University : Al-Mustaqbal University (formerly name: Al-Mustaqbal University College)
Country : Iraq
Web Address : https://uomus.edu.iq/Home/Index

6.4.1: Water reuse policy Year: in place by 2025: Have a policy to maximise water reuse across the university?

Link to the public evidence:

https://sustainability.uomus.edu.iq/SDG_Hub/Goals/6

1- Water Resuse and conservation policy

Al-Mustaqbal University has adopted a comprehensive water conservation policy. This policy not only addresses the local water crisis but also contributes to the global effort in achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 6: Clean Water and Sanitation and SDG 13: Climate Action. It also aligns with the criteria of THE-TIMES Impact requirements, which measure sustainability efforts at universities worldwide. This policy is fully published on the university's website and is updated periodically:
Link:
https://uomus.edu.iq/Sustainability/waterconversationprogram.aspx

By implementing these measures, Al-Mustaqbal University not only strengthens its environmental credentials but also contributes to the United Nations 2030 Agenda by tackling climate change and water scarcity challenges. This comprehensive policy ensures that the university remains at the forefront of sustainable development, setting a benchmark for academic institutions in Iraq and beyond.

Water recycling at Al-Mustaqbal University is conducted with meticulous attention to detail, adhering to international guidelines established by the U.S. Environmental Protection Agency: EPA Water Reuse Guidelines. . Recognizing the pressing challenge of water scarcity in both urban and rural communities across Iraq, exacerbated by the growing impact of climate change on water supply and resources, Al-Mustaqbal University has implemented a comprehensive policy to promote water conservation among its staff and students using: Iraq Water resources conservation system https://wiki.dorar-aliraq.net/iraqilaws/law/1402.html

The university's approach to water management is multifaceted, encompassing efficient conservation, responsible consumption, and the restoration and retention of surface and groundwater. To support these efforts, Al-Mustaqbal University has adopted clear regulations for recycling water from its wastewater treatment plant and other facilities that generate greywater.

These initiatives are part of a broader commitment to fulfilling the requirements of SDG6, and the university has established four core principles to guide these efforts (Figure 1).

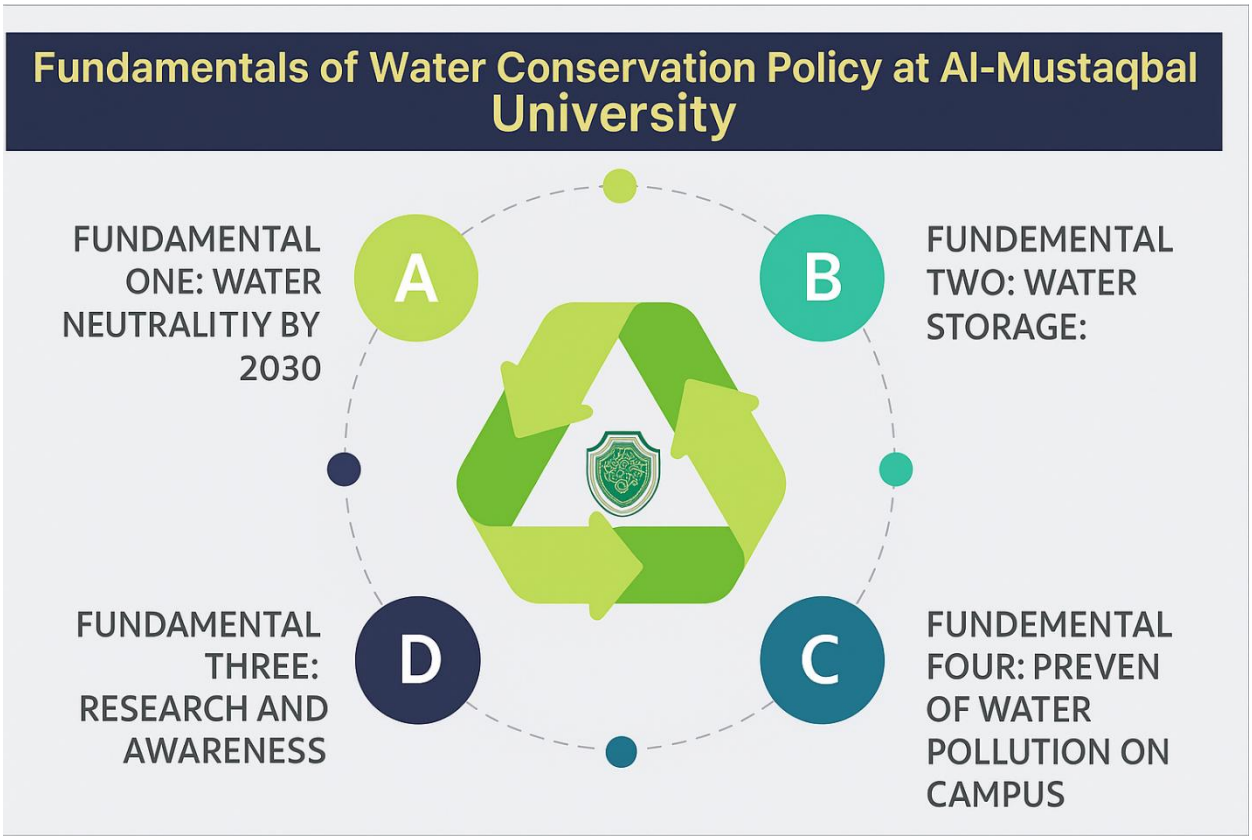


Figure 1: Fundamentals of Water Conservation Policy at Al-Mustaqbal University

A- FUNDEMENTAL ONE: WATER NUETRALITY BY 2030

- All existing buildings, as well as those currently under construction, must be equipped with state-of-the-art water-efficient fixtures. This includes the installation of low-flow faucets, dual-flush toilets, and water-saving showerheads, among other advanced technologies. These measures are designed to significantly reduce water consumption across the campus, ensuring that the university's infrastructure is aligned with its commitment to sustainability and environmental stewardship. By integrating these water-efficient solutions, Al-Mustaqbal University is taking proactive steps to minimize its water footprint and promote the responsible use of this vital resource.Ensuring a 100% treatment and recycling of greywater and 50% of sewage by 2030. Sewage will be treated by state-of-the-art technologies that ensure an efficient recycling process.

- Rainwater should be harvested using advanced and efficient methods to achieve water neutrality. By implementing rainwater harvesting systems across the campus, Al-Mustaqbal University aims to capture and utilize rainwater for various non-potable purposes, such as

irrigation, landscaping, and cooling systems. These systems not only reduce the demand on local water supplies but also contribute to the university's broader goal of water neutrality—ensuring that the amount of water withdrawn is balanced by the amount replenished through sustainable practices. This approach reflects the university's commitment to innovative water management and environmental sustainability.

B- FUNDEMENTAL TWO: WATER STORAGE:

- By 2030, any conserved water that exceeds immediate needs should be stored using a combination of ponds, wells, and tanks. This strategic approach ensures that surplus water is preserved for future use, contributing to the university's long-term water security. To maximize the efficiency of these storage methods, it is highly recommended to adopt techniques that minimize water evaporation, such as the use of covered tanks, floating covers on ponds, and advanced well designs. These measures not only protect stored water from loss but also align with Al-Mustaqbal University's commitment to sustainable resource management and resilience against the impacts of climate change.

- Increasing the number of water meters across the campus is essential to accurately identify areas with the highest water usage. By doing so, the university can target specific zones for more effective water conservation measures. In addition to this, special attention must be given to improving water governance through comprehensive awareness programs for staff and students. These programs will emphasize the importance of responsible water use and foster a culture of sustainability within the university community. Furthermore, implementing regular maintenance procedures is crucial to minimize water waste, ensuring that all fixtures and systems are operating efficiently. Together, these efforts will enhance the university’s ability to manage water resources effectively and sustainably.

C- FUNDEMENTAL THREE: RESEARCH AND AWARENESS

- Water conservation education to all the stakeholders.
- Research and implementation of practices that promote efficient water use.
- Provide incentives to students and teachers for efficient water use and conservation.
- Provide training on adopted water conservation measures by the university to all students, and staff of the colleges and nearby communities and local authorities.
- Ensure awareness about the water conservation policy of the colleges and other sections among all staff and students.

D- FUNDEMENTAL FOUR: PREVENTION OF WATER POLLUTION ON CAMPUS

- Washing should be done using non-toxic materials.
- The prevention of throwing litter, chemicals or solvents into sewer drains.
- Annual inspection of the campus septic systems.
- Prevention of pesticide and fertilisers seepage into water systems.
- The constant look for new methods for preventing water pollution.
- Constant testing of water used on campus for any existing pollution.

2- SDG13 Policy

Al-Mustaqbal University has issued a comprehensive *Climate Action Policy* that serves as a cornerstone of the university's environmental legislation. This policy reflects the institution's strong commitment to achieving carbon neutrality and advancing sustainability across its operations. It plays a vital role in shaping environmental regulations adopted by the university, particularly in the areas of **water conservation, greywater recycling, and waste management**. Through its provisions on **rainwater harvesting, smart irrigation, zero-waste campus initiatives, and recycling programs**, the policy ensures the sustainable use of resources and promotes a circular economy within the university.

For more details, please refer to the policy available at the following link:

https://sustainability.uomus.edu.iq/Policies/details/1

Water recycling is implemented with strict compliance with international standards, including the **EPA Water Reuse Guidelines**. Acknowledging the severe water scarcity facing Iraqi communities, intensified by climate change, the university promotes conservation among staff and students while adhering to national frameworks such as the **Iraq Water Resources Conservation Law** (Law No. 2 of 2001).
The university's water management strategy is **multifaceted**, focusing on:

- Efficient conservation,
- Responsible consumption,
- Restoration and retention of water resources.

To achieve these goals, Al-Mustaqbal University recycles water from its wastewater treatment plant and other facilities generating greywater.