



SUSTAINABILITY REPORT 2024



Table of Contents

Introduction

- About this Report 2
- Message from the President 3
- Team Members and Acknowledgments..... 4
- About AUC 5
- The Office of Sustainability 6
- Understanding Sustainability 8
- AUC’s Commitment to Sustainability 10
- Understanding ESG Principles 11
- Sustainability at a Glance 12

Academics

- Teaching Sustainability* 14
 - Sustainability at a Glance 15
 - Schools and Courses 16
 - Graduate Programs for Sustainable Development 21
- Discovering Sustainability* 24
 - Sustainability at a Glance 25
 - Research and Initiatives 26
 - Research Centers and Labs..... 27
 - Undergraduate Sustainability-Related Research 33
 - Faculty Research 37
 - Faculty Recognition 41

Operations

- Embodying Sustainability* 42
 - Sustainability at a Glance 43
 - Buildings 44
 - Landscape 47
 - Water 48
 - Energy 49
 - Waste 50
 - Transportation 51
 - Measuring the University’s Carbon Footprint 52

Engagement

- Campus Engagement: Living Sustainability* 54
 - Sustainability at a Glance 55
 - Sustainability Awareness 56
 - Equality, Diversity, and Inclusion 58
 - Health and Well-being 60
- Public Engagement: Sharing Sustainability* 64
 - Sustainability at a Glance 65
 - Community Outreach 66
 - Partnerships 68
 - Conferences and Events 72

Global Focus

- Excellence in Sustainability* 78
 - Sustainability at a Glance 79
 - Rankings and Memberships 80

Governance

- Way Forward: Sustainable Future* 82
 - Good Governance 83
 - Vision for Moving Forward 85

- References** 86



About this Report



This is The American University in Cairo's (AUC) third Sustainability Report. Compiled by the Office of Sustainability, this report aims to highlight the University's holistic, steadfast commitment to the environmental, social, and economic aspects of sustainability. AUC operates as one University with two Campuses: New Cairo Campus and Tahrir Square Campus. This report is structured around the various ways of engaging with sustainability, including education, research, campus operations, campus engagement, public engagement, global focus, and governance. Every section of the report showcases achievements, projects, and initiatives that took place between January 2022 and December 2023.

The report ensures that AUC's efforts are guided by the 2030 United Nations (UN) Sustainable Development Goals (SDGs) to demonstrate AUC's dedication to sustainability practices and education. The UN SDGs are linked to the report's section to showcase AUC's commitment to global sustainability efforts. Besides, AUC's Sustainability Report 2024 report introduces the University's progress toward encompassing the global environmental, social, and governance principles (ESG).

This biennial report is published in alternating years with the University's Carbon Footprint Report. This report acknowledges AUC's dedication to sustainable practices and outlines areas for improvement to position the University as a global leader in sustainability. By releasing its third sustainability report, AUC aspires to enhance its position as a role model for comparable institutions in the Middle East and North Africa (MENA) region and beyond.

Message from the President

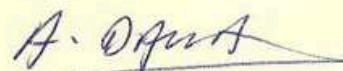
The American University in Cairo is committed to the pillars of sustainability and strives to become a regional and global leader in reducing our impact on the planet. Our vision is to innovate and participate in global climate-change efforts by integrating sustainability practices and research into our academics, campus operations and partnerships. We are fortunate to build on our robust foundation of engaged community members, specialized knowledge, research facilities, policies, and networks. This allows us to have a positive impact and present practical models that can be replicated elsewhere in the region.

AUC became a signatory to the United Nations-backed Race to Zero Campaign for Universities and Colleges in 2022. We have taken on the task of significantly reducing our carbon emissions by 2035 and achieving nearly net-zero emissions on campus by 2050. Efforts across our campuses are harmonized and guided by the University's Net-Zero Plan and Climate Change Initiative, paving the way to confront our challenges and achieve our goals.

Our strategy is to continue developing and implementing best practices across our operations and programs and explore opportunities for collaboration with various stakeholders to address climate change challenges facing Egypt and the region. I support the active engagement of our community members in the global sustainability movement and endorse the initiation of environmental-friendly initiatives on campus.

This report, now in its third edition, presents an overview of our achievements in the field of sustainability while acknowledging areas that require improvement. It results from the successful collaboration among academic and research departments, students, administrative staff, and facility operators across campus. I would like to express my appreciation of all the efforts made by our community members and would like to thank the Office of Sustainability and its core research team who are playing a leading role in this. Its members are Yasmin Mansour, Sustainability Director; Sahar El Ghandour, Sustainability Manager; and Habiba Abdelwahed, Sustainability Research Analyst. Our collective efforts and positive culture allow us to steadily realize our aspirations and effectively contribute solutions and practices that others can build on and work with us on developing further.

Sincerely,



Ahmad S. Dallal
President

Team Members and Acknowledgements

Sustainability Report 2024 Core Research Team

The Office of Sustainability



Sahar El Ghandour
Sustainability Manager



Yasmin Mansour
Sustainability Director

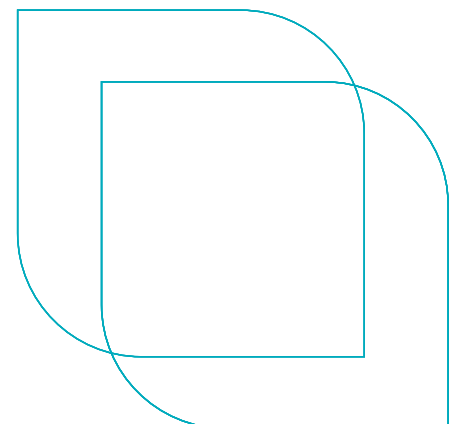


Habiba Abdelwahed
Sustainability Research Analyst

This report is the product of a collaboration among the entire AUC community, including academic and research departments, administrative staff, and facilities operators across campus. We would like to sincerely thank all those who have supported our core research team.

The core research team would like to express their deep gratitude to the following offices and departments, especially Dr. Khaled Tarabieh, University Architect and Associate Professor of Sustainable Design at the Architecture Department. The following list acknowledges the direct contributors who have been extremely helpful in facilitating the data collection process and guiding our efforts to showcase their work in sustainability.¹

- Career Development Department
- Center for Applied Research on the Environment and Sustainability (CARES)
- Center for Entrepreneurship & Innovation
- Department of Architecture
 - Momen El-Husseiny, Assistant Professor
 - Sherif Goubran, Assistant Professor
- Department of Computer Science and Engineering
- Department of Construction Engineering
- Department of Educational Studies
- Department of Sociology, Egyptology and Anthropology
- Office of Facilities and Operations
- Office of Marketing Communication and Public Affairs
- Office of the Vice President for Management and Operations
- Programs and Partnership Department



¹ Contributors are listed in alphabetical order

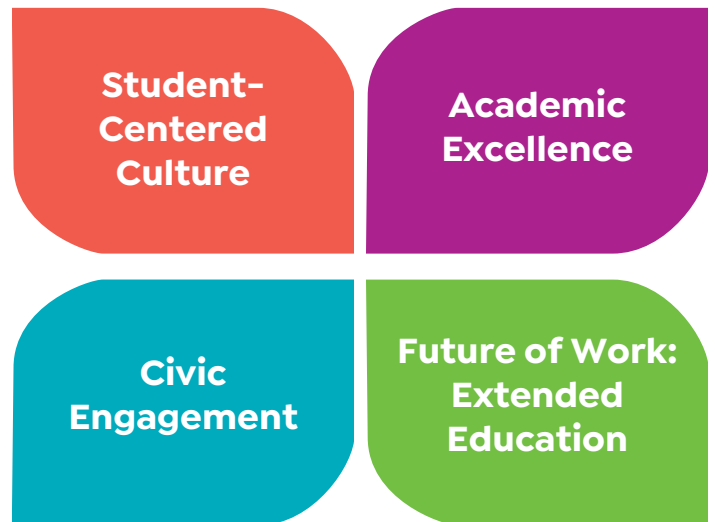
About AUC

The American University in Cairo (AUC) is an English-language, U.S.-accredited institution of higher education and the center of the intellectual, social, and cultural life of the Arab world. It was founded in 1919 in Tahrir Square by a group of American scholars devoted to education and service in the Middle East. Originally established as a preparatory school and college exclusively for boys, AUC admitted its first female students in 1928. Later, in 1950, AUC closed its preparatory school. Throughout the following years, AUC focused on undergraduate and graduate education, experiencing significant growth from 400 students in 1960 to around 1,300 students by the end of that decade. This growth continued through the decades as AUC introduced new programs and further developed existing ones.

In 2008, AUC marked a turning point in its growth by inaugurating its new campus in New Cairo, a rapidly expanding suburb of Cairo. While maintaining parts of its downtown campus for events, outreach, and continuing education, the University relocated all undergraduate teaching and most of its operations to the new 260-acre campus. This new campus was thoughtfully designed to embody the University's educational mission, with advanced technology and environmental sensitivity, and designed to be more accessible for individuals with disabilities. The move has been revolutionary for AUC, enabling it to grow to its current population of almost 7,000 full-time bachelor's, master's, and doctoral students, nearly 2,000 staff, and around 400+ faculty members.

AUC is committed to offering a liberal arts education and has a comprehensive Core Curriculum that covers the humanities and the natural and social sciences. The aim of this curriculum is to nurture future leaders capable of making a meaningful impact in their communities and the world. Additionally, AUC fosters cross-cultural understanding across different regions, religions, and cultures. AUC has 25 departments and institutes offering bachelor's, master's, and graduate diploma programs, along with 12 cross-discipline research centers. With over 39 undergraduate majors, 52 master's programs, and two Ph.D. programs, all rooted in a liberal arts education, AUC encourages students to think critically and develop innovative solutions to the challenges and conflicts faced by both the region and the world.

AUC Strategic Priorities RoadMap



6,984 Students

418 Faculty

1,867 Staff²

² Based on Fall 2023 [AUC Profile and Factbook](#).

The Office of Sustainability

Established in 2011, the [Office of Sustainability](#) is responsible for addressing AUC's environmental challenges, including climate change, resource scarcity, pollution, and waste management. Its objective is to integrate environmental and social sustainability into the culture and structure of the University. The Office strives to reduce the University's use of natural resources and operating costs, and to instill a mindset of sustainability within the AUC community by supporting the University's programs, projects, and initiatives in education, research, and operations.

The Office of Sustainability has an invaluable portfolio targeting the responsible management of the University's natural resources, including energy, water, and natural gas, in addition to waste management, campus outreach, and awareness programs of environmental concerns. It publishes the AUC's biennial Carbon Footprint Report, which demonstrates the impact of AUC's operations on the environment. AUC's Sustainability Report is biennial, alternated with the Carbon Footprint Report every two years. The Sustainability Report, which is divided into several main sections, including academics, operations, campus community, public engagement, and the University's governance and sustainability future, outlines the collaborative efforts made across campus to promote sustainability and sustainable development.

By committing to integrating sustainability into AUC's culture, mission, operations, education, projects, and programs, the Office of Sustainability, a division of the University Architect's Office, was able to position the University for recognition on a global scale for its sustainability accomplishments.



Timeline of Sustainability Achievements

2012

AUC becomes a member of the Association for Accreditation of Sustainability in Higher Education (AASHE).

AUC publishes the University's first Carbon Footprint Report.



2014

AUC is ranked top green campus in Africa, top third worldwide in UI GreenMetric ranking.



2016

Sustainability Measures and Policies part was first included in The Middle States Commission on Higher Education (MSCHE) Accreditation for AUC.

Communication on Engagement (COE) report was first submitted to the United Nations Global Compact (UNGC).

2011
Office of Sustainability is established.



2013
The first recycling program is launched on campus.
Faculty Housing is first in Egypt to establish green design, green roof.



2015
AUC purchases a compactor to process recyclable goods on campus.
AUC featured in UN's Greening Universities Toolkit as a global exemplar of sustainability.
AUC is the only college outside North America in the Princeton Review Guide to Green Colleges.



The Office of Sustainability Strategic Goals

The Office of Sustainability continues supporting AUC's commitment and action towards climate change and sustainability. A set of strategic goals and objectives are highlighted below:

Work Towards Achieving AUC's Net Zero Transition Plan

Achieving the AUC's carbon emissions management and mitigation plan involves reducing greenhouse gas emissions and balancing any remaining emissions through carbon offsetting or carbon sequestration initiatives.

Keep Track of AUC's Sustainability-Related Global Rankings

Keep track and promote AUC's global rankings related to sustainability in collaboration with sustainability campus-wide efforts.

Report AUC's Impact on Climate Change: Carbon Footprint Report

Collect and analyze carbon emissions data, track gaps, and report progress toward carbon emissions reduction goals to evaluate the effectiveness of the University's operations.

Promote Sustainability Culture, Outreach, and Partnerships

Promoting sustainability literacy, raising awareness, and working on sustainability initiatives among AUC community members and the wider community through educational campaigns, workshops, events, and knowledge-sharing initiatives.

2018

New [filtered drinking water stations](#) are established across AUC's New Cairo campus.
AUC celebrates its first Campus Sustainability Month.
AUC's [Tobacco-Free community](#) policy is launched.



2020

AUC publishes its [first Sustainability Report](#).
First [sustainability e-newsletter](#) launched.

2022

AUC became a [Race to Zero](#) signatory.
AUC launched its [Climate Change Initiative](#).
AUC participated in [COP27](#).

[Green Guide Brochure](#) 2nd edition is launched.

[Green Guide Brochure](#) is revamped in its 3rd edition

AUC publishes its [6th Carbon Footprint Report](#).
AUC publishes its [second Sustainability Report](#).

AUC's Net- Zero Task Force published [The American University in Cairo's Carbon Emissions Management and Mitigation Plan](#).

Working to formulate a plan to [eliminate most single-use plastics](#) on campus by the end of 2024.

The introduction of [designated parking spots](#) for AUC members who carpool to campus.



AUC's recycling program is re-vamped to be more effective.

2017

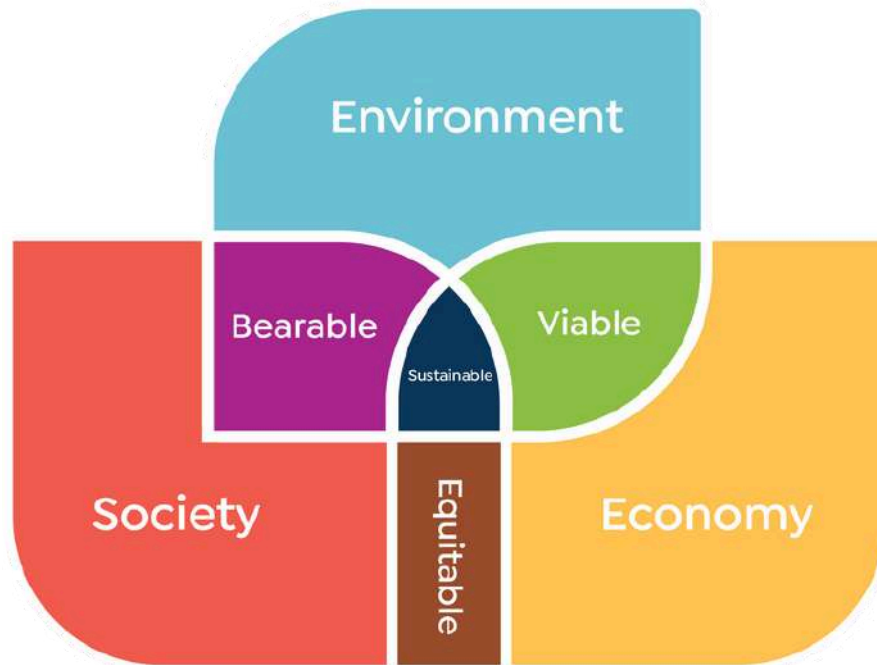
2019

2021

2023

Understanding Sustainability

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainability is typically composed of three pillars: economy, environment, and society. It is essential to recognize the linkages between the pillars of sustainability to achieve a more green, equitable, and long-lasting world.



There are many different ways to define and envision sustainability. The Venn diagram is one common representation of sustainability that suggests in order to achieve sustainability, its 3 pillars - economy, society, and environment - must be in harmony.

United Nations Sustainable Development Goals

The [17 Sustainable Development Goals](#) (SDGs) are the foundation of the [2030 Agenda for Sustainable Development](#) established in 2015 by the United Nations (UN), providing a comprehensive roadmap for eradicating poverty, protecting our planet, and addressing inequalities. Unfortunately, several issues, including conflicts, climate change, the long-lasting effects of the COVID-19 pandemic, and other global challenges, have seriously hampered efforts to meet the 2030 goals. According to [The Sustainable Development Goals Report](#) - Special edition - published in 2023 by the UN, the world's poorest and developing countries are the most vulnerable, making the goals unrealistic due to their limited resources and options. However, significant progress has been made in critical SDGs, including poverty reduction, child mortality, access to electricity, and the fight against specific diseases. The focal point for the decade of 2020-2030 is to effectively address the rising poverty rates, empower women and girls, and tackle the pressing issue of climate change. Through collaboration among multiple sectors of society, we

need to accelerate action towards ending extreme poverty and hunger, fighting socio-economic inequalities, addressing climate change, and building a healthier, more resilient planet. During the second [SDG Summit](#) in 2023, the UN adopted a political declaration to accelerate actions towards the 17 SDGs.

As an institution of higher education striving to create a more sustainable world, AUC is affiliated with the SDGs and directly contributes to several goals. All the goals listed are linked to at least one of the sections of the Sustainability Report. This correspondence will examine the critical role of higher education in achieving and implementing the SDGs. The SDGs also elevate the information communicated through the Sustainability Report to a national and international scale and provide access to a broader audience outside the scientific community. The following information is not our own; it refers to the UN targets for each Sustainable Development Goal by 2030.

SUSTAINABLE DEVELOPMENT GOALS



By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.



By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.



By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.



By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.



By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.



By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.



By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.



Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries and improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.



By 2030, ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.



By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.



By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.



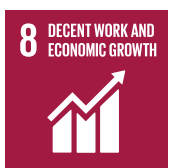
By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.



By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.



Promote the rule of law at the national and international levels and ensure equal access to justice for all, develop effective, accountable and transparent institutions at all levels, and promote and enforce non-discriminatory laws and policies for sustainable development.



Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.



Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.



By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

AUC's Commitment to Sustainability

AUC's Climate Change Initiative

The American University in Cairo has taken action to address the global climate crisis by establishing [AUC's Climate Change Initiative](#). This initiative plays a crucial role in tackling climate change through research, student activities, teaching, learning, and outreach activities. It highlights AUC's expansive global network and builds on the academic and research expertise of the University's departments and research centers. It prioritizes Water Scarcity, Energy Transition, Green Finance, Urban Development, and Public Health, aligning with national and regional climate change and sustainability goals.

#AUCCLIMATECHANGE



AUC became a signatory to the Race to Zero Campaign

In 2022, The American University in Cairo became a signatory to the global UN-backed [Race to Zero Campaign for Universities and Colleges](#). The Race to Zero initiative was launched by the United Nations Framework Convention on Climate Change (UNFCCC) in 2019, aiming to reduce carbon emissions. Becoming a signatory, AUC is automatically added to the UNFCCC Race to Zero campaign; therefore, AUC is committed to reducing its carbon emissions by 2035 and achieving a nearly net-zero campus by 2050.

In response to this campaign, a task force named "AUC Net-Zero Task Force," comprised of AUC faculty, staff, and students, was formed to develop the University's Net-Zero Plan. In 2023, the task force

published AUC Net-Zero Plan, [The American University in Cairo's Carbon Emissions Management and Mitigation Plan](#). The AUC Net-Zero Plan is based on sustainability best practices across the University's design, operations, activities, culture, research, and academics. It outlines a vision for a nearly net-zero emissions campus, utilizing different scenarios to reduce future emissions. Moreover, AUC will implement a series of initiatives to achieve emission reductions in the future.

RACE TO ZERO



AUC's Commitment to Sustainability



AUC Eliminating Single-Use Plastic on Campus

The American University in Cairo has taken the initiative to contribute to mitigating climate change by formulating a plan in Fall 2023 to [eliminate most of the single-use plastics](#) on campus. This initiative aims to phase out most single-use plastics by the end of 2024.

Understanding ESG Principles

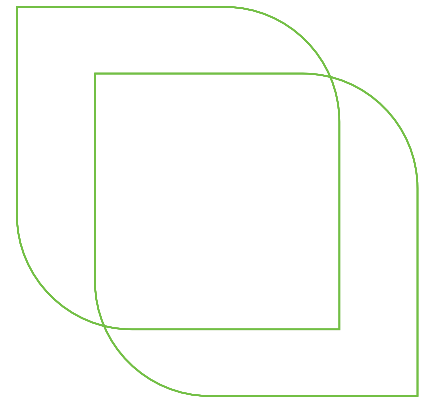


Environmental, Social, and Governance (ESG) principles provide a framework for assessing and measuring how an organization deals with risks and opportunities associated with its environmental and social impacts and good governance. These principles are also relevant in higher education, where institutions have been putting their efforts into addressing [ESG principles](#) like accessibility, affordability, diversity in student populations, sustainability-focused capital projects, and cybersecurity risk management.

The American University in Cairo is not only a leading institution in higher education but also leads by example in promoting sustainability in the sector.

AUC is committed to addressing key environmental, social, and governance challenges to ensure the long-term sustainability of our society and beyond. Being a sustainability trailblazer among the region's higher education institutions, AUC has a [Global Impact](#) by setting an example for others and going beyond the boundaries of its campus to achieve tangible environmental and social impact through focusing on ESG principles. Among various efforts, AUC develops green strategies, promotes renewable energy sources, engages with the community, and prepares future leaders with a sustainability mindset.

Sustainability at a Glance



Academics



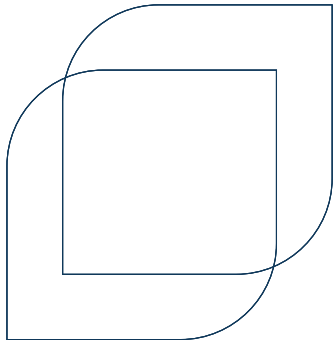
\$ 7.4 million

total research funds dedicated to sustainability research³



7

AUC faculty listed in the **top 2%** of impactful research by Stanford University - Elsevier



52

graduates

since the establishment of the Sustainable Development Graduate Programs

Operations



100%

of the campus landscape is almost irrigated by treated wastewater



15.2 million

plastic bottles saved from campus filtered drinking water stations⁴



28

reserved parking spots for carpoolers

³ Average per annum over the last three years

⁴ Recent updated readings from ELKAY water stations at the University's two Campuses - AUC New Cairo and AUC Tahrir Square

Sustainability at a Glance

Engagement



32

published e-newsletters issued by the Office of Sustainability since the inaugural edition in March 2020



1st

AUC wins first Place as the Best Smoke-Free University in the region



150+

AUC delegates of faculty, students, and staff participated at COP27



100+

educational partnerships with universities and organizations across Egypt and the world

Global Focus



7

global sustainability initiative memberships



1st

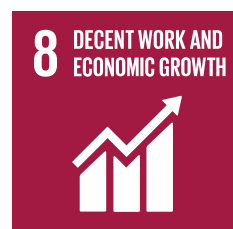
sustainable university in Africa and Egypt according to the 2023 UI GreenMetric World University Ranking



ACADEMICS

Teaching Sustainability

As education is the most effective tool for creating change, AUC is deeply committed to sustainability in its educational mission. AUC offers a range of courses across various departments that examine sustainability from different perspectives. Throughout their studies, students learn and explore sustainability concepts and have the opportunity to develop innovative solutions to complex environmental challenges. Whether at the undergraduate level, graduate level, or in professional programs, AUC integrates sustainability into its different levels of education.



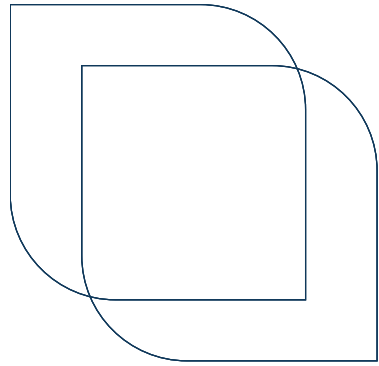
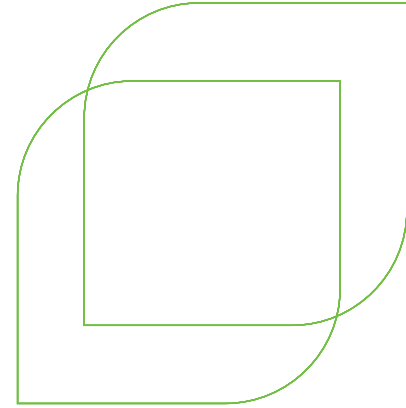
Sustainability at a Glance



52

graduates

since the establishment of
the Sustainable Development
Graduate Programs



47

students

enrolled in the
Sustainable Development
Graduate Programs in
AY 2022



Top

MSc. in Sustainable
Development program in Africa
recognized by Eduniversal

Schools and Courses

[Schools](#) and departments throughout AUC are addressing a range of sustainability topics through innovative and distinctive academic courses. AUC serves over 6,000 undergraduate and graduate students and more than 20,000 non-degree students while offering professionals extended educational opportunities. Schools, departments, and research centers focus on sustainability's key thematic areas, enhancing students' understanding of sustainability on local and global levels. The curriculum incorporates the three pillars of sustainability - environment, economy, and society - across numerous fields of study. Thus, the courses and programs offered by the schools at AUC help encourage students and faculty to explore creative academic endeavors across various disciplines, preparing students to address sustainability issues on both local and international scales.

School of Business

[The School of Business](#) is committed to shaping tomorrow's leaders, entrepreneurs, and change-makers by harnessing leadership, integrity, ambition, and excellence principles. Positioned to be the top private University in Egypt and making history with seven decades of accomplishments, the school offers a wide range of programs that extend beyond the classroom to provide a holistic and engaging learning experience.

The undergraduate programs offered by the school combine a liberal arts foundation with a strong understanding of business, economics, and accounting. Meanwhile, the graduate and executive programs offer practical and hands-on perspectives in dynamic fields of study, preparing professionals for success. The School of Business has five research centers, a startup incubator, and a digital publication focusing on business and the economy.

Taking a role in sustainability, the School of Business has been a [Communicating Signatory](#) since 2011 of the [Principles for Responsible Management and Education \(PRME\)](#), an initiative by the United Nations Global Compact (UNGC). As a signatory, the school ensures that sustainability and social responsibility values are integrated into learning, teaching, and research.



AUC is a leading member of the Africa Chapter of Business Schools for Climate Leadership

AUC is also a leading member of the Africa Chapter of Business Schools for Climate Leadership (BS4CL) global initiative, which advocates for climate action and leadership in business schools worldwide.

The School of Business recognized with the Business School Impact System label

In 2023, the School was again recognized with the Business School Impact System (BSIS) label, initially received in 2020 and successfully renewed in 2023. This label serves as a comprehensive tool for assessing the impact of business schools and evaluating their contributions across 7 dimensions through a framework of 120 indicators. The renewal of this label demonstrates the School's ongoing commitment to realizing a sustained positive impact through various initiatives to better society and the business community in areas such as entrepreneurship, responsible business, economic development, climate action, and more.

Schools and Courses

School of Sciences and Engineering

[The School of Sciences and Engineering](#) (SSE) strives to continue its growth and excellence within its disciplines as a respected and recognized force, regionally and internationally. It also aims to promote and foster an environment of interdisciplinary cooperation and social responsibility. It offers a diverse selection of undergraduate, graduate programs and diplomas, Ph.D. programs, and well-informed teaching methods applied practically and experientially in a liberal arts setting. This is achieved through a unique multidisciplinary and transdisciplinary approach. Additionally, the school emphasizes critical thinking, social responsibility, and community engagement within the local environment and globally. Among its driving values is its commitment to serving and providing sustainable solutions to emerging challenges. This commitment is reflected through inclusion, dedication, ethics, the application of knowledge, and social responsibility. This commitment is reflected through inclusion, dedication, ethics, the application of knowledge, and social responsibility.

School of Global Affairs and Public Policy

[The School of Global Affairs and Public Policy](#) (GAPP) is a leading school in the Middle East that aims to educate and empower students committed to global affairs and public policy. The school's core competencies are cultivating effective communication skills, promoting a multi-/interdisciplinary approach, emphasizing professional experience, fostering a global perspective, and focusing on public policy. It prepares its students by providing a unique educational experience with a strong curriculum emphasizing critical thinking, experiential learning, and community engagement. The school firmly believes in the interaction between international and public affairs, upholds a steadfast commitment to ethics and the rule of law, and recognizes the influential role that the media plays in shaping public policy. Its vision is to be the premier School of GAPP in the Middle East and Africa and to produce highly skilled and knowledgeable professionals capable of quality decision-making and taking practical actions for public concern – domestically, regionally, and globally.



The programs offered by GAPP are ranked among the top 10 in Africa and the top 200 worldwide.

School of Humanities and Social Sciences

[The School of Humanities and Social Sciences](#) (HUSS) is committed to allowing its students to explore the human experience from various cultural, historical, linguistic, and societal perspectives. This commitment enhances students' critical thinking skills and fosters active civic engagement involvement. It offers a variety of programs and majors designed to cultivate in its students' intellectual curiosity and expand their understanding of the world. Additionally, the school has several centers that enhance the students' academic experience and offer opportunities for research, collaboration, and involvement in the wider community. Its core values revolve around striving for excellence, embracing the importance of social responsibility and service, upholding academic integrity principles, and advancing knowledge development.

Schools and Courses

School of Continuing Education

[The School of Continuing Education's](#) (SCE) mission is to enhance the employability of its participants and provide lifelong learning opportunities by extending the resources of the University to Egypt and beyond. The school offers a wide range of options to meet the continuing education needs of individuals and organizations in Egypt and the Middle East. These options include certificate programs, term-length courses, and customizable courses. Additionally, their programs cover various topics such as career and skills development, language enhancement, IT and computer programs, teacher training, youth programs, and translation diplomas. Furthermore, drawing on AUC's long-standing tradition of liberal arts and interdisciplinary studies, the school equips contemporary professionals with the necessary skills and knowledge to thrive today. The school's vision is to enrich and transform the lives of a diverse range of lifelong learners. They strive to be the provider of continuing education, not only in Egypt but also beyond.

Spotlight on Sustainability Courses

ARCH 4532: Urban Design and Landscape Architecture

The Architecture Department at the School of Sciences and Engineering offers an Urban Design and Landscape course. This course aims to teach students urban design and landscape architecture principles, focusing on ethnography, creating inclusive communities, and placemaking. It involves analyzing visual elements, urban form, grain, texture, and the lively atmosphere of streets. The course also delves into perception, space, time, and function concepts about tactical urbanism and urban acupuncture as development strategies. Students work together in teams and present their ideas and design plans, which helps them question the role of urban designers and master plans for people, economic activities, and the city's ecosystems.



The course features a weeklong international workshop developed by the University of Sheffield's Live Projects program. Master's students from Sheffield's architecture program join AUC students. Furthermore, the students from both universities collaborated to boost Egypt's First Bike Share Program in 2022.



ARCH 3554: Design Studio III Imaging a Fossil Fuel Free Future

The thematic of Design Studio III (ARCH 3554), at the Architecture Department at the School of Sciences and Engineering, offered a studio brief focused on “Imaging a Fossil Fuel Free Future: Transitioning Gas Stations to Local Resilience Hubs.” This studio brief, developed by [Dr. Sherif Goubran](#) and [Dr. Khaled Tarabieh](#) and taught by them and [Dr. Amal Hamdy](#) and [Dr. Islam Mashaly](#), allows students to explore retrofitting, future thinking, the environment, and sustainability through architecture. With the growing global challenges of climate change and social issues, there is a clear need for environmental awareness and new design solutions. Students can analyze and implement environmentally responsible designs by building on existing sustainable design strategies. This includes considerations such as material conservation, recycling, and waste management so that students can gain practical experience through field visits.



SOC 3085: Environmental Issues in Egypt

The Department of Sociology, Egyptology, and Anthropology at the School of Humanities and Social Sciences offers a course on environmental issues in Egypt. This course focuses on the technical aspects of environmental issues in Egypt while also exploring the cultural, social, and political dimensions contributing to the disruption of environmental balance. It addresses major topics, including water scarcity, global warming, desertification, urban pollution, tourism, and demographic pressures.

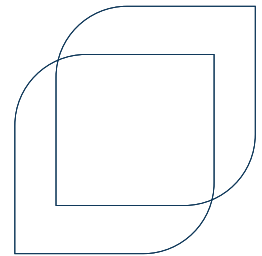


EDUC 3011: Educating Children and Youth for a Sustainable Future



The Department of Educational Studies at the School of Humanities and Social Sciences offers a course called Educating Children and Youth for a Sustainable Future. The course is designed to provide children and youth with the knowledge, skills, and attitudes they need to address the challenges and opportunities of sustainable global development effectively. Its goal is to help them become agents of change who can preserve the planet's resources. Throughout the course, students learn about education for sustainable development (ESD), including its definition, importance, and how to integrate it into the educational system. ESD is seen as a crucial need for both the current and future generations in Egypt and beyond. It encourages a balanced approach to development and an improved quality of life by considering environmental, social, and economic factors.

EDUC 5236: Education for Sustainable Development



The Department of Educational Studies at the School of Humanities and Social Sciences offers an Education for Sustainable Development (ESD) course. This course aims to help Master of Arts (MA) candidates understand ESD in Egypt, specifically focusing on science, technology, engineering, arts, and mathematics (STEAM) education. They explore ESD's goals, strategies, and elements and consider its definition. In addition, it also uses the "lens of sustainability" to frame learning in various educational settings, explore partnerships and collaboration between them, and discuss the knowledge, skills, and attitudes students need to be effective agents of change globally. Participants critically evaluate international ESD policies and practices through exemplars and case studies. Additionally, they will analyze different curriculum designs for sustainability and the challenges they face. The focus is on developing interdisciplinary learning materials that are essential to ESD and STEAM education and relevant to the local community in Egypt.



Graduate Programs for Sustainable Development

Founded and coordinated by the [Center for Applied Research on the Environment and Sustainability](#) (CARES), AUC offers a [Master's of Science](#) (MSc) and [Graduate Diploma](#) in Sustainable Development. These programs are delivered through a unique, multidisciplinary curriculum that covers various disciplines; among the School of Science and Engineering, School of Business, School of Global Affairs and Public Policy, and the School of Humanities and Social Sciences, it is the first program-based collaboration across these schools. The Master's of Science and Graduate Diploma in Sustainable Development provide a comprehensive and in-depth study of sustainability, encompassing the three dimensions of economy, environment, and society. Students pursuing an MSc. or Diploma in Sustainable Development can choose from four concentration modules: Green Technologies, Entrepreneurship, Sustainable Cities, or Sustainable Communities.

Students actively engage in community projects, research activities, and international initiatives throughout their studies. By doing so, they gain valuable practical experience and contribute to finding solutions that reduce the pressure on the local environment and promote the development of sustainable communities. Overall, the AUC Graduate Programs in Sustainable Development enables students to make a positive impact by addressing the challenges of sustainability and green technologies in Africa and beyond.

4 Fellowships are offered for the MSc in Sustainable Development

[Al Alfi Foundation Sustainable Development Fellowship](#)

[Dr. Ahmed and Ann M. El-Mokadem Fellowships](#)

[Mark Turnage Fellowship for Sustainable Development](#)

[Tomorrow's Leaders Graduate Students Program \(TLG\)](#)



52
graduates

since the program's establishment



47

students

enrolled in AY 2022



[Eduniversal](#) has recognized the MSc in Sustainable Development Program as the top master's program in Africa, focusing on sustainability and green technologies.

The Sustainable Development program, established in 2013 by Dr. Hani Sewilam, is the first of its kind in Africa and the Middle East. It has over 40 alumni and is still the leading program in the region. The MSc has also been defined following the [European Quality Framework](#) (EQF) and the Accreditation requirements for the Egyptian Education System. Its main purpose is to ensure that it meets a quality standard suitable for the Egyptian context.

Spotlight on Sustainability-Related Diplomas

Water-Energy-Food Technologies Professional Diploma

In 2022, AUC launched a new professional Water, Energy, Food Technologies Diploma (WEFT) for students interested in water, agriculture, and renewable energy, aiming to focus on Egypt's future. Administrated through AUC's Engineering and Science Services and the Center for Applied Research on the Environment and Sustainability (CARES). This program aims to qualify professionals in the fields of agriculture, energy, and water to implement sustainable resources management in desert areas. The goal is to address and provide solutions for water, energy, and food-related challenges outlined in "Egypt 2030" vision, such as to reclaim 1.5 million acres of the desert. Participants will receive training in various areas, such as sustainable resources management, agriculture, engineering, entrepreneurship, and information technology. The program's objective is to equip participants with a solid technical and practical understanding of innovation, design, entrepreneurship, and the management of sustainable WEF projects in desert climates. Through this program, participants learn how to identify, assess, and effectively address WEF nexus challenges and develop viable business opportunities.



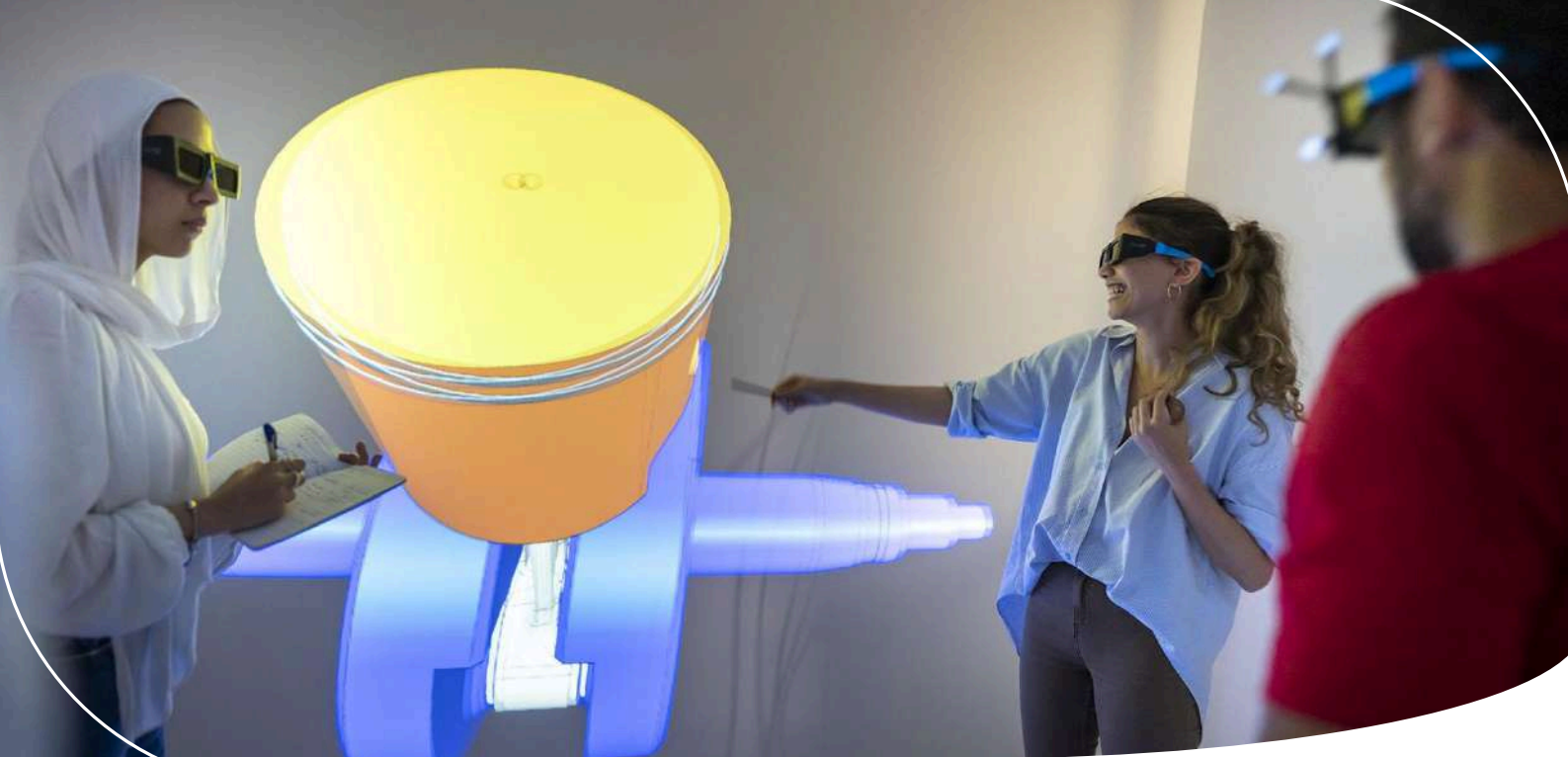
The diploma results from AUC's participation in the SureMap project, an initiative co-funded by the European Union's ERASMUS+ Programme. The project aims to establish Master's of Science programs in engineering at Egyptian partner universities, such as Heliopolis University, Aswan University, Alexandria University, and The American University in Cairo.

Executive Diploma in Sustainability

In 2022, AUC launched the Executive Diploma in Sustainability to provide participants with the knowledge and skills required to address environmental and social challenges. Administered by CARES, this Diploma focuses on four sustainability models: 1) sustainability and water, 2) the global energy and food nexus, 3) regional energy resources and the green economy, and 4) water productivity for food security, as well as grassroots innovation for challenges related to water-energy-food. Participants will gain a holistic perspective of sustainability challenges and solutions, positively impacting communities. By exploring global issues such as Sustainable Development, Sustainability Approaches, the Transition and Progress of SDGs, Ecological Awareness, Renewable Energies, Resilience, and Adaptation and Mitigation to Climate change, participants will develop an understanding to tackle environmental issues, promote sustainable resource utilization, and create long-lasting impacts. The Diploma's emphasis on integrated solutions and ethical engagement prepares graduates to become influential leaders, steering towards a more sustainable and equitable future.



In line with [COP28](#), hosted in Dubai, United Arab Emirates (UAE) in 2023, and under the auspices of the [UAE Ministry of Climate Change and Environment](#), the American University in Cairo (AUC) has partnered with the [University Leadership Council of the UAE \(ULC\)](#) and the [Dubai International Financial Center Academy \(DIFC Academy\)](#). AUC offered the Executive Diploma in Sustainability, an intensive two-month educational initiative, to train and empower 200 Emirati public servants as the UAE prepared to host COP28.



ACADEMICS

Discovering Sustainability

Research on sustainability plays a crucial role in finding innovative and practical solutions to global environmental, social, and economic challenges. AUC prioritizes innovation and strongly motivates students and faculty to participate in original academic endeavors spanning various disciplines. At AUC, students and faculty delve into research on sustainability topics, emphasizing on projects that support the social well-being, economic prosperity, and environmental health both locally and internationally.



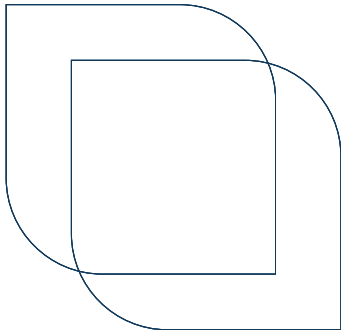
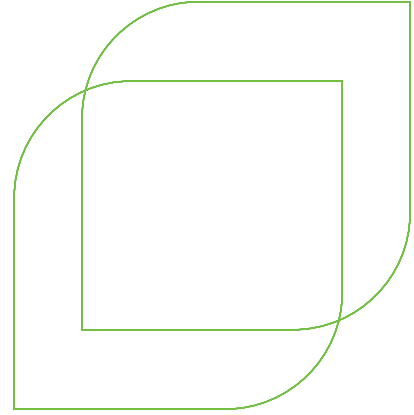
Sustainability at a Glance



19

Research Centers
and labs

on-campus conducting
sustainability-related research



7

AUC faculty listed
in the
top 2 %

of impactful research by
Stanford University - Elsevier



\$ 7.4
million

total research funds
dedicated to sustainability
research⁵

⁵ Average per annum over the last three years

Research and Initiatives

[AUC's Climate Change Initiative](#) is crucial in tackling climate change through various activities: research, student engagement, teaching and learning, and community outreach. The initiative highlights AUC's expansive global network and builds on the academic and research expertise of the University's departments and research centers. It prioritizes Water Scarcity, Energy Transition, Green Finance, Urban Development, and Public Health, aligning with national and regional climate change and sustainability goals.

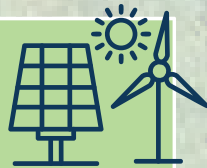
Focus Areas

Water Scarcity



AUC research activities focus on addressing water scarcity through low-cost approaches, including water and wastewater treatment and recycling.

Energy Transition



AUC research focuses on conventional, sustainable, hybrid systems design, cogeneration, clean production, green hydrogen production, and energy economics.

Green Finance



AUC aims to promote the use of green financing in Egypt by developing instruments and regulatory frameworks, and enhancing the capacity of financial sector operators.

Urban Development



AUC research prioritizes energy-saving architecture, social sustainability, and accessibility to tackle Egypt's overpopulation challenges and achieve SDGs.

Public Health



AUC research focuses on the consequences of climate change on health and the impact of pollutants generated by human activities on health, such as determining the levels of toxicants and mitigating methods.

Research Centers and Labs

AUC's [Research Centers](#) foster interdisciplinary collaboration, exemplifying the university's commitment towards sustainability within its community, Egypt, and the broader region through outreach initiatives. Across the schools, they house centers and labs that promote collaborative research among various disciplines.

School of Business

- [AUC Venture Lab](#)
- [Access to Knowledge for Development Center](#)
- [Center for Entrepreneurship and Innovation](#)
- [John D. Gerhart Center for Philanthropy, Civic Engagement and Responsible Business](#)
- [Qalaa Financial Services Lab](#)
- [The Behavioral and Economic Decision-Making Laboratory](#)
- [Abdul Latif Jameel Poverty Action Lab Middle East and North Africa](#)
- [Women on Boards Observatory](#)

School of Sciences and Engineering

- [Center for Applied Research on the Environment and Sustainability](#)
- [Youssef Jameel Science and Technology Center](#)
- [Eltoukhy Learning Factory](#)
- [Center of Nanoelectronics and Devices](#)
- [Process and Product Development Unit](#)
- [Educational Virtual Environment](#)

School of Global Affairs and Public Policy

- [Kamal Adham Center for Television and Digital Journalism](#)
- [Center for Migration and Refugee Studies](#)
- [Prince AlWaleed Bin Talal Bin AbdulAziz AlSaud Center For American Studies and Research](#)
- [Cynthia Nelson Institute for Gender and Women's Studies](#)
- [Middle East Studies Program](#)

Research Centers and Labs

Spotlight: Center for Applied Research on the Environment and Sustainability

The [Center for Applied Research on the Environment and Sustainability](#) (CARES) has been established through the merger of two units: the Center for Sustainable Development (CSD) and the Research Institute for Sustainable Environment (RISE). CARES is housed in the [Institute of Global Health and Human Ecology](#) (IGHHE), School of Sciences and Engineering, and it capitalizes on the accumulated expertise, research, and facilities. The mission of CARES is to promote sustainable development in Egypt, the region, and beyond. This is achieved through various activities, including academic programs, interdisciplinary research, and community services. CARES's strategy is based on three main dimensions: education, research, and community services, and it is built on a solid foundation consisting of various resources, robust networks, and a high level of motivation. Ultimately, CARES envisions creating modern, sustainable, and prosperous communities in the region.



Research

[The Water-Energy-Food \(WEF\) Nexus](#) is at the core of CARES research activities. The research involves exploring the relationships between water, energy, and food to ensure the security of all three for the expanding population in the Arab world. To advance its goal of integrated planning, policy, and management, it is important to increase awareness of how these three systems intersect, and enhanced coordination is crucial. As a result, the WEF Nexus is in operation through partnerships between local and international entities and through the WEF Nexus Lab.

The main challenges being addressed by the CARES research team are water scarcity, food security, and high energy consumption. Furthermore, the AUC New Cairo Campus research and facilities encompass a desalination laboratory, solar energy-operated greenhouses, an aquaponics research laboratory, a soil and water laboratory, a permaculture garden, rooftop gardens, and an organic community garden. The CARES team collaborates with researchers, volunteers, trainees, and students on educational, research, and community projects within these facilities.

Research Centers and Labs

Spotlight: Center for Entrepreneurship and Innovation

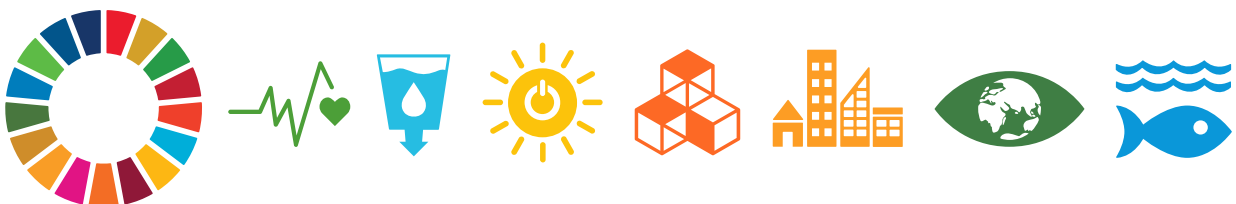
The [Center for Entrepreneurship and Innovation](#) (CEI) was established in 2015 as a continuation of the Entrepreneurship and Innovation Program (EIP) launched in 2010, under the School of Business. CEI is a leading hub for all entrepreneurial stakeholders in Egypt and the MENA region. Over the past 12 years, the center has been committed to promoting entrepreneurial education, fostering the entrepreneurial ecosystem, providing capacity-building opportunities, and conducting cutting-edge research. Its primary focus is to nurture entrepreneurship knowledge, particularly among youth and women, while supporting sustainable entrepreneurship that drives growth and innovation. CEI has emerged as a pioneer in the Middle East, known for its work in launching accelerators, supporting startups, and connecting various groups within the entrepreneurial ecosystem. The center is dedicated to advancing entrepreneurship in the MENA region, empowering its community with knowledge and expertise, and addressing market gaps, especially for youth and women.



Sustainability- Related Activities and Programs

Hack 22: Climate Change and Sustainable Healthcare Technology

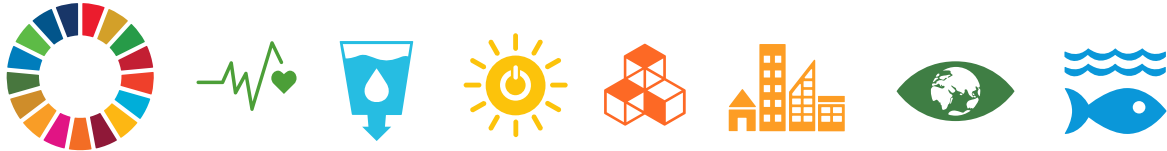
In June 2022, the AUC School of Business, in collaboration with Etisalat Egypt and Alfa Medical Group, launched the third edition of [Hack22](#), an annual virtual business plan competition. This competition is open to undergraduate students from national, regional, and international universities, regardless of their major. Its purpose is to foster innovative and sustainable solutions, particularly in the areas of recycling and addressing challenges faced by various industries.



Pitchathon 22: From Sustainable Fashion to Digital Payment Solutions

The Business Plan Project, [Pitchathon 22](#), was held in 2022 as part of the Experiential Learning Entrepreneurship Program (ELEP) launched by the AUC School of Business Center for Entrepreneurship and Innovation (CEI) and the Business Association (BA). This initiative targets students enrolled in Entrepreneurship and Innovation classes (ENTR 3102) who are tasked with developing innovative ideas to address the UN Sustainable Development Goals (SDGs) across various sectors. Throughout the semester, students acquire knowledge of entrepreneurship, business models, and the entire ecosystem under the guidance of their professors. They conduct market research, evaluate the competitive landscape, and construct a comprehensive business model for their venture.

Moreover, winning teams receive monetary prizes as a small seed fund and are shortlisted for the Babson Global Student Challenge. This challenge encourages students to consider the UN SDGs and explore business opportunities aligned with these goals. Participating students apply their opportunity identification and assessment knowledge to create a feasibility analysis presentation for a new business concept. Each business concept should address one or more of the UN SDGs, with the potential to establish a new venture in the future.



UN Women's Economic Empowerment - Entrepreneurship Support Program (Rabeha)

The [Rabeha Program](#) aims to support women entrepreneurs in Egypt and reduce the gender gap in the entrepreneurship ecosystem. It is part of the UN Women Egypt - UNIDO Egypt Joint Program "Women's Economic Empowerment for Inclusive and Sustainable Growth," implemented in partnership with the National Council for Women (NCW) and the Ministry of Trade and Industry (MOTI), and supported by Global Affairs Canada (GAC) and the Embassy of Canada in Egypt. The project is delivered in Arabic and provides training to enhance the skills of 1600 women entrepreneurs or women with entrepreneurial ideas. The training covers market study, corporate management, financial modeling, soft skills, and empowerment support. The program will span two years. Upon completion of the training, women entrepreneurs will receive support to develop, maintain, and expand their projects through access to business incubation.



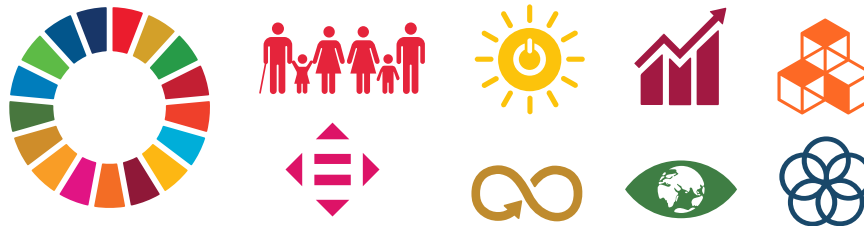
In 2022, the UN Women's Economic Empowerment-Entrepreneurship Support Program (Rabeha) achieved its first milestone by successfully training over 1,000 women from seven Egyptian governorates with various educational backgrounds. These women either have existing businesses or entrepreneurial ideas.



USAID Funded Program: Business Egypt

[Business Egypt](#) is a five-year program, 2021- 2026, implemented by DAI, Global LLC (DAI) and supported by USAID. This program aims to enhance job opportunities, focusing on women and youth, and boost sales revenues and investment in the local market. Business Egypt achieves this by fostering the growth and competitiveness of startups and micro, small, and medium enterprises (MSMEs) by establishing a dynamic ecosystem of enabling institutions that drive economic development in Egypt. It focuses its activities on value chains with

high growth potential, specifically in ICT, Renewable Energy, and Logistics. To support USAID's objectives under the Business Egypt project, AUC-CEI provides technical services in collaboration with DAI. AUC-CEI's role within the Business Egypt team involves offering technical assistance through a combination of long-term project staff and short-term technical advisors. This assistance aims to help existing MSMEs adapt, innovate, and grow.



SANAD Fund for Micro, Small, and Medium Enterprises (MSMEs) - Diversity and Inclusion Program

In 2023, AUC CEI partnered with the [SANAD Fund of Micro, Small, and Medium Enterprises](#) (MSMEs) - Diversity and Inclusion Program - as the implementing partner in the Middle East and North Africa region. This program is focused on three Egyptian banks and their MSME clients. It involves a customized training program for two specific groups: 1) The banks' staff who directly work with MSMEs. 2) The MSME clients who receive financial and non-financial services from the banks. The program aims to bridge the gap between the banks and MSMEs in Egypt.



This gap is caused by socio-economic challenges and cultural barriers that hinder inclusive economic growth in Egypt. AUC CEI aims to set a standard through this program to promote diversity and inclusion in the MSME portfolio of the Egyptian banking sector. Other banks in Egypt can eventually adopt this standard. AUC CEI is conducting a needs assessment for the banks' staff and clients. Based on this assessment, tailored curricula will be developed, followed by the design and implementation of a training program in the upcoming phases of the program.



AUC Venture Mentoring Services Program

In 2022, AUC CEI has partnered with the International Finance Corporation to bring the [Venture Mentoring Services](#) (VMS) Program from the Massachusetts Institute of Technology (MIT) to Egypt. Through this partnership, AUC CEI now holds the exclusive rights to provide this program in Egypt. What sets this program apart is its unique approach of offering group mentoring sessions for Egyptian start-ups enrolled in the program. Each session can accommodate one venture and up to four mentors from diverse backgrounds. This arrangement creates a powerful learning experience for each mentee, as evidenced by testimonials from participants who have gained a wealth of knowledge in just a few sessions. The diversity of backgrounds among the

mentors add an irreplicable synergy to each session. As the mentoring sessions are free of charge, mentors are not permitted to invest in their mentees' ventures in order to maintain objectivity, AUC CEI is committed to ensuring balanced gender and age representation in this initiative, consistent with its long-standing advocacy for breaking down barriers based on gender and age. The MIT VMS model is based on five pillars: team mentoring, recruiting and retaining highly qualified mentors, providing unbiased advice, formalizing processes and procedures, and cultivating more vital entrepreneurs.



Undergraduate Sustainability-Related Research

Spotlight: Advancing Sustainability: An Experimental and Numerical Analysis of Incorporating Waste in Building and Pavement Alternatives, with Emphasis on Affordable Housing and Eco-Friendly Development

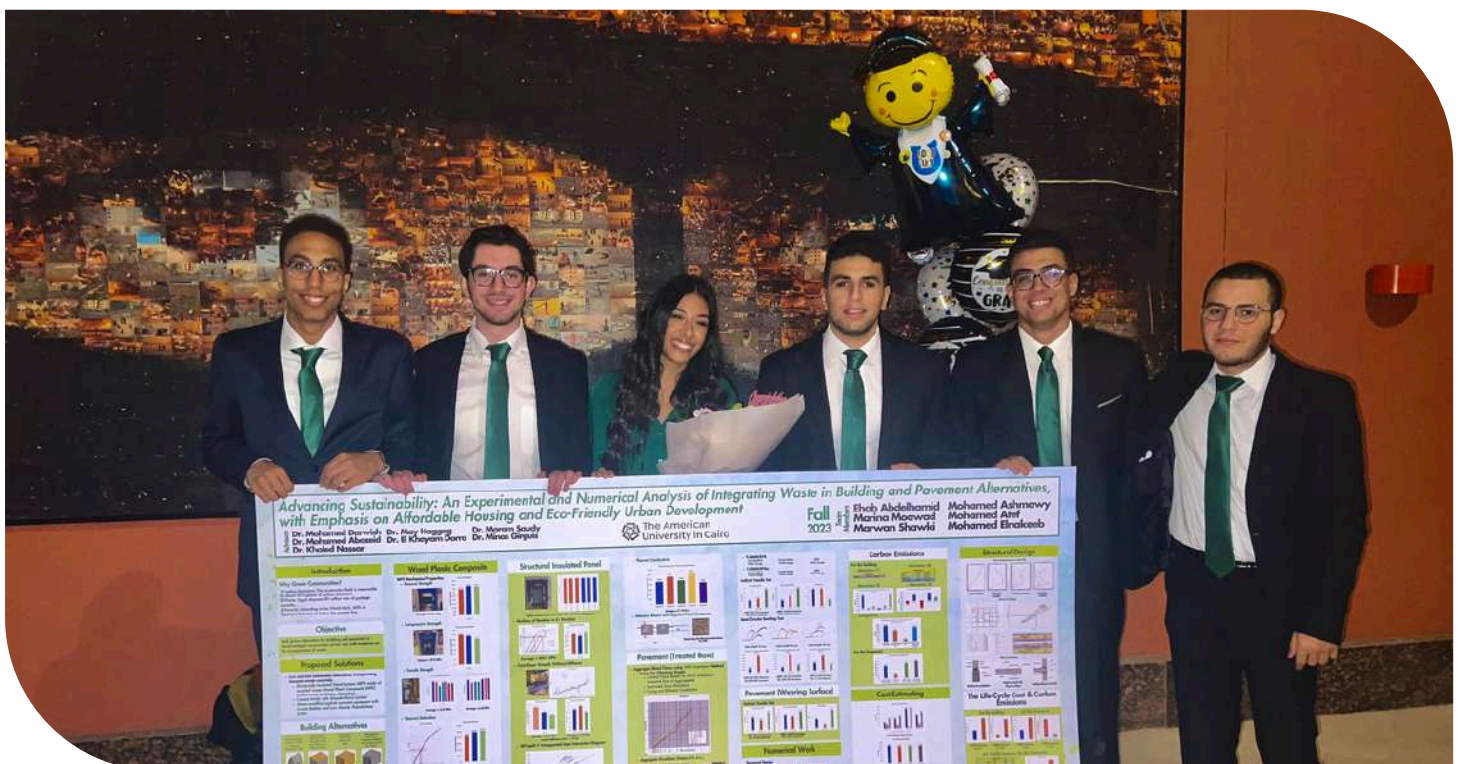
At the Construction Engineering Department, and under the supervision of Dr. El Khayam Dora, Dr. Khaled Nassar, Dr. Maram Saady, Dr. May Haggag, Dr. Minas Guirguis, Dr. Mohamed Abouzeid, and Dr. Mohamed Darwish, a group of students conducted their graduation research project on sustainable materials in the construction industry. The group members included Ehab Abdelhamid, Marina Moawad, Marwan Shawki, Mohamed Ashmawy, Mohamed Atef, and Mohamed Elnakeb.

The multidisciplinary project approach involves numerical and experimental analysis of both pavements and buildings. It aims to address the pressing need for sustainable practices in the construction industry by developing affordable and eco-friendly alternatives that contribute to reduced carbon emissions. This initiative tackles important issues such as the industry's significant carbon footprint, Egypt's waste disposal challenges, and the high costs of constructing affordable housing projects.

Project Achievements

The project has been approved for full funding by [Misr Elkheir Foundation](#) and will be presented at three conferences:

1. International Conference on Sustainable Development and Innovation (ICSIDI) 2024, Riyadh, Saudi Arabia.
2. Canadian Society for Civil Engineering Annual Conference (CSCE) 2024, Niagara Falls, Canada.
3. Engineering Mechanics Institute (EMI) Conference by the American Society for Civil Engineers (ASCE) 2024, Chicago, United States of America.



Spotlight: Sugar Cane Bagasse Ash as a Partial Cementitious Material

At the Construction Engineering Department, and under the supervision of [Dr. Mohamed Naguib Abouzeid](#), a group of students conducted their graduation research project on sustainable materials in the construction industry. The group members included Ahmed Bayoumi, Jumana Ali, and Seif Naguib.

The project focused on the use of [Sugar Cane Bagasse Ash as a Partial Cementitious Material](#). Their research aimed to address the alarming levels of carbon dioxide in the atmosphere, as the construction sector is responsible for approximately

40% of these emissions. In Egypt, the improper disposal or burning of sugarcane bagasse also contributes significantly to environmental harm. To tackle this issue, they conducted controlled experiments at the University where they burned sugarcane bagasse ash and used it as a partial substitute for cement in concrete blocks. They then compared these blocks, which contained different percentages of sugarcane bagasse ash, with the concrete blocks available in the market that contained Portland cement. The results were highly encouraging, as the concrete blocks with sugarcane bagasse ash showed great promise.



Spotlight: TwinRescue - Digital Twins for Automated Guided Vehicles

At the Computer Science and Engineering Department, and under the supervision of [Dr. Tamer El Batt](#), a group of students conducted their graduation research project on developing emergency management and response technologies to mitigate the impact of climate change. The group members included Abdelrahman Abuzaid, Abdelrahman El Gammal, Ahmed Shaaban, Mark George, Mohamed Ellethy, and Rován Adham, who developed [Digital Twins for Automated Guided Vehicles](#) (AGV) as their senior project.

The concept of Digital Twins aims to create detailed simulation models of physical systems for optimization, monitoring, maintenance, and experimentation with “what-if” scenarios, without causing substantial damage (e.g., crash tests for digital twins of vehicles). Machine learning and AI are also utilized in Digital Twins for decision-making. After graduating, some group members continued working on TwinRescue, focusing on using it for disaster relief, particularly search and rescue operations. The need for efficient and effective emergency management and response technologies drives this initiative.

Project Achievements

This project collaborated with Siemens Egypt to showcase the TwinRescue Project at national and international events, including AUC RCC 2022, [IEEE Smart World Congress 2023](#), and [Prototypes for Humanity](#).



Spotlight: Zero-Carbon Future of Cairo's Heritage

Funded by the British Council's Going Global Partnership grant, and under the supervision of [Dr. Sherif Goubran](#) and [Dr. Khaled Tarabieh](#) and with the teaching assistance of Lobna Anous and Tamer ElGabaly, a group of students worked together to explore [Zero-Carbon Future Heritage](#) landscapes and urban environments as part of their graduation thesis project, at the Architecture Department in the Academic year 2022-2023. The students included Amgad AbelAlim, Heba ElKammah, Laila Hany, Moustafa Zahran, Nouran El-Khattam, Omar Assem, and Saja Shatat.

In this project, students worked individually on the project in a transnational studio setup along with students from Queen's University Belfast, Northern Ireland, and the University of Salford, England. The year-long thesis journey included hybrid and virtual exchanges, travel to COP27, Northern Ireland, and Venice.

In May-November 2023, the work was presented at the 2023 Venice Architecture Biennale, "Time Space Existence," hosted by the European Cultural Center (ECC) in Venice, Italy. In June 2023, Students Laila Hany, and Heba El Kammah from AUC, and Dr. Sherif Goubran, travelled to Venice along with collaborators from the UK and held a series of events, including a roundtable discussion regarding their work exhibited in the biennale. The work displayed at the ECC is a collaborative effort by members of AUC, Queen's University Belfast, Northern Ireland, and the University of Salford, England, made possible through a British Council's Going Global Partnership grant. This 'Distributed Design Studio' engages architectural design thinking to re-evaluate decarbonization strategies across scales, cultures, and climates. Presentations of design research findings at COP27 highlighted the limitations of current decarbonization strategies. They generated a shared understanding of local responses to global challenges, forming the basis of propositionally based themes that overlap:

- The Home + Away Catalogue of Alternative Living (Queen's University Belfast, Northern Ireland)
- Reviving-Reusing-Futuring (The American University in Cairo, Egypt)
- Scarcity, Surplus, and Heritage Production (University of Salford, England)



ENT
R, WASTE

REVIVING-REUSING-FUTURING
THE COPPER CONDUIT

SCARCI

Faculty Research

For the [third year in a row](#) (2022-2023), AUC faculty members have been named among the top 2% of the world's most impactful scientists by Stanford University and Elsevier. Experts at Stanford University created the database, and it is based on data from Elsevier's Scopus, which is "the largest abstract and citation database of peer-reviewed literature." The [database](#) includes the top 2% of scientists in 22 scientific fields and 174 subfields and provides standardized information on citations, h-index, co-authorship-adjusted hm-index, citations to papers in different authorship positions, and a composite indicator (c-score).



AUC Faculty Develop 2 Winning Courses on Climate Change and Sustainability during the Research and Creativity Convention 2023

The [Research and Creativity Convention](#) (RCC) at AUC is a collective event that combines diverse activities of research, design, entrepreneurship, innovation, and creativity. It has demonstrated growth and success over time. The main goal is to enhance knowledge sharing, interdisciplinary research partnerships, and projects with community or economic significance. The convention serves as a platform to spotlight AUC's strategic priorities, enhance research capabilities, stimulate campus creativity, and address important regional and global issues.

AUC's faculty and students, both graduate and undergraduate, present and share original research findings and creative outcomes across various fields such as sciences, humanities, social sciences, business, and arts, demonstrating the breadth and depth of AUC's research mission. RCC is a tribute to the University's excellence in research, entrepreneurship, and creative endeavors.

1. Climate Change: From Interdisciplinarity to Action Course

In the Arab World Studies/Egypt category, the course developed by [Dr. Tamer Shoeib](#), [Amina Saleh](#), and [Noha Omar](#) aims to create and empower more environmentally conscious students; this course explores climate change from multiple disciplines, focusing on filling information gaps about the crisis and the specific context of Egypt. "Filling these gaps would allow for a better understanding of the climate change crisis in Egypt and therefore a better management of it," the course description reads.

A significant part of this course is centered around community-based learning; students work with different organizations and groups of people around Egypt, gaining real-life experience while leaving a lasting impact on their communities. Projects span the industries of wastewater treatment, fish farming, recycling, and waste management, among others.

2. Sustainability in the Cracks of Urban Policy: Communities, Bureaucracies and Adaptation Course

In the Global Studies category, the course developed by [Dr. Noura Wahby](#) and [Dr. Sherif Goubran](#) aims to explore and challenge the norms, regulations, policies, and laws that inform unsustainable behaviors, from the overuse of plastic at AUC and in Egypt to water pricing in urban areas.

Spotlight: Utilization of Plastic Bottles in Building Construction Research Fund

Under the supervision of [Dr. Ahmed Abodonya](#), [Dr. Ezzeldin Yazeed](#), [Dr. Khaled Nassar](#), [Dr. Khaled Tarabieh](#), [Dr. Omar El Kadi](#), and their research assistants Eng. Mayar Khairy and Eng. Zeinab Abdelaziz. The main aim of this research project is to use discarded plastic bottles in the construction of sustainable walls, utilizing cost-effective, environmentally friendly ways to handle materials while building. The research aims to:

1. Introduce the integration of mechanically compacted sand as a filler with the construction of main construction elements that can support their weight.
2. Minimize and eliminate cement usage by incorporating more eco-friendly resources, such as cob material.
3. Present a green solution for construction to repurpose plastic.

Published Work

1. Presented and published research work titled “Integration of Plastic Bottles with Earth Materials for Insite Construction Modules” in the Canadian Society for Civil Engineering, 2023.
2. Submitted abstract for research titled “Integrating Cob-Earth Material and Sand-Filled Plastic Bottles to Combat Environmental Challenges: A Sustainable Construction Solution” in the 2nd International Conference on Sustainability: Development and Innovations, 2024 (Accepted).



Spotlight: The 2050 Education for Sustainable Development Campus: Envisioning the futures of learning spaces and curricula for AUC and Egypt

While the future of sustainability in education has been explored in developed nations, more research should focus on developing and underdeveloped countries, which face significantly different challenges, realities, and potentials. This knowledge gap presents a significant obstacle for Higher Education Institutions (HEIs) in shaping their strategic vision and approach to sustainable education, potentially resulting in misallocated resources and untapped potential. In this project, funded by the Bartlett Fund for Critical Challenges, [Dr. Sherif Goubran](#) (Architecture) and [Dr. Heba ElDegheidy](#) (Education), in collaboration with [Dr. Hoda Mostafa](#), and [Dr. Khaled Tarabieh](#) and with the assistance of an exceptional group of graduate and undergraduate researchers, aim to address this issue through a future-oriented, multistakeholder-based holistic approach that considers the two primary dimensions of HEIs: learning environments and curricula. The central question that the project seeks to answer is: "How can we define the future of higher education for sustainable development in Egypt in 2030 and 2050?" The project utilizes future thinking methodologies to contextualize the objectives of

SDGs 4 and 11 within the Egyptian context. It uses future-oriented approaches to leverage the community's collective intelligence to formulate a medium-term vision for sustainable education in Egypt.

Specifically, the project seeks to define two milestones: 1) 2030, aligned with the current sustainable development agenda, and 2) 2050, anticipating the proposal and adoption of a new global agenda. These visions will be further customized to AUC as a case study, engaging undergraduate students from the Architecture (ARCH) and Educational Studies (EDUC) departments to explore the implications on curricula and built infrastructure. By doing so, the project aims to equip AUC to gain critical strategic insights into global and local trends concerning sustainable education, aligned with the UN 2030 Agenda's 5Ps (people, planet, prosperity, peace, and partnership). Ultimately, the project seeks to position AUC as a frontrunner in sustainable education and education for sustainable development locally, regionally, and globally.

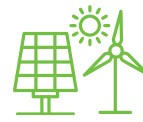


Spotlight: AUC DataHub for Climate Change Mitigation: Establishment of a training and reporting platform for the Carbon footprint of Egyptian Universities

As a result of climate change and the potential risk of global warming, an emerging interest across academic institutions in developing a comprehensive inventory of greenhouse gas emissions is rising. To align with Sustainable Development Goals (SDGs), higher education institutions (HEIs) are often faced with the challenge of developing a process that will accurately assess the campus' resource consumption in a timely, economical, and informative manner. This type of assessment is not typical and relies heavily on data availability and institutional capacity to carry out such exercise accurately, report the findings, benchmark against peer institutions, and establish the institutional mechanisms to sustain this type of data-intensive work in collaboration with [Dr. Khaled Tarabieh](#), [Dr. Ali Awani](#), [Dr. Ahmed El Gendy](#), [Dr. Nouri Sakr](#), and [Dr. Omar Abdel Aziz](#). There are two essential elements of a strategy for reducing energy-related carbon emissions: first, improving the

efficiency of energy use or, equivalently, reducing the 'energy use intensity' of the institution; and second, 'decarbonizing' the energy supply infrastructure - that is, reducing the carbon intensity of the energy system by moving away from primary reliance on petroleum for transportation and high carbon fuels for electricity generation towards alternative means and low or zero-carbon electrical generating technologies. Accordingly, this grant proposal aims to assist Egyptian universities in the following:

- CO₂ Emission reduction.
- Data gathering and reporting.
- Identify opportunities for energy reduction through low-carbon technologies.
- Support with future de-carbonization strategies.



This research aims to develop a robust online platform and phone App for carbon accounting tailored for Egyptian universities, disseminate the AUC experience to several institutions, and ultimately institutionalize the reporting method to become a culture in their respective organizations.

Spotlight: Edited Book Publications

Khaled Tarabieh and Sherif Goubran, **Publisher:** [Palgrave Macmillan](#)
[Sustainable Practices in Higher Education: Finance, Strategy, and Engagement](#)

Sherif Goubran, **Publisher:** [Palgrave Macmillan](#)
[Artificial Intelligence for Sustainability: Innovations in Business and Financial Services](#)

Spotlight: Journal Publications

Ahmed Sherif, Khaled Tarabieh, Islam Mashaly, and Mariam Amer
[Identifying Façade Orientations with Closely Similar Thermal Performance for Unifying Façade Design Features in Hot Arid Climate](#)

Mariam A. Nessim, Aya Elshabshiri, Virginia Bassily, Niriman Soliman, Khaled Tarabieh, and Sherif Goubran
[The Rise and Evolution of Wind Tower Designs in Egypt and the Middle East](#)

Ossama Hosny, Elkhayam Dorra, Ahmed El-Eslamboly, Khaled Tarabieh, Ibrahim Abotaleb, Mariam Amer, Mostafa Farouk, Heba Gad, Youmna Abd El Raouf, Adham Sherif, and Youssef Hussien
[Designing an Automated Multi-Objective Optimization Model for Integrated and Sustainable Farming](#)

Faculty Recognition

Hani Sewilam Appointed as Egypt's Minister of Water Resources and Irrigation

[H.E. Professor Hani Sewilam](#) is the director of the Center for Applied Research on the Environment and Sustainability (CARES). In 2022, he was appointed Egypt's Minister of Water Resources and Irrigation.

Since 2002, he has raised funds and implemented research and development projects in collaboration with institutions from at least 20 European, Mediterranean, and African countries. He has implemented many international research and development projects in the water areas, including flood risk management, innovative capacity-building programs, solar-powered desalination, aquaponics, hydroponics, and effective water management. Additionally, he worked as the Managing Director of the UNESCO Chair in Hydrological Changes and Water Resources Management at RWTH Aachen University in Germany and as the University Rector's Delegate for African Countries.



Salah El-Haggag Innovating in Environmental Technologies since 1987

[Salah El-Haggag](#) is a professor of Energy and Sustainable Development at the Mechanical Engineering Department with over 30 years of experience in the field. His paramount objective is to transform waste into a valuable product, and he developed a simple theory called the 7Rs Rule to approach the cradle-to-cradle (C2C) concept. Dr. El-Haggag developed a formula and indicator for sustainable development in his book published by Elsevier Academic Press in 2007 entitled "Sustainable Industrial Design and Waste Management: Cradle-to-Cradle for Sustainable Development." This book is the first worldwide to demonstrate the concept of net zero waste according to cradle-to-cradle principles to protect the environment and natural resources in terms of business plans to approach sustainability. Moreover, Dr. El-Haggag has 230 Scientific Publications in Environmental, Sustainable Development, and Energy Fields, 53 invited presentations, 57 technical reports, 17 books, and 15 book chapters.



Sherif Goubran Awarded Best Paper at the International Conference on Sustainable Development (ICSD)

In 2023, the paper titled "[Realizing Sustainable Development Goal 11 in Public Realm Designs through Regional Landscaping](#)" was published and awarded at the [ICSD 2023: The Midpoint of the SDGs: Global and Local Progress & Challenges](#) conference. ICSD is a platform that brings together stakeholders from academia, government, civil society, UN agencies, and the private sector to collaborate and exchange practical solutions to achieve the Sustainable Development Goals.

The conference is a prominent academic event on sustainable development, featuring over 300 presentations, including oral and poster presentations delivered by researchers and practitioners worldwide. These presentations cover various topics, such as gender equity, climate change, and economic development. The main objective of these presentations is to showcase solutions to achieve the SDGs.





OPERATIONS

Embodying Sustainability

AUC recognizes the importance of embodying sustainability in the campus's daily operations and is committed to the conservation, efficient, and responsible use of resources. The Office of Sustainability monitors and tracks the University's campus energy consumption, water usage, waste management schemes, and natural gas consumption.

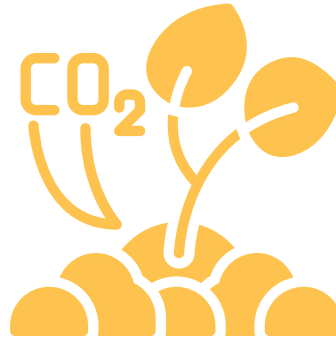
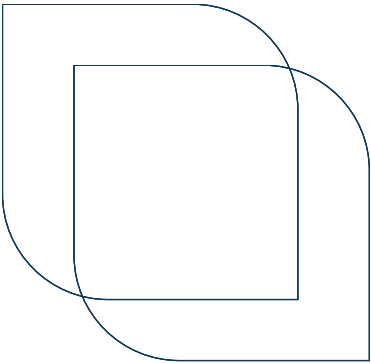
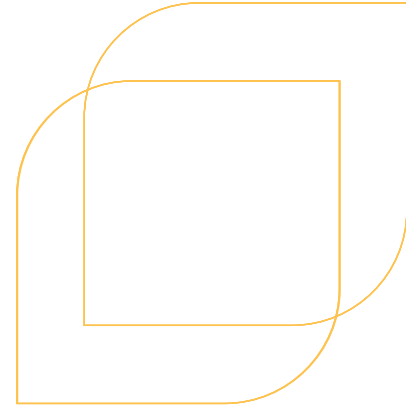


Sustainability at a Glance



15.2
million

plastic bottles saved
from campus filtered
drinking water stations



168

MTCO₂e

sequestered from
landscaping and
composting in AY 23



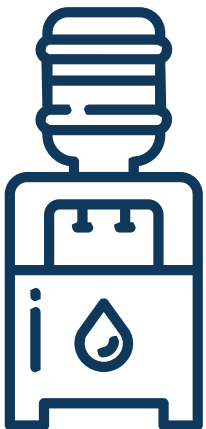
48

waste-sorting stations in
the New Cairo Campus



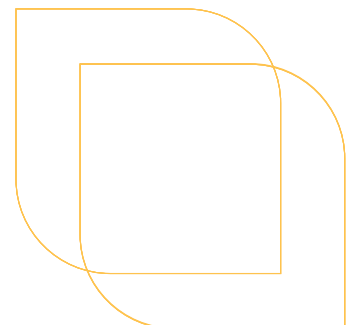
28

Reserved parking
spots for carpoolers



36

stations in the New
Cairo campus providing
chilled and filtered
drinking water



Buildings

When AUC relocated to New Cairo in 2008, the campus design was centered around sustainability and efficiency right from the beginning. Each building at AUC was designed to embody sustainability on campus. The construction of the AUC New Cairo campus involved the use of 24,000 tons of reinforcing steel and 115,000 square meters of stone, marble, granite cladding, and flooring. The walls were built in accordance with energy management systems, resulting in a 50 percent reduction in energy consumption for air conditioning and heating compared to traditional construction methods.

The architects strategically positioned openings in plazas, courtyards, and gateways between buildings to take advantage of the prevailing northeast winds. This created a significant green buffer that helps to mitigate heat and acts as a filter during dust storms. This design not only lowers long-term energy and maintenance costs but also enhances the social design of open spaces. The campus layout features a hollow-square building design that optimizes the utilization of natural light and facilitates air circulation in offices, classrooms, and laboratories. Most buildings also incorporate solar shading, utilizing horizontal and vertical louvers to block solar radiation and provide additional shading. This helps to reduce heat gain while ensuring sufficient levels of natural daylight through passive means.



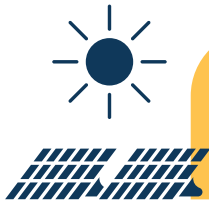
The orientation of buildings and the design of indoor and outdoor spaces reduce the energy requirements for cooling AUC's campus by **40%**



Solar Photovoltaic Project: AUC Faculty Housing Plot 2

As part of the campus sustainable development plan, AUC is actively expanding its renewable energy portfolio. In September 2018, AUC commenced a project to construct a solar power plant at AUC Faculty Housing, specifically on the roofs of Plot 2 in New Cairo off-campus. This highly ambitious project allows AUC to diversify its electricity sources and ensures that a portion of its energy requirements is met through a clean, sustainable, and more reliable source.

The installed solar photovoltaic (PV) power station is anticipated to yield an annual output of 133.7 MWh/year. The project comprises a grid-connected plant with a capacity of 78.4 kWp, consisting of 234 polycrystalline panels rated at 335 Wp each, along with two 33k inverters. The project was completed in November 2019 and continues to operate to this day. Through this solar initiative, AUC is actively working towards transitioning to a cleaner, renewable energy source that offsets carbon emissions and reduces energy costs.



It is estimated that the solar project helps AUC reduce carbon emissions by approximately 77 tons per year.

LEED Certification: AUC Faculty Housing Plot 3

In 2013, AUC initiated a project to earn its first Leadership in Energy and Environmental Design. (LEED) for Operations and Management (O+M) certification. LEED (O+M) aids building managers in creating more green operations by helping them maximize operational efficiency and minimize environmental impacts.

LEED-accredited professionals and the AUC task force of faculty members, executive directors, and the Office of Sustainability director are working to earn AUC Faculty Housing Plot 3 LEED (O+M) certification. The building boasts various features, including a green roof, solar heating with a capacity of 167 KWs, energy-efficient doors and windows, motion sensors, sub-meters, and a landscape filled with low-impact native plants. Additionally, monthly data of water and building-level energy consumption are continuously monitored, and policies such as no-smoking policies, waste management, and green cleaning have been partially implemented and are under continuous discussion for future enhancement. Throughout the project, students have been able to use the building as a living lab, learning about green building approaches and sustainable methods of operation.

Furthermore, the project aims to achieve LEED Silver certification. The certification application is currently under review by the [United States Green Building Council](#) (USGBC), and the building is on track to receive the certificate by the academic year 2023-2024.



Solar Photovoltaic Array Mini Projects Piloted Across Campus

Project 1

The School of Sciences and Engineering has installed a solar photovoltaic power station with a total capacity of 16.9 kW. This power station generates electricity and is used in a collaborative project between the University and industry to develop new solar technology. The Center for Sustainable Development (CSD) also has a solar array as part of its research on the sustainable use of solar energy for desalination. This research aims to use solar energy to convert saltwater or brackish water into drinkable water. In addition, the brine produced in this process is utilized for aquaculture.



Project 2

The Center of Applied Research on the Environment and Sustainability has established the Water-Energy-Food (WEF) Nexus lab, which makes use of the sunny weather in Egypt to generate electricity to power a modern hybrid desalination unit for salt and brackish water. At the heart of CARES' research activities, the WEF Nexus lab explores the interconnections between water, energy, and food. The goal is to ensure the security of all three resources for the growing population in the Arab world.

Using reverse osmosis membrane technology, the lab desalinates water, which is used for aquaponics and modern agricultural drip irrigation. The byproduct of the desalination process, known as brine, is effectively utilized in fish production. The concept is to harness solar energy to power desalination, preparing water for agricultural use. The water is then efficiently used in irrigation systems to maximize food production. This system aims to achieve zero waste and to have a positive environmental impact while being economically profitable.

AUC Central Utility Plant and Co-Generation

The AUC Central Utility Plant is built to be energy efficient in two important aspects. Firstly, it uses natural gas as its fuel source, a relatively clean-burning (albeit carbon-based) fuel that is mostly extracted domestically from abundant reserves in Egypt, and it is considered cleaner compared to other fossil fuels. Secondly, the plant uses co-generation, a process that captures and recycles waste heat from electricity generators. This enables the plant to produce almost half of the campus's hot water without the need for additional natural gas consumption.

During the construction of the New Cairo Campus, AUC partnered with the Egyptian Company for Refrigeration by Natural Gas (Gas Cool) to establish and operate an on-campus Central Utility Plant (CUP). Spanning approximately 5,781 m² (62,226 ft²), the plant supplies all the chilled water required for air conditioning, hot water needed for heating, and most of the hot water used for domestic purposes. Approximately, 66% of AUC's total carbon footprint during the academic year (AY) 2023 is attributable to Heating, Ventilation, and Air Conditioning (HVAC), domestic hot water, and electricity for lighting and other equipment (non-HVAC).

Landscape

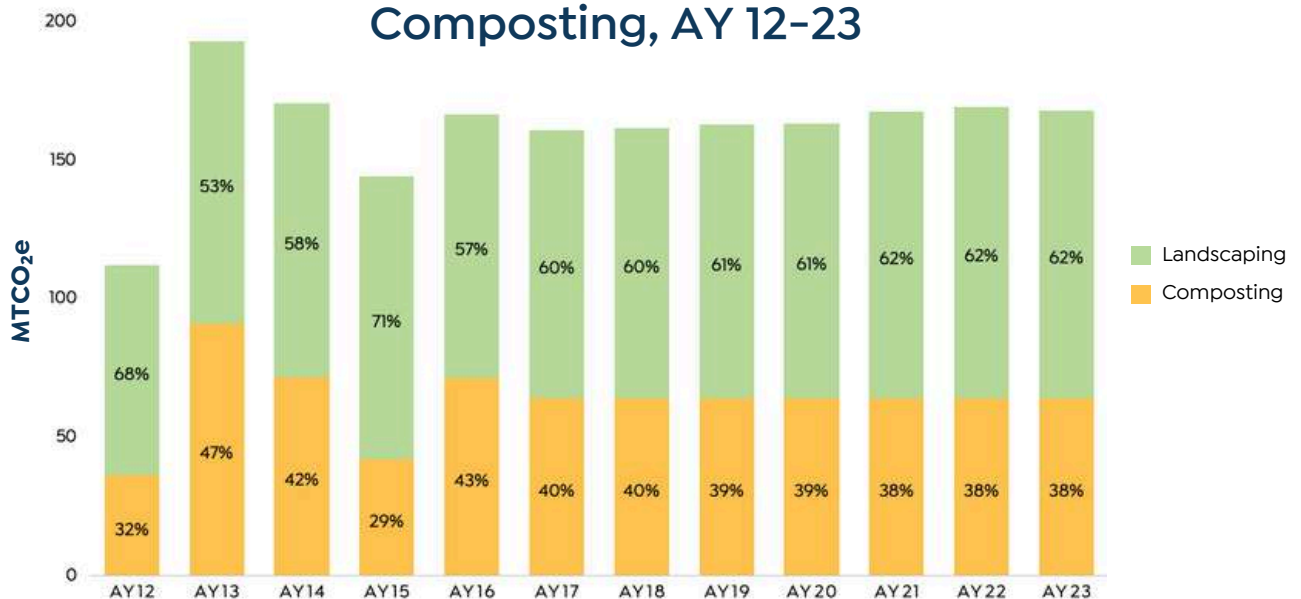
AUC's outdoor [landscape](#) demonstrates its commitment to ecological leadership and best sustainable practices in design and operations. The New Cairo campus is home to an impressive 60 acres, equivalent to approximately 58 feddan, of gardens. The AUC's 20-acre main garden was expertly designed by Maher Stino, a distinguished landscape designer known for his work at the world-famous Al-Azhar Park.

Over 60 acres of greenery are cultivated on campus to ensure the campus remains diverse and self-sustaining. All trees and plants, except for the date palms, are propagated and grown at AUC's own nurseries and research station, formerly known as the Desert Development Center (DDC). In addition to providing vegetation services for events and commencements, AUC's landscaping team takes care of indoor plants in offices and promotes campus sustainability through its landscaping efforts.

The campus's green cover has several advantages, such as storing and sequestering CO₂ through photosynthesis, purifying the air, and reducing AUC's carbon footprint. The landscaping unit employs sustainable procedures, including composting landscaping waste like pruned tree branches and grass cuttings. This composting technique helps reduce carbon emissions by using a mix of on-campus organic fertilizer produced from composting landscape waste and a small amount of purchased synthetic fertilizer. Another sustainable practice is the biological control program, which aims to control pest population density and prevent it from reaching the economic injury level. This is achieved by using predator insects that eat pests, preserving the plants' greenery, minimizing the use of pesticides, and reducing hazardous pollution. The vast green area on campus, around 60 acres, is irrigated using treated wastewater. The irrigation water management is based on weather data and monitoring the plant's water requirements. Additionally, the AUC community benefits from the garden's harvested fruits and vegetables.



Total Emission Savings from Landscaping and Composting, AY 12-23



Water

AUC has implemented several water conservation techniques to reduce the energy needed to pump water throughout campus, given the scarcity of water in arid climates such as Egypt. As a result, the amount of water we consume on campus has a significant environmental impact due to the total carbon footprint it emits.

AUC's water conservation efforts include utilizing treated wastewater, drip irrigation, and humidity sensors to irrigate the landscaped areas on campus. The use of treated wastewater is a cost-effective alternative to drinking-grade water, which helps reduce the University's overall carbon footprint. This system allows for the reuse of water that would otherwise go to waste, thereby helping preserve Egypt's water sources. Besides the sustainable irrigation techniques used in campus landscaping, several sustainable features are also used to preserve on-campus domestic water, such as using water-efficient appliances, namely low-discharge flush valves in toilets and low-flow faucets. In addition, low-flow shower heads are installed in students' residences, the sports complex, and the faculty housing buildings.

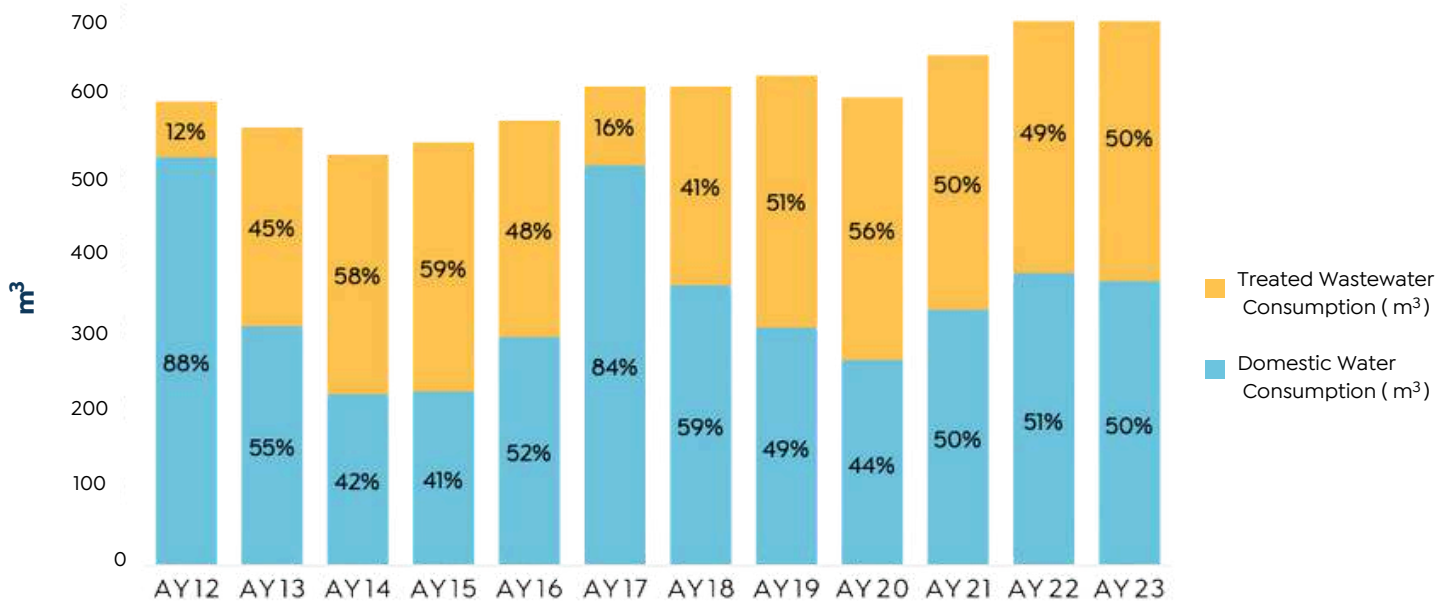
The Energy and Resource Conservation and Efficiency (ERCE) water task force meets monthly to continuously monitor and evaluate campus water consumption. The Office of Sustainability heads the task force, which includes representatives from senior administration, faculty members, facilities and operations, and the landscaping unit. Together, they work to monitor water use across campus, study our water needs, and develop strategies to reduce demand and increase water supply responsibly and sustainably.



Almost 50% of AUC's total water demand is covered by the treated wastewater used to irrigate 100% of the campus landscape.



Total Water Consumption, AY 12-23



Energy

To maintain its daily operations, AUC consumes significant cooling, heating, and lighting energy. The primary energy source is an on-campus co-generation plant that runs on natural gas, which is cleaner than coal, with electricity obtained from the Egyptian Electricity Authority (EEA) as a secondary source. This plant efficiently produces steam that is reused for heating rather than wasted as in conventional plants. As a result, the overall energy demand is reduced, decreasing the amount of fossil fuels AUC burns to generate energy.

To efficiently reduce its energy consumption, AUC has implemented several strategies, including using a campus-wide building management system (BMS), motion sensors, continuous retro-commissioning, and other technologies. The BMS complements the awareness campaign on campus, encouraging students, faculty, and staff to turn off lights when leaving a room or when sufficient natural light is present. The BMS controls and monitors a building's mechanical and electrical equipment, such as ventilation, power supply, fire systems, and security systems. Additionally, the well-designed existing buildings with insulated exteriors and double-glazed windows also help to lower energy demands.

AUC meticulously records data on energy consumption throughout the entire campus. Every month, the Energy and Resource Conservation and Efficiency (ERCE) energy task force meets to discuss energy consumption trends and brainstorm ways the University can reduce its energy consumption while meeting its daily demand. The Office of Sustainability chairs the ERCE energy task force, which is comprised of representatives from the facilities and operations team, budget office, and School of Science and Engineering Faculty.

Spring 2023 Energy Conservation Plan

During the Spring 2023 Semester, April 9-27, AUC New Cairo Campus turned off the Air Conditioning (A/C) in all New Cairo Campus Buildings except the Data Center, SSE Labs, Dorms, Library, and Food Court to reduce AUC's overall carbon footprint and utility expenses.



40% reduction in energy use due to energy-efficient wall construction

Total Electricity Consumption, AY 12-23



Waste

Students, faculty, and staff generate significant waste daily, including packaging from food and drink containers, scratch paper from exams, and more. AUC is committed to reducing waste streams and diverting as much recyclable material as possible from landfills. The Office of Sustainability leads the Clean and Green Committee, a group of dedicated faculty and staff members who spearheaded a campus-wide recycling program, installing 48 sorting stations on the New Cairo Campus for plastic, cans, and trash collection.

The Office of Sustainability has constructed an on-campus compacting station to compress the separated plastic, cans, and paper. Once these valuable materials are compressed, the sorted trash weights at the New Cairo Campus are calculated daily. AUC sells compacted, sorted, and weighted trash to commercial recyclers and uses the profits to fund sustainability-related projects. Presently, AUC donates most of the used paper to a recycling NGO and the rest to the Zabaleen, the trash-collecting community in Cairo.

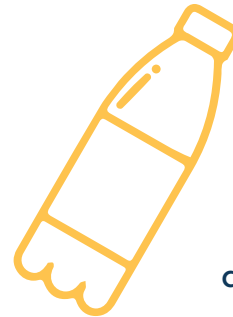
To address the issue of plastic water bottle usage on campus, the Office of Sustainability has upgraded the on-campus drinking water stations. These stations provide filtered, chilled drinking water for students, faculty, staff, and visitors to fill their reusable bottles. Currently, 36 filtered drinking water stations are on the New Cairo campus, 3 stations in the off-campus faculty residences, and 23 stations on the Downtown Tahrir campus. Plans are underway to install more chilled water dispensers in high-traffic areas of campus to decrease AUC's plastic bottles waste and its relevant emissions.



48 waste-sorting stations in the New Cairo Campus



36 bottle-filling stations in the New Cairo campus providing chilled and filtered drinking water



15.2 million plastic bottles saved from campus filtered drinking water stations



Transportation

When AUC relocated 35 kilometers east of Downtown to New Cairo, providing sustainable transportation options for our community members commuting to and from campus became more important than ever. AUC provides multiple bus routes, totaling 13, that serve greater Cairo. These buses adhere to a fixed [schedule](#), offering transportation to campus in the morning and returning individuals home in the evening. The bus service is accessible to staff and faculty members free of charge, five days a week along with limited services on Saturdays. Students can also utilize this service for a reasonable subscription fee.

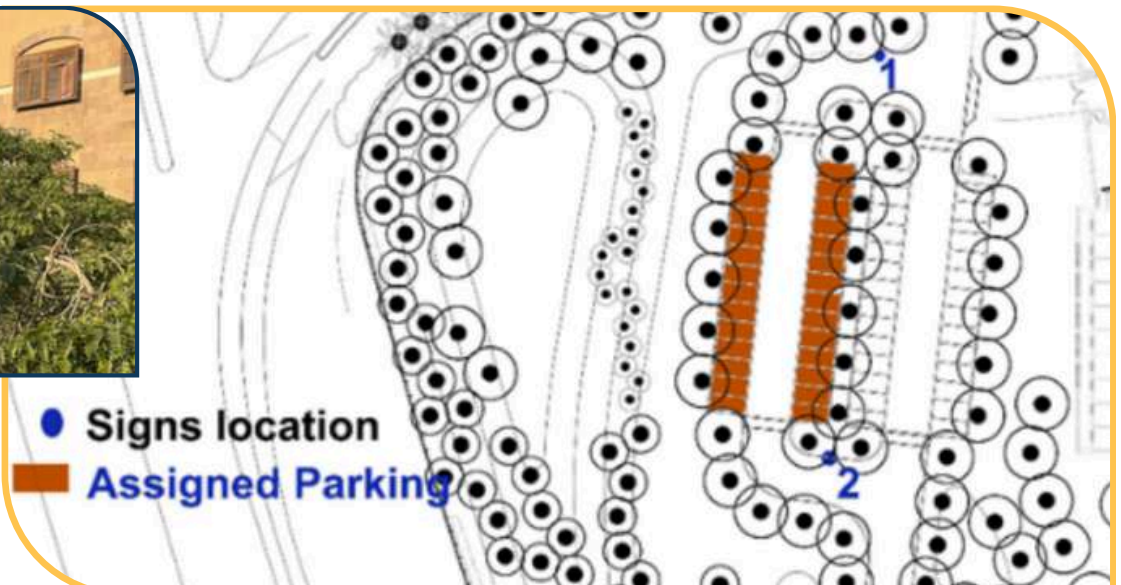
For individuals with busy schedules that may not perfectly align with the bus schedule, we have made efforts to encourage carpooling to campus. Starting [Fall 2023, AUC designated reserved parking spots for carpoolers](#). This new initiative aligns with AUC's Climate Change Initiative and the Race to Zero Campaign, aiming to reduce AUC's carbon footprint effectively. This initiative has motivated several students to carpool as it reduces their concerns about finding a parking spot and ensures that they arrive at their classes on time. Furthermore, within the University's [parking policy](#), it is stated that parking on campus is free of charge for those who carpool to campus.

AUC ensures that zero-emission transportation services are provided for commuting on campus through the use of golf carts. The on-campus cart services are utilized for a range of activities. These include transporting staff and vendors' personnel through the tunnel every half hour, offering catering transportation services, aiding other departments, and transporting guests during commencement and major events on campus. Furthermore, AUC also provides shuttle bus services, free of charge, between its two campus sites, the New Cairo Campus and the Tahrir-Falaki Campus, as well as to the Faculty Off-Campus residence.



28 reserved parking slots

The reserved parking slots are for carpoolers with at least two passengers per car. The parking slots are at Gate 5, near Omar Mohsen entrance, Parking lot G.



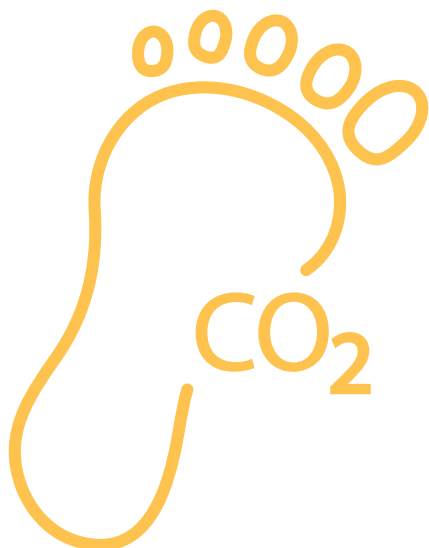
Measuring the University's Impact on Climate Change

The United Nations' Intergovernmental Panel on Climate Change (IPCC), the leading global authority for assessing climate change, concludes that higher concentrations of greenhouse gases (GHG), mainly CO₂, in the atmosphere are the primary driver of recent global warming, glacial melting, and rising sea levels. In 2022, the IPCC released its report "[Climate Change 2022: Mitigation of Climate Change](#)." The report emphasized the urgency of the world's state, as it is now very unlikely that global warming will be able to be reduced to 1.5°C above pre-industrial levels by 2030. Climate mitigation action must be accelerated to maintain climate change to +1.5 °C by the end of the century. The report cites the importance of a steep reduction in fossil fuel sources by transitioning to renewable energy and implementing carbon capture technologies.

By recognizing the importance of greenhouse gases as a primary indicator of global warming, AUC publishes a biennial, comprehensive carbon footprint report to assess, monitor, and plan for the reduction of its carbon emissions. A carbon footprint is a widely used tool to measure the impact of human activities on global warming. The World Resources Institute defines a carbon footprint as "a representation of the effect you, or your organization, have on the climate in terms of the total amount of greenhouse gases produced (measured in units of carbon dioxide)" (World Resources Institute, 2022). By identifying sources of carbon emissions, a carbon footprint can also be used as a guide for reducing emissions and evaluating progress on emission reductions. The University recognizes that it is not immune to nationwide sustainability issues and must implement its sustainable development plans to combat climate change better. In doing so, AUC acts as a catalyst for change by positioning itself at the forefront of sustainable development in Egypt and the MENA region.

AUC collects data to study its impact on climate change comprehensively. In April 2023, AUC published its [7th Carbon Footprint Report](#), which shows trends for the past eleven years. AUC is committed to reducing its carbon emissions and convincing others to do so to help sustain Egyptian society's long-term viability. A carbon footprint is a widely accepted method of measuring the impact of human activity on global warming. A university's carbon footprint is the annual total of Carbon Dioxide (CO₂) and other significant greenhouse gases emitted into the atmosphere due to daily activities and campus operations. AUC is the first higher education institution in the Middle East and North Africa (MENA) to study its impact on climate change comprehensively. AUC's Carbon Footprint report is biennial; thus, in Spring 2025, the 8th edition will be published.

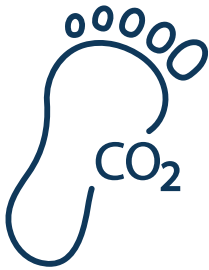
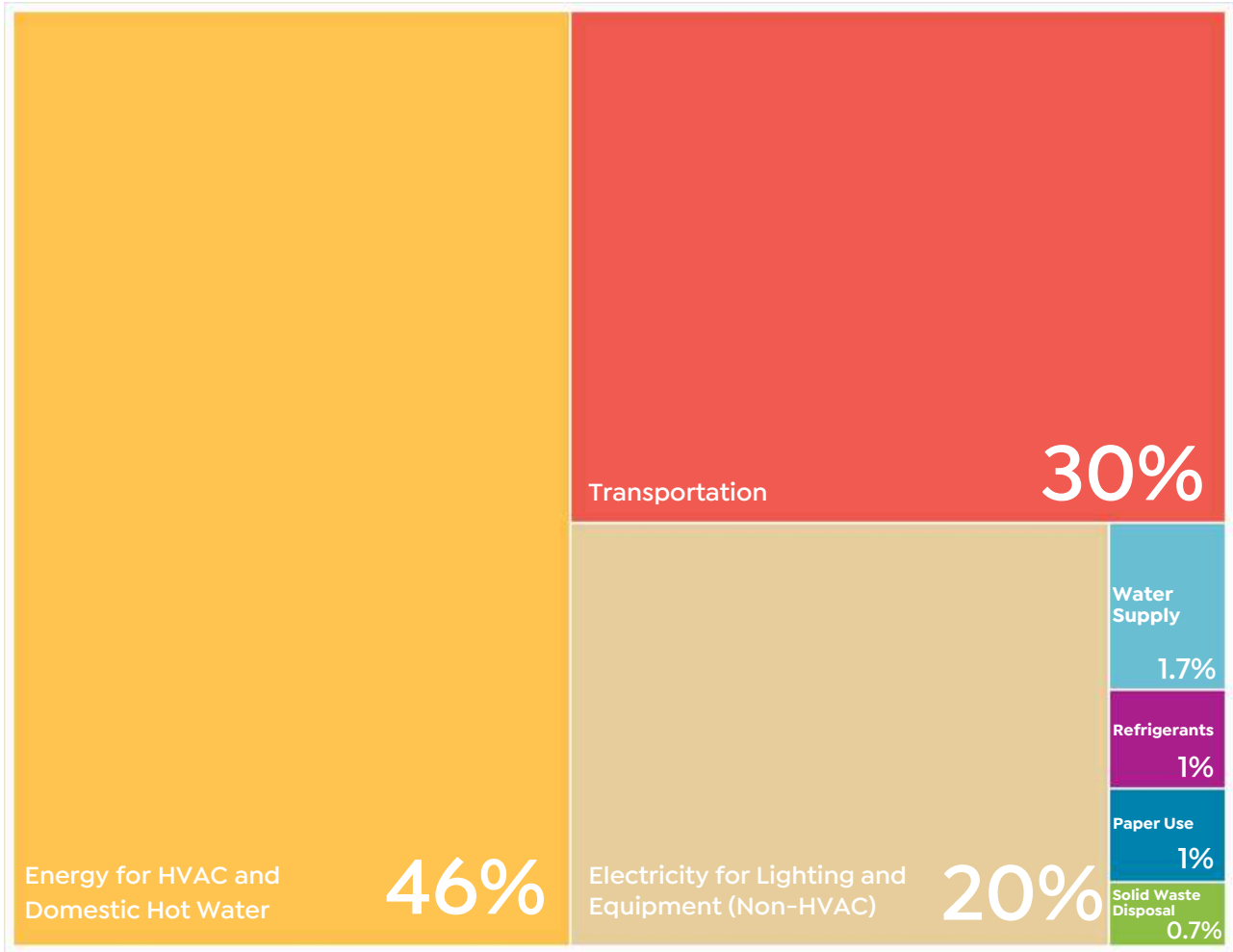
The main components of AUC's New Cairo Campus carbon footprint in the 2022-2023 Academic Year (AY 23) (September 1, 2022, through August 31, 2023) are heating, ventilation, and air conditioning (HVAC) and domestic hot water, transportation, electricity for lighting and other equipment (non-HVAC), water supply, paper, refrigerants, and solid waste disposal.



AUC is the first university in the region to produce a carbon footprint report

in response to the alarming implications of climate change and Egypt's regional energy significance

AUC's Carbon Footprint for Academic Year (AY) 2023 (September 1, 2022 - August 31, 2023)



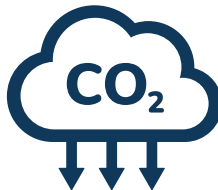
AUC'S AY 2023
CARBON FOOTPRINT
38,713 MTCO₂e

Did you know
 38,173 MTCO₂e is equivalent to

= **89,541**  barrels of oil burned

Carbon sequestered by growing

= **640,123**



trees for 10 years



Engagement

Campus Engagement: *Living Sustainability*

The members of the AUC community are crucial partners in building a sustainable campus. Encouraging AUC students, faculty, and staff to adopt sustainable habits and foster a culture of awareness is essential. Sustainability efforts within AUC's campus community empower future changemakers with the tools and knowledge needed to build a more sustainable and equitable world.

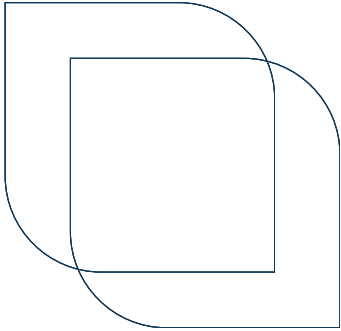
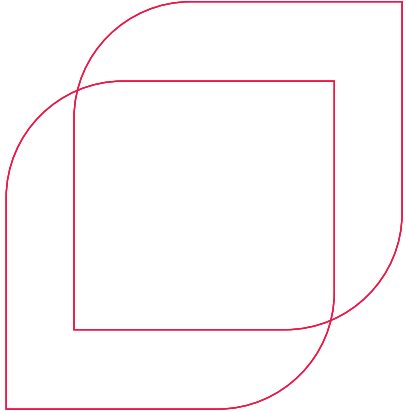


Sustainability at a Glance



32

Published e-newsletters issued by the Office of Sustainability since the inaugural edition in March 2020



876

Students received counseling⁶



1st

AUC wins first place as the Best Smoke-Free University in the region

⁶ Data from Student Counseling Services: Mental Health & Academic Risk, Academic Year 2022 - 2023

Sustainability Awareness

To engage community members in sustainability, the Office of Sustainability organizes various awareness events announced on the University's various platforms to educate the community about sustainable practices. Additionally, the Office issues monthly [e-newsletters](#) that provide AUC members with general knowledge on sustainability-related issues. Not only that, but the newsletter also presents AUC's sustainability-related news. These newsletters include a global environmental calendar showcasing sustainability, environmental events, and daily green tips on eco-consciousness.

On-Campus Activities

Sustainability Fair

On February 23, 2023, the Office of Sustainability organized a Sustainability Fair in collaboration with the Office of Marketing and Communications and the Student Union. The event featured local businesses, public speakers, and workshops in the field of sustainability. The Office of Sustainability also set up a planting station in collaboration with the Landscape unit where the AUC community was invited to plant their plants while incorporating coffee grounds as compost.



Campus Sustainability Month

In October 2022 and 2023, AUC celebrated Campus Sustainability Month, an international month-long event promoting sustainability in higher education institutions. The programming for the month consisted of a series of awareness events focusing on sustainability issues, such as energy consumption, food and material waste, and transportation emissions. The Office distributed informational materials about sustainability at AUC, organized reusable bags giveaways, and encouraged the campus community members to contribute ideas for new sustainable initiatives they would like to see implemented on campus.



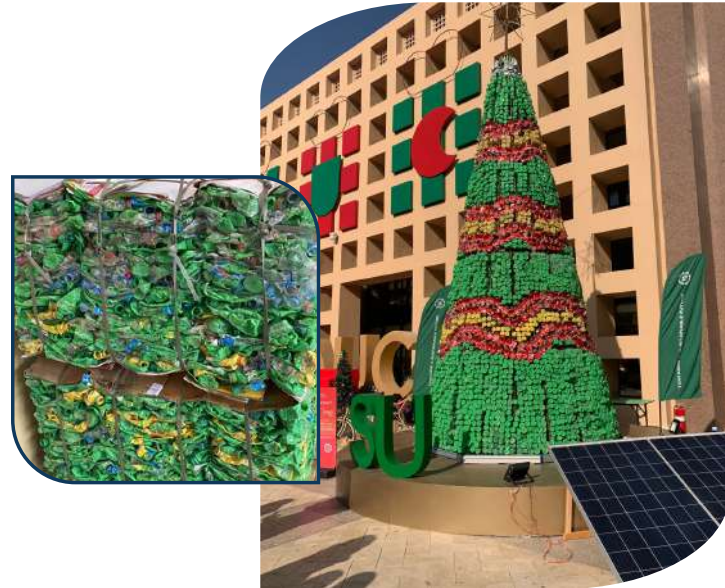
Carpooling Event

On September 22, 2022, the Office of Sustainability, in collaboration with the AUC Student Union and the Office of Security, facilitated the parking for the carpoolers throughout the day, celebrated World Car-Free Day by distributing giveaways to carpoolers and offering designated parking slots near Gate 4 for those who carpoled.



Sustainable Christmas Tree

In 2022, the Student Union, with the support of the Community Assembly Office and the Office of Sustainability, created Christmas decorations using around 6,000 reused plastic bottles and 1,000 reused cans collected from our campus recycling center. These bottles and cans were recycled after the holiday season to reduce waste and protect the environment. Additionally, the lighting system for the decorations was powered by renewable energy from solar panels and bike kinetic energy.



Digital Awareness

Digital communication is a crucial and efficient tool for raising awareness and maintaining engagement on vital issues. The Office of Sustainability issues a monthly sustainability [e-newsletter](#) to promote sustainability culture among AUC community members. The newsletter updates the community on new sustainability-related initiatives, events, and achievements on campus and ways the community can get involved. It also gives readers green tips for daily routines and includes an environmental calendar highlighting global sustainability and environmental celebrations.



Published e-newsletters issued by the Office of Sustainability since the inaugural edition in March 2020

The Office of Sustainability sends the monthly e-newsletter to AUC community members who [subscribe](#). In addition, the newsletters are regularly updated on the Office of Sustainability webpage for anyone to check out.

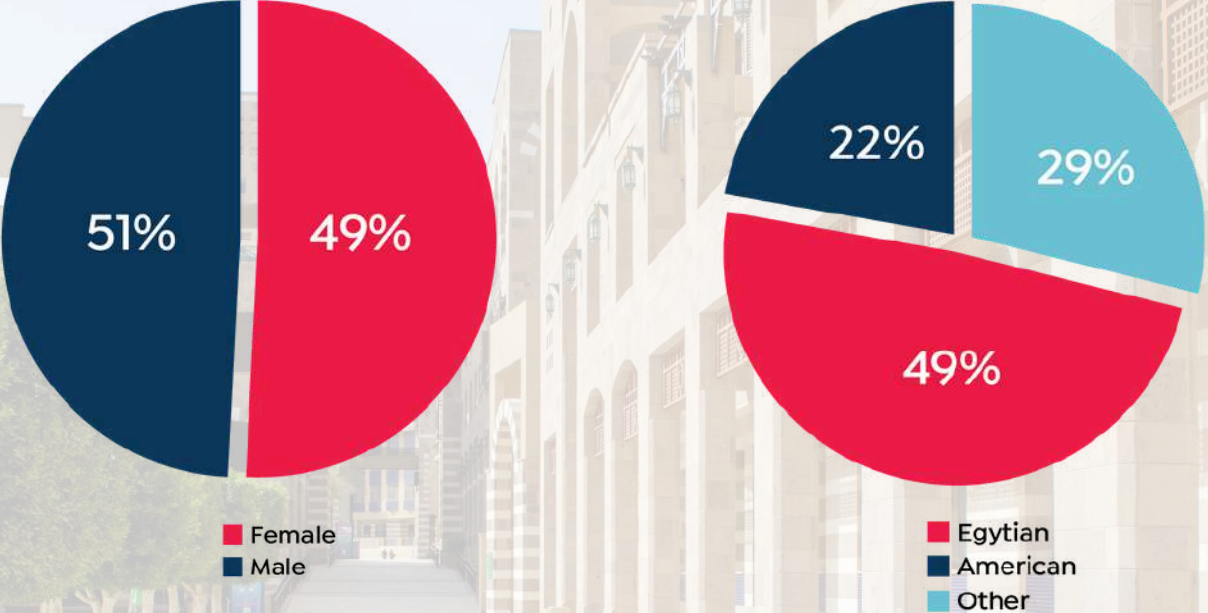
Equality, Diversity, and Inclusion

The culture at AUC promotes inclusion, diversity, and equity, ensuring that all individuals on campus feel safe, welcomed, and valued. Advocating for this culture within an academic institution is crucial in fostering a more just and equitable society. Equality means providing equal opportunities to all individuals and protecting them from discrimination. Diversity encompasses the similarities and differences among individuals, such as gender, ethnicity, race, age, culture, religion, disability, mental health, and other characteristics. Inclusion refers to operating in a manner that celebrates and embraces diversity to create a fair and productive community.

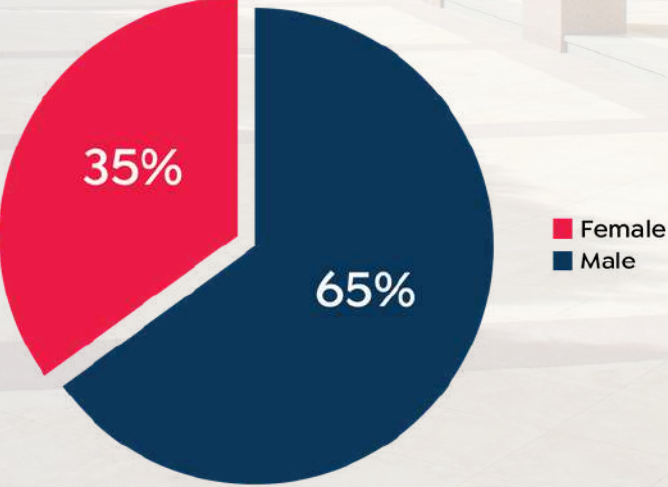
Equitable Workplace

AUC is committed to providing staff and faculty with a high-quality, healthy, safe, and equitable working environment through its policies and programs. The worklife at AUC is a supportive environment for its staff and faculty, providing them with various benefits and opportunities for both personal and professional development, such as organized events, lectures, seminars, workshops, and social activities on and off campus.

Faculty Statistics, 2023⁷



Staff Statistics, 2023⁸



^{7,8} Based on Fall 2023 [AUC Profile and Factbook](#)

Anti-harassment and Non-Discrimination Policy

As a leading University in Egypt, AUC is committed to maintaining safe learning and working environments free from harassment and discrimination. The [Office of Institutional Equity](#) (OIE) at AUC ensures that this commitment is firmly enforced through [AUC's Anti-Harassment and Non-Discrimination Policy](#). Discrimination and harassment based on sex, gender, marital status, pregnancy, race, color, ethnicity, national origin, disability, religion, gender identity or expression, or any other protected characteristic under the Egyptian law are strictly prohibited.

The University has a zero-tolerance policy for discrimination, harassment, sexual harassment (including sexual assault), or retaliation in the workplace or educational environment, regardless of whether the perpetrator is a student, alumni, staff, faculty, vendor, or visitor on campus. Moreover, the OIE educates and informs the AUC community about the sexual misconduct policy both on and off-campus, receives reports of policy violations, conducts investigations, imposes sanctions following the policy guidelines, and guides individuals to the available campus resources, such as medical and counseling services, academic support, and legal assistance.



AUC's "Msh Zanbik" Anti-Sexual Harassment Arts Project is Awarded by Times Higher Education

In 2023, the [Msh Zanbik \(It's Not Your Fault\) initiative](#) won the [Times Higher Education](#) Research Project of the Year: Arts, Humanities, and Social Sciences award, and the principal investigators of the project are Dina Amin and Jillian Campana. This initiative aims to combat and raise awareness of sexual harassment. It is a collaborative research project that involves creating a series of original plays about sexual harassment and assault in Egypt. The project aims to understand the issue from the perspective of Egyptian university students and educate people about it. More than 60 AUC students, faculty, and alumni have worked on the project, and each play explores sexual harassment from multiple perspectives, including families and couples, bystanders, victims and perpetrators, men and women, power and incapacity.



Health and Well-being

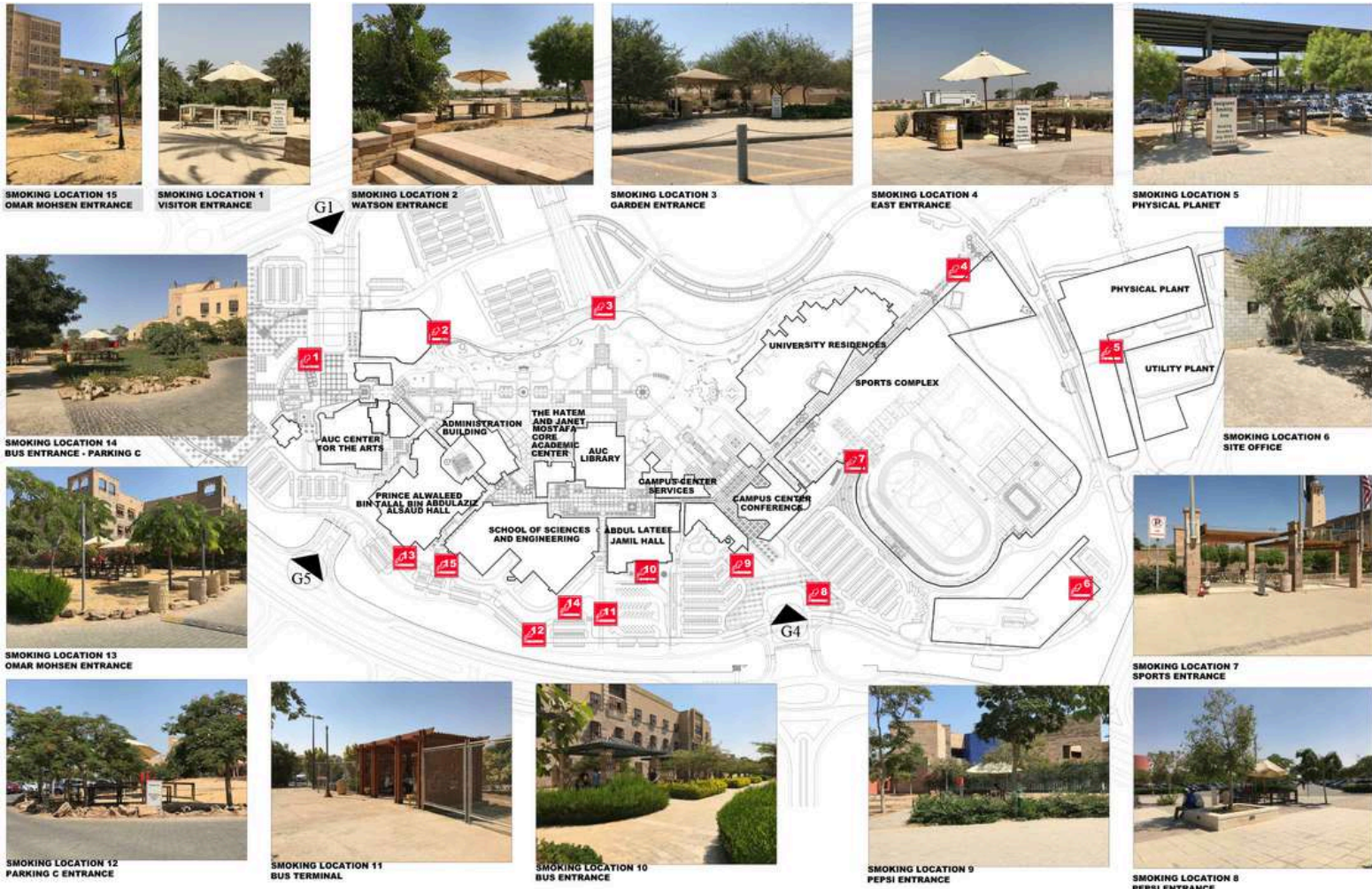
At AUC, the well-being of our community members is a dual objective for sustainability and health. It is important to encourage students, faculty, and staff to understand the intersection between human health and global sustainability and support initiatives that help our community and the planet thrive.



AUC Wins First Place as the Best Smoke-Free University in the Region

As part of its commitment to promoting a healthy lifestyle and well-being for its students, faculty, and staff, AUC has been recognized as the [Best Smoke-Free University](#) in the inaugural edition of the Arab Anti-Smoking Award. The award is presented by the Arab Union for Humanities and Development (AUHD) to universities that have implemented effective campus policies and initiatives to create smoke-free environments. AUHD is a reputable educational and training institution specializing in studies, scientific publications, consultations, and scientific meetings related to humanities and sustainable development.

To create a completely smoke-free and tobacco-free environment, AUC enforced the [Tobacco-Free Campus Policy](#) in 2018 across both AUC campuses, New Cairo and Tahrir. This policy established designated smoking areas around and within the parking lots and restricted smoking and tobacco use on campus. AUC further demonstrated its commitment to promoting a smoke-free environment by establishing the [University's Smoking Cessation Clinic](#). The clinic provides guidance and medication to AUCians looking to quit smoking, and it also organizes workshops and sessions to raise awareness about the harmful effects of tobacco.



Health and Well-being

AUC has various features that aim to improve the health and well-being of the community. These include opportunities for physical fitness and social interaction. The sports facilities provide easy access to exercise, encouraging the community to engage in physical activities. Additionally, the vast landscape allows the community to enjoy nature, and by participating in activities such as adopting a plot, people can develop a connection with the land, promote sustainable practices, and get fresh produce.



The University offers students a range of health and well-being services on campus. [The Center for Student Well-Being](#) prioritizes all students' overall health and well-being, including those with disabilities. In particular, students with disabilities have access to the [Student Accessibility Services](#) (SAS) Unit, which ensures that they have equal access to all aspects of University life by providing tailored support and accommodations. The center provides various programs and services, such as [student counseling](#), mental health assessments, and workshops on various topics. These resources aim to assist students in developing the skills and resilience they need to succeed academically, professionally, and personally. The [Psychological Counseling Services](#) and [Training Center](#) offers free and confidential counseling services to individuals, couples, families, and groups. These services include workshops, psychological assessments, and community outreach. The counseling services are provided by Masters-level student clinicians supervised by faculty members from the psychology department. They cover a wide range of areas, including stress, anxiety, depression, anger, self-esteem, relationships, and marital conflict.



4867
Appointments⁹



876
Students received counseling¹⁰

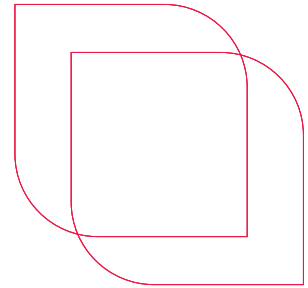


^{9,10} Data from Student Counseling Services: Mental Health & Academic Risk, Academic Year 2022 – 2023

On-Campus Activities

Community Wellness and Mini-Marathon Day

In October 2022, AUC hosted the Community Wellness and Mini-Marathon Day event to raise awareness for mental health on campus. The event offered a range of activities, including a mini-marathon, yoga sessions in the gardens, Zumba classes, musical performances, and wellness support booths.



Mental Health Week

In 2023, the Center of Student Well-being organized AUC's Mental Health Week by going all green. The week aimed to engage AUC's community members through workshops on self-care, art therapy, burnout, stress management, and conducting class visits.





Engagement

Public Engagement: Sharing Sustainability

AUC has implemented meaningful changes that make campus operations more sustainable, but as a globally oriented University, we always seek to engage with external partners. As an institute of higher education, AUC recognizes its ability to impact the surrounding community positively. AUC is committed to sharing sustainability beyond its campus boundaries through public events, external partnerships, and global initiatives.

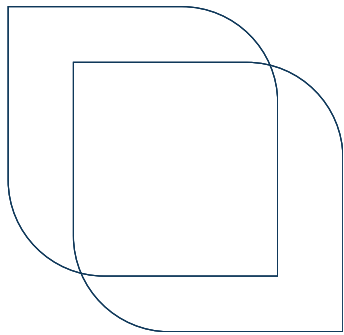
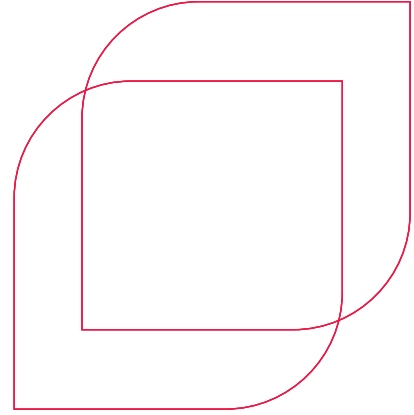


Sustainability at a Glance



14

student organizations actively participate in community service and civic engagement



150+

AUC delegates of faculty, students, and staff participated in COP27



\$86
million

awarded to AUC from USAID for USAID Egyptian Pioneers to assist Egypt in achieving its climate goals through the new program that provides scholarships and training to Egyptian student

Community Outreach

Community outreach refers to the various actions and services that utilize AUC's resources and knowledge to benefit communities outside its campuses. AUC students and faculty engage with the surrounding communities in the Greater Cairo Area and across Egypt's governorates through sustainability initiatives in a non-academic setting.

AUC Student Clubs Giving Back to the Community in Ramadan

In April 2022, during the holy month of Ramadan, several student clubs and organizations at AUC demonstrated their commitment to positively impact the local community as part of their social responsibility. These clubs include the [Volunteers in Action \(VIA\)](#), [Mashroo3 Kheir](#), [Hand in Hand](#), and [Help Club](#). Additionally, during the holy month, AUC's [Student Union \(SU\)](#) aimed to spread happiness through a program called Re7let el Sazada (Trips of Happiness) by organizing several trips for AUC students throughout the month to disadvantaged communities in Egypt. The students engaged with locals through activities such as house painting, lantern-making workshops, and other activities for children.



14

Student organizations actively participate in community service and civic engagement



AUC Student Ambassadors Participate in a Beach Clean

In June 2022, AUC student ambassadors participated in a beach cleaning activity in Hurghada in collaboration with the Hurghada Environmental Protection and Conservation Association (HEPCA). The activity mainly focuses on removing toxic plastic waste harmful to marine life and people who visit the beach for recreational purposes. This initiative allowed important members of the AUC community to actively participate in environmental conservation and create spaces for sustainable beach shores.



AUC Road to College Program Provides Free English Language Online Courses for High School Students

In 2023, the University launched the [AUC Road to College](#) program to provide free and online self-paced courses specifically designed for high school students in Egypt. AUC is the first educational institution in the Middle East to offer this program, which is a fully online 12-course English-language program. These courses are tailored to be academically and culturally relevant, allowing Egyptian high school students to compete for admission to English-language universities, including AUC and other institutions in Egypt or abroad. The program also aligns with the University's strategy of increasing access to higher education institutions like AUC for talented students, regardless of their financial ability.

The program's launch event took place in February 2023 at AUC's New Cairo campus. The event was attended by several important individuals including members of AUC's Board of Trustees, Ahmad Dallal (AUC President), Ehab Abdel Rahman (AUC Provost), James Ketterer (AUC Dean of the School of Continuing Education), Hoda Mostafa (AUC Director of the Center for Learning and Teaching), and Ghada Elshimi (AUC Dean of undergraduate studies and The Academy of Liberal Arts).



12,500+¹¹

learners enrolled in the courses from various backgrounds



¹¹ Since its launch date in 2023

Partnerships

AUC Leads School-University Partnerships to Enhance Sustainability and Engagement in Public Schools

In 2023, [the Middle East Institute of Higher Education \(MEIHE\) at AUC](#) partnered with the [Egyptian Ministry of Education and Technical Education](#) to build a strong partnership with five neighboring public schools in New Cairo. This collaboration aims to implement gardening activities and training programs for students, with a focus on educating them about sustainable development, collaboration, and innovation.



The aim of this partnership is to enhance students' awareness of their interpersonal skills, engage them in community service, and foster an understanding of teamwork. The project's first phase involved transforming three public schools into green spaces by planting fruit trees, vegetables, and flowers, with the support of the AUC Student Union, clubs, and associations. In the second phase, the collaboration expanded to include school activities during summer vacation, such as green initiatives, art, theater, sports, and other life skills-related activities.

AUC and UNDP Collaboration to Advancing Sustainable Development Goals

In 2023, [AUC partnered with the United Nations Development Programme \(UNDP\)](#) in Egypt to promote knowledge exchange, sustainability, student engagement, and entrepreneurship and to support the UN Sustainable Development Goals in Egypt. The partnership signifies a commitment to utilizing the combined expertise, resources, and networks of both organizations to create lasting and positive change for Egyptian citizens, while contributing to the nation's overarching goals. The collaboration is dedicated to campus involvement through programming such as hackathons and boot camps, sustainable campus initiatives, and student-led outreach activities. Emphasizing evidence-based approaches to policy and programming, the partnership will leverage the expertise of AUC's labs and centers. It will also provide students with practical experience, mentorship opportunities, and internships to prepare them to be future leaders.



AUC and University of Sheffield Students Collaborate to Boost Egypt's First Bike Share Program

In 2022, AUC, UN-Habitat, the University of Sheffield, Sereira Creative Arts Academy, and Cairo-based NGO Alwan-wa-Awtar collaborated to transform Downtown Cairo into a cyclist-friendly haven.

The [Cairo Bike](#) is the first public bike-share project in Egypt. It was organized by the Cairo governorate in collaboration with UN-Habitat and the Drosos Foundation. This initiative offers a low-cost alternative to commuters and joyriders alike, whether they are zipping through traffic to work or leisurely touring the historical and cultural sights of the area. Cairo Bike stands out from other bike and scooter-sharing systems in Cairo due to its unique launch that has encouraged the city to reassess its infrastructure and implement changes to reduce traffic congestion and improve air quality. A walk along one of the city's primary roads, Talaat Harb, clearly demonstrates that such changes are being implemented as the street now boasts a newly established bike lane.



Mangrove Ecosystem Restoration Solution (MERS)

As part of their Global Climate Solutions Partnership International, banking giant HSBC has joined forces with the AUC's Center for Applied Research on the Environment and Sustainability (CARES). In 2021, the two organizations worked on a project called "Developing a Participatory [Mangrove Ecosystem Restoration Model as a Nature-Based Solution to Climate Change](#) (MERS)." The project aims to address the challenges of climate change and improve the resilience of the most vulnerable local communities in Egypt by restoring and rehabilitating the mangrove ecosystem. Through this, it reduces greenhouse gas emissions, enhances climate resilience, and promotes sustainable food and material production within thriving economies. The following are the five main pillars needed to achieve the project's objectives:

1. Mangrove Plantation

The MERS program aims to increase the area of mangrove stands in degraded sites along the Red Sea coast. They plan to do this by planting 10,000 new mangrove seedlings each year, which will total 50,000 seedlings with the help of the local community. As part of their commitment to tackling climate change, AUC collaborates with the MERS team to plant 10,000 mangrove seedlings along the Red Sea coast. This initiative aims to offset the CO₂ emissions produced during the transportation of the AUC team to and from Sharm ElSheikh for the COP27 event.



2. Climate-Smart Agri-Hub

The CARES-AUC established a Climate Smart Agri-Hub, which will operate as a state-of-the-art research and training center. It disseminates knowledge about mangroves and their vital role in enhancing the ecosystem. Furthermore, this facility will share the acquired knowledge with others, magnify its impact, and encourage public and private investment in climate action solutions.

3. Community Awareness and Participation

This pillar aims to ensure the successful scalability of mangrove forest development projects through capacity building of the community surrounding the mangroves, including its different clusters of adults and youth, males and females. This pillar's primary goal is to raise community awareness and disseminate project activities among interested parties through various activities, including beach cleanups, awareness sessions, webinars, and exhibitions.



4. Economic Empowerment

Developing eco-businesses centered around the mangroves is crucial for involving the community in the conservation efforts of these vital ecosystems. In collaboration with the local community, MERS is developing an ecotourism project called "Mangrovy Hamata" in the Wadi Elgemal Protectorate in Marsa Alam. MERS provides the necessary awareness and capacity-building training for the locals to ensure this eco-tourism project's successful operation and long-term sustainability.

Mangrove Ecosystem Restoration Solution (MERS)

5. GIS Platform

MERS is developing a GIS-based knowledge platform on mangrove forests, CO₂ sequestration, and biodiversity conservation to break barriers to investment in climate action by bridging the information gap and offering an inventory of ideas and lessons learned from the project.



Mangrove Ecosystem Restoration Solution participated in Cairo Water Week

The Mangrove Ecosystem Restoration Solution (MERS) project actively participated in the sixth edition of [Cairo Water Week 2023](#). During this event, the MERS team had the honor of hosting esteemed guests, including H.E. Dr. Hani Sweilam, Egypt's Minister of Irrigation and Water Resources, and H.E. Dr. Aoun Diab, Iraq's Minister of Water Resources. Furthermore, the MERS team interacted with visitors from Arab and African nations, introducing the project and participating in various activities.



Conferences and Events

AUC@COP27

The [Conference of the Parties](#) (COP) is a United Nations initiative that encourages international cooperation to mitigate the impacts of climate change. It seeks to stabilize greenhouse gas emissions, make global ecosystems more resilient, and urge nations to collaborate by identifying problems and designing integrative solutions. In 2022, COP 27 took place in Sharm el-Sheikh, Egypt, from November 8 to November 18. AUC proudly participated by presenting faculty research and students' activities, highlighting the University's work and Climate Change Initiative at the AUC pavilion that was located in the Green Zone.

Furthermore, AUC formed a task force to develop a master plan for participating in COP27. The AUC's COP27 Task Force was headed by Khaled Tarabieh, the University Architect and the Associate Professor of Sustainable Design. The task force members included Dina Abulfotuh, Fady Morcos, Hani Henry, Karim Seddik, Naila Hamdy, and Samer Atallah.

AUC Pavilion@COP27

The [AUC Pavilion](#), located at the Green Zone of COP27, was open to the public and was one of the main attractions in the zone. The Pavilion spans over an area of 100 square meters while featuring aquaponics station with live fish, a virtual reality experience to model the impacts of climate change, and a zero-energy sewage treatment prototype designed for rural areas. Furthermore, it showcased more than 160 projects, research papers, art installations, a play, and policy papers that highlight AUC's contributions to one of humanity's most significant existential challenges.

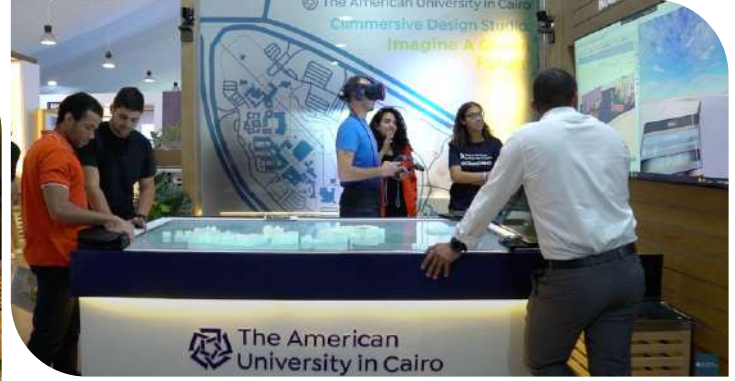
AUC@COP27



AUC's [10-day program](#) held at the pavilion was divided into daily themes: Finance Day, Science and Youth and Future Generation Day, Decarbonization Day, Adaptation Agriculture Day, Gender Day and Water Day, Civil Society and Energy Day, Biodiversity Day, and Solutions Day. Each day featured presentations and discussions on various climate change and environmental issues. Topics included addressing eco-anxiety among youth in Egypt, the role of media in environmental issues, using wind towers as a passive environmental solution for energy and carbon reduction, implementing thermally responsive walls as a cost-effective approach for sustainable urbanization in hot arid climates, and promoting rooftop planting.

AUC Unveils a New Climmersive Design Studio @COP27

During COP27, AUC unveiled [Egypt's first Climmersive Design Studio](#) at its pavilion. Co-founded by Khaled Tarabieh and Sherif Abdelmohsen, the design studio is a pioneering prototype for architectural education, introducing a climate change simulation program and design that combines traditional 2D architectural design with immersive and 3D technology. The studio aims to raise students' environmental awareness and support them in making climate-conscious decisions. The green architecture studio is interdisciplinary, allowing students to use immersive VR technology to express their ideas and concepts while raising environmental awareness.



USAID Egyptian Pioneers

During COP27, the U.S. Agency for International Development [USAID formally awarded AUC \\$86 million](#) for USAID Egyptian Pioneers. This new program provides scholarships and training to Egyptian students to foster a more inclusive and skilled Egyptian workforce while also assisting Egypt in achieving its climate goals, such as the environment and energy.



The Office of Sustainability @COP27

The Office of Sustainability was pleased to participate in COP27 at AUC pavilion and give two talks during COP27 at AUC's pavilion. Yasmin Mansour, Sustainability Director, and Sahar El Ghandour, Sustainability Manager, presented AUC's Carbon Footprint report and AUC's sustainability efforts regarding the University's operations.



The second Annual AFRICA FM conference: Towards Sustainable Development

The second annual Africa Facilities Management Association (Africa FM) Conference was held from 24th to 26th November 2022 at AUC, hosted by The Egyptian Facilities Management Association (EGYFMA). Africa Facility Management is a leading regional network and the voice of Facility Management professionals interested in advancing Facility Management in Africa. It provides a standardized framework for Facility Management professionals across Africa. The conference, themed "Accelerating FM Across Africa: Towards Sustainable Development," aimed to create a meeting hub for the Facility Management community of organizations and individuals across Africa, featuring around 30 countries.



She Can - She Greens 23

The Programs and Partnerships department at the School of Continuing Education held the event on March 4th in 2023, [She Can](#) - She Green, which Kuwait Energy Egypt and Deutsche Bank sponsored. The purpose of the event was to support sustainability and promote a green environment. During the event, 100 female participants were honored for successfully completing the Management and Entrepreneurship program. The day was dedicated to showcasing the green projects of female entrepreneurs, as well as hosting workshops and panel discussions on topics such as green business, green innovation in real estate, and digitization.



Egypt 13th CSR Forum

The 13th Corporate Social Responsibility (CSR) Forum of Egypt took place in Soma Bay from March 2 to 5, 2023. This annual forum aims to promote the government's efforts by providing opportunities for stakeholders to network and form partnerships for sustainable development. In 2023, the focus was on Decarbonization & Sustainable Finance Transformation. Sustainability Director, Yasmin Mansour and Sustainability Manager, Sahar El Ghandour attended the forum on behalf of the AUC, in which they participated in the sessions that covered

covered topics such as Standards for Preparing Comprehensive ESG Reports, Measuring the Carbon Footprint of Products and Institutions, Green Buildings, and Sustainable Finance. Besides the main forum sessions, several professional workshops were held on Environmental Product Declaration (EPD), preparing reports on Environmental, Social, and Governance (ESG) performance within institutions, and workshops on the Excellence in Design for Greater Efficiencies (EDGE), a green building standard, and an international green building certification system.



AASHE Conference 2023

Yasmin Mansour, Sustainability Director at the Office of Sustainability, recently attended the AASHE 2023 Conference & Expo in Boston, Massachusetts, from October 29 to 31, 2023. Notably, she was accepted as a presenter for an on-demand session titled "Reporting the Institution's Impact on Climate Change & Sustainability Reporting" on the AASHE online platform. This session on sustainability reporting aligns with the conference's emphasis on effective communication, strategic partnerships, and fostering a stronger, more resilient campus sustainability community. The AASHE conference provides a transformative experience for higher education sustainability professionals, offering innovative strategies to transform institutions effectively. The conference's focus areas encompass crucial subjects, including gaining influence, campus decarbonization, sustainability assessment and reporting, racial equity and social justice, communications and storytelling, mental health and wellness, and teaching & learning.



Net Zero International Conference

The Net Zero International Conference was held at The American University in Cairo from May 26 to 28, 2023, in coordination with the Egypt Green Building Council (EGBC) and the AUC. Dr. Salah El Haggar, Professor of Energy and Sustainable Development at the Mechanical Engineering Department, is the president of EGBC and of this conference. This conference united educational institutions, government representatives, the private sector, financial institutes, and civil society to explore opportunities and challenges, and share knowledge to help pave the way toward a Net Zero future. Distinguished by H.E. Dr. Yasmine Fouad, Egypt's Minister of Environment; H.E. Dr. Nevine El-Qabbaj, Egypt's Minister of Social Solidarity, and H.E. Dr. Hani Sewilam, Egypt's Minister of Irrigation and Water Resources.



The anticipated impacts of climate change threaten several aspects of Egyptians' lives, including water availability, food security, and energy supply. Meanwhile, higher temperatures and faster evaporation rates are projected to raise the water requirements of key Egyptian crops. Egypt's large agricultural sector will likely suffer from a hotter, drier climate and exacerbating water scarcity, potentially impairing the country's capacity to sustain its growing population and impacting its export-driven economy, where agricultural goods play a pivotal role. However, Egypt has adopted an approach toward achieving sustainable development characterized by a high level of ambition, firm commitment, and dynamic innovation.



AUC at COP28

AUCians across disciplines made their voices heard at [COP28](#), the world's largest climate conference, held in Dubai, United Arab Emirates, from November 30 to December 12, 2023. AUC faculty, students, and alumni shared their knowledge and expertise on a wide range of topics, such as green buildings and education, showcased award-winning sustainable startups, and delivered powerful speeches. The faculty that participated are Dina Abdel Fattah, Department of Economics, Salah El Haggag Department of Mechanical Engineering, Omar Abdelaziz, Department of Mechanical Engineering, and Seham Elmrayed, Institute of Global Health and Human Ecology. In addition, Anisa (Nissa) Bek, a student, delivered the keynote speech, "[We Will Not Let You Get Away With It](#)," along with more than 20 alumni also participated in the conference.



Khaled Tarabieh, University Architect and Associate Professor of Sustainable Design, is [Named Among the Top 100 Middle East Sustainability Voices by Climate Penpal and Gulf Intelligence](#)



COP28 UAE

#AUCCLIMATECHANGE



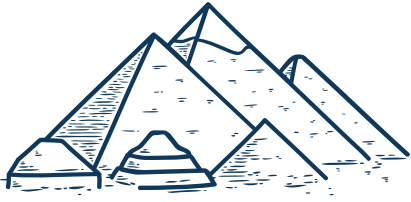
Global Focus

Excellence in Sustainability

Since its founding in 1919, AUC has been a distinctly global University. While many of our sustainability efforts are internally focused, we maintain an outward, global focus by participating in several international sustainable associations.



Sustainability at a Glance



Cairo



Egypt



MENA Region



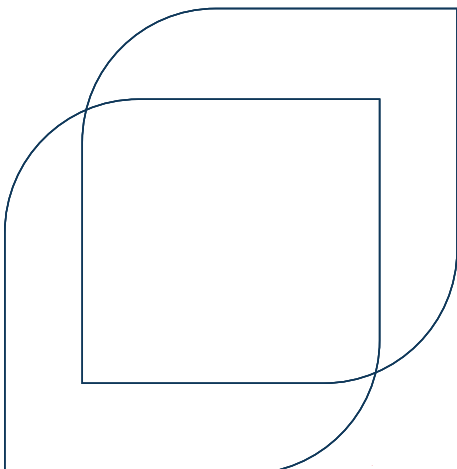
World

Global Focus



7

global sustainability
initiative memberships



1st

sustainable
University in Africa
and Egypt according
to the 2023 UI
GreenMetric World
University Ranking

Rankings and Memberships

Race to Zero



In 2022, The American University in Cairo became a signatory to the global UN-backed [Race to Zero Campaign for Universities and Colleges](#). The Race to Zero initiative was launched by the United Nations Framework Convention on Climate Change (UNFCCC) in 2019. By being a signatory, AUC is added to the UNFCCC Race to Zero campaign. As this initiative aims to reduce carbon emissions, AUC, as a signatory, has committed to reducing its carbon emissions by 2035 and achieving a nearly net-zero campus by 2050.

In response to this campaign, a task force named "AUC Net-Zero Task Force," headed by the Office of Sustainability, comprised of AUC faculty, staff, and students, was formed to develop the University's Net-Zero Plan. In 2023, the task force published AUC's Net-Zero Plan in a report named "[The American University in Cairo's Carbon Emissions Management and Mitigation Plan](#)." The AUC Net-Zero Plan is based on sustainability best practices across the University's design, operations, activities, culture, research, and academics. It outlines a vision for a nearly net-zero emissions campus, utilizing different scenarios to reduce future emissions. Moreover, AUC will implement a series of initiatives to achieve emissions' reductions in the future.



United Nations Global Compact



In 2016, AUC declared its commitment to the [United Nations Global Compact](#) (UNGC), a strategic policy initiative for organizations working in alignment with the Sustainable Development Goals. The Compact is the world's largest voluntary sustainability framework with guiding principles concerning human rights, environmental stewardship, labor, and anti-corruption conservation measures. The Office of Sustainability will submit its fifth [Communication on Engagement](#) (COE), through the University's Sustainability Report, by the end of 2024. The COE is intended as a statement of continued support for the UN Global Compact and its ten principles. As part of UNGC's Egypt office, AUC has participated in training and networked with various Egyptian businesses.

UNEP Green Universities Toolkit



In 2015, AUC's sustainable campus practices were featured in the [United Nations Environment Programme \(UNEP\) Green Universities Toolkit](#) as a global example of a green, low-carbon institution. The toolkit showcases the strategies of leading green universities to inspire similar institutions to better utilize resources and reduce their energy consumption and carbon footprint.

The Princeton Review Guide to Green Colleges



AUC is the only University in the region and is among the universities outside North America recognized in [The Princeton Review Guide to Green Colleges](#). In 2023, AUC was named in The Princeton Review Guide to Green Colleges for 8 years. The University scored a green rating of 95 out of 99, according to The Princeton Review Guide to Green Colleges 2023 edition.

AUC ranks 1st in Africa and Egypt

The American University in Cairo ranked first in Egypt and Africa and 175th out of 1,182 institutions across 84 countries in the [2023 University of Indonesia GreenMetric World University Rankings](#), an annual publication focused on raising awareness of sustainability within universities. AUC has been ranked first in Egypt in the UI GreenMetric World University Rankings for 6 years.

Using a questionnaire filled out by universities, the University of Indonesia (UI) calculates the rankings by looking at several key categories related to sustainability, including transportation, energy and climate change, setting and infrastructure, waste, water, and education. In 2023, a new theme, "Instituting UI GreenMetric World University Rankings: The Way Forward," was introduced to encourage greater participation from universities worldwide and foster a collective commitment to building sustainable campuses for the future.

UNGC PRME

As part of the duty of an academic institution participating in the UNGC, AUC has lent its capacity to the UNGC and other UN initiatives, specifically the [Principles for Responsible Management Education](#) (PRME). Through the John D. Gerhart Center, the AUC School of Business has implemented PRME and has become a leader for PRME in Egypt and throughout the MENA region. In 2016, AUC hosted the regional PRME conference with the theme of "Action for PRME and SDGs." The forum brought together professors from MENA universities participating in PRME and international PRME working group members for a series of workshops and discussions. Hosted at AUC's New Cairo campus, they worked on linking PRME to the SDGs, sharing information across institutions, and PRME's relation to anti-corruption. These types of discussions are crucial to spreading the UNGC's mission of making progress on the SDGs.

Taking a role in sustainability, the School of Business has been a Communicating Signatory since 2011 of the PRME. As a signatory, the school ensures that sustainability and social responsibility values are integrated into learning, teaching, and research.

AASHE

AUC has been a member for the [The Association for Advancement of Sustainability in Higher Education](#) (AASHE) since 2011. AASHE is a membership association of colleges & universities, nonprofits, and businesses that work together to lead the sustainability transformation. The Office of Sustainability represents AUC in AASHE's annual conferences; besides, it adopts AASHE events, and practices, such as the Campus Sustainability Month in October, besides, AUC is featured in AASHE's newsletter.





Governance

Way Forward: Sustainable Future

After shedding light on AUC's different sustainability efforts, it is clear that governance plays a crucial role in AUC's commitment to addressing the climate crisis as one of the greatest challenges of our time. Across the University, AUC community members, faculty, students, and staff are working together to generate and spread the basics of sustainability for current and future development.



Good Governance

To promote sustainability initiatives and practices on campus, it is essential to comply with both internal and external guidelines. This can only be achieved by maintaining good governance within the University. Good governance involves developing policies, procedures, and best practices to integrate sustainability factors into AUC's policies, establishing a robust framework for responsible decision-making, and promoting a sustainable culture to ensure the efficient and effective management of resources while encouraging the University community to act sustainably. By doing so, universities can play a significant role in creating a more sustainable future for all.

Internal

- Campus 2026: AUC's visionary development project, designed for student-centered excellence and sustainability.
- AUC is continuously committed to further advancing its sustainability scope in the campus expansion by obtaining LEED Certifications for buildings and incorporating innovative waste and recycling mechanisms.
- Further planning is to install Electric Vehicles (EV) stations in the parking lots and integrate them into future plans for the campus expansion.
- AUC Environmental and Social Management System (ESMS) Report.
- AUC Carbon Emissions Management and Mitigation Plan - Net Zero Plan.
- Monitoring and reducing the energy consumption across AUC to reduce its carbon emissions.
- Issuance of Anti-Harassment and Non-Discrimination Policy.
- Launch of Climate Change Initiative.
- Launch of Mental Health and Well-being Initiative.
- Tobacco-Free Community Policy.
- Launch of Eliminating Single-Use Plastic Free Initiative.
- Designated parking spots for carpoolers.
- Biological Control Program to minimize pesticide use and reduce pollution hazards.
- Using treated wastewater to irrigate the landscaped areas on campus.
- AUC's campus-wide recycling program includes 48 sorting stations on the New Cairo Campus for collecting plastic, cans, and trash.
- Establishment of the Office of Sustainability.

External

- Signatory to UN Race to Zero by committing to reducing its carbon emissions by 2035 and achieving a nearly net-zero campus by 2050.
- AUC is a member of The Association for Advancement of Sustainability in Higher Education (AASHE).
- AUC, School of Business, has been a Communicating Signatory of the Principles for Responsible Management Education (PRME).
- Recognition in The Princeton Review Guide to Green Colleges.
- Featured in the United Nations Environment Programme (UNEP) Green Universities Toolkit as a global example of a green, low-carbon institution.
- Declared its commitment to the United Nations Global Compact (UNGC), a strategic policy initiative for organizations working in alignment with the Sustainable Development Goals.

Spotlight: Environmental and Social Management System (ESMS) Report

In December 2022, AUC established the “AUC Environmental and Social Management System (ESMS) Report”. This report describes the management’s processes and procedures that formulate the ESMS established by AUC. The ESMS is designed to analyze and control environmental and social risks and impacts in compliance with the [IFC Performance Standards on Environmental and Social Sustainability](#). It will guide the design and implementation of IFC Projects and Activities to avoid, minimize, and mitigate environmental and social risks and impacts regarding [AUC’s Campus 2026: AUC’s visionary development project, designed for student-centered excellence and sustainability](#).

Additionally, it will assist in developing the project and identifying the necessary environmental and social documents, as well as the fundamental entities responsible for implementation, supervision, monitoring, and reporting. Since the report verifies the effectiveness of proposed mitigation measures given in environmental and social plans during the project’s implementation and operational phases, it is anticipated that the ESMS will need to be updated and enhanced periodically to address changing conditions, regulatory requirements, or practical implementation issues. AUC administration will use the information in the Biennial reports to decide on improvements and direct the ESMS team to implement as needed.



Vision for Moving Forward

This report highlights the significance of collaboration in our sustainability endeavors, particularly in areas where we find limitations. It is crucial that we persist in developing and implementing new projects and initiatives to ensure a sustainable future. In order to move forward, we will continue working on practices that can be instilled on campus to further our sustainability commitment and to position our University as a sustainability leader not only locally and regionally but also globally. As per the AUC's Carbon Emissions' Management and Mitigation Plan, the dedicated task force envisioned the future steps highlighted below.

Optimizing Operations:

Reducing emissions from regular operations of existing and new assets. This can involve following the relevant guidelines that support cutting emissions resulting from waste, transport, paper use, fertilizers, and refrigerants.

New Initiatives:

Introducing new sustainability initiatives, such as investing in solar energy as a cleaner source of energy. In addition, the University can improve the performance of its existing and new buildings through passive and active systems and infrastructure controls.

Cultural Transformation:

Encouraging sustainable behavior across campus by innovating ways to weave the sustainability culture into the consciousness of the University's community members.

References

Reference	Link
The American University in Cairo	https://www.aucegypt.edu/about
AUC Strategic Priorities RoadMap	https://www.aucegypt.edu/strategic-priorities-roadmap
AUC Profile and Factbook	https://documents.aucegypt.edu/Docs/Publications/Factbook%20of%202023-2024.pdf
Office of Sustainability	https://www.aucegypt.edu/sustainability/office
2030 Agenda for Sustainable Development	https://sdgs.un.org/2030agenda
17 Sustainable Development Goals	https://www.un.org/sustainabledevelopment/
The Sustainable Development Goals Report	https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf
SDG Summit	https://www.un.org/en/conferences/SDGSummit2023/programme
AUC's Climate Change Initiative	https://www.aucegypt.edu/climate-change
Race to Zero Campaign for Universities and Colleges	https://www.educationracetozero.org
The American University in Cairo's Carbon Emissions Management and Mitigation Plan	https://documents.aucegypt.edu/Docs/about_sustainability/AUC%27s%20Carbon%20Emissions%20Management%20and%20Mitigation%20Plan%20-%20Net%20Zero%20Plan.pdf
Eliminate most of the single-use plastics	https://www.aucegypt.edu/about/statements/campus-2026
ESG principles	https://guidehouse.com/insights/state-and-local-government/2023/esg-materiality-in-higher-education
Global Impact	https://www.aucegypt.edu/sustainability/global-impact
Schools	https://www.aucegypt.edu/academics/schools
The School of Business	https://business.aucegypt.edu
Principles for Responsible Management and Education	https://www.unprme.org/school-of-business-the-american-university-in-cairo/
AUC is a leading member of the Africa Chapter of Business Schools for Climate Leadership	https://www.aucegypt.edu/media/media-releases/auc-school-business-leading-african-business-schools-launch-climate-leadership
The School of Business recognized with the Business School Impact System label	https://business.aucegypt.edu/news/bsis-label-enduring-positive-impact-renewed-auc-school-business
The School of Sciences and Engineering	https://sse.aucegypt.edu
The School of Global Affairs and Public Policy	https://gapp.aucegypt.edu
The School of Humanities and Social Sciences	https://huss.aucegypt.edu
The School of Continuing Education's	https://sce.aucegypt.edu/about
ARCH 4532: Urban Design and Landscape Architecture	https://issuu.com/momenelhusseiny/docs/urban_design_volume_2_compressed

References

Reference	Link
ARCH 3554: Design Studio III Imaging a Fossil Fuel Free Future	https://de.cdn-website.com/7d3d46fee35e4f7490a33d8fd24246de/files/uploaded/design%25203%2520documentation.pdf
SOC 3085: Environmental Issues in Egypt	https://catalog.aucegypt.edu/preview_course_nopop.php?catoid=20&coid=32892
EDUC 3011: Educating Children and Youth for a Sustainable Future	https://catalog.aucegypt.edu/preview_course.php?catoid=38&coid=92371
EDUC 5236: Education for Sustainable Development	https://catalog.aucegypt.edu/preview_course_nopop.php?catoid=36&coid=83708
Center for Applied Research on the Environment and Sustainability	https://sse.aucegypt.edu/centers-labs/cares
Master's of Science	https://www.aucegypt.edu/academics/graduate-programs/sustainable-development-msc
Graduate Diploma	https://www.aucegypt.edu/academics/graduate-programs/sustainable-development-diploma
Al Alfi Foundation Sustainable Development Fellowship	https://www.aucegypt.edu/admissions/fellowships/listings/al-alfi-foundation-sustainable-development
Dr. Ahmed and Ann M. El-Mokadem Fellowships	https://www.aucegypt.edu/admissions/fellowships/listings/ahmed-ann-elmokadem
Mark Turnage Fellowship for Sustainable Development	https://www.aucegypt.edu/admissions/fellowships/listings/mark-turnage-fellowship-sustainable-development
Tomorrow's Leaders Graduate Students Program (TLG)	https://www.aucegypt.edu/admissions/fellowships/listings/tomorrows-leaders-graduate-program
Eduniversal	https://www.best-masters.com/ranking-master-energy-and-natural-resources-in-africa/master-of-science-in-sustainable-development-concentration-in-green-technologies-the-university-in-cairo-school-of-sciences-and-engineering.html
European Quality Framework	https://europa.eu/europass/en/europass-digital-tools/european-qualifications-framework
Water, Energy, and Food Technologies Diploma	https://sse.aucegypt.edu/programs/graduate/water-energy-food-diploma
Executive Diploma in Sustainability	https://www.aucegypt.edu/admissions/fellowships/listings/al-alfi-foundation-sustainable-development
COP28	https://www.cop28.com/en/
UAE Ministry of Climate Change and Environment	https://www.moccae.gov.ae/en/home.aspx
University Leadership Council of the UAE	http://www.ulc.ae
Dubai International Financial Center Academy	https://academy.difc.ae
Water Scarcity	https://www.aucegypt.edu/index.php/climate-change/water-scarcity

References

Reference	Link
Energy Transition	https://www.aucegypt.edu/index.php/climate-change/energy-transition
Green Finance	https://www.aucegypt.edu/index.php/climate-change/green-finance
Urban Development	https://www.aucegypt.edu/index.php/climate-change/urban-development
Public Health	https://www.aucegypt.edu/index.php/climate-change/public-health
Research Centers	https://www.aucegypt.edu/research/centers
AUC Venture Lab	https://business.aucegypt.edu/research/centers/vlab
Access to Knowledge for Development Center	https://business.aucegypt.edu/research/centers/a2k4d
Center for Entrepreneurship and Innovation	https://business.aucegypt.edu/research/centers/cei
John D. Gerhart Center for Philanthropy, Civic Engagement and Responsible Business	https://business.aucegypt.edu/research/centers/gerhart
Qalaa Financial Services Lab	https://business.aucegypt.edu/research/centers/qalaa-financial-services-lab
The Behavioral and Economic Decision-Making Laboratory	https://business.aucegypt.edu/research/centers/behavioral-and-economic-decision-making-lab
Abdul Latif Jameel Poverty Action Lab Middle East and North Africa	https://business.aucegypt.edu/research/centers/j-pal-middle-east-and-north-africa
Women on Boards Observatory	https://business.aucegypt.edu/research/centers/women-boards-observatory
Center for Applied Research on the Environment and Sustainability	https://sse.aucegypt.edu/centers-labs/cares
Youssef Jameel Science and Technology Center	https://sse.aucegypt.edu/centers-labs/yjstrc
Eltoukhy Learning Factory	https://sse.aucegypt.edu/centers-labs/eltoukhy-learning-factory
Center of Nanoelectronics and Devices	https://sse.aucegypt.edu/centers-labs/CND
Process and Product Development Unit	https://sse.aucegypt.edu/centers-labs/PPDU
Educational Virtual Environment	https://sse.aucegypt.edu/centers-labs/educational-virtual-environment-lab
Kamal Adham Center for Television and Digital Journalism	https://gapp.aucegypt.edu/centers/kamal-adham-center
Center for Migration and Refugee Studies	https://gapp.aucegypt.edu/academics/centers/cmrs
Prince AlWaleed Bin Talal Bin AbdulAziz AlSaud Center For American Studies and Research	https://gapp.aucegypt.edu/academics/centers/casar
Cynthia Nelson Institute for Gender and Women's Studies	https://gapp.aucegypt.edu/academics/centers/igws
Middle East Studies Program	https://gapp.aucegypt.edu/academics/centers/mesc
Institute of Global Health and Human Ecology	https://sse.aucegypt.edu/academics/departments/institute-global-health-and-human-ecology

References

Reference	Link
The Water-Energy-Food (WEF) Nexus	https://sse.aucegypt.edu/centers-labs/cares/research
Center for Entrepreneurship and Innovation	https://business.aucegypt.edu/research/centers/cei
Hack22	https://hack22.untapcompete.com#:~:text=Sustainability%2C%20Climate%20Change%20and%20Sustainable%20Healthcare%20Technology&text=As%20climate%20change%20affects%20every,ensure%20an%20effective%20learning%20environment
Pitchathon 22	https://business.aucegypt.edu/research/centers/cei/about/CEI-news#:~:text=Pitchathon%2022%3A%20From%20sustainable%20ofashion%20to%20digital%20payment%20solutions&text=The%20Business%20Plan%20Project%2C%20Pitchathon,the%20Business%20Association%20(BA)
Rabeha Program	https://business.aucegypt.edu/research/centers/cei/our-activities/un-women-wee-program
Business Egypt	https://business.aucegypt.edu/research/centers/cei/our-activities/business-egypt#:~:text=Business%20Egypt%2C%20a%20USAID%20project&text=The%20goal%20of%20the%20program,investment%20in%20the%20local%20market
SANAD Fund of Micro, Small, and Medium Enterprises	https://sanad.lu/the-fund
Venture Mentoring Services	https://business.aucegypt.edu/research/centers/cei/our-activities/vms-program
Misr Elkheir Foundation	https://mekeg.org/ar
Sugar Cane Bagasse Ash as a Partial Cementitious Material	https://www.youtube.com/watch?v=MPNGRZRcs9o
Digital Twins for Automated Guided Vehicles	https://www.youtube.com/watch?v=7OBXeNdKYdQ
IEEE Smart World Congress 2023	https://ieee-smart-world-congress.org/program/digitaltwin2023/overview
Prototypes for Humanity	https://www.prototypesforhumanity.com/project/twinrescue/
Zero-Carbon Future Heritage	https://www.aucegypt.edu/media/media-releases/zero-carbon-future-cairo%E2%80%99s-heritage-auc-architecture-graduates-showcase
third year in a row	https://www.aucegypt.edu/research/impactful-researchers
database	https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6
AUC Faculty Develop 2 Winning Courses on Climate Change and Sustainability during the Research and Creativity Convention 2023	https://www.aucegypt.edu/news/auc-faculty-develop-new-courses-climate-change-sustainability-during-2023-research-and
Research and Creativity Convention	https://www.aucegypt.edu/research/convention
Identifying Façade Orientations with Closely Similar Thermal Performance for Unifying Façade Design Features in Hot Arid Climate	https://www.mdpi.com/2075-5309/13/10/2639
The Rise and Evolution of Wind Tower Designs in Egypt and the Middle East	https://www.mdpi.com/2071-1050/15/14/10881

References

Reference	Link
Designing an Automated Multi-Objective Optimization Model for Integrated and Sustainable Farming	https://ascelibrary.org/doi/abs/10.1061/9780784483961.005
Realizing Sustainable Development Goal 11 in Public Realm Designs through Regional Landscaping	https://ic-sd.org/wp-content/uploads/2023/10/2023-submission_213.pdf
ICSD 2023	https://ic-sd.org/2023/10/25/proceedings-from-icsd-2023/
United States Green Building Council	https://www.usgbc.org/guide/om
landscape	https://www.aucegypt.edu/about/offices/integrated-services-office/landscape
During the Spring 2023 Semester	https://us4.campaign-archive.com/?u=a2e2d10cce6bcbf439430967f&id=00e88d2d69
schedule	https://www.aucegypt.edu/services/bus
Fall 2023, AUC designated a reserved parking spots for carpoolers	https://www.aucegypt.edu/about/statements/reserved-carpool-parking
parking policy	https://documents.aucegypt.edu/Docs/Policies/Parking%20Policy.pdf
Climate Change 2022: Mitigation of Climate Change	https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf
Carbon Footprint Report	https://documents.aucegypt.edu/Docs/about_sustainability/CFP%202023%20Report.pdf
AUC's Carbon Footprint for Academic Year (AY) 2023	https://documents.aucegypt.edu/Docs/about_sustainability/Carbon%20Footprint%202024%20Brochure.pdf
e-newsletters	https://www.aucegypt.edu/sustainability/newsletters
Office of Institutional Equity	https://www.aucegypt.edu/institutional-equity
AUC's Anti-Harassment and Non-Discrimination Policy	https://documents.aucegypt.edu/Docs/Policies/Anti-Harassment%20and%20Non-Discrimination%20Policy%208-5-20.pdf
Msh Zanbik (It's Not Your Fault) initiative won the Times Higher Education	https://www.aucegypt.edu/media/media-releases/auc%E2%80%99s-msh-zanbik-anti-sexual-harassment-arts-project-awarded-times-higher
Best Smoke-Free University	https://www.aucegypt.edu/media/media-releases/auc-wins-first-place-best-smoke-free-university-region
Tobacco-Free Campus Policy	https://documents.aucegypt.edu/Docs/Policies/Tobacco-Free%20Campus.pdf
University's Smoking Cessation Clinic	https://www.aucegypt.edu/news/stories/smoking-cessation-clinic-helps-ucians-break-smoking-habits
The Center for Student Well-Being	https://www.aucegypt.edu/student-life/well-being
Student Accessibility Services	https://www.aucegypt.edu/student-life/well-being/accessibility-services
Psychological Counseling Services	https://huss.aucegypt.edu/about/centers/psychological-counseling-services-training-center

References

Reference	Link
Training Center	https://huss.aucegypt.edu/about/centers/psychological-counseling-services-training-center
University President's statement on the Mental Health Initiative Kickoff Event	https://www.aucegypt.edu/about/statements/mental-health-initiative-kickoff
Mental Health and Wellbeing Initiative	https://www.aucegypt.edu/mental-health-and-well-being
AUC Community Mental Health Wellness Task Force	https://www.aucegypt.edu/mental-health-and-well-being/taskforce
Volunteers in Action	https://www.instagram.com/via.auc/?hl=en
Mashroo3 Kheir	https://www.instagram.com/Mashroo3KheirAUC/
Hand in Hand	https://www.instagram.com/handinhandauc/?hl=en
Help Club	https://www.instagram.com/helpclubauc/
Student Union	https://www.instagram.com/auc.su/?hl=en
AUC Road to College	https://www.aucegypt.edu/academics/free-english-courses
the Middle East Institute of Higher Education (MEIHE) at AUC partnered with the Egyptian Ministry of Education and Technical Education	https://www.aucegypt.edu/media/media-releases/auc-leads-school-university-partnerships-enhance-sustainability-and-engagement
AUC partnered with the United Nations Development Programme	https://www.aucegypt.edu/news/auc-undp-collaboration-advancing-sustainable-development-goals#:~:text=AUC%2C%20UNDP%20Collaboration%20Advancing%20Sustainable%20Development%20Goals,-October%209%2C%202023&text=AUC%20has%20partnered%20with%20the,Sustainable%20Development%20Goals%20in%20Egypt.
Cairo Bike is the first public bike-share project in Egypt	https://www.aucegypt.edu/news/auc-university-sheffield-students-collaborate-boost-egypts-first-bike-share-program
Mangrove Ecosystem Restoration Model as a Nature-Based Solution to Climate Change	https://sse.aucegypt.edu/centers-labs/cares/community-initiatives/mangrove-ecosystem-restoration
Cairo Water Week 2023	https://www.cairowaterweek.eg/cww2023/
Conference of the Parties	https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop?page=%2C%2C%2C2
COP 27	https://unfccc.int/cop27
AUC Pavilion	https://www.aucegypt.edu/media/media-releases/auc-opens-its-pavilion-cop27-cutting-edge-climate-research-initiatives-and
10-day program	https://documents.aucegypt.edu/Docs/about/Agenda%20COP27%20Final.pdf
Egypt's first Climmersive Design Studio	https://www.aucegypt.edu/media/media-releases/auc-unveils-new-climmersive-design-studio-cop27
USAID formally awarded AUC	https://www.aucegypt.edu/about/usaaid-egyptian-pioneers
She Can	https://sce.aucegypt.edu/programs/she-manages-her-business-she-can

References

Reference	Link
We Will Not Let You Get Away With It	https://www.youtube.com/watch?v=nmLyly9DUmI&t=10s
Named Among the Top 100 Middle East Sustainability Voices by Climate Penpal and Gulf Intelligence	https://drive.google.com/file/d/1z2k9BrpHkeSy24iMP94agOKK2bLXIMOC/view
Race to Zero Campaign for Universities and Colleges	https://www.educationracetozero.org
The American University in Cairo's Carbon Emissions Management and Mitigation Plan	https://documents.aucegypt.edu/Docs/about_sustainability/AUC%27s%20Carbon%20Emissions%20Management%20and%20Mitigation%20Plan%20-%20Net%20Zero%20Plan.pdf
United Nations Global Compact	https://www.unglobalcompact.org
Communication on Engagement	https://unglobalcompact.org/participation/report/coe
United Nations Environment Programme (UNEP) Green Universities Toolkit	https://wedocs.unep.org/bitstream/handle/20.500.11822/11964/Greening%20University%20Toolkit%20V2.0.pdf?sequence=1&isAllowed=y
The Princeton Review Guide to Green College	https://www.princetonreview.com/college-rankings/green-guide/green-colleges-by-location
2023 University of Indonesia GreenMetric World University Rankings	https://greenmetric.ui.ac.id/rankings/overall-rankings-2023
Principles for Responsible Management Education	https://www.unprme.org
The Association for Advancement of Sustainability in Higher Education	https://www.aashe.org
IFC Performance Standards on Environmental and Social Sustainability	https://www.ifc.org/en/insights-reports/2012/ifc-performance-standards
AUC's Campus 2026: AUC's visionary development project, designed for student-centered excellence and sustainability	https://www.aucegypt.edu/about/new-cairo-campus/campus-2026
Sustainable Practices in Higher Education: Finance, Strategy, and Engagement	https://www.amazon.co.uk/Sustainable-Practices-Higher-Education-Engagement-ebook/dp/BoBXNQ9Y8S/ref=sr_1_2?dib=eyJ2IjoiMSJ9.ElBrOIXGjIMdBMOZNAKfB-EWeiLfbdkRQKzETjHillHRZud14bmTF1BZHxZBByxNv1oO-w6AUICdA2gbXl7Rlq3gcYyi5r3xbfSIP-MpMVZavZAbs4mTrn9oOcBEaK.DG_ScjlNy4No9-R5_Z6nTHKGT-ePW8Qt9JSsFPPEjo&dib_tag=se&qid=1713338188&refinements=p_27%3ASherif+Goubran&s=books&sr=1-2
Artificial Intelligence for Sustainability: Innovations in Business and Financial Services	https://www.amazon.co.uk/Artificial-Intelligence-Sustainability-Innovations-Financial-ebook/dp/BoCNJC39GJ/ref=sr_1_5?dib=eyJ2IjoiMSJ9.ElBrOIXGjIMdBMOZNAKfB-EWeiLfbdkRQKzETjHillHRZud14bmTF1BZHxZBByxNv1oO-w6AUICdA2gbXl7Rlq3gcYyi5r3xbfSIP-MpMVZavZAbs4mTrn9oOcBEaK.DG_ScjlNy4No9-R5_Z6nTHKGT-ePW8Qt9JSsFPPEjo&dib_tag=se&qid=1713338188&refinements=p_27%3ASherif+Goubran&s=books&sr=1-5

To learn more about the Office of Sustainability, visit
www.aucegypt.edu/sustainability



printed on recycled paper