
Energy Consumption Reduction Plan at Mutah University

Revised September 2023
Mutah University
Maintenance and sustainable unit

Mutah University is proactively implementing initiatives and protocols to optimize energy usage across its campus, including all operational units. The University has developed a range of strategies, executed by specialized teams, to enhance energy efficiency and security while incorporating eco-friendly energy sources. A key player in this effort is the Maintenance and Sustainability Unit, which, through its various departments, continuously evaluates all energy production sources on campus. This rigorous oversight ensures that the University's energy needs are met using sustainable and environmentally friendly sources. Below are some key actions taken to achieve this objective.

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| ❖ All the electrical power of Mutah University is secured through the University's photovoltaic system, which has a capacity of 5 megawatts and is installed inside the university campus. |
| ❖ The University adopted a plan to convert all facilities that need thermal energy to use natural gas, which is environmentally friendly and has low emissions instead of diesel fuel. |
| ❖ Mutah University's transportation Department is changing buses and cars to hybrid and electrical ones. |

In addition to physical infrastructure improvements, the University has focused on enhancing energy security and diversifying its energy sources. Through its public education units, the University has actively raised awareness among employees and students about the importance of responsible energy consumption. This outreach has also fostered innovative initiatives to create new energy conservation opportunities. Below are some examples of energy-saving measures implemented by staff and students on campus.

Information and Monitoring

It is only possible to provide information on achievement against targets and the success of specific initiatives if we have the correct monitoring and reporting processes in place. This detail will also provide valuable feedback to users about their energy consumption levels.

Behavioral Change

The University has been successful in targeting specific behavioral changes through campaigns. Providing additional helpful information will allow these campaigns to be more targeted and include an element of competition.

Upgrade Existing Energy Supply Capability

Switching to natural gas instead of diesel oil

Introduce New Low-Carbon Sources of Energy

The University is keen to introduce diversification within the energy supply market, including renewable energy sources. This set of initiatives includes the introduction of solar energy.

Encouraging constructive initiatives

Sun umbrellas, Lighting through solar energy for the streets, and others.

The table below shows the procedural plan based on the University's strategy to activate all procedures that ensure optimal use of energy as the implementation of this plan began in 2020. The work continues to achieve its goals in combination with the executive procedures until 2025—evidenced by the fifth goal of the procedural plan, which is concerned with developing the efficiency of human, financial, and material resources at the University following the best international practices.

https://www.mutah.edu.jo/Documents/Action-Plan_ar.pdf

Strategies	Executive procedures	Implementation responsibility	Cost	Schedule	Performance indicators
<p>Working on developing the University's facilities and using them effectively to increase the University's production capacity, rationalizing expenditures, and using all available capabilities to achieve the University's goals.</p>	<ul style="list-style-type: none"> ✓ Raising the operational efficiency of all university facilities, facilities, and services ✓ Preventive and rehabilitative maintenance of facilities, facilities, and equipment ✓ Reducing electrical energy consumption by controlling the timing of turning on and off lighting and air conditioning units ✓ Reducing water consumption and recycling in irrigation ✓ Conducting the necessary studies to benefit from waste recycling ✓ Using modern technologies that support energy and resource conservation trends ✓ Carrying out technical studies for statistics and analysis of electrical energy consumption rates before and after the application of sustainability systems 	<p>*University administration *Relevant Departments</p>		<p>2020 To 2025</p>	<ul style="list-style-type: none"> ✓ Performance appraisal reports ✓ Written reports. ✓ Reduction of energy consumption by 25% of the base year and annually. ✓ Reducing of water consumption by 25% of the base year and annually. ✓ Completion of a waste recycling project ✓ Studies on consumption rates