

# JADARA UNIVERSITY SUSTAINABILITY REPORT 2022-2023

S R 2023

**Jadara University** 

Irbid, Jordan



# **Table of Contents**

# Content

About The Green Campus3
Jadara & Energy4
Jadara & Waste Management5
Jadara's Water Resources6
Sustainability in Education & Research7
Jadara's International Rankings in Sustainability8
Sustainability Committee & Data Source9



# **About The Green Campus**

Jadara University sits on land of an area 201756.77 m2, comprised of one large Campus established in May 2005. In 2022-2023 this unique university location gathers 4314 students and 250 Academic Staff, as well as 116 administrators, providing a total population of 4680 students and staff members.

The Campus is located 30 km away from Irbid city, the capital and largest city of Irbid Governorate, the second-largest metropolitan population in Jordan after Amman, with a population of around 2,003,800. It is located 50 km from the Capital Amman. The University has 4 main buildings, titled building 'A', building 'B', building 'C' and building 'D', in addition to a 5th building, the Gym /Arena building. The university has 2 large green pitches, 4 main parking areas, 3 (in - building) stadiums and 1 open (outdoor) stadium. The rest of the Campus is open land planted with forest trees, Olive trees and over 450 palm trees.

The green campus is spacious with beautiful landscaping, including flowers, big trees, palm trees and loan covered areas where students, staff and visitors can sit and enjoy beautiful sights and clean air. Closed areas and buildings are SMOKE FREE. A rigorous regulation was set for this purpose in 2019. Awareness workshops, informative sessions, posters, and signs are great examples of the practices applied in this regard.

The campus parking areas are only designated for staff cars and some visitors. We offer Bus transportation (free service) to encourage staff, faculty members and students to use instead of cars. Therefore, this reduces production of emission gas on campus.

The buildings' design allows natural sunlight and natural ventilation and cooling. Walls are all painted in light color to increase brightness and decrease electrical lighting.

Safety/firefighting and surveillance systems in campus are all installed, monitored, and managed. Fire Management System is available with a response time of less than 10 minutes.

35.8%

95.17%

34.9%

**Forest Vegetation** 

Open Space

Sustainability

72000 m<sup>2</sup>

192012 m<sup>2</sup>

Effort Funds

S R 2023

Jadara University

Irbid, Jordan

# **Jadara & Energy**

Jadara University is keen to go green through practices, programs, and infrastructure. Therefore, the leadership with the help of the Building Manager at the Engineering Office at Jadara university, installed solar panels on all Buildings' roofs and solar panels on all 4 parking areas that work as a natural cooling system, providing great shades for parking areas. This project is complete and provides the Campus with 200.3% of its electricity supply.

Our departments also use Energy Efficient appliances. For Example: A typical desktop PC uses between 65 to 250 watts of power per hour. Compare this to a 10ZiG Zero Client, which uses between 6 and 14 watts of power per-hour. Therefore, IT labs use about 60 Zero Client units to lower the consumption of energy.

The Campus has 17 Computer Labs of 250 pc and 300 pc in offices, all are (Energy Star – certified).

As for the 'Light –emitting diodes', they save up to 80% of electricity consumption and its durability is high. We have recently changed 3000 units of all lighting from regular to LED lamps as phase 4; while in phase 1, 2 & 3, we also replaced 9000 units in buildings and 200 units outdoor. A total of 12200 LED lamps were installed.

Central AC with Inverter technology has been installed in all 5 buildings. AC split units are 25 pieces installed in new buildings with inverter technology.

Building Management Systems are part of the plan to go green, so we started using Wems-York CAC Management System for Air conditioning in buildings with an App to control usage and monitor online in early 2020. This helps in controlling Air quality and Energy usage. The AC and heating systems are all using electricity energy by solar system and all boilers for heating are cancelled to reduce the production of CO2.

92.8%

200.3%

<0.20 Metric ton per person

**Energy Efficient** 

**Solar Energy** 

Carbon Footprint

**Appliances** 

Supply

By Campus Population

4

# **Jadara & Waste Management**

Jadara follows simple Single Stream Recycling, helping staff at their offices and students to recycle the waste according to materials whether it is plastic, cans, paper or other waste (rubbish). Regular waste (rubbish) is gathered in waste collectors by our service contractor, then is collected by a third party responsible for sorting and treatment depending on the materials being recycled.

Policies since 2019 have been regulated & followed regarding paper use, such as double-sided printing and if necessary, with the use of emails as an alternative option for correspondence. Digital archiving started in 2018 to decrease the amount of paper waste. Paper waste at our campus was about 5 tons in the past year and now the amount has decreased by 50% of paper waste, down to 2.5 Tons only. All papers are collected by a contractor for Treatment.

No plastic bags are allowed on Campus, a program to reduce plastic use along with offering pure water from Ground Water through fountains and coolers. This has decreased the purchase of water bottles. Our use of Plastic was 0.5++ tons in the past. This has decreased by 40% lately.

Organic waste (such as Food and Plant waste) is fully treated into compost by a contractor, of which we reuse as fertilizer for the plants at the campus.

Inorganic waste, like E-waste and Electrical waste, are stored and picked up by contractors for recycling. Metal, Aluminum, and glass waste is about +/- 0.6 ton per year.

Hazardous and toxic waste is one of our main priorities due to the high levels of toxicity and dangerous impact on our campus and the surrounding environment.

Labs' Waste (quite small amounts) is stored temporarily in storage rooms and places designated for that purpose. Lab supervisors are responsible for packaging the waste safely, following the safety protocol and adhering to Ministry of Health and Environment regulations.

Hazardous (medical) and (chemical) waste is sent through a third party to one of the largest medical waste incineration units that operates with a design capacity (4 tons / day) and conforms to the European standard specifications for gas emission.

5 Programs

**50%** 

40 %

To Reduce

**Less Paper** 

**Less Plastic** 

Paper & Plastic Use

S R 2023 Jadara University

Irbid, Jordan

## Jadara Water Resources

Jadara University is water self-sufficient and has a water conservation system through....

### First:

Water coolers that provide filtered water (which is pure ground water that comes from the University's artisan well allow students and staff to fill up reusable containers replacing bottled water (to reduce plastic) in all Buildings. These coolers are available in all common areas at the Campus and provides 100% of need.

Rainwater is collected from the roofs of the 4 main buildings at the campus and is then saved in an In-Ground Tank of a size of 200 m<sup>3</sup>. The water is tertiary treated and pumped into a special piping system and then down cycled for irrigation, reused in cleaning vehicles and toilet flushes.

The collection of rainwater is only seasonal, mainly in winter and spring time, providing about 10% of water consumption, which is added to the Sewage wastewater that is tertiary treated in a special station at the campus, providing about 72% of water consumption. This concludes to 82% of Total treated water consumed.

### Second:

We Have Artesian Well that is owned by Jadara University, providing ground water of an amount of water supply equalling to 130 m<sup>3</sup>/day (12 -13 hours of Operation working hours). The well is more than 440 m depth. The water is clean and drinkable. Also, the water source is renewable every 10 years. The well covers the University with ++100% of water consumption.

This is pumped through special pipes for coolers, drinking water fountains, kitchens, WC faucets for hand washing, labs, and others.

### **Third**

Jadara has installed 450 sanitizers in halls, hallways, and rooms at all buildings. To decrease water-use and encourage hygiene. Water Efficient Appliances are installed in all 5 buildings on campus this year, with a percentage equal to 97%.

+100%

+ 82%

+10-11%

Ground Water Treated Water

Rainwater

Supply

Consumed

Supply

S R 2023

Jadara University

Irbid, Jordan

# **Sustainability in Education & Research**

Jadara University offers comprehensive education through Undergraduate and Post-Graduate Studies. The University caters to more than 34 different specializations in Undergraduate Program and 16 Specializations in Post-Graduate Program.

In 2022-2023, the campus gathers more than 4000+ students and 360+ staff.

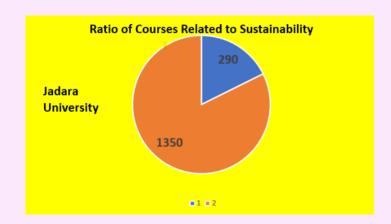
In 2022-2023:

Ratio of sustainability courses to total courses is **21.48%** 

Research fund dedicated to sustainability research is:

156,000 JOD

219.726 US Dollars



Jadara University holds many events every year that are relevant to Culture, or Environment & Sustainability such as conferences, workshops, awareness, training, environmental related events, programs and collaborations with local community and other partners, and internationally.

The travel policy at our university helps indirectly in decreasing gas emission in the environment by minimizing the number of travelers participating in conferences or meetings. We encourage virtual meetings and call conferences rather than physically must commute or travel. Also, it helps in decreasing the expenses on travel and utilizes these funds in more sustainable practices like research and sustainability efforts.

Since the beginning of 2022, Jadara Students have been actively working in affiliation with Faculties and Innovation Center in more than 6 Sustainability startups, at different levels.

S R 2023 Jadara University Irbid, Jordan www.jadara.edu.jo

# **Jadara's International Rankings in Sustainability**

### **UI GreenMetric:**

Jadara University is keen to participate in International Sustainability Ranking systems such as UI GreenMetric World University Ranking every year. Proudly, Jadara ranked 228<sup>th</sup> in UI Green Metric in 2019- 2020, 220<sup>th</sup> in 2020-2021, 215<sup>th</sup> in 2022-2023, and in 2021-2022 we were at 215<sup>th</sup> ranking in UI Green-metric Internationally, and 4<sup>th</sup> locally for the third time.

UI GreenMetric Ranking information can be found via the link:

https://greenmetric.ui.ac.id/rankings/overall-rankings-2022

Remark: A link specific for UI GreenMetric has been set on our Sustainability & Environment section on Jadara's webpage, and surely updated and reviewed regularly.

For more information, please click on the link below:

http://jadara.edu.jo/eng/main.php?type=mod gmetric

### **THE Impact Rankings:**

Jadara cares to participate in THE Impact Rankings for the UNs SDGs all over 1200 universities from 94 countries. In 2021 Jadara ranked 101-200 among 1200 universities from 90+ countries, and was 1st in Jordan in the SDG6 (Clean Water and Sanitation).

In 2020-2021, the university also participated and was ranked 301-400, and ranked 401-600 in SDG6 in THE Impact-International Ranking for 2021-2022.

A plan is under implemntation to include more SDGs in the uniersity's report in this year's cycle.

Jadara's Rank in THE is found in the link below:

https://www.timeshighereducation.com/world-university-rankings/jadara-university

S R 2023 Jadara University Irbid, Jordan www.jadara.edu.jo

# **Sustainability Committee**

Prof. Iman Basheti (Vice Rector-Head)

8

Prof. Belal Zaqaibeh (Rector Assistant-Member)

Dr. Saleh Al-Omr (Director of QA-Member)

Dr. Saleh Al-Omari (Vice Dean – Member)

Mrs. Lama Haddad (Director of IRO-Member)

### **Data Source:**

**Quality Assurance** 

**Building Manager / Engineering Office** 

Finance Department

Jadara Bureau/Head Office

Admission & Registration

Faculty of Scientific Research

**Computer Center/IT** 

**Public Relations Department** 

**Agriculture Department** 

IT Department



S R 2023

Jadara University

Irbid, Jordan