

2023

Al-Zaytoonah University Sustainability Management Report



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1- Introduction

The University of Al-Zaytoonah in Jordan was established in 1993 and obtained its license and general accreditation on 6/9/1993, according to decision number (848) of the Higher Education Council dated 6/9/1993. Since its establishment, the university has been striving to prepare students both academically and morally to enable them to fulfill their responsibilities in serving their country and their nation.

Recognizing the importance of sustainability, the university's vision, mission, and goals are clearly aligned with it, which is reflected in its strategic and operational plans. Here is a summary of what is stated in the vision, mission, objectives, and policies related to sustainability:

2- Vision

"Toward a competitive university in the job market, scientific research, and sustainable environment."

3- MISSION

An active contribution in the sustainable development of the society and providing the labor market with the specialized competencies capable of leadership, entrepreneur and creativity through implementing proper planning, wise governance, modern teaching and learning methods, transfer of technology and by focusing on applied scientific research, developing attractive scientific and teaching environment, choosing skilled and experienced man power, partnering with notable higher education institutions, and applying quality assurance and competitiveness standards.

Which is reflected in the strategic plan's objectives, which include the following:

Enhancing the social responsibility by participating in the continuous development and proper utilizing of cooperation and networking nationally and internationally.

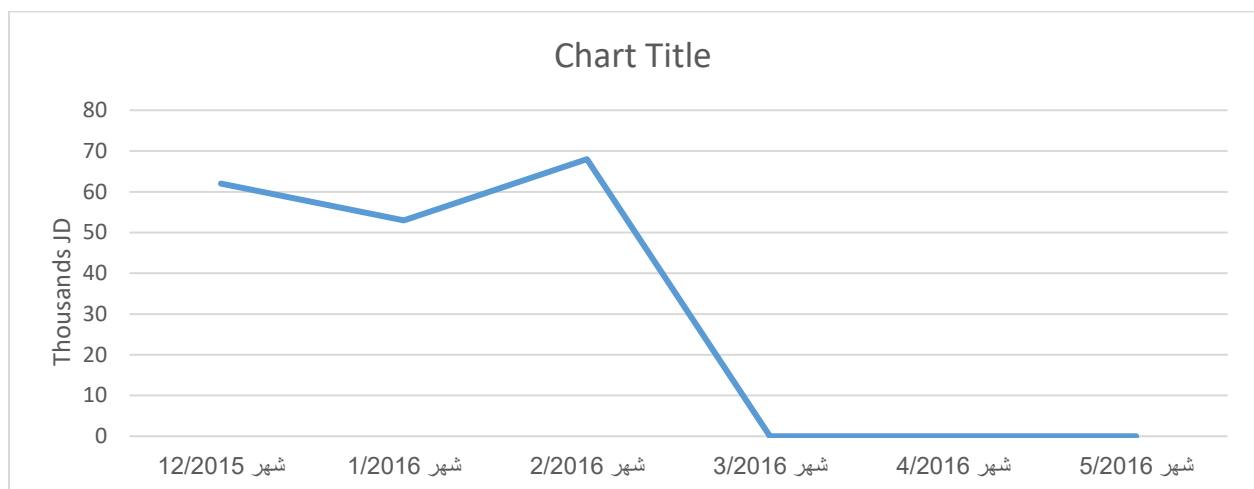
Building upon what was mentioned earlier, the university has translated this vision, mission, and objectives into practical initiatives through a set of projects and plans that have been implemented or are currently in progress. These initiatives can be summarized as follows:

- 1- Renewable Energy (academic programs, solar energy, charging stations)
- 2- Green Buildings
- 3- Recycling
- 4- Technology Utilization (university app, bus app, e-learning)
- 5- Green Spaces
- 6- Training, Education, and Consultations
- 7- Academic Exchange
- 8- Student Activities
- 9- Excellence in Green Metrics Standards

4- Renewable Energy:

The university is among the pioneers of national institutions that have transitioned to clean renewable energy. In 2016, the university implemented and operated a solar energy project to supply electricity to the university, resulting in the generation of over 2094 kWh. This project significantly reduced the university's electricity bill from an average of 60,000 Jordanian dinars to zero. Additionally, it generated surplus electricity that is supplied to the national electric company for redistribution to areas with higher electricity needs.

The university also has two other sources of renewable energy generation: wind energy with a capacity of 3 kWh and biofuel with a capacity of 6 kWh. The following chart illustrates the cost of electricity before and after the implementation of the renewable energy project in electricity generation:



In this project, all the university buildings' rooftops were covered with solar panels for electricity generation. Furthermore, the project is currently being expanded through the construction of canopies in the university's bus parking area. This expansion provides shade in the summer and protection from rain in the winter, in addition to generating electricity through the solar panels installed as canopies.

The university also established 16 electric vehicle charging stations through a scientific research project. These charging stations encouraged faculty, staff, and students to own electric vehicles. As a result, the number of electric vehicles owned by the university's faculty and staff increased from 7 cars in 2020 to more than 30 cars in 2022, and the number continues to grow.



Believing in the importance of investing in renewable energy, the university has introduced a specialized program directly related to renewable energy and alternative energy technology. This program is a technical program that focuses on technological aspects of alternative energy, with 50% of the program being practical. The program covers several important areas, including the installation and maintenance of renewable energy systems and their applications, such as solar energy, wind energy, thermal energy, nuclear energy, bioenergy, and waste management. It also includes hybrid systems and energy management.

You can find more information about the Alternative Energy Technology department at this link: [Alternative Energy Technology Department](#)

5- The Green Buildings project

The Green Buildings project in the College of Engineering and Technology is a significant initiative aimed at promoting environmental sustainability and energy efficiency within the university campus. The project serves as a model for environmentally friendly construction and green building practices that are aligned with international standards and best practices.

Key features of this project include:

- **Sustainability:** The building has been designed and constructed with a focus on sustainability. Sustainable materials, eco-friendly construction methods, and energy-efficient systems have been incorporated into the building's design and construction.
- **Green Building Standards:** The project adheres to green building standards, which encompass various aspects such as reducing energy consumption, optimizing water usage, and enhancing indoor air quality. These standards ensure that the building is both environmentally responsible and cost-effective.
- **Energy Efficiency:** The building incorporates energy-efficient technologies and systems to minimize energy consumption. This includes the use of high-efficiency lighting, heating, ventilation, and air conditioning (HVAC) systems, as well as insulation and solar control measures.

- **Water Efficiency:** Water-efficient fixtures and systems have been integrated to reduce water consumption. This includes low-flow toilets, water-saving faucets, and the use of landscaping practices that minimize water usage.
- **Indoor Environmental Quality:** The building promotes a healthy and comfortable indoor environment for its occupants. This involves the selection of materials that have low emissions and the design of spaces that provide ample natural light and good air quality.
- **Resource Management:** The project emphasizes responsible resource management. This includes the use of sustainable and locally sourced materials, as well as efficient waste management and recycling practices during construction and operation.
- **Education and Outreach:** The Green Buildings project can also serve as an educational tool for students and the broader community. It can showcase the benefits of sustainable building practices, inspiring future generations to adopt similar environmentally conscious approaches.
- **By implementing the Green Buildings project, the university not only reduces its environmental footprint but also sets an example for sustainable and eco-friendly construction practices. This initiative can have a positive impact on the overall campus, providing an environment that is both conducive to learning and aligned with the principles of environmental responsibility.**



The creation of the "Green Student Park" is another noteworthy initiative undertaken by the university. This park has been designed with a strong focus on environmental sustainability and providing a functional and eco-friendly space for students.

Key features of the Green Student Park include:

- **Seating and Study Areas:** The park is equipped with comfortable seating and study areas where students can relax and study in a serene outdoor environment.
- **Renewable Energy Integration:** One of the unique aspects of this park is the integration of renewable energy sources. Wind turbines have been installed to harness wind energy, and solar panels have been incorporated into canopies or shade structures within the park. This combination of wind and solar energy generation not only powers the park's lighting and amenities but also provides an educational opportunity for students to learn about renewable energy technologies.

- **Shade Structures:** The park features shade structures with built-in solar panels. These structures not only offer relief from the sun during hot weather but also generate electricity from the sun's energy. The electricity generated can be used to power lighting or other electrical devices in the park.

The Green Student Park serves as a multifunctional space where students can enjoy the outdoors, study, and learn about renewable energy technologies. It demonstrates the university's commitment to sustainability and provides a practical example of how green technologies can be integrated into everyday campus life to benefit both the environment and the student community. This initiative aligns with the broader goal of promoting eco-conscious practices and renewable energy adoption on campus.



In addition to the previously mentioned initiatives, the university is actively involved in recycling, both in terms of water and waste:

Water Recycling: The university recycles water and utilizes it for irrigation and agricultural purposes. It has water wells that collect and store water used in the university's facilities. This water is then scientifically treated and recycled for the irrigation of plants and crops throughout the campus. Water recycling helps conserve this valuable resource and reduces the university's reliance on external water sources.

Waste Recycling: The university has also launched initiatives to recycle various types of waste, including paper, plastic, and metal. Agreements have been made with different organizations to provide the university with waste collection bins, which are used to collect waste materials. These materials are then processed and recycled. This waste recycling effort promotes a sustainable and eco-friendly approach to waste management, reducing the environmental impact of waste materials.

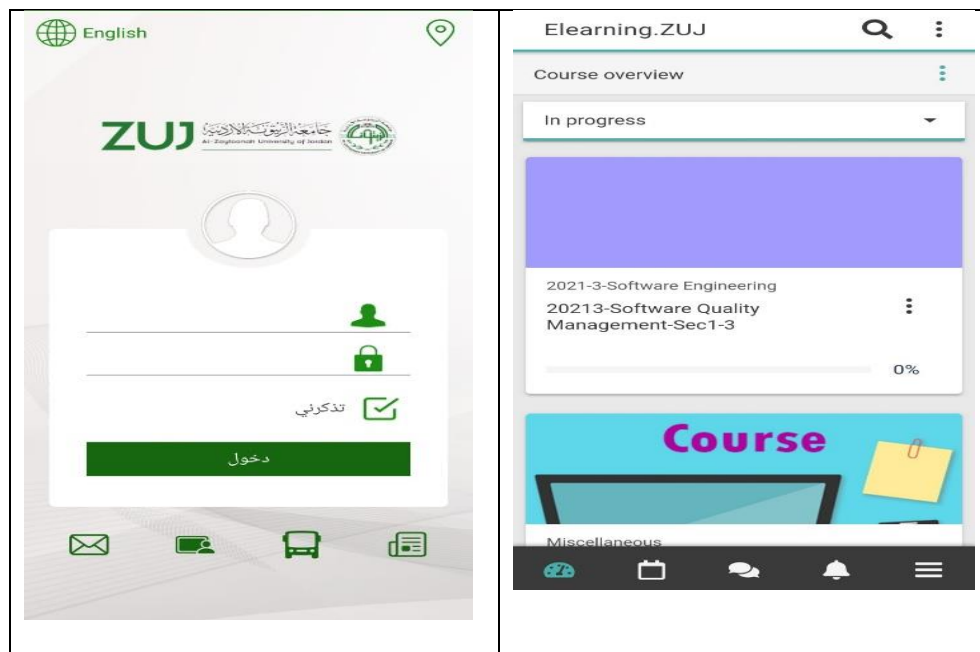
These recycling efforts demonstrate the university's commitment to sustainability and responsible resource management. By reusing water and recycling waste, the institution not only reduces its ecological footprint but also sets an example for students and the community on the importance of environmental stewardship and conservation.



6- Applying Technology

The university's commitment to environmental protection extends beyond clean energy and recycling efforts to include the strategic use of technology for sustainability. Here are some of the ways in which technology has been harnessed for these purposes:

- **E-Learning System and Open Educational Resources:** The university has transitioned to a fully electronic learning environment, replacing the need for printing textbooks, summaries, assignment submissions, and many exams. This has enabled 100% computer-based interactions with students. The e-learning system has become the central hub for academic activities. [Link to the e-learning system](#)
- **Archiving and Correspondence:** Faculty, staff, and students at the university have been provided with email services and cloud storage, making communication and documentation entirely electronic. This approach also allows for electronic archiving of documents and correspondence.
- **Computerization of Administrative Processes:** Many administrative processes, such as research procedures, postgraduate studies, procurement, admissions, and registration, have been computerized. The electronic systems are also equipped for digital archiving.
- **Mobile Applications for Students:** The university has developed three mobile applications for students. The first application enables students to manage admissions and registration, view their academic information, and complete all registration-related tasks without visiting the university physically. The second is the e-learning application, as mentioned earlier. The third application is designed for tracking the movement of student transport buses, enhancing transportation efficiency and reducing the need for private vehicles and taxis to commute to the university. This initiative helps reduce the environmental impact of commuting.



- **Hybrid/Virtual Conferences:** The University has embraced hybrid and virtual conferencing as a means of reducing the environmental impact associated with travel and physical events. Several international scientific conferences have been organized by the university using remote conferencing and video broadcasting applications. This approach has significantly reduced the need for faculty, researchers, and participants to travel to the conference venue. By conducting conferences remotely, the university not only minimizes its carbon footprint but also enhances accessibility for participants' worldwide, making knowledge exchange more convenient and eco-friendly.



By fully integrating technology into various aspects of university life, the institution not only enhances efficiency and accessibility but also significantly reduces its carbon footprint. These technology-driven initiatives demonstrate the university's commitment to sustainability and its proactive approach to incorporating technology for environmental and operational benefits.

The university's commitment to sustainability extends to several areas, including the utilization of green spaces, continuous education and training, and academic exchange programs:

7- Green Spaces:

The university boasts over 12,000 square meters of green spaces, covering more than 40% of its total campus area. These green spaces are home to a variety of trees and plants, enhancing the campus environment. Moreover, the university utilizes the olive trees it cultivates, offering their yield to staff members at symbolic and affordable prices, allowing them to pay in installments. This initiative not only contributes to the campus's aesthetics but also promotes eco-conscious practices among the university community.



8- Education and Continuous Training:

The concept of sustainable development extends beyond economic growth and involves the development of land, cities, and people in a way that meets present needs while preserving natural and environmental resources, as well as achieving social development. The university fulfills its core roles in education, training, and scientific research, which significantly contribute to driving development and ensuring its sustainability. This is accomplished through awareness of the importance of these roles and their long-term impact on future generations.

In line with this, the university has established a Center for Consultation and Community Service, which offers a wide range of courses on skills demanded in the job market, student

development, and skill enhancement. Additionally, the university has a Faculty Development Unit within the Quality Assurance Office, providing courses on teaching, assessment, and evaluation for faculty members. Furthermore, the e-Learning Center conducts courses on computer usage and electronic learning systems for teaching.

9- Academic Exchange:

The university offers academic exchange opportunities to its academic staff and students across various disciplines. The university has signed over 30 academic exchange agreements with international and Arab universities. In 2022, the university hosted more than 15 professors and over 50 students from different Arab and foreign nationalities, while also sending more than 24 professors and over 150 students to participate in academic exchange programs. This initiative promotes cross-cultural learning and collaboration while enriching the educational experience for both the university's community and its international partners.



These endeavors underscore the university's multifaceted approach to sustainability, which encompasses environmental conservation, educational excellence, and global engagement, all contributing to the development and prosperity of its community and the broader society.

The university actively engages its faculty and students in various community service activities, both curricular and extracurricular, to promote social values and a sense of belonging to the local community. Some of these activities include:

- 1. Community Awareness and Educational Lectures:** Faculty members regularly conduct informative and educational lectures for various segments of the local community. These

lectures cover a wide range of topics and are tailored to meet the specific needs and interests of different audiences.



2. Environmental Support Activities: Students actively participate in initiatives to increase green spaces in Jordan. They engage in tree planting and afforestation activities and organize campaigns for the conservation of forests, parks, and gardens. They also organize campaigns to promote efficient resource utilization and recycling.



3. Moral and Psychological Support: Students regularly visit retirement homes, childcare centers, hospitals, and organize blood donation drives to provide moral and psychological support to those in need.



4. Participation in Competitions and Other Activities: Students take part in various competitions and activities, including scientific, sports, cultural, and social events, further promoting social interaction and personal development.



10- Distinguished Global Ranking

The university has achieved notable distinctions in various rankings, reflecting its commitment to excellence and sustainability:

UI Green Metric World University Ranking:

The university has made significant progress in the UI Green Metric World University Ranking, which assesses environmentally friendly universities. In 2022, the university ranked third locally and first among private universities out of 1050 universities globally. It achieved a remarkable jump of 575 points in the ranking, securing the 181st position globally. This consistent improvement demonstrates the university's commitment to environmental sustainability and its dedication to promoting eco-friendly practices.

These achievements highlight the university's commitment to providing high-quality education, promoting sustainability, engaging in community service, and contributing to the development and well-being of both its local community and the broader society.



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Certificate

This certificate is awarded to

Al-Zaytoonah University of Jordan (zuj)

as The 181st World's Most Sustainable University
in 2022 UI GreenMetric World University Rankings

Jakarta, 12 December 2022



Prof. Ari Kuncoro, S.E., M.A., Ph.D
Rector of Universitas Indonesia



Prof. Dr. Ir. Riri Fitri Sari, M.M., M.Sc
Chairperson of UI GreenMetric
World University Rankings



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FACT FILE 2022 UI GREENMETRIC WORLD UNIVERSITY RANKINGS

AL-ZAYTOONAH UNIVERSITY OF JORDAN (ZUJ)

Jordan

P.O.Box 130 Amman 11733 Jordan Airport Road

UNIVERSITY PROFILE

Name : Al-zaytoonah University of Jordan (zuj)

Established : 1993

Country : Jordan



1. VERIFIED DATA

Category	Point	Maximum Point	Percentage
Setting and Infrastructure (SI)	1,150	1500	76.67 %
Energy and Climate Change (EC)	1,650	2100	78.57 %
Waste (WS)	1,275	1800	70.83 %
Water (WR)	800	1000	80.00 %
Transportation (TR)	1,550	1800	86.11 %
Education (ED)	1,275	1800	70.83 %
Total Score	7,700	10000	77.00 %

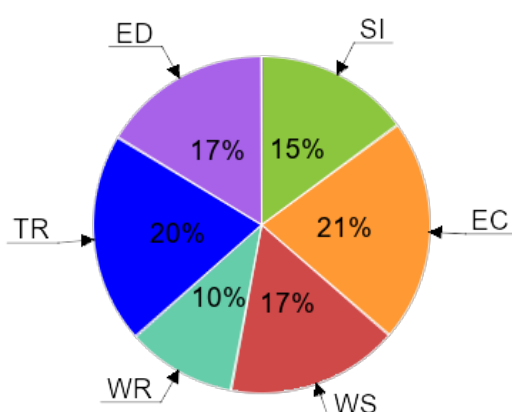


Figure 1.1 Overall Score Diagram

2. RESULTS SUMMARY

World Ranking	SI Ranking	EC Ranking	WS Ranking
181	179	92	318
	WR Ranking	TR Ranking	ED Ranking
	189	85	475

3. WORLD RANKINGS HISTORY

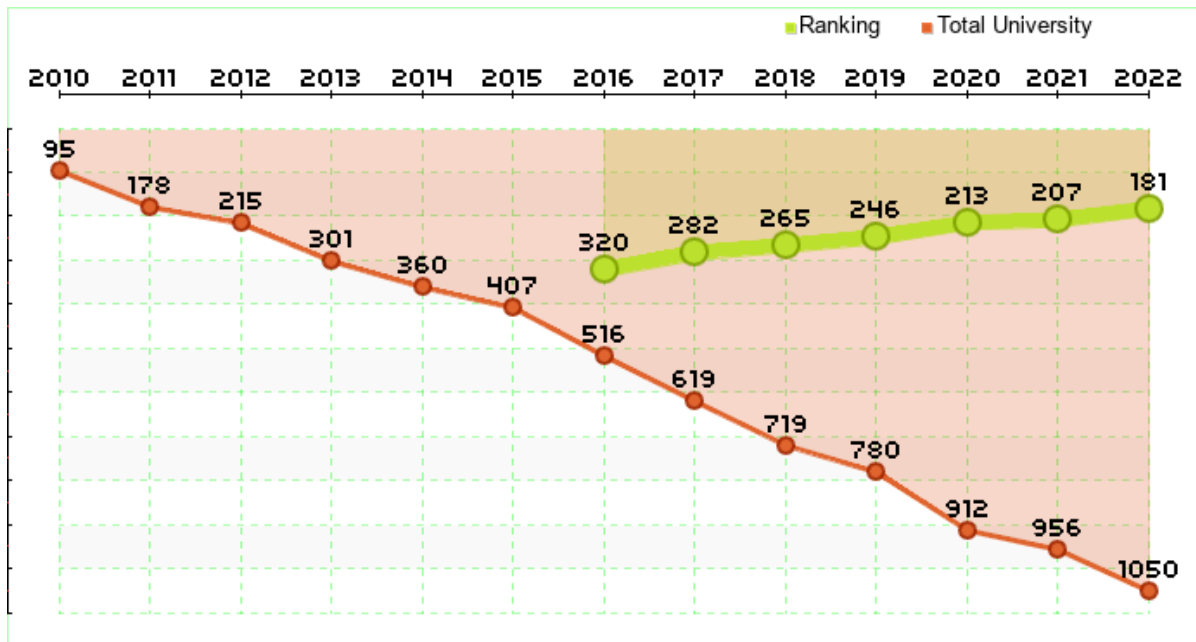


Figure 3.1 World Rankings History Diagram

4. RANKING IN JORDAN

Country Ranking	SI Ranking	EC Ranking	WS Ranking
3	4	2	3
	WR Ranking	TR Ranking	ED Ranking
	5	2	5