

## SDG 12 Responsible Consumption and Production

The university is a system coordinator for the implementation of key projects of the state program "Improvement of the Waste Management System, including Solid Municipal Waste, in the Samara Region for 2018-2024", the strategy for ensuring environmental safety and waste management in the region, and participates in the execution of a number of federal projects within the framework of the national project "Ecology," including: "Integrated Waste Management System," "Infrastructure for Managing Waste of Hazard Classes 1-2," "Clean Water," "Revitalization of the Volga," "Implementation of Best Available Technologies," and "Elimination of Objects of Accumulated Environmental Damage". Samara Polytech experts are developers of regulations, including the feasibility study for the formation and development of a cluster of secondary material resources in the region until 2029.

Samara Polytech employees objectively assesses potential environmental risks associated with the university's activities and takes all necessary actions to prevent negative impacts and ensure environmental safety. According to environmental goals, Samara Polytech ensures the implementation of separate waste collection for paper, PET, scrap metal, office equipment waste, etc., aiming for a target value of → 100%.

[http://smk.samgtu.ru/sites/smk.samgtu.ru/files/prikaz\\_1-556\\_ot\\_06.09.2022\\_o\\_vvedenii\\_ekol\\_politiki\\_i\\_celey\\_22-23.pdf](http://smk.samgtu.ru/sites/smk.samgtu.ru/files/prikaz_1-556_ot_06.09.2022_o_vvedenii_ekol_politiki_i_celey_22-23.pdf).

Samara Polytech implements a system of incentives for waste collection and removal, which includes quarterly bonuses proportional to the volume of paper handed and/or the amount of savings achieved. In order to maintain a paperless system and reduce the amount of paper used, Samara Polytech has developed a regulation on the use of the electronic document management system "Thesis".

<file:///C:/Users/User/Downloads/Регламент%20использования%20СЭД%20ТЕЗИС-2b7efdc993.pdf>.

Another popular practice that is gaining momentum every year is double-sided printing, which allows for a reduction in the amount of paper sent for recycling or disposal. Rules for the collection and disposal of waste, including paper and PET waste, have been developed and are being implemented in practice. In 2023, the waste recycling program at Samara State Technical University achieved a rate of 50-75%.

№	Показатель	2023
1.	The University's Waste Recycling Program (3R - Reduce, Reuse, Recycle)	50-75 %
2.	Program to reduce paper and plastic use on campus	11
3.	Total amount of organic waste produced (tons)	7,132
4.	Total amount of organic waste processed (tons)	0
5.	Organic waste management (tons)	0
6.	Total amount of inorganic waste generated (tons)	1 125,298
7.	Total amount of recycled inorganic waste (tons)	22,88
8.	Inorganic waste management	2,03%
9.	Total amount of toxic waste generated (tons)	4,026
10.	Total amount of toxic waste processed (tons)	4,026
11.	Handling toxic waste	100 %
12.	Treatment facilities	Традиционное очищение

In 2023, Samara Polytech underwent recertification of its quality management system based on the requirements of the international standard ISO 9001:2015 (GOST R ISO 9001-2015 "Quality Management Systems. Requirements"). The activities of Samara Polytech were highly praised by experts from the State Regional Center for Standardization, Metrology, and Testing in the Samara Region – Samara CSM. Additionally, an inspection of the environmental management system was conducted at Samara Polytech to ensure compliance with the requirements of the international standard ISO 14001:2015 (GOST R ISO 14001-2016 "Environmental Management Systems. Requirements and Guidance for Use"). The university once again confirmed the full compliance of its environmental management system with the standard's requirements.



The ISO certificate is not a mandatory document, but it confirms Samara Polytech has implemented and operates both a quality management system and an environmental management system. These systems ensure a high level of services provided, regardless of changing external or internal conditions, as well as the university's commitment to enhancing the environmental efficiency of its activities and ensuring sustainable development.

<https://samgtu.ru/news/view/sistema-menedzhmenta-kachestva-politexa-sootvetstviet-gostu>).

At the university, a separate waste collection system has been permanently implemented. The entire volume of collected recyclable materials has been sent for recycling. As part of the Sustainable Development Goal 12 (SDG 12), the university has organized the collection of recyclables into six fractions:

1. **Paper Waste.** The collection is organized on a permanent basis. In 2023, a total of 12.6 tons were collected. The paper is collected at designated warehouses located at the following addresses:

- Warehouse No. 1 – 244 Molodogvardeyskaya St. (in the basement of academic building No. 8);
- Warehouse No. 2 – 194 Molodogvardeyskaya St. (in the utility yard of ACA);
- Warehouse No. 3 – 42 Revolyutsionnaya St. (in the Department of Social Sphere "Student town").

Each department has responsible persons who oversee the separate collection of paper waste and ensure its transfer to the warehouse.

2. **Plastic Caps.** The collection is organized on a permanent basis. Containers for collecting caps are installed in the following academic buildings:

- Academic building No. 1 (in the entrance hall);
- Academic building No. 8 (in the entrance hall);
- Academic building No. 6 (in the entrance hall);
- Academic building No. 10 (in the entrance hall);
- Academic building No. 12 (in the entrance hall);
- Academic building No. 14 (in the entrance hall).

3. **PET Bottles.** The collection is organized on a permanent basis, with a total of 1.04 tons collected in 2023. All collection points for PET waste are equipped with special containers for PET disposal. The regular filling and transportation of these containers justify their installation, as it significantly reduces the volume of accumulated municipal solid waste by separating PET from the general waste stream. The container

pickups are performed by employees of the waste disposal organization with which a contract has been signed.

4. **Scrap Metal.** The collection is organized on a permanent basis, with 4.87 tons collected in 2023. Scrap metal waste is stored by responsible personnel until centralized removal.

5. **Office Equipment.** The collection is organized on a permanent basis, with 2.74 tons collected in 2023. Office equipment waste is stored by responsible personnel until centralized removal.

6. **Used Tires.** The collection is organized on a permanent basis, with 1.56 tons collected in 2023. The waste from used tires is generated during the replacement of car tires and is stored at a special warehouse located at 1 Pervomayskaya St. (territory of the garage).

In the reporting year of 2023, the following events dedicated to the collection of recyclables were organized:

№	Наименование мероприятия	Вид вторсырья	Место проведения	Ссылка на мероприятия
1.	Collection of plastic covers jointly with the trade union committee of Samara Polytech	Plastic Caps	Educational buildings of SSTU	<a href="https://vk.com/ecoclub_zhizn?w=wall-202687368_1291">https://vk.com/ecoclub_zhizn?w=wall-202687368_1291</a>
2.	Competitive collection of waste paper	Paper Waste	Educational buildings of SSTU	<a href="https://vk.com/ecoclub_zhizn?w=wall-202687368_1068">https://vk.com/ecoclub_zhizn?w=wall-202687368_1068</a>
3.	Installation of containers for collecting paper and aluminum	Paper and aluminum	Educational buildings of SSTU	<a href="https://ecoclub.samgtu.ru/2023/04/16/контейнеры/">https://ecoclub.samgtu.ru/2023/04/16/контейнеры/</a>
4.	Development of a map of the location of recycling points in Samara	Any kind of fraction	-	<a href="https://yandex.ru/maps/51/samara/?ll=50.211657%2C53.219444&amp;mode=usermaps&amp;um=mymaps%3AtM8xEyg4MqnRQu75wki619F-JO7Ta03&amp;z=12.6">https://yandex.ru/maps/51/samara/?ll=50.211657%2C53.219444&amp;mode=usermaps&amp;um=mymaps%3AtM8xEyg4MqnRQu75wki619F-JO7Ta03&amp;z=12.6</a>
5.	Increase the number of containers for separate waste collection to 13	Any kind of fraction	5 Samara Polytech educational buildings	

The total volume of generated hazardous waste has been fully sent for recycling.

Toxic waste type	Tons
- Lead batteries	0,716
- Chemical reagents	0,63
- Waste of mixtures of petroleum products	0,68

General information on the quantity and measures taken for waste management.

Indicator	2023
<b>WASTES HANDLING</b>	
Total amount of waste removed from the territory of the	1 134 456 kg

university for the reporting period	
<b>SEPARATE WASTE COLLECTION</b>	
Implementation of a separate waste collection system at the university on an ongoing basis	Yes
Number of fractions collected separately	6 unit
Number of measures (actions) taken to collect recyclables	4 unit
Total amount of waste sent for recycling during the reporting period	24 906 kg
<b>WASTE PREVENTION</b>	
Number of permanent points for book exchange (bookcrossing, book rotation)	3 unit
Number of book and/or thing exchange events (actions)	3 unit
The university refused to use disposable tableware	Yes