



# Sustainability Report for Amman Arab University

## 2024

### (Environment, Economy, Community)



## ❖ Introduction

Sustainable development is a concept that has evolved to create a balance between the social, economic, and environmental needs of current generations without affecting the ability of future generations to meet their own needs. This method seeks to integrate economic development with environmental protection and social justice, leading to improve the quality of life for all in ways that support the planet on the long run.

### ❖ Three Aspects of Sustainable Development:

1- Economic development attempts to improve economic well-being by providing job opportunities, fostering infrastructure, and enhancing productivity. Economic development promotes economic growth that takes into consideration the effective use of natural resources and way of preserving them.

2- Social development aims to create social justice and equality in access to essential resources and services such as education and health. Social development focuses on improving quality of life, enhancing social integration, and reducing poverty.

3- Environmental protection places an emphasis on the preservation of ecosystems and biodiversity. Environmental protection seeks to reduce pollution and restrict the depletion of natural resources by adopting friendly practices to the environment.

In addition, sustainable development is not an option, but an urgent necessity to ensure survival and progress of humanity and the environment at an equal footing. Thus, achieving sustainable development requires cooperative efforts of governments, institutions, and people to create a better future for current and future generations.

By the same token, Amman Arab University hosts the first Arab Council for Sustainable Development, which is headed by the university president, Professor Dr. Mohammad Al-Wydaian. This council is one of the Arab councils established under the Arab Universities Union founded upon a decision of Executive Council no (53rd) of the Conference held from November 14 to 15, 2021.

The foundation of this council reinforces the mission of Arab Universities Union in supporting the efforts of Arab universities to prepare individuals who is able to serve his nation, maintaining its cultural and civilizational unity, and developing its human resources to live up to expectations. In addition, encouraging

the establishment of joint Arab research and scientific centers, exchange results, and undertaking applied research, linking its topics to Arab economic and social development plans.

Arab Council for Sustainable Development seeks to activate the developmental role of Arab higher education institutions, contribute to instilling the concept of sustainable development and disseminate the culture of ethical commitment to social, environmental, and human responsibilities. Arab Council for Sustainable Development also seeks to create a generation that fulfills its social and humanitarian duties. The significance of founding this council works in tandem with the focus of global accreditation and quality institutions on number of published research papers and the number of faculty members to students, scientific and practical achievements, or the number of graduates. Likewise, emphasizing universities' performance in serving the community, preserving the environment, and their contributions to improving economies of countries and developing communities.



## About the University



Amman Arab University was founded in 1997 upon the resolution of Higher Education Council No. (1476) dated 11/24/1997, as a private, non-profit university specialized in postgraduate studies, under the name "Amman Arab University for Postgraduate Studies"; to be the first Jordanian university specialized in postgraduate programs for Master and PhD students. As of 9/30/1998, the Higher Education Council granted approval to the university to start teaching; resolution No. (1625). The university received its first class of students since the beginning of the second semester of the academic year 1999/2000.

The university went through two stages; the first: was limited to postgraduate programs, and the second: began in 2009 upon opening undergraduate programs, changing the university name to "Amman Arab University."

Since inception of the university, the administrators have been doing their level best to make the university an effective partner in the efforts made at the national and regional levels to enhance the quality of education, and to provide an environment that develops the student's thinking to be an effective and creative individual for the benefits of society. In addition, making the university appealing environment for students from neighboring and foreign countries.

The university is constantly working for excellence, enhancing the spirit of leadership and creativity, providing quality education, reputable scientific research, and serving the community. The university is committed to provide the labor market with graduates equipped with knowledge and training, to excel in their professions, and able to meet the requirements of the labor market. The university encourages scientific, critical, and creative thinking to achieve excellence based on theoretical and applied education. To fulfill this purpose, the university develops its study plans to be updated with the latest developments in the world. In addition, the university improves the educational process by enhancing skills, and introducing blended e learning to keep pace with the skills of the new generation. The



university is at the service of the community via contributing to its development and advancement.

The university fosters diversity, civilized thinking, cultural interaction, acceptance of others, and denial of all forms of fanaticism and violence. Since inception, the university has provided the local and regional community with highly qualified

- College of Law.
- College of Educational and Psychological Sciences.
- College of Arts and Sciences.
- College of Engineering.
- College of Pharmacy.
- College of Aviation Sciences.
- College of Business.
- College of Computer Sciences and Informatics.
- College of Sharia.
- College of Medical Sciences.



## ❖ Sustainable Environment at Amman Arab University

A sustainable environment means that harvesting renewable resources can be maintained, non-renewable resources can be depleted, and pollutants can be absorbed naturally. Amman Arab University has implemented strategies to achieve and provide this sustainable environment.



## ❖ Green Buildings

Amman Arab University is concerned with considering factors that make its buildings environmental and supportive of climate, and human health. The buildings significantly contribute to reducing the effect of climate change and take into account indoor environmental and air quality. The buildings of Amman Arab University are distinguished by natural lighting and ventilation, energy-saving devices, and the fact that all of





them are smart buildings. Additionally, water-saving facilities and devices are provided in all buildings. Furthermore, indoor internet connection was established at the university which is regarded as one of the most important steps in leading the digital transformation process. Additionally, many internal systems have been created to facilitate the exchange of official documents between the various departments of the university. All university buildings are equipped with a safety system, which includes a camera system to monitor all campus facilities, including buildings, classrooms, parking lots, and gardens. This ensures complete control over all entrances, exits, classrooms, and laboratories. The system has been upgraded to utilize audio and motion-sensitive cameras for sound transmission between the control room and all building facilities, providing alerts for any detected movement. Moreover, all university buildings have been equipped with a smart fire alarm system. The sensors in these systems detect any changes in temperature and send an electronic message to the relevant body monitoring that facility on campus to warn them of any abnormal conditions. In case of a fire, the system automatically makes attempts to put out the fire.



Amman Arab University provided green spaces, including gardens that are composed of the best and most beautiful ornamental trees.





## ❖ Renewable Energy

Amman Arab University is considered one of the leading educational institutions in transformation to clean and renewable energy. In 2015, the university conducted a solar energy system to provide electricity to the campus, leading to generating 550 kilowatts per hour.

All buildings roofs were covered with solar panels to generate electricity in this project. Currently, efforts are made to cover the parking lots and bus areas with these panels.

Reflecting the vision and mission of Amman Arab University, for providing leading higher education, and due to the restricted sources of conventional energy, the College of Engineering made attempts to keep pace with scientific developments and contribute to finding scientific and practical solutions by initiating Renewable Energy Engineering Department in 2020. This department is directly connected with renewable and alternative energy, and its study plans focuses on renewable energy sources, energy conversion, transforming, storage, and energy management and economy.

The program is also concerned with the technology of solar cells, wind energy systems, laboratories of solar systems and heat transfer.



The university converted, air conditioning, lighting and computer screens to power-saving devices, scoring 100% conversion in terms of light bulbs, air conditioning, computer screens, and others.





## ❖ Carbon Footprint

## Option 2: Recommended by UI GreenMetric

**CO<sub>2</sub> (electricity)**

$$= \frac{\text{electricity usage per year (kWh)}}{1000} \times 084$$

$$= \frac{754171 \text{ kWh}}{1000} \times 084$$

$$= 633.50 \text{ metrictons}$$

**CO<sub>2</sub> (bus)**

$$= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01$$

$$= \frac{31 \times 5 \times 0.4 \times 240}{100} \times 001$$

$$= 1.49 \text{ metrictons}$$

**CO<sub>2</sub> (cars)**

$$= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 002$$

$$= \frac{500 \times 2 \times 0.4 \times 240}{100} \times 002$$

$$= 19.2 \text{ metrictons}$$

**CO<sub>2</sub> (motorcycle)**

$$= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 001$$

$$= \frac{10 \times 2 \times 0.4 \times 240}{100} \times 001$$

$$= 0.192 \text{ metrictons}$$

**CO<sub>2</sub> (total)**

$$= 633.5 + 1.49 + 19.2 + 0.192$$

$$673.4 = \text{metrictons}$$

**Carbonfootprint in 2023-2024= 673.4 metrictons**

**Total CarbonFootprint (UI GreenMetric)**





## Water Recycling:

Amman Arab University recycles water after processing it in a scientific way and reuses water to irrigate plants at campus. Water recycling helps preserve this valuable resource and reduces water consumption. The university relies on external water sources and measures the amount of reused water for irrigating plants, so that 150 cubic meters of recycled water was used for this purpose

All buildings at Amman Arab University have a separate sewage system for wastewater and clean water (rainwater). Besides, underground wells that supply the university with water, which are connected to water tanks for storage.

– It is worth noting that the university has initiated a Policy for water recycling



AMMAN ARAB UNIVERSITY  جامعة عمان العربية		
<b>Waste Recycling Policy</b>		
Policy No.: QA-82	Issue Date: 01/2023	No. of Pages: (1)
Planning and Quality Assurance Department Decision 07/02/2023	Dean's Council Decision 0 Date: 08/04/2023	
Review and Modification No. 0 Date: _____	Review and Modification No. 0 Date: _____	
<b>Policy</b>	Dealing with waste in an environmentally acceptable manner coping with local laws, reducing waste resulting from various university activities by recycling waste, raising awareness among students and employees, and disseminating the culture of recycling at the University.	
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. Reducing environmental pollution.</li> <li>2. Preserving the campus environment.</li> <li>3. Reducing emissions and global warming.</li> <li>4. Raising awareness and educating students and employees on the importance of recycling waste.</li> <li>5. Recycling waste by separating it into plastic waste, plastic bags, metal waste, paper waste, and medical waste.</li> </ol>	
<b>Responsibility of Application</b>	-----	
<b>Operations</b>	<b>Regulations</b>	-----
	<b>Procedures</b>	-----
<b>Related forms</b>	-----	
 ISO 9001:2015 M. Dean's Council Session (01/03/2023), Decision No. 01, Date 10/03/2023 14		



## ❖ Garbage Recycling

Amman Arab University has also organized initiatives to recycle various types of waste, including paper, plastic, and metals. Special bins have been bought for collecting waste that are made from recycled materials. These materials are processed and recycled. This effort encourages a sustainable and friendly approach to the environment in order to manage waste and reduce the negative impact on environment.

Efforts of recycling view the university's commitment towards sustainability and responsible resource management through water reuse and waste recycling, which are part of the environmental footprint and serve as a model for students and the community regarding the importance of preserving environmental resources.

The university provides special archiving systems to diminish paper use, together with another system that contains all university documents that can be easily accessed via all university devices, in addition to encouraging the use of email for correspondence purposes.

The university has also signed agreements with specialized companies for the purpose of recycling consumed paper.



Laboratory waste



## ❖ Transportation



Based on the university efforts to provide facilities and services for students, Amman Arab University has enhanced its transportation fleet by adding 31 new buses, model 2023, to provide modern, comfortable, and safe transportation for all university members. The university's transportation fleet is comprised of 26 routes distributed across various regions of the kingdom.

According to the university strategic plan, Amman Arab University has worked to incorporate new features to serve students in their university life, such as green spaces and smart classrooms equipped with the latest technology. These classrooms include interactive boards and cameras that track the movements and voice of the faculty member, with lectures that are recorded automatically, permitting students to access them at any time.

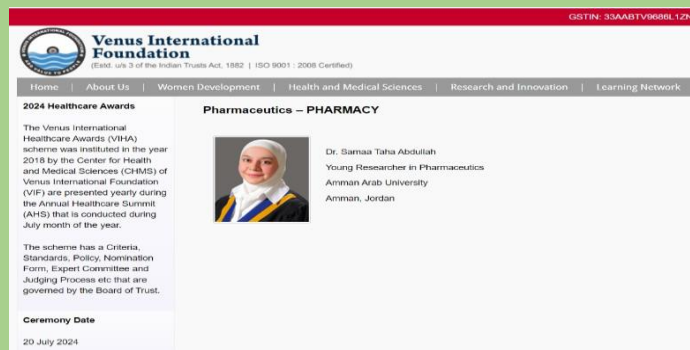


❖ Education and Research

- Amman Arab University is a Member of the United Nations Global Compact



- Healthcare Awards 2024 (Outstanding/Young Researcher)



- Nashmi Amman Arab AAU Hackathon 2024




















- Amman Arab University assists the Board of Directors of the Arab Council for Social Development



- Scientific research publications on sustainability

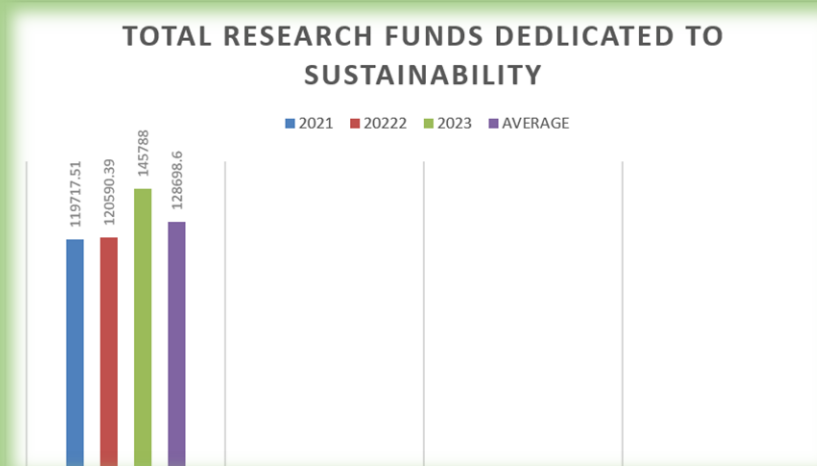
SDG contributions

 Goal 1: No poverty	9 documents	 Goal 10: Reduced inequalities	19 documents
 Goal 2: Zero hunger	1 document	 Goal 11: Sustainable cities and communities	18 documents
 Goal 3: Good health and well-being	70 documents	 Goal 12: Responsible consumption and production	30 documents
 Goal 4: Quality education	43 documents	 Goal 13: Climate action	17 documents
 Goal 5: Gender equality	9 documents	 Goal 14: Life below water	3 documents
 Goal 6: Clean water and sanitation	10 documents	 Goal 15: Life on land	5 documents
 Goal 7: Affordable and clean energy	58 documents	 Goal 16: Peace, justice and strong institutions	29 documents
 Goal 8: Decent work and economic growth	58 documents	 Goal 17: Partnership for the goals	272 documents
 Goal 9: Industry, innovation and infrastructure	47 documents		

- Total Research Funds



- Total Research Funds Dedicated to Sustainability Research



**Pioneering and Excellence**

Accreditation Ranking and Qualification of National Framework Department

