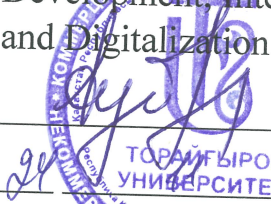


Approved

Member of the Board for Strategic
Development, Internationalization,
and Digitalization - Vice-Rector


S. Aubakirova
2025 year



**3R WASTE MANAGEMENT PROGRAM
(REDUCE, REUSE, RECYCLE)**

Toraigyrov University Non-Profit Joint-Stock Company

Pavlodar

2025

1. General Provisions

Waste management is an important element of sustainable development and environmental safety. Toraigyrov University, a non-profit joint-stock company, strives to reduce the negative impact of waste on the environment by implementing modern approaches to waste collection, sorting, reuse, and recycling, as well as fostering an environmental culture among students and staff.

The waste management program is based on the international **3R (Reduce, Reuse, Recycle)** concept and aims to integrate the principles of sustainable consumption and production into the university's educational, scientific, and administrative activities.

2. Key Principles of the 3Rs

Reduce

Waste reduction through the rational use of resources, reducing the consumption of disposable products, and implementing electronic document management.

Reuse

Reusing items without disposal through repair, modernization, and transfer for further use.

Recycle

Organizing the separate collection and transfer of waste for recycling to return materials to economic circulation and reduce the environmental impact.

3. Program Goals and Objectives

Program Goal

Improving the environmental sustainability of Toraigyrov University by implementing 3R principles, improving the waste management system, and fostering environmental responsibility among students and staff.

Program Objectives

- Implementing a separate waste collection system in all academic buildings and dormitories of the university;
- Developing infrastructure for collecting, sorting, and transferring waste for recycling;
- Improving the environmental awareness of students and staff;
- Integrating sustainable waste management principles into the educational process and scientific research;
- Developing cooperation with government agencies, businesses, and environmental organizations in the field of waste management;
- Organizing monitoring and evaluating the effectiveness of program activities.

4. Main Activities

Educational Activities

- Developing and implementing educational modules on sustainable development and waste management;

- Conducting lectures, seminars, trainings, and environmental campaigns based on 3R principles;
- Organizing awareness-raising activities among students and university staff;
- Conducting annual environmental weeks, competitions, and volunteer events.

Improving the Waste Management System

- Conducting an audit of the current waste management system;
- Implementing a separate waste collection system in academic buildings, administrative buildings, and dormitories;
- Installing containers for collecting paper, plastic, glass, metal, and other recyclable materials;
- Organizing collection points for used batteries, accumulators, and electronic waste;
- Implementing measures to reduce the use of disposable products and packaging;

Research Activities

- Supporting research in the field of sustainable waste management;
- Developing innovative waste recycling and reuse technologies;
- Stimulating publication activity on environmental and sustainable development issues;
- Participating in national and international projects on the circular economy and sustainable development.

External Cooperation

- Developing partnerships with waste recycling companies;
- Collaborating with environmental organizations and government agencies;
- Participating in international environmental initiatives and experience exchange programs.

5. Expected Results

The program is expected to:

- Implement a separate waste collection system in all university buildings and dormitories;
- Increasing the proportion of waste sent for recycling;
- Improving the environmental awareness of students and staff;
- Expanding scientific research and publications on sustainable development issues;
- Strengthening the university's image as an environmentally responsible educational organization.

6. Program Success Criteria

- Functioning of a waste separation system in all university departments;
- Participation of at least 50% of students and staff in environmental activities;
- Annual increase in waste volumes sent for recycling;
- Increase in the number of scientific publications on sustainable development and ecology by at least 50% by the end of the program.

7. Program Implementation Resources

Financial Resources

- Purchase of containers and equipment for waste separation;
- Financing of educational, scientific, and outreach activities;
- Development and modernization of waste management infrastructure.

Human Resources

- Faculty;
- Administrative and economic specialists;
- Research staff;
- University students and volunteer associations.

Technical Resources

- Waste separation containers;
- Equipment for temporary storage of recyclable materials;
- Information systems for monitoring environmental indicators.

8. Monitoring and Reporting Procedures

- Annual monitoring of program implementation;
 - Preparation of an annual report on program progress;
 - Review of program results at meetings of the University Academic Council.
-