

The infographic features a large, stylized blue water droplet shape in the background. In the top left corner, there is a black circle containing a white icon of two clouds. The central focus is the large text '3.4%' in a bold, black, sans-serif font. Below this, a thin blue horizontal line separates the percentage from the explanatory text. The text at the bottom, in a smaller black font, states: 'Scope 1 emissions decreased from 30,199 tonnes to 29,162 tonnes CO₂-eq. compared with 2024'.

3.4%

Scope 1 emissions decreased from 30,199 tonnes to 29,162 tonnes CO₂-eq. compared with 2024

In 2024–2025, an energy audit was conducted to enhance energy efficiency and resource saving.

Scope 1 emissions decreased from 30,199 tonnes to 29,162 tonnes CO₂-eq. compared with 2024

4.2.1. Environmental protection

Management approach

GRI 3-3, 2-23, 2-25

Despite the low level of direct environmental impact conditioned by the nature of activities, Kazakhtelecom JSC recognises its responsibility for the impact on the environment and applies efforts for its minimisation. The Company consistently implements approaches aimed at the rational use of resources, the enhancement of energy efficiency and the improvement of production processes.

Kazakhtelecom JSC implements an environmental policy, for the fulfilment of which the executive management is responsible. The policy provides for the distribution of roles, compliance with environmental legislation, the constant improvement of indicators, the training of employees, the establishment of goals on the reduction of impact and the development of environmental culture.

For the management of environmental aspects, at the Company an environmental management system (EMS) is functioning, which is a part of the corporate management system and a component of the management of non-financial risks. The EMS covers the processes of the reduction of pollutant emissions, the introduction of environmentally safe data transmission technologies, the management of energy consumption and the modernization of equipment. The Company is certified in accordance with the international standard ISO 14001, which confirms the compliance of the system with the leading requirements in the area of environmental management.

Environmental management structure

The management of environmental issues at Kazakhtelecom JSC is carried out at two levels. The operational coordination and control over the observance of environmental requirements, including occupational health and safety, is carried out by the relevant department both at the level of the head office and in the branch network. Strategic management in this area, including planning, the assessment of environmental risks, the identification of hazards and the integration of corresponding approaches into business processes, is in the area of responsibility of the Chief Administrative Officer.

At the Company, a number of internal regulatory documents regulating activities in the area of environmental protection are in effect. The provisions of these documents are obligatory for fulfilment by every employee of the Company:

- Environmental Policy;
- Programme of low-carbon development of Kazakhtelecom JSC for 2022–2032 (hereinafter — PLCD);
- Roadmap on the development of ESG practices for 2024;
- Programme of internal environmental inspections of Kazakhtelecom JSC;
- Guide on the management and conservation of biodiversity of Kazakhtelecom JSC;
- Guide on the monitoring, reporting and reclamation of land resources of Kazakhtelecom JSC;
- Programme of management of production and consumption waste of Kazakhtelecom JSC for 2025–2032;
- Programme of management and conservation of water resources of Kazakhtelecom JSC for 2025–2032;
- Documented procedure on the identification of hazards, environmental aspects and risk assessment;
- Documented procedure on the identification of legislative and other requirements in the area of occupational safety, health protection and environmental protection;
- Documented procedure on the monitoring of indicators in the area of occupational health, safety and environmental protection;
- Documented procedure on the management of production and consumption waste;
- Documented procedure on emergency preparedness and response.

Precautionary principle

Kazakhtelecom JSC applies the precautionary principle in the sphere of environmental protection, regarding it as part of a systemic approach to the management of environmental aspects. At the Company a risk management system is in effect, including the assessment of environmental risks both at the stage of project planning and in the process of current operational activities.

To ensure a preventive approach, a documented procedure on the identification of hazards, environmental aspects and risk assessment has been introduced. This procedure covers not only existing impacts, but also potential consequences that may arise in the future.

The Company carries out environmental impact assessment (EIA) in accordance with the requirements of the legislation of the Republic of Kazakhstan, and is also oriented towards the best international practices in the area of environmental responsibility. Upon the making of decisions, long-term environmental consequences are taken into account, even in the absence of full scientific certainty, which corresponds to the spirit of the precautionary principle.

In addition, measures on the reduction of risks are integrated into the environmental policy, the processes of internal environmental audit and the corporate system of continuous improvement.

The Company determines the following priority directions of development in the environmental protection sphere:

- minimisation of the negative impact on the environment;
- awareness of the extreme importance of the problem of climate change;
- compliance with legislation, national and international environmental standards;
- observance of the principles of sustainable development in the development and implementation of the Company’s activities;
- responsibility of the Company’s management at all levels for the effective functioning of the environmental management system;
- disclosure of accessible and transparent environmental information for all stakeholders.

Compliance with the legislation of the Republic of Kazakhstan in the area of environmental protection

GRI 2-27

In 2025, no cases of violation of environmental legislation were registered. In respect of the Company, no non-financial sanctions and other administrative penalties in the area of environmental protection were applied.

Table 17. Expenditures for environmental protection measures, KZT thousand

Expense item	2023	2024	2025
Development of EIA projects, projects of emission norms and conduct of production environmental monitoring, confirmation of categories	82.2	8,250.0	78,203.2
Payments for negative environmental impact, of which:	12,500.0	14,542.0	10,247
for stationary source		2,066.2	1,316.5
for mobile source	0	12,448.8	8,930.49
Total	12,582.2	22,792.0	88,450.3

Plans for 2026

Introduction of quantitative target indicators for EP aspects (waste and GHG emissions).

90

75 thousand trees planted as part of an eco-campaign

Contribution of Kazakhtelecom JSC to the Taza Qazaqstan initiative

In 2025, Kazakhtelecom JSC acceded to the large-scale nationwide environmental campaign Taza Qazaqstan, aimed at raising environmental culture and improving the state of the environment throughout the country. The initiative, which covered all regions of Kazakhstan, united millions of citizens, government and business structures around the idea of environmental renewal and a sustainable future.

As part of participation in Taza Qazaqstan, the Company’s employees took part in environmental clean-up days, actions to clean up territories and improve public spaces throughout Kazakhstan. The events were organized both in major cities and in remote population centres, demonstrating the Company’s commitment to the principles of social responsibility and care for the habitat.

Eco-education and employee engagement

As part of the implementation of the approved Plan of Measures to support the nationwide Taza Qazaqstan project, Kazakhtelecom JSC organized a series of activities aimed at raising environmental awareness and forming sustainable habits among employees, which included:

- Educational webinars on sustainable development, biodiversity, climate and renewable energy.
- Holding of “Eco Wardrobe” and “My Eco Tip” challenges aimed at the development of sustainable habits.
- Holding of Eco-Fashion Week with a webinar on an environmentally friendly approach to clothing.

Participation in the Taza Qazaqstan campaign became a continuation of Kazakhtelecom’s strategic course in the ESG area, confirming the Company’s commitment to environmental values and social responsibility.

4.2.1.2. Water resources

GRI 3-3, 303-1

Kazakhtelecom strives for the rational use of water resources and the minimisation of impact on water ecosystems. [A](#) The only source of water supply is city networks, while the Company does not use wells and other alternative sources. The effective management of water resources is a priority of the Environmental Policy and is carried out within the framework of internal regulatory documents. [A](#)

[A](#) Water consumption is carried out exclusively for household and domestic needs. All water supply systems are equipped with water consumption metering devices. [A](#)

Water withdrawal and discharge of wastewater in conditions of water stress are assessed on the basis of the Aqueduct Water Risk Atlas with account for the location of the Company’s facilities.

Water consumption

GRI 303-3

Table 20. Total volume of water withdrawal, [thousand m³](#)

Indicator name	2023	2024	2025
Total water withdrawal	250.3	274.2	361.2 A
- Fresh water	250.3	274.2	361.2 A
- Other water	-	-	-
Water withdrawal in water-stressed regions		145.7	192.5 A
- Fresh water		145.7	192.5 A
- Other water	-	-	-

In 2025, the Company clarified the approach to the determination of territories with water stress and moved to assessment at the level of cities. For the comparability of data, the updated methodology was retrospectively applied to the indicators of 2024.

GRI 303-3

The only source of water supply for Kazakhtelecom is municipal water supply networks s (water utilities). In 2025, an increase in the volume of water consumption by 31.7% was registered.

Table 21. Specific water consumption

Indicator name	2023	2024	2025
Production indicators	5,449	5,298	5,236 A
Specific water consumption, thousand m³/thousand facilities	0.046	0.0517	0.069 A
Revenue of Kazakhtelecom JSC, KZT million	299,725	314,673	348,014 A
Specific water consumption, thousand m³/KZT million	0.00083	0.000886	0.001 A

Wastewater discharges

GRI 303-4, 303-1, 303-2

[A](#) The Company uses water exclusively for sanitary and household needs. All wastewater of the Company is discharged to the central sewage networks in accordance with the contract. [A](#)

[A](#) Since the discharge of wastewater is carried out to the centralized sewage network, the Company observes the general requirements established by local bodies and water utilities for the discharge of wastewater to sewage networks. [A](#)

[A](#) The Company does not have its own internal standards of wastewater quality, since all wastewater is discharged to the central sewage networks, where their treatment and purification are regulated by local water utilities. Control over the quality of wastewater is carried out at the level of city treatment facilities. [A](#)

Table 22. Total volume of wastewater discharges, [thousand m³](#)

Indicator name	2023	2024	2025
Total discharges	251.0	121.1	194.1 A
- Fresh water	251.0	121.1	194.1 A
- Other water	-	-	-
Wastewater discharges in water-stressed regions	-	37.4	60.3 A
- Fresh water	-	37.4	60.3 A
- Other water	-	-	-

GRI 303-5

[A](#) Total water consumption in 2025 amounted to 167.1 thousand m³. In regions with water shortage, total water consumption in 2025 amounted to 132.2 thousand m³. [A](#)

167.1

thousand m³
total water consumption
in 2025

132.2

thousand m³
water consumption in water shortage
regions

Programme on the management of water resources

The Company sets itself tasks on the gradual reduction of total water consumption, the introduction of saving technologies and the transition to systems with zero discharges. With the aim of the effective management of water resources, in 2025 the Programme on the management of water resources for 2025-2032 was introduced, which is oriented to the reduction of the Company's water footprint, the use of leading water-saving technologies and the restoration of water ecosystems. The tasks of the Programme are:

Reduction of total water consumption and losses in technological processes;	Ensuring control of wastewater quality and the exclusion of environmental pollution;
Development of the corporate culture of water saving among employees and contractors;	Participation in national and international initiatives on the protection of water resources.

Plans for 2026 and the medium term

The Company plans to perform the following measures on the rational use of water resources:

1. Carrying out an inventory of water consumption and water disposal sources at the Company.
2. Modernization of water supply systems with the aim of reducing the total volume of water consumption.

In connection with the risks related to water stress, climate change, environmental and infrastructure challenges, Kazakhtelecom JSC implements a programme of measures of management of water resources in the regions of Kazakhstan where a shortage of fresh water is observed.

The measures cover the following areas: Kyzylorda, Mangistau, Atyrau, West Kazakhstan and Aktope. In these regions, the Company introduces various technologies and solutions for the reduction of water consumption and the enhancement of the resilience of water systems. These measures are aimed at the resolution of current and potential problems with water supply, ensuring long-term sustainability and the minimisation of impact on ecosystems in conditions of fresh water shortage:

Development and implementation of corporate water use plans, coordinated with local akimats and water management bodies;	Introduction of IoT systems of monitoring of the quality and consumption of water at all key facilities;
Creation of backup sources of water supply (bottled water, mobile containers, contracts with suppliers);	Participation in national and international environmental initiatives aimed at the protection and restoration of water resources;
Training of employees in the principles of rational water use and actions in emergency situations.	

In the long term, the Company is oriented to the achievement of a sustainable model of water use, fully corresponding to ESG principles and international GRI requirements. The main goal consists of the transition to minimum impact on water ecosystems through the maximum use of reused resources and the introduction of “zero discharge” technologies.

The Programme includes an integrated system of goals and indicators, covering the fulfilment and monitoring of the following goals, for which target and intermediate quantitative indicators until 2032 have been established:

Reduction of the total volume of water consumption;	Specific water consumption per one employee or unit of equipment;
Number of water bodies covered by environmental monitoring and having condition passports;	Level of involvement of employees in the issues of water saving and environmental safety.



Programme of management of production and consumption waste

A In 2025, the Programme of management of production and consumption waste of Kazakhtelecom JSC for 2025–2032 was developed and approved, which is aimed at the achievement of goals related to the reduction of the environmental load, the minimisation of risks for public health and the ensuring of integration into global ESG practices. It is also aimed at the transition to circular economy within the framework of the ESG Strategy, assuming the involvement of secondary resources in the economic turnover, the reduction of waste burial and the creation of a Zero Waste system. A

However, in the process of the implementation of these goals, the Company faces a number of risks:

- The high share of hazardous waste in the telecommunications industry, such as electronic and electrotechnical equipment, accumulators, mercury-containing lamps, oils, causes the risk of pollution of ecosystems;
- The growth of electronic waste causes the necessity of the development of special methods of processing and disposal.

Within the framework of the Programme, goals on the generation and transfer for processing of electronic waste (e-waste) have been established, for which target and intermediate quantitative indicators until 2032 have been set:

Increase of the share of processed electronic waste, %;	Increase of the number of units of equipment transferred for reuse;	Reduction of the storage period of decommissioned equipment until transfer, months.
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At the same time, the Programme establishes goals for the processing of accumulator batteries, the disposal or processing of cables and office waste, as well as their separate collection.

Measures aimed at the implementation of the goals of the programme:

Minimisation of waste generation at the source — the Optimization of business processes, the transition to a “paperless office”, the use of energy-efficient technologies;	Reuse of equipment — the development of refurbished and reuse practice for telecommunications equipment;	Development of recycling infrastructure — cooperation with companies introducing leading technologies of secondary processing (for example, the chemical extraction of metals from e-waste);	Investments in R&D (scientific research and experimental design works) — research into the possibilities of the introduction of closed material cycles and waste-free technologies.
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Plans for 2026

The Company plans the fulfilment of the following measures on the effective management of waste:

- Implementation of the measures provided for in the Programme of management of production and consumption waste of Kazakhtelecom JSC.

4.2.1.4. Impact on biodiversity

GRI 3-3, 413-1

According to the Environmental Policy, Kazakhtelecom JSC undertakes to contribute to the conservation of biodiversity and not to allow the conduct of production activities in protected territories.

Within the framework of the conservation of the plant and animal world at the sites of construction and installation works (including the laying of cables), the Company performs mechanical and biological reclamation, which minimise the risks of soil erosion and contribute to the restoration of the vegetative layer on the disturbed land plot.

In 2024, Kazakhtelecom JSC conducted an independent assessment of the impact of its activities on biodiversity, as well as on land and water resources in the cities of Astana, Almaty and Shymkent within the framework of the implementation of the “Guide on the management and conservation of biodiversity”. The assessment performed by KazTEKO LLP covered automatic telephone stations, 5G antennas and auxiliary equipment. Measurements of electromagnetic radiation, noise level, air quality and the impact of 5G antennas on the animal world were carried out. According to the results of the measurements, exceedances of the maximum permissible values and changes in ecosystems were not identified. In connection with the obtained results, an additional impact assessment in 2025 is not required.

Plans for 2026

1. Planning of participation in projects on the maintenance and conservation of biodiversity in the regions of presence.
2. Collection of data on equipment and technological processes falling territorially in specially protected zones for further updating and public disclosure of the Guide on the management and conservation of biological diversity in the operation zone of Kazakhtelecom JSC.