



**Non-commercial Joint-Stock Company
«Shakarim University of the City of Semey»**

Sustainable Energy Policy

Semey 2024

Sustainable Energy Policy

Policy Statement

Shakarim University is committed to integrating sustainability and energy efficiency into all aspects of campus operations, including the planning, construction, and renovation of buildings. The University aims to lead in sustainable design and low-carbon development, pursuing a consistent path toward low-carbon and zero-carbon emissions in all infrastructure projects. This policy reflects the University's dedication to environmental stewardship, responsible resource management, and fostering a culture of sustainability within the campus community.

Regulatory References

This policy aligns with the legislation and standards of the Republic of Kazakhstan, including:

1. Law No. 541-IV dated 13 January 2012 “On Energy Saving and Improving Energy Efficiency”;
2. Order No. 406 dated 31 March 2015 “On Establishing Energy Efficiency Requirements for Buildings, Structures, and Their Components”;
3. Order No. 407 dated 31 March 2015 “On Energy Efficiency Requirements for Technological Processes and Equipment, Including Electrical Equipment”;
4. Order No. 399 dated 31 March 2015 “On Rules for Determining and Revising Energy Efficiency Classes of Buildings and Structures”;
5. Order No. 394 dated 31 March 2015 “On Energy Consumption Standards”.

Purpose

The objectives of this policy are to:

- Ensure that all new construction and renovation projects comply with energy efficiency and sustainability requirements;
- Reinforce the University's commitment to low-carbon and zero-carbon operations, reducing environmental impact and supporting a sustainable future;
- Encourage research and adoption of low-carbon technologies while minimizing reliance on high-carbon energy sources, including coal and oil;
- Promote a culture of sustainability within the University community through energy-efficient practices, awareness campaigns, and environmentally responsible decision-making.

Scope

This policy applies to:

- All new construction and renovation projects undertaken by the University;
- Planning, design, construction, and operation of campus infrastructure;
- Procurement and investment decisions related to energy use and building materials;
- Management of energy consumption across campus, including operational efficiency and resource optimization.

Principles

1. Compliance with Energy Efficiency Standards

All projects must meet national energy efficiency requirements, including high-performance building envelopes, energy-efficient lighting, and smart energy management systems.

2. Commitment to Low-Carbon and Zero-Carbon Development

The University is dedicated to systematically reducing its carbon footprint by transitioning to low-carbon and zero-carbon energy sources, aligned with national and international sustainability goals. Renewable energy solutions—including solar, wind, geothermal, and hydroelectric power—will be integrated wherever feasible, alongside low-emission building systems.

3. Reduction of Carbon-Intensive Energy Use

High-carbon energy consumption and related investments will be gradually phased out and replaced with low-carbon alternatives in accordance with international standards and best practices.

4. Sustainable Procurement and Investment

The University prioritizes suppliers and contractors demonstrating commitment to energy efficiency and sustainability. Investment decisions are guided by environmental responsibility, focusing on low-carbon technologies and renewable energy initiatives.

5. Integration of Sustainable Design in New and Renovated Buildings

New construction and renovation projects must incorporate energy-efficient design elements from the earliest stages of planning. Projects should optimize natural lighting and ventilation, implement energy-saving technologies, and integrate renewable energy sources where feasible.

6. Minimizing Environmental Impact

The University actively monitors and mitigates environmental impacts of construction and operations, with particular attention to reducing harmful emissions and improving energy performance of buildings.

7. Education and Awareness

The University fosters energy-conscious behavior within the campus community through educational programs, curriculum integration, workshops, and information campaigns for students, faculty, and staff.

8. Collaboration and External Engagement

Shakarim University collaborates with government agencies, scientific centers, private sector partners, and international organizations to advance sustainable energy initiatives. Partnerships across sectors are encouraged to promote innovation in energy efficiency and low-carbon technologies.

Responsibilities

The implementation of this policy is led by the **Department of Infrastructure** and the **Procurement Office**, who are responsible for:

- Ensuring compliance with national energy efficiency legislation in all construction and renovation projects;
- Monitoring campus energy consumption and proposing strategies for improvement;

- Integrating low-carbon and zero-carbon technologies into existing and new infrastructure;
- Reviewing and updating procedures to support continuous improvement in energy management.

Monitoring and Reporting

Shakarim University maintains a system for monitoring energy consumption and carbon emissions. The Energy, Environment, and Climate Unit prepares annual reports detailing:

- Energy consumption across campus buildings;
- Progress in reducing carbon emissions relative to established targets;
- Utilization of renewable energy sources;
- Improvements in energy efficiency achieved through renovations and new construction.

Conclusion

Shakarim University is committed to high standards of energy efficiency and environmental sustainability, emphasizing the transition to low-carbon and zero-carbon operations. Compliance with national regulations, adoption of renewable energy, and reduction of fossil fuel use ensure the University continues to serve as a model for responsible environmental management and sustainable development.