



Report on Sustainable Development Goal 13 Climate Action

2025

13 CLIMATE
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Foreword

The accelerating impacts of climate change make immediate, coordinated action more crucial than ever. Sustainable Development Goal (SDG) 13 emphasizes the need for decisive measures to combat climate change and its consequences, highlighting the responsibility of institutions, governments, and individuals to work toward a resilient and sustainable future. This report highlights Azerbaijan Technical University's (AzTU) ongoing commitment to SDG 13, focusing on low-carbon energy adoption, environmental education, and international collaboration. By implementing measurable actions and setting ambitious targets, AzTU continues to serve as a model for higher education institutions advancing climate action globally.

Introduction

SDG 13 calls for urgent action to combat climate change and its impacts. In 2025, AzTU continued to integrate climate awareness across teaching, research, and infrastructure management. The university has reinforced climate literacy within its academic community and implemented low-carbon technologies as part of its ongoing "Green Transformation Roadmap."

Key 2025 focus areas included:

- Expanding renewable-energy and efficiency projects across campus facilities;
- Enhancing cooperation with international universities for climate innovation;
- Organizing training programs on sustainable technologies and environmental protection;
- Engaging students in awareness campaigns and applied climate-resilience projects.

References

[National Information Portal on Sustainable Development Goals of the Republic of Azerbaijan](#)
[AzTU Sustainability](#)
[AzTU SDG 13 Report / November 2023](#)
<https://www.aztu.edu.az/sdg/wp-content/uploads/2024/11/Report-on-SDG-13-2024.pdf>
[A Meeting with UN Experts at the Department of Energy Efficiency and Green Energy Technologies](#)
[Ecological Thinking Begins at School – Another Group of Students Joined the Green Mission at AzTU](#)
[A Workshop on AI in Precision Agriculture Project Held at AzTU](#)
[Training on Plastic Pollution Awareness and Bioplastic Production Held as Part of Sustainability Workshops](#)
[A Digital Transformation Strategy Will Be Developed for AzTU](#)

SDG 13 keywords - Climate action

Average global temperature	Climate mitigation	Greenhouse gases
Carbon	Climate refugees	Ice loss
Carbon dioxide	Climate-related hazards	Low-carbon economy
Changing weather patterns	Climate resilience	Natural disasters
Climate	CO2 capture	Natural systems
Climate action	CO2 conversion	Ocean warming
Climate adaptation	COP 21	Paris Agreement
Climate and gender	COP 22	Pollution
Climate and infectious disease	Ecosystems	Renewable
Climate and politics	Emissions	Sea level rise
Climate change	Extreme weather	Temperature
Climate change management	Extreme weather events	Warming
Climate change planning	Global mean temperature	Climate impact
Climate change policy	Global temperature	Greenhouse gas emissions
Climate early warning	Global warming	Greenhouse gas

SDG 13 Targets

- **Integrate Climate Change Measures into Policies and Planning:**

AzTU actively monitors and measures low-carbon energy use across its campus, employing renewable sources like wind turbines and solar panels with a 15kW capacity. The university aims to reduce greenhouse gas emissions by 35% by 2030 compared to 1990 levels through energyefficient building designs and the promotion of sustainable transportation options such as electric vehicles, walking, and biking.

- **Improve Education, Awareness, and Capacity on Climate Change:**

AzTU's 5E Climate Change Model serves as the foundation for local education programs and international conferences that address climate risks, impact mitigation, and adaptation strategies. Through seminars, webinars, and campaigns, the university promotes environmental awareness and aims to foster a well-informed community capable of addressing climate-related challenges.

- **Implement the Commitment Undertaken by Developed-Country Parties to the UNFCCC:**

In alignment with Azerbaijan's ratification of the Paris Agreement, AzTU has developed a Climate Action Plan shared with local government and community groups. This plan outlines initiatives and collaborations aimed at reducing emissions and preparing the community for climate adaptation.

- **Promote Mechanisms to Raise Capacity for Climate Change-Related Planning and Management:**

AzTU collaborates with the Eurasian Energy and Sustainable Development Association (EESDA) to enhance its capacity for climate adaptation and sustainability projects. Through partnerships with local and international NGOs, the university supports projects that advance sustainable development and environmental resilience within the broader community.

Statistics and Their Indicators

Indicator	2023	2024	2025	Change (2023–2025)
Indicator	2023	2024	2025	Trend (2023–2025)
Reduction in Institutional Carbon Emissions (t CO ₂ eq)	420 t	355 t	305 t	–27 % overall
Renewable Energy Share in Operations	10 %	15 %	21 %	Growing adoption
Number of Climate & Sustainability Workshops	9	15	22	+144 % increase
Participants in Green Mission Activities	520	740	1 080	+108 % growth
Research Projects Focused on Climate & Energy	18	26	34	Strong upward trend
Energy-Efficiency Improvement (kWh/m ²)	5.8 %	9.2 %	13.5 %	Progressive efficiency gains

SDG 13's Positive Impact on other SDGs

- **SDG 1 – No Poverty:** Effective climate action helps reduce the economic vulnerabilities that climate change creates, especially for low-income communities. By preventing climate-related disasters, improving resilience, and supporting sustainable livelihoods, SDG 13 reduces poverty risks caused by crop failure, loss of assets, and displacement. Strengthening climate adaptation ensures stable income sources and improves long-term economic security for marginalized populations.
- **SDG 2 – Zero Hunger:** Climate action promotes sustainable agricultural practices that are essential for maintaining food production and food security. Addressing issues like drought, soil degradation, and extreme weather helps protect crops and livestock. By supporting climate-resilient farming and improved irrigation systems, SDG 13 directly contributes to reducing hunger and ensuring stable food supply chains, especially in rural and vulnerable regions.
- **SDG 6 – Clean Water and Sanitation:** Climate action is closely linked to water management, as climate change influences water availability, quality, and distribution. Efforts to mitigate climate impacts help prevent the contamination and depletion of water resources. Strengthening water management through climate-responsive strategies ensures reliable clean water access and reduces the risk of floods and droughts.
- **SDG 7 – Affordable and Clean Energy:** Promoting climate action accelerates the transition to renewable energy sources, such as solar, wind, and hydropower. This shift reduces carbon emissions and air pollution while increasing energy security. Expanding clean energy infrastructure not only supports environmental sustainability but also makes energy more accessible and affordable for households and industries.
- **SDG 11 – Sustainable Cities and Communities:** Climate action encourages cities to adopt resilient infrastructure, efficient transport systems, and sustainable urban planning. Reducing emissions, increasing green spaces, and strengthening disaster preparedness help urban areas withstand climate risks. This improves overall living conditions, promotes healthier environments, and enhances long-term community resilience and sustainability.

Current situation

1. Collaboration on Renewable Energy and Climate Innovation

In partnership with the Department of Energy Efficiency and Green Energy Technologies, AzTU hosted a meeting with UN experts to discuss institutional strategies on sustainable energy transition and decarbonization.

[Source: A Meeting with UN Experts at the Department of Energy Efficiency and Green Energy Technologies.](#)

2. Green Education and Student Engagement

The *Green Mission* initiative expanded its outreach by engaging both students and local schools in ecological activities and awareness programs that emphasized sustainable urban living and environmental stewardship.

[Source: Ecological Thinking Begins at School – Another Group of Students Joined the Green Mission at AzTU.](#)

3. Research on Environmental Sustainability and AI-Driven Climate Solutions

AzTU researchers developed projects integrating artificial intelligence for monitoring environmental data and optimizing renewable-energy systems, aligning with the national strategy for smart, low-emission technologies.

[Source: A Workshop on AI in Precision Agriculture Project Held at AzTU.](#)

4. Awareness and Capacity-Building Programs

Multiple events such as the *Sustainability Workshop Series* and *Plastic Pollution Awareness & Bioplastic Production Training* promoted community-based approaches to reducing pollution and improving waste management — key components of climate resilience.

[Source: Training on Plastic Pollution Awareness and Bioplastic Production Held as Part of Sustainability Workshops](#)

5. Digital Transformation for Resource Efficiency

AzTU's ongoing digitalization initiative reduced paper usage, travel emissions, and overall operational carbon footprint through enhanced digital communication and e-learning platforms.

[Source: A Digital Transformation Strategy Will Be Developed for AzTU](#)

Future goals

- **Achieve Carbon Neutrality by 2035:** Implement an institutional carbon-management system, including monitoring, reduction, and offset mechanisms.
- **Expand Green Infrastructure:** Increase solar capacity, enhance building insulation, and promote energy-efficient retrofits.
- **Enhance Climate Literacy:** Introduce compulsory modules on climate science and sustainable technologies across all faculties.
- **Strengthen Regional Partnerships:** Collaborate with government and industry partners on climate innovation and resilience projects.
- **Develop a Climate-Smart Campus Policy:** Integrate climate risk assessment, disaster preparedness, and sustainable transport planning.

Conclusion

AzTU's 2025 initiatives under SDG 13 demonstrate a robust commitment to integrating climate action into education, research, and operations. By expanding renewable energy adoption, promoting environmental literacy, and embedding sustainability across disciplines, the university continues to shape a climate-resilient academic community.

AzTU's leadership exemplifies how higher-education institutions can translate scientific knowledge and civic responsibility into concrete steps toward a **low-carbon and sustainable future**.