UNIVERSITY SUSTAINABILITY REPORT

2025

CAIRO UNIVERSITY

Associate Prof. Mohamed Naguib Mohamed

Executive manager of sustainability office, Cairo University

DECEMBER 2025

It is my pleasure to announce Cairo University (CU) 2025 Sustainability report. Cairo University has thoroughly integrated sustainability into its operational, educational (academic), and administrative practices. This integration follows Egypt's Vision 2030 and the UN Sustainable Development Goals. Cairo university has incorporated environmental and sustainability concepts into a significant portion of its academic programs, with around 65% of courses addressing these
topics. Cairo University runs initiatives like the "Sustainability Ambassadors" program and provides a "Student Sustainable Life Guide" to raise awareness and encourage sustainable behaviors among students. Cairo University encouraged faculties to expand their efforts by launching Best environmentally friendly competition. Cairo University has adopted many programs for waste reduction, reuse, recycling, composting, and the safe disposal of hazardous medical waste. Cairo University also has many Initiatives concerning saving energy including the replacement of incandescent lamps with LEDs, a plan for a solar energy project, and efforts to purchase energy- saving devices. This has resulted in significant energy cost savings.
This report validates our persistent commitment to sustainability. The creation of a living laboratory for sustainability, in which our teaching and research inform campus operations and strengthen community partnerships, is under underway. The completion of this report is crucial as a review of past performance as well as a baseline against which future sustainability efforts will be measured. The first sustainability plan for the University puts out an ambitious set of goals and methods for integrating sustainability throughout the University from 2021 to 2025.
All these efforts improved the ranking of Cairo University in QS- sustainability to be 370 worldwide. We also have honor to gain Silver Star in Sustainability Tracking, Assessment & Rating System and welling to gain gold star in next year. I express my gratitude to all employees in Cairo University who provided the data needed to carry out this enterprise-wide evaluation

Prof. Dr. Mohamed Abdel Sadek

President of Cairo University

I’m glad to present Cairo University’s 2025 Sustainability Report. This annual document addresses the university’s ongoing commitment to sustainability and demonstrates how sustainable practices generate economic, social, and environmental value for our community and the areas we serve. These practices aim not only to reduce costs and waste but also to enhance the learning and working

environment, thereby improving the overall quality of university life. The principles of sustainability continually guide Cairo University’s actions, enriching education and preparing students to tackle global challenges, while supporting more responsible and innovative research that addresses the era’s most pressing issues. Cairo University Sustainability Report outlines the university’s strategies and decisions related to sustainability governance, records the economic value attracted, distributed, and retained, and measures impacts across key areas: research, teaching, people, society, and the environment. Announcing this report aims to inform the public requires an ongoing commitment to optimizing resource management, reducing waste, and improving operational efficiency. Reporting is a central element of this process: it involves a consistent, transparent assessment of the university’s performance and impacts, fostering a culture of continuous improvement. Additionally, the report directly engages students, faculty, professional staff, and the local community in evaluating and refining the university’s strategies and impacts.

Prof. Dr. Mohamed Refaat El Serky

Vice president of community service and environment development

Cairo University is striving to become a sustainable campus and has been ranked among the world's top universities in sustainability according to the AASHE Index for 2025. The university focuses on integrating sustainability into its curricula and research and on implementing environmentally friendly practices such as using solar panels to light buildings and reduce greenhouse gas emissions. The international recognition: Cairo University has been listed among the world's leading educational institutions in sustainability according to the AASHE Index for 2025, reflecting a shift in its educational and research philosophy.

Prof. Sohair Fahmy

University President's Advisor for Sustainable Development

Cairo University has become an influential actor on the global sustainability map through the policies and initiatives it has launched to raise environmental awareness and implement best sustainability practices. The global documentation recognizing Cairo University among the top performing universities in sustainability reflects international appreciation for the university and embodies the success of its ongoing efforts to embed the principles and culture of sustainability within the university community and beyond

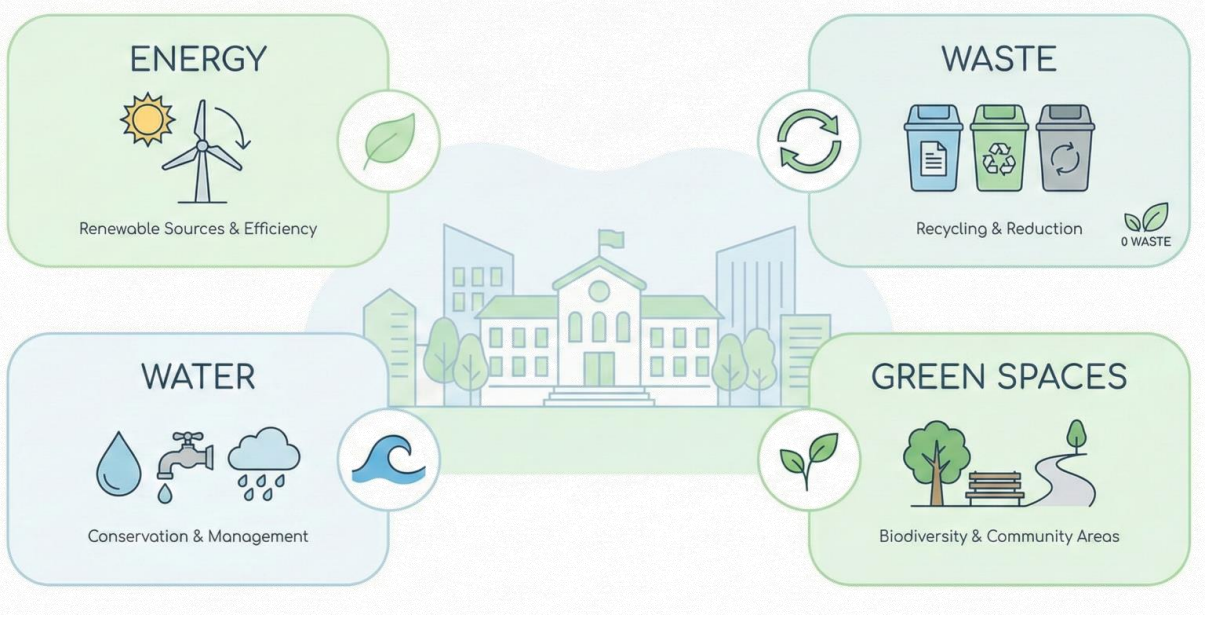
Associate Prof. Mohamed Naguib Mohamed

Executive manager of sustainability office, Cairo University

About the Report

Cairo University produced 4 Sustainability Report, and this is the Fifth report for 2025. Sustainability reports measure our performance across many criteria that measure sustainability performance and the progress we have made toward our sustainability goals by following seven key standards: Infrastructure - Learning and Scientific Research - Cairo University and society- Energy and climate change- Waste management - Water management and Transportation inside Cairo University.

In this report we emphasized on the international standards in sustainability that Cairo University follows as well as the key factors that enabled Cairo University to be in top universities in Egypt as well as Africa, Arab countries. Cairo University is characterized by its unique location, upgraded infrastructure to cope with sustainability standards in green building. It is also characterized by offering teaching programs that allies with international standards of education. In research sector Cairo University in characterized by its encouraging researchers, staff members and even students to publish in highly ranked journals. Cairo University also is making huge efforts concerning climate change mitigation solutions, energy saving and conversion to renewable energy in many campus buildings. Also, many initiatives have been adopted by Cairo University in waste management, water management and transportation that aids in alignment with sustainable development goals. Cairo University is famous for its social activities with partners outside campus such as NGO's to spread the culture of sustainability in society in all fields.



Cairo University Strategic Sustainability Report 2025: An Integration of Framework between Institutional Standards and SDGs towards a Fourth-Generation University Model

This report serves as the comprehensive reference document establishing the introduction to the Cairo University Sustainability Report for 2025. It offers an in-depth strategic analysis of the University's methodology in aligning its seven operational standards with the United Nations Sustainable Development Goals (SDGs) and Egypt's Vision 2030. Amidst rapid global shifts towards more environmentally and socially responsible higher education institutions, Cairo University—a prestigious institution established in 1908—is adopting a radical transformation strategy towards the concept of "Fourth-Generation Universities." This report goes beyond listing achievements; it deconstructs the infrastructural and intellectual framework of this transformation, demonstrating with evidence and precise data how the University has evolved into a "Living Laboratory" for sustainability.

1. Strategic Context: The Shift to Fourth-Generation Universities

1.1. Historical Evolution and Future Commitment

With a massive population of over 207,000 students and an area exceeding 5.8 million square meters across 14 locations, Cairo University functions as a complete urban entity directly impacting the environment of Giza and Greater Cairo. Transitioning from the traditional model of a university as solely a beacon of knowledge to a "Fourth Generation" model entails integrating education and research with innovation and entrepreneurship to serve societal and environmental causes. This shift is not merely a slogan, but an imperative driven by 21st-century challenges, primarily climate change and resource scarcity.

The report indicates that under the leadership of Prof. Dr. Mohamed Abdel Sadek, the University has set an ambitious sustainability plan for 2021–2025, aiming to embed sustainability into the University's operational and academic fabric. This comprehensive approach means sustainability is no longer a peripheral function but part of the institution's DNA, where every decision—academic or administrative—is evaluated based on its environmental and

societal impact. Linking this internal direction with the global agenda (SDGs) gives Cairo University's experience international weight, making the 2025 report a reference document that transcends national borders.

1.2. Institutional Governance and Decentralization: The Green Office Network

A key insight of this report is the analysis of the governance structure managing sustainability. The University did not stop at establishing a central Sustainability Office led by Associate Prof. Mohamed Naguib Mohamed; it took a bold step toward decentralization by establishing "Green Offices" in every faculty and institute. This networked structure ensures sustainability concepts permeate various disciplines, from humanities to applied sciences.

The effectiveness of this system is evident in the "Best Environmentally Friendly Faculty Competition," which has become a driver for positive competition. The Faculty of Urban and Regional Planning winning first place in the competition's second edition carries deep significance; it confirms that the academic discipline of the faculty (Urban Planning) was practically applied to its own buildings, transforming the campus into an applied model of what is taught in lecture halls. This dynamic creates an environment of continuous innovation, where every entity within the University strives to improve its environmental performance not just for compliance, but for excellence and leadership.

1.3. Sustainability as a Standard for Quality and International Competitiveness

The report demonstrates deep awareness that sustainability has become a governing standard in international rankings. Cairo University's achievement of the 370th global rank in QS Sustainability and the Silver Star in STARS, with ambitions for Gold , reflects a precise understanding of modern academic standards. Quality of education is no longer measured solely by student-faculty ratios, but by energy efficiency, carbon footprint, and commitment to social justice.

This report systematically links these rankings to national goals. Egypt's Vision 2030 intersects directly with the SDGs, and by adopting these standards, Cairo University positions itself as the state's executive arm in achieving this vision. By integrating sustainability concepts into 65% of courses, the University ensures the graduation of a generation of leaders and professionals who carry sustainability thinking into the labor market, multiplying the University's positive impact beyond its walls.

Therefore, the sustainability standards at Cairo University will be presented below.

Standards

Infrastructure

- Buildings and furnishings: safety, ventilation, lighting, accessibility, seismic resistance, emergency areas.
- Service facilities: lecture halls, scientific/technical laboratories, libraries, computer centers, cafeterias, mosques, corridors, and parking.

Learning and Scientific Research

- Student life, peer education programs, outreach efforts, staff development, community partnerships, inter-campus collaborations, continuing education, and community service.
- Teaching and learning methods: variety of instructional methods (lectures, project-based learning, professional learning), availability of modern educational technologies, student engagement and assessment.
- Research strategy and quality: project eligibility criteria, consideration of research ethics, peer review, research methodology and transparency of results.

Cairo University and society

- Societal impact metrics relevant to a Cairo University as a major Egyptian public university.
- Phased implementation plan suited to Cairo University's scale and stakeholders (faculty, students, and government partners).

Energy and climate change

- Energy demand and climate policy affect campus operations, student education, research opportunities, and societal leadership of Cairo university in Egypt.
- Transformation to renewable sources of energy.

Waste management

- Waste minimization and source reduction.
- Segregation at source (general, recyclables, organics, hazardous).
- Safe handling and storage.
- Recycling and composting programs.
- Data collection, reporting, and continuous improvement.

Water management

- Water use efficiency and metering.
- Leak detection and rapid repair.
- Non-potable water reuse and recycling where feasible.
- Sustainable landscaping and irrigation.
- Data transparency and reporting.

Transportation (inside Cairo university)

- Campus Transportation (facilities, security, planning, student representatives, local transit partnerships).
- Regular reporting to university leadership and stakeholders.
- Parking management.
- Carpooling and biking (priority parking, rider credits).

Methodological Framework for Alignment: The Standards and SDGs Matrix

To ensure the accuracy and comprehensiveness of the report's introduction, a strategic matrix was developed linking the seven standards adopted in Cairo University's report with the 17 Sustainable Development Goals. This alignment is not superficial; it is based on an analysis of the sub-indicators of each UN goal and how they are met through the University's specific actions.

Cairo University Sustainability Standard	SDG	
Infrastructure		**Goal 9:** Industry, Innovation, and Infrastructure
		**Goal 11**: Sustainable Cities and Communities
Learning & Research		**Goal 4:** Quality Education
		**Goal 8:** Decent Work and Economic Growth
Society		**Goal 17:** Partnerships for the Goals
		**Goal 1:** No Poverty

Cairo University Sustainability Standard	SDG	
		**Goal 3:** Good Health
Energy & Climate		**Goal 7:** Affordable and Clean Energy
		**Goal 13:** Climate Action
Waste Management		**Goal 12:** Responsible Consumption and Production
		**Goal 15:** Life on Land
Water Management		**Goal 6:** Clean Water and Sanitation
		**Goal 14:** Life Below Water
Transportation		**Goal 11:** Sustainable Cities and Communities
		**Goal 13:** Climate Action

This matrix forms the backbone of the report, where subsequent sections will deconstruct and analyze each standard in depth, illustrating how the University translates these theoretical goals into tangible, measurable reality.

Infrastructure

1- Infrastructure

The university's infrastructure represents a fundamental pillar closely interconnected with the Sustainable Development Goals (SDGs), extending far beyond mere buildings and classrooms to form an integrated network of educational, research, administrative, recreational, and health services, all operating in harmony to support the university's vision of comprehensive education, knowledge development, innovation, and the advancement of the academic community. For instance, the large student population at Cairo University, exceeding 207,853 students, is not merely a statistical figure; it reflects the significance of a carefully designed infrastructure capable of meeting the needs of a diverse, multidisciplinary community. Accommodating such a substantial number of students requires modern, fully equipped lecture halls, advanced scientific laboratories, a variety of student facilities, and widely accessible libraries. All of this demonstrates the university's commitment to achieving SDG 4 (Quality Education) and providing equal opportunities for all students in line with SDG 10 (Reduced Inequalities), ensuring that every student, regardless of background or ability, can access high-quality education and academic facilities.

Similarly, the academic and administrative staff, numbering over 14,518 members, form a vital component of the university's human infrastructure. They contribute significantly to the quality of education, guide scientific research, and manage diverse academic programs, reflecting the university's high operational capacity and achieving a balance between human resources and educational facilities, in line with SDG 4 while underscoring the importance of SDG 8 (Decent Work and Economic Growth) in developing education and research capabilities within a sustainable and balanced environment.

The diversity of academic disciplines, evident in the presence of 28 faculties, institutes, and educational centers covering sciences, engineering, medicine, agriculture, economics, law, arts, and social sciences, highlights the richness of knowledge offered by the university. This multidisciplinary environment enhances opportunities for innovation and the development of scientific and research capacities, representing a core element of the university's sustainable

development, aligned with SDG 4 and SDG 10, and making Cairo University a versatile educational environment capable of meeting labor market demands and addressing the needs of both local and global communities.

Moreover, the total campus area, amounting to approximately 5,881,503.12 m², provides a broad framework for planning integrated and sustainable facilities, including academic buildings, laboratories, lecture halls, sports facilities, and student and administrative service areas. This expansive space enables the development of a comprehensive educational environment that supports innovation and sustainable education, enhancing SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities). The campus's scale offers flexibility for future expansion, incorporation of renewable energy systems, improvement of wastewater networks, and enhancement of transportation and mobility services within the campus.

In terms of green spaces and open areas, totaling approximately 5,172,743.72 m², equivalent to 87.9% of the campus area, the university demonstrates its commitment to environmental sustainability. These spaces improve air quality, mitigate heat, create a healthy environment, and provide opportunities for recreational and sports activities, directly supporting students' and staff's physical and mental well-being. This aligns with SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDG 15 (Life on Land), making the campus a living model for implementing environmental sustainability principles in higher education.

In the context of operational sustainability, Cairo University has been ranked among the world's top universities in sustainability according to AASHE and UI GreenMetric indicators between 2022 and 2025. This reflects the university's commitment to SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 17

(Partnerships for the Goals), confirming that the infrastructure goes beyond traditional facilities to include resource management, energy efficiency, climate considerations, and operational effectiveness within the campus.

Examining the 12 equipped academic buildings and 18 state-of-the-art scientific laboratories, it is evident that these facilities support practical and experimental education, enhance scientific research, and position infrastructure as a key driver of innovation and knowledge, aligning with SDG 4 and SDG 9. Additionally, approximately 70% of classrooms are smart classrooms, providing a hybrid learning environment that supports digital education and increases teaching efficiency and student engagement. Energy-efficient facilities and modern wastewater systems contribute to reducing consumption and protecting the environment, directly linked to SDG 7 and SDG 11.

Sports facilities, including stadiums and gymnasiums, are integral to infrastructure that promotes students' and staff's physical health and well-being,

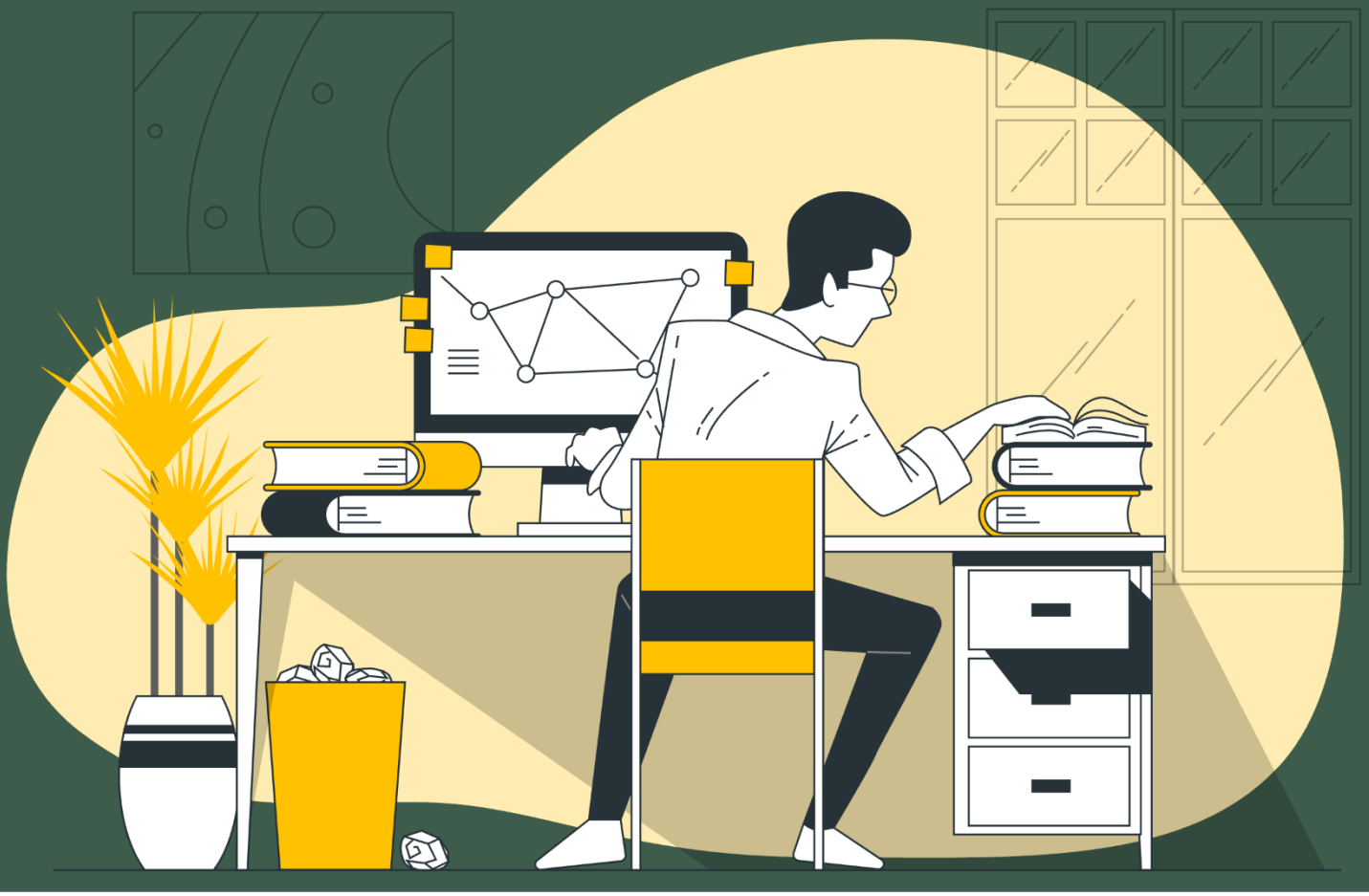
supporting SDG 3 (Good Health and Well-being) and SDG 11. Meanwhile, the university's comprehensive internet network ensures connectivity across all classrooms, enabling remote learning and efficient scientific research, further strengthening academic capacity in line with SDG 4 and SDG 9.

In summary, this analysis demonstrates that every element of the university's infrastructure from academic buildings, laboratories, classrooms, sports facilities, green spaces, energy and wastewater systems, to internet networks is not merely a university facility but a strategic asset directly linked to the Sustainable Development Goals. This positions Cairo University as a living model of an

integrated sustainable university, combining quality education, innovation, environmental sustainability, student well-being, and support for the local and global academic community.

Infrastructure Component	Description	Relation to SDGs	Notes
Number of Students	Over 207,853 students	SDG 4 (Quality Education) + SDG 10 (Reduced Inequalities)	The large student body requires robust infrastructure to serve a diverse student population.
Number of Academic/Support Staff	Over 14,518 members	SDG 4 (Quality Education) + SDG 8 (Decent Work and Economic Growth)	Contributes to education and research quality; reflects high operational capacity.
Number of Faculties / Institutes	28 faculties/institutes/centers	SDG 4 (Quality Education) + SDG 10 (Reduced Inequalities)	Diversity of disciplines supports knowledge development within the university community.
Total Campus / Facility Area	5,881,503.12 m²	SDG 9 (Industry, Innovation, and Infrastructure) + SDG 11 (Sustainable Cities and Communities)	Large area enables planning of integrated and sustainable facilities.
Green Spaces / Open Areas	5,172,743.72 m², equivalent to 87.9% of campus	SDG 11 (Sustainable Cities and Communities) + SDG 13 (Climate Action) + SDG 15 (Life on Land)	Essential for microclimate regulation, air quality, and promoting health and well-being.
Sustainability Ranking (AASHE / UI GreenMetric)	Ranked among the world's top sustainable universities 2022–2025	SDG 7 (Affordable and Clean Energy) + SDG 12 (Responsible Consumption and Production) + SDG 13 (Climate Action) + SDG 17 (Partnerships for the Goals)	Reflects institutional commitment to environmental and sustainability policies.
Academic Buildings	12 fully equipped buildings	SDG 4 (Quality Education) + SDG 9 (Industry, Innovation, and Infrastructure)	Supports teaching and provides a safe, flexible learning environment.
Scientific Laboratories	18 laboratories equipped with modern instruments	SDG 4 (Quality Education) + SDG 9 (Industry, Innovation, and Infrastructure)	Enhances scientific research and practical experimentation.
Energy & Sanitation Facilities	Energy-efficient systems and modern wastewater networks	SDG 7 (Affordable and Clean Energy) + SDG 11 (Sustainable Cities and Communities)	Contributes to reducing consumption and protecting the environment.
Smart Classrooms	70% of classrooms equipped with interactive devices	SDG 4 (Quality Education) + SDG 9 (Industry, Innovation, and Infrastructure)	Supports digital and hybrid learning.
Sports Facilities	Playgrounds and gymnasiums available for students	SDG 3 (Good Health and Well-being) + SDG 11 (Sustainable Cities and Communities)	Promotes physical health and student well-being.
University Internet Network	Strong network coverage across all classrooms	SDG 4 (Quality Education) + SDG 9 (Industry, Innovation, and Infrastructure)	Enables remote learning and scientific research.

Learning and Scientific Research



2- Learning and scientific research

Education and scientific research at Cairo University represent core pillars that reflect the institution's academic standing and its leadership in the field of higher education. They form an integral part of the university's strategic vision to promote sustainable development and innovation. The university offers a wide range of academic programs across all faculties and institutes, including undergraduate degrees in every discipline, as well as master's and doctoral programs in various specializations. This diversity establishes Cairo University as a comprehensive educational environment that integrates undergraduate and postgraduate studies, directly supporting SDG 4 (Quality Education) by ensuring broad human-capacity development.

The language of instruction at the university is primarily Arabic in most programs, with an increasing reliance on English particularly in science, technology, engineering, mathematics (STEM), and postgraduate programs. Some faculties also offer programs in additional languages such as French, thereby supporting SDG 10 (Reduced Inequalities) by providing students with multilingual competencies and enhancing their adaptability to global academic settings.

Teaching methods at Cairo University are diverse and include lectures, seminars, laboratory work, and practical field training. Laboratory sessions, clinical training (in medical programs), and fieldwork are essential components of scientific and health-related disciplines. This creates an interactive and integrated learning environment that reinforces SDG 9 (Industry, Innovation, and Infrastructure) by promoting applied education focused on acquiring practical and research skills.

Scientific research constitutes one of Cairo University's most distinguished strengths. The university places significant emphasis on research output, publishing in high-impact international journals, and collaborating with national and international institutions. These efforts reflect the university's commitment to SDG 8 (Decent Work and Economic Growth) through strengthening research capacities and fostering an innovative environment that advances knowledge and technology. The university also offers sustainability-related courses in 26 departments, demonstrating its dedication to environmental awareness and the integration of sustainable development concepts into academic programs, which aligns with SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

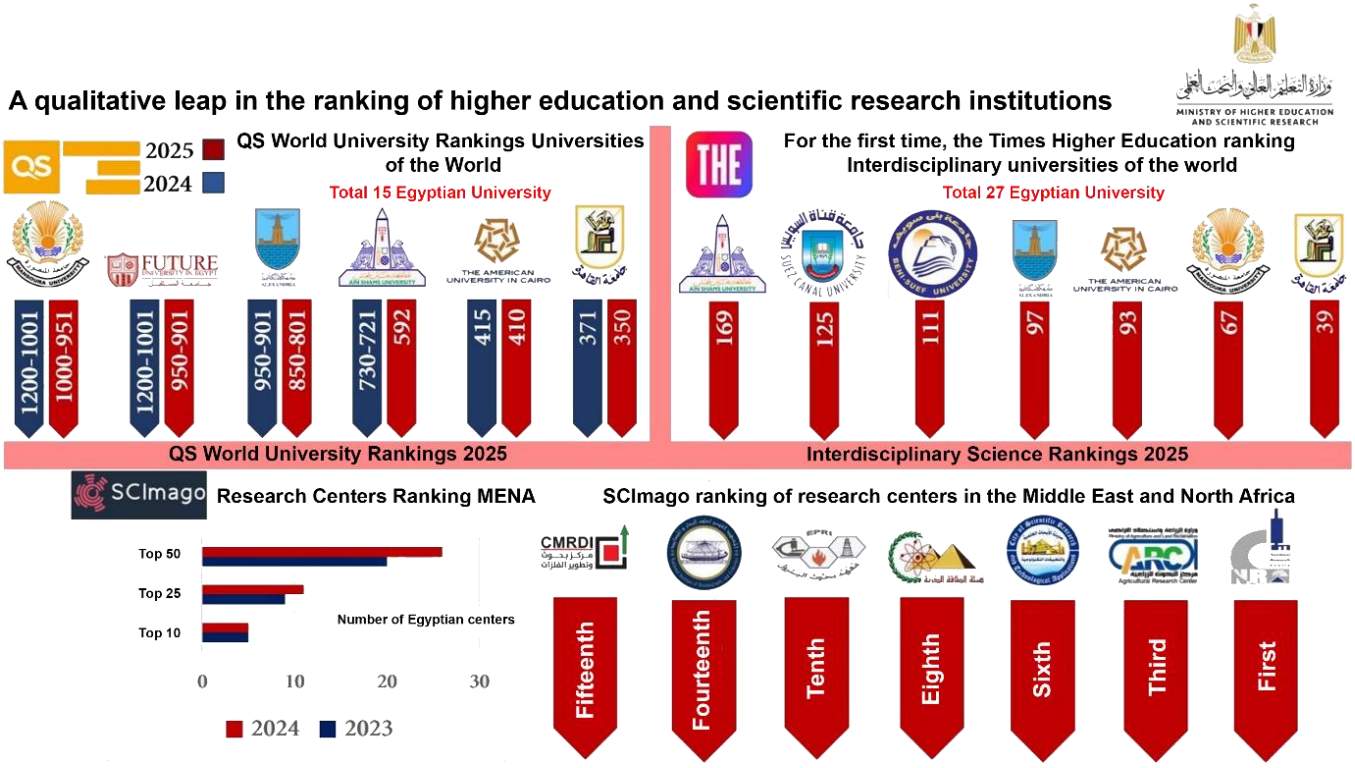
In terms of global rankings, Cairo University is ranked 347th worldwide according to the QS World University Rankings and 1st nationally for the second

consecutive year. The university is also listed among the top 100 globally in several subject areas, including Petroleum Engineering (38th globally), Pharmacy and Pharmacology (72nd globally), Data Science and AI, Mining Engineering, as well as Veterinary and Dental Sciences ranked within the 51–120 range. These achievements highlight the high quality of education and research at the university and strengthen its international standing, directly supporting SDG 4 and SDG 9 by promoting academic excellence and innovation.

Additional indicators further underscore the university's distinction, such as

- the Shanghai ARWU ranking, where Cairo University ranks first in Egypt and among the top 400 worldwide
- the Webometrics ranking, placing the university among the top 1% globally
- the Stanford list of the world's top scientists (2025), which includes 76 Cairo University scholars among the top 2% internationally.
- Leiden Ranking: The University ranks first in Egypt and Africa, and 164th globally
- Times Arab Rankings: It ranks eighth among Arab universities and first among Egyptian universities

These accomplishments demonstrate the university's advanced research performance, supporting SDG 9 (Innovation and Infrastructure) and SDG 17 (Partnerships for the Goals) through enhanced international collaboration and knowledge exchange.



Based on these indicators, it is evident that education and scientific research at Cairo University are not merely traditional academic activities; they represent a strategic and integrated framework that supports human development, innovation, sustainability, and active engagement at both local and global levels. This positions the university as a leading model of sustainable higher education aligned with the United Nations Sustainable Development Goals (SDGs).

Education & Research Axis	Description	Relation to SDGs	Notes
Academic Programs	Bachelor's, Master's, and PhD programs offered across 28 faculties and institutes	SDG 4: Quality Education + SDG 10: Reduced Inequalities	The diversity of programs supports knowledge development and provides equal learning opportunities.
Languages of Instruction	Arabic as the primary language; extensive use of English in STEM fields and postgraduate studies; French in selected faculties	SDG 4: Quality Education + SDG 10: Reduced Inequalities	Enhancing multilingual skills strengthens students' competitiveness locally and globally.
Teaching Methods	Lectures, seminars, laboratory work, and practical field training	SDG 4: Quality Education + SDG 9: Industry, Innovation & Infrastructure	Diverse teaching approaches support applied learning and foster innovation.
Scientific Research	Publishing in international journals and partnerships with national and international institutions	SDG 8: Decent Work & Economic Growth + SDG 9: Innovation & Infrastructure + SDG 17: Partnerships for the Goals	Research activities enhance innovation and elevate the university's global academic standing.
Sustainability Courses	26 departments offering sustainability-related courses	SDG 12: Responsible Consumption & Production + SDG 13: Climate Action	Integrating sustainability within curricula strengthens environmental awareness and responsible practices.
Global Rankings	*QS Ranking:* 347th globally – 1st nationally *Shanghai ARWU:* 1st in Egypt and among the top 400 worldwide	SDG 4: Quality Education + SDG 9: Innovation & Infrastructure	Reflects excellence in education and research, enhancing the university's international reputation.
Highly Cited Scientists	76 scholars listed among the world's top 2% according to Stanford (2025)	SDG 9: Innovation & Infrastructure + SDG 17: Partnerships for the Goals	Indicates strong research impact, promoting international collaboration and knowledge exchange.

Cairo University and society

3- Cairo University and society

Cairo University's relationship with society represents a foundational pillar of its developmental mission and national role, operating through a comprehensive model that integrates both campus engagement and community engagement. The university has embraced a sustainability-oriented vision that embeds environmental awareness, social responsibility, and participatory culture across its academic, administrative, and community structures. These efforts align strongly with the Sustainable Development Goals particularly SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), and SDG 17 (Partnerships for the Goals).

At the level of campus engagement, the university prioritizes sustainability integration within campus life through programs that extend beyond classroom instruction. Initiatives such as Sustainability Advocates provide students with practical training and participation in sustainability-driven activities, while Green Office Programs target staff and faculty to promote eco-friendly administrative practices and responsible resource management. A prominent tool in this context is the Best Eco-Friendly Faculty Competition, now in its second edition, which serves as a practical mechanism for evaluating the environmental performance of faculties and institutes. The most recent round witnessed the participation of 21 faculties and institutes, reflecting a growing environmental culture and a healthy competitive spirit toward sustainability compliance. The competition's Supreme Committee included leading academics and sustainability experts, ensuring strong governance and institutional credibility. Results placed the Faculty of Urban and Regional Planning first, followed by the Faculty of Engineering, the Faculty of Mass Communication, and the Faculty of Economics and Political Science, highlighting their leadership in applying environmental sustainability criteria.

On the level of community engagement, Cairo University continues to reinforce its national responsibility by supporting environmental and social issues and participating in key sustainability events locally and internationally such as the "75th Anniversary: From Lab to Market" seminar. The university was also invited by the Supreme Council of Universities to present its best practices in the

Best Eco-Friendly Faculty Competition, contributing to establishing environmental sustainability principles across Egyptian universities. Notably, Cairo University won first place nationwide for two consecutive years, demonstrating its institutional leadership and its capacity to champion sustainability transformation in higher education.

Furthermore, the university maintains robust community partnerships with governmental and non-governmental organizations, implements community service programs targeting vulnerable groups, and supports environmental awareness initiatives that respond to societal needs. Through research-based solutions and applied community projects, the university leverages its academic capital to address national challenges, enhance community resilience, and promote sustainable development. These efforts reflect the university's commitment to SDG 17 (Partnerships) and demonstrate its central role as a national platform for knowledge transfer and community empowerment.

State Information Service
Your Gateway to Egypt

Urban planning faculty wins 1st place in Cairo univ. eco-friendly competition

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Head of Public Health Department
Prof. Rania Ahmed Zayed
Professor of Clinical and Chemical Pathology
Prof. Mervat Mamdouh Khorshid
Professor of Clinical and Chemical Pathology
Assoc. Prof. Sherine Esmat Hussein
Associate Professor of Public Health
Tuesday 25th Febrary 2025
Faculty of Medicine - Cairo University

Overall, Cairo University's engagement with both the campus community and the broader society positions it not only as an academic institution but also as a proactive driver of sustainable development. By integrating sustainability across education, operations, outreach, and partnerships, the university stands as a leading model in Egypt and the region for sustainable higher education and community-oriented development.

Cairo University and society		Description	Relation to SDGs	Notes
Campus Engagement	**Campus Engagement**	Sustainability initiatives within campus life such as Sustainability Advocates and Green Office Programs	SDG 4 (Quality Education) + SDG 11 (Sustainable Cities)	Enhances environmental awareness among students, staff, and faculty.
	Eco-Friendly Faculty Competition	Second edition; 21 faculties and institutes participated	SDG 11 (Sustainable Cities) + SDG 12 (Responsible Consumption and Production)	Practical tool for assessing and promoting environmental performance.
	Competition Results	1st: Urban and Regional Planning, 2nd: Engineering, 3rd: Mass Communication, 4th: Economics & Political Science	SDG 11 + SDG 13 (Climate Action)	Reflects faculty-level implementation of sustainability practices.
	Supreme Committee for Evaluation	Committee includes deans, sustainability experts, and senior academic leaders	SDG 17 (Partnerships)	Ensures transparency, credibility, and institutional governance.
Community Engagement	**Community Engagement**	Participation in local and international sustainability events and initiatives	SDG 11 + SDG 17	Reinforces the university's national and regional role in sustainability.
	Supreme Council of Universities Invitation	Sharing best practices to support sustainability in Egyptian universities	SDG 17 (Partnerships)	Cairo University serves as a national reference model.
	National Awards	Winner of first place in eco-friendly competition for two consecutive years	SDG 13 (Climate Action) + SDG 11	Highlights leadership in environmental transformation in higher education.
	Community Partnerships	Collaboration with governmental and non-governmental actors in community service and environmental initiatives	SDG 17	Supports local development and enhances societal resilience.

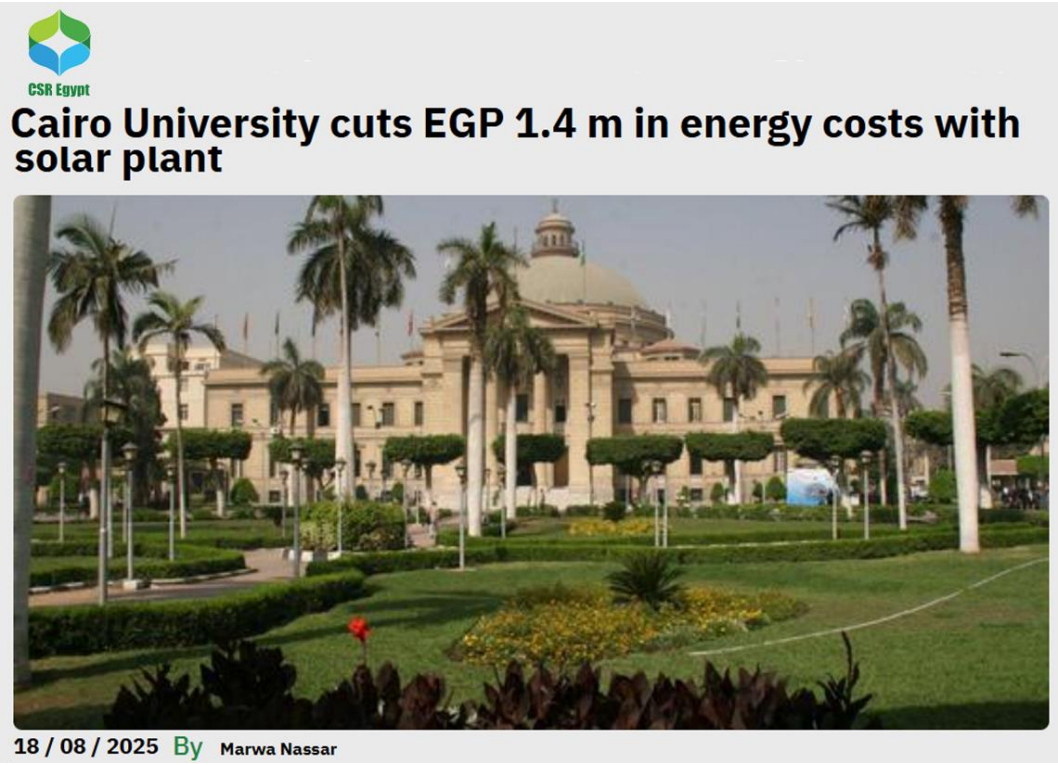
Energy and climate change

4- Energy and climate change

Cairo University demonstrates a clear commitment to an effective strategy for energy management and climate change response through the adoption of a comprehensive environmental vision and a responsible energy-use policy across its campus. In 2025, the university officially launched its Energy Usage Policy, which aims to rationalize energy consumption, reduce its carbon footprint, and enhance the efficiency of buildings and facilities.

This policy includes concrete operational measures, such as replacing traditional appliances with high-efficiency models (including Energy Star-certified devices), standardizing LED lighting in corridors, classrooms, and laboratories, and installing motion sensors in restrooms, meeting rooms, and common areas allowing lights to switch on only when spaces are occupied and turn off upon exit, significantly minimizing energy waste. Fans and cooling systems have also been upgraded to high-efficiency categories (A or B) as part of improving electricity performance.

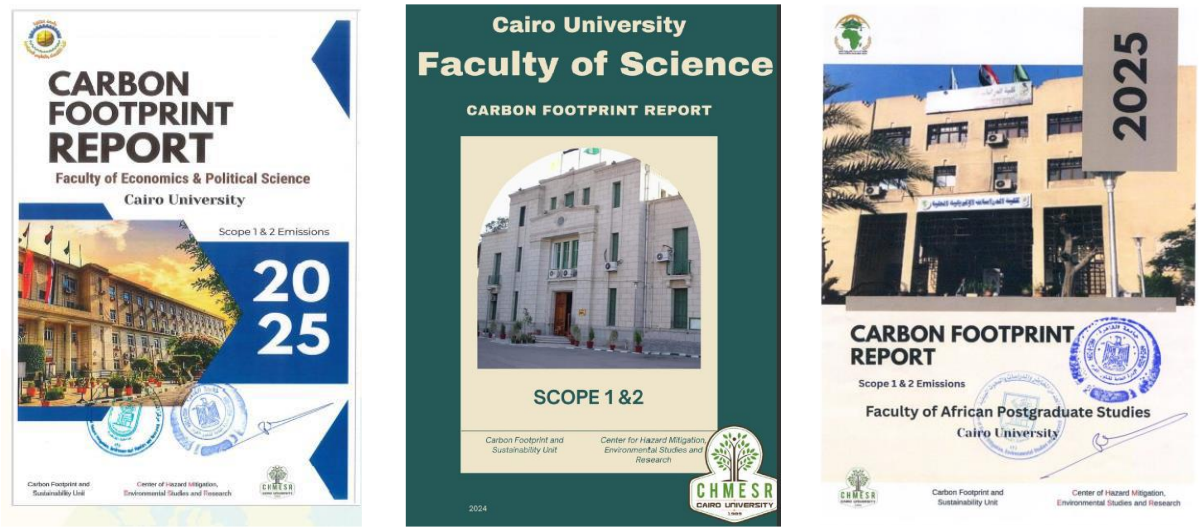
On the renewable-energy front, the university has taken tangible steps by installing solar-power plants on the rooftops of several campus buildings and replacing a large proportion of outdoor lighting across all departments and campus lamp posts with LED units. According to the university's sustainability report, a 660-kW solar system installed across 13 buildings contributed to a substantial reduction in annual electricity costs and reduced emissions by approximately 1,100 tons of CO_2 per year, equivalent to removing 240 cars from the roads.



Beyond operational improvements, Cairo University has integrated energy and sustainability within its academic programs by offering courses and training modules in sustainable energy and environmental engineering. Student projects are strongly encouraged, including the design of low-cost solar water heaters for use in student housing and campus cafeterias. This approach reflects the university's aim not only to implement institutional solutions but also to cultivate a new generation of engineers and scientists capable of advancing sustainable innovations in Egypt and the region.

Regarding climate-change management, several faculties have issued periodic carbon-footprint reports such as the Faculty of Economics and Political Science, the Faculty of Graduate Studies for Education, and the Faculty of Science ensuring that these assessments are conducted at least once every two years as part of the university's commitment to monitoring and evaluating its environmental impact.

Solar power plants on the roofs of Cairo University- buildings



Carbon Footprint Report for Some of Cairo University's Faculties

Taken together, these efforts show that Cairo University is moving steadily toward a comprehensive environmental transition within higher-education institutions spanning efficient energy use, renewable-energy production, educational integration, and continuous environmental assessment positioning the university as a national model for embedding sustainability and climate action into academic and institutional practice.

Energy and climate change	Description	Relation to SDGs	Notes
Environmental Vision & Energy Policy (2025)	Cairo University released its first institutional Energy Usage Policy aiming to reduce consumption, enhance efficiency, and minimize emissions.	SDG 7 – Affordable & Clean Energy	First institutional energy policy among Egyptian universities.
Replacement of Traditional Devices	A gradual plan to replace traditional electrical devices with energy-efficient models (Energy Star).	SDG 13 – Climate Action	Helps reduce annual electrical loads significantly.
High-Efficiency Lighting	Standardization of LED lighting across corridors, classrooms, laboratories, and outdoor areas.	SDG 11 – Sustainable Cities	LED lighting saves up to 80% of energy consumption.
Motion Sensors	Installing motion sensors in restrooms, meeting rooms, and lounges to automatically switch lights on/off.	SDG 7 – Energy Efficiency	Reduces energy waste and operational cost.
Energy-Efficient Fans and Devices	Fans and appliances must comply with efficiency class A or B.	SDG 12 – Responsible Consumption	Example documented by the Faculty of Mass Communication.
Solar Energy Projects	Solar power systems installed on the rooftops of many university buildings.	SDG 7 – Clean Energy	Reduces approx. 1100 tons of CO_2 annually (equivalent to removing ~240 cars).
LED Outdoor Lighting	Replacing all campus streetlights and external lighting units with LED systems.	SDG 13 – Emission Reduction	Reduces the energy load of outdoor campus pathways.
Student Renewable-Energy Projects	"Low-cost solar heater" project + "solar cooking" initiative by engineering students.	SDG 4 – Quality Education	Enhances innovation and supports practical sustainable-energy training.
Academic Programs in Energy	Launch of the "Sustainable Energy Engineering" program to graduate specialized renewable-energy engineers.	SDG 4 – Education	One of the leading programs in Egypt and the region.
Pilot Electricity-Generation Plant	Operation of an experimental electricity-generation pilot plant at the Faculty of Engineering.	SDG 9 – Innovation & Infrastructure	Used for research and educational demonstrations.
Carbon Footprint Reports	Faculties required to produce carbon footprint reports every two years (e.g., Economics & Political Science, Graduate Studies for Education, Science, African Postgraduate Studies).	SDG 13 – Climate Action	Enhances environmental governance and transparency.
Climate-Change Assessment Efforts	University-wide initiative to assess climate-change risks and implement follow-up mitigation measures.	SDG 11 – Sustainable Communities	A core component of the university's environmental strategy.

Waste management

5- Waste Management

Waste management represents one of the most critical pillars of sustainability at Cairo University, due to its direct link with Sustainable Development Goal (SDG) 12 on responsible consumption and production, which emphasizes the need to adopt sustainable patterns in resource use, reduce waste generation, and maximize reuse and recycling. With a growing population and rising consumption levels, waste management has become an escalating challenge for cities and university campuses alike—especially with global projections anticipating a significant increase in waste volumes by 2050. In response, the University has adopted a comprehensive approach grounded in Circular Economy principles and Zero-Waste strategies.

Cairo University was among the first Egyptian universities to adopt a structured zero-waste program as part of its "Green University" framework. The University implemented clear policies to reduce paper consumption through digital transformation, with more than 90% of faculties relying on electronic notifications and digital transactions instead of paper-based forms. It also adopted a source-reduction policy through early-stage waste segregation within faculties, installing color-coded bins for paper, plastics, and metals—as seen in the Faculties of Early Childhood Education, Urban Planning, and Science.

As part of its reuse efforts, the University launched several pioneering initiatives, most notably the installation of plastic bottle and can recycling machines at the Faculties of Engineering and Economics & Political Science. These machines rely on barcode scanning to identify the type of container, followed by a series of safety sensors before the item enters the crushing unit, where it is converted into flakes collected in dedicated compartments for recycling. This technology encourages students to adopt reuse practices and reduces plastic waste on campus, while also generating quantitative data that supports sustainability awareness initiatives.

In terms of recycling, the University has successfully expanded the culture of source segregation across many faculties, supported by a central waste management unit that collects pre-sorted waste every Thursday from each faculty and transfers it to certified recycling companies. Report data indicate a decrease in organic waste from 675.96 tons in 2023 to 526.49 tons in 2024, and then to 504.23 tons in 2025—largely due to the expansion of e-learning and the reduction of food waste. Organic waste represents approximately 19.56% of the University's total waste, with food waste accounting for nearly 45% of that amount. This fraction is managed through composting programs jointly operated

by the Faculty of Agriculture and the Biotechnology Program at the Faculty of Science.

Non-organic waste amounts to 978.12 tons annually (36.35%) and has declined by approximately 10% as a result of digital transformation policies during and after the COVID-19 pandemic. The University collaborates with a certified waste management company to coordinate sorting, transportation, and recycling operations based on a weekly schedule that covers all faculties.

Can machine in Faculty of Engineering& Faculty of Economics and political sciences

ecofriendly bins in Faculty of Urban Planning& Faculty of early childhood

Overall, these efforts reflect Cairo University's commitment to becoming a leading educational institution in sustainable resource management, fostering environmental awareness among students, and transforming the campus into a practical model of a circular economy centered on reduction, reuse, and recycling.

Waste Management	Description	Relation to SDGs	Notes
Reducing paper consumption through digital transformation	The University relies on electronic notifications and digital transactions instead of paper forms in more than 90% of faculties.	SDG 12: Responsible Consumption and Production	Reduces paper consumption, conserves natural resources, and lowers emissions from paper production.
Implementing source segregation policy (color-coded bins)	Color-coded bins for paper, plastics, and metals were installed in faculties to facilitate early waste separation.	SDG 12: Responsible Consumption and Production	Increases recycling efficiency and reduces mixed waste sent to landfills.
Plastic bottle and can recycling machines	Machines use barcode scanning to identify the type of container and convert it into flakes ready for recycling.	SDG 12: Responsible Consumption and Production	Encourages students to practice reuse and reduces plastic waste on campus.
Weekly collection of segregated waste by a central unit	The central unit collects segregated waste every Thursday from each faculty and transfers it to certified recycling companies.	SDG 11: Sustainable Cities and Communities	Ensures regular collection and reduces pollution within the campus.
Composting programs for organic waste	Food and organic waste are converted into compost in collaboration between the Faculty of Agriculture and the Biotechnology Program at the Faculty of Science.	SDG 2: Zero Hunger	Reduces food waste (around 45% of organic waste) and supports sustainable agriculture.
Collaboration with certified recycling companies	Organizes sorting, transport, and recycling operations according to a weekly schedule covering all faculties.	SDG 17: Partnerships for the Goals	Reflects institutional partnerships supporting a circular economy on campus.
Reducing non-organic waste by 10%	Decline in non-organic waste due to digital transformation policies during and after the COVID-19 pandemic.	SDG 12: Responsible Consumption and Production	Direct indicator of improved consumption behavior and reduced reliance on single-use products.
Waste monitoring and data collection system	Quantitative data collection on waste supports awareness and sustainability initiatives and enables evidence-based decision-making.	SDG 12: Responsible Consumption and Production	Enables the University to improve policies and monitor environmental performance.

Water management

6- Water management

Water is the essence of life, and the water flowing from the taps across the campus for drinking and daily use originates from the Nile River. Cairo University has developed a water usage policy to control overuse and misuse, and the Sustainability Office has directed faculties to establish dedicated groups to monitor water management in each faculty. This approach reflects the university's commitment to achieving the Sustainable Development Goals (SDGs), particularly Goal 6, which focuses on ensuring availability and sustainable management of water and sanitation for all. The university aims to reduce water consumption across the campus by 20–30% by 2030 in alignment with local regulations, covering the main campus, satellite campuses, laboratories, dormitories, sports facilities, and green spaces. Water usage categories include drinking water, irrigation, heating and cooling, sanitation, laboratories, and culinary services. Key performance indicators include water consumption per user, irrigation efficiency, and the rate of water reuse, supporting SDG 12 on responsible consumption and production.

The university seeks to enhance water efficiency within buildings through comprehensive audits to identify leaks and high-flow fixtures, retrofit taps, showers, and toilets for low-flow use, and install sensor-activated fixtures as needed. These efforts align with SDG 11 on sustainable cities and communities by improving water management within educational facilities and ensuring effective resource use.

Irrigation systems focus on smart technologies based on soil moisture sensors and weather-adaptive controllers, alongside the use of drought-tolerant plants and reclaimed or rainwater where feasible. This approach directly supports SDG 6 by reducing water resource depletion and improving campus-wide water-use efficiency. Centralized monitoring ensures optimal water use and minimal wastage, enhancing sustainable water management indicators.

Infrastructure development and maintenance include regular leak detection programs, installation of sub-meters for each building, and upgrading old pipes and fittings to reduce leakage and pressure loss. These measures contribute to SDG 11, ensuring continued network efficiency and water availability across all campus facilities.

The university also emphasizes community awareness and active participation of faculty and students in water management. Awareness campaigns involving student clubs and faculty champions, along with official water management policies and appointed coordinators or committees, support SDG 4 on quality

education and sustainability skills, ensuring ongoing compliance and effective water stewardship.

The wastewater treatment unit addresses sustainability by recovering energy and nutrients, employing advanced techniques such as electrolysis, physical treatment, and membrane bioreactors to achieve water reuse and reduce pollutant discharge, aligning with SDG 6. Furthermore, collaborative research projects with Japanese universities focus on wastewater treatment and biofuel production from human and agricultural waste, promoting SDG 9 on sustainable industry and innovation. Treated water is used for irrigating campus gardens, and a pilot treatment plant is in operation, with plans for a new unit in the Faculty of Science in collaboration with Giza Drinking Water and Sanitation Company to produce greywater for irrigation and washing while serving as a research facility, reflecting SDG 12 on responsible consumption and production.

Cairo University owns a pilot wastewater treatment plant for the safe disposal of wastewater

In conclusion, Cairo University's water management initiatives demonstrate its commitment to the Sustainable Development Goals by improving water efficiency, reusing treated water, raising community awareness, and developing infrastructure to ensure sustainable water resources. These efforts serve as a practical model linking effective water management with sustainable development, fostering a responsible and resilient university community capable of addressing future water challenges.

Water management	Description	Relation to SDGs	Notes
Improving building water efficiency	Conduct building audits to identify leaks and high-flow fixtures, retrofit taps, showers, and toilets for low-flow use, and install sensor-activated fixtures as needed	SDG 6: Clean water and sanitationSDG 11: Sustainable cities and communities	Covers all campus buildings and aims to significantly reduce water wastage
Optimizing irrigation systems	Use smart irrigation technologies with soil moisture sensors and weather-based controllers, adopt drought-tolerant plants, and utilize reclaimed or rainwater where feasible	SDG 6: Ensure sustainable water availability	Applies to gardens and green spaces; focuses on maximizing use of treated water
Infrastructure development and maintenance	Install sub-meters for each building, upgrade old pipes and fittings to reduce leakage and pressure loss	SDG 11: Sustainable cities and communities	Ensures continuous efficiency of water networks and minimizes pressure loss
Enhancing community awareness and behavior	Launch awareness campaigns for students and faculty, establish official water management policy, and appoint water management coordinators or committees	SDG 4: Quality education and sustainability skills	Includes all university stakeholders to strengthen participation and compliance
Wastewater reuse and treatment	Treat wastewater using advanced technologies such as membrane bioreactors and electrolysis, produce greywater for irrigation and washing, and conduct collaborative research projects on biofuel production	SDG 6: Clean water and sanitationSDG 9: Sustainable industry and innovation	Covers experimental and research purposes, with practical use for campus gardens and communal areas

Transportation

7- Transportation (inside Cairo university)

Cairo University is distinguished by its unique location and the variety of transportation modes available, some of which are eco-friendly, such as the Metro and green buses, while others are moderate, such as private vehicles. Vehicle emissions are harmful to human health and contain greenhouse gases that contribute to climate change. Burning fuels like gasoline and diesel produces harmful byproducts such as nitrogen dioxide, carbon monoxide, hydrocarbons, benzene, and formaldehyde. In addition, vehicles emit carbon dioxide, the most common human-caused greenhouse gas.

To reduce the negative effects of transportation-related pollution, Cairo University encourages students to use the Metro by offering discounts and promotes group transportation such as university shuttles. The university provides a mass transportation system consisting of 49 buses operating on 49 routes, offering safe and comfortable transportation for approximately 1,553 employees and faculty members, with each bus accommodating around 28 passengers.

Cairo University is keen on preventing hindrances to student movement, streamlining administrative and security operations, and reducing the number of cars entering the campus. Only vehicles with a university permit are allowed access. Several plans are being implemented to increase the use of electric vehicles on campus. The university has been a pioneer in electric vehicle development and research within New Cairo City, hosting the first electric vehicle rally to promote the local electric vehicle sector and clean technologies.

The university also encourages eco-friendly transportation, such as bicycles, by providing additional bike parking areas and organizing an almost-annual cycling marathon on campus to celebrate the start of the academic year, engaging many students.

Additionally, Cairo University has created designated car parking areas and provides facilities for students with special needs, such as ramps and wheeled chairs across various faculties, ensuring safe and easy access to university facilities for all students.

Cairo University Cycling Marathon

Cairo University Metro Station

Bike parking area Faculty of Engineering

Ramps in Faculty of economics and political Sciences

In conclusion, Cairo University's transportation initiatives demonstrate a strong commitment to sustainable mobility and environmental responsibility. By promoting the use of the Metro, shuttles, bicycles, and electric vehicles, while regulating private car access and providing facilities for students with special needs, the university effectively balances efficiency, accessibility, and environmental sustainability. These efforts align with multiple Sustainable Development Goals, including sustainable cities and communities, climate action, clean energy, innovation, and reduced inequalities. Collectively, these measures contribute to a safer, greener, and more inclusive campus environment, setting a model for sustainable transportation practices within higher education institutions.

Transportation	Description	Sustainable Development Goal	Notes
Encouraging Metro and group bus use	Providing discounts for students to use the Metro and supporting university shuttles	SDG 11: Sustainable cities and communitiesSDG 13: Climate action	49 buses operate on 49 routes, each bus accommodates about 28 passengers
Regulating car access within campus	Only authorized vehicles are allowed entry to reduce traffic congestion	SDG 11: Sustainable cities and communities	Facilitates movement for students and administrative security
Promoting electric vehicles	Plans to increase electric vehicle use on campus and hosting EV rallies	SDG 7: Affordable and clean energySDG 9: Industry, innovation, and infrastructure	University is a pioneer in electric vehicle development within New Cairo City
Encouraging bicycle use	Providing bike parking areas and organizing annual cycling marathons	SDG 11: Sustainable cities and communitiesSDG 13: Climate action	Marathons promote eco-friendly transportation among students
Supporting students with special needs	Installing ramps and providing wheeled chairs in various faculties	SDG 10: Reduced inequalities	Ensures safe and easy access to university facilities for all students

Sustainable Educational Performance Assessment

8- Sustainable Educational Performance Assessment

8.1. A Comprehensive Strategic Framework for Measuring Sustainable Institutional Performance in Faculties

Higher Education Institutions (HEIs), and particularly Cairo University (CU), represent indispensable pillars for achieving holistic societal development, moving beyond their traditional role of knowledge transmission and basic research. Considering "Egypt's Vision 2030" and the nation's commitments to the United Nations Sustainable Development Goals (SDGs), the pivotal role of universities as engines for innovation and green change becomes acutely evident. Cairo University's strategy to transition towards the "Fourth Generation Universities" model reflects a deep awareness of the necessity to integrate sustainability at the core of its educational, administrative, and research mandates.

The 2025 Sustainable Performance Report serves as a seminal document confirming this commitment, detailing tangible successes in infrastructure optimization, resource efficiency (energy and water), and waste management initiatives. However, ensuring the sustainability of these achievements and measuring the depth and impact of their implementation necessitates a more comprehensive and detailed assessment framework. The challenge facing sustainability in HEIs globally is not in adopting policies, but in measuring the effectiveness and efficiency of their application across various academic and administrative units. International comparative studies, including the case studies analyses in this report, indicate that fragmented or purely operational environmental indicators (such as emission reduction) do not fully reflect true comprehensive sustainable performance. Success in lowering electricity consumption, while vital, must be paralleled by success in fostering academic equity, supporting targeted research, and implementing transparent, robust governance. Hence, the need for a strategic framework that measures the commitment of faculties across all dimensions of sustainability, acting as a crucial tool for Benchmarking and identifying strengths, weaknesses, and opportunities for innovative growth.

8.2. The Adopted Methodological Framework: The Five Dimensions of Sustainability Model

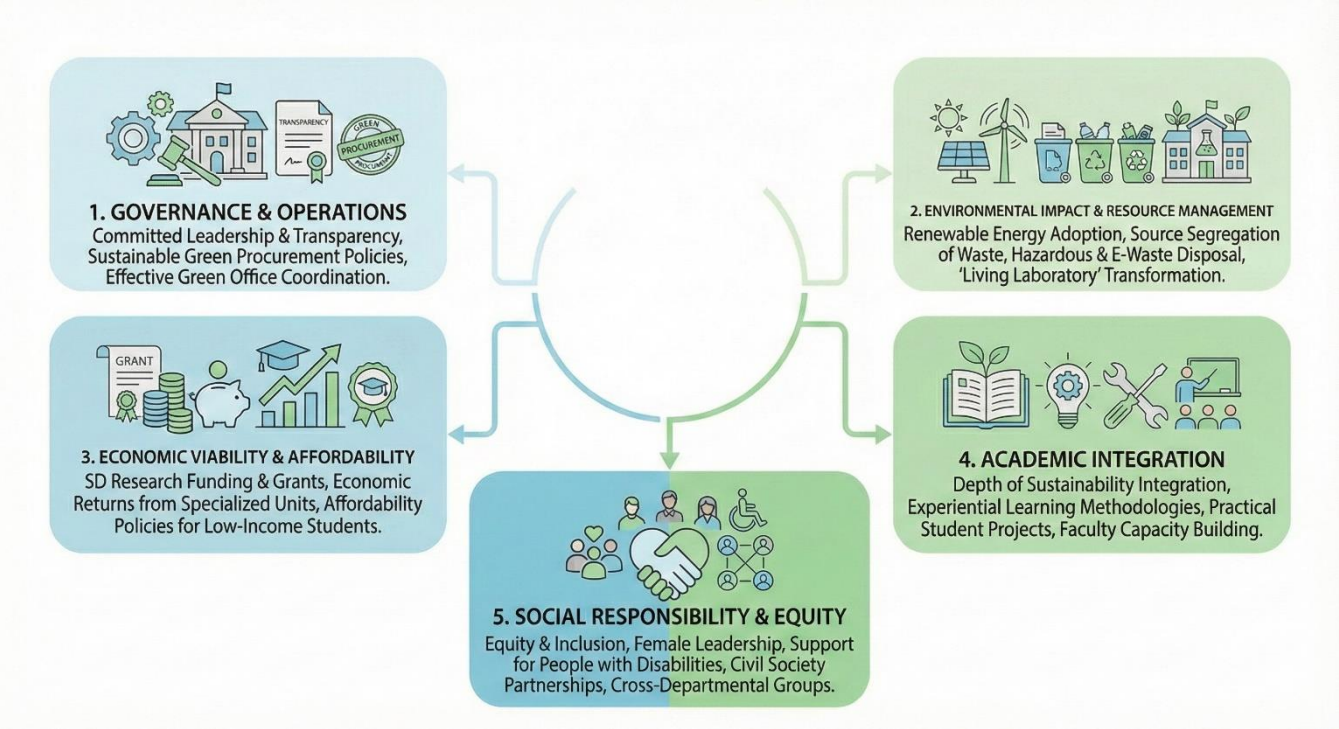
Based on a critical review of global best practices and established international frameworks (such as STARS and AASHE), the Sustainable Educational Performance Assessment framework for Cairo University has been meticulously designed to adopt a model built on Five Integrated Dimensions as the core pillars of measurement. This model aims to overcome the methodological shortcomings of unidirectional indicators, ensuring that the assessment covers all institutional facets while linking them to the weighted indicators and detailed metrics sanctioned by the "Best Environmentally Friendly Faculty Competition" to ensure internal credibility and external alignment.

The Five Dimensions forming the basis of the Faculty Checklist are:

1. **Governance and Operations:** This dimension measures the extent of committed institutional leadership towards sustainability, the availability of transparency mechanisms, and the adoption of critical regulatory policies, such as Sustainable Green Procurement. International studies have shown this to be one of the most impactful areas for reducing the institutional carbon footprint. This further assesses the effectiveness of the Green Office as a coordinating and governing mechanism.
2. **Environmental Impact and Resource Management:** This focuses on the faculty's efficiency in managing physical resources and infrastructure, moving beyond consumption measurement to quantify the transition towards renewable energy adoption, the implementation of source segregation for waste, and the safe disposal of hazardous and e-waste. The goal is to transform the faculty building into a "Living Laboratory" for sustainability, practically reflecting what is taught in classrooms.
3. **Economic Viability and Affordability:** This dimension focuses on financial sustainability, tracking the volume of funding and grants specifically allocated to Sustainable Development (SD) Research, and the faculty's efficiency in generating economic returns from specialized units to serve the environment and society. Crucially, it assesses the existence of Affordability Policies to support low-income students, ensuring economic justice.
4. **Academic Integration:** This is the nexus of Cairo University's sustainable performance. This dimension does not merely measure the percentage of courses covering sustainability but focuses on the depth of integration. It assesses the faculty's adoption of Experiential Learning methodologies,

requiring students to undertake practical projects aimed at solving real-world sustainability challenges, in addition to developing the capacity of faculty members to teach these advanced methodologies.

5. **Social Responsibility and Equity:** This dimension concerns the faculty's societal impact, emphasizing indicators of Equity and Inclusion, female representation in leadership positions, and providing a supportive environment for people with disabilities. Furthermore, it measures the effectiveness of partnerships with civil society organizations and the existence of Cross-Departmental Working Groups to ensure social and functional integration.



The adoption of these five dimensions ensures that the assessment process is not confined to merely documenting achievements but strategically guides faculties toward policy innovation, prioritizing investments, and converting operational challenges (such as resistance to change or budget constraints) into opportunities for learning and practical application. By doing so, Cairo University guarantees that sustainable performance is not just a slogan, but an integrated, measurable system that leads its faculties toward a more sustainable future, cementing its position as a regional pioneering model.

1. Governance and Operations

This dimension constitutes the foundational layer upon which all sustainability initiatives are built, measuring the maturity of administrative structures and the entrenchment of sustainability within the faculty's top-level decisions and operational procedures. The assessment goes beyond merely verifying the existence of a 'Green Office' to quantifying the effectiveness of its operations, the allocation of dedicated financial resources (budgeting), and the level of transparency in performance disclosure (Carbon Footprint Reports). Critically, this dimension evaluates the adoption of impactful and mandatory policies, such as Sustainable Green Procurement, ensuring that all operational procedures, from purchasing supplies to facility maintenance, align with the University's environmental and economic objectives.

Dimension		Indicator	Sub Indicator
Governance and Operations			
1	Institutional Leadership and Strategy	Integration of Sustainability (SD) in the faculty's Vision, Mission, and Objectives, and the availability of a Strategic Implementation Plan.	Approved strategic document for the faculty, and the existence of a declared SD implementation policy
2	Budget and Support	Allocation of a Dedicated SD Budget and In-Kind Support for the Green Office and sustainability activities.	Certified statement on the budget allocated to SD objectives and the percentage of the budget dedicated to facilities maintenance.
3	Performance Governance and Transparency	Publication of the faculty's Annual Carbon Footprint Report, and activation of communication mechanisms to disseminate sustainability activities.	Carbon Footprint Report, and list of active communication channels.
4	Green Procurement	Presence of active Sustainable Green Procurement Policies within the faculty.	Evidence of applying policies for purchasing energy-efficient equipment and a mechanism to reduce paper and plastic consumption.
5	Organization of Working Groups	Activation of an SD Working Group including members from different departments (academics, administrators, and students) to ensure integration.	Decision for the formation of the SD team or committee within the faculty.

2. Environmental Impact and Resource Management

This axis focuses on the physical dimension of the faculty, treating the campus as a **Living Laboratory** for applied knowledge. It assesses the faculty's actual performance in the efficient use of natural resources and the reduction of its environmental footprint on the campus and the surrounding community. Indicators include operational efficiency in consumption reduction, the transition to renewable energy sources and the quality of waste management systems for solid, hazardous, and electronic waste This evaluation contributes to determining operational effectiveness and ensures that the faculty's practices meet the highest standards of environmental and occupational safety

Dimension		Indicator	Sub Indicator
Environmental Impact and Resource Management			
1	Energy Efficiency and Emissions	Replacement of 100% of lighting with LED units, activation of a consumption rationalization program, and measurement of renewable energy production percentage.	Certified report on renewable energy production rates, and number of energy-saving devices instead of traditional ones.
2	Solid Waste Management	Implementation of a functional waste recycling mechanism (source segregation), and the percentage of waste recycled.	Annual report on applied recycling practices, and mechanism for reducing paper and plastic usage.
3	Hazardous and E-Waste Management	Presence of a certified mechanism for the safe disposal of hazardous, sanitary, and electronic waste (E-Waste).	Evidence of applying the approved procedures and policies within the faculty.
4	Water Management and Irrigation	Presence of mechanisms for water consumption rationalization, pipe maintenance to prevent leaks, and the percentage reliance on treated water for irrigation.	Evidence of activating the approved mechanism for water rationalization and reuse.
5	Green Spaces and Biodiversity	Total area covered by planted greenery and its percentage of the faculty's total area.	Certified statement on the total area covered by planted greenery.

3. Economic Viability and Affordability

This dimension confirms that sustainability is not merely a cost but a smart, long-term investment. The assessment here measures the comprehensive economic aspect, starting with the faculty's capacity to attract external funding targeted at Applied Sustainability Development (SD) Research, which can yield economic or environmental returns. It also evaluates the economic role of specialized units in providing green consulting services. Most importantly, this dimension includes a vital social justice indicator: the existence of Affordability Policies to support underprivileged students, ensuring that the sustainable transition does not exacerbate the economic gap within the university community.

Dimension		Indicator	Sub Indicator
Economic Viability and Affordability			
1	Targeted Research Funding	Volume of funding, grants, and contracts dedicated to SD research.	Certified statement on the volume and budget of funded research projects related to sustainability.
2	Student Financial Support	Existence of Affordability Policies for low-income students, and provision of financial/non-financial support and incentive programs.	Evidence of approved financial support policies.
3	Community Return on Specialized Units	Number of specialized units providing community and research consultations on the transition to alternative energy sources and climate change mitigation.	Certified statement with the names of these units and the services provided.

4. Academic Integration

Representing the core mission of the University, this dimension evaluates how deeply sustainability thinking is embedded in the educational process itself. The assessment is not limited to the quantity of courses addressing sustainability; it focuses on quality and depth, measuring the faculty's adoption of Experiential Learning which transforms lecture halls into workshops for solving real-world challenges. Furthermore, it focuses on academic innovation indicators, such as patents related to sustainability, and the faculty's effectiveness in developing the capabilities of its teaching staff to deliver SD-oriented curricula.

Dimension		Indicator	Sub Indicator
Academic Integration			
1	Curriculum and Experiential Learning	Percentage of courses covering sustainability across all stages, and integration of Experiential Learning and holistic thinking skills.	List of courses, and evidence of applying experiential learning.
2	Research Outputs and Innovation	Number of publications and Patents in the field of SD, and the number of student projects aimed at serving SD goals.	Certified statement on the number of patents and student projects related to sustainability.
3	Faculty Development	Provision of Specialized Training Courses to 'educate the educators' on SD teaching methodologies.	Evidence of providing training courses for faculty members.

5. Social Responsibility and Equity

This dimension measures the faculty's societal impact, underscoring its commitment to the principles of inclusion and justice. Key indicators here include the faculty's efforts to achieve Academic Equity, the representation of women in leadership positions, and providing a supportive environment for all student groups, including those with disabilities. This dimension also evaluates the faculty's external relations through the number of active partnerships with Non-Governmental Organizations (NGOs) on environmental and development issues, and the faculty's dedication to providing a healthy and safe work environment for all its stakeholders.

Dimension		Indicator	Sub Indicator
Social Responsibility and Equity			
1	Equity and Inclusion	Percentage of courses Procedures supporting female empowerment in leadership positions (Gender equality), and procedures supporting faculty/staff/students with disabilities (ramps and accessible spaces). sustainability across all stages, and integration of Experiential Learning and holistic thinking skills.	Certified detailed statement of support procedures and applied evidence.
2	Community Engagement and Partnerships	Number of active partnerships with NGOs and external bodies for environmental community service initiatives, and the implementation of cultural/scientific initiatives outside the community.	Certified statement of partnership agreements and community service activities.
3	Campus Health and Safety	Presence of implemented mechanisms to reduce noise, provide a healthy and comfortable work environment (Ergonomic work environments), and procedures to limit smoking.	Evidence of applied practices to reduce noise, and mechanisms to limit smoking.
	Sustainable Transportation	Percentage of available bicycles relative to the total number of personnel, and mechanisms adopted to encourage sustainable transportation.	Certified statement on the number and percentage of bicycles/personnel.

This matrix serves as a straightforward monitoring tool for faculties to accurately record the implementation status of each performance indicator (Done, No, In Progress).

Main Indicator	Sub-Indicators	Done	No	In Progress
Governance and Operations	Integration of Sustainability into the faculty's Vision and Mission.			
	Availability of an Approved Strategic Plan for SD implementation.			
	Allocation of a Dedicated SD Budget to support sustainability activities.			
	Presence of operational Sustainable Green Procurement policies.			
	Publication of the faculty's Annual Carbon Footprint Report.			
	Activation of an SD Working Group including members from different departments.			
Environmental Impact and Resource Management	Replacement of 100% of lighting with Energy-Efficient LED Units.			
	Measurement of Renewable Energy Production percentage (e.g., Solar Energy).			
	Implementation of a functional Source Segregation and recycling mechanism for waste.			
	Presence of a certified mechanism for the safe disposal of Hazardous Waste and E-Waste.			
	Availability of mechanisms for Water Rationalization and maintenance to prevent leakage.			
	Attention to Green Spaces and biodiversity within the faculty campus.			
Economic Viability and Affordability	Availability of Funding/Grants specifically supporting SD Research.			
	Existence of Affordability Policies for low-income students.			

Main Indicator	Sub-Indicators	Done	No	In Progress
	Provision of Financial Support or Incentives for students promoting sustainability.			
	Activation of Specialized Units to provide environmental/economic consulting.			
Academic Integration	Integration of Mandatory and Elective Sustainability Courses across all academic levels.			
	Inclusion of Experiential Learning methodologies in the curricula.			
	Provision of Specialized Training Courses for "Educators on SD Teaching Methodologies".			
	Existence of Research Outputs (Patents or Publications) related to the field of sustainability.			
Social Responsibility and Equity	Procedures supporting Gender Equality in faculty leadership positions.			
	Procedures supporting personnel with Disabilities (provision of ramps and accessible spaces).			
	Establishment of Active Partnerships with NGOs and civil society stakeholders.			
	Provision of Healthy and Ergonomic Work Environments.			
	Promotion of Sustainable Transportation (e.g., providing bicycle parking areas).			

9- Conclusion and Strategic: Recommendations Leading towards the Sustainable Development Goals (SDGs)

9.1 From Commitment to Comprehensive Impact

The Cairo University Sustainable Performance Report for 2025 serves as concrete evidence of its qualitative transformation from a traditional educational institution into a regional pioneer adopting the "Fourth Generation Universities" model. The University has demonstrated clear institutional commitment, reflected in the integration of sustainability into 65% of academic programs, operational initiatives like replacing conventional lighting with LED units, developing solar energy projects, and establishing a decentralized governance system through the Green Offices in its faculties.

To ensure the transition from compliance assessment to measuring strategic impact, the Five Dimensions of Sustainable Educational Performance Assessment Framework (Checklist) was developed. This framework is not merely a checklist; it is a mechanism for decentralization empowerment, transforming faculties into active strategic units that utilize clear monitoring tools (Done/No/In Progress) to identify performance gaps. Cairo University's future success in global rankings (QS-Sustainability) and in achieving "Egypt's Vision 2030" will fundamentally depend on the faculties' adoption of the advanced indicators within this Checklist, especially those related to Green Financial Governance, Targeted Research, and Social Equity.

9.2 Strategic Recommendations and the SDG Alignment Map

To achieve a qualitative leap in sustainable performance, Cairo University recommends implementing a three-pronged strategic plan aimed at linking every direct institutional activity to a measurable mechanism, while clearly defining the Sustainable Development Goals (SDGs) that this activity serves:

Investment in Human and Knowledge Resources (Academic & Social)

Strategic Recommendation	Proposed Actions	SDG Alignment
Deepening Academic Integration (SDG 4)	**Action:** Directing curriculum development departments to mandate the inclusion of **Experiential Learning** and Problem-Based Learning projects focused on environmental issues.	**Goal 4: Quality Education** (Ensure inclusive and equitable quality education)
Empowering Faculty (SDG 4)	**Action:** Allocating a budget to fund **"Educator Training Courses"** in sustainability teaching methodologies to ensure the quality of educational content.	**Goal 4: Quality Education**
Promoting Inclusivity and Equity (SDG 10)	**Action:** Activating **Equity and Inclusion** indicators in the Checklist, especially regarding female representation in leadership positions and implementing **Affordability Policies** for students.	**Goal 10: Reduced Inequalities**

Performance Governance and Green Transition (Governance & Economic)

Strategic Recommendation	Proposed Actions	SDG Alignment
Financial Resource Governance (SDG 9)	**Action:** Shifting budget allocation from general support to Targeted Funding for sustainability research and encouraging specialized units to offer green consulting services with economic returns.	**Goal 9: Industry, Innovation, and Infrastructure**
Transition to Green Procurement (SDG 12)	**Action:** Mandating "Sustainable Green Procurement" policies as a required standard in all faculty operational procedures, and applying resource rationalization criteria to all purchased equipment.	**Goal 12: Responsible Consumption and Production**
Activating Monitoring and Transparency (SDG 17)	**Action:** Obligating faculties to prepare and publish Carbon Footprint Reports and utilize digital platforms to enhance transparency and accountability.	**Goal 17: Partnerships for the Goals**

Environmental Footprint Management and Sustainable Cities (Environmental & Infrastructure)

Strategic Recommendation	Proposed Actions	SDG Alignment
Energy Efficiency and Climate Action (SDG 7 & SDG 13)	**Action:** Generalizing solar panel installation plans on faculty rooftops (where feasible), completing the full transition to LED lighting, and regulating the consumption of air conditioning units.	**Goal 7: Affordable and Clean Energy and Goal 13: Climate Action**
Waste Management (SDG 11)	**Action:** Generalizing and activating the **Source Segregation** system for waste, providing specialized mechanisms for the safe disposal of **Hazardous and E-Waste**, and transforming the faculty into a regional model for waste management.	**Goal 11: Sustainable Cities and Communities**
Transportation and Connectivity (SDG 11)	**Action:** Developing infrastructure to encourage **Sustainable Transportation**, increasing the number of bicycle parking spaces, and providing incentives for using mass transit to reduce carbon emissions.	**Goal 11: Sustainable Cities and Communities**

Integrating Sustainable Development Goals into Higher Education Quality and Institutional Performance

The Sustainable Development Goals (SDGs), particularly Goal 4 on Quality Education and Goal 10 on Reduced Inequalities, constitute a governing framework for advancing higher education systems and strengthening the role of universities as key drivers of comprehensive development. In this context, investment in human and knowledge resources represents a fundamental pillar for enhancing educational quality through curriculum development and the integration of experiential learning and problem-based learning approaches. Such practices contribute to preparing graduates capable of addressing contemporary environmental and societal challenges. Moreover, equity, inclusion, and affordability indicators serve as essential measurement tools to ensure fair access to education, promote female representation in academic leadership, and support inclusive student policies. These indicators play a critical role in improving academic performance, enhancing learning outcomes, and reinforcing quality assurance and accreditation standards within higher education institutions, thereby supporting the achievement of the SDGs in a sustainable and measurable manner.

Sound performance governance, green transition strategies, and effective environmental footprint management play a pivotal role in institutional sustainability within universities, particularly at Cairo University as one of the largest and most established higher education institutions in the region. Governance and transparency indicators such as the preparation and publication of carbon footprint reports and the activation of monitoring and evaluation mechanisms contribute to improving resource efficiency and strengthening accountability, in alignment with SDGs 9, 12, and 17. Additionally, indicators related to energy efficiency, waste management, and sustainable transportation are essential for assessing environmental performance and transforming the university campus into a living model for sustainable cities and communities, in accordance with SDG 11. The adoption of these indicators underscores that educational quality is no longer limited to academic content alone, but is increasingly linked to the quality of the learning environment, infrastructure efficiency, and the university's capacity to embed sustainability principles into both operational and educational practices, thereby reinforcing Cairo University's leadership in advancing sustainable development at the national and regional levels.

Adopting these recommendations will enable Cairo University to solidify its position as a center of excellence for Sustainable Development, not only in Egypt but as a regional pioneering model in achieving the global Sustainable Development Goals.

FOR MORE INFORMATION

https://cu.edu.eg/

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