



Cairo University





Cairo University environmental Sustainability Report 2020 -2021. The report includes all efforts made to reduce our negative environmental impacts and create a sustainable university. This report is the first sustainability report of Cairo University. The report aims to provide a comprehensive view of the culture of sustainability on campus by summarizing the university's commitment to the environmental, social and economic aspects of sustainability.

It is worth noting that Cairo University won first place this year over 27 public universities in the competition for the best environmentally friendly university.

The report includes Cairo University's efforts to transform the campus into a more sustainable society. The report includes various aspects of advancing the university's sustainability, including education, research, campus operations, campus community and public engagement. The report shows the extent of Cairo University's commitment to achieving the United Nations sustainable development goals, as well as Egypt's Vision 2030.





Sustainability report reparation team

2020-2021

Prof. Sohir Fahmy Ramadan

Dr. Mohamed Naguib Mohamed

Roaa Sameh Abdelsabour

Safaa Omar Elazab

Youmna Mohamed Farid

General coordinator of Sustainability office

Executive manager of Sustainability office

Volunteer student

Volunteer student

Volunteer student

TABLE OF contents



University Profile















Setting and Infrastructure (SI)





Water (WR)





Energy and Climate change (EC)





Transportation (TR)



1. University Profile

Cairo University was established in 1908; currently it has 28 faculties/institutions in different scientific disciplines, with total volume of about 220000 students. Cairo University aims to be a sustainable, healthy and green university. Cairo University aims to produce graduates with the moral, quality and skills to be global citizens.

The university is committed to conducting research and innovations for excellence and serving academic services for the benefit of society. Cairo University has successfully been undertaking its mission of delivering education, research and cultural duties over the years. It is considered as the mother university among other younger universities in Egypt. Cairo University is also offering its education and research facilities to Arab and foreign students and scientists and has become well known worldwide. Cairo University is a comprehensive institution of higher learning located in Giza, Egypt. Cairo University is usually ranked among the top universities in Egypt, and one of the top universities in Africa. In QS ranking 2021, Cairo University was ranked the 2nd in



Egypt and the 6th across Africa, and it was rated 561-570 worldwide. In the Academic Ranking of World Universities (ARWU) 2020 ranking, the university was ranked 1st in Egypt. It was rated 401-500 worldwide. It counts three Nobel Laureates among its graduates and is one of the 50 largest institutions of higher education in the world by enrollment.

Cairo University, El-Sheikh Zayed branch

Cairo University is the first public university in Sheikh Zayed City, and it is also the first public university to establish a second branch. So it established a branch of Cairo University in Sheikh Zayed City. There are branches of some colleges, including:

- 1. Faculty of Commerce, English Department
- 2. Faculty of Law, English Department
- 3. Faculty of Pharmacy
- 4. Dental college
- 5. College of Engineering for middle school students

Inside the university branch there is a mosque equipped with all audio equipment and a capacity of about 200 worshipers, an indoor theater equipped with all audio and visual equipment, display screens and equipped with 268 chairs, and spaces for playgrounds and green spaces, in addition to the service transportation provided to college students to transport them from the college in Cairo to the college annex in Sheikh Zayed City., as well as the African Institute, according to the plan to move colleges with a large density outside Cairo.



It is noteworthy that in 2012, a new branch of the College of Commerce, the English Language Division, was opened in Sheikh Zayed City on the sixth of October during the reign of Dr. Helmy Al-Bashbeshi, the former Dean of the Faculty of Commerce, and Dr. HossamKamel, the former university president.

In December 2013, a new headquarters for the College of Pharmacy was opened in Sheikh Zayed City. In 2014, President of Cairo University, inaugurated the English Division, Faculty of Law,

It also established a new branch of the College of Engineering for students of the middle school, and it consists of an educational building that contains 35 classrooms with a capacity of 36 students with a total capacity of 1260 students, a multi-purpose hall equipped with a cinema projector, two language labs with a capacity of 30 devices each, and two laboratories. A computer, one of which is for students with a capacity of 36 devices and the second is administrative, five chemistry and physics laboratories, two engineering drawing rooms, twenty-two administrative offices, three hobby rooms for drawing, electricity and carpentry, a scientific library and a

basketball court. in addition to workshop buildings, and there are three classroom buildings. They are the Textile Center, Technology the production building and the central laboratory, and they were equipped with eight workshops, namely: the tools workshop, the mechanics workshop, the electrical workshop, the refrigeration and air conditioning workshop, the workshop, carpentry the metal workshop, the textile workshop, and the architectural workshop.

The new international branch of Cairo University in 6th of October City, west Cairo, is slated for inauguration in the academic year 2020/21, Invest-Gate reports.



2. Setting & infrastructure

2. Setting & infrastructure

Cairo University's main campus situates on 1 Gamaa Street, Giza, Egypt. Postal Code: 12613. Cairo University is a public university. Cairo University is a Comprehensive and urban institution.



- 1.1. <u>Campus sites</u>
 - 1. Main CU Campus



2. Faculty of medicine



3. Faculty of Nursing



4. <u>Faculty of Engineering</u>



5. <u>Faculty of physical therapy</u>



6. Faculty of Pharmacy



7. Faculty of Agriculture



8. <u>Faculty of Veterinarian</u>



9. Faculty of Education for <u>Early</u> <u>Childhood</u>



10. Faculty of Computers and <u>Artificial Intelligence</u>



11. <u>Faculty of Graduate Studies for</u> <u>Statistical Research</u>



12. <u>Cairo University, Faculty of</u> <u>Specific Education</u>



13. <u>Cairo University, El-Sheikh</u> Zayed branch



14. <u>International branch of Cairo</u> <u>university</u>



1.2. <u>Some setting & Infrastructures highlights</u>





1.3. Operation and maintenance activities of building during Covid-19 pandemic

1.3.1. Providing masks and gloves

In light of the mandatory application of the decision to wear the masks inside the university at all times, the university has intensified its efforts in supervising the availability of masks and gloves on the campus.





1.3.2. Displaying awareness posters on the university campus

The university worked to spread awareness about prevention precautions by hanging posters inside the campus.



1.3.3. Publication of the awareness guide about the emerging Corona virus

It is worth noting that Cairo University has issued an awareness guide about the emerging corona virus, how it is transmitted, symptoms of infection and ways to prevent it, and has also finished issuing a guide to rules and guidelines for home isolation for cases who suffer from minor symptoms of infection with



the virus instead of transferring them to isolation hospitals, with the aim of educating students And employees and faculty members, and introducing the scientific rules of isolation, removing fear and ambiguity, and confronting popular recipes.

1.3.4. Cairo University had developed a comprehensive plan to manage the educational process since the beginning of the Corona virus

Procedures for the educational process (rooms, laboratories) and laboratories, libraries (Cairo University has developed a comprehensive plan to manage the educational process since the beginning of the Corona virus crisis and for any possible scenario, by defining ways to ensure the safety and health of the university's members, including students, members of the teaching staff. and workers. by periodically equipping and sterilizing laboratories and terraces). In addition to activating the university's transformation plan into a thirdgeneration smart university and providing educational services electronically.



1.3.5. Providing electronic platforms and clarifying them for teaching staff





1.4. Campus facilities for disabled, special needs and or maternity care

Cairo Univ. gives priority to care for students with special needs and has taken many steps to support people with special needs, as it was decided that students with special needs have the right to attend any faculty that suits their circumstances and represent their faculty at the University Students Union. The university has launched an initiative to integrate people with special needs in the community. The initiative included many activities such as a training course teaching sign language for university staff and students in the Faculty of Physical Therapy.

-Cairo University called on the new Students Union to prioritize the demands of people with special needs to provide a safe environment for them inside the university. It was decided to abolish the term "Mongolian" from all courses at the university.

1.4.1. Cairo University established special roads for students and peoples with physical disabilities in all faculties and institutions

1.4.2. Cairo University established disability challenger's center







CAIRO

IRO UNIV پ_ک متحدي الإعاقة



🖸 🕣 🚱 💟 CUch



1.4.4. Cairo University developed disability support service center

Cairo University established the Center for Services and Support for People with disabilities at the university, in order to spread the culture of inclusion inside and outside the university community, and implement the vision of Cairo University in achieving inclusion and equal opportunities and providing all services for students with disabilities to ensure the achievement of the principle of independence, in partnership with AMIDEAST. Cairo University pays great attention to students with special needs, putting their requirements in mind and providing them with all the services and requirements they need, whether at the academic level or personal requirements related to them.

1.5. Security and safety facilities

Security administration is one of the most important administrations in Cairo University.

It has many tasks, such as; preserving facilities of Cairo University, securing citizens inside the university, as well as lifting the level of discipline and guaranteeing that education renaissance is going on. The administration is responsible for supplying security and safety at the university's facilities: This will be achieved through:

1. Guarding, distributing guards among the university's facilities. Supervising the movement of 2. walking and traffic inside university campus and following-up violators. Preparing daily comprehensive 3. security reports about the university. Making sure safety procedures 4. inside the university is in work. Scrutinizing IDs of individuals in 5. front of main entries of the university. Preparing entry cards of cars whose 6. owners belong to Cairo University.



Cairo University Campus Safety

provides Environmental Health &

Safety, Emergency Preparedness and Fire Prevention Services, along with other public safety services to create a safe and secure environment for university students, staff, faculty, and visitors.

- 1. Cairo University program in civil protection and fire alarm system.
- 2. Cairo University seeks to achieve the largest percentage of civil protection for lives, buildings and institutions, and therefore the following has already been implemented.
- 3. A comprehensive maintenance was carried out for all university buildings for fire alarm systems, the supply and installation of new systems in all administrative and central buildings, and work is underway on the rest of the university's faculties.
- 4. A firefighting system was built inside the university campus and

a water tank for the fire was made for both of them.

5. (Campus - University Dorms -Faculty of Computers and Information Faculty of Physiotherapy -Faculty of Veterinary Medicine - Faculty of Agriculture - University Branch in Sheikh Zayed) in order to civil protection ensure and firefighting at the university.



6. The civil protection work for the university dormitories has been completely started, and the work has been assigned to the Arab Organization for Industrialization with a work

plan that includes all university dormitory buildings. Cairo University has built a complete and integrated security system to secure the entire campus and faculties from inside and outside.





7. A network of surveillance cameras has been installed on the entire university campus and colleges to ensure a safe learning environment. A complete and comprehensive maintenance of the surveillance camera system is carried out.





Securing campus ports

Entry is secured to all campus entrances in cooperation with the security elements of the security company to control all campus entrances and to ensure that no suspicious elements are entered among the students and the entry

1. Determining the entry and exit ports and limiting them to the narrowest limits in order to facilitate the control of the visitors to the university.

2. Assigning sufficient guards at the entrances to control them, in cooperation with the security elements of Falco Company.

3. Follow up the entry of students and alert the need to wear a mask and

of any undesirable materials to avoid the dangers of sabotage or to take out anything from the university that is not authorized to leave in order to avoid For acts of theft therefore the following actions are performed:

maintain the precautionary measures and social distancing to limit the spread of the Corona virus.

4. For faculty members and employees, they are allowed to enter according to the identity card, as for students, they are allowed to enter according to the college or institute card. 5. For foreigners and other temporary workers "contract workers...etc", specific entry permits are issued to them showing the necessary data and photographs.

6. For visitors, they are not allowed to enter until after verifying the identity of the visitor and agreeing to the visit of the person who is requested to visit, provided that the data (the visitor's name / his name / identity card number / its issuer / the person to be visited / the date and time of entry and exit) are recorded.

7. It is not permitted to leave the university cars except by virtue of a written permission stating (the driver's name / car number / type of assignment / date and time of exit and return).

8. Monitoring cars carrying goods or items coming to the university / college / institute and seizing suspicious parcels in order to avoid sabotage operations that may occur on this road. Also, loaded cars leaving the university / college / institute are inspected to ensure their safe exit and they are not allowed to leave without a written permission to the contents.

9. the magnetic Activating university card devices the on university campus ports to verify the identity of the students, faculty members, employees and visitors to the university, to prevent the entry of any unauthorized persons to enter the campus and to follow up the destructive elements among the students inside the campus.

10. Installing iron corridors at the university campus ports so that it is easier to control the visitors on the university campus to prevent the entry of any unauthorized persons to enter.

11. Coordination with the administration of the university and colleges before allowing visitors to enter

12. Coordination with the university administration before allowing the entry of non-accredited media outlets to cover events and activities on campus.

13. Not allowing entry of vehicles of all kinds except for those who are authorized to enter and after verifying the identity of their driver and inspecting them.

Distribution of campus outlets

- The main port: It consists of a car entry port, a car exit port, and two (2) ports for individuals to enter/exit, an entry/exit port for faculty members, an entrance to the university hospital, and an outlet for visits.
- 2. The public port: It includes (1) port for entry/exit of individuals, the university hospital, and a closed car port. The port is closed at 4:00 pm.
- Trade outlet: It includes (1) port for entry/exit of individuals and (1) port for individuals' entry/exit.
- Trade outlet 2: It includes a port for cars to enter / exit, and the port is closed at 5 pm

5. The laser port: It includes a port



for entry/exit of cars (closed) to be used in case of emergency only.

- Dar Al Uloom Port: It includes a port for entry/exit of individuals and a port for entry/exit of cars.
- Metro outlet: It includes two (2) entry points for individuals and one (1) outlet for individuals to exit.

1.6. Health infrastructure facilities for students, academics and administrative staff's wellbeing

Cairo University's hospitals are the oldest educational and medical hospitals and the largest in Egypt and the Middle East. It is the citadel of medicine in the region. Thanks Arab for Cairo University's hospitals, the world is being with the supplied most skilled physicians. Cairo University's hospitals include a group of educational and medical hospitals in all the branches of medicine.

In 1837, El Qasr El Ainy hospital has been established first as a medical hospital in surgery, internal medicine, ophthalmology, dermatology, and

1. <u>El Manial Academic Hospital</u>

The number of beds at El Manial Academic Hospital counts about1794 beds distributed among its different departments. The hospital is administratively divided into three administrative units: a) El Manial El Bahary Hospital: venereal diseases. This was the basis of the School of Medicine.

El Qasr El Ainy has continued to perform its sublime message in all circumstances. Its physicians lifted Egypt's name high in the world's sky until a decree of demolishing was issued on 17/3/1977 to establish a hospital, with modern construction and equipment, on the area that was occupied by El Qasr El Ainy. The hospital with 1200 beds capacity. It has been partially inaugurated in 1955 to receive patients. Cairo University's hospitals include the following medical and educational units:

It supervises surgery departments no. 6, 28, 28, 30, urology department no. 17 and internal medicine department no. 9, 19, 31, orthopedic department no. 7, 20. It also supervises accidents reception and central rays. b) El Manial El Qebly Hospital: It supervises surgery departments no. 5,

25, 27, cardiology and ophthalmology department no. 12, 14, 16, neurology departments no. 4, 15, chest medicine, dermatology and venereal diseases, ear, nose, and throat department, and psychiatry department. c) Operations Units: They include operations rooms that serve both El Manial El Bahary and El Manial El Qebly Hospitals. It is composed of 16 equipped operations rooms.

The Kasr Al Ainy Obstetrics and Gynecology Hospital

It is one of Cairo University's hospitals. It includes five departments for obstetrics and gynecology departments that contain 297 beds and two operations rooms, besides, two departments of surgery and laboratories at Premature Infants Unit.

The Kasr Al Ainy Obstetrics and Gynecology Hospital is a major national and regional referral center providing state-of-the-art medical service. The hospital offers a comprehensive range ofv services in the field of women's health, including general obstetrics and gynecology, high risk pregnancy, prenatal diagnosis and fetal medicine, urogynecology, gynecologic oncology, reproductive endocrinology and infertility.

- Six inpatient units (Depts. 22, 32
 & 33) with a total of 175 beds.
- An antenatal care and fetal medicine unit (Dept. 21) with 3Dv and 4D ultrasound facilities.
- A general surgery unit (Dept. 11) with 55 beds.
- A neonatology unit equipped with28 incubators.
- A 24/7 casualty unit (Dept. 10) that includes:
- An 18-bed pre-labor ward¬Two operating theaters¬ Three normal labor rooms¬
- A 9-bed intermediate intensive care unit (ICU.



2. Internal Medicine Hospital (IMH)

It is a special hospital, majoring in treatment of internal diseases. It consists of seven floors, serving curative and teaching purposes. It has 306 beds, as well as radiology devices and laboratories. It is a stand-alone hospital that is specialized in internal medicine. It includes seven floors that serve medical and educational purposes, containing 306 beds other than rays and laboratories equipment's.

Newborn at the casualty department





3. Pediatrics New Academic Hospital

It is a hospital that was constructed by the most recent medical equipment in the world. It started to work in 1983 with 185 beds capacity and four operations rooms other than rays equipment and specialized laboratories. This hospital works in perfect integration to provide Egyptian and Arab children with medical service. It is considered an advanced center at the highest global level in fields of pediatrics and its surgery.



External Clinic

It includes different clinics of several medicine branches. It presents diagnostic and medical services to its visitors. It also pays for medicine suitable to its cases. It is regarded as an independent administrative unit, in accordance with decentralization system that is followed by hospitals.

4. The Student Hospital

The Old Building

 Consists of four floors and includes: Emergency Room (ER): capacity 4 beds 15 Specialized Outpatients Departments (OPD): OBG, ENT, Chest, Surgery, Ophthalmology, Dermatology, Urology, Internal medicine for males and females, Psychiatry,

Cardiology, Physiotherapy, Diabetes, Orthopedics and Neurosurgery. 2 Dental clinics. 5 Inpatients Departments - 100 Operating Room beds. (OR): 4 tables Laboratory, Radiology, Pharmacy, Laundry Kitchen Nephrology and Dialysis; 9 machines Rehabilitation Department.

2) An average of 64219 students were seen by the OPD last year

3) An average of, 1238 students were admitted in inpatients departments

4) An average of 992 students was operated upon.

5) The Hospital is also responsible for treating some of the faculty members and the people working in the university.6) The hospital also provides treatment for symbolic prices.

7) A major renovation operation has included the OR, kitchen, laundry, also outside passages and the garden.



Outpatients 12 Specialized Departments (OPD): ENT, Surgery, Ophthalmology, Urology, Orthopedics, Dermatology, Internal medicine for males and females. OBG. Chest & Pediatrics, Psychiatry, Cardiology. Dental clinic. Self paying patients' pharmacy. Intensive care unit (8 bed for critical care), (4 beds for intermediate care) Gastroenterology Endoscopy Department. OR (4 opertating rooms and 1 recovery room). IPD capacity 48 beds.

New Building

Consists of four floors and include:

5. New Kasr El-Aini Teaching Hospital

Created on: 2/22/1995 and considered the special medical center equipped with up to date advanced scientific methods and modern technology



[3] Energy and Climate Change

[3] Energy and Climate Change Background:

Cairo University is making great efforts in making a comprehensive development to advance the university at all educational, research and environmental levels within the framework of its strategy to shift towards fourth generation universities despite the exceptional circumstances imposed by the Corona pandemic.

Making regular environmental measurements is one of the most important legations to save the environment. This is done to all different facilities aiming to make an environmental records and recording the measurement results, controlling and environmental monitoring regularly and continuously.

Also The strategic plan of the international branch of Cairo University is based on analyzing the current situation of Cairo University, taking into account the strategic vision for higher education in the Arab Republic of Egypt, which is derived from Egypt's Vision 2030, allowing the preparation of a bold, effective and reversible strategy that works to achieve distinction as a main goal and reflects the available and expected inputs to build on The historical strengths of Cairo University with the development of new fields and programs that can move the university to different levels and horizons.

[3.1] Energy efficient appliances usage are replacing conventional appliances

1- Installing solar heaters to provide hot water for all campus restaurants and student housing.

2) Replacing all external incandescent lamps for all buildings and lighting poles with more energy efficient LEDs.

3) The use of lighting poles inside the university campus with solar energy cells for lighting at night.



4- Activating the pilot plant project for the production of electrical energy at the Faculty of Engineering.

5- The installation of occupancy sensor is an indoor motion detection device used to detect the presence of a person to control the lights automatically

6- Assigning the administrative security to ensure that all lit lamps are turned off at night, as well as on holidays and vacations.

7- Recommending obligating colleges to establish an energy management team in departments and units, which works to monitor and follow up on energy use.

8- Cairo University formed a committee to follow up the implementation of the government's plan to rationalize electricity consumption in buildings and facilities.

9- The tendency to purchase energy-saving devices instead of traditional devices.

10- 90% of the external incandescent lamps for all buildings and lighting poles have been replaced with more energy efficient LED lamps.



3.2. Total campus' smart building area (m²)

International branch of Cairo University in 6th October city

The international branch of Cairo University is the way to transform into thirdgeneration universities, which aims to move higher education towards globalization and achieve educational distinction, with smart building design.

3.3. Smart building implementation



International branch of Cairo University in 6th October city

The International Branch of Cairo University is considered a nucleus for providing an integrated educational approach that aims to integrate education and scientific research and the exploitation of knowledge. Related programs that support the values of development, innovation and sustainable development by smart building implementation.

3.4. Renewable energy sources on campus = solar energy.

Fourteen Solar cells have been installed in university buildings.




The implementation of solar cells on one of Cairo university buildings

3.5. Renewable energy sources and its capacity (in kilowatt hour)

The electrical power produced by Solar roofs= 660 kilowatts and this is a nucleus for extending the implementation of solar cells in most of university buildings.



3.6. Electricity usage per year (in kilowatt hours)= 16000000



لقاهره تشخيل تحنة لمتابعة تنفيذ خطة الحكو ولة. ية الخاصة بتنغيذ ترشيد استهلاك الخهرباء م



3.7. Total electricity usage divided by total campus' population (kWh per person)

The total campus populations is divided as follows

- Staff members number is 12,988
- Students number is 307,002
- The officers and workers number is 12158

The total campus population will be 332148

Total electricity usage divided by total campus' population (kWh per person)

48.17

3.8. The ratio of renewable energy production divided by total energy usage per year

600/1600000= 0.0000375

This ratio is too low but the university is extending the implementation of the solar cells in most of university buildings.

3.9 Elements of green building implementation as reflected in all construction and renovation policies

Green building offers employees a comprehensive set of best practices to help their design and construct efficient, healthy homes that benefit the community, the environment, and your bottom line.

First element is Site planning and design

Cairo University offers affordable housing works best when residents have easy access to key services and transit. Infill sites have these and many more environmental benefits. Cairo university apply that and by taking care of trees and soil conditions during construction.



Second element is Indoor Air Quality

Indoor air quality significantly impacts Cairo university resident health and comfort--essential goals for any building. Achieving a high quality indoor environment requires careful design, construction, and materials choices, and thus strong coordination among the building team. Indoor air quality centers on well-designed ventilation and moisture control, which goes hand in hand with energy efficiency and building durability. Ongoing maintenance is important, of course, as is a commitment to finding alternatives to toxic materials and finishes.



Third element is Water

Conserve finite freshwater resources and reduce utility bills by installing water-efficient appliances and plumbing fixtures, landscaping with drought-resistant plants and efficient irrigation, and greywater to use.



Sewage water treatment unit installation

Fourth element: Commissioning

Commissioning is the process of making sure that a building works right. By systematically evaluating and adjusting building systems to function together as designed, commissioning optimizes efficiency, health, and comfort. A commissioning agent--often a third-party architect or engineer--gives advice during the design phase and follows through with testing during construction and training of operations and maintenance staff.

[3.10] Greenhouse gas emission evaluation and reduction program

Time of last record: September 2021

The recent report of Cairo University (September 2021) was done by center of hazard mitigation, environmental studies and research in Cairo University. This center is considered one of the research and advisory centers accredited by the Environmental Affairs Agency, with URL: http://www.chmesr.edu.eg/ar/. 🕊 f 🍪 🛛 🍳

Blog Create account

مركز الحد من المخاطر والدراسات والبحوث البيئية C.H.M.E.S.R CAIRO UNIVERSITY





Environmental measurements including

- 1- Suspended dust concentration.
- 2- Inhaled dust concentration
- 3- Noise intensity
- 4- Detection of different greenhouse gases (CO- CO₂- VOC's)

Measurements and devices used

S.N	Units		Device
38107	1	Proskit – MT 4618 Sound Level Meter	
M01F001777	1	Multi RAE proPGM – 6208Gas - VOCs- CO - NO2	
1029845175	1	Thermo Scientific PDR1500 Air Quality Dust Monitor	
Page 5		Danse and the	North Contraction of the second secon

Results of measurements

The following table shows the suspended dust concentration and inhaled dust concentration recorded during rush hours in Cairo University at the main gate, this data reveals that the concentration of dust is within the allowed concentration according to environmental law number 4 for the year 1994, corrected by law 9 for year 2009, law number 105 for the year 2015.

Inhaled dust concentration µ/M ³	Suspended dust concentration µ/m ³	الوقت	•
132	152	10:30	1
122	143	10:35	2
135	175	10:40	3
123	152	10:45	4
131	151	10:50	5
122	162	10:55	6
134	170	11:00	7
150µg/m³ 24 Hours	230 μg/m³ 24 Hours	Allowed concentration	

VOCs ppm	CO mg/m ³	Noise measurements Decibel	الوقت	
1.28	0.6	65.3	10:30	1
1.39	0.7	68.4	10:35	2
1.41	0.5	77.3	10:40	3
1.04	0.7	67.2	10:45	4
1.31	0.8	74.3	10:50	5
1.30	1.1	73.4	10:55	6
1.33	1.3	68.2	11:00	7
No availabe limit	10 mg/m ³ 8 Hours	90 Decibel	Allowed limit	

3.11 Total carbon footprint (CO_2 emission in the last 12 months, in metric tons)

No.	Description	CO ₂ emission (tons) in	Proportion (%)
		last 12 months	
1.	Transportation Cars	41.416	87.27
2.	Transportation buses	5.127	10.80
3.	Transportation	0.914	1.93
	motorcycle		
Total		47.457	100

3.12. Total carbon footprint divided by total campus' population (metric tons per person)

47.457/332148= 0.000142879 metric tons per person

Cairo University is advising staff members to park cars only in parking areas to reduce the CO₂ emission and also is planning to make a huge parking area outside the campus to reduce carbon footprint.

Also Cairo University is advising staff members, workers to use busses to reduce number of cars entering the campus daily.

3.13 Impactful university program(s) on climate change

A cooperation protocol between the Ministry of Environment and Cairo University to establish the first university programs for environmental sciences in Africa and the Middle East in cooperation with the World Bank



A cooperation protocol between the university and the Ministry of Environment in preparing university programs for environmental sciences through the Air Pollution and Climate Change Management Project in cooperation with the World Bank, within the framework of the presidential mandate related to the implementation of an integrated project to reduce and limit air pollution and climate change.

The President of Cairo University said that the signing of the protocol comes within the framework of Cairo University's transformation into the fourth generation of universities that focus within what focuses on the ecosystem, and in order to consolidate the role of the university in many development axes and the integration of the university's educational and research plan with Egypt's strategic vision 2030, and the sustainable development goals of the United Nations.

Dr. Muhammad Al-Khasht explained that the air pollution and climate change management programs are the first programs of their kind in Africa and the Middle East, where their axes interact in a dynamic and integrated manner to keep pace with the fundamental transformations in the labor market, and its need for new types of graduates equipped with the latest sources of science, knowledge and modern technology. Building a modern graduate personality that has the ability to creatively interact with various technology systems and keep pace with the future challenges of environmental sustainability.

Dr. Muhammad Al-Khasht stressed the importance of employing multidisciplinary sciences in study and research programs related to the

environment, because it is by nature a multidisciplinary field, which is at the heart of the function of fourth-generation universities, noting that most future jobs require scientific training from various disciplines.

The cooperation protocol between Cairo University and the Ministry of Environment includes preparing scientific content in Arabic and English for the university education program specialized in environmental sciences, establishing an entity to organize periodically approved training programs for workers in the field of environment and its protection, and coordinating between Cairo University and the Ministry of Environment to hold periodic workshops to introduce environmental issues and challenges. Contemporary and future, launching a joint awareness campaign on air pollution management and climate change, inclusion of scientific curricula at the graduate and postgraduate levels on air pollution management and climate change, dissemination and expansion of green jobs, and building scientific and technical capabilities and capabilities for practitioners of those jobs through university education specialized in science of the environment.



[4] Waste (WS)

[4] Waste (WS)

[4.1] Recycling Program for University Waste

Waste recycling is done independently in each department and faculty. Separation of plastic, paper and food using garbage's boxes takes place from the beginning. One of the university's pollution-reduction initiatives is to recycle waste. Food trash is recycled into bird food using special machinery; nonetheless, plastic and paper garbage is collected and sold to an echo-conserve certified company for waste transfer and treatment. Every week on Thursday, the waste management unit is in charge of transporting these segregated wastes from each faculty and selling them to dealers to be recycled in usable form. Other unclassified Wastes, that are not recycled, are stored in their form under dry fermentation conditions and transferred to incinerator.



Figure (1): example of waste sorting, collection and transfer by certified echodeserve company



[4.2] Programs to reduce the use of paper and plastic on campus

From 2019, the university has authorized policies and methods aimed at reducing paper and plastic usage, such as reusable cups and printing on both sides. As digital transfer is one of Egypt's Vision 2030 goals, the university has implemented a number of projects, including:

- Use of blackboard platform as an e-learning channel for teaching, education, scientific materials instead of papers over all faculties of universities.

eLearning vs Classroom-Based Learning



- Approved usage of an e-documentation system instead of paper documents in all university e-meetings, e-announcements, and e-office work.

- Use pdf scanning file document replacing photocopy document to reduce paper consumption .

- Use of electronic system to communicate, announce faculty members, students and employees in more than 90% of university's faculties.

- Implementation of e-financial system to execute all process to reduce paper consumption.

- Use of reusable bags instead of plastics .

- Use of digital art works instead of papers.



The university now is one of Egyptian universities that is known as Fifth generation university and awarded the first green university overall Egypt.



Ly also p	
Conset ()	
nun Faun Buhlt Careart V Autosmatt - State - Yanar Careart -	
klanuta () 🕴	
Personal Chargenet C	
Company Constant of the second seco	
As the end of this chapter the student will be able to:	
every	
40 effortations definered system of emission spectra	
Carlora Managanawat	
Control Parent 4Post strangy: land diagram of the hydrogen atom	
Contain Colamon O Anae the failure of the Hole theory Vorum Hole Vorum Hole	
between 0	
Contact Seeven and Contact	
* American 8	
P Prologen and GARNAN D	
Enabled, Statistics Executing	
At the and of this chapter the student will be able to: -descript the particle-wave dual antire and Bragile assumption	
-Deduce a common formula of Schrodinger equation	
Stars the properties of electrons were functions Acriv were functions counters on Ectr's hydrogen stors model using subsciedly symmetrical resters.	
Same 10	
Mid Term East	
Sandardige tane to ballion their sandware. If and har available on the A_20201001000	
Charles 40	
Acadamity: Steel a bindler from tandents is not fail available on par 23, 3021 11:21,976.	

[4.3] Organic Waste Treatment

Because of the Covid-19 crisis, university organic wastes were roughly 526.49 tons in 2020, down from 675.96 tons in 2018. This was due to the adoption of e-education. Organic waste accounts for 19.56 percent of all university garbage. Food waste accounts for around 45 percent of all organic waste generated at universities. There is a program of fertilizer production from these food wastes established in faculty of agriculture and biotechnology program in faculty of science and ministry of environment from 2018. A facility for energy production is being built in collaboration with the Ministry of the Environment. It is scheduled to begin in March of 2022.



[4.4] Inorganic Waste Treatment

The total inorganic wastes were 978.12 tons/year (36.35 %) of the total wastes of university based on collected data in 2020. Both of Covid-19 and digital transfer polices of university lower the consumption of paper consumption especially and other inorganic sources by 10% based on data in 2018. The university with collaboration of a certified waste management company established a weekly system for the waste sorting, transfer and selling to recycled companies.



Figure (7) garbage boxes for plastic, paper and food waste separation distributed over all university



Figure (8) Food recycling machine that converts the food waste to bird's food and fertilizer products



[4.5] Toxic Waste Treatment

Due to the Covid-19 crisis, the average infectious wastes collected from CU hospitals in 2020 were higher than those collected in 2019, as CU had one of its hospitals designated as an isolation hospital. Infectious waste, such as needles, sharp objects, tissues, bathroom wastes, and so on, accounts for 3.25 tons of waste every day. For the treatment of these wastes, there is a recognized system that meets Ministry of Health criteria, as indicated in figure 13. Faculty of medicine CU use a non-pollution incinerator, that matches with standards of Ministry of Health, for elimination of hazardous waste and has an established system for treatment of remaining ash from burned medical wastes. A certified organization licensed to deal with and handle these wastes removes both hazardous chemicals and wastes every three months.



Figure (10) example of hazardous waste treatment stages



Figure (11) example of tools used in classification of dangerous wastes and unit of dangerous waste treatment in Faculty of Medicine (Kasr Alainy)



Figure (12) example of medical waste incinerator and treatment system of remaining ash from burned medical wastes



[4.6] Sewage Disposal

The wastewater collected by CU from various campus zones is processed in accordance with the environment ministry's standards and policies. The purified water is used to water plants and gardens in the university's public spaces at a rate of roughly 2000 cm3/day.



5. Water (WR)

5. Water (WR)

5.1. Water conservation program and implementation (WR.1)

The River Nile is the main source of freshwater in the Cairo University as it gives a daily source of the water source that sustains us. The water flowing through our campus taps for drinking and daily use originates in the *River Nile*.



The *River Nile water is* then treated in the Giza water station through a complex process to become safe, high quality drinking water, and distributed to the campus throughout the city by water pipes.



- Mechanisms of rationalizing water consumption within the university campus A new drinking and fire water network has been installed and is being received, where the water pressures are controlled) to suit the use.

Work to rationalize water consumption

- The faculties were addressed to take the necessary action towards rationalization by speeding up the repair of damaged sanitary ware and making posters to guide the university's affiliates, students, administrators and faculty members, on the importance of rationalization in consumption and the speed of reporting any leaks.
- A follow-up committee was formed twice a month to follow up on the various colleges to find out any problems resulting from water pipe leaks to prevent waste resulting from these leaks.
- Plans and mechanisms for maintaining taps and internal supply networks for the university to prevent water wastage
- Water-saving cutting technology is a modern, simple and easy way to disassemble and install it is installed on the nozzles of the taps currently in use without the need to change those taps at all. Flowing water, which achieves the rationalization axis, one of the most important axes of the strategy for the development and management of water resources.
- Replacing pipes with drilled holes with spray manifolds.
- Using manual spraying system once a day for irrigation.
- The workers be sure nozzles are properly positioned to ensure precise spray coverage with minimal waste.
- Installing in-line strainers on all spray headers with inspection of nozzles regularly for clogging and wear.

-As a result of the problem of water scarcity and the university's belief in its important role as a key partner to confront this problem and to activate the principle of sustainable development, Cairo University has long since tended to plant drought-tolerant plants such as palms (date palms and prichardia) and trees (conocarpus, tamarind, prosops, Broad pepper, Ficus netda, glass mattress, carob, cypress, lemon cypress, thin pepper, decrostaches, sycamore, bell, caszurina, buckthorn, olive, arthurina, poinciana, acacialinga and fitna).

- List of planted trees in the campus.

، الاستنامة اليونية مع ما يعادل للريباً - 2	من سيالتكم بخصوص مواجهة التهرات المناخرة وتحديات وحد الطريق مالحرم الجادي ــــــــــــــــــــــــــــــــــــ	 اجتمال المساء فندى من المت
lace	بيان الأشجار داخل الحرم الجامعي	
441	النوع فيكس نتدا	1
171	531	7
132	1	1
EA.	Ulumit at	L
71	44	*
41	الاسبا جوتيكا	.5
	المارتين	Y
414	فيكس بنجامينا	A
11	فيكس هاواى	1
7.	باسمين هندى	3.
. TA	فبكبى نيكورا	2.4
1	فیکس اورت	17:
1 N	يومياكس	17
× ×	346	11
1	فرشاة (جاج	1.0
T.	چنتل	17
Y	سرو ليموني	3.8
7	مرو بلدى	3.8
1	خيف الجمل	14
+	متوبر	Ť.
T	تون بنغالي	11
*	2:2	
1	خیار شمېر	17
A A	بوالسيانا التربوبيا	71
1	فيكس اسان عصفور	10
1.	كافور	17
1	توت	71
1	ليكوما	TA
	الوكاريا	
1		T.
X	فيكس بوليفيا	
3.0	فيكس جينتل	73
3353	الاجمال	

List of dates in the campus

Just	النوع	1
01	لخيل ملوكي	1
TV	نخيل بلدى	Y
9.5	تخيل بشطرده	T
07	نخيل كوكس	t
21	تخيل تحت الإلشاء	0
1-	نخيل سيكاس	1
3	تخيل السفورسيا	V
F	نخيل تيمورابس	A
A	نخيل اربكا	
CV1	الاجمالي	



conocarpus	<image/>
prosopis	







Template for Evidence(s)UI GreenMetric Questionnaire

- Cairo University has ground tank for water conservation



5.2. Water recycling program implementation (WR.2)

Water recycling and reuse mechanisms

Each individual consumes 152 liters of water per day, approximately 15% of which is gray water, which means that it needs less complex treatments to transform into water suitable for secondary uses such as garden irrigation for cleaning purposes, toilets and other uses, and from this point of view, Cairo University implements several mechanisms.

Two units for the treatment of gray water were established at Cairo University in the following places (the mosque of the Faculty of Commerce / Building No. 2 in the University City) and based on the visits and inspections that were made on this subject. The unit consists of the following:

1. Gray water collection tank.
- 2. Water pump.
- 3. Treated water collection tank.
- 4. A washing water tank or sewage line.
- 5. Sand filter: purification of impurities from water to 52 microns.
- 6. Carbon filter: To remove colour, taste and odor.
- Micro purification: To purify impurities from water up to 22 microns.
- 8. Super purification: To purify the impurities down to 5 microns.
- 9. Ultraviolet sterilization: To kill bacteria in water by means of ultraviolet rays.
- 10.Operation and control unit.
- 11.External fence to protect the unit.



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



5.3. Water efficient appliances usage (WR.3)

Currently, Cairo University started water-saving equipment change and water supply management system installation in accordance with the actual operating conditions



Automatic sensor tap	
Compressed air	
tap	
dual flush toilet	

Urinal automatic	
sensor	

	Water	r taps	Toil	ets	Shov	vers	Urin	als
	Normal	Water	Normal	Water	Normal	Water	Normal	Water
		saving		saving		saving		saving
Quantity	19,678	543	26,378	311	-	-	3,476	211
(Pieces)	·							
Total	20,2	221	26,6	589	-		3,68	37
quantity								
(Pieces)								-
Ratio [%]	97,31	2.75	98,83	1.16	-	-	94.27	5.72
Total	1.065 from 50,597 pieces with ration of 2.1 %							
proportion				· 1				
[%]								

5.4. Consumption of treated water (WR.4)

Treated wastewater System Cairo University is reused for gardening and watering the lawn of the common areas of the university.

6. Transportation

6. Transportation

6.1 Cars actively used and managed by university

• Cairo university provides cars for research purposes as well as some cars for examination services outside campus.

• Cairo University provides a mass transportation policy by providing 49 buses operating on 49 lines and providing a safe and comfortable means of transportation for 1,553 employees and faculty members. From here, it is clear that each bus carries approximately 28 people.

• President of Cairo University: We are studying a project to produce an Egyptian-made car

Dr. Mohamed Othman Elkhosht, President of Cairo University, said that the university is ready to transfer technology in the field of manufacturing and production of engines and build integrated production lines through its research centers and units, to become ready for implementation on the ground for industrial quantitative production.

6.2. Number of cars entering the university daily

Cairo University leader decided not to allow cars to enter the university campus unless they have a university permit and not to enter cars for students, and parking cars in the places designated for them on the campus, so as not to impede the movement of students or the work of administrative security or the movement of cars heading to the campus, and the entry of new students to the campus will be organized with a card Nomination for their colleges located on the campus with the presentation of the identity card, while the old students enter their colleges with the card of the last academic year until the completion of the issuance of university cards for all students before the end of the current month of October. As for people, who are not affiliated with Cairo University, who have interests and connections within the university campus, and visiting delegations, their entry will be arranged through the university's public relations.





6.3 Shuttle services

• Cairo University provides a mass transportation policy by providing 49 buses operating on 49 lines and providing a safe and comfortable means of transportation for 1,553 employees and faculty members. From here, it is clear that each bus carries approximately 28 people.

- Shuttle service is provided (by the university or other parties) and the university contributes a part of the cost.
- The university is characterized by an excellent and strategic location, with many public transportation means.

• The university provides a comprehensive bus service available to all its members.

• Buses operate on set times throughout the day, five days a week, in addition to limited times on Saturdays.

• Faculty of Commerce, Cairo University, provides transportation for students of the English Language Division at EI-Sheikh Branch.

• The university has a dedicated door for the Cairo University metro station.

• Operating high-quality buses to connect the 6th of October and Sheikh Zayed areas with the Cairo University metro.

Engineer Sherif El-Sherbiny, Head of the 6th of October City Authority, revealed a project to operate high-quality buses to connect the 6th of October and Sheikh Zayed areas with the Cairo University metro, stressing that the project includes buses and minibuses, as there are 50 minibuses within the project, as well as 20 buses with a load of 40 passengers.





6.4. Zero Emission Vehicles (ZEV) policy on campus

Cairo University is making great efforts in making a comprehensive development to advance the university at all educational, research and environmental levels within the framework of its strategy to shift towards fourth generation universities despite the exceptional circumstances imposed by the Corona pandemic.

Making regular environmental measurements is one of the most important legations to save the environment. This is done to all different facilities aiming to make an environmental records and recording the measurement results, controlling and environmental monitoring regularly and continuously.

The continuous efforts aiming to zero emission is planned by different ways:

- Planning to make a huge parking area outside the campus

- Planning to increase shuttles for transportation instead of huge number of cars.

- Planning to make deal with ministry of petroleum to construct a building for replacing benzene cars with natural gas to encourage staff members.

- Encourage the use of electric or hybrid cars.
- -Encourage using bicycles
- Put filter on cafeterias to filtrate gases before release to atmosphere.

6.5. Zero Emission Vehicles (e.g. bicycles, electric car, etc.) on campus per day

1- The President of Cairo University leads a bicycle marathon inside the university campus

Dr. Mohamed Othman Elkhosht, President of Cairo University, led a cycling marathon inside the university campus; celebrating the start of the new academic year with the participation of dozens of university students.

He announced the opening of renovation and development works in the university city of Cairo University in the coming days.

He explained that 6 buildings in the University City and the green areas of the University City were renovated, and the university mosque was also renovated and developed.







2- A Cairo engineering team won a bronze medal for inventing an electric race car

Cairo University President Dr. Mohamed Othman Elkhosht announced that the Cairo University Racing Team -Formula Student team won the bronze medal at the "Geneva International Exhibition of Inventions" in its extraordinary session 2021 for their invention of an electric racing car, and the Academy of Scientific Research and Technology nominated the team to participate in the exhibition from Among the hundreds of applicants.

Al-Khasht said, in a statement issued by Cairo University, that the university encourages its students to participate in international competitions and is keen to provide them with the opportunity for creativity, innovation and communication with their peers from all over the world, stressing its support for student projects and innovations in various fields, indicating that distinguished rewards will be disbursed. For winning students and the supervisory body.

The President of Cairo University indicated that the Faculty of Engineering has advanced in international classifications and is ranked globally among the top 150 in the British QS classification, and comes in the category between the top 200: 300 in the world in the Chinese classification "Shanghai" for the year 2020, noting that the College of Engineering is not just a college for learning and graduating cadres only, but it is a house of expertise that has the best cadres locally, regionally and internationally.



6.6. Ratio of parking area to total campus area.

Formula: ((2500/1105126.12) x 100%)= 0.226

6.7. Initiatives to decrease private vehicles on campus

1- Encouraging riding bicycles by Cairo University President Dr. Mohamed Othman Elkhosht

2- President of Cairo University is studying a project to produce an Egyptian-made car.

3- Planning to make deal with ministry of petroleum to construct a building for replacing benzene cars with natural gas to encourage staff members.

4- Planning to make a huge parking area outside the campus

6.8. Pedestrian path on campus

Pedestrian paths are available, designed for safety, convenience, and in some parts provided with disabled-friendly features.

- Safety: equipped with enough lighting, separator between road for vehicle and pedestrian path, and some handrail.

- Convenience: Level difference with a mild slant for walking alongside the pavement, some area covered, using soft (rubber, woods, etc.) material, availability of location information and directions

- Disabled-friendly: ramps and guiding blocks which have a suitable design for pedestrian having physical disabilities.





Golf cars to deliver students of Cairo University with disabilities to exam venues

More attention is given to people with disabilities in Egypt, and this time interest appeared in Cairo University, which succeeded in cooperation with an unnamed company in providing 3 golf carts for students with special needs to move around the university from one place to another, specifically to the examination sites. This unnamed company donated the three cars, whose capacity varies between 4 and 6 people. These vehicles will also serve the university's faculty members and employees with disabilities, and will be present at the university's gates to transport students, staff and teachers to the places they want. Two cars will be present continuously inside the university and a third car in the University City to serve students with disabilities and transport them to the examination sites in the university's stadiums.



7. Education and Research

7. Education and Research

7.1. Total number of courses offered

No.	Institution	Total
1.	Faculty of Science	2040
2.	Faculty of Law	700
3.	Faculty of Arts	1460
4.	Faculty of <u>Engineering</u>	1480
5.	Faculty of <u>Medicine</u>	2600
6.	Faculty of <u>Computers and Artificial Intelligence</u>	1880
7.	Faculty of <u>Pharmacy</u>	980
8.	Faculty of <u>Agriculture</u>	1840
9.	Faculty of <u>Economics and Political Science</u>	920
10.	Faculty of <u>Archaeology</u>	1100
11.	Faculty of <u>Commerce</u>	1600
12.	Faculty of Specific Education	480
13.	Faculty of <u>Nursing</u>	1023
14.	Faculty of <u>Physical Therapy</u>	843
15.	Faculty of Oral and Dental Medicine	674
16.	Faculty of <u>Veterinary Medicine</u>	1988
17.	Faculty of Dar El-Ulum	543
18	Faculty of <u>Education For Early Childhood</u>	432
19	Faculty of Graduate Studies for Statistical Research	1430
20.	Faculty of <u>African Postgraduate Studies</u>	1230
21.	Faculty of <u>Regional and Urban Planning</u>	423
22.	Faculty of Graduate Studies for Education	476
23.	Faculty of <u>Nanotechnology for Postgraduates Studies</u>	37
24.	Faculty of Mass Communication	622
25.	National Institute of Laser Enhanced Sciences (NILES)	323

26. <u>National Cancer Institute</u>	89
Total	27,213

7.2. Number of courses/subjects related to sustainability offered



Cairo University has established 26 academic units, both faculties and institutes, offering 1460 degree programs, which are 314 Bachelor's, 459 Diploma's, 400 Master's and 287 Doctoral degree programs with the total of 27,213 courses or subjects. About 17,688 that representing 64.99 % of the total courses studied in the Cairo University are related to sustainability.

7.3. Representative courses of sustainability courses studied in the Cairo University.

No.	Degree	Programs	Faculty
1.		SUSTAINABLE ENERGY	
		ENGINEERING [SEE]	
2.		Infrastructure engineering program	
3.		Architectural engineering and	
	Bachelor's	technology program	Engineering
4.		Healthcare Engineering and	
		Management Program	
5.		Electrical Power Engineering Program	
6.		Water and Environmental	
		Engineering Program	
7.		Sustainable Energy Engineering	
		Program	
8.		Agriculture and Environment	
		Legislation	
		and human rights	
9.	Bachelor's	The foundations of generalization of	Agriculture
		the environment	
10.		Environmental Economics	
11.		The environment and natural	
		resources	
12.		Ecology and physiology of insects	

13.		Pollution of the environment with	
		pesticides	
14.		microorganism environment	
15.		Industrial Medicine & Occupational	
	Master	Diseases	Medicine
16.		Medical Microbiology & Immunology	
17.		Medical Parasitology	
18.		Psychiatry	
19.		Medical Pharmacology	
20.		Blood Transfusion	
I			
21.	Bachelor's	Architecture & Urban Morphology	Faculty of Regional
22.		Urban Conservation & Upgrading	<u>and Urban</u> <u>Planning</u>
23.		Design of Urban Communities	
24.		Man and Environment	
25.		Introduction to Environmental	
		Systems	
26.		Environmental Planning	
27.		Environmental Information Systems	
28.		Environmental Economics & Natural	
		Resources	
29.		Environmental Geotechnical Analysis	
30.		Environment Surveys	
31.		Economics of Urban Management	

32. 33.	Master	Sustainability and future cities Issues and urban development policies	Faculty of Regional and Urban Planning
34.		urban upgrading and conservation	
	Ph.D.,	methods	Faculty of Regional
35.		introduction in environmental planning and natural resources	and Urban Planning
36.		management urban upgrading and conservation	
		issues	
37.		Environmental and infrastructure	
		planning projects	

7.4. Total no. of research publication in last 3 years



7.5. Total research funds (in US Dollars)



7.6. Total research funds dedicated to sustainability research (in US Dollars)



7.7. Ration of Total sustainability research fund towards Total research fund (%)



7.8. Research centers and sustainability

7.8.1. Center for Environmental Hazard Mitigation and Environmental Research and Studies at Cairo University

Center for Environmental Hazard Mitigation and Environmental Research and Studies Cairo at University (C.H.M.E.S.R.) applying geographic information systems using the latest software systems and extrapolate satellite images to create optimal land use map. The an C.H.M.E.S.R. determine the geotechnical and engineering characteristics of the foundation soil in construction sites and new cities in cooperation with the Ministry of Housing, Utilities and Urban Communities, the Ministry of Electricity and Energy, the Ministry of Tourism and the private sector. The C.H.M.E.S.R. assesses the environmental impact of agricultural, industrial. urban and medical activities, and in landfill sites and activities. petroleum The C.H.M.E.S.R. determines the seismic code and preparing seismic range maps for strategic construction sites and carry out chemical analyzes and evaluating the effects of toxic and

harmful elements to the environment in the field of industrial drainage, sewage and agricultural drainage, and air and soil pollutants. Also the C.H.M.E.S.R. determines the levels of groundwater and the degree of its pollution and the sources of this pollution and its impact on construction activities and burial sites of hazardous waste. The C.H.M.E.S.R. aims to measure air pollutants for industrial facilities and petroleum activities sites using the latest devices in the mobile center laboratory. In addition, the C.H.M.E.S.R. address environmental problems in the areas of air and water pollution and hazardous well waste disposal, as as environmental impact assessment studies and basic geological and geophysical studies for future plans in agricultural, tourism urban, and industrial expansion. The center also activates the cooperation protocols between the Center and the Ministry of State for Environmental Affairs and the governorates of the Republic, the

Ministry of Housing and Construction and the Petroleum Authority.

7.8.2. Experimental wastewater treatment plant at Cairo University

The experimental wastewater treatment plant at Cairo University designed by the university as part of a research project with a Japanese university to treat sewage water and convert it into potable water. It can also be used in agriculture after the results of the final and official analyzes that confirmed the validity of the water for drinking.

مركز الحد من المخاطر والدراسات والبحوث البيئية C.H.M.E.S.R CAIRO UNIVERSITY







7.8.3. The Development and Technological Planning Consultation and Research Center

The Development and Technological Planning Consultation and Research Center was established in 1979, and is the first and largest center of its kind at Cairo University and Egyptian universities. This is through the "Technological Development Program" for research cooperation between the Massachusetts Institute of Technology in the United States and Cairo University, with the support of USAID in Cairo. The main objective of this program was to conduct 14

national research projects in which Cairo University and the Massachusetts Institute participate in addition to the concerned Egyptian ministries. It aims to analyze, plan and important development manage programs in Egypt with a broader goal of forming an institutional framework this for program through the establishment of an independent research center dedicated to this purpose. Cairo University under the name of "Development Consulting and

Research Center and Technological Planning".



7.8.4. Scientific Computation Center - Cairo University

Scientific Computation Center - Cairo University is specialized in large-scale national projects characterized by modern management requirement of precise data collection and cadres training to enhance benefiting from potentials material and human contributing thus to facilitating differentiation from among best available alternative, besides helping in expediting proper decisions for

decision makers. S.C.C is specialized over in implementing more information systems plans, offering consultative services and training of all faculties of Cairo University, external bodies and individual in computer and engineering. info technology It especially the following conduits researches and studies for improving efficiency of scientific computation and electronic computers.



7.8.5. Science Heritage Center

In the end of the year 1996, the board of Cairo University, under the presidency of Professor Mofid Shehab, decided to establish a center for the history of Science "Science Heritage Center" in the Faculty of named as Science. In spite of the interest in history that is characteristic of Egypt, teaching history of science is not included in the University and general education curricula. So, the Science Heritage Center represents the first step for the initiation and revival of the scientific history and achievements in the ancient Egyptian and Islamic era.

The Science Heritage Center is devoted to the study of the history of science. The process of scientific thinking and acquisition of knowledge acquisition and their interrelations with cultural, technical, and social contexts will be central points for investigation. Even though, natural science might be considered the principal objective of research and studies at the center, the methodologies applied are rooted in the humanities, and in particular in studies of human culture.



7.9. Events related to sustainability

Sustainability day 27/10/2021



Your health week guys

Sustainability competition



Environmental Awareness Week







1	12	(A)	and
	F	The second	X
		m	

مبوع صحتك يا شباب بالمشى أمام بالكتبة الركزية ۲۰۱۰/۱۲/۵ حتى ۲۰۱۰/۱۲/۵

61		الأيام
۲	۲O	الاثنين
1	10	الفلافاء
۲	٤٨	الأربعاء
٩	75	ال <mark>ذهيس</mark>
12	1714	الاجمالي

Drinking water seminars pollution and poisoning

between







Steroids and youth, causes and risks





World Environment and Green Economy Day





Cycling marathon



Celebration of the World Mental Health Day and in line with the efforts of Cairo University for sustainable development



Today's

session 10/18 on sustainable development and waste recycling to produce educational aids for children Presenter of the symposium Prof. Dr. Samah Abdel Fattah Marzouk. The symposium included two topics Sustainable

development and how to conserve natural resources and rationalize consumption

2- Recycling waste to produce educational aids for the child


"Get Green" Initiative

It aims to change behaviors, spread environmental awareness, and urge citizens, especially young people, to participate in preserving the environment and natural resources to ensure their sustainability in order to preserve the rights of future generations.

The initiative also aims to spread awareness of the preservation and management of natural reserves according to international standards, in order to ensure the preservation of the balance of ecosystems and to maximize opportunities for economic and social development.







The initiative launched by the Ministry of Environment raises awareness of the importance of afforestation, recycling of waste, rationalizing food and energy consumption, reducing the use of plastic, preserving marine creatures, reducing air pollution, and protecting nature reserves.

7.10. Examples of Cairo University sustainability competition posters.



7.11. Student organizations related to sustainability

MSP Tech Club is a student activity organized by Microsoft student partners under the supervision of Microsoft, aiming to increase the knowledge of students by providing them with the essential training and the interpersonal skills.



Cairo University Entrepreneurship Club



1.	Literary club Faculty of arts
2.	Committee of Art and Culture Outreach- Faculty of Law Students
3.	Outreach and Volunteer Faculty of Science
4.	Families Committee in all 28 faculties
5.	Sports Activity Committee in all 28 faculties
6.	Committee for cultural and media activity in all 28 faculties
7.	Technical Activities Committee in all 28 faculties
8.	Mobile and Public Service Committee in all 28 faculties
9.	Social Activities Committee in all 28 faculties
10.	Scientific and Technological Activities Committee in all 28
	faculties

7.12. Cultural activities on campus

Educational seminars for your health guys



Violence against Woman



Heritage Week Seminars





Egyptian epic symposium





Turkish University concert



7.13. Sustainability community services project organized and/or involving students

1. Small and medium enterprise project







3. Digital Mechanization Model Project



4. Project of the full vision model to clarify the requirements of the labor market from all directions



7.14. University program(s) to cope with Covid-19 pandemic

Cairo University has developed a comprehensive plan to manage the educational process since the beginning of the Corona virus crisis and for any possible scenario, by defining ways to ensure the safety and health of the university's members, including students, members of the teaching body and workers, by periodically equipping and sterilizing laboratories and terraces, in addition to activating the plan to transform the university into a smart university from

the third generation and the provision of educational services electronically.



First: Providing electronic platforms and clarifying them for the teaching staff:

Supporting colleges to switch to eeducation and distance study using global programs and applications for distance education by uploading courses and questions for each college electronically on the university's website and college websites, and making them available to students at the bachelor's and bachelor's levels, whether in terms of two semesters or credit hours, through Word files And PowerPoint, PDF, and video, and the disbursement of rewards to faculty members and technical cadres for contributing of to the creation electronic courses.

With the onset of the crisis, a workshop was held at the Knowledge and Electronic Services Center, for all faculties coordinators to train them on methods of distance study, develop methods of teaching courses, and discuss the problems that students may face in browsing the Internet, and CDs were provided on them with weekly lectures for each course with the availability of The possibility of receiving it from colleges or sending content to students through e-mail.



Second: In the event those students have to attend some practical practices that could not be taught through electronic platforms:

In the event that students had to attend some practical practices that could not be taught through electronic platforms: the university prevented overcrowding

and increased the number of hours in the working day to be from 9 am to 9 pm. to come on time.

۲-۲۱ مايو ۲۰۲۱					7.71	- T		7.75 Jun 19 - Yo								
1	1	5	٤	خميس	Į,	No.	5	1 E	ŝ	Les 1	-226	8	È	16-4 1	كرد ططلب	,
المهارات العامة بالكلية			SE.S.S		المزرعة الغربية ٢٠				وحدة الإليان			ليدان طه محدد حد الله	1975-170	÷.		
المهارات العامة بالكلية				語ない	البزرعة الغربية ٢٠			وحدة الاليان			and the second		ايمان اريد سلامه عبد الطعيود		- 11	
المهارات العامة بالكلوة						المزرعة التربية ٢٠		وحدة الآليان			16.2		ایه ایمن جد الکان ایمن محد المد		13	
المهارات العامة بالكلية					100	Je-	المزرعة العربية ٢٠		وحدة الألبان		1	1.5.6		ايه مرحى عبد الطاهر سود	WYF-14-	١٢
المهارات العامة بالكلية			91	の行う		المزرعة الفربية ٢٠			وحدة الاليان					بسطة الين اعمد جمعه أبر المدد	1975-111	71
المهارات العامة بالكلية			1	and a second		لمزرعة الفربية -٢			وسدة الإليان		50	inter de Reference		تلی مصالی معمر د مصالی		٠,
a, K	المهارات النامة بالكلية					Y- 301		العزرمة اله	ونهاد	وحدة ا	1000			حسام الدين تغسر كمال حد اللتاح محد	1975-129	"
المهارات المامة بالكلية			6			وحدة تكتولوجيا الخير			The second s		غريد ۲۰	المزرعة ا	سلېمىت مىرن لىلى سىن	1917-191		
2,5	المهارات العامة بالكلية			63 - T	出於時代	وحدة لكتولوجيا الحيز			A HAN	133	المزرعة الغربية ٢٠		المزرعة ا	هنذاه لحد يكر مطرط	1997-190	11
کلية	المهارات المامة بالكلية			1	in the second	وحدة تكنولوجيا الخذ			Alter A		المزرعة الغربية ٢٠		المزرعة ا	حدين مصطلي حدين محدود	1977-199	79
المهارات العامة بالكلية					وحدة لكتولوجيا الحيز					المزرعة العربية ٢٠		المزرعة ا	هوریه مزتنون کلن ریابن	1917-147	۴.	
المهارات العامة بالكلية			12.00		وحدة تكنولوجيا الخبز			122.1	and the second second		المزرعة الغربية -٢		طاك طى محد طى لتد	1917-144	**	
المهازات العامة بالكلية			Concertainty Alation of the	332.,	وحدة تكنولوجها الخز			語が		1.1	غربية ٢٠	المزرعة ا	دهاد استمه ایند جد السلام همین			
ŕĸ	المهارات العامة بالكلية			-	147 T 14	وحدة تكتولوجيا الخبر			23454	and the second	17.5	غربية ٢٠	المزرعة ا	رسبة لمتدابر اهيارج	NYTE-T11	51
ųκ	المهازات العامة بالكلية			وجاالغيز	وحدة تكنوا				梁之:		3	خريبة ٢٠	المزرعة ا	ر حملاً مجدی ایر اهم سلمان	1917-117	
1,K	المهارات العامة بالكلية			وجيا الغبز	وحدة تكنوا	A set of the set of the set			Aler -		South States	غربية ٢٠	المزرعة ا	ووان أبراهم سهد سهد	1916-164	
المهارات العامة والكلية			وجيالغيز	وحدة لكتوا						1 an	ظريبة T-	المزرعة ا	زينب عد العل محد محد		٢٦	
4,6	البامة بال	المهارات		وجرا الخبز	وحدة لكنوا	125	1.4.2	1244	100000	12	Hige A	Y- Jeck	المزرعة ا	سارد احمد أبراهيم منصور	1917-141	n

توزيع طلاب برنامج علوم الاغذية خلال الفصل التدريبي الثاني ٢٠٢١/٢٠٢٠

Third: Procedures for cafeterias and food inside the university

Due to what the country is going through from the new Corona pandemic, His Excellency Mr. Prof. Dr. President of Cairo University emphasizing the following:-

- 1. Preventing overcrowding in cafeterias
- 2. Observe the distance between individuals
- 3. Take into account the use of single-use cups.
- 4. Washing and sterilizing hands for all employees who are responsible for preparing food.





The university cities received 16 regiments, which included 2,922 Egyptians returning from the State of Kuwait, to spend the period of precautionary sanitary isolation, which contributes to emphasizing the role of the Egyptian state in caring for its children and providing all their needs for free, in addition to hosting 531 male and female students from 6 different nationalities.







Cairo University has succeeded During the period of receiving the Egyptian groups returning from abroad and the residence of the foreign students, in the preparation of collecting the necessary equipment inside the university dormitories to

support from the central medical administration of the university and university hospitals, the consequences of the health status of the residents and hosting some of them for treatment in the university hospitals. The university has hired additional companies for cleaning works in the University City to conduct continuous cleaning and disinfection of rooms and buildings, while providing large quantities of provide safe and sterile accommodation and provide full medical care, as an integrated clinic operating around the clock, a pharmacy, an equipped ambulance, and first aid kits were provided, With the provision of full

hand sanitizers and liquid soap, and distributing masks and gloves. The restaurants of the University City and the guest house provided meals in addition to the use of external restaurants, and TV screens and shower dishes were installed in the rooms. The rooms designated for isolation in order to provide the best service and requested all precautions.

Fifth: Procedures for student events and activities

Cairo University has succeeded in implementing the largest plan for student activities through electronic platforms, by launching cultural, artistic and scientific competitions, with the aim of motivating students and supporting the spirit of competition among them. Some events were also hosted, taking into account the precautionary measures.

ال اولا: الأنشطة التي تم تنفيذها لتنمية الابداع في ظل مواجهة جانحة كورونا خلال شهر أكتوبر ٢٠٢٠									
سياسية التعامل	الغرض من النشاط	الاشطة							
يقوم المتسابق بتسجيل مقطع بصوته لمدة ٣ دقانق وارساله عبر البريد الالكتروني ووصلت الجوانز المالية الى ١٠ الاف جنيه للفائز الأول و ٢٠٠٠ ج للفائز الثالث و ٢٠٠٠ ج للفائز الثالث ومن الرابع للعاشر ٢٠٠٠ ج وجوائز خاصة بقيمة ٢٠٠٠ ج لعدد ٢٠ متسابق بقيمة ٢٠٠٠ الف جنيه	أكتشاف جيل من القرآء الجدد من طلاب الجامعة الموهويين	والأسلاة والعاملين	`						
أن يقوم الطالب بكتابة العمل في أحد المجالات وارساله عبر الالكتروني وتم منح الفائزين جوائز مالية كبيرة	تشية مهارات الابداع الأدبى لدى طلاب الجامعة	<u>تنظيم المسابقة الثقافية : في مجالات</u> - شعر القصحي – شعر العامية – القصة القصيرة – البحث العلمي	۲						
يقوم الطالب بتسجل مقطع غنائي بصوته عبر برنامج zoom	تتمية المهارات الفنية والابداع لدى الطلاب الموهبين فى التشاط الفنى	المجالات الفَقي <mark>ة :</mark> -الغّاى الفردى – العرّف الفردى -	٣						
h									

Sixth : Procedures for handling suspected cases

Cairo University issued a guide explaining the rules and guidelines for home isolation for cases that suffer from simple symptoms of infection with the virus instead of transferring them to isolation hospitals, with the aim of educating students, workers and faculty members, and introducing the scientific rules of isolation and removing fear and ambiguity.



Seventh: Procedures for following up on the implementation of precautionary and preventive measures

His Excellency Prof. Dr. Muhammad Al-Khasht directed him to follow up on the implementation of the precautionary and preventive measures as follows:

- Assigning the team of the Supreme Committee for Crisis Management in coordination with the General Department of Preventive Affairs
- ✤ To follow up on the implementation of precautionary measures.
- ✤ Control and control teams have been formed.
- ✤ Contact persons have been identified for each college.
- The degree of readiness of Al-Qasr Al-Aini Hospital has been raised to receive suspected cases of corona.

8- Events and competitions

Cairo University celebrated the international day of sustainability by several ways, among it celebration among all faculties







International sustainability day celebration by faculty of science





First experimental use of can bank, faculty of science

8.2- Cairo University win first place among all universities in field as best eco-friendly university



8.3 Cooperation with international agencies and universities

International birds cooperation partnership presented a lecture about birds bio- conservation at Cairo University's sustainability day by President, International Bird Conservation Partnership, Nico Arcilla, PhD, Affiliate Fellow, University of Nebraska, USA



8.4 Sustainability office conducted Awareness lectures at National Cancer Institute

National Cancer Institute Cairo University Vice Dean's Office For vironmental and Social Affairs المعهد القومى للأورام جامعة القاهرة المعهد القـومـي ا__لاورام مكتب وكيل المعهد فتون خدمة المحتمع وتنمية البينة 12 12 نتشرف بدعوة سيادتكم لحضور محاضرة ل ا.د.سهير رمضان فهمى وكيل كلية العلوم والمنسق العام لمكتب الإستدامة - جامعة القاهرة و ا.د.محمد نجيب المدير التنفيذي لمكتب الإستدامة - جامعة القاهرة المحاضرة بعنوات :-حامعة العاهرة وأهداف التنمية المستدامة وذلك يوم الثلاثاء الموافق ٢٠٢١/١١/٣٠ في تمام الساعة ١١.٠٠ صباحاً القاعه الكبرى . ا.د/طارق خبری ا.د/عبير عشماوي وكيل المعهد لشنون خدمة المجتمع وتنمية البيئة منسق البرنامج قصر العينى - ميدان فم الغليج - القاهرة ١١٧٩٦ Fom El Khalig, Cairo 11796, Egypt T-T- TTRASEVA



8.5 Sustainability office conducted Awareness lectures in cooperation with institutional animal care and use committee









8.6 Sustainability office, Cairo University announced competition titled Cairo University and sustainability goals





The contribution of all faculties was as follows

The winning posters were



The winning photographs and drawing were

