



D. Serikbayev

**EAST
KAZAKHSTAN
TECHNICAL
UNIVERSITY**

SDG 12

Policy of NJSC «D. Serikbayev EKTU»



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1. GENERAL PROVISIONS

1.1 Goal



This policy defines the strategic goals and priority areas of activity for EKSTU within the framework of achieving UN Sustainable Development Goal No. 12 — “Ensuring rational consumption and production models”.

The policy aligns with the national Strategy of the Republic of Kazakhstan for the transition to a green economy, the Waste Management Concept until 2030, as well as the principles of sustainable development integrated into the University’s educational, research, and operational activities.

The document establishes EKTU’s commitments to the efficient use of natural resources, reduction of waste volumes, development of environmentally safe technologies, enhancement of environmental awareness among students and staff, and strengthening partnerships with governmental and international organizations to promote the principles of responsible consumption.

2. FUNDAMENTAL PRINCIPLES

- Rationality — minimizing excessive consumption and enhancing the efficiency of all types of resource use.
- Renewability — transition to materials and energy sources that do not deplete natural potential.
- Circularity — implementation of “closed-loop” principles through reuse and recycling.
- Responsibility — conscious engagement of every member of the University community in reducing negative environmental impact.
- Innovativeness — development of scientific and engineering solutions for sustainable production and consumption.

3. MAIN DIRECTIONS OF IMPLEMENTATION

3.1 Paper Reduction Program

EKTU has implemented a digitalization policy and a transition away from paper-based materials: electronic document management systems (Directum, Service Desk, Metodist) and online educational platforms are used. For internal documents, double-sided printing is applied, significantly reducing paper consumption and the associated CO₂ emissions.

3.2 Mini Waste Recycling Lines

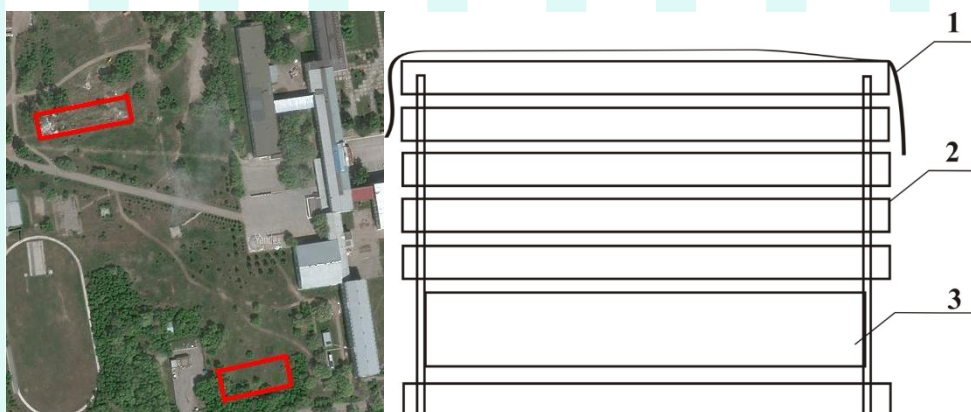
Mini recycling lines for paper, plastic, and electronic waste operate on the University campus. Separate collection has been implemented, with waste transferred to specialized companies.

3.3 Plastic Reduction Program

Single-use tableware has been completely eliminated in cafeterias; only reusable items are used. Free access to drinking water is provided across the campus, eliminating the need for plastic bottles.

3.4 Organic Waste Recycling Program

The simplest and most cost-effective method proposed for processing the University's organic waste is composting using vermiculture. Sawdust from carpentry workshops, mowed grass, leaves, and food waste are used in the composting process, and the resulting compost is applied annually for landscaping and greening the main campus.



3.5 Hazardous Waste Management Program

Mercury lamps, batteries, and chemical reagents from laboratories are transferred to licensed organizations for disposal, ensuring the safe handling of toxic substances.

4. EXPECTED RESULTS

4.1 Environmental Results

Waste reduction – by 2030, it is planned to reduce the amount of waste sent to landfills by at least 40%.

Increase in recycling – increasing the share of recyclable waste (paper, plastic, organic, electronics) to 70% of the total volume.

Carbon footprint reduction – local recycling and the elimination of single-use materials are expected to reduce CO₂ emissions by 10–15%.

Campus greening – annual use of self-produced compost will enhance soil biological activity and expand the area of green spaces on campus.

4.2 Educational Results

Formation of environmental awareness among students and staff through participation in waste separation, recycling programs, and eco-projects.

Enhancement of knowledge on circular economy and sustainable consumption through academic courses and student startups.

Involvement of students in applied research on waste recycling and energy efficiency.

4.3 Economic Results

Reduction of expenses for waste removal and disposal through internal recycling.

Reuse of resources — application of recycled materials for educational and operational purposes.

Creation of student startups in the field of recycling and eco-technologies with commercialization potential.

4.4 Social Results

Formation of a “green campus” — a comfortable and safe environment for all participants in the educational process.

Enhancement of EKTU’s image as a national leader in implementing the principles of sustainable development and responsible consumption.

Expansion of partnerships with government agencies, businesses, and NGOs in the field of environmental protection.