

# AFFORDABLE AND CLEAN ENERGY



**Adopted: 2026**  
**Review cycle: every 3 years**

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# ENERGY SUPPLY AND HEATING POLICY



> Academic and administrative buildings do not use natural gas

> Heating systems in all facilities are powered by electricity

> Staff residential units also rely solely on electric heating systems

This approach reduces dependency on fossil fuels and minimizes CO<sub>2</sub> emissions

# CARBON REDUCTION AND BLUE CARBON INITIATIVE



This initiative contributes to mitigating the impacts of climate change

## LSU implements systematic measures for carbon management:



### **Carbon Footprint Assessment**

Periodic analysis of energy consumption, transportation, and waste

Monitoring and reporting of carbon emissions



### **Rainwater Management**

Collection and purification systems for rainwater

Formation of reusable water reserves



### **Artificial Lake and Blue Carbon Project**

Designation of areas for rainwater harvesting

Creation of an artificial lake with algae and aquatic plants

Natural absorption of atmospheric carbon and removal from the carbon cycle



Lankaran State University is committed to promoting the efficient and sustainable use of water resources as part of its environmental sustainability policy.

In line with this commitment, the University organized a seminar dedicated to water resource management and conservation.

The seminar addressed integrated water resource management, rational water consumption, and strategies for improving water efficiency.

The shortage of potable water was emphasized as a significant global challenge of the modern era.

Participants were informed about the environmental, social, and economic consequences of water scarcity.

Water samples collected from different areas were analyzed on-site to determine contamination levels.

The results and underlying causes of water pollution were explained, reinforcing the importance of sustainable water management practices



# STRATEGIC APPROACH TO ENERGY EFFICIENCY



## **New Construction and Renovations**

Compliance with national construction and energy regulations

Alignment with ISO 50001 Energy Management System standards

Application of green building and sustainable design principles

“Green Construction” training programs for faculty and students

## **Modernization of Existing Buildings**

Enhanced thermal insulation

Installation of energy-efficient windows

Transition to LED lighting systems

Optimization of high-energy consumption systems

# FIVE-YEAR ENERGY EFFICIENCY PLAN



## Key objectives for the next five years:



Reduce overall energy consumption

Apply energy storage and smart management systems



Increase the share of renewable energy

Implement solar energy systems



Explore geothermal and other alternative energy solutions

Behavioral energy-saving initiatives (switching off unused lights and equipment) are actively promoted.

# ENERGY AUDITS AND MONITORING

## **LSU regularly:**

Conducts energy audits in all buildings

Identifies areas of energy loss

Develops improvement measures for high-consumption areas



# EDUCATION, RESEARCH AND INTERNATIONAL ENGAGEMENT

**Courses related to environmental studies and renewable energy offered at the university:**

## **Undergraduate Programs**

Ecology  
Teaching of Biology and Chemistry  
Ecological monitoring of the environment  
Bioresources and ecological situation of the southern region  
Hydrology  
Environment and nature protection  
Alternative energy sources

## **Master's Programs**

Methods of Environmental Protection and Restoration  
Protection of the Environment in the Agricultural Sphere  
Comprehensive analysis of the environment

## **Doctoral Programs:**

Ecology  
Geoecology



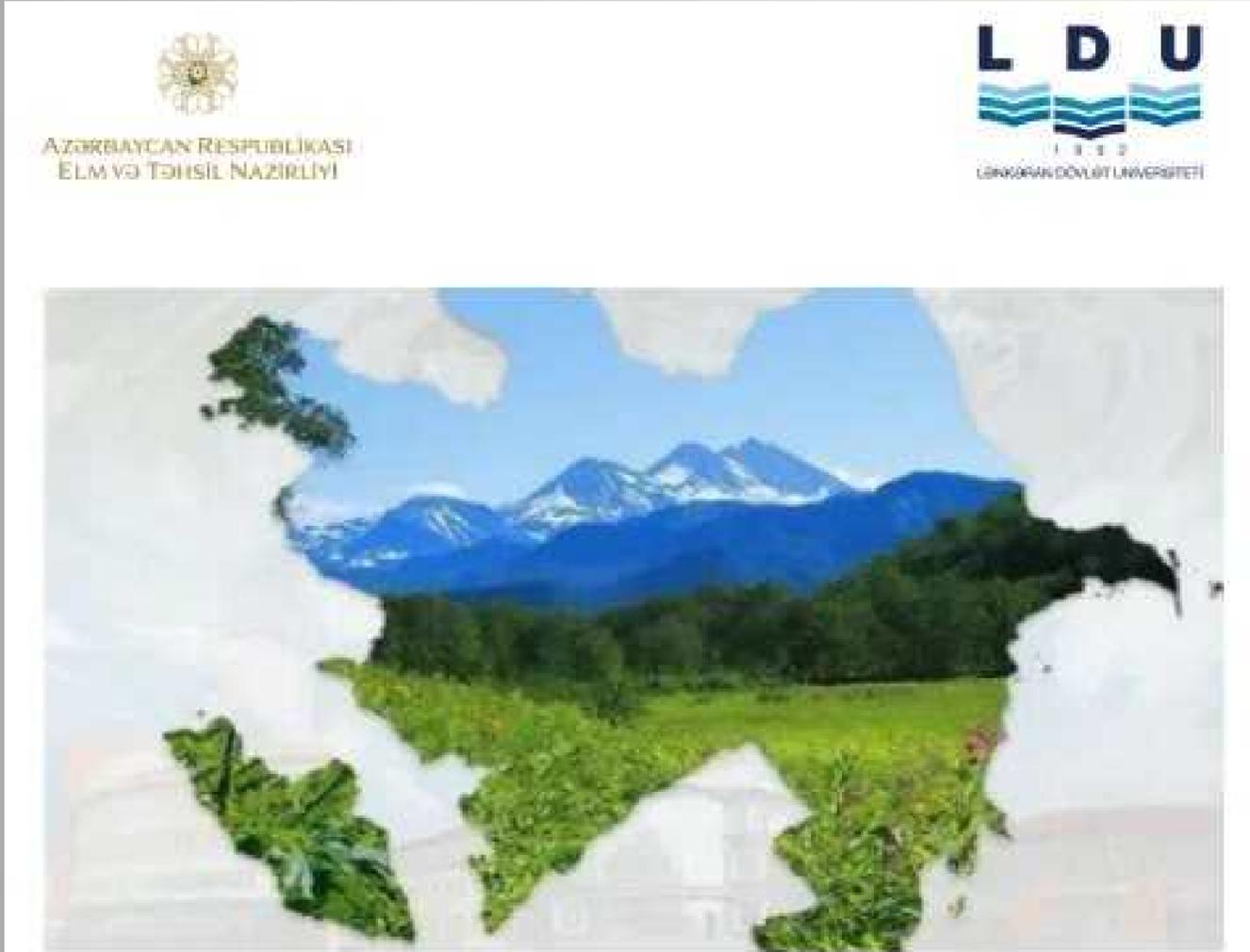


## The University conducts research projects in energy efficiency and renewable energy:

The REFRESH project aims to promote green and sustainable economic development in Azerbaijan. Within the framework of the project, it is planned to improve curricula in the fields of renewable energy and climate change mitigation at higher education institutions, train academic staff through the Training of Trainers (ToT) program, and introduce pilot courses. The main goal of the project is to accelerate the transition to green energy in the country and strengthen the capacity of universities in this field.



# THE UNIVERSITY ORGANIZES LOCAL AND INTERNATIONAL CONFERENCES, SEMINARS AND WORKSHOPS



**“YAŞIL DÜNYA NAMİNƏ HƏMRƏYLİK İLİ” NƏ HƏSR  
OLUNMUŞ “YAŞIL TEXNOLOGİYALAR VƏ EKOLOJİ  
İDARƏETMƏNİN PRİORİTETLƏRİ” MÖVZUSUNDA  
ELMİ KONFRANS**





**“YAŞIL DÜNYA, ƏTRAF MÜHİT NAMİNƏ HƏMRƏYLİK  
VƏ İNKİŞAF MÖVZUSUNDA RESPUBLİKA  
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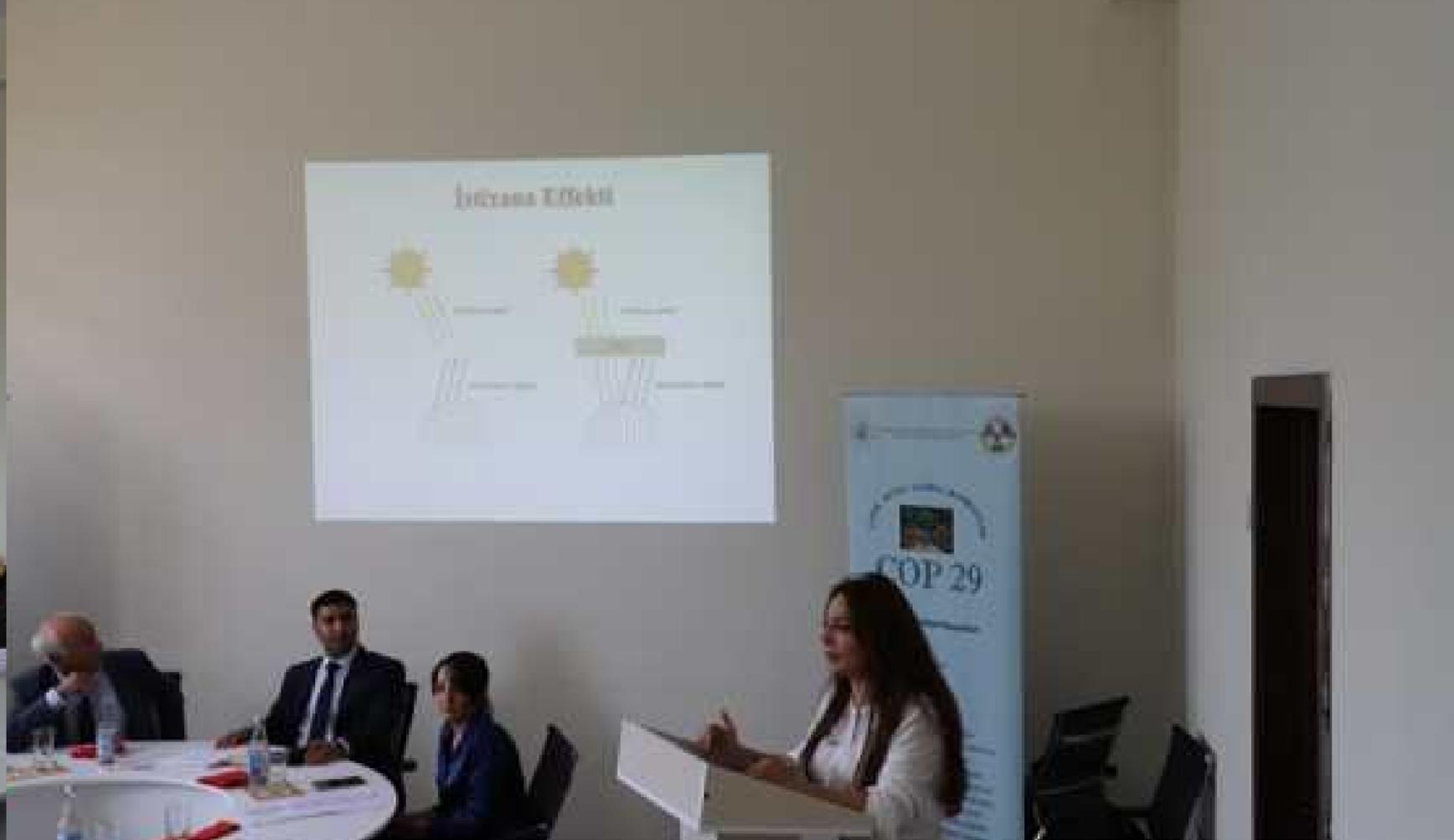
# The University ensures the participation of students and faculty members in international clean energy projects



**Actively participates in scientific discussions on regional environmental issues, including the ecological condition of the South Caspian region**

***COP29-related academic event***





# Accountability and Rating Compliance

This policy is approved by the university administration and is mandatory for all structural units.

## For ranking and international evaluation systems:

An annual report on energy and carbon indicators is prepared;

Progress indicators for SDG 7 are documented;

Results are presented in a format accessible to the public;

The policy is regularly updated.



# Conclusion

Lankaran State University systematically implements its institutional commitments under SDG 7 through energy efficiency, reduction of carbon emissions, the application of renewable energy sources, and a sustainable investment policy.

This policy strengthens the university's position as a sustainable and responsible higher education institution in accordance with the requirements of international ranking systems.