

JADARA UNIVERSITY SUSTAINABILITY REPORT 2019-2020

S R 2020

Jadara University

Irbid, Jordan

www.jadara.edu.jo

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About The Green Campus

Jadara University sits on a land of an area 201756.77 m2 and is only one large Campus since May 2005. In 2020, the only location gathers 4101 students and 418 staff.

The Campus is located 30 km away from Irbid city and 50 km from Capital Amman. The location has 4 main buildings A, B, C and D as well as a 5th building which is the Gym /Arena. It has also 2 large green pitches, 3 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 400 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 set and enjoy beautiful sight and clean air. Closed areas and buildings are SMOKE FREE. A rigorous regulation has been set for this purpose in 2019. Awareness workshops, informative sessions, posters and signs are great examples of our practices 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 of electrical lightning.

Safety/firefighting and surveillance systems are all installed, monitored and managed in our campus.

35.8%

95.17%

9%

Forest Vegetation

Open Space

Sustainability

72000 m²

192012 m²

Effort Funds



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Jadara & Energy

Jadara University is keen to go green through practices, programs and infrastructure. Therefore, leadership with the help of our Building Manager at Engineering Office at Jadara, planned to install solar panels on roofs as phase one back in 2015 and in 2019-2020 the plane finished it's phase 2 with installing solar panels on parking areas. This project is complete and provides the Campus with 150% electricity supply. These panels also work as natural cooling system for the roofs of all 5 buildings and great shades for parking areas.

Our departments also use Energy Efficient appliances and more plans to be completed before the end of 2020. For Example:

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 uses 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 (EnergyStar –certified).

(Light –emitting diodes) save up to 80% of electricity consumption and durability is high. We have recently changed 3000 units of all lightning from regular to LED lamp as phase 2; and phase 1 we replaced also 6000 units in buildings and 200 units outdoor. Need to replace 6000 more prior the end of 2020 in the remaining two buildings.

Central Ac with Inverter technology has been installed in 4 buildings out of 5 buildings. Ac split units are 25 pieces installed in new buildings with inverter technology and there is a plan to replace old ones in the coming year.

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 A and D with an App to control usage and monitor online early 2020. AC and heating are all using electricity energy by solar system and all boilers for heating are cancelled in order to reduce production of CO2.

75.5%

150%

<0.10 metric ton

Energy Efficient

Solar Energy

Carbon Footprint

Appliances

Supply

By Campus Population

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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 the directorate of Al-Nuaymeh in Irbid city is responsible of disposing it according to the materials.

New policies in October 2019 were regulated regarding paper use such as Double sided printing only if necessary and use emails as an alternative option for correspondence. Digital archiving has started in 2018 to decrease the amount of paper waste. Paper waste at our campus was about 6 tons in the past year and now the amount has decreased by 40% of paper waste.

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. This has decreased by 20%.

Inorganic waste like E-waste and Electrical waste are stored and picked up by contractors for recycling. Metal and Aluminum waste is about +/- 0.4 ton per year.

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

Labs' Waste is stored temporarily in storage rooms and places designated for that purpose. Lab supervisors are responsible of packaging the waste safely, following the safety protocol and adhere 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 unit that operate with a design capacity (4 tons / day) and conform to the European standard specifications for gas emission.

5 Programs

40%

20%

To Reduce

Less Paper

Less Plastic

Paper & Plastic Use

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Jadara Water Resources

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

First:

Rain water that 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 m³. The water is treated and pumped into 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 about 10% of water consumption which is added to the Sewage waste water that is treated in a special station at the campus of about 50% of water consumption.

Conclude to 60% Total treated water consumed.

Second:

We Have Artesian Well that is owned by Jadara University, provides ground water of an amount of water supply = $130 \text{ m}^3/\text{day}$. (12 -13 hours of Operation working hours) The well is more than 440 m depth.

Water is clean and drinkable. Also the water source is renewable every 10 years. The well covers 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.

+100%

60%

10%

Ground Water

Treated Water

Rain Water

Supply

Consumed

Supply



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Sustainability in Education & Research

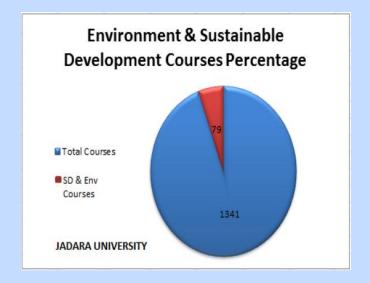
Jadara University offers comprehensive education through Undergraduate and Post-Graduate Studies. The University caters to more than 30 different specializations in Undergraduate Program and 10+ Specializations in Post-Graduate Program. In 2020, the campus gathers 4101 students and 418 staff.

In 2019-2020:

Ratio of sustainability courses to total courses is % 5.9

Research fund dedicated to sustainability research is

130.800 JOD



Jadara University hold many events every year that are relevant to Environment and sustainability such as conferences, workshops, awareness, training, environmental related events, programs and collaborations with local community and other partners, etc.)

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 have to commute or travel. Also it helps in decreasing the expenses on travel and utilize these funds in more sustainable practices like for research and sustainability efforts.

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Future Plans

Jadara University is keen to participate in International Sustainability Ranking systems such as UI GreenMetric World University Ranking by October 2020. Results shall be displayed by December 2020.

A link specific for UI GreenMetric has been set on our Sustainability & Environment webpage.

For more information please click on the link below:

http://www.jadara.edu.jo/main.php?type=mod_greenmetric



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