

Waste management

By addressing the issue of waste reduction, we not only minimize our environmental impact but also unlock opportunities to reduce resource consumption, save costs, and foster innovation.

Waste management is a multifaceted challenge that goes beyond recycling and landfill practices. It encompasses the entire life cycle of materials used in companies' operations – from procurement and production to consumption and disposal. By addressing waste reduction, we not only reduce our environmental impact, but also gain opportunities to reduce resource consumption, save money and innovate.

Industrial and municipal waste management, temporary storage, transportation, recycling and disposal are carried out by the legislative norms of the Republic of Kazakhstan and do not pose a threat to the environment, health of employees and local residents. State authorities conduct regular inspections of safe waste management. Portfolio companies have developed Waste Management Programs for each industrial facility by the Environmental Code. [GRI 3-3](#)

ALL PORTFOLIO COMPANY FACILITIES THAT GENERATE WASTE KEEP RECORDS OF PRODUCTION AND CONSUMPTION WASTE BY TYPE, QUANTITY AND PROPERTIES, AND HAZARDOUS WASTE PASSPORTS ARE DEVELOPED.

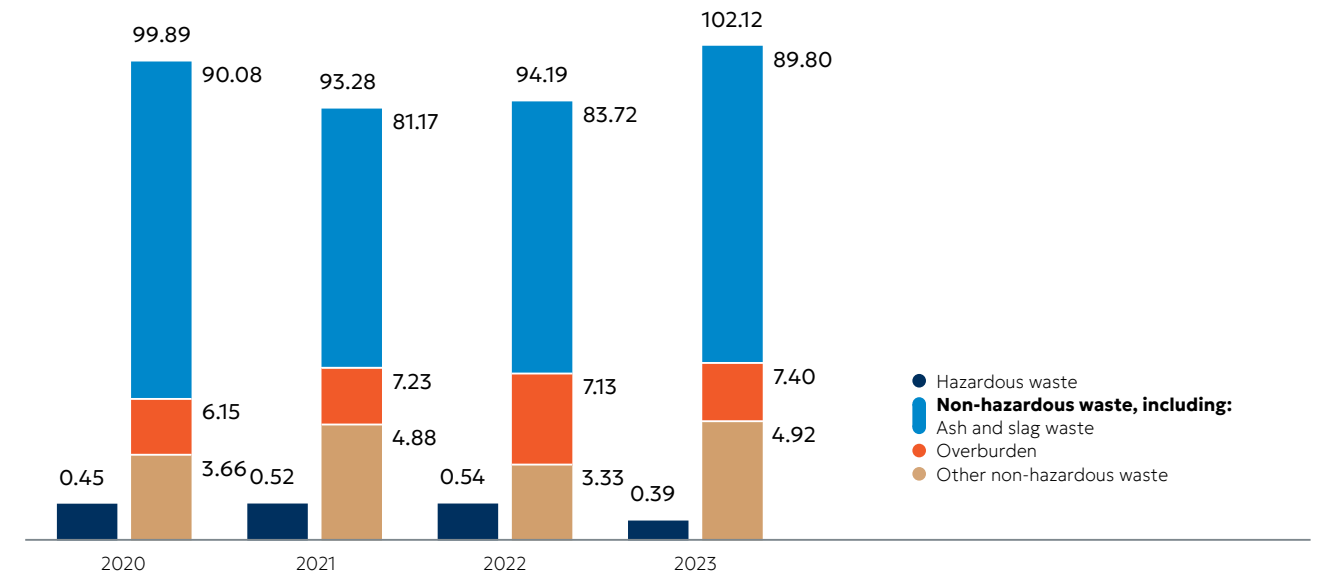
They are filled in a special waste record book as wastes are generated and transferred for utilization or disposal. The results of waste accounting are submitted to the environmental authority in the form of the following documentation: reports on the results of industrial environmental control (quarterly), waste inventory reports (annually), hazardous waste passports. [GRI 306-2](#)

Most of the Fund Group companies' waste is removed by specialized organizations for further recycling/use/disposal, which reduces or completely eliminates pollution of environmental components. Before their removal to final disposal facilities and recycling, waste is temporarily accumulated on the companies' territory for no more than 6 months. [GRI 3-3](#)

Many portfolio companies separately collect waste paper, plastic, glass, waste batteries, waste office equipment, waste car tires for further transfer to specialized organizations for recycling. JSC NC «Kazakhstan Temir Zholy» has installed fondamats (specialized machines for accepting bottles) for accepting tin cans and plastic bottles. [GRI 306-2](#) [GRI 3-3](#)

99%
Most of the Fund's waste comes from the heat and power generation sector.

Waste generation, million tons [GRI 305-5](#)



The main part of the Fund's waste is in the heat and power generation sector – 99% of the total volume or 98,496.1 thousand tons. Taking into account the specifics of the activity, the main share in the total volume of wastes falls on overburden rocks of coal mines of Bogatyr Komir LLP and ash and slag wastes generated as a result of coal combustion, which belong to non-hazardous wastes. [GRI 3-3](#)

The oil and gas production and processing sector generates 435.9 thousand tons of waste (0.4% of the total volume). The following types of waste are generated in this sector: drilling waste (drilling mud and cuttings), oil waste (bottom sediments, oil-contaminated soil, oil sludge, well backwashing waste), spent catalysts and chemical reagents, etc., as well as waste oil and gas wastes. [GRI 306-1](#) This sector accounts for the largest volume of hazardous waste – 383 thousand tons (97% of the total volume of hazardous waste). Oil-containing waste is classified as hazardous waste.

In JSC NC KazMunayGas by the obligations on utilization of historical oil-containing waste and cleaning of oil-contaminated lands, measures on cleaning of historically oiled territories of Mangistaumunaigas JSC, Ozenmunaigas JSC, Karzhanbasmunai JSC are carried out. In 2023, 1.1 thousand tons were utilized, and areas of their disposal sites were reclaimed.

In the uranium mining and processing sector, 381 thousand tons of waste were generated in the reporting period, of which 1.6 thousand were hazardous. The total volume of waste gen-

eration decreased by 33%. Corporate standards were developed to establish uniform requirements for production and consumption waste management at JSC NAC Kazatomprom enterprises, and the Zero Waste program aimed to reduce waste gradually [GRI 306-2](#) In 2023, the Radioactive Waste Management Program for 2023-2030 was developed.

The mining and processing sector of minerals accounts for 178.8 thousand tons, which is 81% lower compared to last year. A sharp decrease in the volume of waste generation in 2023 is due to the absence of mining and preparation works at the deposit of LLP JV Alaigyr. In JSC Tau-Ken Samruk, the main volume of waste is waste rock generated during stripping and mining preparation works at JSC ShalkiyaZinc Ltd. Waste rock is mainly reused for the construction of in-pit roads, while the remainder is disposed of at the Company's own rock dumps.

The rail transportation sector generated 58.6 thousand tons of waste, down 1% year-on-year.

The waste generation volumes are insignificant for the rest of the Fund's portfolio companies.