



>> **Mingachevir State University**

Report

13 CLIMATE
ACTION



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Introduction

Mingachevir State University (MSU), located in Mingachevir — known as Azerbaijan’s energy capital — is a higher education institution that has integrated the principles of sustainable development, environmental responsibility, and social welfare into its core mission. The university’s strategic direction aligns directly with the United Nations Sustainable Development Goals (SDGs), particularly SDG 13 – “Climate Action.” MSU consistently takes steps to mitigate both the global and local impacts of climate change and to enhance research and educational activities focused on environmental protection.

In this context, MSU’s academic activity extends beyond theoretical knowledge transfer, encompassing practical and applied research aimed at reducing the effects of climate change, promoting innovative technologies, and encouraging green economic solutions. Climate change topics have been integrated into several academic programs, including ecology, energy engineering, and natural sciences. Furthermore, the university prioritizes cultivating environmental responsibility and a green mindset among its students and staff.

One of MSU’s defining features is its regional context. Mingachevir plays a strategically important role in Azerbaijan in terms of both energy production and water resource management. Therefore, the university has made it a priority to study the effects of climate change on energy efficiency, water management, and ecosystem stability. The university’s leadership and academic community view climate action not only as an environmental issue but also as a fundamental element of social responsibility.

In this regard, through initiatives organized under the “Year of Solidarity for a Green World,” awareness projects, tree-planting campaigns, and community engagements involving student volunteers, MSU continues to contribute meaningfully to local climate action.

The purpose of this report is to systematically present the activities, outcomes, and future plans of Mingachevir State University in the framework of SDG 13 – “Climate Action.” The report reflects both the university’s internal management and academic efforts as well as its public engagement and international cooperation initiatives. It covers:

- Teaching and awareness-raising initiatives;
- Research and innovation activities;



- Energy and resource management measures;
- Environmental projects involving students and the public;
- Mechanisms of international and national cooperation.

The report also highlights MSU's achievements in areas such as energy efficiency, the use of renewable energy sources, the protection of water and soil resources, biodiversity conservation, and climate adaptation efforts. By ensuring transparency and accountability in strategic management, this document aims to strengthen MSU's potential for participation in national and international sustainability rankings. It also serves as a reference for future climate-related projects and activities.



University Actions Against Climate Change

Participation in the Summer School “Healthy People and a Sustainable Future”

In line with SDG 13, Mingachevir State University places special emphasis on fostering ecological awareness, social responsibility, and a “green mindset” among youth. Representatives of the university actively participated in the summer school titled “Healthy People and a Sustainable Future,” held in Nabran, Khachmaz district. The event, organized by the Republican Committee of the Azerbaijan Education Workers’ Free Trade Union within the framework of the “Year of Solidarity for a Green World,” aimed to promote climate action and sustainable living among young people.



MSU was represented by the Chair of the University Trade Union Committee Ariz Abbasov, the Chair of the Student Youth Organization (SYO) Aslan Alekbarzade, Deputy Chair Jamila Ismayilova, and Deputy Chair of the Faculty of Education SYO Rovshana Ibrahimova. During the conference, discussions focused on reducing global environmental problems, individual and collective responsibility in combating climate change, and contributing to the national priority “Clean Environment and Green Growth Country” set out in Azerbaijan’s 2030 strategy.

Through sports events, intellectual games, and tree-planting activities, the summer school enhanced both the students’ environmental engagement and social solidarity, reaffirming MSU’s commitment to sustainability and environmental education.

Awareness Activities on COP29 and Climate Diplomacy

Within the framework of SDG 13, MSU has organized a series of awareness-raising events about the 29th Session of the Conference of the Parties (COP29) to the UN Framework Convention on Climate Change, to be held in Azerbaijan in 2024.

The seminar “COP29 – Political, Economic, and

Environmental Importance for Azerbaijan” aimed to educate students about the history and significance of COP summits and the role of the Paris Agreement in global climate policy.

Participants discussed how COP summits serve as major international platforms for identifying solutions to global issues such as the climate crisis, water scarcity, and





ecosystem degradation, and for fostering cooperation among nations. Hosting COP29 was noted as a milestone for Azerbaijan’s international climate diplomacy, supporting the nation’s goals to reduce greenhouse gas emissions by 35 percent by 2030 and 40 percent by 2050. The seminar also covered the economic and technological dimensions of COP29, emphasizing opportunities for investment in green technologies, renewable energy, and sustainable tourism.



The symbolism of the COP29 logo — the “buta,” leaf, and water-drop motifs — was explained as a representation of Azerbaijan’s natural wealth, cultural heritage, and commitment to sustainable development. Through such initiatives, MSU strengthens environmental literacy, civic

awareness, and national contribution to Azerbaijan’s COP29 agenda.

Scientific and Educational Initiatives

Scientific-Practical Seminar on “COP29 – Azerbaijan”

On 17 September 2024, MSU’s Department of Physics and Ecology held a seminar titled “COP29 – Azerbaijan,” discussing global, regional, and national aspects of climate change. Department Chair Assoc. Prof. Taraneh Yusibova and faculty members presented research on the impacts of climate change on human development, economic stability, and resource management, as well as on ozone-layer protection.



Lecture: “The Umbrella of Our Planet – The Ozone Layer”

A lecture by Shabnam Islamova, Lecturer at the Department of Physics and Ecology, examined atmospheric pollution, the greenhouse effect, ozone depletion, and



their consequences. It emphasized the role of renewable energy, green infrastructure, and international frameworks such as the Vienna Convention (1985) and the Montreal Protocol (1987).

Environmental Action and Student Engagement *Environmental Protection Day*



MSU's "Bir Volunteers" team organized a cleanup activity at the Mingachevir Reservoir beach to raise awareness about plastic pollution. Participants collected waste and discussed the environmental impact of pollution, highlighting the importance of civic engagement in nature protection.

Industrial Visit to "Azerbaijan TPP" LLC

Students of the Mechanical Engineering and Occupational Safety Engineering programs visited the "Azerbaijan Thermal Power Plant" LLC to observe energy production processes and safety practices firsthand, bridging theoretical and practical learning.





Scientific Events on Energy and Sustainability

Seminar “From Conventional Energy to Green Energy”

On 16 October 2024, the Department of Energy Engineering organized a seminar within the “Year of Solidarity for a Green World.” Student presentations covered topics such as geothermal energy, nuclear energy safety, hydrogen storage, and solar panel efficiency.



Conference “Sustainable Development of Azerbaijan’s Energy Sector”

On 21 October 2024, MSU hosted a scientific-practical conference dedicated to Energy Workers’ Day, with participation from the “Azerbaijan TPP” LLC, local community, and media. Rector Üzeyir Zeynalov emphasized Mingachevir’s strategic role in energy security and the training of qualified specialists. A cooperation agreement between MSU





and “Azerbaijan TPP” was signed to promote joint research and student internships.

Seminar “Green Transport: Global Challenges”

Held on 22 October 2024, the seminar explored sustainable transport and climate-friendly urban planning. Discussions highlighted Azerbaijan’s climate commitments —



reducing greenhouse gas emissions by 35 percent by 2030 and establishing zero-emission zones by 2050 — and addressed hybrid transport and renewable energy applications.

Seminar “The Impact of Climate Change on Azerbaijan’s Economy”

On 25 October 2024, the Faculty of Economics and Management organized a seminar addressing the economic implications of climate change on agriculture, water resources, and energy. Presentations covered topics including green economy prospects, the role of renewable energy, and the socio-economic impacts of COP29.

Tree-Planting Campaigns

MSU continues tree-planting initiatives within the framework of the “Year of Solidarity for a Green World” and COP29, aimed at improving environmental quality and raising public awareness. These activities, conducted with active participation of university leadership, staff, and students, strengthen ecological culture and contribute to sustainable urban greenery.

Key Activity Areas

1. **Scientific Seminars and Conferences:**
 - Events on climate change, energy transition, and green transport.
2. **Environmental Forums and Awareness Programs:**



- “Ecology Forum 2024” and open lectures on natural resource protection.
- 3. **Green Projects and Practical Actions:**
 - Tree-planting, clean-up campaigns, and eco-monitoring visits.
- 4. **Research and Technology Initiatives:**
 - Studies on renewable energy and sustainable engineering solutions.
- 5. **International Cooperation:**
 - Partnerships with UNEC and other universities on green economy and COP29.
- 6. **Student and Community Engagement:**
 - Volunteer-based ecological activities promoting environmental citizenship.





Achievements and Future Goals

MSU aims to expand its work on climate change and sustainable development through new master's programs in climate and energy studies, establishment of laboratories, and implementation of innovative projects. Public awareness will continue to be strengthened through campaigns, seminars, and open lectures to enhance environmental literacy and civic responsibility.

Conclusion

Mingachevir State University has achieved significant progress toward SDG 13 – “Climate Action.” Through seminars, conferences, tree-planting initiatives, research on green technologies, and environmental education, MSU contributes both locally and globally to the fight against climate change. Moving forward, the university plans to intensify its sustainability efforts, develop innovative solutions to environmental challenges, and equip students with professional competencies in climate and energy disciplines — reinforcing its role not only as an academic center but also as a driving force for green transformation in society.

