

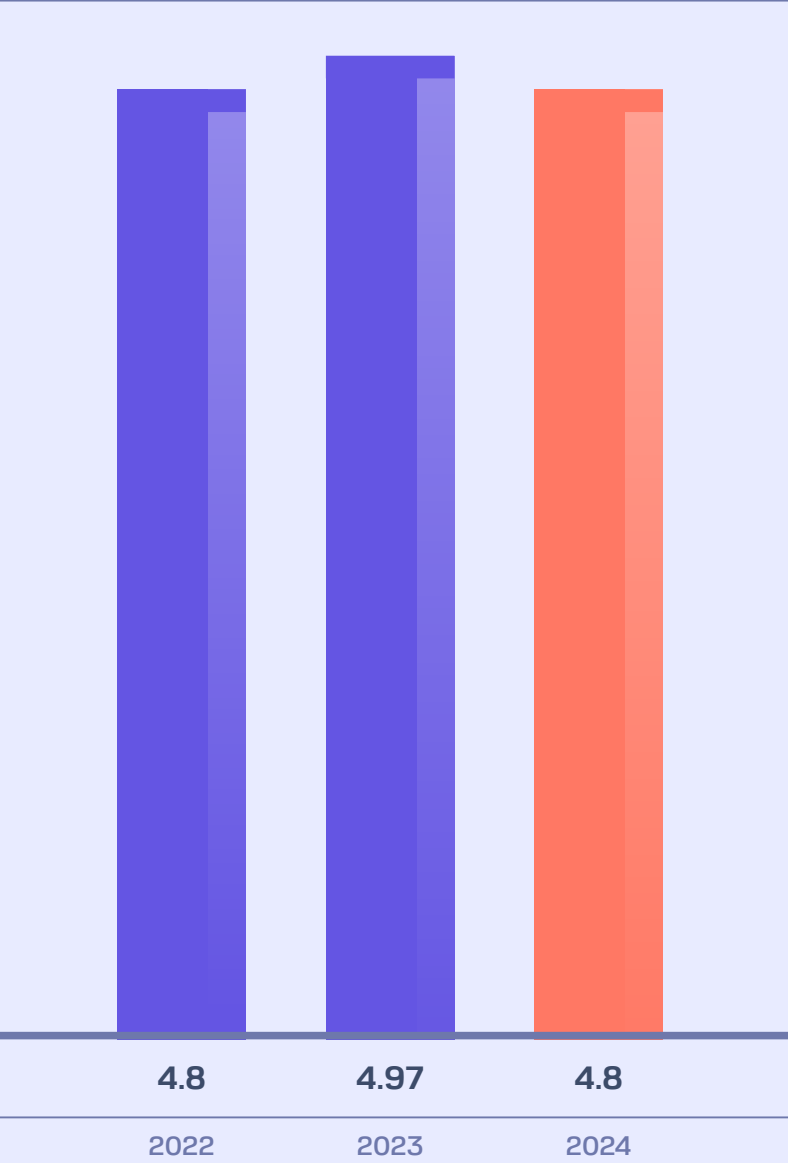


GRI 302-3

ENERGY INTENSITY

| Indicator                              | 2022      | 2023        | 2024      |
|----------------------------------------|-----------|-------------|-----------|
| Total energy consumption, GJ           | 1,335,517 | 1,490,401.4 | 1,487,723 |
| Kazakhtelecom JSC revenue, KZT million | 278,111   | 299,725     | 309,484   |
| Energy intensity, GJ/KZT million       | 4.8       | 4.97        | 4.8       |

ENERGY INTENSITY, GJ/KZT million



4.8

GJ/KZT million

Energy intensity in 2024

Plans for 2025 and the Medium Term

In 2025, the Company plans to implement the following energy efficiency measures:

- › Thermal modernization of buildings based on the results of energy audits.

CLIMATE CHANGE MITIGATION

GRI 3-3

Kazakhtelecom JSC regards climate change as one of the key challenges, as well as an important opportunity to transform its business model and enhance resilience. In the context of the global transition to a low-carbon economy, the Company strives to make a meaningful contribution to Kazakhstan’s climate goals and its international commitments under the Paris Agreement.

In 2023, the Company planned a set of initiatives aimed at improving the corporate climate risk management system in line with the TCFD recommendations. A significant portion of these initiatives was implemented in 2024.

The Company continued implementation of its 2022–2032 Low-Carbon Development Program and integrated elements of climate analysis into strategic and investment planning processes. During the reporting period, an in-depth climate analysis was conducted covering the Company’s operations and infrastructure. This included the identification of transition and physical climate risks and the assessment of their potential impact on key business processes in accordance with international TCFD guidance. In 2024, responsibility for managing climate risks was formally assigned to a member of the Management Board.

Development of an adaptation plan for the identified climate risks has been scheduled as one of the priority actions for the medium term.

The full results of the analysis are presented in the “Analytical Report on Climate Risk and Opportunity Assessment” available on the Company’s website: [telecom.kz](https://telecom.kz).

Key priorities of our climate strategy:

- › Decarbonization and reduction of greenhouse gas emissions across the Company’s operations and its entire value chain;
- › Alternative energy;
- › Resource conservation and energy efficiency improvements.





## CLIMATE CHANGE GOVERNANCE

**Kazakhtelecom JSC has established a multi-level climate governance system based on the principles of accountability, transparency, and integration of climate risks and opportunities into strategic management.**

### Board Oversight

The Board of Directors exercises top-level oversight of climate-related matters through the Audit and Sustainability Committee. Within its mandate, the Board reviews climate-related issues during the approval of strategic plans, investment programs, annual budgets, as well as during the assessment of major infrastructure projects and transactions. Climate matters are reported to the Board at least once a year. The agenda includes monitoring implementation of the Low-Carbon Development Program, progress toward emission reduction targets, resilience to physical climate risks, and opportunities in digital products and services.

Climate risk management is outlined in the Regulation on the Audit and Sustainability Committee under the Board of Directors. The Committee reviews issues related to low-carbon development, carbon footprint management, and potential risks and constraints associated with the global climate agenda. It also monitors the quality of non-financial reporting and oversees the implementation of relevant ESG initiatives.

In 2024, the Board of Directors continued to strengthen climate-related expertise, including through ESG sessions with independent experts and discussions on climate impact scenarios affecting long-term business sustainability.

### Role of Executive Management

Operational management of the climate agenda is carried out at the executive level. Within the Company structure, coordination of climate matters is entrusted to the Sustainable Development Department, in close cooperation with departments for technical operations, capital construction, energy, and risk management. Designated employees are responsible for assessing climate risks, developing and implementing adaptation measures, and monitoring progress toward climate targets. These individuals and committee heads regularly report to the Management Board and, when necessary, present information to the Board of Directors.

Management is informed on climate issues based on internal monitoring results, external analytical reviews, data on energy efficiency and emissions, and climate models and scenarios. Reporting is integrated into the unified ESG analytics system and verified prior to inclusion in the Company's annual reports for stakeholders.

Internal climate governance mechanisms include regular cross-functional meetings, integration of climate aspects into investment and project committees, and risk and opportunity assessments during the development of new initiatives.







CLIMATE GOVERNANCE STRUCTURE AT KAZAKHTELECOM JSC

BOARD OF DIRECTORS

The Board of Directors of Kazakhtelecom JSC oversees sustainability matters, including the management of climate risks and opportunities. The Board approves the ESG strategy, which outlines the key areas related to climate risks and opportunities.

Functions:

- › Determining the strategy for sustainable development and climate risks.
- › Monitoring the process of integrating climate factors into the company's strategic and operational planning.
- › Reviewing and approving reporting in this area.
- › Overseeing the implementation of sustainability principles and low-carbon development.
- › Managing sustainability-related risks, including climate risks.

Incentives for Managing Climate Risks

- › Defining incentive strategies related to climate goals for the Company's executives and staff.
- › Approving a remuneration system based on the achievement of ESG targets, including climate-related targets.

AUDIT AND SUSTAINABLE DEVELOPMENT COMMITTEE

Since July 2022, the Audit Committee has been renamed the Audit and Sustainable Development Committee. This committee is responsible for managing sustainable development risks, including physical and transition climate risks.

Functions:

- › Preliminary approval of the Company's Annual Report regarding the quality of the presented non-financial information.
- › Development of recommendations for the Board of Directors on topics related to sustainable development, as well as on the implementation of ESG principles and low-carbon development within the Company.
- › Monitoring the transformation of business processes in accordance with the principles of sustainable development, ethical behaviour, and responsible investing.
- › Development of recommendations for the Board of Directors regarding the approval of new policies and the evaluation of the effectiveness of existing policies, plans, and programmes in the field of sustainable development, as well as priority projects, key activities, and initiatives in the area of sustainable development and climate.
- › Review of issues related to low-carbon development and the management of the Company's carbon footprint, including potential risks and limitations arising for the Company in relation to the global climate agenda.
- › Development of recommendations for the Board of Directors regarding the compliance of activities, corporate reporting, and documents with the requirements of international ratings in sustainable development, as well as monitoring the implementation of measures to improve the Company's positions in international sustainable development ratings.
- › Monitoring the quality of the Company's public reporting in the areas of sustainable development and climate.

Incentives for Managing Climate Risks

- › Evaluation of the effectiveness of climate incentives aimed at achieving the Company's climate targets.
- › Monitoring the implementation of incentive strategies and the integration of climate factors into employee motivation.

EXECUTIVE COMMITTEE

Department of Corporate Governance and Sustainable Development

- › Responsible for the inventory of internal regulatory documents, managing sustainability risks, and regularly monitoring the achievement of the company's targets in this area.
- › Develops and updates policies related to climate risks and sustainable development, with regular presentations for discussion at the Audit and Sustainable Development Committee.

Compliance Department

- › Ensures compliance with norms and standards in the field of sustainable development and climate risk management.
- › Implements internal control to ensure adherence to sustainable development requirements.

Communications Department

- › Responsible for external communications, including informing the public and stakeholders about the company's actions in the field of sustainable development.
- › Coordinates engagement with external partners and the media on climate integration issues.

Structural Units Responsible for Human Resource Management, Occupational Health and Safety

- › Oversee specific aspects of sustainable development management, including compliance with occupational health and safety standards.
- › Implement measures to minimise environmental impact and enhance energy efficiency.

Head Office of Kazakhtelecom JSC

- › Is directly responsible for the coordination and oversight of the implementation of sustainable development initiatives within the company's structural units.
- › Ensures the execution of the company's climate and ESG strategies at all levels.

BRANCHES

The Chairman of the Management Board and the General Directors of the branches

- › Oversee the implementation of sustainability standards and policies within the company's branches.
- › Ensure the provision of accurate information regarding the execution of plans and activities related to climate initiatives.

Managing Director of Kazakhtelecom JSC for Sustainability

- › Coordinates the Company's efforts to achieve sustainable development goals.
- › Monitors the fulfilment of key performance indicators (KPIs) in the field of sustainable development and climate initiatives.

Incentives for Managing Climate Risks

- › Implementation of Strategies for Managing Climate Risks and Monitoring Their Progress.
- › Establishment of a remuneration system linked to the achievement of the company's climate and ESG targets.



CLIMATE STRATEGY

In 2024, Kazakhtelecom JSC conducted a comprehensive assessment of climate risks and opportunities, encompassing both physical and transition-related factors, as well as potential value creation pathways in a changing climate. The analysis was based on international methodologies, including Intergovernmental Panel on Climate Change (IPCC) scenarios, McKinsey and S&P Global analytical tools, and took into account Kazakhstan’s climate specifics and the telecommunications sector’s characteristics.

The assessment utilized four climate development scenarios: RCP 2.6, RCP 4.5, RCP 8.5 (IPCC), and NZE2050, which reflects global efforts to achieve carbon neutrality. Internally, the Company interpreted these scenarios as optimistic, baseline, and pessimistic cases, enabling a comprehensive analysis of climate factor impacts on operational resilience, cost structure, profitability, and investment appeal.

Physical Risks

The physical risk analysis covered 25 key data centers and technological facilities in major cities and regional centers of Kazakhstan. The study addressed all segments of the value chain—from infrastructure and logistics to operations and maintenance.

KEY IDENTIFIED RISKS:



Temperature (chronic risk)

Rising average and extreme temperatures lead to equipment overheating, increased cooling costs, and reduced system reliability. According to climate models, by 2060, the average temperature in Almaty Region may reach 9.64 °C, and the maximum—17.59 °C under the RCP8.5 scenario. Elevated temperatures pose risks to data centers, communication nodes, and engineering systems:

- › Equipment overheating;
- › Increased cooling costs;
- › Reliability decline and more frequent shutdowns;
- › Decreased employee productivity and higher thermal stress.

The most vulnerable areas are Almaty, Akmola, and East Kazakhstan regions, where the largest increases in average and extreme temperatures are expected.



Increased humidity and precipitation

Rising precipitation is observed under all scenarios, especially in South Kazakhstan, Atyrau, and Mangystau regions. For instance, in South Kazakhstan, annual precipitation could increase to 894.6 mm by 2060 under RCP8.5 (a 45% increase over historical values). Impacts include:

- › Damage to cable networks and equipment due to high humidity;
- › Infrastructure corrosion;
- › Higher maintenance and replacement costs for network components.



Flooding (acute risk)

Flooding is identified as one of the most significant acute risks. In South Kazakhstan and Mangystau regions, flood depths may reach up to 0.7 m, posing a threat of infrastructure inundation and equipment failure. Consequences:

- › Equipment damage;
- › Service interruptions;
- › Potential multimillion-tenge losses due to downtime.



Wind load

Zhambyl Region exhibits the highest wind speeds—up to 28.17 m/s under RCP2.6 and 27.44 m/s under RCP8.5 by 2060. Akmola and South Kazakhstan regions are also exposed. Risks:

- › Destruction of communication towers and antennas;
- › Structural damage;
- › Operational disruptions due to physical destruction.







REGISTER OF CLIMATE RISKS OF KAZAKHTELECOM JSC

| Risk Type  | Category      | Risk                              | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Horizon <sup>9</sup> | Potentially Vulnerable Assets / Regions                        |
|------------|---------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------|
| Physical   | Chronic       | Temperature                       | <div><div>›</div>Decline in production capacity.</div> <div><div>›</div>Some equipment may not withstand high temperatures.</div> <div><div>›</div>Additional costs (investments in cooling systems).</div> <div><div>›</div>Impact on employee health: increased risk of heat-related illnesses and poor decision-making.</div> <div><div>›</div>Annual financial losses due to increased energy consumption for cooling.</div> <div><div>›</div>Increased structural damage to physical infrastructure.</div> | Medium-/long-term    | Akmola, Almaty, and East Kazakhstan regions                    |
|            |               | Precipitation                     | <div><div>›</div>Increased costs for maintenance and replacement of equipment.</div> <div><div>›</div>Risk of corrosion of metal infrastructure components.</div> <div><div>›</div>Operational disruptions due to equipment damage and failures.</div>                                                                                                                                                                                                                                                          | Medium-/long-term    | Atyrau, Mangystau, and South Kazakhstan regions                |
|            | Acute         | Floods                            | <div><div>›</div>Flooding of infrastructure and severe equipment damage.</div>                                                                                                                                                                                                                                                                                                                                                                                                                                  | Medium-/long-term    | Atyrau and Mangystau regions                                   |
|            |               | Extreme weather events            | <div><div>›</div>Increased repair and restoration costs.</div> <div><div>›</div>Operational disruptions due to infrastructure damage.</div> <div><div>›</div>Impact on employee safety</div>                                                                                                                                                                                                                                                                                                                    | Medium-/long-term    | Zhambyl, South Kazakhstan, and Akmola regions                  |
| Transition | Regulatory    | Tightening of climate regulations | <div><div>›</div>Increased operating costs.</div> <div><div>›</div>Significant investments required to modernize infrastructure.</div>                                                                                                                                                                                                                                                                                                                                                                          | Medium-/long-term    | Data centers, energy-intensive infrastructure                  |
|            | Technological | Deployment of new technologies    | <div><div>›</div>Significant investments required to modernize infrastructure.</div>                                                                                                                                                                                                                                                                                                                                                                                                                            | Medium-/long-term    | Obsolete network equipment, cooling systems, IT infrastructure |
|            | Market        | Changing demand and expectations  | <div><div>›</div>Need to develop new “green” solutions and adapt the business model.</div>                                                                                                                                                                                                                                                                                                                                                                                                                      | Medium-/long-term    | Product portfolio, telecom services                            |

Transition Risks

In assessing transition risks, particular attention was paid to the potential impact of changes in legislation, market trends, carbon regulation policies, and technological shifts on the Company’s business model.

Regulatory

The potential introduction of a carbon tax and new energy efficiency standards may impact operating costs, necessitate equipment upgrades, increase CAPEX, and affect the cost of services.

Technological

Obsolescence of energy-inefficient infrastructure and the need to implement new solutions aligned with ESG expectations of clients and investors.

Market and reputational

Growing demand for sustainable suppliers and the need for ESG rating transparency to maintain competitiveness and secure access to sustainable financing.



<sup>9</sup> Kazakhtelecom is not significantly affected by physical climate risks in the short term.



Climate Opportunities

The Company views climate change not only as a source of risk but also as a driver for the development of sustainable technological solutions, improved energy efficiency, and long-term cost savings. Climate-related opportunities are systematically analyzed in the following areas:



Energy efficiency improvement

Data centers (DCs) are major electricity consumers. In 2023, total DC consumption amounted to 48,776 MWh—approximately 4,000 MWh less than in 2022. This reduction resulted from the implementation of energy-saving programs and modernization of climate control systems.

Between 2021 and 2023, energy efficiency improved from 0 to 0.8% (in terms of specific indicators). The goal is to achieve significant results by 2025. The potential savings from energy-efficient solutions in DCs are estimated at \$3.5–4 million by 2030.



Renewable energy development

Transition to renewable energy sources and reduced dependence on carbon-intensive fuels. Under the ESG Strategy through 2032, the Company considers increasing the share of renewables from the current 0% to 10–15%. Fuel and emission offset savings may reach up to \$5 million over the long term.



Development of digital services and infrastructure

The Company is actively developing solutions in the areas of:

- › Internet of Things (IoT) to reduce the carbon footprint;
- › Smart grids and remote monitoring;
- › Digital modeling of telecom infrastructure to optimize energy consumption;
- › Commercialization of carbon offsets through climate projects.



Access to sustainable financing

Increased attractiveness to ESG investors, issuance of green bonds, and financing for climate-focused projects.

The total economic benefit from realizing climate opportunities could exceed \$20 million by 2060.

As part of the climate analysis, a set of recommendations was developed to strengthen the Company’s resilience to climate risks. Key measures

include implementation of a public reporting system, regular review of climate risks, development of monitoring plans for vulnerable regions, energy efficiency improvements in data centers, calculation of Scope 3 emissions, and consideration of participation in the Net-Zero initiative.

REGISTRY OF CLIMATE OPPORTUNITIES OF KAZAKHTELECOM JSC

| Opportunities                                          | Activities                                                                                                                                                                       | Horizon         |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Energy efficiency improvement and process optimization | › De-duplication of copper lines and replacement with LED lighting;<br>› Implementation of intelligent control systems;<br>› Optimization of network and data center operations. | Short-term      |
| Transition to renewables                               | › Purchase of green certificates;<br>› Development of smart grids;<br>› Procurement of alternative energy and switch to environmentally friendly fuels.                          | Short-/Mid-term |
| Carbon offset commercialization                        | › Implementation of climate projects and subsequent emissions offsetting.                                                                                                        | Mid-term        |
| Digital modeling                                       | › Use of digital technologies to optimize infrastructure design and operation.                                                                                                   | Mid-term        |
| Resource consumption minimization                      | › Reduction of imported electricity, heat, and fuel consumption.<br>› Reduction of fossil fuel use at stationary and mobile sources.                                             | Short-term      |
| Digitalization and development of sustainable products | › Development and promotion of digital and telecom services/products to reduce the carbon footprint.<br>› Promotion of IoT solutions.                                            | Short-term      |

The assessment included financial modeling, covering energy supply costs, maintenance, facility adaptation, and projected indirect impacts on revenue, capital investment structure, and access to sustainable financing.

In the short- and medium-term, climate risks do not significantly affect the Company’s financial stability.

Under low and moderate emission scenarios (RCP2.6 and RCP4.5), the Company demonstrates steady growth and strong adaptability to changing climate conditions. Significant impacts may occur post-2050 under the high-emissions scenario (RCP8.5), including rising costs and reduced profitability. Long-term climate risks are incorporated into strategic planning.



## CLIMATE RISK MANAGEMENT

Climate risk management in the Company is carried out within the corporate risk management system and is integrated into the unified Risk Registry. Environmental/climate risk is categorized under operational risks and covers factors such as violations of environmental legislation, waste management issues, and insufficient environmental oversight. Climate risks are regularly reviewed during updates of the risk map, taking into account likelihood and impact magnitude. Mitigation and management measures are developed for key risks.

### Approach to Climate Risk Identification and Assessment

The Company employed a structured and scientifically grounded approach to identifying and assessing climate risks, aligned with international TCFD recommendations, as well as IPCC methodologies, guidance from the European Bank for Reconstruction and Development (EBRD), and the Network for Greening the Financial System (NGFS).

The assessment covers both transition risks (regulatory changes, market and technological shifts, investor ESG expectations) and physical risks (extreme weather events, overheating, floods, power supply disruptions). The analysis considers the geographic distribution and climate vulnerability of Company assets.

Climate risk identification and assessment involved the following elements:

1. Stage one: Assessment of external climate and economic environment:
  - Historical and current climate trends (temperature, precipitation, wind loads);
  - Dynamics of global and regional climate factors;
  - Key demographic, technological, legal, political, and economic drivers;
  - Potential changes in supply chains, service demand, and consumer behavior.
2. Classification of climate risks according to TCFD and climate analysis framework:
  - Physical risks (acute and chronic);
  - Transition risks (regulatory, market, technological, reputational).

<sup>10</sup>Regional climate forecasts (Kazhydromet, World Bank Climate Portal) were used, which allowed for the localization of risks by region and the identification of particularly vulnerable assets, mainly in the southern regions of the country.



### CATEGORIES OF CLIMATE RISKS AND OPPORTUNITIES

| Transition Risks                                                                                                              | Physical Risks                                                            | Opportunities                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>› Policy and Legal</li><li>› Technology</li><li>› Market</li><li>› Reputation</li></ul> | <ul style="list-style-type: none"><li>› Acute</li><li>› Chronic</li></ul> | <ul style="list-style-type: none"><li>› Resource Efficiency</li><li>› Energy Source</li><li>› Products/Services</li><li>› Markets</li><li>› Resilience</li></ul> |

A STEEP analysis was also conducted to identify external factors–Social, Technological, Economic, Environmental, Political–affecting the Company.

### STEEP MODEL OF KEY FACTOR TYPES

| Social                                                                                                                                                                                              | Technology                                                                                                                                    | Economic                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>› Social/Lifestyle Factors</li><li>› Demographic Patterns</li><li>› Health &amp; Education Trends</li><li>› Civil Stability &amp; Tensions</li></ul>          | <ul style="list-style-type: none"><li>› Basic Research Trends</li><li>› Emerging Tech-nologies</li><li>› Technology Diffu-sion</li></ul>      | <ul style="list-style-type: none"><li>› Macroeconomic Trends</li><li>› Microeconomic Trends</li><li>› Regional/National Variations</li><li>› Financial Capital Trends</li><li>› Trade Rules/Protectionism</li></ul> |
| Environment                                                                                                                                                                                         | Political                                                                                                                                     |                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"><li>› Ecosystem Trends Climate/</li><li>› Weather Trends</li><li>› Pollution</li><li>› Recycling and Waste Disposal</li><li>› Energy</li><li>› Land Use</li></ul> | <ul style="list-style-type: none"><li>› Policies</li><li>› Laws/Regulations</li><li>› Court Decisions</li><li>› Political Attitudes</li></ul> |                                                                                                                                                                                                                     |





3. Kazakhtelecom JSC applied a model combination based on the Representative Concentration Pathways (RCP) developed by the Intergovernmental Panel on Climate Change (IPCC), along with the NZE2050 (Net Zero Emissions 2050) scenario. The RCP2.6, RCP4.5, and RCP8.5 scenarios were used to evaluate consequences of various global warming levels and their impact on infrastructure, energy consumption, and operational resilience:

- RCP 2.6 – low-carbon pathway (1.5–2°C goal);
- RCP 4.5 – intermediate emissions level;
- RCP 8.5 – high-emissions scenario with intensified physical consequences.

The NZE2050 scenario focuses on achieving carbon neutrality by 2050 and was used to assess transition risks related to climate policy, technological changes, and market expectations.



1

Assess materiality of climate-related risks:

- › Market and technological changes
- › Reputational risks
- › Political and and capabilities legal risks
- › Physical risks

Assessment of the Company’s current and future climate-related risks. Do these have the potential to be material in the future? Are organizational stakeholders concerned?

3

Evaluate business impacts:

- Impact on:
- › Resource costs
  - › Operating expenses
  - › Revenues
  - › Supply chain
  - › Business interruption
  - › Time

Evaluate the potential effects on the organization’s strategic and financial position under each of the defined scenarios. Identify key sensitivities.

2

Identify and define range of scenarios:

Scenarios that include a range of transitional and physical risks relevant to the Company.

Determining which scenarios and interpretations are appropriate considering the identified impacts. Consider input parameters, assumptions, and analytical choices. What reference scenario(s) should be used?

4

Identify potential responses:

- Responses may include:
- › Change in business model
  - › A change in the composition of the portfolio
  - › Investments in technology and capabilities

Use the results to identify applicable, realistic decisions to manage the identified risks and opportunities. What adjustments to strategic/financial plans would be needed?

Following scenario analysis, an assessment was conducted on potential impacts to the Company’s business model, key assets, and financial performance. The approach included both qualitative and quantitative elements, such as spatial vulnerability analysis, scenario evaluation, and financial modeling based on current climate and economic data.

To assess physical risks, 25 key infrastructure sites were selected, including data centers in major cities and regional centers across Kazakhstan.

These sites represented three segments of the value chain:

- › Infrastructure;
- › Operation;
- › Business processes.

Georeferenced climate data was used by region to account for projected changes in precipitation, temperature, wind loads, and other parameters.

Transition risks were assessed with a focus on potential legislative changes, decarbonization policies, market expectations, and technological developments. Their impact on cost structure and investment plans was considered.

For each climate risk, scale and likelihood of impact were determined, taking into account the scenario, site sensitivity, and reliance on external resources. The model factored in potential increases in electricity costs, need for facility modernization, and adaptation-related expenditures.

As a result, priority zones and assets most vulnerable to climate impacts were identified—primarily those located in the southern regions of Kazakhstan, where risks of overheating and energy disruptions are expected to rise.





ASSETS OF KAZAKHTELECOM JSC MOST EXPOSED TO CLIMATE RISKS

| Category                    | Type    | Indicator/Unit                        | Potentially vulnerable assets of Kazakhtelecom   |                                                                        | Number of assets |
|-----------------------------|---------|---------------------------------------|--------------------------------------------------|------------------------------------------------------------------------|------------------|
| Temperature                 | Chronic | Average daily temperature (°C)        | Regions: Akmola, Almaty, and East Kazakhstan     | Cities: Astana, Kokshetau, Almaty, Taldykorgan, Ust-Kamenogorsk, Semey | 13               |
|                             | Chronic | Annual minimum daily temperature (°C) |                                                  |                                                                        |                  |
|                             | Chronic | Annual maximum daily temperature (°C) |                                                  |                                                                        |                  |
| Precipitation               | Acute   | Snowfall (mm)                         | Regions: Atyrau, Mangystau, and South Kazakhstan | Cities: Atyrau, Aktau, Shymkent                                        | 4                |
|                             | Chronic | Annual precipitation (mm)             |                                                  |                                                                        |                  |
| Flood                       | Acute   | Flood (m)                             | Regions: Atyrau, Mangystau                       | Cities: Atyrau, Aktau                                                  | 2                |
| Extreme weather (wind load) | Chronic | Maximum wind speed (m/s)              | Regions: Zhambyl, South Kazakhstan, and Akmola   | Cities: Taraz, Shymkent, Astana, Kokshetau                             | 9                |

Monitoring and Risk Management

Climate-related risks are integrated into the overall corporate risk management process, ensuring their consistent consideration alongside other strategic and operational factors. The company employs a dual-assessment approach, evaluating both potential losses and strategic opportunities. Response mechanisms are developed within the framework of adaptation and investment policies and include:

- › modernization of facilities in vulnerable regions;
- › introduction of energy-efficient solutions;
- › retrofitting of cooling systems and backup power supply;
- › enhancement of network and data center resilience to physical impacts.

Management decisions are made with regard to the projected impact on expenditures (CAPEX, OPEX), income stability, operational continuity, supply chain resilience, and financing conditions. Priority is given to risks that may significantly affect financial performance or disrupt service provision. Adaptation measures are developed for such risks, including adjustments to investment programs and operational planning.

Monitoring is carried out on an ongoing basis with the involvement of responsible departments. If necessary, information on the escalation of climate risks is promptly communicated to the Management Board and the Board of Directors. The company also monitors changes in the regulatory environment and international requirements, including the potential introduction of carbon regulation in the Republic of Kazakhstan.



CLIMATE CHANGE METRICS AND TARGETS

GRI 305-1, 305-2

Kazakhtelecom JSC prioritizes accurate accounting and comprehensive analysis of greenhouse gas (GHG) emissions, considering them a crucial element in assessing the climate impact of its operations. To achieve its decarbonization and sustainable development goals, the Company has implemented a systematic approach to carbon emissions monitoring and management. Regular monitoring and transparent reporting enable the Company to track performance trends, identify patterns in a timely manner, and make well-informed management decisions aimed at reducing environmental impact.

To respond effectively to climate challenges, the Company has adopted a Low-Carbon Development Program focused on integrating climate aspects into operational activities and the sustainable development strategy.

Methodology for Greenhouse Gas Emissions Calculation

To ensure the accuracy of its calculations, the Company adheres to internationally recognized standards, enabling a more comprehensive accounting of emissions. Scope 1 emissions are calculated in accordance with the Methodology for Calculating Emissions and Removals of Greenhouse Gases, approved by Order No. 9 of the Minister of Ecology and Natural Resources of the Republic of Kazakhstan dated January 17, 2023.

Scope 2 emissions are calculated in accordance with Order No. 260 of the Acting Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated July 19, 2021, “On approval of the list of benchmarks in regulated sectors of the economy.”

In 2021, Kazakhtelecom JSC conducted a baseline inventory of greenhouse gas emissions across its key structural units covering the entire territory of Kazakhstan. The inventory included the following branches:

- › Corporate Business Division
- › Retail Business Division
- › “Network Division” Association
- › Information Technology Division
- › “Telecom-Complect” Directorate
- › “Service Factory”
- › “Academy of Infocommunication Technologies” Directorate
- › Telecommunications and Infrastructure Construction Directorate.

Subsidiaries and affiliated companies were not included within the inventory boundaries. Annual inventories are conducted in line with the GHG Protocol methodology, which includes the definition of operational boundaries and classification of emissions as follows:

- › Scope 1 – Direct emissions: GHG emissions from sources owned or controlled by the Company
- › Scope 2 – Indirect energy emissions: GHG emissions from the generation of purchased electricity, heating, or steam consumed by the Company.

The results of this inventory formed the foundation for the development of the Company’s climate monitoring system and carbon footprint management framework.





### Analysis of Current Scope 1 and Scope 2 GHG Emissions

In 2024, the total volume of GHG emissions (Scope 1 + Scope 2) amounted to 208,436 tons of CO<sub>2</sub>-eq, which is 7.3% lower than the 2023 level (224,857 tons of CO<sub>2</sub>-eq).

Key changes:

- › Scope 1 (Direct emissions) increased from 24,319 tons to 25,787 tons of CO<sub>2</sub>-eq (+6.0%). Carbon dioxide (CO<sub>2</sub>) continued to represent the majority share – 25,246 tons. Minor increases were also recorded for methane (CH<sub>4</sub>) – from 201 to 212 tons, and nitrous oxide (N<sub>2</sub>O) – from 321 to 329 tons.
- › Scope 2 (Indirect energy emissions) decreased from 200,538 tons to 182,648 tons of CO<sub>2</sub>-eq, representing an 8.9% reduction.

Kazakhtelecom JSC actively implements energy efficiency measures aimed at reducing GHG emissions. These initiatives are a key component of the Company’s climate strategy and demonstrate progress toward its decarbonization and sustainable development goals.

#### GRI 305-1

#### VOLUME OF GREENHOUSE GAS EMISSIONS, TONS OF CO<sub>2</sub>-EQ

| Indicator                                  | 2022    | 2023    | 2024    |
|--------------------------------------------|---------|---------|---------|
| Direct GHG emissions (Scope 1), including: | 20,602  | 24,319  | 25,787  |
| – Carbon dioxide (CO <sub>2</sub> )        | 20,172  | 23,797  | 25,246  |
| – Nitrous oxide (N <sub>2</sub> O)         | 251     | 321     | 329     |
| – Methane (CH <sub>4</sub> )               | 178     | 201     | 212     |
| Indirect energy GHG emissions (Scope 2)    | 204,276 | 200,538 | 182,648 |
| Total GHG emissions                        | 224,878 | 224,857 | 208,436 |

GHG emissions data for Scope 1 for 2022 and 2023 were recalculated to align with 2024 reporting in accordance with IPCC methodology. Scope 2 emissions were calculated using the regional method recommended by the GHG Protocol.

208,436

9.1%

tons of CO<sub>2</sub>-eq.

the total volume of GHG emissions (Scope 1 + Scope 2) in 2024

25,787

7.3%

tons of CO<sub>2</sub>-eq.

Scope 1 (Direct emissions)

182,648

9.4%

tons of CO<sub>2</sub>-eq.

Scope 2 (Indirect energy emissions)



#### GRI 305-4

#### CARBON INTENSITY TRENDS, TONS OF CO<sub>2</sub>-EQ PER MILLION KZT

| Indicator                                                   | 2022    | 2023    | 2024    |
|-------------------------------------------------------------|---------|---------|---------|
| GHG emissions (Scopes 1 and 2), tons of CO <sub>2</sub> -eq | 224,878 | 224,857 | 208,436 |
| Revenue of Kazakhtelecom JSC, million KZT                   | 278,111 | 299,725 | 309,484 |
| Carbon intensity, tons of CO <sub>2</sub> -eq / million KZT | 0.81    | 0.75    | 0.67    |





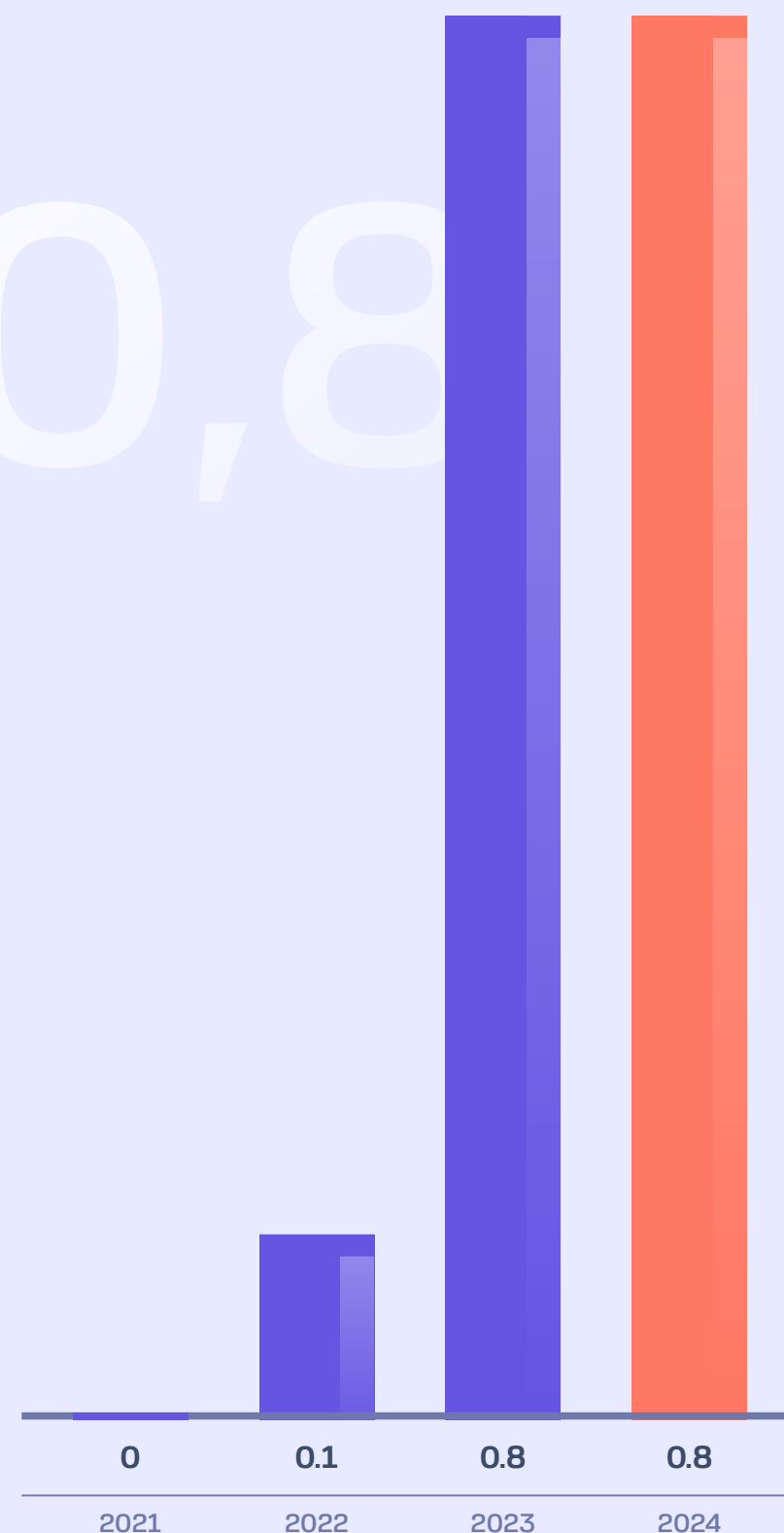
Kazakhtelecom JSC systematically works to improve the energy efficiency of its data centers (DCs), recognizing their critical role in supporting the country's digital infrastructure. A top priority is reducing specific energy consumption while increasing computing capacity and system reliability.

To improve energy efficiency, the Company plans to modernize its DCs, including the installation of new equipment and capacity expansion within existing facilities. Particular attention is paid to the summer season, when the load on cooling systems increases – this period requires enhanced energy efficiency and system reliability to maintain stable IT infrastructure operations.

From 2021 to 2023, the total energy consumption of data centers demonstrated a steady decrease – in 2023, consumption dropped by 8.2% compared to 2021. However, despite the positive trend in energy consumption, the share of renewable energy sources (RES) in the energy mix remains at 0%. This indicates potential for transitioning to more sustainable energy sources and the opportunity to integrate renewable solutions into the data center energy supply architecture.

Kazakhtelecom JSC is considering a phased transition to RES as part of its medium-term climate strategy. This would help reduce the Company's carbon footprint and enhance the resilience of its digital infrastructure.

#### ENERGY EFFICIENCY IN DATA CENTERS OF JSC KAZAKHTELECOM, %



The Company views its current performance indicators as benchmarks for further development. Its climate strategy includes plans to expand energy efficiency programs, implement innovative technological solutions, and reduce carbon intensity over the long term.

#### Targets under the Low-Carbon Development Program and ESG Strategy

Kazakhtelecom JSC sets clear and measurable climate targets aimed at reducing its carbon footprint, increasing energy efficiency, and transitioning to sustainable energy sources. These targets are aligned with international best practices and Kazakhstan's national climate goals and cover both the short- and long-term horizons. They are based on GHG emission calculations across Scopes 1, 2, and, in the future, Scope 3.

##### Long-term target:

- › Achieve carbon neutrality by 2060, in line with the national decarbonization strategy of the Republic of Kazakhstan.

##### Mid-term targets (by 2032):

- › Reduce Scope 1 and Scope 2 GHG emissions by 13% compared to the 2021 baseline.
- › Reduce imported electricity consumption by an average of 1.5–2% annually.
- › Reduce imported thermal energy consumption by an average of 1% annually.
- › Transition to RES: Gradual increase in the share of renewable energy in the energy mix, including the purchase of "green" electricity with I-REC certificates, with a target of 10,700 MWh by 2032.
- › Implement offsetting measures: Build a portfolio of offset projects by 2029.

#### Plans for 2025 and the mid-term period:

- › Revise the Low-Carbon Development Plan through 2032 to reflect updated climate challenges and technological capabilities.
- › Develop a climate engagement plan with counterparties (within the supply chain and Scope 3).
- › Expand public disclosure of climate-related risks in the Annual Report.
- › Conduct Scope 3 assessment (non-energy emissions) and disclose the results publicly.

