

7.4.5. Assistance to Low-Carbon Innovation

2023-2024

AASTMT assists and supports innovations and start-ups related to clean renewable energy and energy-efficiency technologies via its different entities.

First: AASTMT Entrepreneurship Center

Entrepreneurship Center on AASTMT webpage

AASTMT Entrepreneurship Center is keen on supporting startups and innovations in the field of green economy, energy management, industry efficiency and sustainability, through training courses, agreements as well as spin-offs as demonstrated below.

1. Trainings offered by AAST Entrepreneurship Centre for Startups

Training	Preview	Logo	Link
AAST Startup School	AAST Startup School acts as the educational arm of the center. The main objective of this program is equipping early stage entrepreneurs with the essential, substantial, and core knowledge & skills, besides supporting existing startups through advanced trainings and technical, industry-related mentorship programs.	STARTUP SCHOOL AAST E	AAST Startup School
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	AAST YALLA Startup
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	AAST GRADs to Business



2. Spinoffs Related 2023/2024 Spinoffs

Medica Edes/Ede i Spirions			
Spin-offs	Preview	Logo	Link
CarboCycle	A company that uses solar energy in the field of agriculture, such as lighting, heating, cooling and ventilation to facilitate the farmers for a period of one year.	ARBO VCLE	Carbocycle Company - Entrepreneurs hip Center
Biomass	A Biogas production Company that converts any organic matter, disposed of in the fermentation of plant and animal residues and garbage in fermenters, to produce gas. This gas is used to ignite cooking stoves as an alternative to the petroleum product. This fuel is already used in countries such as the United States, Brazil and Germany.	Biomass	Biomass - Entrepreneurs hip Center
IOT Smart Home	A system for converting homes or offices to smart homes for remote control, for enhancing operation efficiency and reducing energy consumption, at a competitive cost with similar service providers	IOT Smart Home	IOT Smart Home - Entrepreneurs hip Center
Tanmia Wa Tatweer -TWT	A project to enhance and support entrepreneurship ecosystem in Egypt to enable empowerment of existing and potential entrepreneurs, particularly youth and women, to establish, manage and operate successful innovation-driven businesses in 3 priority sectors:1.Agribusiness 2.Clean and Green 3.Creative Industries, with a focus on handicrafts and arts.	TANMIA WA TATWEER AGRIBUSINESS INCUBATOR AASTIEC	Tanmia Wa Tatweer- Entrepreneurs hip Center
Tatbeek	Provide digital Transformation and Integrated Business Solutions to enhance machines efficiency in all factories using IoT, cloud computing, and machine learning technologies, thus unlocking manufacturing excellence, maximize efficiency, and minimize Waste	TATBEE	<u>Tatbeek -</u> <u>Entrepreneurs</u> <u>hip Center</u>

<u>EC-AASTMT Spin-offs - Entrepreneurship Center</u> on AASTMT webpage



Second: AASTMT Scientific Research & Innovation Centre

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

Scientific Research & Innovation Centre on AASTMT webpage

• Energy Conservation Program

Energy Conservation Program on AASTMT webpage

Energy-related Policies & Reports

Policies & Reports on AASTMT webpage

Third: AASTMT Energy -Related Lab Facilities

Environmental Monitoring, Modelling and Training Research Facilities as well as Renewable Energy Labs at AASTMT are advanced and fully- equipped facilities dedicated for comprehensive study of environmental, energy and climate change research parameters. These facilities foster collaboration with national and international research institutions, government bodies, and industry stakeholder to support innovation and startups, encourage information exchange, generate solutions to global environmental issues and energy aspects and promote sustainable practices within and beyond the AASTMT community. They also carry related research studies and consultations as well as training.

These facilities include;

 Environmental Monitoring and Climate Change Laboratory - Scientific Research & Innovation centre

Environmental Monitoring and Climate Change Laboratory - Scientific Research & Innovation centre on AASTMT webpage

Energy Research Unit LAB in seventh Engineerring Building - Alexandria main campus

<u>Energy Research Unit LAB in seventh Engineerring Building - Alexandria main campus</u> on AASTMT webpage

Energy LAB in Eletrical Energy Engineering Department - Smart village campus

Energy LAB in Eletrical Energy Engineering Department - Smart village campus on AASTMT webpage

Fourth: Innovation Days

Annually, AASTMT organizes the INNOATION DAY to support innovations and start-ups as well as appreciating the efforts of its students, presenting their high-level ideas and innovations, qualifying their graduates for the requirements of the labor market, and displaying distinguished graduation projects that enhance the value of the college graduate and enhance his/her ability to achieve sustainable success.



Innovation Day 2024 (21 April 2024)

The World Creativity and Innovation Day Celebration on AASTMT webpage

Innovation Day 2023 (9 August 2023)

<u>Innovation Day 2023</u> on AASTMT webpage

Innovation Day (25 July 2022)

Innovation Day 2022 on AASTMT webpage

Fifth: Innovations And Awards

AASTMT students are distinguished for their ability to design and implement innovative ideas in prototypes and projects.

Related Innovations and Awards in 2023/2024

Innovation/Award	Overview		
(May 2024)	Energy-related graduation projects which received Research Grants from Academy of Scientific Research and Technology (ASRT) and Schneider Electric. Energy include; Energy Saving Multi-pumping Systems (grant from Shneider Electric)		
Research Grants	Prototype and Construction of a Fast Charging Station of Electric Cars		
from ASRT and	(grant from Shneider Electric)		
Schneider Electric	Design and implementation of Modified Solar Still by Heat Pump (grant from ASRT)		
	Graduation Projects Grants-Cairo branch		
(May 2024) ITIDA Financial support for "Smart Green House" and "Smart Bin" Projects-	Energy-related graduation Projects, which received financial prize from ITIDA, are; "Smart Green House" and "Smart Bin" projects Smart Green House Smart Bin Smart Bin		
	ITIDA 2024 Awards		



(Nov. 2023)

Technical and
Financial support
for "Autonomous
Electric Bus"
Project from
Valeo Egypt.

Students of AASTMT Mechanical Eng. and Computer Eng. departments are entitled to receive technical and financial support from Valeo Egypt, for their distinguished project "Autonomous Electric Bus", which is considered an important addition in the field of green smart land transportation.



Autonomous Electric Bus Fund

