



**Al-Ahliyya Amman University**



# **Sustainable Development Goals**

## **Report 2023-2024**



**Prof. Sari Hamdan**  
*President -AAU*

**T**he 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) were adopted by all UN member states in 2015 and set out an ambitious plan for ending poverty, fighting inequality, and building peaceful, just, and sustainable societies by 2030. Achieving the SDGs will require the concerted efforts of all members of society.

Universities are particularly well-placed to contribute to creating a sustainable future through their research and teaching activities. Universities at the forefront of research generate new knowledge and innovations that provide solutions to the

interconnected social, economic, and environmental challenges captured in the SDGs. As educators, universities equip students with the knowledge and skills that enable them to contribute to creating a sustainable future.

Of course, the role of universities in sustainable development extends beyond their role in research and teaching. Institutions also contribute to the SDGs through their policies and practice, and increasingly institutions everywhere are working hard to ensure continuous improvement and lead by example. At Al-Ahliyya Amman University (AAU), we recognize and embrace our responsibility to transition to a sustainable future. We are committed to ensuring that our activities, be they research, teaching, community service or operations, advance us to a better place for humanity and the planet. In this report, we outline some of the many activities in our University that contribute to achieving the SDGs. We cannot capture all the fantastic work of our staff and students across research, teaching, engagement/outreach and operations. However, the selection presented here shows an appreciation of the activities happening within our university that are setting us on a path to a more sustainable future for all.

President

*Sari Hamdan*

Prof. Sari A. Hamdan

president@ammanu.edu.jo

# *Better together*

# *Driving Sustainability at AAU: Policies, KPIs, Research, and Partnerships for Transformative Impact*

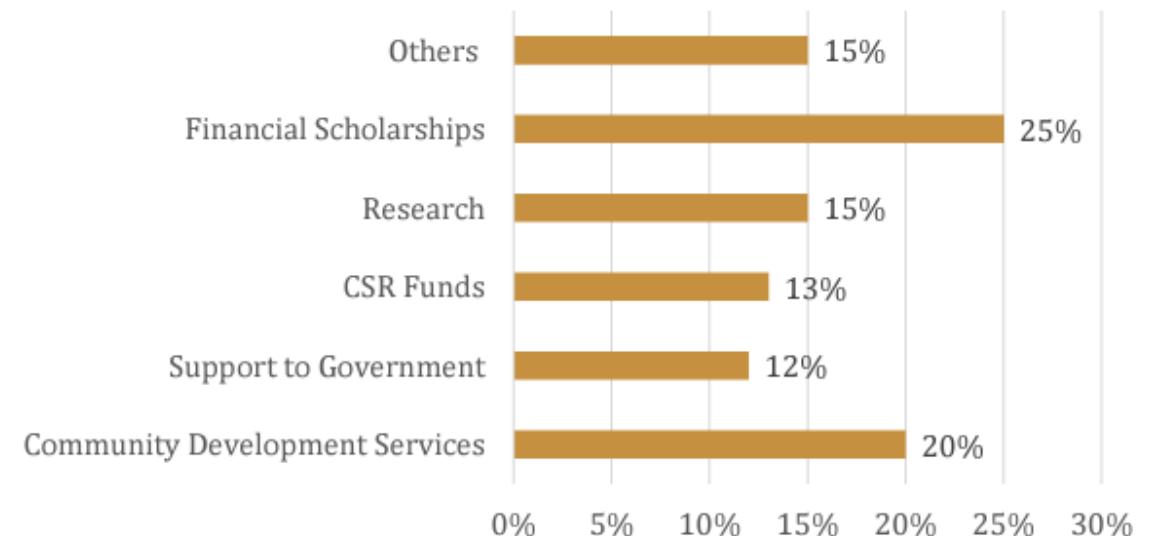
AAU leads in sustainability, aligning with the UN's SDGs through strategic policies, measurable KPIs, innovative research, and impactful partnerships. Recognized for top rankings in the Times Higher Education Impact Rankings, AAU excels in quality education, clean energy, and climate action. Its initiatives in equality, resource management, and carbon neutrality set benchmarks, while collaborations amplify its vision of a sustainable future.



# 98.8%

Spend from the allocated budget for the Sustainable Development.

Fund Allocation in Percentage



## **Institutional Achievements and Global Recognition**

AAU has been ranked #1 in the Times Higher Education (THE) Impact Rankings 2024 among Jordanian universities for the fourth consecutive year, excelling in SDG 3 (Good Health), SDG 4 (Quality Education), SDG 11 (Sustainable Cities), and SDG 17 (Partnerships for the Goals). It also secured a spot in the QS World University Rankings 2025 (801–850 band), showcasing excellence in teaching, employability, and environmental impact. These accolades affirm AAU's leadership in sustainability and global engagement.

# *Driving Transparency: Access to Our Sustainability Dashboard*

To ensure transparency and to set an example of best practices, we have integrated a QR code that provides access to our sustainability dashboard. This dashboard offers an overview of our sustainability performance, including environmental, social, and economic metrics, as well as our research contributions aligned with the SDGs.



**Sustainability Culture Assessment**

# *Driving Knowledge: Sharing: Our Multilingual Sustainability Survey*



We are proud to provide access to our comprehensive sustainability survey through an easy-to-use QR code. Designed to drive knowledge sharing and engagement with all university stakeholders, the survey is available in both English and Arabic—two of the five official languages of the United Nations. This ensures inclusivity and maximizes its impact. By aligning with the SDGs, this initiative supports collaboration across diverse audiences and reinforces our commitment to achieving international recognition and influence in the field of sustainability.

# 1 NO POVERTY



## “Initiating Economic Rehabilitation”

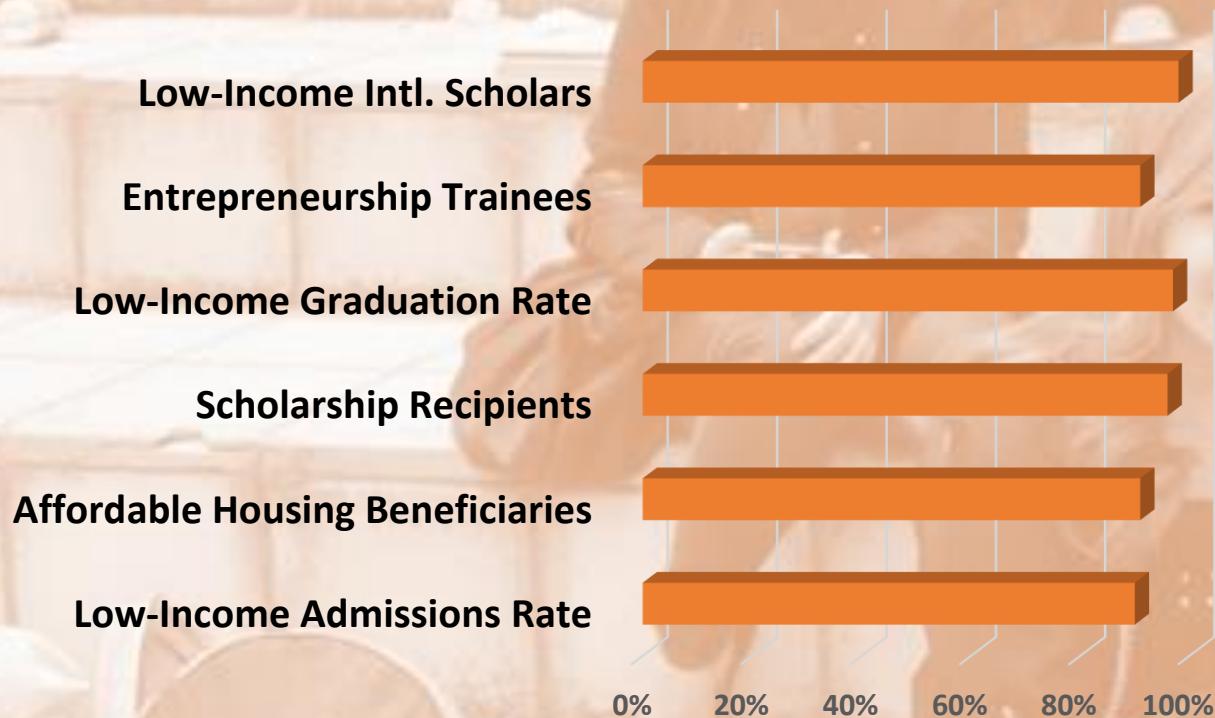
### Key Focus Areas

Equitable Access, Financial Support, Graduation Retention, & Empowerment.

### Activities and initiatives achieved (2023/2024)

- AAU Organizes a Volunteering Campaign to Support the Charitable Clothing Bank
- Clinical Psychology Students Visit SOS Children's Village
- Free medical day in partnership with the Specialized Eye Hospital and Advanced Surgeries
- The Department of Optometry at Al-Ahliyya Amman University distributes reading devices to the blind
- In Collaboration with Vienna Healthcare Group: AAU Launches Employment Program for Jordanian Nursing Graduates in Austria

No poverty [A/T%]



### SDG Scientific Research (2023)

**Business Analytics in Banking:** Study on factors driving analytics adoption and its impact on bank performance.

**Surgical Renal Carcinoma:** Study on race/ethnicity effects on survival in surgically treated renal carcinoma.

And more..

Scopus 20

### SDG 1. Partnerships (2023/2024)



# 2 ZERO HUNGER



## “Food For All”

### Key Focus Areas

Campus Food Waste Management, Student Hunger Alleviation, Sustainability in Agriculture & Aquaculture, & National Food Security and Agriculture.

### Activities and initiatives achieved (2023/2024)

- The Faculty of Agricultural Technology Participates in the Regional Conference of the Food and Agriculture Organization for the Near East
- Al-Ahliyya Amman University of Agricultural Technology Participates in Agricultural Sector Leadership Training Course
- Ensuring Food for All – Conducted 17 events to supply food through student's community initiatives.
- Partnering with Government- Supporting Food Security campaigns conducted by the government community.

Zero Hunger [A/T%]



### SDG Scientific Research (2023)

Exploring the Nexus between Fintech, natural resources, urbanization, and environment sustainability

Integrating Maize Yield and Agricultural Drought Analysis for Sustainable Food Security

And more..  
**Scopus 20**

### SDG 2. Partnerships (2023/2024)



المركز الوطني للبحوث الزراعية  
National Agricultural Research Center



AL-BALQA' APPLIED UNIVERSITY

# 3 GOOD HEALTH AND WELL-BEING



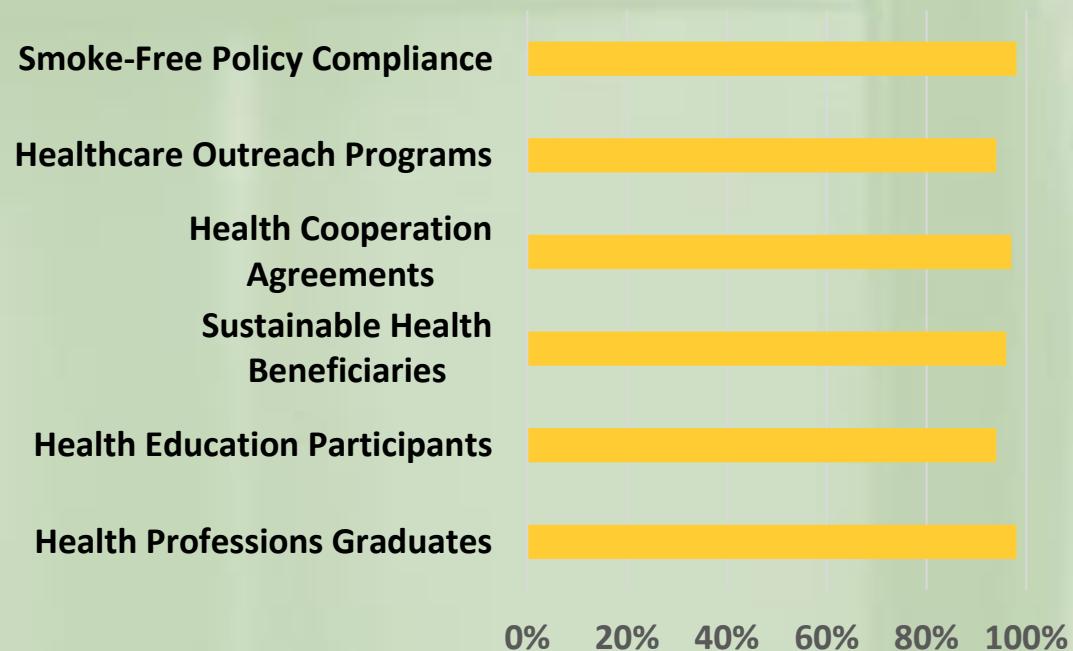
“Good Health For All”

## Key Focus Areas

Health Professions, Sustainable Health Services Delivery, Health Collaboration, & Smoke-Free.



Good Health and Well-being [A/T%]



## Activities and initiatives achieved (2023/2024)

Al-Ahliyya Amman University actively supports the health and well-being of students, staff, and the refugee community in Jordan. Through centers like the Women's Health Center, Counseling Center, Speech & Hearing Center, and Health Clinic, the university provides healthcare services, awareness programs, and initiatives aimed at fostering good health and well-being for all.

*The university supports refugees with healthcare services and awareness programs, showcasing its commitment to social responsibility.*

### SDG Scientific Research (2023)

The Efficacy and Safety of Metastasis-directed Therapy in Patients with Prostate Cancer

Multi-objective liver cancer algorithm

Targeting Hypoxia-Inducible Factor-1 (HIF-1) in Cancer

And more..

Scopus 20

### SDG 3. Partnerships (2023/2024)



Ministry of Health



# 4 QUALITY EDUCATION



*“Education For All”*

## Key Focus Areas

Free Access to Educational Resources, Equal Opportunity and Non-Discrimination, First-Generation Student Support.

## Activities and initiatives achieved (2023/2024)

Al-Ahliyya Amman University (AAU) is committed to SDG 4 – Quality Education, promoting inclusive, equitable learning through innovative methods, lifelong opportunities, and tackling educational challenges locally and globally.



Equal Opportunity and Non-Discrimination



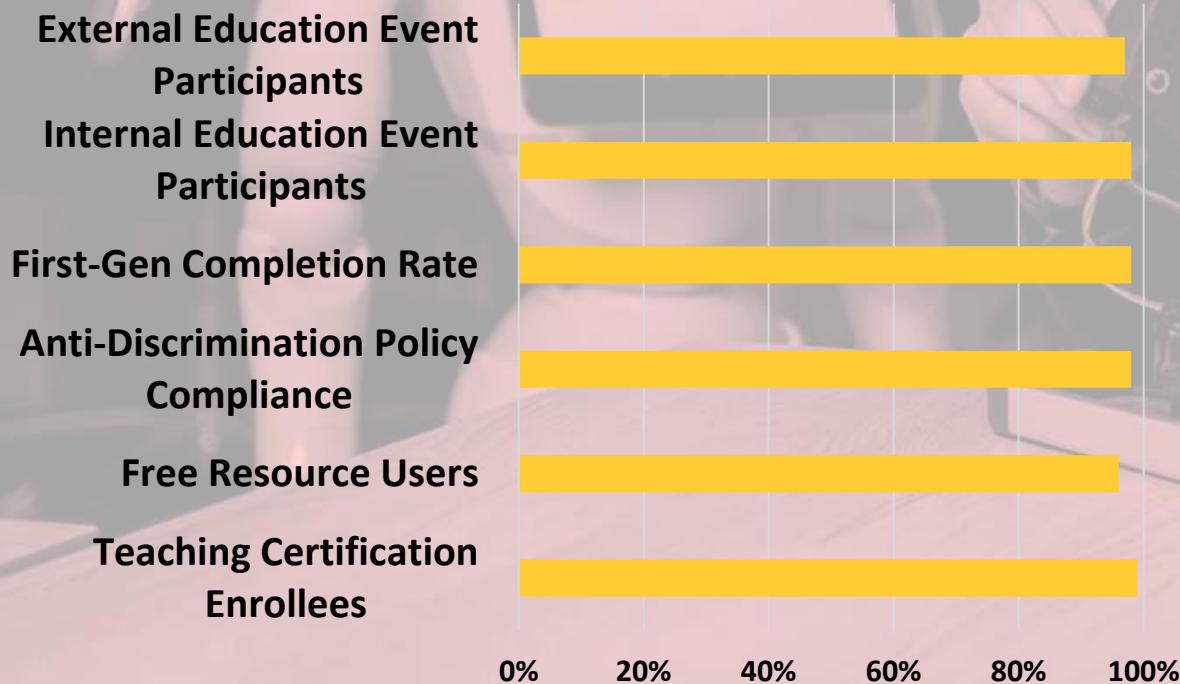
European Investment Bank



مجموعة مدارس الجامعة



Quality Education [A/T%]



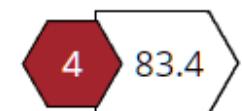
### SDG Scientific Research (2023)

- Efficiency Of E-Learning In Applied Materials For Visual Communication Students
- Comparison Between Task-Oriented Training and Proprioceptive Neuromuscular Facilitation Exercise on Upper Extremity Function In Spastic Cerebral Palsy
- And more..



### SDG 4. Partnerships (2023/2024)

Al-Ahliyya Amman University  
Jordan



# 5 GENDER EQUALITY



*“Equality For All”*

## Key Focus Areas

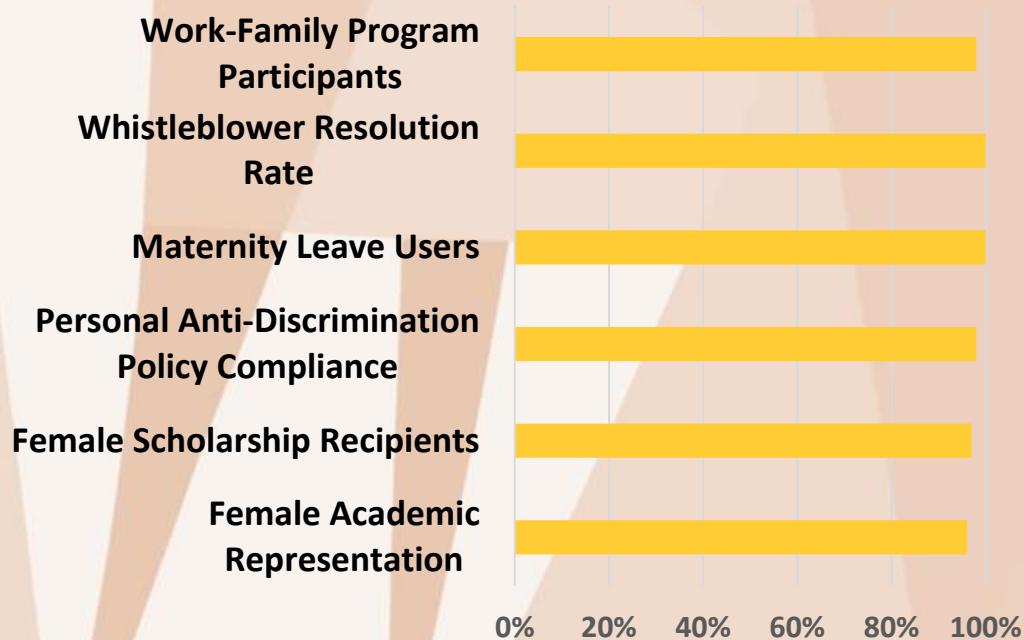
**Non-Discrimination Against Women, Equal, Women’s Access to Education Enhancement, Non-Discrimination and Respect for Personal Diversity.**

## Activities and initiatives achieved (2023/2024)

Al-Ahliyya Amman University (AAU) upholds a commitment to fostering an inclusive and equitable environment by adopting seven ‘protected characteristics’ groups. The university strictly prohibits unfair discrimination, harassment, and victimization based on these characteristics, as described below:

- **Race and Nationality:** Ensuring respect and equality for individuals of all racial and national backgrounds.
- **Gender:** Supporting gender equality and addressing any form of gender-based bias or inequity.
- **Disability:** Ensuring accessibility, accommodation, and equal opportunities for individuals with disabilities.

Gender Equality [A/T%]



SDG Scientific Research (2023)

Empowering Women Through Digital Transformation

Technostress Impact on Educator Productivity: Gender Differences in Jordan's Higher Education

The Association between Marriage Consanguinity and Hearing Loss in Jordan

And more..

Scopus 20

SDG 5. Partnerships (2023/2024)



مؤسسة الملكة رانيا  
QUEEN RANIA FOUNDATION



اللجنة الوطنية الأردنية لشؤون المرأة  
The Jordanian National Commission for Women



جمعية معهد تضامن النساء الأردني  
Solidarity Is Global Institute-JO

# 6 CLEAN WATER AND SANITATION



*“Water For All”*

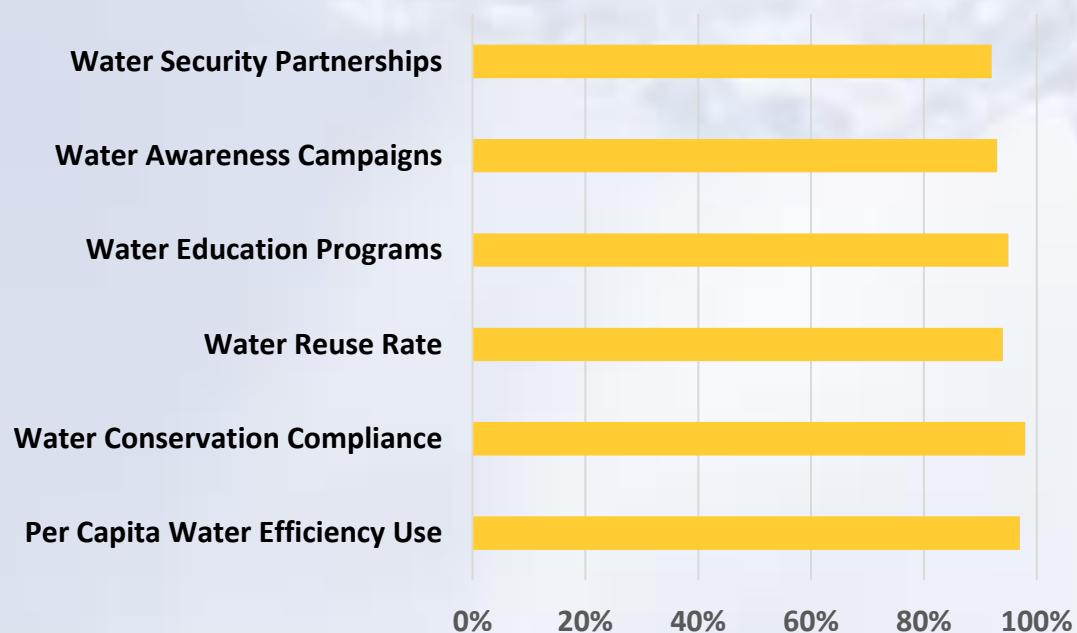
## Key Focus Areas

Campus Water Consumption Management, Water Treatment and Reuse, Water Management Education and Awareness, & Water Security & Conservation Collaboration.

## Activities and initiatives achieved (2023/2024)

- AAU Participates in the Artificial Intelligence Conference on the Water, Energy, Food, and Environment Nexus.
- A High-Level Delegation from Iraq, in Collaboration with the International Trade Center, Visits AAU.
- Al Ahliyya Amman University Hosts Workshops on Water Conservation and Purification Technologies
- University Launches Water Conservation Campaign
- AAU’s Faculty of Agricultural Technology Participates in the Arab Forum on Water Scarcity and Management

Clean Water and Sanitation [A/T%]



## SDG Scientific Research (2023)

Assessing water production from air conditioning systems as an unconventional supply source

Cross-linked chitosan-adipic/zirconia (ZrO<sub>2</sub>) nanocomposite for removal of eosin y dye

And more..

Scopus 20

## SDG 6. Partnerships (2023/2024)



Hashemite kingdom of jordan  
Ministry of Water

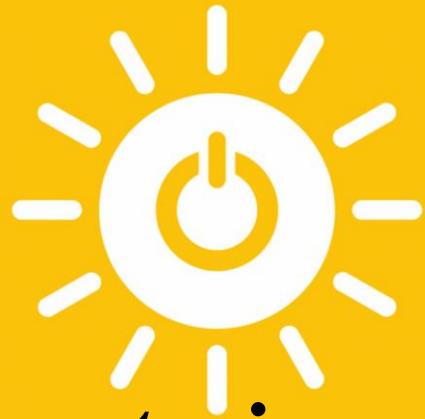


USAID



Community Schemes  
Ombud Service

# 7 AFFORDABLE AND CLEAN ENERGY



*“Sustainable Energy”*

## Key Focus Areas

University Building Energy Efficiency, Carbon Management and Emissions Reduction, Energy Efficiency and Clean Energy Education.

Affordable and Clean Energy [A/T%]



## Activities and initiatives achieved (2023/2024)

Al-Ahliyaa Amman University employs different energy saving strategies for its campus. Energy efficient appliances are an important part of the university’s sustainability efforts. A rated air conditioning units, LED indoor and outdoor lighting units, occupancy detectors and fans in lecture hall are installed in most buildings.

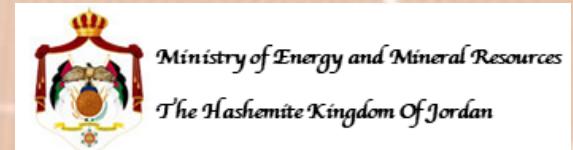
Data-driven interpretable ensemble learning methods for the prediction of wind turbine power incorporating SHAP analysis

Empowering power distribution: Unleashing the synergy of IoT and cloud computing for sustainable and efficient energy systems

An energy-efficient and deadline-aware workflow scheduling algorithm in the fog and cloud environment

And more..

Scopus 20



SDG Scientific Research (2023)

SDG 7. Partnerships (2023/2024)

# 8 DECENT WORK AND ECONOMIC GROWTH



“Economic Stability”

## Key Focus Areas

Fair and Equitable Wage, Labour Rights and Non-Discrimination, Outsourced Labour Rights, Anti-Forced Labour and Anti-Human Trafficking.

## Activities and initiatives achieved (2023/2024)

As part of its duty to provide decent work and pay conditions for its staff, the University has an Enterprise Agreement in place that provides the University and its staff the freedom to bargain for better wages, greater flexibility, and working conditions to suit their individual needs. It also sets out the conditions of employment between the University and the majority of academic, professional and English-language teaching staff. We have a range of research and education that supports decent work and economic growth.

An empirical assessment of the effect of natural resources and financial technologies on sustainable development in resource abundant developing countries: Evidence using MMQR estimation

Industry 4.0 technologies and circular economy synergies: Enhancing corporate sustainability through sustainable supply chain integration and flexibility

And more..

SDG Scientific Research (2023)

SDG 8. Partnerships (2023/2024)

Decent Work and Economic Growth [A/T%]



Scopus 20

# 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



*“Innovation & Excellence”*

## Key Focus Areas

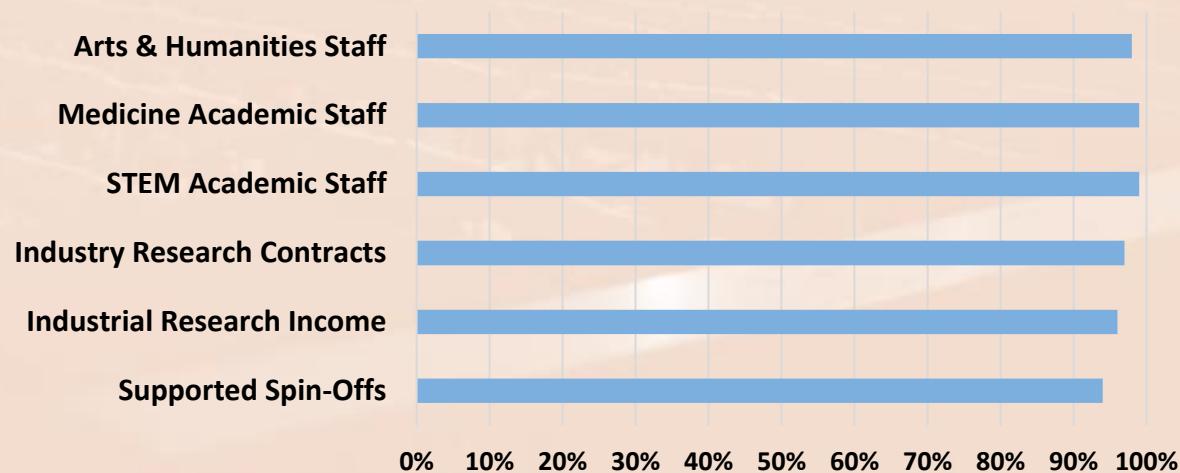
University Spin-Off Support, Industrial and Commercial Research Funding and Revenue Enhancement, Academic Resources and Targeted Research Expansion .

## Activities and initiatives achieved (2023/2024)

As part of its duty to provide decent work and pay conditions for its staff, the University has an Enterprise Agreement in place that provides the University and its staff the freedom to bargain for better wages, greater flexibility, and working conditions to suit their individual needs. It also sets out the conditions of employment between the University and the majority of academic, professional and English-language teaching staff. We have a range of research and education that supports decent work and economic growth.

**The University’s Centre for Innovation and Excellence(CIE) offers a range of innovation, entrepreneurship and commercialization programs that support our students (and in some cases staff) to grow their entrepreneurial mindset and capabilities.**

Industry, Innovation and Infrastructure [A/T%]



### SDG Scientific Research (2023)

The future of competitive advantage in Oman: Integrating green product innovation, AI, and intellectual capital in business strategies

Artificial intelligence-based prediction of hydrogen adsorption in various kerogen types: Implications for underground hydrogen storage and cleaner production

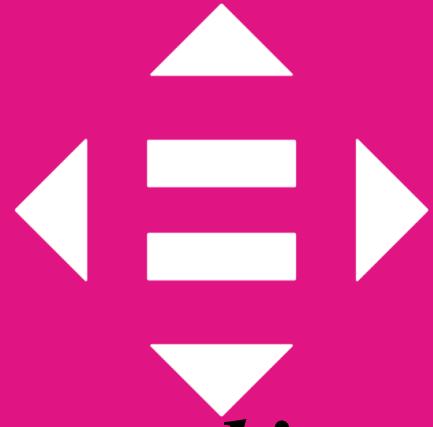
And more..

**Scopus 20**

### SDG 9. Partnerships (2023/2024)



# 10 REDUCED INEQUALITIES

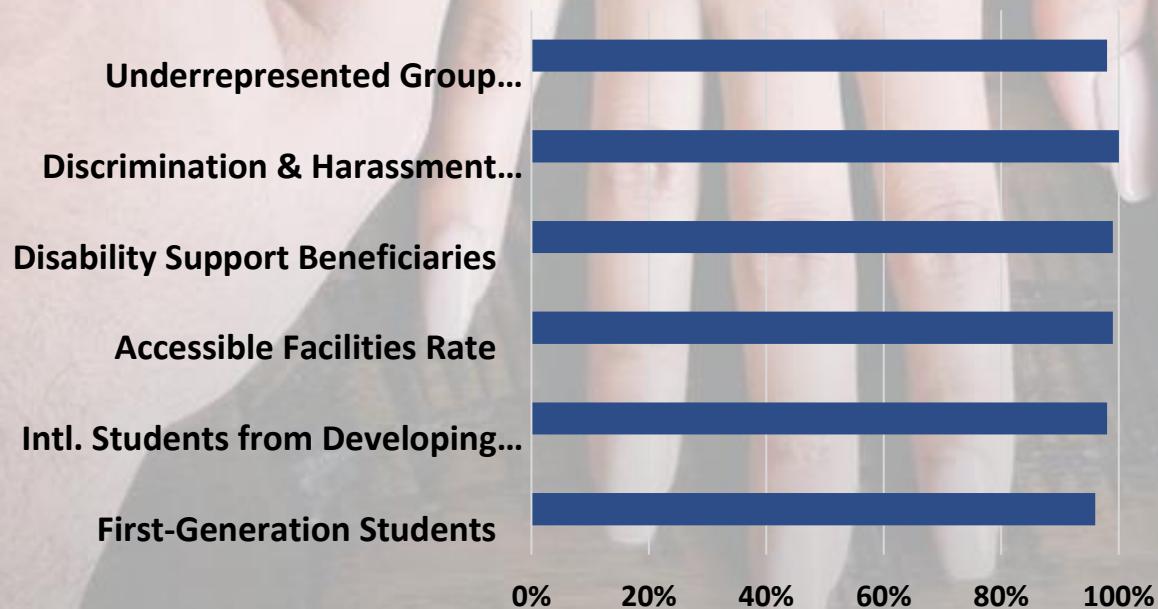


*“Equality of Opportunity”*

## Key Focus Areas

International Students from Developing Countries Support, Disability Inclusion and Support, Diversity and Equality Support.

Reduced Inequalities [A/T%]



## Activities and initiatives achieved (2023/2024)

Al-Ahliyya Amman University was established to provide education on the basis of merit only. It observes the rights and respects the dignity of staff, students, visitors and all others with whom the University has contact. It makes every effort to create an inclusive and diverse working, learning and social environment, free from unfair discrimination, prejudice and all forms of harassment and bullying. Al-Ahliyya Amman University believes that the diversity of its community is an essential part of its values and enriches employment, research, studying and learning experiences.

SDG Scientific Research (2023)

Empowering Women Through Digital Transformation: Case Studies in Enhancing Gender Equality in Business Leadership

The Impact of the Outputs of the Development and Employment Fund in Reducing Poverty and Unemployment in Jordan

And more..

Scopus 20

SDG 10. Partnerships (2023/2024)



مؤسسة نهر الأردن  
Jordan River Foundation



اللجنة الوطنية الأردنية  
للشؤون المرأة  
The Jordanian National  
Commission for Women

# 11 SUSTAINABLE CITIES AND COMMUNITIES



*“Towards a Sustainable community”*

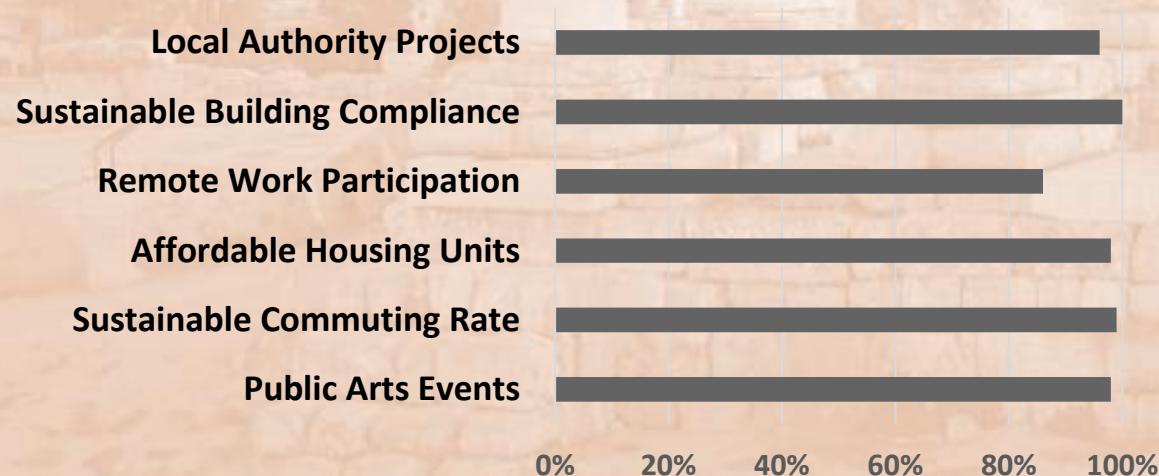
## Key Focus Areas

Arts and Cultural Heritage Support, Sustainable Commuting and Housing Practices, Sustainable Building and Campus Planning.

## Activities and initiatives achieved (2023/2024)

Al-Ahliyya Amman University (AAU) sustainable development programme aims to establish a roadmap towards a green built environment, which will promote sustainable growth in Jordan. AL-Ahliyya Amman University is a leading, internationally recognized higher education institution whose core business is the generation and spreading of knowledge. As a higher education institution, we are committed to making a positive impact through responsible sustainability performance. We transform our own university to be both prosperous and sustainable, and to produce new generations of graduates and staff that are ambassadors of positive social and environmental change.

Sustainable Cities and Communities [A/T%]



SDG Scientific Research (2023)

Enhancing preservation outcomes for architectural heritage buildings through machine learning-driven future search optimization

Enhancing Najran’s sustainable smart city development in the face of urbanization challenges

And more..

Scopus 20

SDG 11. Partnerships (2023/2024)

UNIVERSITY OF TWENTE.



# 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



*“Towards Food Security”*

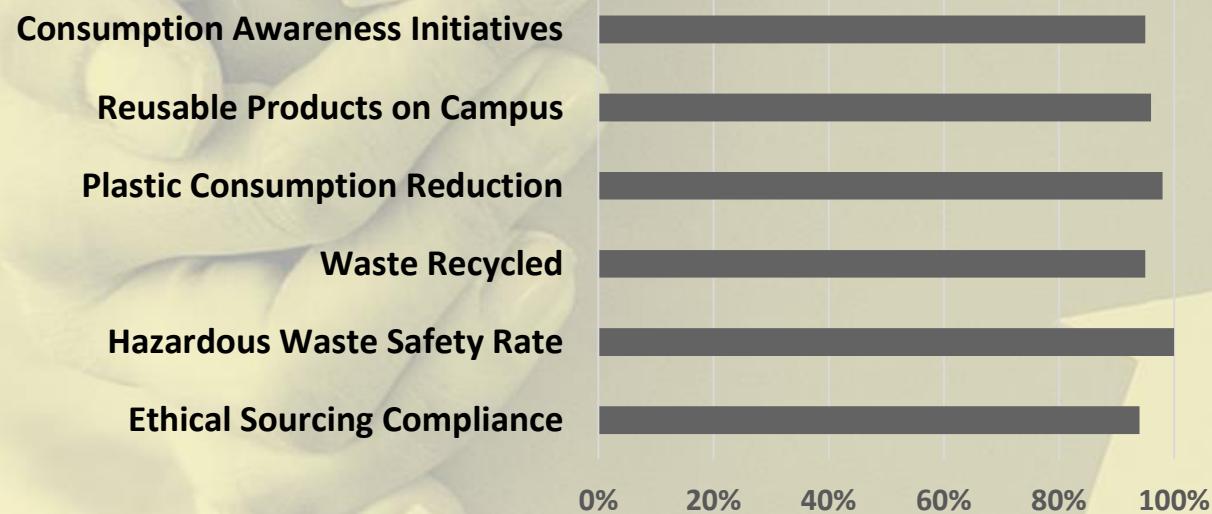
## Key Focus Areas

**Ethical Sourcing of Food and Supplies, Hazardous Waste Disposal Management, Recycled Waste Management and Measurement.**

## Activities and initiatives achieved (2023/2024)

- University Launches Sustainable Product Campaign to Reduce Plastic Use.
- Vice President Launches Zero-Waste Initiative to Promote Sustainability.
- University Hosts Workshop on Sustainable Resource Management.
- University Implements Green Procurement Policy to Promote Sustainability.
- Consumption Awareness Initiatives.

Responsible Consumption and Production [A/T%]



### SDG Scientific Research (2023)

Leveraging BIM for Sustainable Construction: Benefits, Barriers, and Best Practices

Enhancing employee sustainability through employee quality of life: the role of top management support

And more..

Scopus 20

### SDG 12. Partnerships (2023/2024)



# 13 CLIMATE ACTION



## “Combat Climate Change”

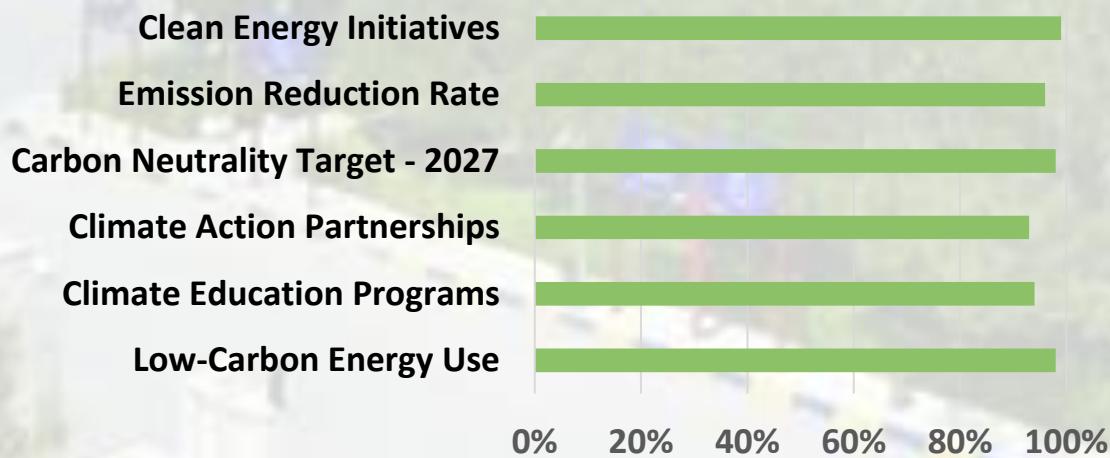
### Key Focus Areas

Low Carbon Energy Use, Climate Change Education, & Carbon Neutrality Target.

### Activities and initiatives achieved (2023/2024)

The University is dedicated to increasing the use of low-carbon energy on campus to reduce carbon emissions and improve energy efficiency, supporting sustainable development and minimizing environmental impact. This commitment includes actively measuring and tracking low-carbon energy usage to ensure effective implementation of energy-efficient practices across campus. By incorporating renewable energy sources and optimizing energy systems, the University aims to foster an eco-friendly environment that aligns with global sustainability goals. These efforts contribute significantly to reducing the University's carbon footprint and advancing its role in promoting responsible energy use.

Climate Action [A/T%]



### SDG Scientific Research (2023)

Unlocking corporate social responsibility and environmental performance: Mediating role of green strategy, innovation, and leadership

Optimizing grid-connected PV systems with novel super-twisting sliding mode controllers for real-time power management

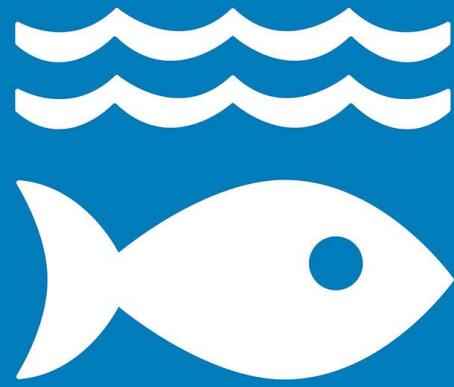
And more..

Scopus 20

### SDG 13. Partnerships (2023/2024)



# 14 LIFE BELOW WATER



## “Saving Water Resources”

Life Below Water [A/T%]



## Key Focus Areas

Aquatic Ecosystems Education Support, Aquatic Ecosystems Conservation Action, Marine Resources Sustainability and Waste Disposal, & Local Aquatic Ecosystems Stewardship.

## Activities and initiatives achieved (2023/2024)

- University Launches Marine Conservation Workshops to Promote Ocean Protection.
- University Hosts Beach Cleanup at Aqaba Sea to Support Marine Conservation Efforts.
- University Launches Research Initiative on Marine Ecosystem Preservation.
- University Partners with Marine NGOs to Advance Ocean Conservation.
- Watershed Projects with Communities.

SDG Scientific Research (2023)

Preliminary Investigation of Bioaccumulation of Microcystins in Hypereutrophic Irrigation Ponds Case Study – the Jordan Valley

Carbon dioxide emission evaluation of biochar based vegetation concrete for ecological restoration projects

And more..  
Scopus 20

SDG 14. Partnerships (2023/2024)



الجمعية الملكية لحماية البيئة البحرية  
The Royal Marine Conservation Society  
JREDS



MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION

Aqaba marine park  
Underwater Wonderland

# 15 LIFE ON LAND



## “Sustainable Life”

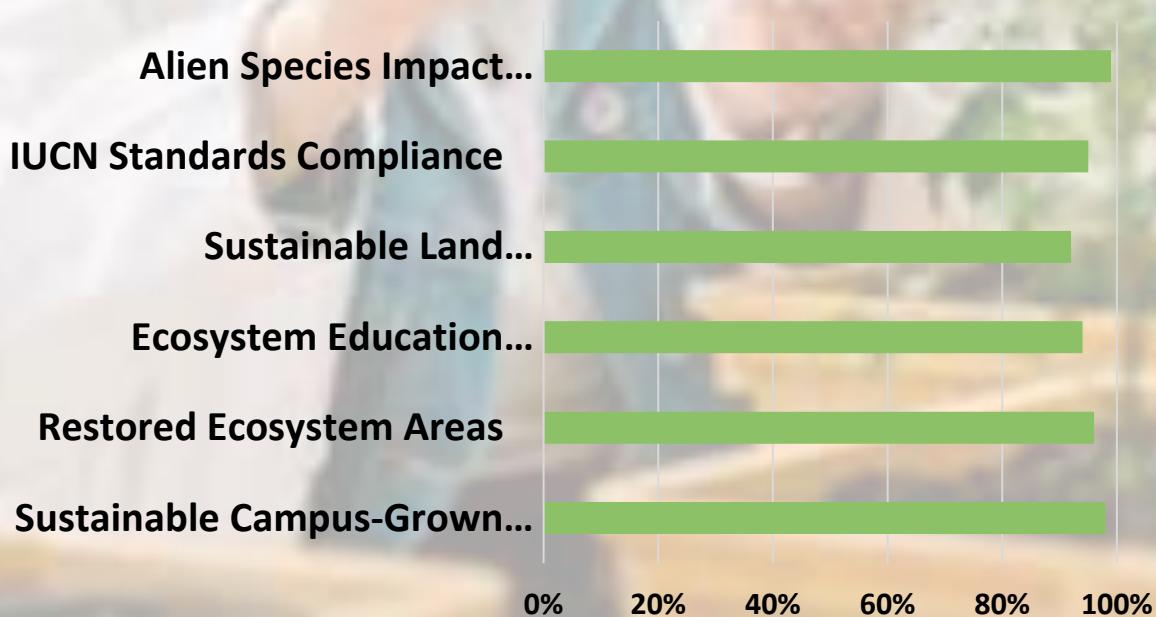
### Key Focus Areas

Sustainable Campus Food Farming, Terrestrial Ecosystems Conservation and Restoration, International Union for Conservation of Nature [IUCN] Red List Species Protection.

### Activities and initiatives achieved (2023/2024)

Go-Green Community is a community organization initiated by Al-Ahliyya Amman University’s Nature Club, which is working relentlessly to promote sustainable environments. The program holds environmental education classes in schools, based on experiential learning or Do-It-Yourself (DIY) sustainability activities. The approach is to build awareness and knowledge of sustainability through effective experiential learning towards energy, waste, food, agricultural indigenous solution and practices in a student’s daily life with activity-based pedagogy, that is both very simple and cost effectively.

Life On Land [A/T%]



### SDG Scientific Research (2023)

Artificial intelligence-based prediction of hydrogen adsorption in various kerogen types: Implications for underground hydrogen storage and cleaner production

Dynamic interactions in a two-species model of the mammalian predator-prey system: The influence of Allee effects, prey refuge, water resources, and moonlights  
And more..

Scopus 20

### SDG 15. Partnerships (2023/2024)



# 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



## Key Focus Areas

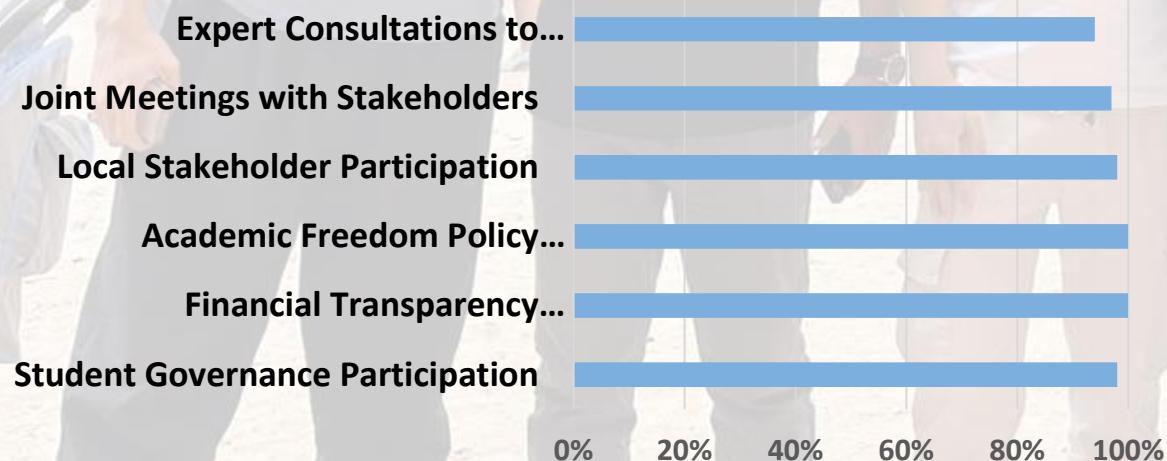
University Governance Representation, Transparency and Anti-Corruption, Academic Freedom Support, Local Stakeholder Engagement & Government Collaboration.

## Activities and initiatives achieved (2023/2024)

Recent wars in the Middle East region have had a devastating impact on the development of affected countries, hindering economic growth and leaving behind grievances that often persist for generations. Conflict zones or areas lacking rule of law frequently experience sexual violence, crime, exploitation, and torture, which further exacerbate the suffering of vulnerable populations. To mitigate these impacts, Al-Ahliyya Amman University collaborates with governments and international partners to provide support for refugees who have fled their homelands in search of safety.

*“Towards Peace & Stability”*

Peace, Justice and Strong Institutions [A/T%]



SDG Scientific Research (2023)

The role of social media marketing and marketing management promoting and developing brand sustainability strategy

The Relationship Between E-Government Effectiveness And E-Government Use: The Mediating Effect Of Online Trust And The Moderating Effect Of Habit

And more..

Scopus 20

SDG 16. Partnerships (2023/2024)



المؤسسة العامة للضمان الاجتماعي  
Social Security Corporation



# 17 PARTNERSHIPS FOR THE GOALS



*“Partnering for a Cause”*

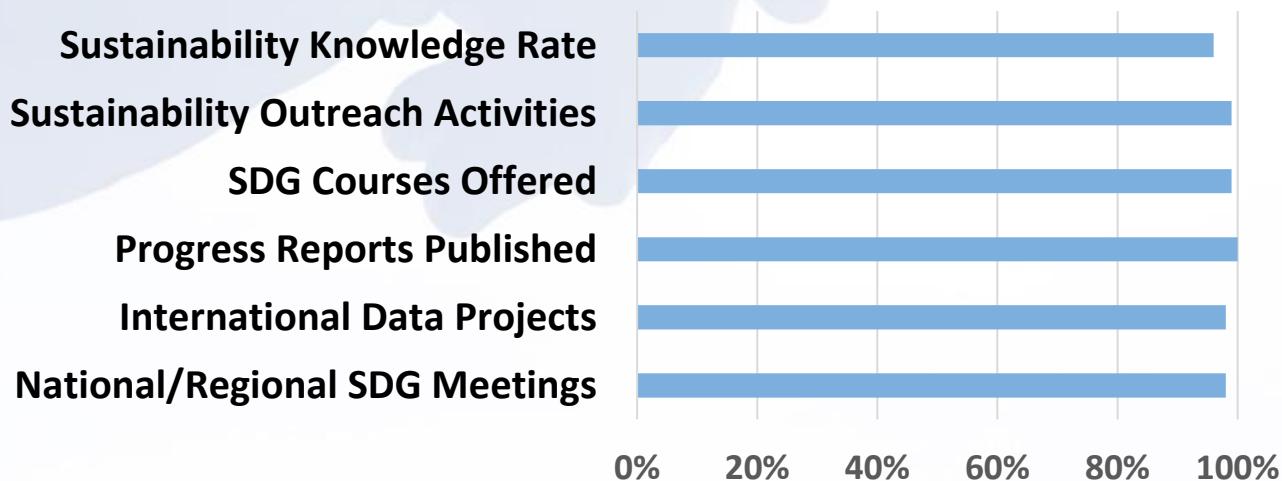
## Key Focus Areas

Participation in SDG Development strategies, International Collaboration for SDG Data Collection, SDG Progress Reporting and Publication & SDG Education and Sustainability Culture Development.

## Activities and initiatives achieved (2023/2024)

The University is committed to fostering a deep understanding of Sustainable Development Goals (SDGs) and cultivating a culture of sustainability within and beyond the campus community. This commitment includes developing educational and outreach programs that focus on SDGs, increasing knowledge of sustainability concepts, and encouraging sustainable practices among students, faculty, staff, and the local community. Key initiatives involve expanding partnerships with local and international institutions to exchange expertise and develop sustainability-focused academic courses, organizing conferences and workshops that address SDG topics and feature international experts, and utilizing digital technology to enhance environmental awareness through applications and educational platforms. These efforts contribute to a robust culture of sustainability, empowering the University community and surrounding region to actively support and advance SDG goals.

Partnerships for the Goals [A/T%]



## SDG 17. Partnerships (2023/2024)



# What's Next?

AAU aims to further its sustainability agenda by focusing on

AAU is committed to building on its sustainability achievements by taking bold steps toward future goals. Key focus areas include achieving carbon neutrality by 2027 through expanded use of renewable energy and enhanced emission reduction measures. The university also plans to integrate sustainability more deeply into its curriculum, equipping students with the skills and knowledge to address global challenges. Strengthening global partnerships will remain a priority, enabling AAU to share its expertise, collaborate on groundbreaking research, and adopt best practices from around the world.

*Better together*

