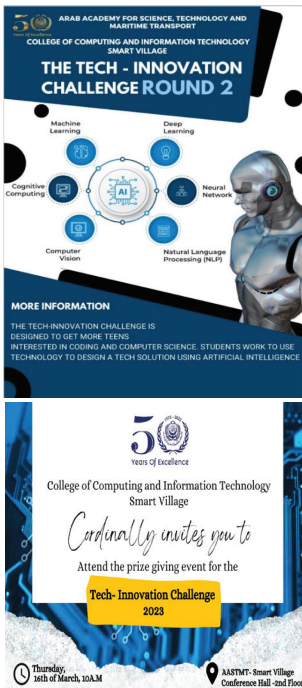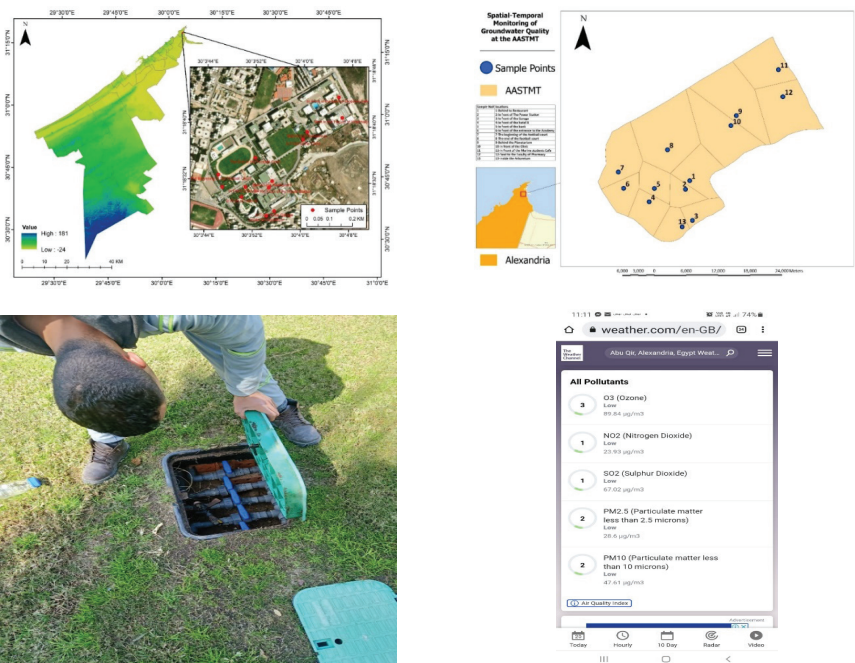

UPCOMING GOALS

Sustainable Underground Water Extraction through PV- automated Pumping System

Some AASTMT campuses use underground water extraction for irrigation. In that area, palm trees as well as the green land cover are irrigated by borehole wells of groundwater distributed as shown in Figures. Water is extracted through deep wells using mechanical drilling, and submersible pumps are used to draw groundwater. Underground water is utilized to cover all irrigation needs as well as for filling up fire protection water system. Underground is monitored and analyzed to make sure that water quality meets irrigation specifications. Underground water annual extraction in cubic meters is as follows:

2020-2019	2020-2021	2021-2022	2022-2023
216,000	237,000	102,000	000,81

Part of the underground water extracted is being treated, utilizing solar energy to power a three-phase pump and a four-stage nanofiltration system. As a future goal, AASTMT strives to adopti different research methods and projects for sustainable water extraction and use. One of the future plan in the adoption of desalination units which can be used for water extraction and use for filling swimming pools in the AASTMT Abukir Campus. In addition, the use of ICT technology for better monitoring of water consumption and identifying possible water loss reduction opportunities.

GOAL 7 - AFFORDABLE AND CLEAN ENERGY

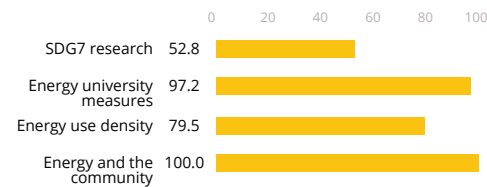**7 AFFORDABLE AND CLEAN ENERGY**

OUR AIM IN 2022-2023

In light of AAST goal of maintaining Clean and Affordable Energy for Everyone, its 2022/2023 theme for **SDG7**, is "Energy Transition for Sustainable Development" via four main sectors: "Higher Energy Efficiency, Energy Saving, Expansion in Renewables Employment and Carbon Emissions Reduction". This also extends beyond the university walls via Training, Consultancy, Workshops, Initiatives, regional and international collaborations as well as support to Governments, Startups and Innovations.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

7 ☀
AFFORDABLE AND CLEAN ENERGY

QUALIFYING SDG - 26% OF OVERALL

SDG7 research	52.8
Energy university measures	97.2
Energy use density	79.5
Energy and the community	100.0

SCORE **81.1**   RANK **=6** out of **987** institutions

KEY MILESTONES IN 2022-2023

In accordance with Green Energy and Energy Management policy, AASTMT Energy Management Committee put forward several strategies towards **energy usage rationalization, buildings' renovation/establishments as per energy efficiency standards, carbon emissions reduction and renewables' infrastructure expansion.**

These measures are thoroughly detailed in AASTMT 2022/2023 Plan towards Clean Sustainable Energy. The effectiveness of these measures is evaluated using AASTMT energy consumption and emissions insights in AASTMT Alexandria campus (featuring multiple branches as well as largest area, energy usage and number of staff and students), from 2018-2023 as discussed in AASTMT 2022/2023 Energy Progress Report.

To assess AASTMT's progress in energy efficiency and rationalization as well as carbon emissions reductions, it is essential to establish a baseline using data from 2018 to 2021. This period serves as a foundation for future energy consumption and emissions and allows for a clear comparison with data from 2022 and 2023. Detailed AASTMT Insights are given in AASTMT 2022/2023 Insights.
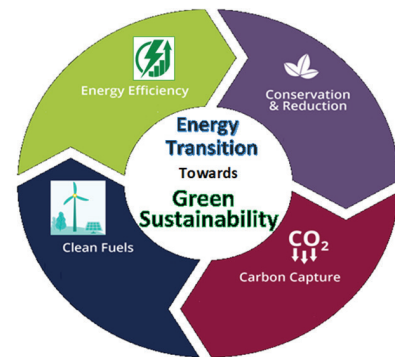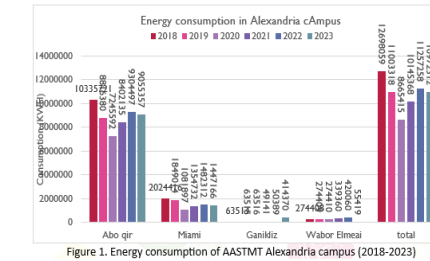
Energy Consumption
Analyzing Figure 1, it is clear that the maximum consumption in the entire Alexandria campus (total of energy usage in all its branches) was in 2018 with a full load of 12,698,059 kWh before Covid19, then the lowest load in 2020 during Covid 19, then it gradually increased until all the branches returned to their full load in 2022 with a value 11,257,258 kWh, as well as 2023, with a value of 10,972,312 kWh.

Note that despite the return of total operation and the increase in expansions and new buildings, there is a decrease in the total load in 2023 by 13.59%, compared to 2018 and by 2.5% compared by 2022 **which verifies the effectiveness of AASTMT plan and measures towards energy efficiency and saving in AASTMT entire Alexandria campus.**

Figure 1. Energy consumption of AASTMT Alexandria campus (2018-2023)

Renewable Energy Share Growth
AASTMT energy consumption is supplied mainly from the national grid in addition to solar energy in average 214 kW installed on AASTMT campuses buildings. Since, renewable energy share in the national grid has increased to more than 21% in 2023, this contributed, besides the already installed 214 kW solar energy, to increase AASTMT average renewable energy share in supplying its total energy demand to around 24**%** in 2022/2023. Table1 shows the entire AAST energy density in GJ/m². It is worth noting that 270 GJ were supplied from renewable energy resources which reflects **AASTMT efforts to divert to clean energy and its commitment to its long-term goal of increasing renewables share to 40% by 2040.**

TABLE 1. ENERGY DENSITY IN GJ/M² FOR THE ENTIRE AAST IN 2022/2023

Total Floor Area (m²)	Usage from grid (GJ)	Total energy (GJ) = (Grid + Renewables)	Density (GJ/m²)
735569.7	71702.89	71972.892 = (71702.89+270)	0.09784

Carbon Emissions
Table 2 presents the emissions across Scope 1, Scope 2, and Scope 3, using the Greenhouse Gas Protocol's framework, providing insights into direct and indirect emissions, to identify key areas for improvement.

Total emissions for 2023 reflect a steady decrease by 4.6% from 2022 emissions a notable reduction of 30% from 2019 which witnessed the highest emissions rate since 2018. (Note that 2020 was the Covid year, that's why emissions were the lowest). **These reductions demonstrate AASTMT's commitment to its long-term goal of 50% carbon reduction by 2040.**

TABLE 2: AASTMT-ALEXANDRIA CAMPUS- CARBON EMISSIONS FROM 2018 TO 2023 (KG CO²-E)

Year	Scope 1 (kg CO²-e)	Scope 2 (kg CO²-e)	Scope 3 (kg CO²-e)	Total Emissions (kg CO²-e)
2018	1,244,230.50	1,240,286.52	98,997,739.78	101,482,256.80
2019	1,374,252.42	1,151,281.20	152,068,847.38	154,594,380.99
2020	972,551.04	869,471.36	87,130,328.87	88,972,351.27
2021	1,561,942.92	1,008,256.20	112,858,633.63	115,428,832.75
2022	1,300,000.00	950,000.00	110,000,000.00	112,250,000.00
2023	1,150,000.00	925,000.00	105,000,000.00	107,075,000.00

COMMUNITY ENGAGEMENT

AASTMT put a lot of efforts towards sustainable community development in 2022/2023. This is reflected in its participation in related research projects and grants, besides its national, regional and international collaborations towards green sustainable energy. Moreover, the university offers paid and free training and consultancy services to government and industry as well as support to startups and innovation.

Research Projects and Grants
AASTMT has participated in a number of related Funded Projects within the years 2022, 2023.

Project Name	Start date	End Date
Strengthening education and research in Applied Informatics for Energy System Integration **(AI-ESI)**	1/1/2022	31/12/2026
Promoting the role of youth as active change-makers in addressing climate change in Egypt through education **(Uni-Green)**	1/9/2021	31/8/2024
Mobilizing new sectors to invest and work together for a better quality of life for all **(MAIA TAQA)**	1/9/2019	31/8/2023
Smart Integrated On-Board Battery Charger for Electric Vehicle Applications	1/7/2021	31/7/2023
A Smart Public Parking System	1/1/2021	31/12/2023
Integration of sustainable Development goals in universities for better climate change management" **(INVOLVE)**	15/1/2021	14/1/2024

Moreover, in 2022/2023, a number of outcomes, that have significant impacts on industry, resulted from AAST collaboration in joint grants and funded projects.

Grant	Outcome	
Smart Solar-Powered Public Parking System	As an output for this project, AASTMT Research and Development Center designed and implemented two setups (PV-based Electric Vehicle Charger and Solar Power Smart Parking Meter) in AAST Abukir Campus in 2023 as a prototype for more duplicates.	
Environmentally Friendly Electric Car Project	An electric car, that uses water and hydrogen, was invented by a student team from the Institute of Technical and Vocational Studies at AASTMT Industry Service Complex (ISC) in 2023	

Paid Services by AASTMT Productivity and Quality Institute (POI)
AASTMT offers Paid training and consultancy services through AASTMT **PQI** as follow**;**

- *Energy and Environmental Management Training*
- *ISO 50001 Energy Management System Consultancy (EnMS)*

Free Services by AASTMT Energy Research Unit

- *Free Consultancy*

Within the framework of the MAIA-TAQA project, AASTMT Energy Research Unit held the "Innovation One-Stop Center (IOSS)" launch event on 25th of September 2022 at AASTMT- Abukir. It provides many free training and consultancy services in the field of innovative renewable energy, all under one roof.

Free services offered by the Energy Research Unit through the the IOSS centre include;

- *Free Training*
Free training courses offered by AASTMT-Energy Unit

1. *Renewable Energy System*
2. *Solar energy*
3. *Practical fundamental solar energy*
4. *Wind Energy System*
5. *Energy Management and Auditing (EMA)*
6. *Building Management system (BMS)*

Governmental Institute	Consultancy Purpose	
Visit to water company in Egypt **(May 2023)**	Disseminate PV pilot unit and the energy efficient toolkits that can be implemented within the Alexandria water company.	

Visit to the Industrial Technical Secondary School for Drinking Water and Sanitation in Alexandria **(28 Dec. 2022)**	Visit and preparation of development plan, to the Industrial Technical Secondary School for Drinking Water and Sanitation in Alexandria, to rationalize energy consumption, increase energy saving and improve its efficiency.	

AASTMT Participation locally, Regionally, Nationally and Globally
In 2022/2023, AASTMT participated nationally, regionally and internationally through joint co-operations, summits, conferences and events to develop policies, agreements and plans towards energy sustainability and green environment.

Participation	Overview	
(30 Nov. 2023) Joint workshop between the Egyptian Ministry of International Cooperation and the United Nations	As representative of universities and Research Centers, AAST participated in this workshop which is joint between the Egyptian Ministry of International Cooperation and the UN was in light of their partnership for sustainable development 2023-2027. The workshop aimed on crystallizing ideas and project proposals in fields of electricity and renewable energy.	
(11-12 Oct. 2022) UniGreen Workshop	UniGreen is the first workshop on the project "Enhancing the role of youth in reducing the effects of climate change." which is funded by the European Union and implemented in partnership between the Life Makers Egypt Foundation, and AASTMT through the Arab Institute for Leadership Development. This project, focus on enhancing youth role towards green environment and emissions reduction in the Arab Region.	

Support to Startups by AASTMT Entrepreneurship Center
AASTMT Entrepreneurship Center is keen on supporting startups in the field of green economy, energy management, industry efficiency and sustainability, through trainings and spin-offs.

- *Trainings*

Training	Preview	Logo
AAST Startup School	The main objective of this program is equipping early stage entrepreneurs with the essential, substantial, and core knowledge & skills. On another side, supporting existing startups through advanced trainings and technical mentorship programs.	STARTUP SCHOOL AAST EC
Advanced Pre-Incubation Program	This is an advanced pre-incubation training program for AAST students & alumni to provide them with the necessary knowledge & support to put their ideas into action. The program starts with a validation exercise, then during this pre-incubation journey, students learn how to assess their business, compare between ideas to choose the best and develop a business model.	YALLA STARTUP AAST EC
Inspire AAST Fresh Grads find their Passion	Grads to Business is a program dedicated to all AAST fresh graduates. Through this program AAST EC thrives to help AASTians start their career and find an opportunity that meets their passion.	GRADS TO BUSINESS AAST EC

- *2022/2023 Spinoffs*

offs-Spin	Preview	Logo
Ecomilez	Provides Green Transformation - Operations optimization - Cost savings- - improving social sellers volume	Ecomilez
Caionix Robot Systems	Caionix is a robotics system integrator, and automation solution provider to help factories manage energy use, scale their production, raise their quality, create savings	caionix
Tatbeek	Provide Integrated Business Solutions to enhance machines efficiency in all factories using IoT, cloud computing, and machine learning technologies, thus maximizing Efficiency, and minimizing Waste	TATBEEK DIGITAL TRANSFORMATION

Support to Innovation by AASTMT Scientific Research & Innovation Centre
In light of AASTMT concentration on Environmental Impacts, Sustainability and green energy, a number of programs and policies are implemented by this center to support energy-related research and innovation.

- *Energy Conservation Program.*

- *Energy-related Policies & Reports.*
- *Environmental Monitoring and Climate Change Facilities - Scientific Research & Innovation centre.*

Fully- equipped facilities dedicated for comprehensive study of environmental, energy and climate change research

parameters to foster collaboration with national and international research institutions, government bodies, and industry stakeholder to support innovation and startups and generate solutions to global environmental issues and energy aspects within and beyond the AASTMT community.

EVENTS

AASTMT is keen on promoting Green Energy Sustainability within and beyond university walls through organizing related workshops, seminars and visits as well as launching related campaign, initiatives, and competitions.

Visits, Workshops and Seminars

Activity	Overview	
(27/11/2023) Tesla USA and how to apply for summer training in Tesla USA" Seminar	AASTMT hosted Engineer Jalal Salama (Senior Manufacturing Controls Engineer at Tesla, Texas USA and a graduate of the Mechanical Engineering Department at the Academy's main headquarters in Abu Qir) to inform about his experience at Tesla and how to apply for summer training in Tesla US	
(31/10/2023) Visit to Egypt Energy 2023" exhibition	Department of Electrical and Control Engineering and Department of Mechanical Engineering – AAST Abu Qir Headquarters prepared a joint trip for their students to the "Egypt Energy 2023" exhibition	
(4-5 /12/2022) Electrical Energy Efficiency Toward the Achievement of SDGs in Marine Applications Workshop	This is a joint workshop which is organized by AAST college of Engineering and Technology- Headquarter- in cooperation with the research team of the University of Twente in the Netherlands and ABB Electrical Industries.	

Campaigns, Initiatives and Competitions

Event	Overview	
(22/12/2023) Launch of Uni-Green Climate Change Competition	AASTMT in operation with Life Makers Foundation and funded by the European union announced the launch of this competition in fields of small-sale renewable energy, greenhouse gas emissions mitigation, waste management and recycling, biodynamic agriculture and halting desertification.	
(16/11/2023) Toward a Green and Sustainable Future - School Initiative: Competition Finals (Phase 3)	This initiative included three stages; • Awareness sessions at AAST for school students and teachers about sdgs • Physical visits of the AAST sustainability team to schools and online interactions • Implementing innovative ideas by school students and guiding them through development Finally, this was concluded by a competition, held at AAST headquarter, among these innovative ideas presented by school students.	
(25/5/2023) Towards a Green Sustainable Future" School Initiative: Visit to Ryada School (Phase 2)	In the framework of the second phase of this initiative As collaboration between AAST with community towards sustainability, Ryada school hosted some of sustainability team professors to spread awareness about sdgs.	
(10/11/2022) "GO GREEN: Save your Planet Earth using GREEN ICT Technology" Initiative	In light of AAST role in serving sustainability and green environment, AAST computer engineering department, at the headquarters, launched this initiative.	

UPCOMING GOALS

Looking ahead, AASTMT remains committed to achieving its long-term renewable energy and climate action sustainability goals, as follows;

- *30% Carbon Reduction by 2025:*
AASTMT has already succeeded to achieve almost 30% carbon reduction target in 2023 compared to 2019 which experienced highest emissions rate. To maintain this reduction by 2025 and

even achieve more, AASTMT plans to continue expanding its renewable energy capacity, with the goal of sourcing 25% of its energy from renewables by 2025. Additional solar power installations and adoption of clean technologies, plays a key role in reducing energy-related emissions.

- *50% Carbon Reduction by 2040:*
By 2040, AASTMT aims to achieve a 50% reduction in carbon emissions compared to 2019 levels. This will involve further

efforts in sustainable transportation, including a huge transition to electric vehicles on campus. Moreover, AASTMT will implement advanced smart grid technologies to optimize energy consumption and storage, as well as increasing energy from renewables to 40% by 2040 for further minimization of carbon emissions. Finally, AASTMT continues to work effectively towards its Zero-Waste Goal by 2040.

Continuous Progressing towards these Goals will Push AASTMT to Eventually Reach its

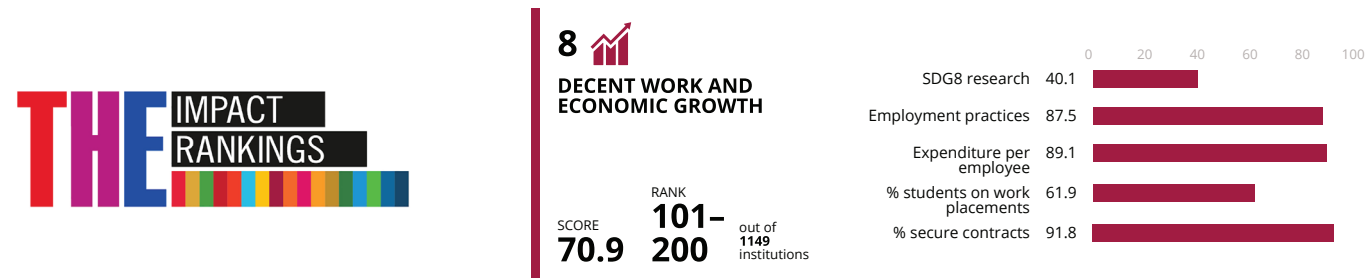**ULTIMATE GOAL** of: **Zero Emissions and 100% Renewable Energy**
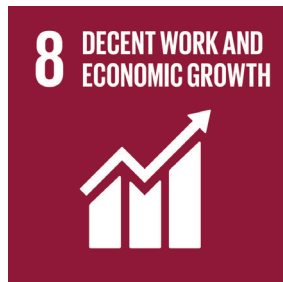
GOAL 8 - DECENT WORK AND ECONOMIC GROWTH

OUR AIM IN 2022-2023

The Arab Academy for Science, Technology and Maritime Transport (AASTMT) is dedicated to advancing SDG 8 by promoting "decent work" and economic growth. This commitment is reflected in efforts to enhance employability through expanded practical training programs, strengthen ties with industry, and drive economic development by creating high-quality job opportunities for students and staff.

THE IMPACT RANKING SCORES 2021-2022

8 DECENT WORK AND ECONOMIC GROWTH

SCORE **70.9**

RANK **101–200**

out of **1149** institutions

SDG8 research	40.1
Employment practices	87.5
Expenditure per employee	89.1
% students on work placements	61.9
% secure contracts	91.8

KEY MILESTONES IN 2022-2023

AASTMT Promotes Decent Employment Practices

Aligned with SDG 8 (Decent Work and Economic Growth), AASTMT is committed to providing fair and competitive compensation by ensuring all staff and faculty are paid above the local living wage. Recognizing its human resources as a core strength, AASTMT has implemented a Pay Scale Equity Employment Policy. This policy upholds the principles of equal opportunity and fair treatment as outlined in Article 35 of the Egyptian Labor Law, ensuring that all employees receive equitable compensation and benefits. For further details about this policy.

AASTMT is dedicated to fostering an equitable and inclusive environment that aligns with and advances the principles of SDG 8 (Decent Work and Economic Growth). By cultivating a campus culture that values diversity and treats every individual with respect and dignity, AASTMT supports SDG 8's goals of fair wages, equal opportunities, and non-discriminatory practices across its workplace and educational spaces. To learn more about AASTMT's anti-discrimination policy.

AASTMT is committed to combating modern slavery and human trafficking while fostering a fair and ethical employment environment. This commitment extends to both its internal practices and its interactions with the wider community. For more details on AASTMT's policy against forced labor, modern slavery, human trafficking, and child labor.

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) aligns its Outsourcing Employment Practices and Equivalent Rights Policy with SDG 8 (Decent Work and Economic Growth). This policy emphasizes the fair and ethical treatment of outsourced employees, ensuring their rights and welfare are protected. AASTMT is committed to maintaining rigorous standards in managing outsourcing processes, prioritizing justice and ethical employment practices. For more details about AASTMT's Employment Practice Equivalent Rights Outsourcing Policy.

Offering Internships and Work Placements to its Students

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) actively advances SDG 8 (Decent Work and Economic Growth) by providing students with meaningful internships and work placements. These initiatives strengthen the link between academic knowledge and practical skills, equipping students for successful careers in local and global job markets. To further support this goal, AASTMT has revised its study regulations, making practical training and work placements a mandatory requirement for graduation. This ensures that every student gains at least one month of hands-on experience in their field of study, fostering career readiness and economic growth.

Organizing Job Fairs for Students and Graduates at AASTMT

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) actively supports SDG 8 (Decent Work and Economic Growth) by organizing job fairs for its students and graduates. These events serve as a crucial bridge between education and employment, connecting talent with opportunities and fostering a vibrant, competitive job market. AASTMT's dedication to hosting job fairs underscores its commitment to developing a skilled workforce, contributing to sustainable economic growth, and supporting regional development.

COMMUNITY ENGAGEMENT

The AASTMT Encourages Decent Employment Practices in the ICT Sectors through Launching Green Technology Initiative

On November 15, 2022, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) launched a green technology initiative on its campus, reflecting a commitment to sustainable development and environmental responsibility. This initiative aligns with the United Nations Sustainable Development Goals, particularly SDG 8, which supports sustainable economic growth and decent work through innovation and environmentally friendly practices. By integrating green technology into its campus operations, AASTMT is setting a powerful example of how educational institutions can contribute to a cleaner, more resilient future. The project also aims to enhance the skills of students and staff by familiarizing them with sustainable technologies and practices, preparing them for careers in an increasingly eco-conscious economy.

Central to this initiative is the promotion of green jobs and the creation of a work environment that supports fair employment and skill development in emerging fields. Through this project, AASTMT encourages sustainable employment practices by offering training in renewable energy, waste management, and resource conservation, thereby expanding job opportunities in the green sector. Additionally, by prioritizing fair pay and decent working conditions in these new green roles, AASTMT aligns with SDG 8's objectives to promote productive employment and economic inclusivity. The green technology initiative not only contributes to environmental sustainability but also supports economic resilience and equity, preparing the AASTMT community to lead in both sustainable innovation and responsible employment practices.

AASTMT Huawei Employment Day at AASTMT Campus

On November 7, 2022, AASTMT hosted Huawei Employment Day, connecting students with job opportunities and promoting fair employment in the tech industry. The event aligned with SDG 8, emphasizing sustainable economic growth, productive employment, and decent work. Students explored career paths, technological advancements, and skills needed in the digital economy through workshops and networking sessions. Huawei highlighted its commitment to fair pay, inclusive employment, and ethical standards, reinforcing the importance of equitable practices. This collaboration underscored AASTMT's dedication to preparing students for the future of work with technical expertise and awareness of sustainable practices. The initiative fostered a culture valuing ethical employment and competitive compensation. It reflected AASTMT's mission to equip graduates for a

responsible, inclusive workforce.

EVENTS

Workshop between AASTMT and Sudan Ports regarding decent work practices in Egypt and Sudan

On March 12, 2023, AASTMT hosted a workshop with Sudan Ports to promote decent work practices in Egypt and Sudan, advancing SDG 8 (Decent Work and Economic Growth). The workshop focused on ethical employment practices and equitable labor rights, emphasizing the importance of upholding workers' rights in outsourced activities, especially in industries like maritime transport. A key topic was ensuring outsourced workers receive the same rights, wages, and protections as in-house employees. AASTMT and Sudan Ports highlighted the value of ethical outsourcing for fair and inclusive employment practices. The event underscored the importance of policies that protect outsourced labor, reduce exploitation, and improve job quality. The workshop called for third-party vendors to uphold fair labor standards, fair compensation, and safe conditions. AASTMT and Sudan Ports reaffirmed their commitment to fostering a workforce grounded in equality. This collaborative approach aims to promote sustainable economic growth and ensure fair treatment across the labor supply chain.

AASTMT Participates in the Activities of The GREENLAND Project

The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) has been an active participant in the Greenland project, a vital initiative dedicated to promoting sustainable development and economic growth across the Mediterranean region. This project closely aligns with Sustainable Development Goal 8 (SDG 8), which emphasizes sustained, inclusive, and sustainable economic growth, as well as full and productive employment and decent work for everyone. AASTMT's role in the Greenland project underscores its dedication to advancing this goal by contributing to job creation that upholds fair labor practices and ethical employment standards.

AASTMT's involvement in the Greenland project also includes reinforcing its strong stance against forced labor, modern slavery, human trafficking, and child labor. Recognizing its responsibility to prevent exploitative labor practices in its development efforts, AASTMT actively pursues these objectives in collaboration with other project partners. By promoting the principles of decent work and social justice as outlined in SDG 8, AASTMT contributes to the larger goal of eradicating forced labor, modern slavery, human trafficking, and child labor in the Mediterranean region. This commitment reflects AASTMT's dedication to building a more equitable and sustainable future for all.

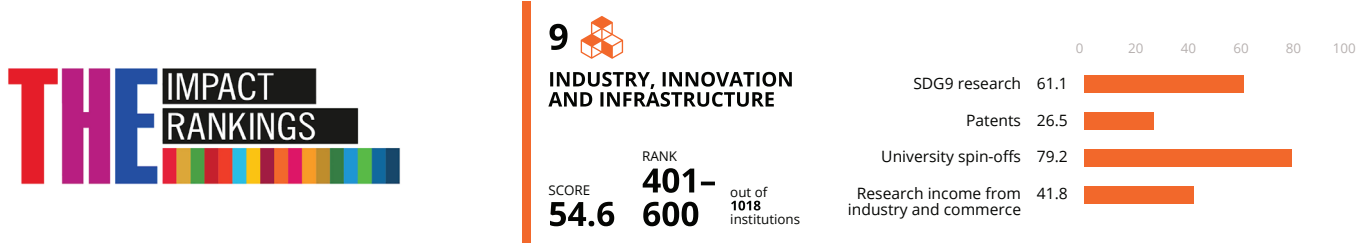# GOAL 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE

OUR AIM IN 2022-2023

AASTMT's Commitment to SDG 9: Building a Sustainable Future

AASTMT, is dedicated to contributing to the achievement of the United Nations Sustainable Development Goal (SDG 9): Industry, Innovation, and Infrastructure. This goal aims to build resilient infrastructure, promote inclusive and sustainable in-dustrialization, and foster innovation. Through its various initiatives, AASTMT is actively working to:

- **Promote Innovation and Entrepreneurship:** AASTMT's En-trepreneurship Center fosters innovation and supports startups through mentorship, funding, and training programs.
- **Develop a Skilled Workforce:** The Academy collaborates with industry partners to provide practical training and intern-ships, bridging the gap between academia and industry.
- **Foster Sustainable Infrastructure:** AASTMT's maritime pro-grams contribute to the development of sustainable maritime infrastructure, including ports, shipping lanes, and logistics systems.
- **Promote Inclusive Industrialization:** AASTMT supports in-clusive industrialization by empowering women and youth through education and training programs.

By focusing on these key areas, AASTMT is making significant strides towards achieving SDG 9 and contributing to a more sustainable and prosperous future for the region.

THE IMPACT RANKING SCORES 2021-2022

9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

SCORE **54.6**

RANK **401–600** out of **1018** institutions

SDG9 research	61.1
Patents	26.5
University spin-offs	79.2
Research income from industry and commerce	41.8

KEY MILESTONES IN 2022-2023

Spin-Offs, Progress Over the Last 3 Years

METRIC / INDICATOR	2020-2021	2021-2022	2022-2023
9.3.1 Number of university spinoffs	17	21	23

■ 9.3.1 Number of university spinoffs

AASTMT - Entrepreneurship Center Spin-Offs

Fuelin solves the problem of fleet expense management by building an all-in-one platform for fleet expense management, distinguishing itself from existing solutions by integrating fuel payment, maintenance, insurance, and tolls into a single system.

Ecomilez Less than truck loader shared space. Provide Operations optimization - Cost savings- Green Transformation - improving social sellers volume.

Wfrley Focuses on providing advanced e-commerce and fleet management solutions tailored for retailers, restaurants, grocery stores, and pharmacies.

Caionix Robot Systems Caionix is a robotics system integrator, and automation solution provider. We help factories scale their production, raise their quality, and create savings.

Nowlun is an online freight forwarding platform in Egypt. Compare, ship, and track Now, Digital freight shipping platform, Scan containers freights in seconds, book and track online.

Iothgha Application for treating speech problems and solving the problem of lisps in an effective and free way for adults and children.

Pharmabill "The Operating System for Your Entire Pharmacy Business," leverages an AI-driven POS platform to help pharmacies enhance net profit, streamline order procurement, simplify funding, and access financial analytics effortlessly.

Tawredaat Digitizing the procurement process for SMEs starting with Construction industry, One stop shop, Competitive prices, Delivery Convenience, Authentic Products.

Shifa Center for home nursing services. The hospital is in your house,Visits of doctors of all specialties. (Medical service)

Tatbeek Provide digital Transformation and Integrated Business Solutions, Plug and play device and platform to measure and enhance machines efficiency for all machines in almost factories.

Super Be Marketplace and delivery service app has been in Egyptian market since 2020, Serving users to order their needs in 45 minutes or less and offering them a unique food ordering & delivery experience in Port Said .

Garrar A technology platform transforming B2B land transportation in Egypt. Our mission is to connect shippers and carriers, streamlining the logistics process and driving efficiency in the industry.

Fifth Generation The Fifth Generation company aims to create a new idea in smart agriculture and the use of technology

DewTreats Agency is the community where you can learn all Digital marketing courses as content marketing, social media marketing, Search engine optimization, Email- marketing, mobile marketing and marketing analytics.

Galsah Provides a platform and an application that connects the best specialists, qualified service providers and

parents of children with special needs.

DeafGain An edutech solution for people who are deaf and hard of hearing. DeafGain is a full-service firm, offering affordable solutions to individuals and local and international combanies and organisations.

Acsibility Mobile application provides information to people with mobility problems about the equipped places and service providers and reduces the lack of information and their life will be easier.

Salma Ansari Meditations Channel A cultural awareness program on the YouTube channel to solve the problem of lack of access to accurate information and a comprehensive description of the needs of the visually impaired and the blind.

Dameg A web accessibility solution targeting people with disabilities to provide a powerful, scalable, lightweight and secure compliance solution for any website that running at any web browser.

Takka-Pay Merchant Wallet For Small Businesses. A forward-thinking application that works as an electronic payment gateway and a commercial wallet.

khidma Providing industrial (electrician, plumber, carpenter, maintenance of household appliances or refrigeration and air conditioning) and other other tasks by applying the customer service.

Freight AnchorFreight Anchor is an advanced non-exclusive E-Logistics Platform that offer the best solutions for your cargo, tailor-made to match your shipment's requirements.

Teradix Teradix is digitizing sourcing & supplier engagement with one easy to use platform, backed by the largest network of verified local suppliers in the Middle East & Africa.

Programs and Incubators 2022-2023

P1.Ripple Enabler Program, 2023-Current
The AAST Entrepreneurship Center (AAST-EC) launched the Ripple Program to support university-based Entrepreneurship Centers (ECs) and Business Incubators in Egypt and the Arab region.

P2.Supply Chain Accelerator Program, 2022 - Current
Supply Chain Accelerator, is The first of it kind initiative in the MENA region, 3 to 6 months intensive program designed to help established, high growth Supply Chain Companies scale their operations and achieve rapid growth.

P3.The Goodwill Incubator, The 1St Business Incubator For Entrepreneurs With Disabilities, 2021-Current
Goodwill Incubator, The 1St Business Incubator For Entrepreneurs With Disabilities, established in cooperation and sponsorship between Rowad 2030, project of the Ministry of Planning and Economic Development and the Entrepreneurship Center.

P4.Egypt Entrepreneurship Rally Society, 2022 - Current
Rally Society is an initiative that encourages young Egyptians to explore entrepreneurship.

Competitions

Egypt Rally startup Competition, 2020 - Current
Rally Startup Competition is a full program that focuses on youth from 18 to 40 years who are eager to create and develop startups and become entrepreneurs.

Rally Accelerate Startup Competition, 2021 - Current
Rally Accelerate is an End-to-End Fundraising program that targets startups that are in the growth phase them for investments.

AASTMT Grants
-Entrepreneurship Center & The National Bank of Egypt, 2020-Current.

-Entrepreneurship Center and USAID, 2020-Current

-Entrepreneurship Center and Google - Training Entrepreneur Program, 2022-2023

-Ministry Of Planning And Economic Development & Entrepreneurship Center, 2022-Current

-The Arab Tourism Organization(ATO) in Digital Entrepreneurship Program(Ted Arabs), 2021-2022

-Entrepreneurship Center And The Innovators Support Fund - ISF, 2022

-Obeikan Company cooperation to support innovation and entrepreneurs in the industrial sector, 2022,Current

Partnerships & Agreements
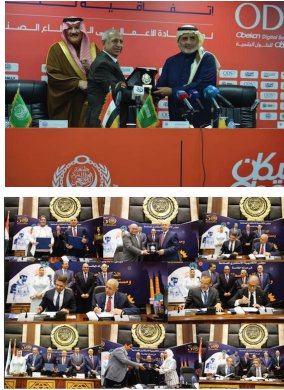
- AASTMT & Obeikan Company signed a Cooperation Agreement to support Innovation and Entrepreneurs in the Industrial Sector.
- CITL signing MOU with Star Shine Shipping Company- May, 2023.
- New Co-operational Agreements AASTMT and Industrial Advisory Council In Different Tracks.
- Cooperation Agreement between "The Ports Training Institute and the Free Zone in Misratah"- Jun, 2023

COMMUNITY ENGAGEMENT

Initiatives, Ideation & Training

"Independent Banking" Project, Winner on GoodWill incubator

Rally Accelerate winners at Karlsruhe Institute, Germany

Partnerships, Public Engagement

Industrials Partners

Universities Partners

Governmental Partners

EVENTS

Launching the program for supporting entrepreneurship centers in Egyptian universities "Ripple"- Jul, 2023
launching ceremony of the program "Egypt for the Development of Entrepreneurship Centers and University Incubators", which is organized by the Arab Academy of Science, Technology and Maritime Transport in cooperation with the Ministry of Higher Education and Scientific Research in Egypt, the Al-Ahli Egyptian Bank and the Agency American for International Development USAID.

Launching of the SixthRound of the Egypt Rally Entrepreneurship Competition- Feb, 2023
Announce the launch of the Sixth Round of the Egypt Rally entrepreneurship competition in partnership with the National Bank of Egypt. The competition offers a unique opportunity to receive mentorship, networking, and potential funding for your entrepreneurial ventures. Around 200+ students , 30+ faculty members from 20 universities attend the launching event.

MAIA TAQA event (Promoting Innovation in Resource Efficiency Solutions for Egypt and the Mediterranean)- Jul, 2023
The conference highlighted Egypt's remarkable energytransition progress towards renewable energy deployment, and presented the contribution of the MAIA-TAQA pilot projects offering detailed replication studies for all partner countries.

UPCOMING GOALS

AASTMT's Future Goals for SDG 9: Building on Success
AASTMT is poised to further its commitment to SDG 9 through several exciting initiatives planned for the upcoming year:

Expanding Innovation and Entrepreneurship
- Scaling the Entrepreneurship Center: AASTMT will expand its Entrepreneurship Center's capacity to support a larger number of startups and provide more comprehensive services, including mentorship, funding, and market access.
- Launching Industry-Specific Incubators: The Academy plans to establish specialized incubators focused on emerging sectors like maritime technology, renewable energy, and biotechnology.
- Organizing International Hackathons and Entrepreneurship Competitions: AASTMT will host international hackathons and entrepreneurship competitions to attract global talent and foster innovation.

Strengthening Workforce Development
- Industry-Aligned Curricula: AASTMT will continue to update its curricula to align with industry needs and prepare graduates for the future of work.
- Advanced Training Programs: The Academy will offer advanced training programs in emerging technologies like artificial intelligence, machine learning, and cyber security.
- International Partnerships: AASTMT will collaborate with international universities and institutions to offer joint degree programs and student exchange opportunities.

Promoting Sustainable Infrastructure
- Research and Development: The Academy will undertake research projects to develop sustainable solutions for maritime transportation, port operations, and coastal zone management.
- Green Campus Initiatives: AASTMT will implement sustainable campus initiatives, such as energy efficiency, waste reduction, and water conservation.
- Community Engagement: The Academy will collaborate with local communities to promote sustainable development and environmental awareness.

By focusing on these areas, AASTMT aims to solidify its position as a leading institution in promoting **sustainable development and contributing to Egypt's economic growth.**

![SDG 10 Reduced Inequalities icon]

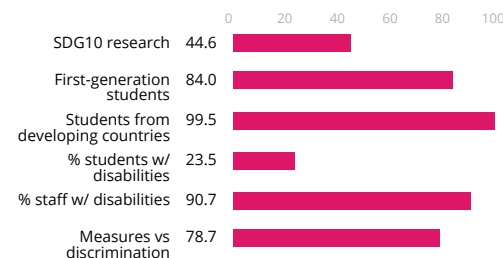# GOAL 10 – REDUCED INEQUALITIES

OUR AIM IN 2022-2023

AASTMT aims to attain SDG 10 by fostering inclusive educational programs and initiatives that empower all stakeholders to actively participate in reducing inequalities and promoting social equity.

THE IMPACT RANKING SCORES 2021-2022

![THE Impact Rankings logo]

10 REDUCED INEQUALITIES

SDG10 research	44.6
First-generation students	84.0
Students from developing countries	99.5
% students w/ disabilities	23.5
% staff w/ disabilities	90.7
Measures vs discrimination	78.7

SCORE **68.6** RANK **201–300** out of **1108** institutions

KEY MILESTONES IN 2022-2023

AASTMT contributed to SDG10 through its commitment to advancing education, research, and awareness about reducing inequality between all levels. This has been carried out through conducting events by AASTMT students' affairs and with relevant community stakeholders related to caring about the participation of disabilities in different social and student events.

In addition, AASTMT focused on community involvement as our admission policy provides a learning, working and social environment which is free from discrimination, prejudice, intimidation, stigmatization and all forms of harassment and bullying. Moreover, we are committed to providing equal opportunities, and will work to ensure

that all of our staff, students and visitors, as well as those that seek to apply to work or study with us are treated fairly and are not subjected to unlawful discrimination on the basis of age, disability, gender identity, marriage or civil partnership, pregnancy and maternity, race (includes: race, color, nationality, ethnic or national origins) and religion.

The AASTMT - Campuses address growing concerns about prohibiting any acts of assumptions nor the expectations of our students based on stereotypes of performance and behaviors of particular groups. Moreover, AASTMT provides a culturally inclusive learning environment, which takes account of the needs of all learners in terms of gender, ethnicity, religion, disability, age, and sexuality. We

use multimode learning and teaching methods to meet the needs of a wide range of learners. Language support is provided as required for students through many events.

Goodwill Incubator
The 1st Business Incubator For Entrepreneurs With Disabilities, established in cooperation and sponsorship between Rowad 2030, project of the Ministry of Planning and Economic Development and the Entrepreneurship Center at the Arab Academy for science, technology and maritime transport.

Goodwill Incubator is designed to support entrepreneurs with varying disabilities and startups that have innovative

solutions for people with disabilities.

Goodwill Incubator works on helping them develop their business ideas and turn it into real business through training, mentorship, consultation and prototype development.

AASTMT believes that Entrepreneurship and self-employment is one of most viable fields for people with disabilities who are looking to enter the job market on their own terms.

COMMUNITY ENGAGEMENT

Bridge of Hope Initiative
The Arab Academy for Science, Technology and Maritime Transport and the United Nations High Commissioner for Refugees (UNHCR) have introduced a joint initiative named "Bridge of Hope." This program seeks to empower refugees by providing scholarships for bachelor's degree programs.
This initiative emphasizes the dedication of both the Academy and UNHCR to uphold the values of humanity and solidarity, foster inclusive learning environments, and develop sustainable solutions that allow refugees to create a brighter future through education.

Collaboration with Sawiras Foundation
The Academy partners with charity institutions and NGOs to secure funding aimed at eliminating financial barriers

for students with disabilities, ensuring they have the resources necessary for social mobility and success. In this effort, a collaboration with the Sawiras Foundation has been initiated to finance a number of students with disabilities across various colleges at the Academy during the academic year. This scholarship will cover all tuition fees for students throughout their four years, facilitating social inclusion and promoting equal opportunity until graduation.

EVENTS

### "Supporting Women: Addressing Physical Abuse and Harassment" Symposium
In collaboration with the National Council for Women and the Sustainable Development with the Deaneries of Student Affairs at Alexandria, Sheraton, and Alamain Campuses, a symposium titled "Supporting Women: Addressing Physical Abuse and Harassment" was organized in partnership with the National Council for Women.
The symposium concentrated on "Forms and Models of Violence Against Women in Their Daily Lives," covering how women can respond to and manage instances of harassment or physical abuse, along with the proper reporting methods and channels to secure their legal rights.
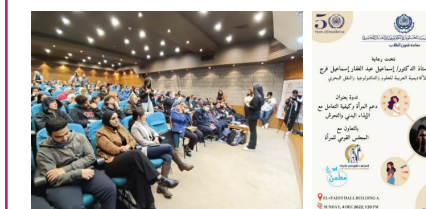
Inclusive Education and its Impact on Society" Symposium
As part of the academy's initiative to foster an inclusive environment, the College of Fisheries Technology and Agriculture conducted an important symposium featuring Dr. Hala Mahfouz, the first sign language interpreter on Egyptian television. Dr. Mahfouz has been recognized for her significant contributions to enhancing the accessibility of television content for the deaf and mute community. The symposium aimed to raise awareness about the necessity of providing equal opportunities for all individuals, thereby creating an educational and professional environment that accommodates everyone while preventing any form of discrimination or harassment.
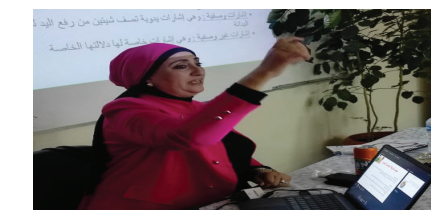
UPCOMING GOALS

The Arab Academy for Science, Technology and Maritime Transport is committed to fostering an environment that offers equitable opportunities to all stakeholders within its extensive community. To achieve this objective, the Academy emphasizes the establishment of partnerships with various funding organizations and the development of initiatives aimed at enhancing awareness of the significance of inclusion, equality, and diversity. Additionally, the Academy actively participates in international projects that promote the attainment of Sustainable Development Goal 10 (SDG 10).

GOAL 11 - SUSTAINABLE CITIES & COMMUNITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

OUR AIM IN 2022-2023

AASTMT aims to promote the development of inclusive, safe, resilient, and sustainable cities and communities through innovative solutions and fostering inclusive urban planning, alongside initiatives that support art and cultural heritage.
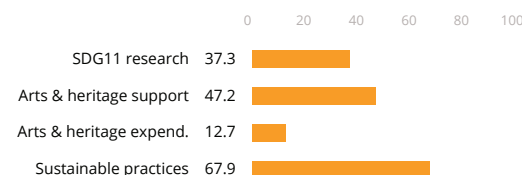
THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

11
SUSTAINABLE CITIES AND COMMUNITIES

SCORE **46.5**

RANK **401– 600** out of **1026** institutions

SDG11 research	37.3
Arts & heritage support	47.2
Arts & heritage expend.	12.7
Sustainable practices	67.9

KEY MILESTONES IN 2022-2023

Arab Academy for Science, Technology and Maritime Transport (AASTMT) has made significant strides towards achieving SDG 11, which focuses on making cities and human settlements inclusive, safe, resilient, and sustainable. AASTMT demonstrates its commitment to advancing SDG 11 by fostering sustainable urban development and engaging with both academic and local communities through education, research, and consultancy. AASTMT has worked on SDG11 through two main integrated pivots, which are:

In-Campus Community (Internally)
1. Encouraging more students, academic and administrative staff to be involved in SDG11 activities through raising awareness about the other 16 different related SDGs.
2. AASTMT has expanded the integration of sustainability concepts into its academic programs, particularly in fields related to urban planning and environmental management. This includes courses that emphasize sustainable urban development practices and the importance of resilient infrastructure.
3. Launching a "Student Competition for Sustainable Development".
4. AASTMT has implemented various sustainability measures on its campuses, such as energy-efficient buildings, waste reduction and recycling programs, green spaces, and the promotion of public sustainable transportation among students and staff. These initiatives not only reduce the university's carbon footprint but also serve as a model for sustainable practices in urban settings.
5. Increasing the expenditure on arts and heritage by 80% compared to the previous year's expenditure.
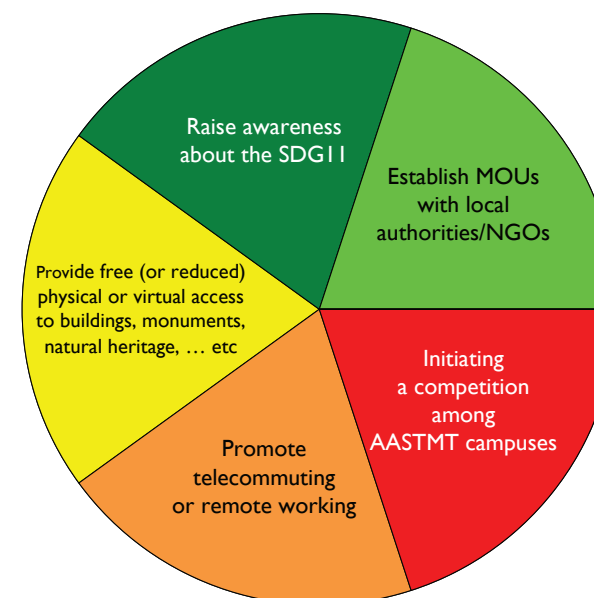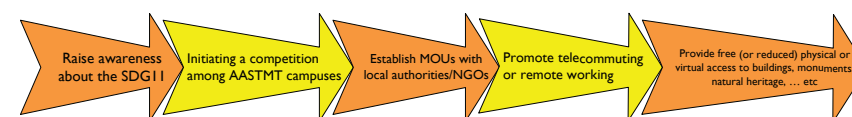
Out-Campus Community (Externally)
1. AASTMT has formed partnerships with governmental and non-governmental organizations to enhance its impact on urban sustainability. Collaborations with local municipalities have led to joint projects that aim to improve urban infrastructure and public services, aligning with the goals of SDG 11. Matrouh agreement is a good example of these collaborations.
2. Growth of AASTMT "Aswan" and "El Alamein" branches are initiatives for reconstructing one of unpopulated areas.
3. Expanding AASTMT library role in serving the public society.
4. Elevating the awareness of Electric Vehicles as clean and sustainable transportation facility.

COMMUNITY ENGAGEMENT

AASTMT engagement is reflected in several initiatives and programs aimed at promoting sustainable community development, as follows:

1. Raise awareness about the SDG11 through spreading knowledge about SDG11 by giving one tip each month to be shown on the electronic boards on campuses.
2. Launching a competition among AASTMT campuses. Also, AASTMT hosts workshops, seminars, and conferences that focus on sustainable urban development. These events bring together experts, students, and community members to discuss and promote best practices in creating sustainable cities.
3. Establish MOUs with local authorities/ NGOs to address planning issues and development to ensure the inclusiveness of all the community members and the right to access the heritage and the building of value. AASTMT collaborates with various stakeholders, including governmental and non-governmental organizations, to enhance community engagement in sustainability efforts. These partnerships are essential for sharing knowledge and resources to achieve the goals of SDG 11.
4. Promote and allow telecommuting or remote working for employees as a matter of policy or standard practice, or offer a condensed working week to reduce employee commuting.
5. Provide free physical or virtual access or reduce the amount of access to buildings and/or monuments or natural heritage landscapes of cultural significance, as well as green spaces.

Raise awareness about the SDG11 → Initiating a competition among AASTMT campuses → Establish MOUs with local authorities/NGOs → Promote telecommuting or remote working → Provide free (or reduced) physical or virtual access to buildings, monuments, natural heritage, … etc

EVENTS

Public Access to Buildings
AASTMT provides public access to buildings and/or monuments or natural heritage landscapes of cultural significance.

*A Visit to Pyramids of Giza and Al-Muizz Street.*

Public Access to Libraries
The Academy Library offers facilities for scientific research for the public for sustainable development in reading.

In El Alamein campus the Arab Academy provide bookstore. The Library serves the College of Dentistry, College of Pharmacy, College of Artificial Intelligence, College of Engineering and Technology, and the College of Management and Technology, and the College of International Transport and Logistics
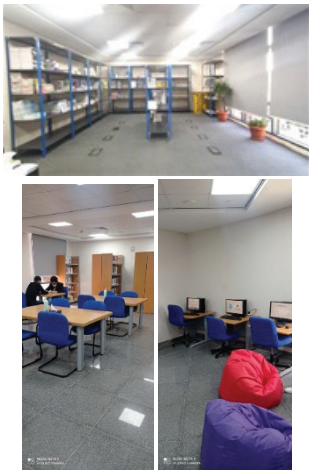
The Academy Library plays a pivotal role in promoting sustainable development in reading by offering comprehensive facilities for scientific research accessible to the public.
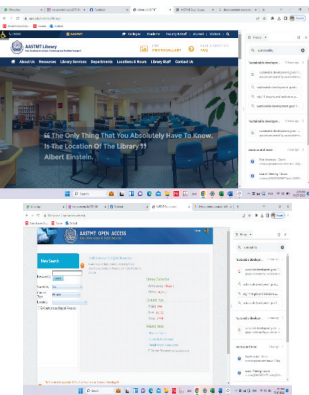
Public Access to Museums

The Academy provides physical and virtual tours to museums, exhibition spaces or galleries.

Students from the College of Archaeology and Cultural Heritage are currently engaged in hands-on training in conservation and restoration at the Egyptian Museum.

Public Access to Green Spaces

The Arab Academy for Science, Technology and Maritime Transport (AASTMT) Main Campus in Alexandria proudly hosted the Champions of the UIPM U17 World Championship 2023 on its eco-friendly grounds.

Record and Preserve Cultural Heritage

The Faculty of Antiquities and Civilizational Heritage offers a degree in this specialty in Egypt in accordance with international quality standards.

The unique location of Aswan campus is a point of excellence in terms of proximity to archaeological sites, museums, heritage and rich culture in Aswan City and makes it the perfect place to study antiquities and cultural heritage.

Promote Sustainable Commuting

AASTMT works on integrating all the related initiatives of the 17 SDGs to fulfil more clean, eco-friendly and sustainable commuting. AASTMT has taken early initiative in the field of Electric Vehicles (EV).

The Transport Department of the Arab Academy offers a distinctive transportation service to transport our students and working on a fleet of bus with the latest technical means. All buses have free Wi-Fi service, and all vehicles have GPS devices that make the service safer to locate and move all vehicles to ensure the safety of passengers during daily trips. Transport service covers all regions.

Allow Remote Working

Promote or allow telecommuting or remote working for employees as a matter of policy or standard practice, or offer a condensed working week to reduce employee commuting.

AASTMT has created effective online learning and learning experiences in a collaborative environment for all students using AASTMT Moodle that helps students in the educational process.

Pedestrian Priority on Campus

AASTMT considers the safety and convenience of pedestrians. AASTMT campuses follow the guidelines on prioritizing pedestrian access based on best practices and urban design principles.

The international research projects center is the link between Arab Academy for Science, Technology and Maritime Transport and external funding entities that support international research projects.

Planning Development - New Build Standards

The Academy participated in the Green Environmental Initiative by growing plants to adorn the Academy and preserve the environment.

Environmental Research Facilities at AASTMT

Building on Brownfield Sites

Build on brownfield sites, where possible The Academy is always interested in preserving the environment through planning and urban construction to achieve the quality of life for students.

that focus on enhancing the quality of life in urban areas. These projects include initiatives aimed at improving its public transportation systems, increasing green spaces. The emphasis will be on creating urban environments that are not only livable but also environmentally friendly.

Partnerships with Local Governments: Collaborating with local government entities is a key strategy for AASTMT. By forming partnerships, the academy aims to implement community-based projects that address specific urban challenges. These collaborations will focus on developing policies and practices that promote inclusivity and resilience in urban planning.

Research and Innovation Initiatives: AASTMT is set to enhance its research efforts related to urban development. This includes conducting studies on urbanization trends and their impacts on sustainability. The findings will inform future projects and help in the development of innovative solutions tailored to the needs of urban populations.

Capacity Building and Training Programs: To support the implementation of SDG 11, AASTMT will offer training programs aimed at equipping stakeholders, including urban planners and local officials, with the necessary skills and knowledge. These programs will focus on sustainable urban development practices and the importance of community engagement in planning processes.

Awareness Campaigns: AASTMT plans to launch awareness campaigns to educate the public about the importance of sustainable cities and communities. These campaigns will highlight the role of citizens in contributing to urban sustainability and encourage community participation in local initiatives.

UPCOMING GOALS

Future Goals and Scheduled Plans

Urban Sustainability Projects: AASTMT plans to launch various urban sustainability projects on its campuses

GOAL 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION

OUR AIM IN 2022-2023

AASTMT seeks to fulfil SDG 12 by reducing waste, advocating for sustainable resource usage, and incorporating environmentally responsible practices into its operations and educational framework.

THE IMPACT RANKING SCORES 2021-2022

12 ∞

RESPONSIBLE CONSUMPTION AND PRODUCTION

QUALIFYING SDG - 26% OF OVERALL

SCORE **76.4**

RANK **101– 200** out of **825** institutions

	0 20 40 60 80 100
SDG12 research	32.1
Operational measures	91.0
Proportion of recycled waste	89.4
Sust. report publication	100.0

KEY MILESTONES IN 2022-2023

Specialized Training course: Oil Spill Response (IMO Level I)
In order to increase environmental awareness and provide participants with the necessary skills for environmental protection and crisis management, the Environment Protection and Crisis Management Centre at AASTMT's Alexandria Abu Kir campus offers a thorough paid training program called Environment Protection and Crisis Management. A number of specialised courses are offered in this program, including Oil Spill Response (IMO Level I), which addresses important subjects like the handling of oily wastes in the maritime industry, including disposal, storage, and transportation. The training offers useful insights into

managing hazardous waste, minimising environmental impact, and encouraging sustainable production practices in maritime environments by covering important topics like waste disposal and sustainable waste management. This program demonstrates AASTMT's dedication to promoting environmental awareness and equipping people to act effectively in emergency situations, all while advancing a sustainable future.

Prevention of Tourism Marine Litter (TouMaLi)
The "TouMaLi" project, funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), aims to address the critical issue of marine pollution in

North Africa, where plastic constitutes approximately 85% of floating marine litter and up to 95% of surface litter. Much of this waste originates from the tourism sector, a key contributor to local economies but also a significant source of marine waste. The Arab Academy for Science, Technology, and Maritime Transport is among the project's key partners, working to promote circular economy solutions in Morocco, Tunisia, and Egypt. Led by the University of Rostock with support from a consortium of academic, business, and policy stakeholders, TouMaLi focuses on reducing marine litter through measures like baseline litter assessments, strategic waste management development, and awareness campaigns. These efforts

aim to establish lasting impacts by 2025, empowering local communities and tourism facilities to adopt sustainable practices and minimize waste inflow into the Mediterranean Sea.

AASTMT Campus Smart Recycling System to turn Food Organic Wastes & Recyclables into Economic Value Products
The AASTMT has successfully implemented a sustainable, self-sufficient recycling system on its campus, aimed at transforming organic food waste and recyclable materials into valuable products that contribute to reducing campus operating expenses. The system specifically targets organic food waste, plastic tableware, and aluminum cans, converting these waste streams into economically beneficial outputs. Through this project, AASTMT produces a portion of its disposable plastic tableware on-site using a plastic injection machine located at the Integrated Service Center (ISC). Additionally, the project lowers costs for campus fertilizers and provides raw aluminum materials for students' graduation projects. To achieve these goals, AASTMT has developed and integrated several recycling units, including a portable compost unit to create organic fertilizer, molds for the plastic injection machine, a unit for washing, drying, and disinfecting plastic tableware, an aluminum can crusher to compact cans before melting, and an electrical furnace for producing aluminum bars. The project continues to operate on campus, showcasing AASTMT's commitment to sustainable practices and efficient waste management.

CANS CRUSHER UNIT

1st International TouMaLi Conference: Contribution of Sound Waste Management Systems to Sustainable Tourism and the Protection of Marine Ecosystems
The AASTMT held a conference on October 24-25, 2022, in Alexandria, Egypt, focusing on effective waste management systems and their significant contributions to sustainable tourism and marine ecosystem protection. This event gathered national and international experts to discuss the vital link between sound waste management and environmental conservation, particularly in regions heavily reliant on tourism. Through sharing best practices and innovative solutions, the conference aimed to foster collaboration across various sectors, emphasizing the importance of sustainable practices in protecting marine resources and enhancing the resilience of the tourism industry. The conference welcomed Dr. Yasmine Fouad, Egypt's Minister of Environment, who emphasized TouMaLi's importance in combating marine waste pollution—especially plastics—through cross-border cooperation. AASTMT's role as a pivotal partner in the project, alongside other collaborators such as Rostock University and environmental organizations across the Mediterranean, showcased its commitment to SDG 12, which promotes responsible consumption and production. Through this event, AASTMT underscored its dedication to fostering eco-friendly practices in tourism and beyond, highlighting innovative solutions for reducing marine waste and its impact on climate.

**IEEE YESIST13- Competition – Global**
The YESIST12 competition's preliminary phase was reorganised by the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) for the second consecutive year. Additionally, the AASTMT was pleased to host the final phase in Egypt for the first time. Over 70 projects from young innovators around the world were submitted for the event, which featured a number of themes, some of which focused on recycling innovations, waste management, and sustainable production. Participation in the event increased dramatically this year compared to the previous year. This accomplishment demonstrates AASTMT's dedication to developing solutions that tackle global issues like food preservation, hazardous waste management, and waste disposal while encouraging environmentally friendly behaviours and sustainable regional development.

Turning Waste into Sustainable Solutions: AASTMT's Focus on Vermicomposting
Part of its continuous dedication to sustainable waste management and recycling techniques, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) is aggressively investigating vermicomposting. By improving soil quality, increasing

drainage, and lowering soil erosion, vermicomposting—a green method—transforms organic waste into nutrient-rich compost so supporting sustainable development. Apart from improving food preservation and crop yields, this natural composting technique is quite important in reducing methane and CO_2 emissions from organic waste. In line with sustainable development objectives, AASTMT keeps using vermicomposting over its campuses to generate fertilisers for agricultural areas, so supporting environmentally friendly waste disposal and environmentally conscious practices. The Aquaculture Research Centre (ARC) of AASTMT on the main campus supervises this two-path recycling system. Waste is gathered and placed in earthworm composting pens in the first path, where it is transformed into vermicompost—then applied as organic fertiliser for landscaping. With some of the worms used in the fish culture operations of the ARC, the worms generated by this process also grow in number. The second route treats the waste to create soluble fertilisers and bio-gas. For several ARC operations, this bio-gas provides a substitute energy source that emphasises AASTMT's creative approach to waste management and sustainable energy. By means of continuous vermicomposting programs, AASTMT keeps encouraging environmentally friendly behaviours and transforms waste into valuable resources for landscaping and agricultural operations over its campuses.
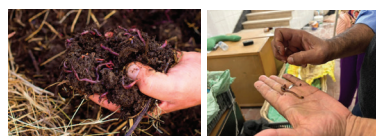
COMMUNITY ENGAGEMENT

Enhancing Waste Management Practices: Aiming for Sustainable Solutions in Greater Alexandria Hotels
Following the recent TouMaLi

International Conference, a dedicated project team from the University of Rostock and BlackForest Solutions visited 20 hotels in Greater Alexandria that are part of the pilot project. During this visit, they collected and reviewed data regarding the general conditions and waste management practices in these establishments. The Arab Academy for Science, Technology, and Maritime Transport (AASTMT), as a key partner in the TouMaLi project, plays a crucial role in this initiative by facilitating collaboration among various stakeholders to develop tailored waste management concepts for the hotels. The overarching goal is to enhance the waste management infrastructure, establish effective waste sorting at the source, and ultimately increase recycling rates while minimizing landfill contributions. Through these efforts, AASTMT is significantly contributing to the improvement of sustainable waste practices in the region.

AASTMT Collaboration with Relevant Ministries to build and Implement the Infrastructure of Egypt's New Waste Management System
The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) has played a vital role in advancing Egypt's waste management system from 2019 to 2023. AASTMT has collaborated with relevant ministries to build and implement the infrastructure of Egypt's new waste management system. This partnership included training and qualifying personnel across various Egyptian governorates in the operation, management, and monitoring of waste management processes—spanning collection, transportation, treatment, and safe disposal. AASTMT has also significantly contributed to introducing global waste management systems and advanced technologies in Egypt, working closely with decision-makers to shape national strategies for optimal

waste management across diverse waste types. This initiative not only aligns with AASTMT's commitment to environmental sustainability but also supports Egypt's goals for sustainable development by promoting local recycling industries and reducing reliance on imports. AASTMT's expertise has extended to the design and launch of 23 secure landfill sites, including a major new facility in Bir Al-Abed, Sinai, set to serve 100,000 residents, alongside three additional sites in Arish, Al-Tur, and Sharm El-Sheikh.In a significant initiative towards sustainable waste management, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) has partnered with Egypt's Ministry of Environment to implement a new waste management system. Under the guidance of Dr. Yasmine Fouad, the Minister of Environment, AASTMT is supervising the operation of a new landfill cell in the city of Badr, which aims to enhance the safe disposal of waste and reduce air pollution and greenhouse gas emissions contributing to climate change. Additionally, AASTMT played a crucial role in conducting a two-day training program for waste management personnel in the Sharqia governorate, equipping them with the necessary skills and knowledge to effectively manage waste systems. This collaborative effort not only addresses local waste management challenges but also aligns with the United Nations SDG 12, promoting responsible consumption and production patterns by enhancing the capacity and efficiency of waste management practice.

AASTMT's Leadership in Sustainable Waste Management: Removal of Waste and Transferring it to Sanitary Landfill
The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) recently collaborated with Egypt's Ministry of Local Development to support the safe disposal and management of historical waste accumulations in Beheira Governorate.

As part of the initiative to promote sustainable waste management aligned with **UN SDG 12**, AASTMT experts, including Dr. Abdel Moneim Sand and Dr. Tarek Eid, provided essential expertise in waste handling and environmental safety. The project involves the removal of over 200,000 tons of waste from Idku to the newly constructed sanitary landfill in Badr City, a crucial step in improving public health, protecting local ecosystems, and enhancing sustainable tourism. This effort also includes training local staff on landfill management and sustainable practices, supported by the ministry's Waste Management Unit and other stakeholders.

EVENTS

Go Green Initiative
The Arab Academy for Science, Technology, and Maritime Transport (AASTMT) successfully organized the "GO GREEN" initiative on **November 29, 2022**, at its main campus in Alexandria. This event, which was in partnership with Brightskies, a leading company in the automotive sector, focused on eco-friendly electric and autonomous vehicles. Under the guidance of key faculty members, including Dr. Sherin Youssef and Dr. Ali Ismail, the event featured workshops and discussions that aimed to educate students on sustainable practices in the automotive industry. The conference attracted over **400 students**, showcasing innovative projects such as "Eco-Friendly Smart Electrical Vehicles" by final-year Computer Engineering students.

Towards a Green Sustainable Future initiative School Visit to Schools
As part of the "Towards a Green Sustainable Future" initiative, a group of professors from the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) visited Riada, EAS, and HIS Schools to promote awareness of the 17 Sustainable Development Goals (SDGs). This initiative aims to engage younger generations in discussions about sustainability, environmental stewardship, and social responsibility. During the visit, the professors conducted interactive sessions and workshops, encouraging students to understand the importance of each SDG and how their actions can contribute to a greener future.

Organizing Beach Litter Monitoring Workshop
In October 2022, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) played a vital role in the TouMali project by facilitating a workshop focused on beach litter monitoring in Alexandria, Egypt. Following an online workshop attended by employees from the Waste Management Regulatory Authority (WMRA), the participants engaged in hands-on activities on November 12, 2022, where they conducted exemplary surveys to assess beach litter. Utilizing two methodologies—the 100 m method and the Sand Rake method—participants effectively captured both macro (> 25 mm) and meso-litter particles (5-25 mm), providing a comprehensive overview of beach pollution. The collected litter was then analyzed and categorized, equipping

the participants with the necessary skills for long-term monitoring of beach litter. This initiative aims to identify pollution sources and develop measures to reduce marine litter, ultimately contributing to enhanced recycling rates and minimizing landfill use.

UPCOMING GOALS

Waste Management Center
A Waste Management Center on an Educational Campus Functions as a specialized facility for the collection, sorting, and processing of diverse waste kinds produced by the institution. It features distinct bins or compartments for several waste categories, including plastics, paper, glass, metal, and organic materials. The center frequently incorporates composting units for food and garden refuse, converting organic waste into compost for landscaping or campus gardens. The facility may collaborate with local recycling companies to guarantee that sorted recyclables are processed correctly and do not wind up in landfills. Educational institutions may utilize the center as a practical learning environment, enabling students to comprehend sustainable waste management techniques, the recycling process, and the significance of waste reduction.

Monitoring and Reporting Systems
Monitoring and Documenting Waste: Quantify the waste generated on campus monthly, producing reports to pinpoint areas for enhancement. Moreover, Sustainable Procurement Reporting: Document sustainable purchasing initiatives and monitor the proportion of environmentally friendly products utilized by the organization.

Cooperative Alliances
Challenges in Sustainable Development: Collaborate with educational institutions or non-profit groups to establish challenges or competitions aimed at innovative solutions for waste reduction, such the reuse of plastic garbage or the creation of applications to monitor personal consumption.

GOAL 13 -
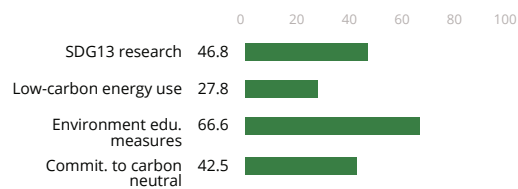# CLIMATE ACTION

OUR AIM IN 2022-2023

For the 2022-2023 academic year, AASTMT aimed to lead in climate resilience and carbon reduction through emissions targets, renewable energy expansion, and collaborative climate initiatives. The AASTMT focused on advancing climate adaptation and sustainability through education, research, and community engagement.

THE IMPACT RANKING SCORES 2021-2022

13 🌍
CLIMATE ACTION

SCORE **45.2**

RANK **401–600**
out of **924** institutions

|	
SDG13 research	46.8
Low-carbon energy use	27.8
Environment edu. measures	66.6
Commit. to carbon neutral	42.5

0 20 40 60 80 100

KEY MILESTONES IN 2022-2023

During the 2022-2023 academic year, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) demonstrated its commitment to SDG 13: Climate Action through various impactful initiatives, partnerships, and programs aimed at advancing climate resilience, carbon reduction, and sustainable development. Below are the significant milestones achieved by AASTMT:

Commitment to Carbon Neutrality
A central milestone for AASTMT was its commitment to achieving carbon neutrality. The 2022-2023 Carbon Emissions Report outlined the academy's targets across Scope 1, 2, and 3 emissions and provided measurable goals within its Climate Action Plan (CAP). AASTMT's initiatives to reduce emissions across campus operations included an ambitious renewable energy goal to meet 35-40% of its energy needs through solar power by 2025 and a further target of 60% by 2040. The installation of a 150-kW solar PV plant at the Aswan Campus was a critical step in reaching these objectives.

AASTMT Carbon Emissions Reduction and Sustainability Progress Report (2022-2023)
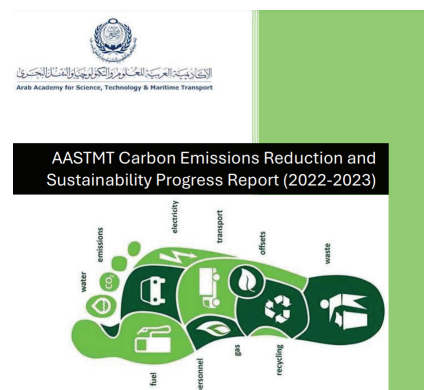
Educational and Capacity-Building Programs
Through programs like the **Meteorology Course** and the **Master's in Smart Environmental Management of Climate Change (SECCM)**, AASTMT prepared students to engage in climate risk monitoring and disaster preparedness. Additionally, the **Crisis Management Course** and the **Alexandria Workshop on Weather Routing and Carbon Emissions Reduction** equipped participants with technical skills to assess climate risks and develop emissions reduction strategies. These initiatives aligned with SDG 13 Indicators 13.3.1, 13.3.4, and 13.4.2, supporting AASTMT's mission to foster a climate-resilient, skilled workforce.

Youth Empowerment through Uni-Green Project
The **Uni-Green Project**, in collaboration with the Life Makers Foundation and funded by the European Union, was another milestone. This project emphasized youth participation in climate action through leadership programs and practical sustainability projects, empowering young climate leaders. The initiative reflected SDG 13 Indicator 13.3.5 by fostering collaboration with NGOs to address climate change challenges in Egypt.

Launch of Multidisciplinary Adaptive Climate Insights (MACI) Journal
The **MACI Journal** provided a dedicated platform for publishing climate resilience and adaptation research, enabling global knowledge-sharing on climate adaptation, mitigation, and sustainable practices. This initiative positioned AASTMT as a leader in climate education and research, promoting evidence-based solutions that address global climate challenges.

COMMUNITY ENGAGEMENT

Throughout the **2022-2023 Academic Year**, AASTMT strengthened its community-focused climate action efforts, actively involving local communities, students, and external partners. These initiatives addressed SDG 13 objectives, equipping communities to navigate environmental challenges and foster sustainable development.

**AASTMT's "Bridge of Hope" Initiative with UNHCR**
AASTMT's **"Bridge of Hope" Initiative** with UNHCR provided educational scholarships to refugees, building resilience for vulnerable populations impacted by climate-related displacement.

Eyes on Earth Campaign
On World Environment Day, AASTMT collaborated with **EU Neighbors South** and the **European Forest Institute** for the **Eyes on Earth Campaign**, which involved community members and students in tree planting, forest conservation workshops, and cleanups. This initiative raised awareness about biodiversity conservation and carbon sequestration, directly engaging participants in practical

climate action to improve ecosystem resilience and sustainable land management.
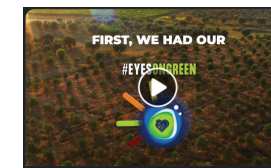
Green Egypt Initiative: Large-Scale Reforestation Efforts
As part of its climate action strategy, AASTMT partnered with Egypt's Ministry of Planning for the **Green Egypt Initiative**, a large-scale reforestation campaign aiming to plant one million trees. This project actively involved students and local youth in tree planting and land restoration efforts, promoting long-term carbon sequestration and soil health. By involving the community in this initiative, AASTMT supported national reforestation goals while enhancing local climate resilience.

Caritas Egypt Collaboration for Vocational Training of Refugees
In collaboration with **Caritas Egypt**, AASTMT provided vocational training to refugees, offering skills in automotive mechanics, electrical systems, and other technical areas. These skills enhance the employability of refugees and equip them to navigate socio-economic challenges, including those linked to climate adaptation. This initiative reflects AASTMT's dedication to social inclusion and climate adaptation by supporting the resilience of vulnerable populations.

EVENTS

During the **2022-2023 academic year**, AASTMT organized and participated in numerous events aimed at advancing **SDG 13: Climate Action**. These events fostered climate literacy, community involvement, and partnerships across various sectors, supporting AASTMT's mission to promote sustainability and resilience.

Leaders Hub Climate Awareness Event with Empower Hub
Through the **Leaders Hub Climate Awareness Event**, AASTMT partnered with **Empower Hub** to encourage students to create educational content on environmental issues, including plastic pollution and climate change. Student teams produced videos, social media posts, and awareness campaigns, promoting climate literacy across the broader community. This initiative empowered students to lead in sustainability communication, fostering a climate-aware society.

Go Green Workshop in Partnership with the Ministry of Environment
The **Go Green Workshop** was a collaborative effort with Egypt's Ministry of Environment, focused on reducing plastic use and promoting sustainable practices. This workshop educated participants on adopting eco-friendly habits, such as reducing single-use plastics and conserving resources. By involving community members, AASTMT promoted practical sustainability efforts, empowering attendees to implement environmentally responsible practices.

International Conference on Sustainable Tourism and Marine Environmental Protection
Held in Alexandria, this conference brought together experts to discuss sustainable tourism practices, marine waste management, and coastal resilience. AASTMT, in collaboration with regional and international organizations, highlighted the importance of sustainable infrastructure in reducing marine pollution and protecting vulnerable coastal ecosystems. The conference promoted cross-sector collaboration, aligning tourism and environmental conservation to support climate adaptation goals.

Science Diplomacy Workshop: "Climate Change in the Broader Mediterranean Area"
This two-day workshop gathered climate experts to discuss climate observation, modeling, and foresight in the Mediterranean region. Focusing on extreme weather events like "Medicanes" and sea-level rise, participants explored collaborative strategies for disaster preparedness and resilience. AASTMT's active involvement reinforced its commitment to regional cooperation in addressing climate challenges, with outcomes that included recommendations for policy reforms and enhanced early warning systems for vulnerable coastal areas.

African Development Senior Managers Forum on Climate Change and Transport Resilience
Hosted by AASTMT, this forum focused on climate adaptation strategies for Africa's transport sector. With senior managers, policymakers, and climate experts in attendance, discussions centered on the impacts of sea-level rise and extreme weather on critical transport infrastructure. The event emphasized cooperative disaster planning, advancing resilience in transport systems across Africa through regional collaboration and sustainable infrastructure practices.

Crisis Management Course
This course provided technical training on crisis management related to climate-induced disasters, equipping participants with skills in emergency planning, risk assessment, and disaster response. By preparing students and professionals to address climate risks, the course strengthened local capacity for disaster preparedness and climate adaptation. The course was a practical addition to AASTMT's climate resilience efforts, fostering partnerships with local and national authorities on effective disaster management.

15th Sectoral Cooperation Meeting on Climate Change between the League of Arab States and the United Nations
 AASTMT participated in this meeting, which addressed climate risk monitoring, drought management, and climate finance across the Arab region. The event highlighted the necessity for early warning systems and policy reforms to protect vulnerable communities. AASTMT's contributions to the discussions underscored its role in informing and supporting regional climate adaptation initiatives and disaster preparedness.

AASTMT Hosts TuoMali International Conference on Marine Waste
The TuoMali International Conference focused on sustainable waste management within the Mediterranean tourism sector. AASTMT, in collaboration with the University of Rostock and other Mediterranean partners, discussed the impact of marine plastic waste on ecosystems and explored waste reduction strategies for the tourism industry. Outcomes from this conference informed ongoing policies in sustainable tourism and marine ecosystem protection, aligning with SDG 13 goals of reducing environmental impacts on marine life.

UPCOMING GOALS

Building on the progress of the **2022-2023 Academic Year**, AASTMT has set ambitious goals to further enhance its impact on **SDG 13: Climate Action** in the upcoming year. These future initiatives will expand AASTMT's reach in climate education, renewable energy use, and community resilience, reinforcing its commitment to sustainable development and climate adaptation.

1. Expansion of Renewable Energy Infrastructure: AASTMT aims to increase its reliance on solar energy across campuses, with a target to reach **50% solar energy usage by 2025**. This includes new solar PV installations and energy-efficient upgrades, reducing dependency on non-renewable energy sources. These plans are aligned with AASTMT's Climate Action Plan (CAP), supporting its goal of achieving carbon neutrality by 2050.

2. Strengthening Community Engagement through New Partnerships: To enhance climate resilience and community support, AASTMT is planning to deepen partnerships with organizations such as **UNHCR** and **Caritas Egypt**. These collaborations will focus on expanding educational and vocational training programs for refugees and other vulnerable populations. By providing skills training in sustainable practices and climate resilience, these initiatives aim to empower communities to adapt to climate-related challenges effectively.

3. Launch of a Climate Resilience and Disaster Preparedness Training Program: AASTMT intends to develop a specialized training program focusing on **disaster preparedness and climate risk assessment**. This program will be open to students and professionals, with the goal of building local capacity to respond to climate-induced disasters. Emphasis will be placed on crisis management skills, early warning systems, and cooperative planning with local government agencies to support disaster preparedness on a regional scale.

4. Expansion of Climate-Focused Educational Programs: The academy plans to broaden its **Master's in Smart Environmental Management of Climate Change (SECCM)** and **Crisis Management Course** offerings to reach more students and professionals. These expanded programs will provide specialized knowledge in areas such as climate risk assessment, sustainable development, and environmental monitoring, preparing graduates to lead in climate adaptation and resilience across various sectors.

5. Additional Workshops on Emissions Reduction in the Maritime Sector: Recognizing the critical role of maritime activities in emissions, AASTMT is preparing to host more workshops dedicated to **reducing carbon emissions in Maritime Transport**. Building on the success of the previous **Weather Routing and Carbon Emissions Reduction Workshop**, upcoming events will focus on fuel-efficient navigation, emissions tracking, and the application of cutting-edge technologies in reducing greenhouse gases from maritime operations.

6. Increased Research and Knowledge Dissemination via MACI Journal : AASTMT aims to expand the **Multidisciplinary Adaptive Climate Insights (MACI) Journal** by encouraging more regional and international contributions on climate adaptation and mitigation. This expansion will provide a larger platform for climate science and facilitate global collaboration, advancing AASTMT's role as a knowledge hub in climate research and policy development.

7. Coastal Protection Projects in Alexandria: In partnership with the Alexandria Governorate, AASTMT is planning new **Coastal Protection projects** focused on adapting to sea-level rise and preventing erosion. These initiatives will include the development of resilient urban infrastructure along Alexandria's coastline, supporting local communities in adapting to the impacts of climate change and enhancing long-term sustainability for the region.

8. Capacity-Building Initiatives in Sustainable Waste Management: AASTMT is planning to develop additional training programs in **Sustainable Waste Management** practices, building on past collaborations with Egypt's Ministry of Environment. These initiatives will involve new research projects and community engagement efforts aimed at reducing CO₂ emissions from waste, promoting environmentally friendly disposal methods, and supporting national climate resilience efforts.

Through these upcoming projects and partnerships, AASTMT reaffirms its dedication to advancing climate action, supporting community resilience, and contributing to sustainable development on both regional and global scales.
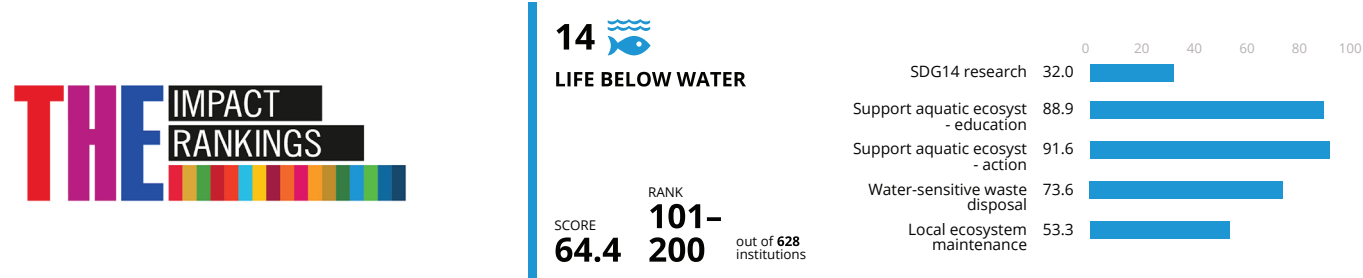
GOAL 14 -
LIFE BELOW WATER

14 LIFE BELOW WATER

OUR AIM IN 2022-2023

AASTMT aimed to our aim for the academic year 2022-2023 was to reinforce our commitment to achieving Sustainable Development Goal 14 (SDG 14): Life Below Water. Recognizing the critical role that oceans and marine resources play in global sustainability, we dedicated ourselves to fostering innovative research, impactful education, and community engagement initiatives to promote marine conservation, sustainable fisheries, and the reduction of marine pollution.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

14 🐟
LIFE BELOW WATER

SCORE **64.4**

RANK **101–200**

out of **628** institutions

SDG14 research	32.0
Support aquatic ecosyst - education	88.9
Support aquatic ecosyst - action	91.6
Water-sensitive waste disposal	73.6
Local ecosystem maintenance	53.3

KEY MILESTONES IN 2022-2023

AASTMT demonstrates its steadfast commitment to Sustainable Development Goal 14 (SDG 14) by familiarizing its students with it and including the necessary knowledge within the related educational programs, Curricula, and specialized courses.

Fisheries Technology program (Undergrad)
The department is a pioneer in the education of fishing vessels navigation and designing of fishing equipment that qualifies graduates to work on fishing vessels as alternate officers, to be responsible for navigational surveillance (after completion of ministerial requirements for practicing the profession) or fisheries observers on fishing vessels

Master of Science Degree in Sustainable Management of Fisheries and Aquaculture (SMFA), Funded by the EU (Erasmus+ project) (Postgrad)
The M.Sc. students have accomplished the student mobility and exchange program within the framework of the EU-funded project FishAqu of Erasmus+. The project started on 15 November 2019 and will last until 15 November 2022.

Directing the Graduation Project Topics in the Relevant Specializations

The College of Fisheries and Aquaculture Technology at the Arab Academy for Science, Technology, and Maritime Transport participated in the activities of the Academy's Industry Advisory Council at the main headquarters in Abu Qir under the theme: "Artificial Intelligence and the Future of National Industry", held on Tuesday, May 16, 2023. It is worth mentioning that they also published a paper from their graduation project entitled: "Potential Application of Chitosan Nanoparticles as Preservative Agent for Fishery Products."

TouMaLi Research Project (2021-2025)
In March and April 2022, the Arab Academy and the IOW teams, supported by several local students and volunteers, surveyed several beaches around Alexandria and Marsa Matrouh. The beaches sampled were a mix of private and public beaches.

AASTMT Funds Research Projects serving SDG14 (March 2021 and October 2022)
Coastal ecosystems are critical to maintaining human well-being and global biodiversity. In particular, mangrove forests provide numerous benefits and services that are essential for climate adaptation and resilience. They help mitigate climate change by sequestering and storing significant amounts of carbon (blue carbon) from the atmosphere and oceans.

Participation of College Students in The Workshop and Competition of The Climate Protection Initiative
The College of Fisheries and Aquaculture Technology students won the first three places in the Climate Protection Initiative competition. 27-28 Feb. 2023

AASTMT Recycling Program

Since 2019, AASTMT has recognized the negative effects of plastic waste, from creation to removal. Plastic contamination can destructively affect Aquatic life, and the College is looking to diminish plastic use and wastage nearby.

AASTMT represents the IAMU at the 82nd of the MEPC in London
AASTMT is an effective participant in the International Association of Maritime Universities (IAMU); it represented the IAMU in the Marine Environmental Protection Committee (MEPC) in its 82nd round, held between 30 September and 4 October 2024 in London, UK.

The committee's final report can be found in the following link for whom has an active IMODOCS account:
MEPC 82/WP.1/Rev.1 (15 October 2014)

COMMUNITY ENGAGEMENT

In the 2022-2023 academic year, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) prioritized impactful community engagement initiatives to address SDG 14: Life Below Water challenges. Below are the key community-focused initiatives undertaken:

Overfishing Community Awareness
In January 2023, AASTMT, a leading university within the region represented by the College of Fisheries and Aquaculture Technology, took the initiative to familiarize the local fishermen with the threats and adverse effects of overfishing.

Initiative: Antifouling Paints: Environmental Hazards and Alternatives (Abu-Qir Bay Fishermen Community Outreach Workshop)
Biofouling is the accumulation of bacterial growth, algae, and sessile invertebrates on any submerged surface. Antifouling paints are widely used to counteract this problem, using toxic substances such as copper-containing paints. Raising the awareness of fishermen about this problem and encouraging them to use eco-friendly antifouling paints is of great importance; environmentally and economically.

Initiative: "Existence of Harmful Algal Blooms along Alexandria Coast: A Mitigation Strategy"
Since 1998, the Alexandrian coast has undergone a series of engineering modifications. These changes have impacted marine water quality, phytoplankton productivity, diversity, and topography. A major problem along the Alexandria shoreline is beach erosion. In 2021, a preliminary mitigation strategy was implemented to overcome this critical environmental crisis in an action plan undertaken in 2021 – 2024.

EVENTS

Throughout the 2022-2023 academic year, the Arab Academy for Science, Technology and Maritime Transport (AASTMT) hosted and participated in a range of impactful events aligned with **SDG 14: Life Below Water**. Below is an overview of the key events and their outcomes:

Scientific Conferences such as MARLOG 12. 12th-14th March 2023
MARLOG 12 illuminates the importance of innovation and modern technologies and their role in a sustainable, resilient future for the port community and maritime industry.

MoU between AASTMT and the World Fish Center, Jun 3, 2022
On the sidelines of the fourth AASTMT's Advisory Council for Industry, on June 3, 2022, his excellency Professor Ismail Abdel Ghafar, president of the Academy, signed an MoU with the WorldFish Center, represented by Dr. Ahmed Nasrallah, the Center's Regional Director. The agreement is set to last for five years.

UPCOMING GOALS

In the upcoming year, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) aims to build on its commitment to **SDG 14: Life Below Water** by advancing impactful projects, forging new partnerships, and expanding its educational and research initiatives. Our future goals include:

1. Expanding Marine Research
2. Strengthening Educational Programs
3. Community-Centered Initiatives
4. Partnership Development
5. Innovative Technology Integration
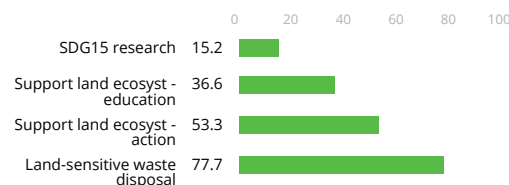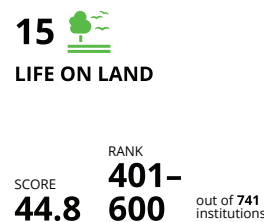6. Policy and Advocacy Efforts
7. Measurable Impact Goals

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GOAL 15 - LIFE ON LAND

15 LIFE ON LAND

OUR AIM IN 2022-2023

Sustaining land ecosystems by prioritizing education, scientific research, and community engagement.

THE IMPACT RANKING SCORES 2021-2022

THE IMPACT RANKINGS

15 LIFE ON LAND

SCORE **44.8**

RANK **401–600**

out of **741** institutions

		0 20 40 60 80 100
SDG15 research	15.2	
Support land ecosyst - education	36.6	
Support land ecosyst - action	53.3	
Land-sensitive waste disposal	77.7	

KEY MILESTONES IN 2022-2023

AASTMT Vitally Contributes to Egypt's Implementation Roadmap on Solid Waste Management
The AASTMT has significantly influenced **solid waste management policies** in Egypt, focusing on improving the process of collecting, treating, and **disposing waste**. This system saves government money, enhances **public health**, and **reduces pollution**, all crucial for nation and global **prosperity**.

Monitoring, Assessment and Innovative Treatment Technology to Enhance Groundwater Quality for Irrigation Toward Climate Change Adaptation Research Project
The Arab Academy for Science, Technology and Maritime Transport (AASTMT) is focusing on improving the quality of ground water for irrigation and drinking purposes. The study aims to assess the suitability of water from 13 borehole ground wells near Alexandria City for irrigation and drinking purposes. Pollution levels in groundwater are a significant concern.

Representative of AASTMT for the Egyptian Partner of Maia -Taqa Project at a Visit to Athens
The workshop showcased the progress related to the pilot sites implemented within the framework of the Maia-Taqa project of **solar** thermal **energy** production during a visit to a Greek company's factory. The **Maia-Taqa Project** is a Mediterranean initiative aimed at promoting innovative resource efficiency solutions in the **clean energy** sector, focusing on **solar energy** and **energy efficiency** technologies. The project brings together partners from various Mediterranean countries, including **Egypt**, represented by **AASTMT.**

AASTMT's Environmental Policy:
AASTMT's environmental policy places a high priority on protecting marine life and halting **climate change**. The policy describes efforts to increase **public knowledge** of the effects of climate change on agriculture, **biodiversity**, human health, and water resources. The policy emphasizes protecting Large Marine Ecosystems (**LMEs**) from pollution, ocean acidification, and unsustainable fishing practices.

Water Conservation Policy at AASTMT
Water conservation policy aimed at improving sustainability and water efficiency, **AASTMT** is actively addressing Egypt's acute water shortage. Reducing water use by installing water-saving technologies, using local water **resources** for agriculture, and minimizing car washing are some important approaches. In addition to using creative dining techniques, such going "**trayless,**" to **conserve water**.

Green Energy and Energy Management Policy
The goal of **AASTMT's energy** policy is to create energy-efficient facilities by enforcing strict guidelines for new construction and renovations and integrating cutting-edge technologies like Building Management Systems **(BMS)** and sustainable energy systems.

AASTMT Transportation Policy
AASTMT's Transport Policy aims to improve vehicle accessibility, reduce **carbon footprint**, and improve air quality on campus. Strategies include reducing vehicle dependency, increasing walkability, **urban planning** decisions, **raising awareness** about sustainable events, and implementing research projects. AASTMT Transportation Policy contribute to the monitoring and evaluation of the University's Climate Change Strategy 2016-2026.

Monitoring IUCN and other Conservation Species Policy
AASTMT is dedicated to biodiversity protection and conservation, focusing on identifying, monitoring, and safeguarding vulnerable species on IUCN Red List and national conservation lists. The policy encourages ethical research, non-lethal data collection, and strict regulations, particularly for severely endangered species.

Building on Brownfield Sites
As part of its commitment to environmental sustainability, AASTMT builds on **brownfield sites** to minimize the need for new land conversion and to **protect natural habitats**. This strategy encourages prudent land use while reducing the environmental impact of campus **construction**.

Water Discharge Guidelines and Standards
AASTMT demonstrates its commitment to **sustainable water management** through rigorous practices designed to prevent environmental contamination, **conserve freshwater ecosystems**, and promote **biodiversity protection**. The Academy's water discharge guidelines ensure the **ecological balance**

AASTMT's Waste and Materials Recycling Policy
AASTMT Waste and Recycling Policy supports **sustainable** environmental management, aiming to minimize negative impacts on **ecosystems**, **biodiversity**, and **land** by reducing, reusing, and recycling waste. The policy prioritizes **pollution prevention** and compliance with environmental regulations, promoting active participation from staff and students to maximize recycling efforts as explained in **3. plastic waste reduction**.

Consumption and Recycling Policy
AASTMT is implementing **policies** to address environmental challenges such as rising sea levels, pollution, waste, and climate change. These policies aim to anticipate**, reuse**, and **reduce waste**, **mitigate** natural effects, and ensure waste **management** in accordance with natural enactment and **contamination prevention**

Campus Smart Recycling System to turn Food Organic Wastes and Recyclables into Economic Value Products
The proposed project aims to create a **sustainable** recycling system for **AASTMT** campus food waste, converting it into valuable products with **economic** value. The system targets three types of waste: organic food remains, **plastic tableware**, and aluminum cans, reducing campus running costs and fertilizer budgets

Contract with Nahdet Masr
By collaborating with Nahdet Masr, **AASTMT** is not only ensuring that waste is managed efficiently and sustainably but is also contributing to the reduction of ecological harm, thus supporting local **biodiversity** and land health. This contract represents a tangible step toward the academy's commitment to environmental sustainability and its role as a model for responsible waste management in educational institutions.

COMMUNITY ENGAGEMENT

Race to Zero AASTMT Initiative
The Race to Zero Campaign aims for long-term prosperity through carbon-free recovery, involving companies, cities, regions, and investors. By 2050, a coalition of top net zero projects will mobilize for this sustainable, equitable, and sustainable development.

National Hunger Actions
Sustainable Development Goals of No

15

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Poverty, Zero Hunger, and Good Health and Well-Being are the focal points of the Prosperous Life Policy. Its main goals are to serve students who are having **financial difficulties**, give back to the community by offering **entrepreneurship initiatives**, and make sure that campus dining alternatives are sustainable. Additionally, the strategy promotes agribusiness projects and partnerships that benefit **nearby farmers**. By providing reasonably priced, healthful food options and supporting local farmers by providing them with access to facilities and events, the policy demonstrates its support **for sustainably cultivated food**

AASTMT Cooperate Social Responsibility
Through a range of academic and extracurricular endeavors, **AASTMT** has been eager to play a significant role in the field of social responsibility with the goal of influencing positive development in the **social**, **economic**, and **environmental** spheres not only in the region and the Arab World but also with global implications.

EVENTS

AASTMT Hosts African Development Senior Managers Forum on Environmental Management Systems in African Seaports
In September 2023, **AASTMT's** African and Asian Affairs Sector (**AAFS**) hosted the African Development Senior Managers Forum on Environmental Management Systems at the Abu Qir Campus, Alexandria, Egypt focusing on enhancing climate **resilience** for African seaports and coastal infrastructure *AASTMT Hosts African Development Senior Managers Forum on Environmental Management Systems in African Seaports*

The Fifth Arab Water Conference
Participation in the **recycling workshop** and creating different models from plastic and rubber waste in vision of the importance of environmental **preservation** through waste recycling. The Academy's College of Pharmacy actively participated in the Fifth Arab Water Conference, which was held in Riyadh, Kingdom of Saudi Arabia. The conference took place from 22 to 23 November 2023.

Climate Change Resilient Event by IEEE-Eta Kappa Nu
This event about the **international program** for **sustainable** development in **ports** and engineering technologies that can be reduced the effect of climate change and the speakers talked about renewable energy source, green hydrogen, and **energy saving** opportunities in Egypt.

The Fifth Arab Water Conference
Participation in the **recycling workshop** and creating different models from plastic and rubber waste in vision of the importance of environmental **preservation** through waste recycling. The Academy's College of Pharmacy actively participated in the Fifth Arab Water Conference, which was held in Riyadh, Kingdom of Saudi Arabia. The conference was organized in **cooperation** with the **Technical Secretariat of the Arab Ministerial Water Council of the League of Arab States**, and took place from 22 to 23 November 2023.

AASTMT's Participation in the United Nations Framework Convention on Climate Change's Conference of the Parties' activities

On December 10, 2023, the Union of Arab Chambers and the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) will **collaborate** to organize a workshop with a theme of "**Food – Agriculture – Water**." The program is a part of a larger effort to address sustainability and **food security** in the Arab world. This session is a major aspect of its participation in COP28.

AASTMT's students from 12 states line up to "Save Our Oceans"
Based in Alexandria, a coastal city in Egypt, more than 200 students from 12 states of the Arab Academy for Science, Technology & Maritime Transport (AASTMT) formed a line to shout out to the world, "SAVE OUR OCEANS."

AASTMT Participate in Tourism- Led Heritage (TOURITAGE) Project
AASTMT participate in the Touritage project which aims to promote **cultural heritage** in tourist destinations, promote **socio-economic recovery**, and **preserve heritage** assets through intensive study programs in six universities.

Student Activation Day (Civilization of Egypt)
The Department of Hotels and Tourism held a successful project activation day on the university's main campus, showcasing Egypt's rich **civilizations** to students, faculty, and guests.

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GOAL 16 - PEACE, JUSTICE & STRONG INSTITUTIONS
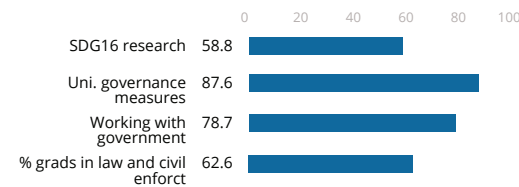
OUR AIM IN 2022-2023

AASTMT is seeking for better and stronger Institution. Also, it guarantees transparency and fairness within its' campuses through more community involvement and through facilitating participation of Refugees in AASTMT by educational scholarships, training.

THE IMPACT RANKING SCORES 2021-2022

16

PEACE, JUSTICE AND STRONG INSTITUTIONS

SCORE **72.0**

RANK **201-300**

out of **1086** institutions

	0 20 40 60 80 100	
SDG16 research		58.8
Uni. governance measures		87.6
Working with government		78.7
% grads in law and civil enforct		62.6

KEY MILESTONES IN 2022-2023

As AASTMT always cope with the international incidents specially in the Middle East region, it has different facilities for refugees' students in Egypt by introduce different academic and nonacademic services to them.

UNHCR, the UN Refugee Agency, and AASTMT the have launched a joint initiative named "Bridge of Hope" designed to empower refugees by offering them scholarships for bachelor's degree programs. The initiative aims to create inclusive learning environments and facilitate sustainable solutions for refugees to build a better future through education.

Bridge of Hope Initiative
Also, AASTMT always holds the responsibility for better Egypt, so that with its' experts and resources, AASTMT supports the Egyptian Government in Creating Innovative Solid Waste Management system.

AASTMT Vitally Contributes to Egypt's Implementation Roadmap on Solid Waste Management
As AASTMT fight corruption and bribery inside and outside its' campuses, so by the cooperation with AASTMT Egypt Launches Model Conference of the States Parties (Model COSP) in Aswan. This Model launched in Aswan Governorate. It is organized by the USAID Economic Governance Activity in collaboration with AASTMT,

and Aswan University. It will promote participative political engagement and transparency, emphasizing individual rights and freedom of expression within a democratic framework. Approximately 255 students from AASTMT and Aswan University have applied to join the Model COSP.

AASTMT VITALLY CONTRIBUTES TO EGYPT'S ROADMAP ON SOLID WASTE MANAGEMENT

AASTMT Fighting Corruption

How Upper Egypt's Students are Fighting Corruption at Model COSP

AAST collaboration with Urban Development Fund
AAST signed MoU with Urban Development Fund February 2023, The Urban Development Fund focuses on projects in Egypt's capital cities and governorates, aiming to protect areas with unique characteristics. Both sides agree on Knowledge exchange in the field of urban development in the way to support modern urban and sustainable development. The educational delivery process will be enriched with further practical skills through training, workshops, projects participation and further research in SDG.

COMMUNITY ENGAGEMENT

AASTMT always concentrate on the community surrounding it. It always involves the community in diverse ways. Such as cooperating with charity organizations, innovating different

campaigns, introducing different awareness and training programs for the community.

One of the main integral part of AASTMT is the Community Service Programs and Continuing Education Department in AASTMT, which is an integral part of AASTMT.

AASTMT believes in developing the community and providing great educational services for all categories, specially the new generations during the summer vacation. This is achieved through our summer school programs which provide different training courses for all ages from 4 years to 16 years old. The Center for adult and continuing education is considered to be one of the most highly acclaimed training centers directed to aid the companies and business organizations in Egypt and the Arab World, it has been successful in reaching the highest level of proficiency and efficiency.

Nowadays, one of the main AASTMT's goal is to spread the culture of sustainable development within Egypt, so by developing "Toward a Green and Sustainable Future School initiative" for schools in Alexandria this initiative has strong outcome which is 13 projects and innovative ideas from the participated students.

AASTMT participation in the national campaign "100 days of health"
AASTMT student have participated in the national initiative "100 days of health". Students roamed the streets of Port-Said/Port-Fouad to spread awareness about the risks of breast cancer, and chronic diseases such as diabetes and hypertension.

Medical Convoys
AASTMT participation in Medical Convoys held by the Ministry of Health in Alexandria governorate during the period from March to July 2023. 130 students from the college of medicine actively participated in medical convoys held in 9 villages in remote areas in Alexandria governorate. They assist physicians in providing curative services and provide health education messages to attendees.

Dental Convoys
The AASTMT college of Dentistry has sent several convoys to rural villages to provide disadvantaged people with minor dental treatment procedures that were carried out in the mobile dental clinic provided by the Faculty of Dentistry - Alexandria University (according to AASTMT-Alexandria University partnership agreement). This was in addition to a full oral screening and oral health education.

Health Education Session
Students and staff share in (the health education session) held in (Alexandria cars club) about chronic diseases prevention and control.

Faculty of Medicine Students Attend Gastro Egypt Conference

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AASTMT visit to Disabled People and Orphanages

AASTMT and Nile of Hope

EVENTS

Progression of Accessibility Centres in Higher Education for Students with disabilities in North Africa: (PACES)
The goal of this project is to promote socioeconomic progress by modernising higher education and improving access for students with special needs. This effort aims to empower students with disabilities by allowing them to enter the workforce and gain economic independence, thereby minimizing their economic disadvantages. The project aims to establish an inclusive educational environment that promotes the overarching objective of economic freedom for all by promoting individual rights and encouraging participation.

Participation of AASTMT in the activities of the Conference of the Parties to the United Nations Framework Convention on Climate Change

The BA Information Institutions and Professional Skills Department, in cooperation with the Arab Academy for Science, Technology and Maritime Transport (AASTMT), launched today the "Artificial Intelligence: Challenges and Adaptations" conference.
The BA Information Institutions and Professional Skills Department, in collaboration with the Arab Academy for Science, Technology, and Maritime Transport (AASTMT), launched the "Artificial Intelligence: Challenges and Adaptations" conference, which focusing on the rule of law, human rights, government, civic engagement, political engagement, fundamental rights, and liberties, as well as issues such as corruption, bribery, and civil liberties protection. An AI project exhibition, showcasing work from AASTMT, Egypt-Japan University of Science and Technology, and Borg El-Arab Technological University, was

stressed on the global relevance of AI and its integration into BA's operations, and underscored the necessity of ethical guidelines for AI usage, highlighting its role in creating new job opportunities for young people.

Launching the Political Science Journal "POLIS PECTATOR"
Political Science Journal provides a forum for scholarly discourse, with a focus on critical subjects such as information freedom, human rights, and active engagement. The journal's writings aim to promote a better understanding of these fundamental concepts and their importance in current society. By addressing these issues, the journal promotes conversation, critical thinking, and a dedication to preserving the rights and liberties that underpin a democratic and inclusive society.

'POLISPECTATOR,' our debut Political Science publication, as a critical first step ahead that welcomes varied perspectives, encouraging debates about both support and opposition, as well as an evaluation of benefits and disadvantages. It's covering a wide range of themes for students to access a multitude of material and broaden their awareness of a variety of topics.

Regional Maritime Security Institute (RMSI) participation in Maritime Security Committee
It has effective participation in the Main Committees for Maritime Security in the Maritime Transport Sector. Also, it plays important role in consultation and participating in Maritime Governmental researches. Also, the Participation in various security review committees for consultative operations in ports, port facilities and ships.

AASTMT Workshop on "Analyzing the Real Situation of the Arab Ports and harbors with the participation of all Arab countries
AASTMT conducted the workshop to analyze the current state of ports and harbors in Arab countries. This program aims to promote collaboration

among Arab states, with a focus on the Egyptian government's engagement. The workshop provides an excellent opportunity for Arab nations to work together to solve the challenges and opportunities confronting their ports and harbors. Through active involvement and knowledge sharing, the workshop aims to improve the efficiency, sustainability, and competitiveness of Arab maritime transport.

TECHLOG Partner in Egypt signs Agreements
During the opening session on October 18th, presentations from various partners' representatives included one by Dr. Sandra Haddad, Vice Dean for Scientific Research, College of International Transport and Logistics at Arab Academy for Science, Technology & Maritime Transport (AASTMT) about the TECHLOG Eastern Living Lab's aims and activities, as well as explaining AASTMT's capabilities and scale in terms of the number of campuses, colleges, and simulator complexes.

AASTMT will donate the participatory approach to provide every effort to work with logistics stakeholders to co-create at least one innovation/training initiative based on the use of advanced driving simulators. The co-design process will consist of three steps: analyzing Egyptian Global Logistics Company's innovation needs, defining innovation goals (Company and College), and designing innovation strategies (Company and College). A thematic pilot action to test and validate the proposed innovation initiative will also be also be considered.

AASTMT- IOSS Innovation One Stop Shop IOSS
It is an entity that offers several services in the field of innovation and renewable energy. it aims to provide start-ups and SMEs with knowledge, technical, assistance, consultancy and networking opportunities required to run succesful innovative renewable energy business in Egypt. As a kind of Community Participation AASTMT will support SME and helping them to run their businesses.

AASTMT participation in the 34th international conference of the supreme council for Islamic affairs
The Fifth Session of AASTMT, entitled "The Academic Vision for Dealing with Cyber Space," was headed by the President of AASTMT and overseen by the Egyptian government, represented by an Al-Azhar official. Addressing the potential and difficulties brought about by the digital age was the main goal of this session.

AASTMT President visit to Naif Arab University for Security Sciences
AASTMT works as participatory body for various Egyptian and Regional bodies. So AASTMT president visited Naif Arab University for Security Sciences. During the meeting AASTMT President discussed the ways to enhance the joint cooperation in various fields.

College of law students attend the second summer school abroad at Universitat Autònoma de Barcelona in Spain 2023
The second summer school program, which took place at Universitat Autònoma de Barcelona in Spain, involved College of Law students. With a concentration on several facets of law and legal studies, this program gave students a rare chance to participate in an enriched academic experience. This incident ensures AASTMT guarantees teaching freedom for their students.

AASTMT Law Students Training at Egyptian Council of State

At the Egyptian Council of State, a group of students from the College of Law at Smart Village Campus participated in a training session. The goal of this program was to improve their knowledge of political rights, political participation and the laws that protect them. The goal is to inform students on their political rights, especially the judicial system's role in defending them, civic engagement, and legal procedures.

Training Visits to Pharmaceutical Company

And Other Practical Training for AASTMT Students
As part of their hands-on learning, AASTMT students frequently take part in training visits to pharmaceutical businesses. The purpose of these excursions is to provide students a personal look into the pharmaceutical sector, which will help them better comprehend it. These practical training initiatives not only enhance the educational experience but also prepare AASTMT students for successful involvement in the future in their communities.

Electrical Construction Practices
For students studying electrical engineering at AASTMT, the Electrical Construction Practices course is a hands-on training program. From the first design to the last delivery, this course gives students the chance to have practical experience with every step of the electrical panel implementation process.

College of Engineering (Heliopolis Campus) hosted a Satellite and Geographical Survey Information Systems Conference
AASTMT College of Engineering (Heliopolis Campus) hosted a satellite and geographical survey information systems conference. The event emphasized the role of government in advancing these technologies for various applications. Over two days, a team from the Authority for Remote Sensing & Space Sciences conducted practical training for students of the College of Engineering through educational and training workshops by the Sensing Authority, where students launched several educational satellites CANSAT under the guidance of Sensing experts and analyzed the satellite data.

AASTMT and Malaysia University of Science and Technology (MUST) Student Exchange Agreement
To promote global cooperation and academic mobility, AASTMT and the

Malaysia University of Science and Technology (MUST) have signed a student and faculty members exchange agreement.

Some of the summer activities of Faculty of Medicine students inside and outside the country
In addition to the distinguished training courses organized by the management of the Faculty of Medicine for summer training for students in different stages at the private hospitals affiliated with the Ministry of Health in Alexandria, and the outstanding student participation in the "100 Days of Health" campaign in Alexandria and Port Said, as well as local medical conferences and activities of the college's scientific research club, the students of the college were keen to engage in multiple additional activities during the summer vacation. We would like to document some of the activities that took place inside and outside the country:

UPCOMING GOALS

In the Future AASTMT will:

- Increase the creation of useful platforms for students for discussion of different issues.

- Increase the existence of the Faculty of Law Students in the Egyptian Policy Makers Authorities.

- Raising the role of AASTMT in spreading sustainable development culture within the Egyptian Community.

- Have more existence in different workshops or others related to Anti-Corruption and Bribery fighting.

- Enhance the capacity of Egyptian Actors established in national, regional or local labor market institutions (e.g. employment agencies) to meet labor market needs in Egypt, reducing regional disparities and the labor mismatch in the different sectors of Green and Circular Economy (GaCE).

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GOAL 17 - PARTNERSHIPS FOR THE GOALS

OUR AIM IN 2022-2023

- At AASTMT, we are dedicated to advancing the Sustainable Development Goals (SDGs) by embedding sustainability into education, fostering impactful partnerships, and empowering communities. Our academic programs prepare students to tackle global challenges, while collaborations with universities, industries, and organizations drive innovation and promote knowledge sharing. Beyond academia, we engage with communities through outreach and skill-building initiatives, ensuring inclusivity and equitable development. By uniting education, innovation, and strong partnerships, AASTMT plays a pivotal role in achieving all 17 SDGs and shaping a sustainable future.

THE IMPACT RANKING SCORES 2021-2022

17 ✿
PARTNERSHIP FOR THE GOALS
MANDATORY QUALIFYING SDG - 22% OF OVERALL

RANK
401–600
out of **2031** institutions

SCORE
73.2

	0 20 40 60 80 100
SDG17 research	50.6
Relationships to support the goals	60.0
Publication of SDG reports	100.0
Education for the SDGs	77.8

KEY MILESTONES IN 2022-2023

In 2022–2023, the Arab Academy for Science, Technology, and Maritime Transport (AASTMT) achieved significant progress in advancing Sustainable Development Goal 17 (SDG 17), "Partnerships for the Goals." Through robust global collaborations, transformative educational programs, and impactful community initiatives, AASTMT reinforced its leadership role in sustainable development.

AASTMT established strategic partnerships with renowned universities, including Pune University, BBW University of Applied Sciences, Politehnica University of Bucharest, and the University of Pisa. These collaborations facilitated academic exchange, joint research, and international cooperation. Further, agreements with the China-Arab States Technology Transfer Center, ECCC Foundation, Obyan Incorporation,

and the Beijing Academy for Artificial Intelligence aligned educational programs with emerging industry needs, fostering innovation and professional development.

Community-focused collaborations with organizations such as the National Council of Women and the Arab Women in Maritime Association strengthened efforts to empower underrepresented

groups, promote gender equity, and support environmental sustainability. AASTMT also prioritized embedding sustainability principles into its curriculum, equipping students with the knowledge and skills needed to address global challenges through innovation, ethical governance, and practical solutions.

To enhance sustainability literacy, AASTMT organized workshops, seminars, and skill-building initiatives that reached diverse communities, including youth and professionals. These efforts ensured that graduates and industry practitioners are empowered with the tools and insights to address complex global challenges, reinforcing AASTMT's commitment to building a sustainable future.

COMMUNITY ENGAGEMENT

Agreement Between AASTMT and Afro- Asian Union for Sustainable Development

The union is branched from The Afro-Asian Peoples' Solidarity Organization (AAPSO). The collaboration that was signed with Agro- Asian Union March , 2022 enables AAST students to enroll in joint training, workshops and organize joint conference that support suitable developments. The union will refer to AAST to enrich its experience with academia and to have joint campaigns and activities that support SDG.

AAST collaboration the Strategic Women and Youth Institute

AAST signed MoU with Strategic women and youth institute Febraury, 2022, the agreement state to have joint programs that support suitable development and gender equality in leadership. The collaboration extended to include Seminars, workshops and case studies. For the next year of such collaboration, AAST maintains sustainable activities with Strategic women and youth to support its roadmap for achieving SDG.

AAST Collaboration with EPROM

AAST signed agreement with EPRO May, 2023, the agreement state to support the educational learning process with industrial best practices, the agreement enables the engineering college to join training opportunities in EPROM. EPROM-College of Engineering agreement target as well how to get advantages form academia role in SDG role to reduce the impact on environment. It plans awareness campaign to SDG support in light of Egypt Vision toward (2030). Both sides will support the three dimension (Economical, Social and environmental) and support the project related to that vision to control its impact on climate change.

AAST Agreement to Establish China – Arab (AAST) Technology Transfer Center

AAST signed MoU with Ministry of Science and Technology of the People's Republic of China and the People's Government of Ningxia Hui Autonomous Region in Nov, 2022 to establish China center of technology transfer. The center will carry-out technologies on demand, exchange and collaboration in key sector such as high speed rails, aerospace, satellite communication, new energy, modern agriculture that support Egypt roadmap to achieve SDG.
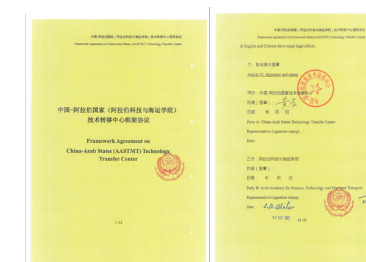
### Urban and Transportation Regeneration

The Faculty of Engineering and Technology is heavily participating in internationally funded research projects that will have a great impact on community service and environmental development. UPGRADE is an Erasmus+ Joint Regional Project, aimed Capacity Building in the field of Higher Education. The project consortium comprises the departments of Architecture, Urban Planning, and Civil Engineering in 8 highly reputable Higher Education Institutes and one Research Center from 6 different countries. Two of which are Partner Countries (Egypt and Lebanon) -in which the project will be held- and four of which are Program Countries (Germany, Italy, Greece, and Spain) -by which the project will be supervised. A team from the Department of Architecture and Environmental Design - headed by Prof. Dr. Yasser Farghali, and the Deanship of Prof. Dr. Akram Suleiman AI-Solami, participated in a workshop in Greece August 2022, within the framework of projects funded by the European Union ERASMUS + entitled: Urban

and Transportation Regeneration for Reducing Automobile Dependency in the MENA Region: UPGRADE, TOT. The project have many partners from Egypt, Lebanon, Greece, Germany, Italy and Spain. The visit includes field visits as well.

TouMali Initiative on Sustainability in Maritime Transport

In 2022, AASTMT spearheaded the TouMali initiative, emphasizing the integration of sustainability principles into the maritime transport sector. By collaborating with local and international partners, the initiative facilitated in-depth discussions on embedding SDG-focused education into maritime logistics and transport programs. This effort highlighted AASTMT's leadership in advancing sustainability through innovative approaches to education and its dedication to making sustainability concepts relevant and applicable across disciplines. The initiative's collaborative framework provided opportunities to connect academic knowledge with real-world sustainability challenges, particularly in maritime logistics. Through such efforts, AASTMT ensures that SDG principles are integrated across its curriculum, fostering a learning environment that equips all students, regardless of their specialization, with the skills and insights needed to tackle global environmental challenges. This initiative exemplifies AASTMT's unwavering commitment to meaningful education that prepares future professionals to contribute to sustainable development on both local and global scales.
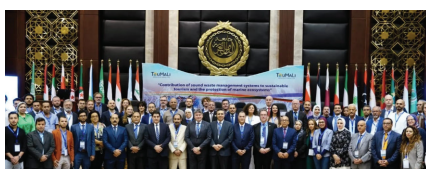
AASTMT's Participation in the Global Refugee

AASTMT participated in the Global Refugee Forum (GRF), which focused on enhancing the inclusion of refugees in decision-making processes affecting their lives. This engagement is particularly significant in the context of Egypt and the Syrian Refugee Crisis, where many Syrian refugees seek safety and stability. Through its involvement in the GRF, AASTMT emphasized the importance of meaningful refugee participation in addressing displacement challenges. This initiative underscores the need for collaboration among various stakeholders, including educational institutions, to support and advocate for the rights of displaced individuals.

Arab Food Security and Sustainability Workshop

The Arab Food Security and Sustainability Workshop, held at the Arab League Pavilion in Expo City Dubai, focused on critical issues related to food security and sustainable agricultural practices. This workshop engaged participants in dynamic discussions surrounding sustainable development and food systems, emphasizing the need for resilient agricultural methods in the face of global challenges. By bringing together stakeholders from various sectors, AASTMT facilitated important conversations aimed at fostering collaboration and promoting sustainability in agriculture, thus addressing key aspects of the Sustainable Development Goals (SDGs).

EVENTS

Artificial Intelligence for Sustainability Workshop

The Sustainable Development and International Cooperation Administration is organizing a workshop on "Artificial Intelligence for Sustainability" under the patronage of Mr. Ahmed Aboul Gheit, Secretary-General of the Arab League, and Professor Ismail Abdelghafar Ismail Farag, President of AASTMT. Hosted by the Arab League in December 2023, the workshop will explore how AI can promote environmental, economic, and social sustainability. Experts from across the Arab region will share knowledge and experiences, raising awareness of AI's role in achieving sustainable development. This initiative reflects the Arab League's commitment to leveraging technology for regional sustainability.

Participation of AASTMT in the activities of the Conference of the Parties to the United Nations Framework Convention on Climate Change

The Arab Academy for Science, Technology and Maritime Transport (AASTMT), participated in COP28 in November 2023, held in Dubai, UAE. At the Arab League Pavilion (Blue Zone, Pavilion No. MS01g2), AASTMT hosted specialized sessions addressing critical sustainability topics:

- **December 6, 2023**:
  - ○ *Engineering and Technology Forum*: "Towards a Green and Sustainable Future" through interdisciplinary engineering and technology.
  - ○ *Sustainable Shipping Forum*: Strategic transformation in the maritime industry.
  - ○ *Strategic Ocean Alliance*: Promoting marine resilience against climate change.
- **December 9, 2023**:
  - ○ *Strategic Ocean Alliance*: Focused discussions on nature, land use, and oceans.
- **December 10, 2023**:
  - ○ Workshop on *Food Security and Sustainability* in collaboration with the Union of Arab Chambers.

Sustainable Urban Mobility LAB

On February 21, 2023, AASTMT President H.E. Prof. Dr. Ismail Abdel Ghafar Ismail Farag inaugurated the **Sustainable Urban Mobility Lab** at the Faculty of Engineering and Technology. Funded by the European Union Erasmus+ UPGRADE project, the lab is a collaborative initiative involving educational institutions from European and Arab countries. It focuses on enhancing educational efficiency in sustainable urban mobility by introducing new courses, best practices, and advanced training opportunities for faculty, supported by state-of-the-art programs and equipment for research in urban planning and mobility.

AASTMT Achieves ZEvA Accreditation in 2022: A Step Toward Sustainable Education

In 2022, AASTMT achieved ZEvA accreditation, a prestigious recognition of its commitment to academic excellence and alignment with global education standards. This accreditation reflects the academy's dedication to integrating sustainability principles into its curriculum, fostering interdisciplinary learning that equips students to address complex global challenges.

The ZEvA process emphasized AASTMT's efforts to embed social responsibility, critical thinking, and environmental awareness across its programs. By ensuring that sustainability concepts are integrated throughout its educational framework, AASTMT reinforces its role in preparing students to contribute effectively to sustainable development across industries and communities.

Sustainability-Focused Courses at AASTMT

AASTMT offers specialized courses and programs focused on sustainability and SDGs to equip students with the skills to address global challenges. Courses like *Sustainable Development (UNR1602)* integrate sustainability with ICT, covering green practices, renewable resources, and systems thinking, while *Climate Change and Water Management (UNR1601)* addresses climate adaptation and water resource management. The *Master of Smart Environmental and Climate Change Management (SECCM)* combines natural and applied sciences to study climate change, mitigation, and adaptation strategies. These initiatives reflect AASTMT's commitment to embedding sustainability in its curriculum and preparing graduates to tackle environmental challenges effectively.

Inclusive Education and its Impact on Society

The symposium **"Inclusive Education and its Impact on Society"** brought together students, faculty, and members of the public to explore the critical role of inclusive education in driving societal progress. Featuring the renowned media figure Dr. Hala Mahfouz, the event sparked insightful discussions about the importance of accessible and equitable education systems that address the needs of all learners, regardless of background or ability. Through engaging talks and interactive sessions, the symposium emphasized the societal benefits of inclusive education, such as fostering social cohesion, reducing inequality, and empowering marginalized communities.

Green Horizon: AASTMT Action Plan

The plan is designed to integrate sustainability principles into the curriculum while actively engaging students and faculty. This initiative fosters an environment that promotes sustainable practices and prepares future leaders to tackle global challenges. By equipping students with essential knowledge and incorporating mechanisms to assess their understanding, AASTMT ensures that sustainability literacy is effectively measured and improved. This plan has been revised periodically to reflect contemporary sustainability challenges and educational strategies, reinforcing AASTMT's commitment to excellence in sustainability education.

UPCOMING GOALS

AASTMT plans to build on its existing efforts to advance the Sustainable Development Goals (SDGs) by fostering new collaborations, enhancing educational initiatives, and expanding community engagement. The Academy aims to strengthen its focus on sustainability through innovative programs, impactful partnerships, and projects that empower students and support global progress. By continuing to prioritize inclusivity, knowledge sharing, and real-world applications, AASTMT will work to further its mission of contributing to sustainable development and preparing future generations to address global challenges effectively.

METHODOLOGY

This report focuses on evaluating the integration of sustainability principles within the Arab Academy for Science, Technology, and Maritime Transport (AASTMT). The methodology involves reviewing institutional efforts and initiatives to assess their alignment with global sustainability goals. A broad framework was utilized to explore the relationship between these initiatives and their contributions to overarching objectives.

Various tools were employed to analyze the effectiveness of these efforts, incorporating insights to gauge their overall impact. The findings were then analyzed to highlight key strengths and identify areas for potential improvement, providing a basis for actionable recommendations aimed at enhancing sustainability practices.

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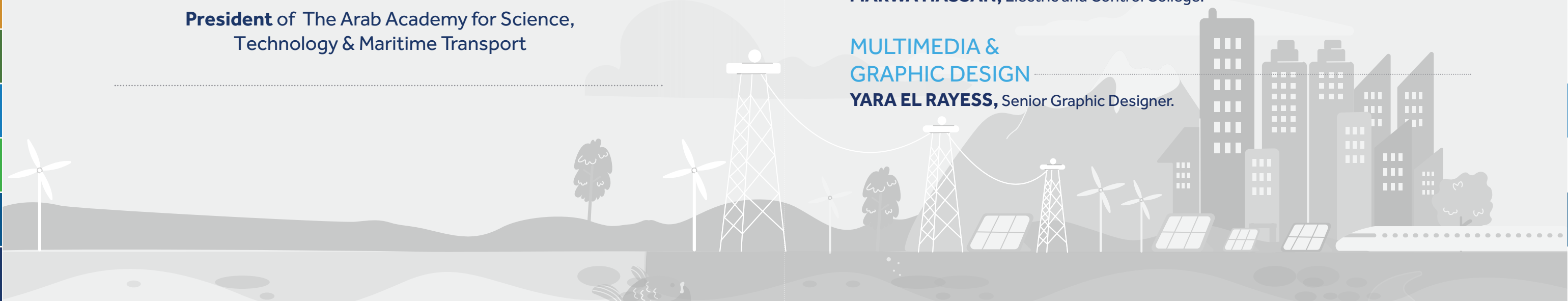
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