

Template for Evidence(s) UI GreenMetric Questionnaire

University : Alexandria University
Country : Egypt
Web Address : <https://alexu.edu.eg/>

[4] Water (WR)

[4.1] Water Conservation Program Implementation



Supplying water taps with water conservation units (Alexandria University, Egypt)

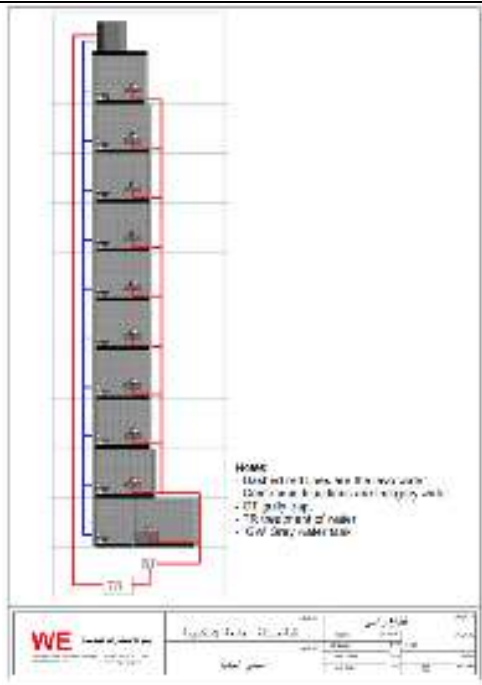
Adopting a mechanism to maintain water pipes to prevent waste resulting from leaks (Alexandria University, Egypt)



Supplying water taps with water conservation units (Alexandria University, Egypt)

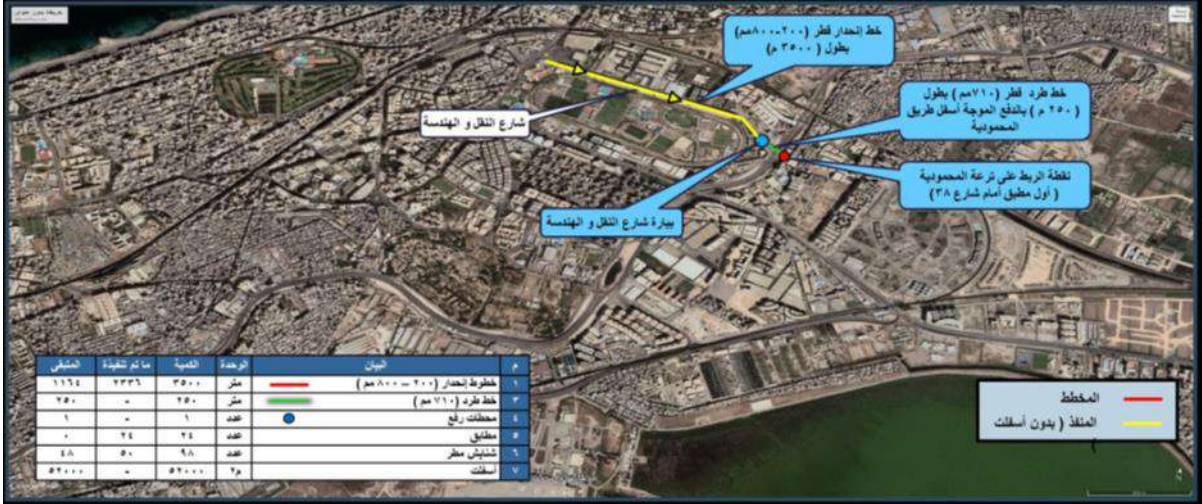


The sewage water will be treated and reused in the irrigation of green areas in the project (Alexandria University)



Grey water recycling system by Faculty of Pharmacy (Alexandria University)





Integrated strategy project for rainwater management in Alexandria Governorate in cooperation with Alexandria University



Integrated strategy project for rainwater management in Alexandria Governorate in cooperation with Alexandria University



Description:

Alexandria University program to decrease the water consumption in its faculties and buildings:

Campus water use is an important indicator in the sustainability scale. The aim is to urge universities to reduce water use, increase water conservation programs, and protect the environment. Among these criteria:

- The water conservation program,
- The water recycling program
- The use of water-saving equipment
- The treatment of wastewater
- The rainwater collection program

- 1- The University has applied a strategy in the faculties to decrease water consumption through installation of special parts on water taps, showers, toilette and bathroom bidet which can conserve about 50% of water consumption.
Water saving devices are used instead of traditional devices. For example, the use of a hand-washing faucet with automatic control via a sensor, and high-efficiency bathroom devices. Supplying water taps with water conservation units.
2. Adopting a mechanism to maintain water pipes to prevent waste resulting from leaks.
3. Adopting plans and mechanisms for maintaining the taps and internal supply networks of the university to prevent water wastage.



4. Providing a sewage treatment plant at the university to make it suitable for irrigating green areas and gardens inside the university campus.
5. The irrigated water supplied to the fish farm at the Agriculture Experimental Research Station of the Faculty of Agriculture is recycled to irrigate the crops, vegetables, and fruits of the land farm. The recycled water is rich with natural fertilizers and enhances the crops production.
6. In addition, the water recycling in Fish Aquaculture of the Faculty of Agriculture, Alexandria University: The water sewage of the Aquaculture of the Faculty of Agriculture, Alexandria University which consist of eight ponds (one acre and quarter/each) in Abis region. Alexandria University used the recycled water for crops culturing in the adjacent agriculture research center in Abis.
7. The use of biochar produced from Agricultural waste and waste Forests in residual removal chlorpyrifos pesticide Imidacloprid is from water agricultural drainage. Cooperation project between the Egyptian Academy of Research Science and Technology and the Czech Academy of Sciences.
8. IOT Pilot Project in Egypt by Shanghai Water Saving Irrigation Corp. Etd performed an automatic controlled irrigation systems IOT project for modern irrigation technology. The company implanted the IOT platform project to irrigate economic crops and facilitate irrigation systems to overcome the water shortage problems in Egypt. This project will be performed in Alexandria University Farm for agroecological farming in Egypt.

Elements of Green Building Implementation as Reflected in all new construction and renovation policies in the new buildings in Abis campus:

- The area of the project is 160 acres, a general site for educational buildings, and 120 acres are complementary activities. The percentage of green areas and lake is about 52% in addition to 25% streets and lanes.
- Water-saving plots are used, which will reduce water consumption by about 30%. The sewage water will be treated and reused in the irrigation of green areas in the project.
- Rainwater is collected in the main lake and used for irrigation.
- The use of plants with few water rationed plants to reduce irrigation needs in addition to absorbing quantities of rainwater to reduce the severity of rain spells.

Green Cycle project in the Faculty of Pharmacy - Alexandria University

The project began in October 2022 by organizing a number of events in cooperation between the Community Service and Environmental Development Committee, ASPSA, and the Alexandria Rotary Clubs, under the supervision and organization of Faculty of Pharmacy - Alexandria University.

Also, the faculty is seriously seeking to **implement a grey water (wastewater) recycling system** that depends on reusing wastewater from sewage basins only (without using wastewater from laboratory basins) by re-pumping it into the flushing bins in the toilets after work. Filtration and primary treatment. The grey water recycling initiative has a significant impact on rationalizing water use.

Also, taking advantage of rainwater for use in irrigation and regulatory operations.

Alexandria University have generalized this initiative in some of the faculties of Alexandria University in gradual stages.

Integrated strategy Project for rainwater management in Alexandria Governorate in cooperation with Alexandria University

Remote sensing technology was used to know the current values of Rain and assess the current situation with the help of satellites. This is done with the help of the following artificial satellites:

-TRMM and GPM are two of the NASA satellites. (Administration National Aeronautics and Space Administration, United States of America)

- NOAA (National Oceanic, Atmospheric, and Space Administration, United States of America)

- NCEI (National Center for Environmental Information in the United States of America)

Proposed rain management strategy

A separate network will be created to drain rainwater for the nearest body of water for areas close to the body of water. The first area is the Corniche, where rainwater is collected and discharging it into marine estuaries.



The second area is on both sides of the Mahmoudiyah and Beheira axis near the airport. The rainwater is collected and part of it is drained on the canal and the other part on the airport lake.

In the third stage of the project, the two projects on the airport lake to exploit rainwater will be linked to the New Delta project. The rainwater will be used to irrigate the crops, vegetables, and fruits in the New Delta.

Link for Green Cycle Project:

<https://fb.watch/mzqhBHazV4/?mibextid=j8LeHn>

Additional evidence link:

Link for Sustainable Development: <https://alexu.edu.eg/index.php/en/sustainable-development>

<https://alexu.edu.eg/index.php/en/2015-11-24-10-38-07/ranking?id=6011>

<http://sustainability.alexu.edu.eg/>

Link for Green University:

https://alexu.edu.eg/index.php/?option=com_content&view=article&id=5932&catid=21&lang=ar-AA



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Tel: +86-21-50187007 Fax: +86-21-50187028 Website: www.enhuawei.com

July 10, 2018

The Honorable Dean,
Faculty of Agriculture,
Alexandria University, Egypt.

IOT Pilot Project in Egypt by Shanghai Irrist Corp., Ltd.

Dear Prof. Dr. Abdalla Zein Eldein,

On behalf of Shanghai Irrist Corp., Ltd (subsidiary brand of Shanghai Huawei Water Saving Irrigation Corp., Ltd), the top leading irrigation brand in China, I am writing to express our gratitude for allowing us to proceed on the automatic controlled irrigation systems IOT (Internet of Things) project for modern irrigation technology.

Following your acceptance, Shanghai Irrist company will finance and implement the IOT platform project to irrigate economic crops and to facilitate irrigation systems to overcome the water shortage problems in Egypt.

This is our company's liability to introduce the best technology for Alexandria University Farm (the land you suggested) for agroecological farming located in Egypt and to promote the business relationships between China and Egypt to attract more investors for this development cause.

We look forward to a sustained partnership for enhancing the modern irrigation systems to Egypt's agriculture with your esteemed university.

Thank you in advance for your time and your consideration for our project.

Ps: Names and the passport details of the leaders are attached with the letter who will come to sign this MOU with Alexandria university.

Yours Sincerely,

Mr. DENG Shouchi



Irrist

邓守赤
Director of International Business Department
Shanghai Irrist Corp., Ltd.
Mobile: +86-17721479036
Email: trade@enhuawei.com

Cost less Harvest more

Alexandria Water Resilience-Center of Excellence AWR -COE



Governance and strategic planning workshop



Training for civil and environmental engineering students at the Eastern Wastewater Treatment Plant in Alexandria.

Description:

The Center of Excellence for Water is a USAID- funded program, managed by the American University in Cairo.

Its goal is to catalyze long-term improvement in Egyptian water resources management by improving its innovative applied research and educated enterprise.

Located at Alexandria University, and in cooperation with four Egyptian Universities (Ain Shams University – Aswan University – Beni Suf University – Zagazig University) and four U.S. Universities (University of California, Santa Cruz, Temple University, Utah State University, and Washington State University), The Center of Excellence for Water is designed to be a state-of-the-art center that raises the quality of all aspects of higher education, including curriculum, teaching, and applied research to international standards.



The Center supports the Egyptian government, academia, and industry to address water challenges, and prepare a new generation of graduates and entrepreneurs to be change agents that stimulate economic growth.

Leveraging on the public-private partnerships established, the Center of Excellence for Water will be the hub for research and a vibrant network of Egyptian industries, research centers, and ministries.

Link: <https://www.coew-grantportal.info/#/landing>

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Community Service & Environment Development

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Sincerely,


11-10-2023

Prof.

Community Service & Environment Development
Alexandria University

