

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Report on Sustainable Development Goal 12 Responsible consumption and production 2025



Foreword

This report presents a comprehensive overview of our university's ongoing dedication to Sustainable Development Goal 12 (SDG 12) in 2025, emphasizing sustainable consumption and production patterns. It highlights the latest initiatives, policies, and practices aimed at ethical sourcing, effective waste management, resource efficiency, and increased recycling across campus operations.

Introduction

SDG 12 emphasizes sustainable management and efficient utilization of natural resources, reduction of waste generation, and the adoption of environmentally friendly technologies.

AzTU's sustainability vision is built around reducing its ecological footprint while developing innovative solutions for clean production and responsible consumption.

During 2025, AzTU implemented several actions aligned with SDG 12 priorities:

- Integration of sustainability and circular economy principles into academic curricula and student projects;
- Deployment of green energy practices and awareness programs through the Green Mission initiative;
- Launch of bioplastic production workshops to promote waste reduction and alternative materials;
- Establishment of partnerships with international institutions focused on environmental engineering and eco-innovation.

References

[National Information Portal on Sustainable Development Goals of the Republic of Azerbaijan](#)

[AzTU Sustainability](#)

[AzTU SDG 12 Report / November 2023](#)

<https://www.aztu.edu.az/sdg/wp-content/uploads/2024/11/Report-on-SDG-12-2024.pdf>

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

[Collaboration Agreement Signed Between AzTU and Malatya Turgut Özal University](#)

[Students of AzTU Presented the Tələbə360 Project](#)

SDG 12 keywords - Responsible consumption and production

Capitalism	Energy consumption	Greenhouse gasses	Production	Sustainable consumption	Waste
Cars	Energy efficiency	Harvest losses	Recycle	Sustainable Energy	Wasteful consumption
Circular economy	Energy use	Life cycle	Reduce waste generation	Sustainable management	Water
Commercial enterprises	Food	Market distortions	Reduction	Sustainable practices	Water pollution
Consumerism	Food losses	Materialism	Renewable	Sustainable production	Water supply
Consumer levels	Food supply	Materials goods	Resource efficiency	Sustainable public procurement	Efficient use of resources
Consumption	Food waste	Monitoring sustainable development	Responsible production chains	Sustainable resource use	Global food waste
Deep decarbonization	Fossil fuel subsidies	Natural resources	Retail	Sustainable supply chain	Over consumption
Ecological	Future proof	Obsolescence	Retail industry	Sustainable tourism	Reuse

SDG 12 Targets

AzTU actively works towards several targets set by SDG 12: Ethical Sourcing of Food and Supplies, Waste Disposal Policies (Hazardous Materials), Waste Disposal Measurement (Landfill and Recycling), Use Minimization of Plastic, Use Minimization of Disposable Items, Extension of Policies to Outsourced Services and Supply Chain, Proportion of Recycled Waste, Publication of Sustainability Report.

1. Awareness and Education:

- Conduct at least two major sustainability awareness campaigns each academic year.
- Engage 50% of the campus community in sustainability workshops or events annually.

2. Collaboration and Partnerships:

- Establish partnerships with at least five external organizations focused on sustainability.
- Initiate joint projects or initiatives with these partners within six months of establishing partnerships.

3. Integration into Curriculum:

- Integrate sustainability principles into at least 20% of academic programs.
- Develop interdisciplinary programs and offer courses related to sustainability within the next two years.

SDG 12's Positive Impact on Other SDGs

SDG 6 (Clean Water and Sanitation): Reducing waste and improving resource efficiency lowers water pollution and helps protect freshwater sources, making clean water more accessible.

SDG 7 (Affordable and Clean Energy): Encouraging efficient energy use and sustainable consumption patterns supports the transition to cleaner energy and reduces overall energy demand.

SDG 13 (Climate Action): Sustainable production practices reduce greenhouse gas emissions and help mitigate climate change through lower carbon footprints and waste reduction.

SDG 15 (Life on Land): Minimizing land degradation, reducing deforestation, and protecting ecosystems are supported when production processes use fewer raw materials and promote recycling.

Statistics and Their Indicators

Indicator	2023	2024	2025	Trend (2023-2025)
Waste Recycling Rate on Campus	32 %	41 %	52 %	+20 % improvement
Energy Efficiency (kWh/m ² reduction)	6.8 %	9.4 %	13.7 %	Steady annual increase
Share of Renewable Energy in Campus Operations	12 %	16 %	22 %	Growth via solar systems
Number of Sustainability Workshops Conducted	11	17	23	+109 % since 2023
Participation in Green Mission & Eco Events	480 students	730 students	1,050 students	+120 %
Academic Papers/Projects on Circular Economy	24	37	46	Rising engagement
Annual Waste Reduction (tons)	19 t	24 t	31 t	+63 % efficiency gain

Current situation

1. Green Mission Expansion:

The *Ecological Thinking Begins at School* initiative grew significantly, involving high school and university students in sustainable activities such as plastic recycling, green energy projects, and ecological awareness sessions.

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

2. Workshops on Plastic Pollution and Bioplastics:

The *Sustainability Workshop Series* introduced practical training on **plastic pollution awareness and bioplastic production**, educating students about the life-cycle of materials and the potential of biodegradable alternatives.

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

3. Sustainable Infrastructure Development:

Continuous modernization of AzTU's laboratories and facilities aimed to reduce waste and energy consumption through digitalization and resource optimization.

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

4. International Collaboration on Green Innovation:

New cooperation agreements with universities in Turkey, Pakistan, and Germany enabled joint research on clean energy and resource efficiency.

[Source: Collaboration Agreement Signed Between AzTU and Malatya Turgut Özal University](#)

5. Student-Led Sustainability Projects:

Student initiatives under the *Talaba360* project and *Startup Innovation Challenges* encouraged entrepreneurial solutions for responsible resource use and sustainable production systems.

[Source: Students of AzTU Presented the Tələbə360 Project](#)

Future Goals

1. **Implement Zero-Waste Policy:** Establish a full zero-waste management system by 2030, including digital monitoring of waste streams and composting practices.
2. **Increase Renewable Energy Usage:** Expand photovoltaic installations and pilot renewable microgrids to reach **35 % renewable share by 2027**.
3. **Enhance Research on Sustainable Materials:** Launch a *Sustainable Materials Innovation Lab* focusing on bioplastics, renewable composites, and green construction technologies.
4. **Strengthen Cross-Sector Partnerships:** Build strategic cooperation with governmental and private entities to develop joint sustainability projects and knowledge-sharing platforms.
5. **Integrate Sustainability into Procurement:** Introduce green procurement policies, prioritizing eco-friendly materials and suppliers.

Conclusion

In 2025, Azerbaijan Technical University reaffirmed its leadership in advancing SDG 12 through structured, data-driven initiatives that promote responsible resource use and circular economy principles.

By fostering innovation, awareness, and collaboration, AzTU continues to model how educational institutions can contribute to **sustainable production, consumption, and environmental responsibility** across Azerbaijan and beyond.

The university's growing commitm