

# ENERGY EFFICIENCY STANDARDS POLICY FOR RENOVATION AND NEW CONSTRUCTION PROJECTS

Navoi State University

## 1. Purpose and Scope

This policy sets out mandatory energy efficiency standards for all renovation and new construction projects carried out at Navoi State University. It aims to ensure that the university's physical development supports national priorities on sustainable development, as stated in Presidential Decree PF-16 (30 January 2025) — *“On the State Program for the Implementation of the Uzbekistan–2030 Strategy in the Year of Environmental Protection and the Green Economy.”*

## 2. Policy Objectives

To reduce overall energy consumption and greenhouse gas emissions in university facilities.

To implement green building practices and optimize energy performance in design, construction, and operation.

To ensure compliance with national legislation and international sustainability standards.

To create healthy, efficient, and climate-resilient learning environments for students and staff.

## 3. Legal and Strategic Framework

This policy is guided by the following national and international documents:

Presidential Decree PF-16 (30.01.2025);

Law of the Republic of Uzbekistan *“On Rational Use of Energy”* (new edition);

Uzbekistan's *Green Economy Strategy 2020–2030*;

United Nations Sustainable Development Goals (SDG 7 – Affordable and Clean Energy, SDG 13 – Climate Action).

## 4. Core Principles

1. **Energy Efficiency First:** Energy performance must be integrated into all project stages — design, construction, and operation.

2. **Lifecycle Thinking:** Decisions shall consider long-term energy costs and environmental impacts.
3. **Renewable Integration:** Priority shall be given to the use of solar, wind, or geothermal energy sources.
4. **Sustainable Materials:** Preference for eco-certified, low-carbon, and locally produced materials.
5. **Smart Management:** Digital systems for real-time energy monitoring and optimization.

## **5. Energy Efficiency Standards**

### **5.1 Building Envelope**

All new buildings must meet or exceed national energy efficiency standards (SNiP 2.01.04-2019 or later).

Use insulated roofs, walls, and double or triple-glazed windows with low-emissivity glass.

Minimize thermal bridges and ensure air-tight construction.

### **5.2 Lighting Systems**

Use LED or other high-efficiency lighting for all indoor and outdoor areas.

Install motion sensors, daylight sensors, and automatic dimming controls in common areas and classrooms.

### **5.3 HVAC (Heating, Ventilation, and Air Conditioning)**

Select A or A+ rated systems with programmable controls.

Prioritize natural ventilation and heat recovery systems.

Conduct regular maintenance and seasonal inspections to ensure optimal performance.

### **5.4 Water Heating and Plumbing**

Install energy-efficient boilers and solar water heaters where feasible.

Use low-flow taps and fixtures to reduce hot water demand.

### **5.5 Renewable Energy Integration**

New construction projects must assess feasibility of solar photovoltaic (PV) installations.

Renovation projects shall include provisions (structural and electrical) for future renewable integration.

## **6. Implementation and Responsibility**

The Department of Construction and Infrastructure and the University Committee are responsible for implementing and monitoring this policy.

Each project must include an Energy Efficiency Plan reviewed during design and post-construction stages.

Projects not meeting the required standards shall not be accepted until corrective measures are applied.

## **7. Monitoring and Reporting**

The Sustainability Office will prepare an annual Energy Performance Report, including data on:

Energy consumption trends;

Efficiency gains from renovation/new projects;

CO<sub>2</sub> reduction estimates.

## **8. Capacity Building and Awareness**

Conduct training sessions for architects, engineers, and facility managers on energy-efficient design and operation.

Integrate energy awareness modules into student environmental education programs.

## **9. Policy Review and Updates**

The policy shall be reviewed every two years, or earlier if required by national legislation or technological advances.

Updates will be coordinated by the University Council and approved by the University Committee.

**Vice-rector for Capital Construction**



**A. Raximov**