



# **Sohag University Sustainability Report (2025)**

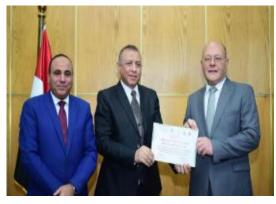
This is the fifth sustainability report; it will be updated annually at the beginning of October every year

The Minister of Higher Education and the President of Sohag University plant a tree in the name of President Abdel Fattah Al-Sisi at sohag university.









https://www.sohag-univ.edu.eg/ar/?page\_id=20049&lang=en https://sust.sohag-univ.edu.eg/en/sustainability-report/

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#### **Introduction:**

Prof. Hassan Alnomany, the president of the university, has worked on developing many sustainability programs and activities to make Sohag University an environmentally friendly university, within the framework of Egypt's Vision 2030 for Sustainable Development and the National Strategy for Climate Change 2050, since he directed to develop many sustainability programs that depend on Spreading environmental awareness and optimal use of resources, and this coincides with the initiative of President Abdel Fattah El-Sisi, President of the Republic (Prepare for the Green), launched by Dr. Yasmine Fouad, Minister of Environmental Affairs.

The university realizes the importance of creating a sustainable environment in the campus.

The university planned to have a clean and spotless campus to achieve a sustainable and green environment standards such as sustainable buildings, reducing the use of environmentally polluting means of transport, rationalizing energy and water consumption, preserving green cover, reducing carbon emissions, reducing noise, safe disposal of waste, in addition to digital transformation to reduce paper use and expand new and renewable energy projects.

The university also supports and encourages the scientific research and research projects related to sustainability and organizes activities to increase environmental awareness among students, staff members, and university employees

Therefore, the university established a sustainability unit and appointed a director for it from one of the most professional professors in the field of environment to develop sustainability plans and initiatives and follow up their implementation.

## **Sustainability Center Activities**

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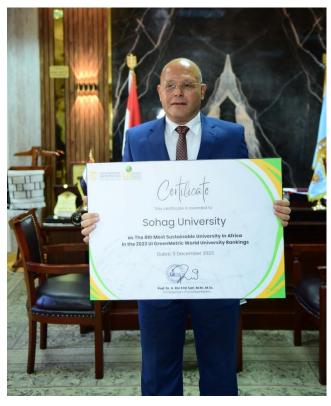
\* Participating in the international rankings (UI GreenMetric) of the most sustainable universities for the first time and obtaining the fifth position in Africa and ranked 492 globally among 912 universities for 2020, while it ranked 400 globally among 956 universities and got the fifth position for the secod time in Africa during the ranking of 2021.

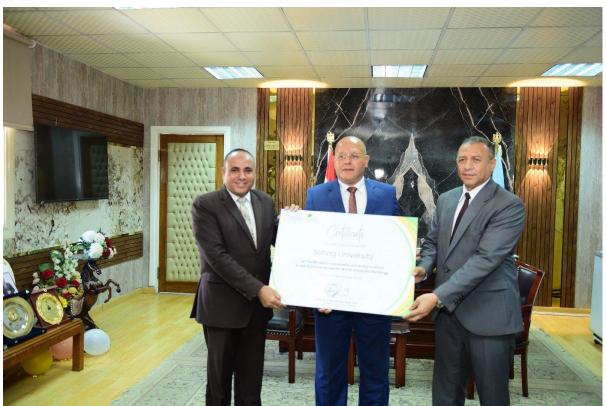
During the ranking of 2022, the university ranked 355 globally and the eighth at the african level among 1050 universities from 84 countries around the world.

Due to improving the sustainability activities, Sohag University achieved better results in the ranking of by obtaining the 320th position globally out of 1183 international universities and achieving the eighth position in Egypt and Africa.

In 2024, Sohag University achieved better results in the ranking by obtaining the 255th position globally out of 1477 international universities and achieving the first position in Egypt and Africa.















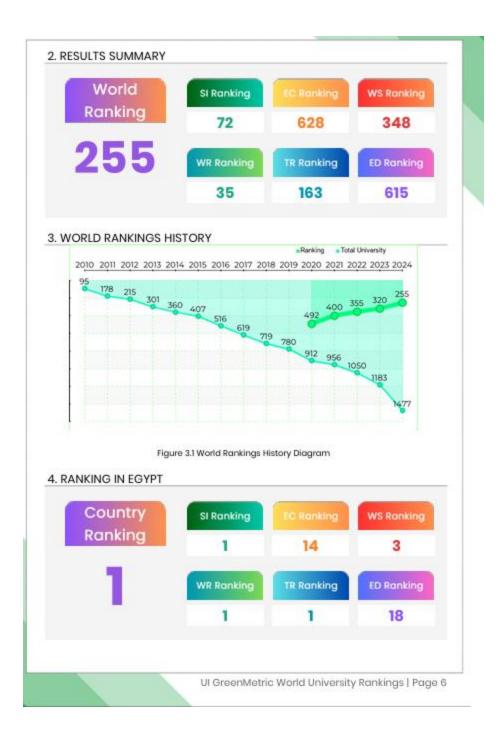
# FACT FILE 2024 UI GREENMETRIC 2024

SOHAG UNIVERSITY EGYPT



























# Certificate

This certificate is awarded to

#### **SOHAG UNIVERSITY**

as the Most Sustainable University in Africa in the 2024 UI GreenMetric World University Rankings

12 December, 2024



Prof. Dr. Ir. Riri Fitri Sari, M.M., M.Sc. Chairperson of Ul GreenMetric





# Certificate

This certificate is awarded to Sohag University

as The 255<sup>th</sup> World's Most Sustainable University in 2024 UI GreenMetric World University Rankings

12 December, 2024



Prof. Dr. Ir. Riri Fitri Sari, M.M., M.Sc. Chairperson of Ul GreenMetric

#### Participation in the international sustainability workshops:

1 -The Director of Sustainability center at the university (**Prof. Hamdy M.A. Hassanein**), representing Sohag University, has participated in the virtual workshop on:

UI GreenMetric World University ranking (13-15 October 2020 University of Zanjan, Iran).



2-The Director of Sustainability center at the university (**Prof. HamdyM** .**A. Hassanein**), has participated in the virtual workshop on: Collective actions for transforming sustainable universities after the pandemic period which was held from 27-29 September 2022 in Chinese Taipei



# **Spreading sustainability culture:**







The President of Sohag University Prof. H. Noaman launched the presidential initiative (planting 100 million trees) by planting 1,000 fruit trees at Sohag University with the participation of all university employees.



Moreover, to spread the culture of sustainability among university employees and the surrounding community, the center nominated 30 young men and women (administrators and students) to train them on sustainability concepts and applications within the "Sustainability Ambassadors" initiative organized by the National Institute for Governance and Sustainable Development, the training arm of the Egyptian Ministry of Planning.

16 candidates from Sohag University have completed the training courses and are qualified to be Sustainability Ambassadors and Trainers

(TOT) and will contribute to the training activities of the Sustainability Unit.











# **Carbon Footprint**

It is an expression of carbon dioxide emissions resulting from the combustion of fuels in all its sources, which are in the consumption of electric energy and also in the emissions of various means of transportation.

Calculation of carbon footprint at sohag university per year (2019)

Total carbon footprint (2019) = 5119.48 metric tons

Calculating the carbon footprint (carbon footprint) at Sohag University for the year (2020)

Total carbon footprint (2020) = 4995.3 metric tons

#### Calculating the carbon footprint at Sohag University for the year (2021):

Carbon footprint = 0 metric tons

**Total carbon footprint (2021) = 7202.28 metric tons** 

#### **Calculating the carbon footprint at Sohag University for the year(2022):**

#### **Total carbon footprint = 5355.82 metric tons**

The total carbon footprint divided by total campus population (metric tons per person). Formula: ((2.11)/(1.12+1.14))=0.0596

Calculation of carbon footprint at sohag university per year (2023)

### <u>Total carbon footprint = 5970.4 metric tons</u>

The total carbon footprint divided by total campus population (metric tons per person).

Formula: ((2.11)/(1.12+1.14)) = 0.064

#### Calculation of carbon footprint at sohag university per year (2024)

#### 1. Electricity:

Electricity usage: 6285714.285 Kilo watt hour

(6285714.285/1000) X0.84 = 5279.99

<u>Carbon footprint = 5279.99 metric tons</u>

2. Transportation (Shuttle bus):

No. Shuttle bus = 4

total trips=48

App. Travel dist.=1.2 km

{(5 X 16 X 1.2 X 240)/100} X 0.01= 2.30

#### **Carbon footprint = 2.30 metric tons**

3. Transportation (Cars):

No. Cars = 717

App. Travel dist.=1.2 km

[(717 X 2 X 1.2 X 240)/ 100] X 0.01= 41.299

Carbon footprint = 41.299 metric tons

**4. Transportation (Motorcycle):** Its entry is forbidden\*\*

**Carbon footprint = 0 metric tons** 

**Total carbon footprint = 5323.59 metric tons** 

The total carbon footprint divided by total campus population (metric tons per person).

Formula: ((2.11)/(1.12+1.14)) = 0.0596



Sohag University has adopted several mechanisms to reduce carbon dioxide emissions and thus reduce the carbon footprint, and these mechanisms are:

- 1- Rationalizing electricity and water consumption.
- 2- Provide specific paths to encourage hiking and cycling.
- 3- Reducing the use of private cars inside the university and relying on public transportation.
- 4- Extending the use of energy from environmentally friendly sources.
- 5- Purchasing new highly efficient devices types.
- 6- Adopting the green building policy upon renewing buildings or constructing new buildings.
- 7- Reducing, separating and recycling waste.

8- Preventing motorcycles from getting in the campus while allocating special places for them, outside the university.













**Infrastructure and Green Cover** 

















The university's location with its open spaces, green spaces, and its infrastructure, gives a clear image of the university's attitude towards becoming environmentally friendly.

However, the university is working to provide more green spaces and clean environmental factors in the framework of its adoption of sustainability standards, and this is clear from:

- The total area of the university (4023806.57 meter<sup>2</sup>) is appropriate, including the area of buildings and the parking space for the students, staff and employees.

The university is also concerned with safety, health and risk control and works to regularly update the university's emergency plan.







After the end of the pandemic, the university started completing the construction process and achieving the required maintenance for the university buildings:







## Water Management





Water management is defined as the process of planning, improving, and optimizing the use of available water resources in order to achieve the best social, economic and environmental life for the citizens.

The University's Sustainability center is working with water management team to develop plans and mechanisms that contribute to rationalize water consumption,

reuse water after purification, and periodic maintenance plans for water conservation.

Here as the picture shows using modern methods of irrigation on the university farms.

An example of water consumption rationalizing



Moreover, the Center of Sustainable Development organized a seminar to raise the awareness of preserving the Nile River from pollution and keeping it clean, entitled "Egypt is the Gift of the Nile", with the participation of a number of university students.

The students talked with their colleagues as well as with university employees and distributed some flyers aimed at raising the awareness of polluting the Nile River.



# **Sohag University Sustainability Center**





The Nile is life line

Save the Nile Save the life











#### **Energy Management**



The university works to rationalize the use of energy in all its facilities, starting with the design of buildings that are mostly rectangular in orientation from east to west so that they are less affected by the sun's heat in the summer, thus saving cooling energy as well as providing natural ventilation and increasing the efficiency of external lighting through the wide windows on the sides.

The university also adopts the green building system by using materials from the environment, isolating roofs and walls, external shading, and using saving bulbs in lighting to save energy.

The university encourages the use of environmentally friendly energy sources, such as solar energy as well as purchasing new highly efficient devices

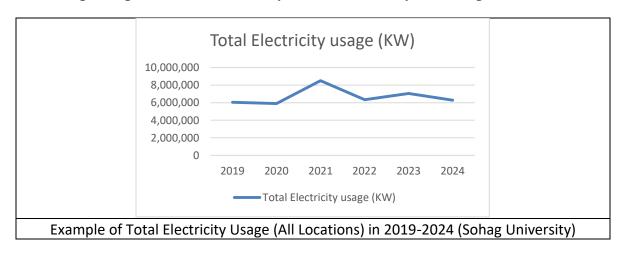
#### Total electricity usage divided by total campus' population (KWh per person)

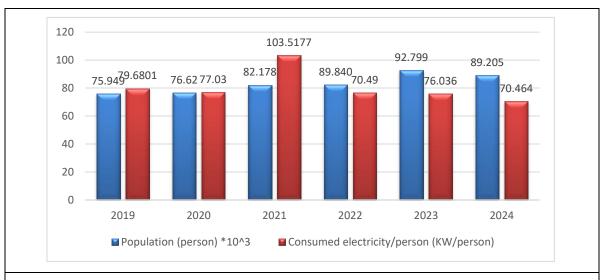
After the end of the epidemic in (2021), the university worked at its full capacity, and all the construction operations resumed, in addition to the construction of many new buildings, which led to an increase in electricity consumption.

The university now plans to cover the car parks with solar cells to produce clean energy to compensate the increase in consumption from traditional electricity.

The value of electricity consumption for all activities at the university in the year (2021) reached 8,506,880 kilowatt-hours, so that the annual average per capita consumption was 103.5177 kilowatt-hours.

Given the university's application of environmentally friendly standards, in terms of expanding green spaces, converting a number of cars to operate on natural gas, in addition to rationalizing electricity consumption by purchasing highly efficient devices that consume less electricity, and replacing regular lamps and bulbs with energy-saving types, in addition to preventing the entry of vehicles with harmful emissions into the university, as special parking spaces have been allocated for motorcycles outside the university walls, electricity consumption decreased from 103.52 kilowatts/person (in 2021) to 70.464 kilowatts/person (in 2024), a decrease of 7.33% (per capita) of the university's total electricity consumption.





The graph shows the total campus population, as well as the amount of electricity consumed )per capita in kW in Sohag University Campuses (Egypt

#### **Waste Management:**

Sohag University adopts a system for recycling divided on two stages:

Firstly, collecting these wastes from different sites, and separating them into special storage rooms, as valuable wastes.

Then, it announces the annual public auction and therefore a lot of merchants attend this auction and the university gains the value from these wastes.

Additionally, this system allows all types of recyclables (plastic, paper, glass, aluminum) to be placed in the same container, making it easier for the user.

Sohag University also promotes the recycling of Electronic and Electrical Waste.

E-waste items should not be thrown in the normal trash due to their toxic chemicals and heavy metals components.



seminar entitled "Ending Plastic Pollution" in celebration of World Environment Day, in collaboration with the Community Service and Environmental Development Sector and the Center for Sustainable Development.





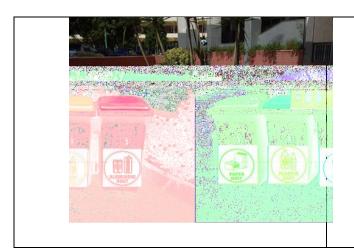
Recycled paper ready for use in printing, packaging, or the production of eco-friendly paper products.



Sohag University has initiated the establishment of the Medical and Industrial Waste Management Unit (a unit of a special nature) aimed at sorting, treating and marketing regular, medical, industrial and agricultural waste and studying how to recycle it or upgrade recyclable waste, because of its health, economic and environmental returns within the university and outside.

Through the following:

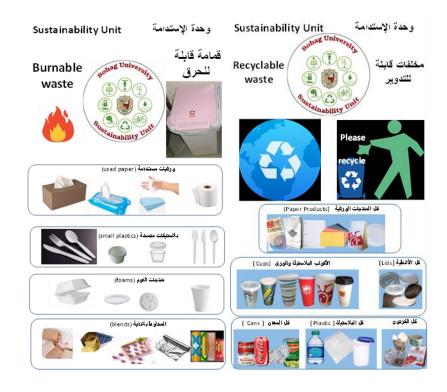
- 1. Studying and treating how to recycle or market medical, industrial and agricultural waste from university hospitals, research laboratories, workshops, laboratories and farms after appropriate treatment systems have been performed.
- 2. Prohibiting the use of plastic bags and replaces them with others, such as paper bags other ones that have biodegradation.
- 4. Raise the awareness and education about the importance of sorting waste from the source for individuals and students by holding seminars and workshops on how to deal with all kinds of waste.
- 3. Issuing cognitive brochures and flyers in the field of dealing with all types of waste and issuing a magazine for the University of Sohag to publish environmental research and studies. (Environmental Research Bulletin)











#### **Transportation:**

The university has 121 different cars and almost 596 private cars.

The university has allocated 4 parking lots in separate places to prevent the random parking, while a special parking lot has been allocated for motorcycles outside the campus.

5 Buses in the university and each bus makes 16 trips (round trip) with a capacity of 50 passengers to serve the university's employees.









Transport systems play an important role in carbon emissions and pollutant levels at universities.

Therefore, Sohag University adapts many policies to reduce the number of vehicles on the campus, including:

- 1-The university has provided motorcycle parking lots outside the campus to reduce the pollution and carbon emissions on the campus
- 2- Encourage pedestrian policy and the use of bicycles for the university, staff, students, and employees on the campus, and avoid the use of private vehicles
- 3- Providing internal transportation within the university or other means transportation to the new university campus in the new city of Sohag in order to reduce the use of private vehicles, while trying to provide and purchase electric vehicles on the university campus to transport university employees in order to reduce the carbon emissions

All of these serious steps will eventually lead to the use of environmentally friendly transportation and reduce the carbon footprint in and around the campus.



## **Education and scientific research**













Education and scientific research is considered one of the most important criteria in achieving development and sustainability at any developed society.

From this point of view, Sohag University has paid great attention to education and scientific research, and supported it with all its human and material capabilities, where:

- Sohag University held many conferences, symposia and scientific events that concerned with developing the human element inside and outside the university and achieving sustainability in developing human capabilities.
- The ratio of the courses related to sustainability are approximately 47.32% of the total courses offered by Sohag University faculties, where these courses focus on achieving sustainability and appropriate employment of human and material resources in society.