



HEADING FOR A GREEN FUTURE

INTEGRATED ANNUAL REPORT 2023
"SAMRUK-ENERGY" JSC

VOLUME 1



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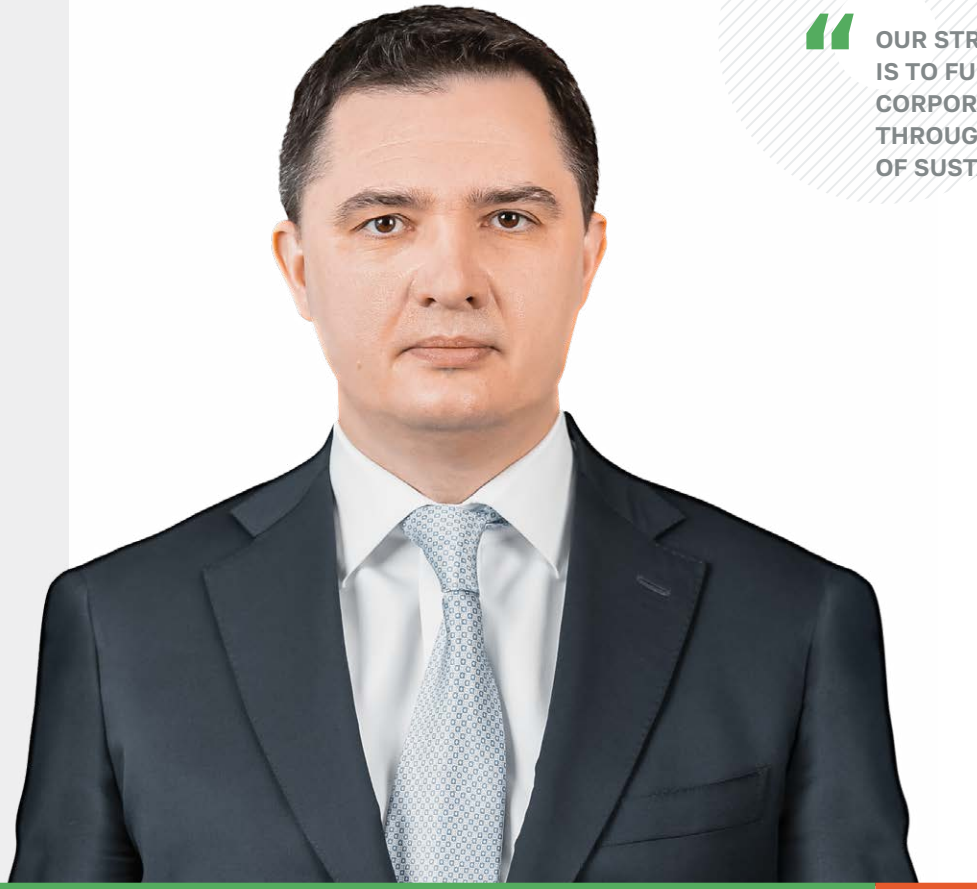
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Message from the Chairman of the Board of Directors

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“ OUR STRATEGIC PRIORITY IS TO FURTHER ENHANCE CORPORATE GOVERNANCE THROUGH THE LENS OF SUSTAINABILITY

Nikolay Kazutin

Chairman of the Board of Directors of Samruk-Energy JSC

We present to your attention the Annual Report containing information on operational and financial results of Samruk-Energy JSC for 2023, as well as work on sustainable development issues.

In 2023, the Board of Directors focused on efficient energy transition, optimization of the organizational structure, improvement of corporate governance, and strategic planning in the field of sustainable development.

Our strategic priority is to further enhance corporate governance through the lens of sustainability. In 2023, we approved the Roadmap for the improvement of the sustainable development management system of Samruk-Energy JSC for 2023-2024, which, among other things, includes measures to improve our activities in environmental and social aspects. These measures were formed based on the results of an independent diagnostics of the Company's corporate governance and the results of the GAP-analysis of the Company's ESG processes.

One of the key areas of the Company's sustainable development is the Energy Transition Program for 2022-2060, aimed at using efficient, resource-saving, and environmentally friendly technologies and measures to achieve carbon neutrality by 2060.

During the reporting period, the number of new RES facilities put into operation increased, resulting in a 32.8% increase in electricity production from renewable energy sources at the enterprises of the Samruk-Energy JSC Group of companies in 2023.

The Company's energy savings in 2023 reached 10,043 thousand GJ, which made it possible to increase electricity generation and significantly reduce the specific consumption of fuel equivalents. During the year, 61 measures to improve energy efficiency in the group of companies of Samruk-Energy JSC were implemented.

Samruk-Green Energy LLP issued I-REC 'green certificates' for the volume of electricity sold in 2022 (19,533 MWh). Such certificates are purchased by companies wishing to reduce their carbon footprint

(Scope 2) and will become an additional source of income for Samruk-Green Energy.

As part of the Group's green finance development, APP JSC registered a sustainable bond program (SLB — sustainable linked bonds) on the Exchange of the International Financial Center 'Astana' for the amount of \$236.9 billion. The raised financing will be used for the reconstruction of Almaty CHPP-3. The bonds have been verified by the Green Finance Center of AIFC.

Another strategic priority of Samruk-Energy JSC is social responsibility. In 2023, a new version of the Personnel Policy of Samruk-Energy JSC for the period from 2023 to 2031 was adopted. This policy is based on strict observance of human rights and includes the principles of openness, responsibility, transparency, legality, and ethics. It ensures equal opportunities for all candidates in the employment process, emphasizing our commitment to fairness and equality in the workplace. Stakeholder requirements and opinions were taken into account in the development of the Personnel Policy.

ESG practices in Samruk-Energy JSC were assessed in 2023. The Company received 24.1 points within the ESG risk rating, which corresponds to Medium Risk level according to the Morningstar Sustainalytics Agency scale and shows good results in the development of sustainable practices development. In addition, Samruk-Energy JSC entered the top 5 best companies in terms of ESG information disclosure level and took 1st place among Kazakhstan electric power companies according to the results of the annual contest of annual reports. We intend to continue improving our performance in this area, making every effort to achieve even better results and improve our contribution to creating a sustainable future.

Samruk-Energy JSC works for the benefit of the country and the development of Kazakhstan's energy sector, being an efficient high-tech operating energy company with high social and environmental responsibility.

I would like to wish the Company further success on the way to achieving its goals!

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Message from the Chairman of the Management Board

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“ SAMRUK-ENERGY JSC REMAINS THE KEY ENERGY COMPANY IN THE COUNTRY, PROVIDING INDUSTRY AND THE POPULATION WITH AFFORDABLE ELECTRICITY AND HEAT AND RELIABLE ENERGY SUPPLY

Kairat Maksutov

Chairman of the Management Board of Samruk-Energy JSC

We are proud to present the annual report of Samruk-Energy JSC, which reflects our development and strengthening of the country's energy system, ensuring sustainable development and responding to the growing needs of our country's economy.

In 2023, the Company continued to demonstrate strong operational and financial results. Electricity generation for 2023 amounted to 35.33 billion kWh, representing more than 31% of the country's total electricity generation. The volume of heat supply for 2023 amounted to 5,794 thousand Gcal. Samruk-Energy JSC remains the key energy company in the country, providing industry and the population with affordable electricity and heat and reliable energy supply.

Revenues for 2023 amounted to KZT 444.96 billion, which exceeds the figure for 2022 by 17% — the growth is associated, among other things, with increased sales of electricity and heat. Net profit increased by 43% to KZT 43.1 billion (profit before minority interest KZT 43.7 billion or 44%). In comparison with peer companies, Samruk-Energy JSC demonstrates a high EBITDA margin — 36% in 2023, which reflects a high level of efficiency in the Company's operations. The financial stability of the Company allows it to fully fulfill its obligations to employees, partners, society, and the state, as well as to maintain investment attractiveness for shareholders.

We continue to transform the energy sector, working on several initiatives to modernize, expand and refurbish power and heat plants and infrastructure.

In 2023, the construction of a new 110/10-10 kW Kokozek substation in Almaty region was completed. The project will solve the problem of the deficit of free transformer capacity in the region and provide electricity to the Industrial Zone in Karasai district. The substation will provide reliable and stable power supply to small and medium-sized businesses and support the construction of social and cultural facilities in the region.

The project to switch to a cyclic-flow technology of coal mining, transportation and loading at the Bo-

gaty open-pit mine increased the capacity of the mine from 32 to 40 million tons of coal per year.

Employees are the highest value and key success factor for the Group of companies of Samruk-Energy JSC, and we are working on the continuous development of the personnel management system. Today the Company employs approximately 17.9 thousand people. We ensure decent labor conditions and social support for employees, and the observance of their rights at all stages of their career path. One of our priorities is personnel development, and a comprehensive training system has been developed for this purpose. Investments in training in 2023 amounted to over KZT 440 million.

We continue to work on a number of projects aimed at reducing our environmental impact. In particular, in 2023, we launched projects to build new combined cycle gas turbines at CHPP-2 and CHPP-3 in Almaty to replace outdated pulverized coal equipment with modern, environmentally friendly combined cycle gas turbines, which will significantly reduce environmental impact.

To develop environmental monitoring, an automated system for monitoring emissions into the environment was introduced in test mode at EGRES-2 JSC. In the future, it is planned to introduce automation of environmental indicators in all major production companies.

In 2024, we expect a significant increase in power generation volumes, thanks to the commissioning of a new power unit and other important projects. In addition, we aim to further strengthen our sustainability initiatives by actively implementing innovative technologies and practices that will help minimize our environmental footprint and improve resource efficiency. These steps not only improve our operational efficiency but also significantly enhance our contribution to conservation, reinforcing our responsibility to future generations.

Thank you for your trust and support. Together we are moving toward a brighter future!

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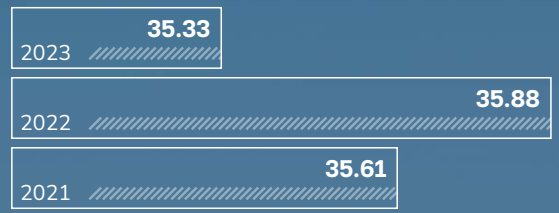




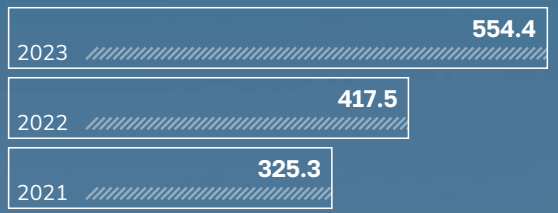
Samruk-Energy 2023 in figures

Production indicators

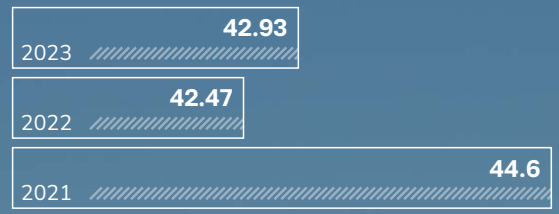
Electricity production volume, billion kWh



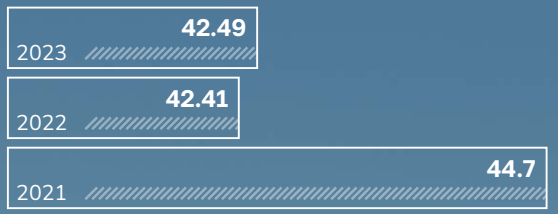
Electricity production by RES facilities, million kWh



Volume of coal production by Bogatyr Komir LLP, million tons

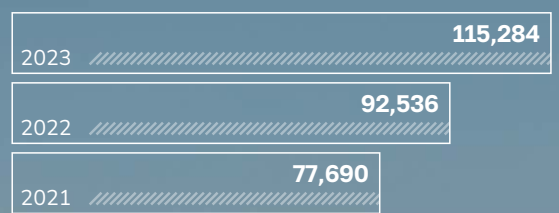


Volume of coal sales, million tons

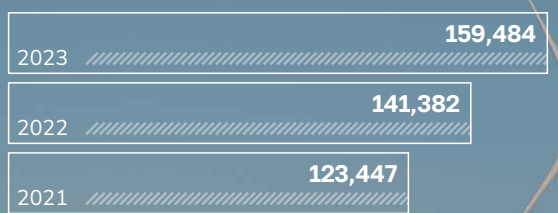


Financial indicators

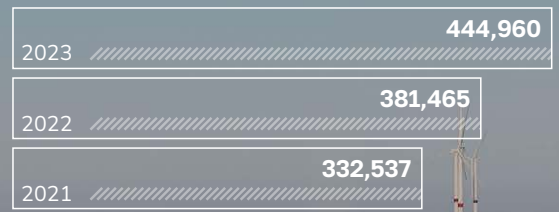
Gross profit, million KZT



EBITDA, million KZT



Income from sales of services, million KZT



Volume of capital investments (including SCR), KZT million, excluding VAT



Sustainable development

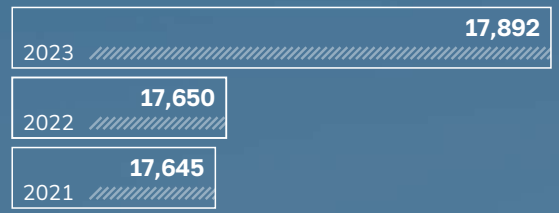
ESG risk rating, scores

24.1

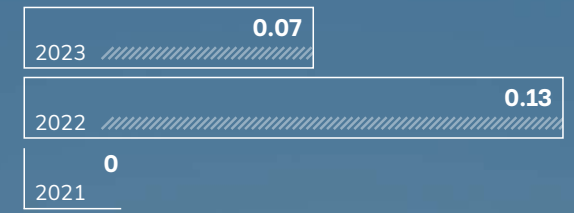
CDP

D

Number of personnel, people



Occupational injury fatality rate



Gross volume of pollutant emissions, thousand tons

354.92

Investments in environmental protection, KZT billion

24.434

Corporate governance

Corporate governance rating

BB

Number of meetings of the Board of Directors

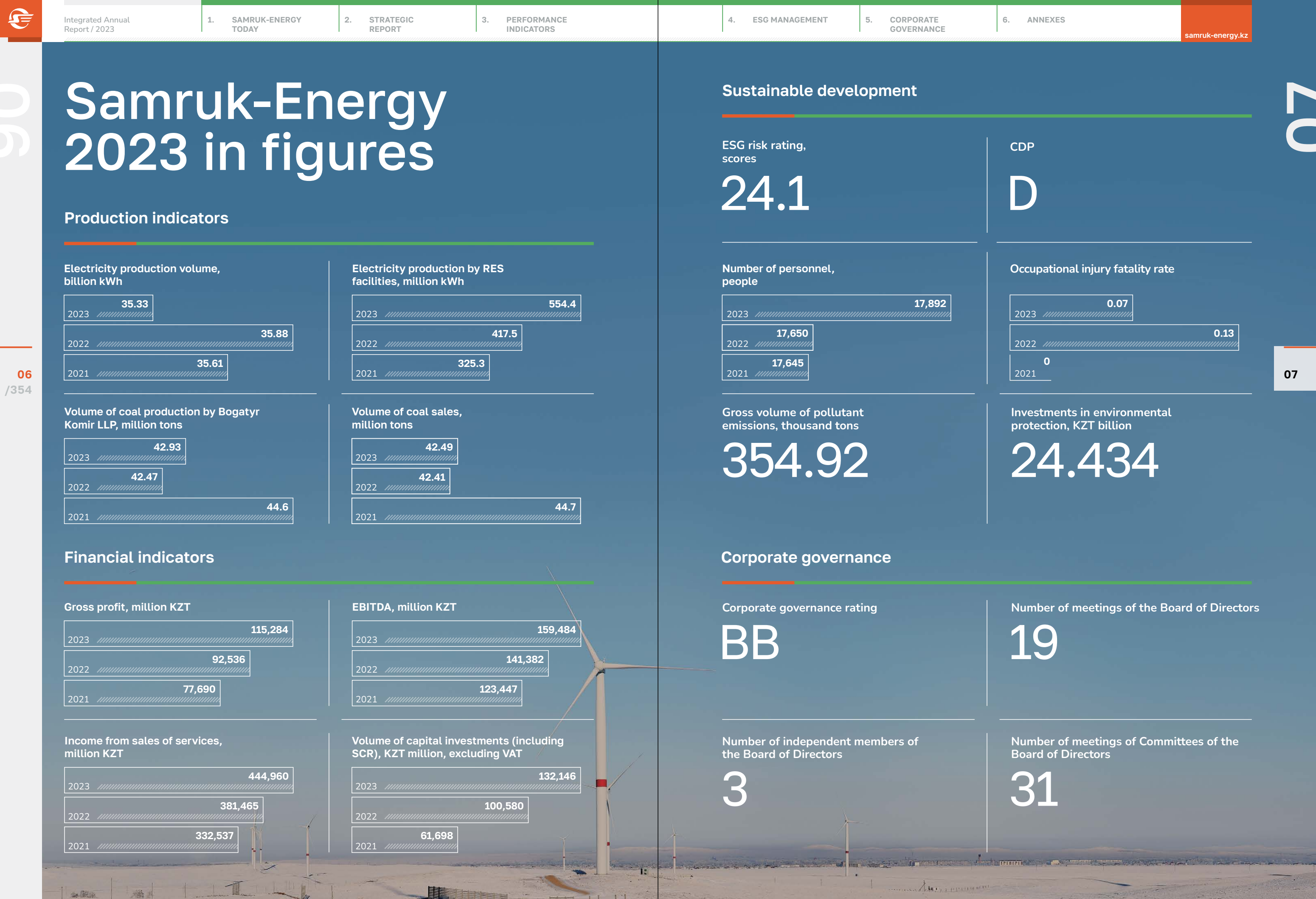
19

Number of independent members of the Board of Directors

3

Number of meetings of Committees of the Board of Directors

31





Key events of Samruk-Energy JSC in 2023

February 16

Samruk-Green Energy LLP registered its solar power plant in the ECOJER Association database to obtain I-REC green electricity certificates.

May 10

Samruk-Green Energy LLP issued I-REC certificates for the volume of electricity sold in 2022 (19.533 MWh).

May 11

Samruk-Energy JSC has received international certificates ISO 9001 "Quality Management System", ISO 14001 "Environmental Management System", ISO 45001 "Occupational Health and Safety Management System", ISO 50001 "Energy Management System", and ISO 37001 "Bribery Management System".

17 March

As part of environmental monitoring, for the first time in test mode, an automated system for monitoring emissions into the environment (AMS) was introduced at EGRES-2 JSC. Within the framework of this project, it is planned to introduce automation of environmental indicators in all major production companies in the next years.

July 27

In 2023 on the Carbon Disclosure Project (CDP) site, the Company disclosed information for 2022 in two areas: Climate Change and Water Security. The results of the first year of disclosure are rated 'D'.

June 06

A loan agreement was signed between APP JSC and Development Bank of Kazakhstan on the project "Modernization of Almaty CHPP-2 with minimization of environmental impact".

June 09

A loan agreement was signed between APP JSC and the Asian Development Bank for the amount not exceeding KZT 98 billion for the implementation of the project on gasification of Almaty CHPP-2.

June 14

Kairat Maksutov was appointed Chairman of the Management Board of Samruk-Kazyna JSC by the decision of the Management Board of Samruk-Energy JSC.

September 14

II Youth Forum of Samruk-Energy JSC was held.

September 28

For the first time in Central Asia, the bond program (SLB — sustainable linked bonds) of APP JSC was registered on the Exchange of the International Financial Center Astana for the amount of KZT 236.9 billion within the framework of the project 'Reconstruction of Almaty CHPP-3', with verification from the Green Finance Center of the AIFC.

20 August

The Samruk-Energy JSC team won 2nd place at the VIII Spartakiade dedicated to the 15th anniversary of Samruk-Kazyna JSC.

August 21 to 24

Samruk-Energy JSC took part in strategic command and staff military exercises 'Batyl toyтарыs-2023', under the leadership of the President of the Republic of Kazakhstan, Supreme Commander-in-Chief of the Armed Forces Kasym-Jomart Tokayev at the training ground "Bereg". Kapchagai HPP named after Sh. Chokin — Samruk-Energy JSC, together with Alatau Zharyk Company JSC, APP JSC participated in the Zher-2023 Republican Command and Staff Exercises.

November 06

Debt Subordination and Support Agreement concluded between EBRD, Samruk-Energy JSC and APP JSC.

November 13

Debt Subordination and Support Agreement concluded between ADB, Samruk-Energy JSC and APP JSC on the project 'Modernization of Almaty CHPP-2 with minimization of environmental impact'.

October 07

110/10 kV Kokozyk substation with connection to 110 kV switchgear-110 kV of 220 kV Kaskelen substation of Karasaysky district of Almaty region was put into operation.

October 20

Fitch Ratings affirmed the Company's long-term credit ratings in foreign and local currency at 'BB+' and revised its assessment of the company's government support from 'strong' to 'very strong'. The outlook is 'Stable'.

November 30

A project Agreement between CDB, Samruk-Energy JSC and APP JSC on the project 'Modernization of Almaty CHPP-2 with minimization of environmental impact' was concluded.

An agreement on joint realization of the project of reconstruction of Almaty CHPP-3 was concluded between APP JSC and Eurasian Development Bank.

December 14

As a result of a comprehensive study of Samruk-Energy JSC activity efficiency (ecology, social responsibility, corporate governance — ESG) for 2022, the International Rating Agency Morningstar Sustainalytics assigned ESG Risk Rating — 24.1 points, which corresponds to Medium Risk level according to the Sustainalytics Agency scale.



Samruk-Energy today

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Company portrait

GRI 2-1

SAMRUK-ENERGY JOINT STOCK COMPANY IS THE LARGEST DIVERSIFIED ENERGY HOLDING OF THE REPUBLIC OF KAZAKHSTAN, SUCCESSFULLY INTEGRATED INTO THE INTERNATIONAL ENERGY BALANCE, CREATING VALUE FOR ITS SHAREHOLDERS AND AIMING AT THE FORMATION OF A HIGHLY EFFICIENT ENERGY SUPPLY SYSTEM AND THE IMPLEMENTATION OF THE LONG-TERM STATE POLICY ON THE MODERNIZATION OF EXISTING FACILITIES AND THE COMMISSIONING OF NEW GENERATING CAPACITIES IN ORDER TO ENSURE SUSTAINABLE DEVELOPMENT OF ALL SECTORS OF THE COUNTRY.



The sole shareholder of Samruk-Energy JSC is Samruk-Kazyna JSC¹



The Group of companies of Samruk-Energy JSC is located and operates in the territory of the Republic of Kazakhstan.



The address of the main office of Samruk-Energy JSC is: 15A Kabanbay Batyr Avenue, Block B, Q Business Center, Astana, 010000.

more information about the Company: <https://www.samruk-energy.kz>



GRI 2-6

Types of activity of Samruk-Energy JSC

The main activities of the Group of companies of Samruk-Energy JSC are production of electricity, heat and hot water on the basis of traditional energy using coal, hydrocarbons and water resources and sale of the produced products to the population and industrial enterprises, transportation and distribution of electricity, construction of hydroelectric power plants and thermal power plants, construction and operation of renewable sources of electricity, extraction and sale of coal, as well as lease of property complexes for hydroelectric power plants.

Main activities of Samruk-Energy JSC:

- management of energy assets in the Republic of Kazakhstan — extraction and sale of coal, generation, transmission, distribution and sale of heat and electricity;
- modernization of existing facilities and construction of new generating capacities;
- introduction of new technologies in the energy sector of the Republic of Kazakhstan.

Main products and services:

- generation of heat and electricity;
- transmission and distribution of heat and electricity;
- extraction of thermal coal.

Key sales markets:

- Entities of the wholesale electricity market purchase electricity from the Unified Purchaser of Electricity;
- The Unified Purchaser of Electricity is a legal entity with 100% state participation, determined by the authorized body, which performs centralized purchase and centralized sale of planned volumes of electricity;
- The mined thermal coal is sold on the domestic market of the Republic of Kazakhstan and exported to Russia.

Development history

In order to develop and implement a long-term state policy on the modernization of existing facilities and the commissioning of new generating capacities, Samruk-Energy Joint Stock Company (Samruk-Energy JSC) was established on April 18, 2007, by the decision of the General Meeting of Founders. The founders of Samruk-Energy JSC at the time of its establishment were Kazakhstan Holding for the Management of State Assets Samruk JSC and KazTransGas JSC. Samruk-Energy JSC was registered in Almaty on May 10, 2007.

On November 3, 2008, as a result of the reorganization through the merger of Kazakhstan Holding for Management of State Assets Samruk JSC and Sustainable Development Fund Kazyna JSC, the National Welfare Fund Samruk-Kazyna JSC became the shareholder of Samruk-Energy JSC, becoming the legal successor of Kazakhstan Holding for the Management of State Assets Samruk JSC.

Assets of Samruk-Energy JSC

The Group of companies of Samruk-Energy JSC includes the largest generating companies of Kazakhstan, including facilities of national importance — Ekibastuz GRES-1 and 2, as well as plants producing electricity and heat of regional importance in the Almaty region. It also includes the main hydroelectric power plants of the Republic of Kazakhstan, which are part of the Irtysh HPP cascade, and hydroelectric power plants in the southern regions of the country, such as Shardara HPP and Moynak HPP, as well as renewable energy source (RES) facilities.

The assets of Samruk-Energy JSC also include the regional distribution network and sales company of the Almaty region, as well as the largest coal mining enterprise in the Republic of Kazakhstan — Bogatyr Komir LLP. The enterprise supplies coal both to generating facilities of the Group of companies Samruk-Energy JSC and to third parties in Kazakhstan and Russia. More information on the asset structure of Samruk-Energy JSC can be found on page 19 of the report.

¹ Resolution of the General Meeting of Shareholders dated May 10, 2007.



Mission, values and principles

Mission

CREATE VALUE FOR SHAREHOLDERS, MEET GROWING DEMAND THROUGH RELIABLE ENERGY SUPPLIES, HIGH-TECH DEVELOPMENT, AND ENVIRONMENTAL FRIENDLINESS, GUIDED BY THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT.



Values



MENTORING

Mentoring — providing assistance and support, building trusting relationships with all stakeholders, preserving, and transferring accumulated experience.



RELIABILITY

Reliability — ensuring uninterrupted and high-quality work, recognizing responsibility to future generations in environmental and ecological issues, creating safe, comfortable and competitive working conditions, and being faithful to the commitments made.



FAIRNESS

Fairness — objective assessment and fairness in resolving any issues, equal requirements and opportunities, and providing the opportunity to speak out and be heard.



PROFESSIONALISM

Professionalism — a conscientious attitude to the tasks set, constant improvement, and the implementation of various methods and approaches to increase efficiency.

Principles



PROFESSIONALISM

Professionalism — high professionalism is the key to our success. We strive to create all conditions for comfortable work and the realization of the potential of each employee of the Company, providing equal opportunities for personal and professional development.



COMPLIANCE

Compliance — following the rules allows us to be a team of professionals united by common goals, behavioral culture and traditions.



SAFETY

Safety — we generate energy and strive to do so in a safe manner.



RISK-ORIENTED APPROACH

Risk-oriented approach — we recognize the importance of risk management and take measures to timely identify and mitigate of risks.



SOCIAL RESPONSIBILITY

Social responsibility — we strive to conduct our operations in an environmentally friendly manner and respect the communities with which we interact.



TRANSPARENCY

Transparency — long-term cooperation, dialog, respect for rights, and a balance between the interests of the Company and stakeholders.



Business model

Capitals



FINANCIAL CAPITAL

Efficient use and management of equity and debt capital.



PRODUCTION CAPITAL

Development and expansion of generating capacities and energy infrastructure.



HUMAN CAPITAL

Staffing of the best industry professionals and an efficient and fair personnel policy.

Operation model

The total installed capacity of Samruk-Energy JSC power plants is

25.5% of the total installed capacity of power plants of the Republic of Kazakhstan

790 MW
HPP

5,328 MW
TPP



MINING AND SALE OF COAL

42.93 million tons coal production volume

32.72 million tons sold on the domestic market

9.77 million tons exported to Russia

38.1% of total coal production in Kazakhstan

62% of the total volume of coal produced in the Ekibastuz coal basin



ELECTRICITY GENERATION

35.33 billion kWh volume of electricity production

31.3% in the total volume of electricity production in Kazakhstan

554.4 million kWh volume of electricity production by RES facilities

Installed capacity of the enterprises of the Group of Companies Samruk-Energy JSC

6,275.1 MW

157.1 MW
RES (Cascade of HPPs, SPP and WPP)



ELECTRICITY TRANSMISSION AND DISTRIBUTION

9,954.07 MW capacity of substations

30,388.63 km length of 220-0.4 kV overhead and cable transmission lines

7,230 substations

8,686 million kWh electricity transmission volumes



SALE OF HEAT AND ELECTRICITY

34.7 billion kWh of electricity sold

576.8 million kWh of electricity exported to the Kyrgyz Republic

5.58 million Gcal volume of heat energy supply by APP JSC

Impact

FINANCIAL IMPACT

43.08 billion KZT

annual profit attributable to the shareholders of the Group of companies of Samruk-Energy JSC

92.8 billion KZT operating profit

1.71 debt/EBITDA (ratio)

ENVIRONMENTAL IMPACT

4.4 billion KZT Environmental protection costs

8.4 billion KZT environmental payments

2.8 KZT billion reserve for environmental liabilities

ECONOMIC IMPACT

54.1 billion KZT taxes

2.041 billion KZT dividends

14.476 billion KZT remuneration on loans

705.6 billion KZT amount of goods and services purchased from domestic suppliers



Strategic goals of Samruk-Energy JSC



Reduction of net carbon footprint with measures and offset carbon units by 2060 — 100%



13-fold increase in the volume of clean electricity compared to 2021 by 2060



Greening of the territory (Forest-climatic projects) by 2060 — 1,800 ha

KEY INDICATORS OF THE BUSINESS PLAN OF SAMRUK-ENERGY JSC

Name			Fact		Forecast
	2021	2022	2023	2024	2025
Tier 1 Strategic KPIs for PCs					
Tier 1 strategic and analytical KPIs for PCs					
Net income, million KZT	15,046	30,132	43,080	79,330	92,081
Debt/EBITDA (ratio)	2.41	1.90	1.71	2.62	4.00
ROACE, %	4.23	5.90	6.45	8.92	7.69
Net asset value (NAV), million KZT	412,899	442,753	485,969	549,723	641,450
ROI, coefficient	-	-12%	-	-	-
FCF**, KZT billion		42.2	37.0	4.6	27.8
ESG rating**, score		-	24.1	-1	-1
Net carbon footprint reduction**, %		-3%	-1%***	1%	3%
Share of in-country value in goods purchases**, %		-	66%	75%	-
Share of in-country value in procurement of works and services **, %		-	92%	94.0%	-
Leadership Behavioral Safety Audit**		6,274	7,186	5,300	5400
Industry KPIs					
Electricity market share in Kazakhstan	31.11%	31.79%	31.31%	31.90%	31.74%
LTIFR	0.19	0.30	0.33	0.27	0.26
Key national indicators					
Labor productivity, thousand KZT/person	35,700*	13,273	14,872	63,086	68,615
Investments in fixed capital, thousand KZT	61,698	100,580	132,146	272,700	754,354
Volume of electricity generation from renewable energy sources, thousand kWh	165,048	417,371	554,379	571,017	570,987
Gross inflow of foreign direct investment, billion USD	0.006	0.043	0.014	0.356	0.526

* according to the 2021 methodology.

** KPI data introduced in 2023.

*** estimated value equal to the plan is indicated. The actual value is calculated after receiving verified greenhouse gas inventory reports (according to the Environmental Code of the Republic of Kazakhstan, by April 1 for the previous calendar year).

Structure of the Group of companies of Samruk-Energy JSC

GRI 2-6

Changes in the structure of the Group of companies of Samruk-Energy JSC

In 2023, within the framework of the creation of a 'green' company Qazaq Green Power PLC, within the structure of the Group of companies of Samruk-Energy JSC, the Company completed the transfer of 100% of the participation interest of Kazhydrotechnergo LLP and 25% of the participation interest of Energy of Semirechye LLP to the authorized capital of Qazaq Green Power PLC.

At the same time, within the framework of the implementation of RES projects, the Company took measures to establish a joint venture Altyn Dala Energy Ltd. (25%).

Within the framework of execution of the instruction of the Head of State of the Republic of Kazakhstan No. 20-01-7.11 dated May 11, 2020 'On the situation with the coronavirus and anti-crisis measures' concerning the transfer of certain structures owned by national companies from foreign jurisdictions to the Astana International Financial Center, Samruk-Energy JSC is taking measures to transfer Forum Muider B. Muider B. V. (Netherlands) from foreign jurisdiction to the jurisdiction of the Republic of Kazakhstan, by joining Forum Muider B.V. to Forum Muider Limited (Cyprus) and then redomiciling of Forum Muider Limited to the Astana International Financial Center.





Asset structure of the Group of companies Samruk-Energy JSC

GRI 2-1



Coal companies

Forum Muider Limited
50%

Forum Muider B.V.
50%



Generation companies

APP JSC
100%

Ekibastuz GRES-1 LLP
100%

Ekibastuz GRES-2 LLP
50%

Balkhash TTP JSC
100%



Distribution companies

Almatyenergosbyt LLP
100%

Alatau Zharyk Company
97.4%



Hydropower companies

Shardarinskaya HPP JSC
100%

Shulbinskaya HPP JSC
92.14%

Ust-Kamenogorskaya HPP JSC
89.99%

Bukhtarminskaya HPP
96.32%



Renewables companies

Energy Solutions Center LLP
100%

Ereymentau Wind Power LLP
100%

Qazaq Green Power PLC
100%

Subsidiaries

Second-tier subsidiaries

Great-granddaughter companies

Bogatyr Komir LLP
100%

Resursenergougol LLC
100%

Moynak HPP JSC
100%

Energiya Semirechiya LLP
25%

First wind power plant LLP
100%

Samruk-Green Energy LLP
100%

Altyn Dala Energy L.t.d.
25%

Kazgidrotekhenenergo LLP
100%

Teploenergomash LLP
95%



Strategic report

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Overview of the global electricity and coal market

Global electricity consumption

Electricity is becoming increasingly important in life and the economy, especially with the spread of technologies based on it, such as electric vehicles and heat pumps.

According to the International Energy Community, global electricity demand will increase by 2.2% in 2023, reaching around 28,000 TWh, slightly lower than the 2.4% growth recorded in 2022. This growth is split across several regions, with the largest share of growth coming from China, followed by significant contributions from India and Southeast Asia².

2023 was marked by the persistent impact of the energy crisis, exacerbated by the conflict in Ukraine and heightened geopolitical tensions due to the war between Israel and Palestine, which had a significant impact on the global economy³.

High inflation, higher interest rates and increased debt obligations have created severe economic constraints at a global level. Supply chain issues and rising costs continued to exacerbate the situation in the energy sector. In addition, it is worth noting that the summer of 2023 was one of the hottest summers on record, which also impacted electricity consumption⁴.

Emerging markets showed a marked increase in electricity demand, supported by economic development and the electrification of residential and transportation sectors. The main growth drivers were also energy-intensive data centers and technologies such as artificial intelligence and cryptocurrencies, whose demand is expected to double by 2026. Meanwhile, developed economies showed a decline in demand: in Europe due to the recession and lower manufacturing activity, in the US due to mild weather, and in Japan due to energy conservation measures and a slowdown in production despite a hot summer.

Forecast for the future period:

Electricity demand growth is forecast to accelerate to a higher level of 3.4%, with an expected total of around 30,700 TWh. This growth largely continues the trend established in 2023, with China, India and South East Asia making significant contributions to this increase. The distribution of electricity consumption growth among these regions indicates changing global consumption trends, emphasizing the important role of emerging markets in the international energy sphere.

²Electricity 2024.

³Highlights of global energy market in 2023.

⁴2023 Summer Reliability Assessment.

In 2023, global electricity demand will increase by 2.2% reaching around

28,000
TWh

Electricity demand growth is forecast to accelerate to a higher level of 3.4%, with an expected total of around

30,700
TWh

Coal market

Coal is the largest source of electricity and the power generation industry is the largest consumer of coal, accounting for two-thirds of the market.

In 2023, the global coal market saw a balancing trend. Coal prices fell early in the year, as a result of a marked increase in coal production in China and India. This increase in production helped to increase coal supply globally, stabilizing market prices⁵.

China dominates the coal market with more than 55% of global demand and more than half of global production, although production growth slowed in 2023. India also plays a significant role, occupying more than 10% of global coal demand. In turn, developing and rising economies account for 15% of global demand, although their share has shown a declining trend in recent years⁶.

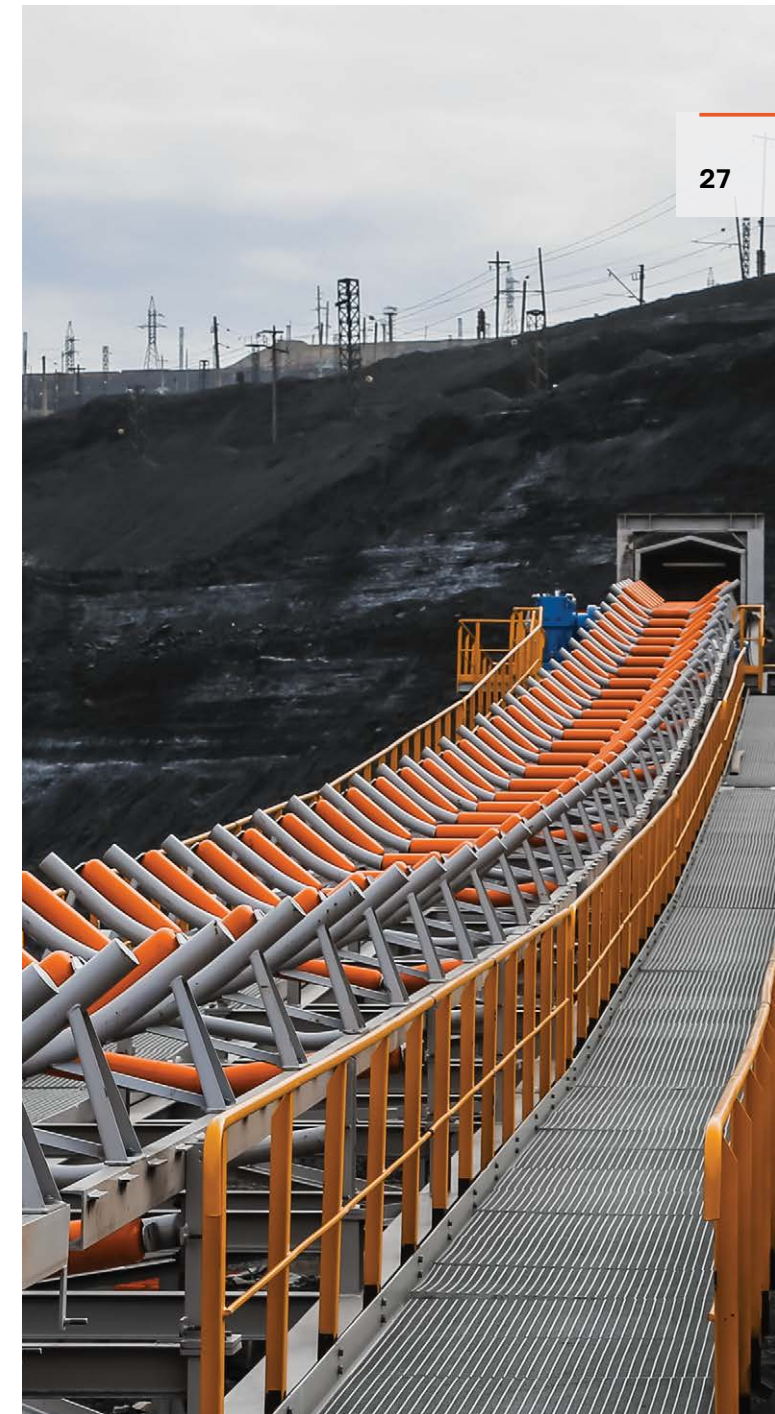
Coal demand in developed economies has fallen by almost half over the same period. The United States accounts for about 5% of global coal consumption and the European Union about 3%.

Forecast for the future period:

No significant changes are foreseen in the thermal coal market and there are no preconditions for shortages. This will remain unchanged provided that China maintains a stable high coal production and imports.

⁵Coal 2023. Analysis and forecast to 2026.

⁶Accelerating Just Transitions for the Coal Sector.





Overview of the electricity and coal market in Kazakhstan

The power industry of the Republic of Kazakhstan operates under the conditions of the Unified Electric Power System (UES), which is a set of power plants, power transmission lines and substations providing reliable and quality power supply to consumers in the Republic.

The energy sector is regulated by an authorized state body represented by the Ministry of Energy of the Republic of Kazakhstan⁷, including in the field of RES⁸. The state policy in the sphere of natural monopolies in the part of regulated services for transmission of electric energy, production, transmission, distribution and supply of heat energy is implemented by the Committee for Regulation of Natural Monopolies under the Ministry of National Economy of the Republic of Kazakhstan⁹. The Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan manages the coal industry¹⁰.

In 2023, electricity generation in the UES was predominantly from coal-fired thermal power plants (TPPs)

71.2%

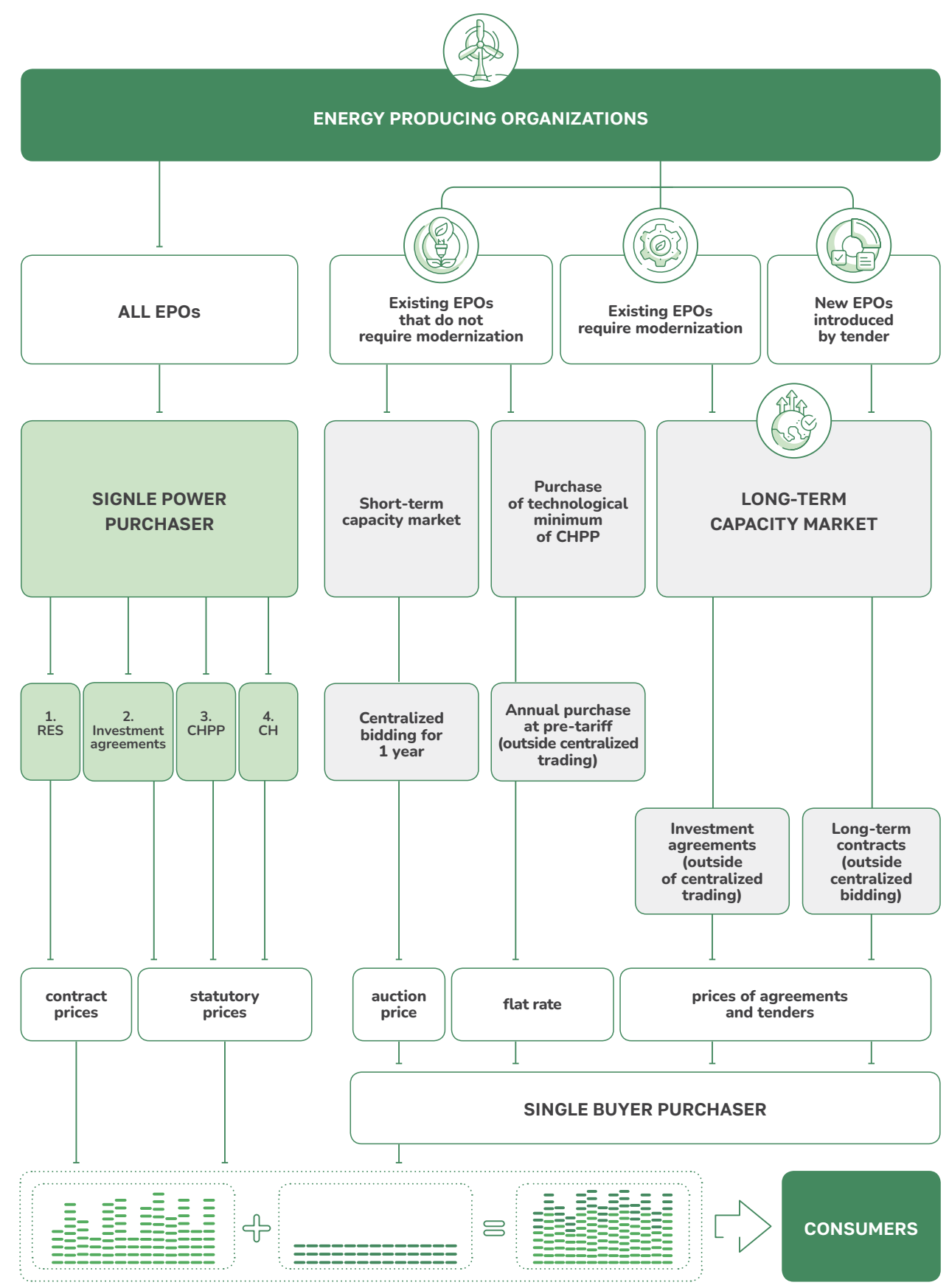
Electricity consumption in the Republic of Kazakhstan

115,068

billion kWh



Electricity and capacity market of Kazakhstan



⁷ Law of the Republic of Kazakhstan 'On Electric Power Industry' No. 588-II dated July 9, 2004.

⁸ Law of the Republic of Kazakhstan "On Supporting the Use of Renewable Energy Sources" No. 165-IV dated July 4, 2009.

⁹ Law of the Republic of Kazakhstan "On Natural Monopolies" No. 204-VI dated December 27, 2018.

¹⁰ The Code of the Republic of Kazakhstan "On Subsoil and Subsoil Use" No. 125-VI dated December 27, 2017.



Electricity balance

In 2023, electricity generation in the UES was predominantly from coal-fired thermal power plants (TPPs) — 71.2%.

As of January 1, 2024, the installed capacity of power plants in the Republic of Kazakhstan was 24,641.9 MW, and the available capacity was 20,428.4 MW.

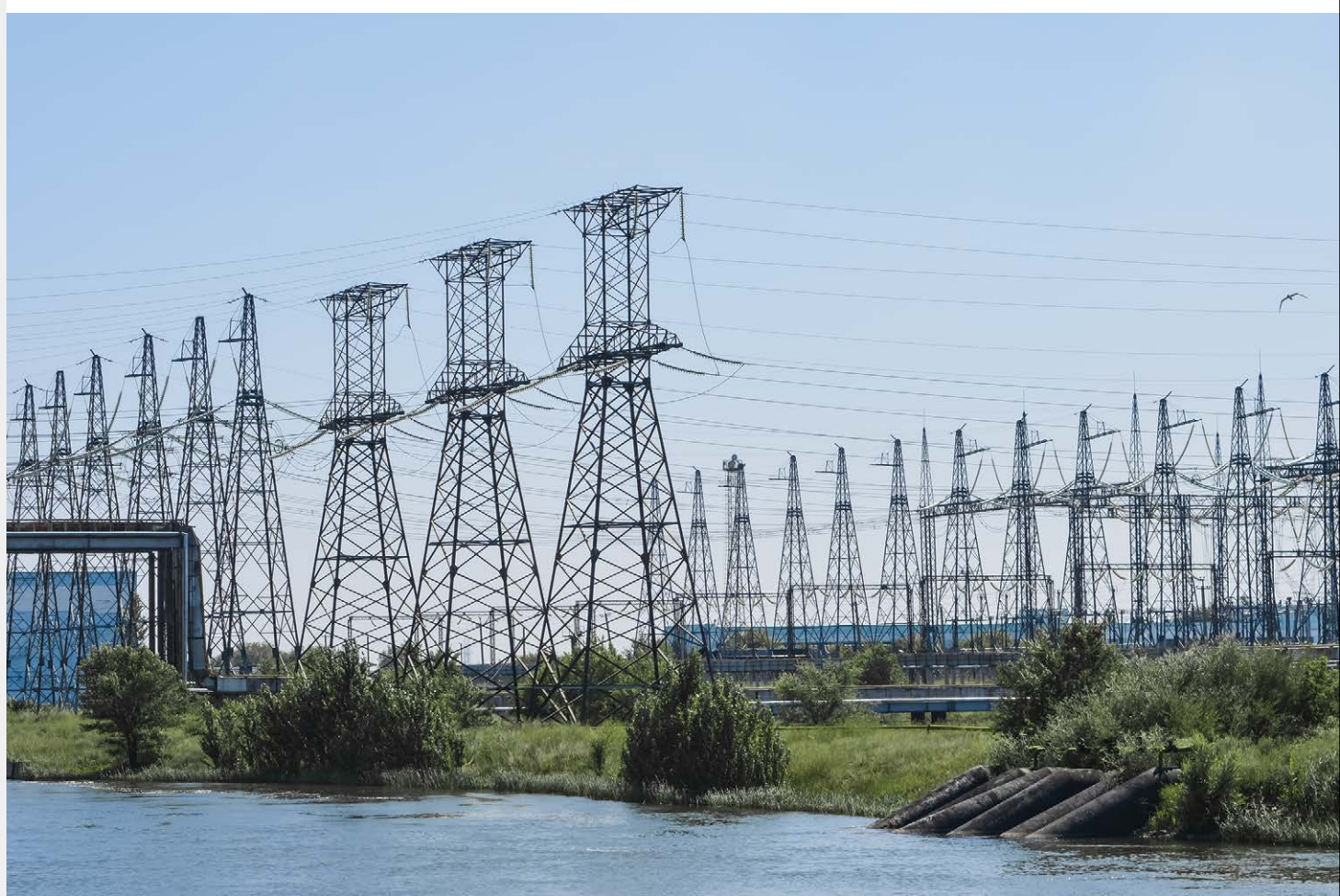
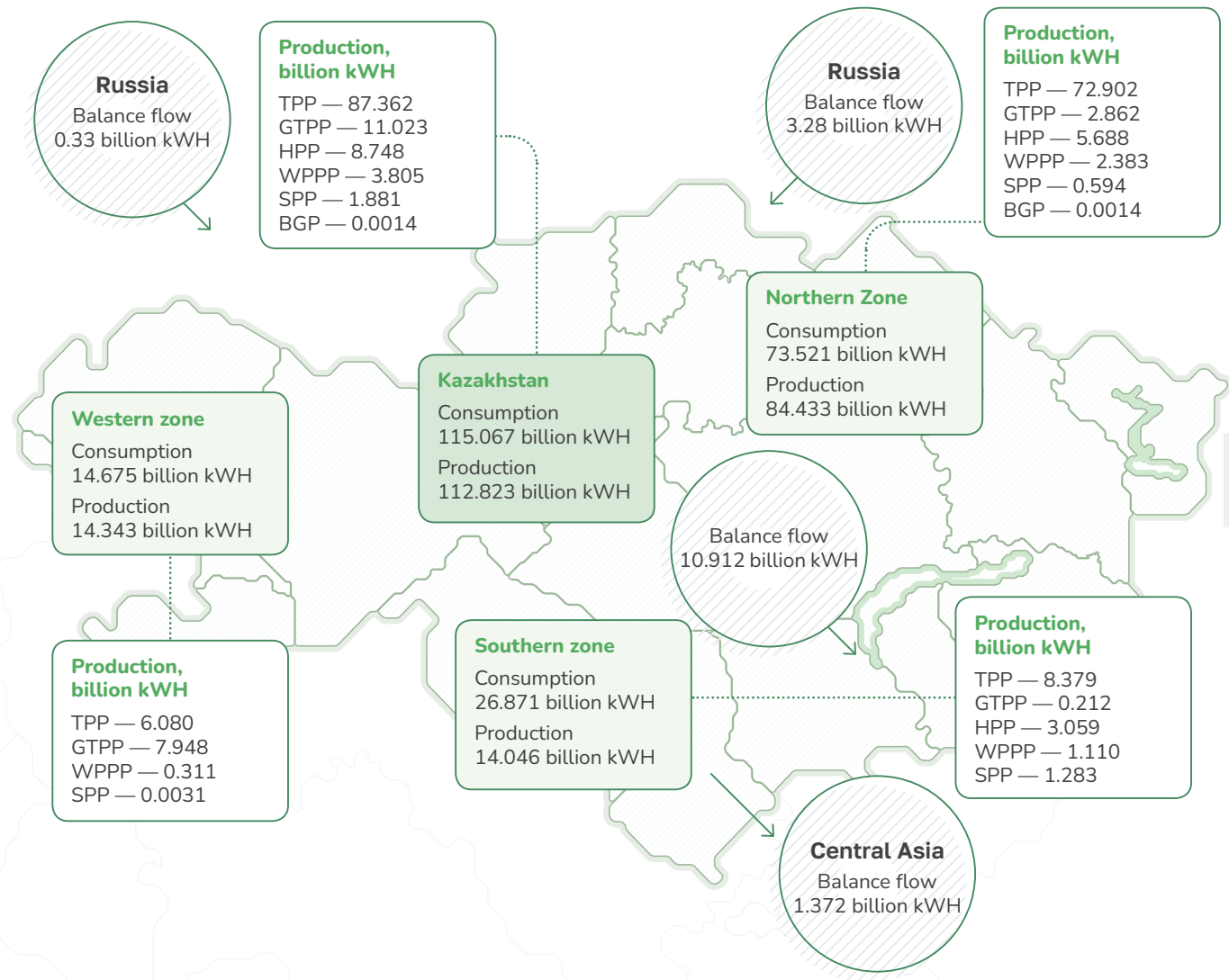
According to the data of the System Operator, from January to December 2023, Kazakhstan's power plants generated 112.82 billion kWh of electricity, which is 0.04% (42.8 thousand kWh) less than in 2022.

Electricity generation/consumption balance, billion kWh

Electricity indicators	2021	2022	2023	Δ 2023/2022, %
Electricity generation, including:	114.45	112.86	112.82	-0.04
Thermal power plants (TPPs)	91.16	88.62	87.36	-1.4
Gas turbine power plants (GTTP)	10.70	10.94	11.02	0.73
Hydropower plants (HPP)	9.18	9.19	8.75	-4.78
Wind power plants (WPP)	1.76	2.36	3.80	61
Solar Power Plants (SPP)	1.64	1.75	1.89	108
Biogas plants (BGP)	0.3	0.04	0.01	25
Electricity consumption	113.89	112.94	115.07	1.9
Balance-flow "+" deficit, "-" surplus, including:	-0.56	0.79	2.24	283.5
Russia	0.46	0.47	3.62	770
Central Asia	-1.02	-0.40	-1.37	342.5

The UES of the Republic of Kazakhstan is conditionally divided into three zones — Northern, Southern and Western zones.

Unified electric power system of the Republic of Kazakhstan



In the Northern Zone, the location of the main coal deposits and hydropower resources, 74.8% (84.4 billion kWh) of the total electricity generated in the country in 2023 was produced. The Northern Surplus Zone covers electricity deficits in the Southern Zone and also provides Kazakhstan's export potential.

In 2023, electricity production in the Southern Zone amounted to 12.4% (14 billion kWh) of the total volume. Electricity deficit in the Southern Zone was covered by supplies from the Northern Zone.

In the reporting period, the Western Zone produced — 12.6% (14,3 billion kWh) of the total share of electricity produced. The peculiarity of this zone is the absence of connections between its power grids and those of the Northern and Southern zones of the UES of Kazakhstan.

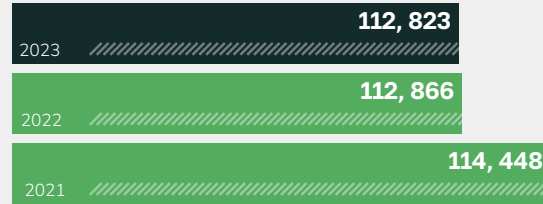
According to the data of the System Operator, in January-December 2023, the power plants of the Republic of Kazakhstan generated 112,823.1 million kWh of electricity, which is 42.8 thousand kWh or 0.04% less than the same period in 2022. A decrease in generation was observed in the western and southern zones of UES of Kazakhstan.

From January to December 2023, electricity generation in Aktobe, Almaty, Abay, Zhetysay, Karaganda, Kostanay, Mangistau, North Kazakhstan and Turkestan regions increased significantly compared to the same period of 2022.

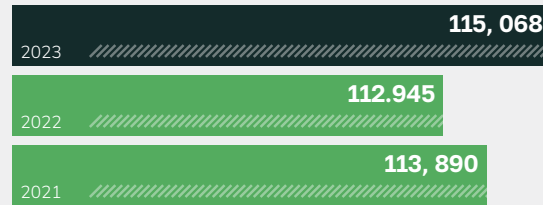
At the same time, a decrease in electricity production was observed in Akmola, Atyrau, East Kazakhstan, Zhambyl, West Kazakhstan, Pavlodar, Ulytau and Kyzylorda regions.



Electricity production in the Republic of Kazakhstan, billion kWh



Electricity consumption in the Republic of Kazakhstan, billion kWh



According to the data of the System Operator, from January to December 2023, there was an increase in electricity consumption in the Republic compared to the same period in 2022 by 2,123.07 million kWh or 1.88%. Thus, in the Northern and Southern zones of the Republic, consumption increased by 1.23% and 4.23%, respectively.

From January to December 2023, there was a decrease in electricity consumption by consumers of energy holdings and large energy producing organizations by 1,532 million kWh or 4%. At the same time, from January to December 2023, there was an increase in electricity consumption by companies of Samruk-Energy JSC by 306.1 million kWh or by 4% compared to the same period in 2022.

From January to December 2023, electricity consumption by large consumers decreased by 437.4 million kWh or 1.2% compared to the same period in 2022.

Export and import of electricity

In 2023, electricity exports to Russia increased by 5.5% compared to 2022, while electricity imports from Russia also increased by 37.3%.

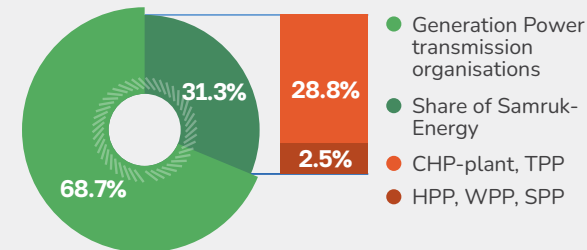
Electricity export/import of the Republic of Kazakhstan, billion kWh

Regions	2022	2023	Δ 2023/2022, %
Exports of Kazakhstan:	-1.64	-1.73	5.5%
to Russia	-1.41	-1.15	-18.4%
Central Asian countries	-0.22	-0.57	159.1%
Kazakhstan's imports:	1.66	2.28	37.3%
from Russia	1.36	2.21	62.5%
Balance-flow '+' deficit, '-' surplus	0.02	0.55	2,650%

Position of Samruk-Energy JSC in the electricity market of Kazakhstan

Electricity production

Share of Samruk-Energy JSC in total electricity generation in the Republic of Kazakhstan for 2023



In 2023, the share of Samruk-Energy JSC in total electricity generation in the country decreased by 0.5% compared to 2022 and amounted to

31.3%

Share of producer companies in the electricity market in 2023, %

Electricity producers in the Republic of Kazakhstan	Indicator
Samruk-Energy JSC	31.3
ERG	17.0
Central Asian Electric Power Corporation JSC	5.0
Kazzinc LLP	2.1
Kazakhmys Energy LLP	5.1
KKS LLP	5.4
Zhambyl SDPP JSC	2.7
Others	31.4



Electricity generation volumes in Kazakhstan, billion kWh

Electricity producers in the Republic of Kazakhstan	2021	2022	2023
Samruk-Energy JSC	35.61	35.88	35.33
ERG	19.91	19.23	19.16
Central Asian Electric Power Corporation JSC	6.24	5.09	5.59
Kazzinc LLP	2.97	2.69	2.33
Kazakhmys Energy LLP	6.60	4.22	5.8
KKS LLP	6.60	6.14	6.1
Zhambyl GRES JSC	2.14	3.65	3.07

Electricity generation at TPPs, CHPPs, million kWh

Indicator	2022	2023
EGRES-1	23,048	22,870
EGRES-2	6,002	5,659
APP (CHPP-1,-2,-3)	4,039	3,955

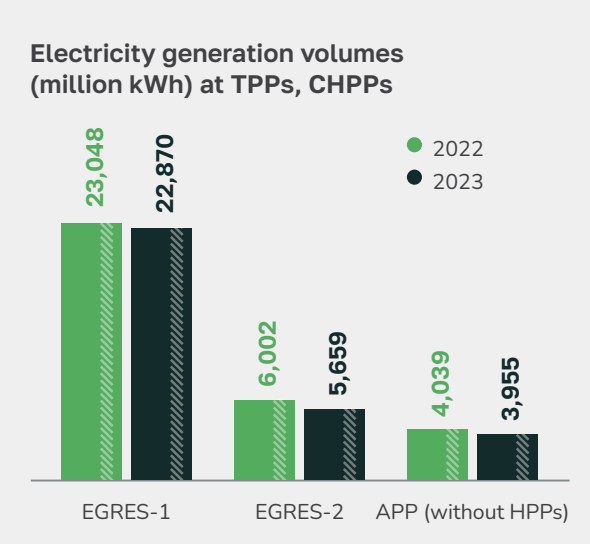
Electricity generation for 2023 amounted to 35,330 million kWh, down 1.5% or 554 million kWh year-on-year. The main decrease occurred at EGRES-2 JSC by 344 million kWh (by 6%) due to a decrease in operating capacity due to failure of the circulation pump, at EGRES-1 LLP by 178 million kWh (by 1%) due to forced downtime of power unit No. 4, and at Moynak HPP JSC by 140 million kWh (by 14%) due to a decrease in water availability in the Charyn River basin.

Competitive advantages of Samruk-Energy JSC in the power market of the Republic of Kazakhstan in 2023:

- significant reserves of thermal coal with low production costs;
- sufficient energy capacities with a relative level of wear and tear across the country;
- state support, as well as support from Samruk-Kazyna JSC.

Challenges for Samruk-Energy JSC:

- high level of depreciation of facilities;
- insufficient return on investment in the implementation of social projects;
- high level of debt burden;
- regulatory environment in the area of tariff setting;
- limited opportunities for price supply management;
- limitations on export supplies of steam coal due to substitution of Ekibastuz coal in traditional markets, as well as non-competitiveness in other markets due to low coal parameters;
- lack of exploration activities to increase coal production.



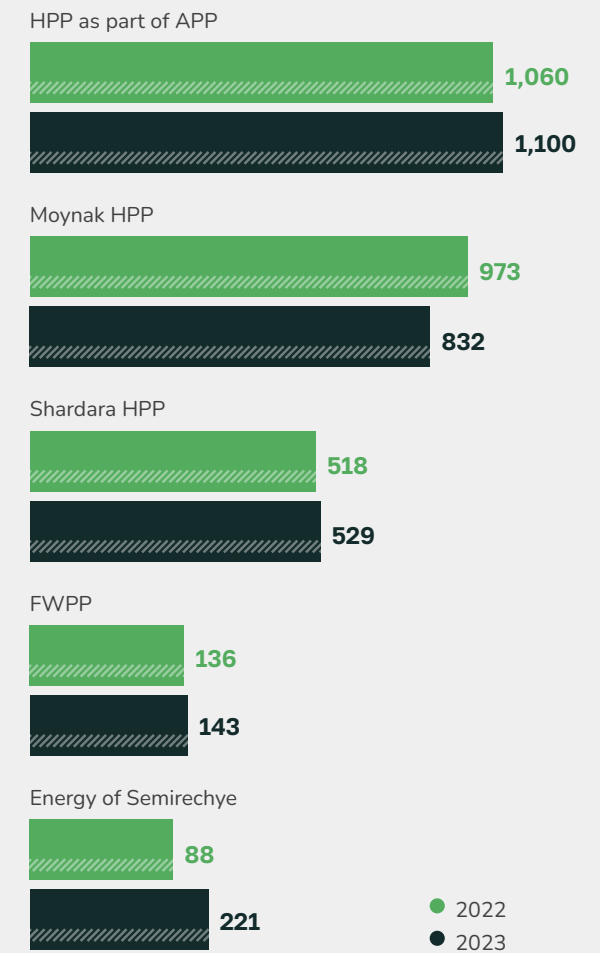
Forecast for the future period:

Electricity production volumes for 2024 are forecast to gradually increase in relation to the figures of 2023. The forecast increase of 3,990 million kWh in electricity generation volumes for 2024 is mainly due to the inclusion of Ust-Kamenogorsk HPP LLP and Shulbinsk HPP LLP within the Company's consolidation perimeter.

The forecast increase in electricity production volumes for 2025 relative to 2024 is due to the growth in production volumes at EGRES-1 LLP.



Electricity generation volumes (million kWh) at HPPs, WPPs, SPPs



Heat production

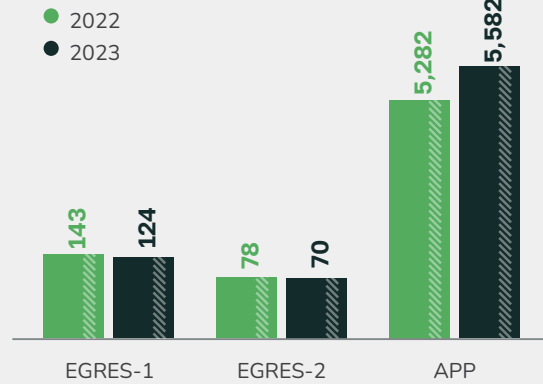
The volume of heat production in 2023 amounted to 5,776 thousand Gcal. Compared to the same period last year, the increase is 5%, which is due to lower average monthly temperature during the heating period.

Forecast for the future period:

Heat production volumes in the plan for 2024 are projected to decrease by 3% compared to 2023, mainly due to reduced heat production by Almaty Power Plants JSC.



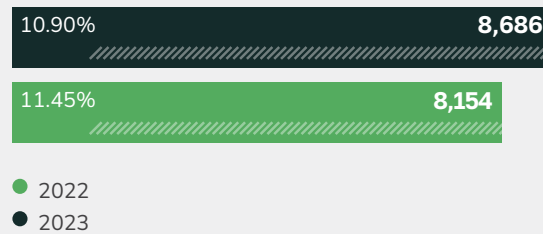
Dynamics of changes in heat production, thousand Gcal



Electricity transmission

In 2023, the volume of electricity transmission through Alatau Zharyk Company's grids amounted to 8,686 million kWh, which is an increase of 7% or 533 million kWh compared to 2022.

Electricity transmission dynamics



Forecast for the future period:

An increase of 1% in electricity transmission and distribution volumes is expected in 2024 compared to the 2023 actual figure, due to a projected increase in consumption in the Almaty region.

Electricity Sales

The total volume of electricity sales by the energy supplying organization AlmatyEnergoSbyt LLP for the reporting period amounted to 7,086 million kWh, which is 3% more than in the same period of 2023, due to increased electricity consumption in the Partnership's service area.



Name	Fact 2022	Fact 2023	Disconnected	Δ 2023/2022, %
AlmatyEnergoSbyt LLP				
Number of consumers, incl:	929,929	952,216	22,287	2%
Population	891,214	911,097	19,883	2%
Legal entities	38,715	41,119	2,404	6%
Sales volume, million kWh	6,847	7,086	239	3%

Forecast for the future period:

Electricity sales are expected to increase by 3% in 2024 compared to the 2023 figures, due to a projected increase in electricity consumption in the Partnership's service area.

Development of RES in the Republic of Kazakhstan

Renewable energy is one of the most promising areas of investment. Despite the fact that in recent years this market has shown significant growth results — since 2014, the installed capacity of RES facilities in the Republic of Kazakhstan has increased more than 14 times — the share of solar and wind generation in Kazakhstan, both in quantitative and share terms, is still far behind other developed and developing countries.

According to the Ministry of Energy of the Republic of Kazakhstan, as of January 1, 2024, 130 RES facilities with a total capacity of about 2,881 MW are in operation in Kazakhstan, producing 8.1% of the total volume of electricity. During reporting period, there was an increase in electricity generation by SPP, WPP and small HPPs. In total, in 2023, RES facilities (SPP, WPP, BGP, small HPPs) generated 6.7 billion kWh of electricity, which is 33.9% more than in 2022.

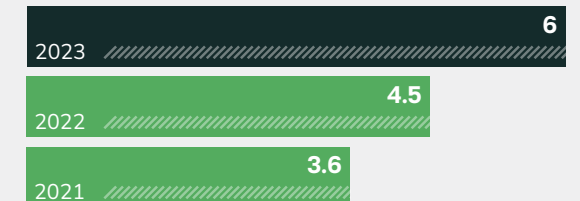
In 2023, 16 new RES facilities, with a capacity of 495.6 MW, were commissioned in Kazakhstan. In 2014, the installed capacity of RES facilities in operation in the country amounted to 177.52 MW, and in 2023 it exceeded 2,881 MW.

Electricity generation by RES facilities of Samruk-Energy JSC (SPP, WPP and small HPPs) for January-December 2023 amounted to 554.4 million kWh representing 8.1% of the total RES-generated electricity in Kazakhstan.

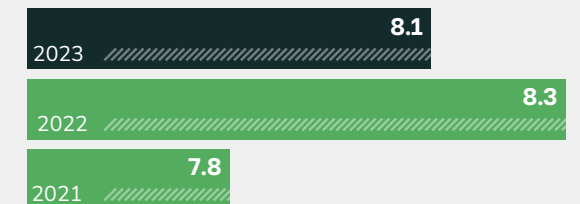
Electricity production by RES facilities at the enterprises of the Group of companies of Samruk-Energy JSC in 2023 increased by

32.8%

Share of RES generation in the electricity market of Kazakhstan, %



Share of RES power generation by Samruk-Energy JSC in Kazakhstan, %





Electricity generation by RES facilities of Samruk-Energy JSC, million kWh

Group of companies of Samruk-Energy JSC	Installed capacity, MW	2022	2023
APP JSC, cascade of small HPPs	43.7	173.6	169.5
Samruk-Green Energy LLP, SPP	3.04	5.3	5.4
Samruk-Green Energy LLP, Shelek Wind Power Plant	5	14.6	16.1
First Wind Power Plant LLP, WPP	45	135.7	142.6
Energy of Semirechye LLP, Shelek WPP	60	88.3	220.8
Total		417.5	554.4

Electricity generation at HPPs, WPPs, SPP, million kWh

Indicator	2022	2023
Moynak HPP	973	832
Kapchagay HPP	886	930.2
Almaty HPP Cascade	173	170
Shardara HPP	518	529
FWPP	136	142
Samruk-Green Energy	20	22
Energy of Semirechye LLP	88	220

Energy market

Along with the electricity market, Kazakhstan has a capacity market, introduced in 2019, whose main purpose is to attract investment to maintain existing facilities and create new capacity, as well as to ensure a balance between supply and demand for electricity in the country. The capacity market also incentivizes the use of renewable energy sources and improves the efficiency of the energy system.

In 2023, we participated in electric capacity auctions held on the trading platform of KOREM JSC.

Based on the results of centralized bidding held on November 21, 2023, the power plants of Samruk-Energy JSC sold 2,707 MW of capacity at a price of KZT 590 thousand/MW*month, including:

- EGRES-1 LLP — 1,436 MW;
- EGRES-2 JSC — 820 MW;
- APP JSC — 450.8 MW.

In accordance with the legislation, individual capacity tariffs were set for Moynak HPP JSC, Shardara HPP JSC and APP JSC in 2022. For Shardara HPP JSC, the volume of capacity amounted to 61 MW, for

Samruk-Energy JSC carried out export of electric power to the Kyrgyz Republic in the amount of

576.8
million kWh

Moynak HPP JSC, 298 MW. These tariffs will allow enterprises to ensure repayment of borrowed funds used for the construction of the power plant (Moynak HPP JSC), modernization of equipment (Shardara HPP JSC), as well as for refinancing of previously obtained target loans for investment programs (APP JSC).

Also during reporting period, in order to balance electricity production-consumption, Samruk-Energy JSC exported 576.8 million kWh of electricity to the Kyrgyz Republic.

Tariff policy

Operating activities of the subsidiaries of the Samruk-Energy JSC Group of Companies and its joint ventures, being natural monopoly subjects, subjects of competitive and publicly important markets, are regulated by the laws of the RK “On Electric Power Industry”, “On Natural Monopolies” and the Entrepreneurial Code of the RK. Tariff regulation, depending on the type of activity of energy companies, falls within the competence of the Committee for Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan (the Committee) or a sectoral ministry — the Ministry of Energy (MOE).

The order of the Minister of Energy of the Republic of Kazakhstan No. 205 dated May 22, 2020 approved a new “Methodology for determining the fixed profit taken into account when approving the marginal tariffs for electricity, as well as fixed profit for balancing, taken into account when approving the marginal tariffs for balancing electricity”.

Based on the Concept of Development of the Fuel and Energy Complex (FEC) of Kazakhstan until 2030 adopted in 2014, starting from 2019, the Capacity Market was introduced as an effective mechanism to provide the industry with a sufficient level of investment, which will favorably affect the market in the long term.

Starting from 2019, with the introduction of the capacity market for energy producing organizations, the following were established:

- marginal tariffs for capacity, including costs of investment projects and repayment of principal debt (for loan funds raised for investment projects);
- marginal tariffs for electricity, including the cost of electricity generation and the rate of profit. The order No. 76 of the Minister of Energy of the Republic of Kazakhstan dated March 11, 2021 amended Order No. 205 dated May 22, 2020 on approval of the “Methodology for determining the rate of profit taken into account when approving marginal tariffs for electricity, as well as fixed balancing profit taken into account when approving marginal tariffs for balancing electricity”.

Starting from July 1, 2021, in accordance with the Law of the RK “On support of RES use”, a mechanism of through surcharge was introduced as part of the sales tariff for electricity of EPO in order to recover the costs of purchased electricity of EPO. The pass-through surcharge is calculated by FSC for RES sup-

port LLP on the basis of the costs of RES support in the RK and volumes of electricity supply to EPOs, which are conditional consumers. Taking into account the introduction of the RES pass-through surcharge, the electricity tariffs of the country's energy producing organizations were revised.

Since July 1, 2023, the RK has launched the Single Purchaser model, which provides for centralized purchase of electricity and introduced a balancing electricity market in real time (until July 1, 2023, it functioned in simulation mode).

Electricity transmission and distribution tariffs for energy transmission companies, heat generation and energy supply tariffs (ESOs) are regulated by the Committee for Regulation of Natural Monopolies and Protection of Competition of the Ministry of Economy. Regulation and control by the Committee is carried out in strict compliance with legislative and regulatory acts.

Tariff decisions are significantly influenced by social and political issues. Economic, social and other policies of the Government of the Republic of Kazakhstan may have a significant impact on the operating activities of the Group of Companies of Samruk-Energy JSC.

The transition to a new model of the electricity market based on the mechanism of a single purchaser of electricity and the balancing electricity market is carried out in real time. With the introduction of the balancing electricity market, the entire volume of electricity purchases is made from a Single purchaser.

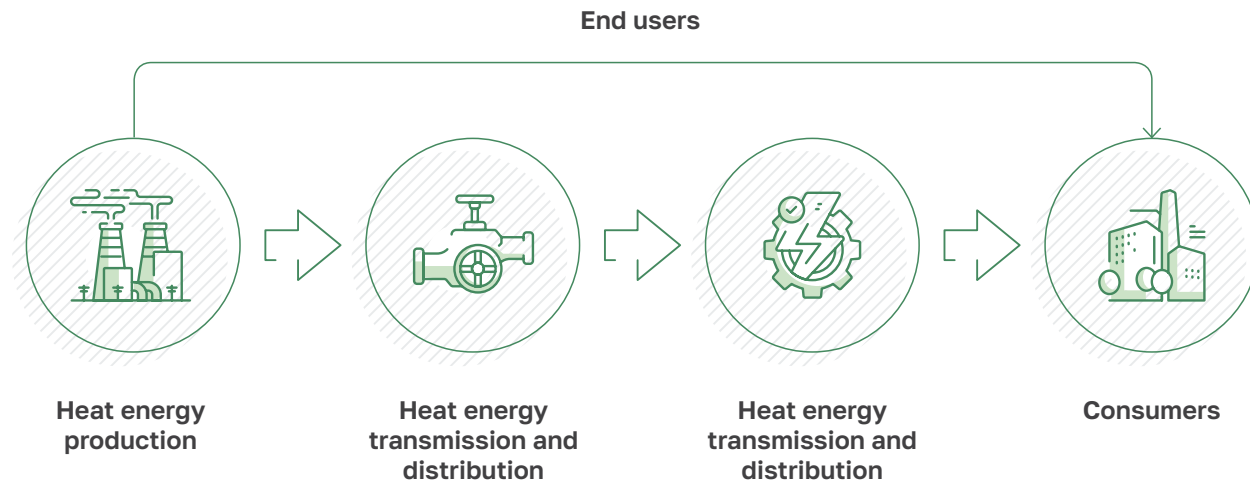
In 2023, the electricity tariff for end consumers was formed taking into account:

- purchase of electricity from a single purchaser;
- prices for transmission/use of electricity through the National Grid;
- the price for transmission and distribution on the REC grid;
- the cost of regulation, balancing and dispatch services;
- the cost of electric capacity availability services.

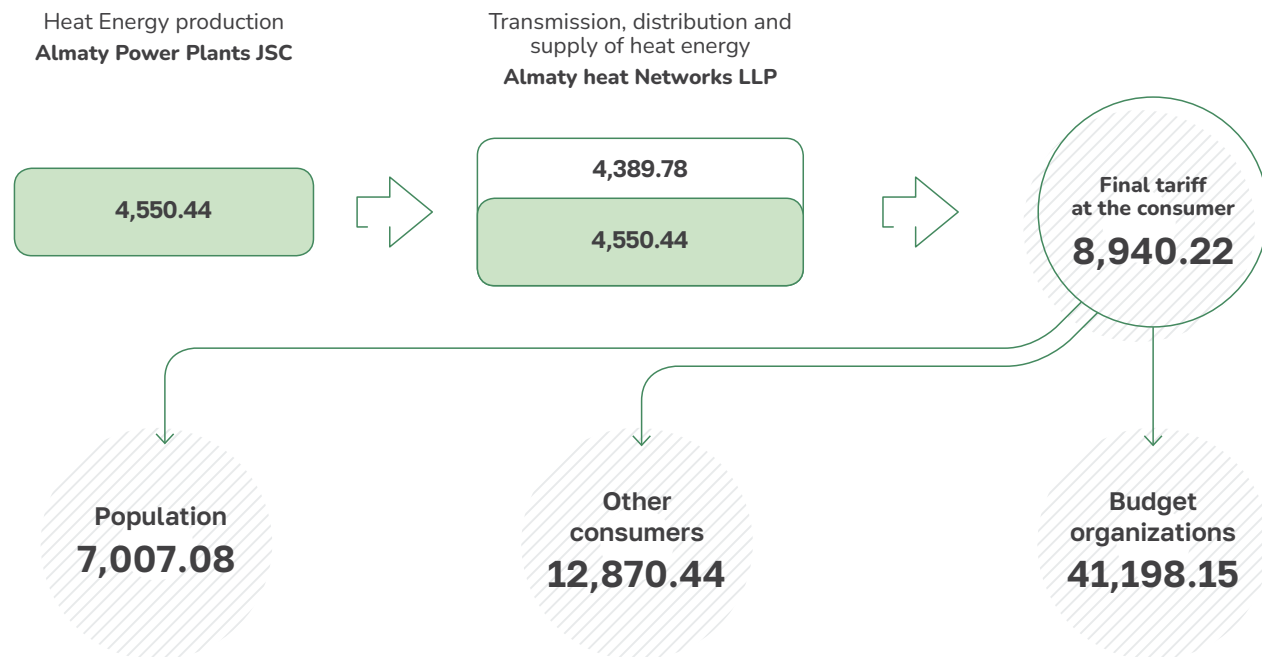
The structure of heat supply systems consists of three sectors: production, transmission (including distribution and sales of heat energy) and consumption of heat energy. The heat market of Kazakhstan is actually a retail sector, where the retail consumer has no practical opportunity to choose a heat supplier.

¹¹ Law of the Republic of Kazakhstan “On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Special Economic and Industrial Zones, Attraction of Investments, Development and Promotion of Exports, and Social Security” No. 243-VI dated April 3, 2019.

Due to the social significance of heat energy prices, the CRNM implements the state policy of restraining the growth of heat energy tariffs.



Example tariff for heat supply services for consumers of Almaty city for 2023, **tenge/Gcal excluding VAT**



Weighted average tariffs for electricity generation

Name of subsidiaries and affiliates	2021 Fact	2022 Fact	2023 Fact	2024 Forecast	2025 Forecast
Ekibastuz GRES-1 LLP	7.31	8.06	8.00	9.02	9.82
electricity tariff, tenge/kWh	6.82	7.44	7.59	7.68	8.20
RK tariff	6.76	7.44	7.59	7.68	8.20
export tariff, tenge/kWh	10.31	-	-	-	-
capacity tariff, tenge/MW*month	590	590	590	1,065	1,215
individual capacity tariff, tenge/MW*month	-	-	-	1,199	1,199
Ekibastuzskaya GRES-2 Station JSC	10.38	11.39	11.46	13.19	13.47
export tariff, tenge/kWh	11.65	13.76	13.76	-	-
tariff for electric power, tenge/kWh	9.74	10.17	10.27	11.20	11.20
capacity tariff, tenge/MW*month	590	590	590	1,065	1,215
Almaty Power Stations JSC	13.12	14.05	15.52	18.22	20.45
electricity tariff, tenge/kWh	11.16	12.27	13.79	15.33	17.49
weighted average capacity tariff, tenge/MW*month	899	796	809	1,181	1,215
capacity tariff, tenge/MW*month	590	590	590	1,065	1,215
individual capacity tariff, tenge/MW*month	4,169	3,139	3,139	2,479	-
Moynak HPP JSC	23.74	21.69	23.51	23.03	23.03
tariff for electric power, tenge/kWh	12.26	12.92	13.65	12.77	12.77
capacity tariff, thousand tenge/MW*month	2,564	2,564	2,564	2,564	2,564
Shardara HPP JSC	15.32	16.03	16.33	15.86	15.19
tariff for e.energy, tenge/kWh	9.27	10.79	11.17	9.82	9.82
capacity tariff, tenge/MW*month	3,868	3,868	3,868	3,868	3,868
AES Ust-Kamenogorsk HPP LLP	-	-	-	6.12	6.51
incl. tariff for e.energy, tenge/kWh	-	-	-	3.32	3.53
incl. tariff for capacity, th. tenge/MW*month	-	-	-	1,065	1,215
AES Shulbinsk HPP LLP	-	-	-	9.05	10.16
incl. tariff for e.energy, tenge/kWh	-	-	-	4.02	4.43
incl. tariff for capacity, tenge/MW*month	-	-	-	1,065	1,215
Samruk-Green Energy LLP, tenge/kWh	19.74	20.94	23.54	24.42	25.96
First Wind Power Plant LLP, tenge/kWh	33.83	36.84	43.36	46.40	48.71
Energy of Semirechye LLP — share of 25%		22.68	24.65	30.94	32.78

On January 1, 2019, an electricity capacity market started operating in the Republic of Kazakhstan. With the introduction of the capacity market in 2020, weighted average electricity tariffs increased due to changes in marginal tariffs and the introduction of individual capacity tariffs from July 1. As requested by the EPOs, the DOE approved ceiling tariffs effective July 1, 2020, effective through March 31, 2021. From April 1, 2021, the marginal tariffs include a profit margin approved by the Minister of Energy of the Republic of Kazakhstan.

Starting from July 1, 2021, the tariff includes the RES support surcharge of 1.57 KZT/kWh, calculated by SFCS of RES LLP. New marginal tariffs with RES surcharge were approved by the Order of the Minister of Energy №211 dated 24.06.2021. In 2022 the surcharge amounted to 1.58 KZT/kWh, and for the first half of 2023 — 1.97 KZT/kWh for the northern and southern zones of the Republic of Kazakhstan.

On April 19, 2023, the President of the Republic of Kazakhstan signed the law “On Introducing Amendments and Additions to Some Legislative Acts of the Republic of Kazakhstan on Issues of Administrative Reform in the Republic of Kazakhstan”, within this framework, amendments were made to the Law of the Republic of Kazakhstan “On Electric Power Industry” to introduce the Single Purchaser model from July 1, 2023, which provides for the centralized purchase of electricity and a balancing electricity market in real time (until July 1, 2023, it functioned in simulation mode).

Due to the expected growth in production costs (such as increased payroll for production personnel and rising fuel costs) and financing costs, applications for ad-

justment of the marginal tariff were submitted by September 1, 2022, to achieve a break-even level of tariffs from 2023. This was done in accordance with item 11 of the Rules for Approval of the Marginal Tariff for Electricity №147 (Order of the Minister of Energy of the Republic of Kazakhstan dated February 27, 2015). As a result, Order No. 192 of the Ministry of Energy of the Republic of Kazakhstan, dated May 26, 2023, approved new marginal tariffs for electricity, which came into force on June 1, 2023. The tariff increase was 24% for “EGRES-1” LLP, 24% for “EGRES-2” JSC, 25% for “APP” JSC, and 9% for “Moynak HPP” JSC.

Thus, during 2023 the following marginal tariffs for electricity (tenge/kWh) were in effect for EPO:

Name	Approved tariff 01.01.2023-31.05.2023	Approved tariff 01.06.2023-31.12.2023	Disconnected, %	Approved tariff from 01.01.2024	Disconnected, %
1	2	3	4=3/2	5	6=5/3
EGRES-1 LLP	5.90	7.32	24%	8.05	10%
EGRES-2 JSC	8.59	11.20	24%	13.17	18%
APP JSC	11.19	14.02	25%	17.82	27%
Moynak HPP JSC	11.71	12.77	9%	12.77	-
Shardara HPP JSC	9.82	9.82	-	9.82	-

Also, Order No.479 of the Minister of Energy of the Republic of Kazakhstan, dated December 28, 2023, approved the marginal tariffs for electricity for EPO from January 1, 2024, with the following increases: 10% for “EGRES-1” LLP, 18% for “EGRES-2” JSC, and 27% for “APP” JSC.

Since 2020, the Ministry of Energy of the Republic of Kazakhstan has been working to approve investment tariffs for plants implementing large-scale investment

projects, including Moynak HPP JSC, Shardara HPP JSC, Almaty Power Plants JSC, and Ekibastuz GRES-1 LLP.

On December 28, 2021, Ekibastuz GRES-1 LLP entered into an Investment Agreement with the MOE RK for modernization, reconstruction, expansion and renewal under the project of rehabilitation of power unit No.1, with tariff setting at the rate of KZT 1,199 thousand /MW*month for the period of 2025-2031 per service volume of 476.6 MW.

Parameters of concluded investment agreements, thousand tenge/MW*month

Name	Volume	Individual tariff	Period
Almaty Power Plants JSC	69.5 MW	2,478.9	2020–2024
Moynak HPP JSC	298 MW	2,563.67	2020–2026
Shardara HPP JSC	61 MW	3,867.9	2020–2028
EGRES-1 LLP	476.6 MW	1,199	2025–2031
EGRES-2 JSC	576 MW	5,017.77	2027–2036

On January 26, 2021, EGRES-2 JSC submitted an application to the Market Council (CEA) for approval of individual tariff for the implementation of the project “Expansion and reconstruction of EGRES-2 with installation of power unit No. 3”. After receiving a positive recommendation from the Market Council dated

29.03.2021, the application was submitted to the Ministry of Energy of the Republic of Kazakhstan for consideration.

Since 2021, the Ministry of Energy of the Republic of Kazakhstan had not made a decision. On January

27, 2022, EGRES-2 JSC submitted a revised application to the Market Council of the Republic of Kazakhstan for an individual capacity tariff for the implementation of the project “Expansion and Reconstruction of EGRES-2 with Installation of Power Unit No. 3.”

On March 30, 2022, a meeting of the Presidium of the Market Council of the Republic of Kazakhstan was

held, at which it was decided to recommend and admit for consideration by the authorized body (DOE RK) the investment program “Expansion and reconstruction of EGRES-2 JSC with installation of power unit No.3”. The decision on this application was not made, and the list of EPOs with which the MOE RK planned to conclude investment agreements in 2022 was not published.

Tariffs for heat generation, tenge/Gcal

Name	2021 fact	2022 fact	2023 fact	2024 forecast	2025 forecast
Almaty Power Plants JSC	3,392	3,782	4,215	5,109	5,272
EGRES-2 JSC	772	812	874	877	906
EGRES-1 LLP	233	221	189	185	196

As a natural monopoly, the legislation provides for the approval of long-term (5+ years) tariff ceilings for organizations producing heat energy, including an investment component and annual cost indexation. The marginal tariffs are approved by the Committee. However, tariff increases are made no more than once a year and there are risks of maintaining tariffs without increase, in cases of growth of plant costs due to objective reasons.

Since the beginning of 2023, the tariff for heat energy at APP JSC has been 4,003.36 tenge/Gcal. As a result of work with DCRNM, new tariffs for heat energy have been approved, taking into account the increase

in prices for strategic goods (coal, fuel oil) and the growth in average monthly wages:

- from 01.08.2023 — 4,550.44 tenge/Gcal, an increase from the previous tariff — 13.7%;
- from 01.01.2024 — 5,063.54 tenge/Gcal, an increase from the tariff of 2023 — 26.5%;
- from 01.01.2025. — 5,180.57 tenge/Gcal, an increase from the tariff of 2024 — 2.3%.

The increase in the tariff for heat energy will reduce losses from heat production. In 2024, Almaty Power Plants JSC and the Company plan to further work with DKREM to ensure break-even operations for heat.

Tariffs for electricity transmission services, tenge/kWh

Name	2021 fact	2022 fact	2023 fact	2024 forecast	2025 forecast
Alatau Zharyk Company JSC	6.07	6.58	7.68	8.87	9.95

For Alatau Zharyk Company JSC, which is also a subject of natural monopoly, the Order of DCRNM dated 17.05.2021 approved the marginal tariff for the period 2021-2025, with the tariff coming into effect from June 1, 2021. Alatau Zharyk Company JSC submitted an application for change of the approved tariff on 09.06.2023 to DCRNM with the Draft Tariff Estimate.

The Draft Tariff Estimate was based on the following grounds (Article 22 of the Law “On Natural Monopolies”):

- Reduction of the tariff due to the increase in the volume of electricity transmission, adjustment of technologically related cost items, taking into account the increase in the cost of strategic commodity (tariff of APP JSC (item 5, item 1, p. 1);

- Change of the approved investment program in connection with the implementation of the state program “Tariff in exchange for investments” (item 4) para. 1);
- Increase in salary costs due to failure to achieve the average salary in Almaty city by economic activity, according to statistics for the 4th quarter of 2022 (item 9-2) p.1);
- Inclusion of operating costs on maintenance of networks and equipment transferred to the balance sheet from the municipal property by KZT 1.8 million. (item 9-1) p.1);
- Income (profit) is calculated taking into account the regulated base of the involved assets and the profit rate (acceptable profit level — APR) in the tariff.



For 2023, the average tariff for the year

7.69
tenge/kWh

According to the results of the consideration of the application, the authorized body approved the following tariffs for AZhK JSC, excluding VAT:

- from 01.01.2023 — 7.05 tenge/kWh;
- from 01.07.2023 — 8,31 tenge/kWh;
- for 2024 — 8.87 tenge/kWh;
- for 2025 — 9.95 tenge/kWh.

Tariffs for electricity sales to ESO, KZT/kWh

Name	2021 fact	2022 fact	2023 fact	2024 forecast	2025 forecast
AlmatyEnergoSbyt LLP	18.69	20.09	23.64	30.86	33.55

The energy supply company AlmatyEnergoSbyt LLP is a subject of the public market and is also subject to regulation by the authorized body. The tariff calculation includes operational, financial and investment components. There are risks of artificial restraint of tariff growth by the Regulator in order to preserve social stability of the population in the regions. For individuals, differentiation by consumption norms is preserved; for legal entities, electricity is supplied at average tariffs.

On October 13, 2023, the DCRNM of Almaty and Almaty region approved the ceiling price of AlmatyEnergoSbyt LLP in the amount of 25.57 tenge/kWh (3.3% increase) effective from November 1, 2023. The increase was due to the increase in supply markup (increase in operating expenses) by 42%, which amounted to 0.68 tenge/kWh.

At the same time, the approved tariff estimate does not consider the growth of price for the purchase of electricity from the Single Buyer, expenses for purchase and sale of electricity on the balancing market,

or losses for August-October 2023 on the difference of tariff for electricity transmission by Alatau Zharyk Company JSC.

As a result, the loss of AlmatyEnergoSbyt LLP for 2023 is 3.2 billion tenge. According to the Rules of Pricing on Publicly Important Markets, these losses are subject to compensation at the next price revision.

In December 2023, following the work carried out, AlmatyEnergoSbyt LLP was added to the list of recipients of targeted support for energy supply organizations by Order No. 276 of the Minister of National Economy of the Republic of Kazakhstan, dated December 22, 2023. As a result, the price for the purchase of electricity from the Single Buyer will be 13 tenge/kWh (according to the tariff estimate). This adjustment will enable AlmatyEnergoSbyt LLP to avoid losses in 2024 from discrepancies between the electricity prices stipulated in the tariff estimates and the actual prices set by the Unified Power Purchase Organization.

Coal market of Kazakhstan

The thermal coal market in Kazakhstan is fragmented. The main major players are Bogatyr Komir LLP (Samruk-Energy JSC and UC RUSAL), EEC JSC and Shubarkol Komir JSC (ERG), Kazakhmys Corporation LLP, Karazhyra JSC, and Angrensor Energo LLP.

According to the Bureau of National Statistics, coal mining companies in Kazakhstan produced 112.74 million tons of hard coal from January to De-

ember 2023, which is a 1% decrease compared to the same period in 2022.

By the end of the reporting period, Bogatyr Komir LLP produced 42.93 million tons of coal, which is 1.1% increase compared to 2022. The company's share in coal production in 2023 was 38.1% of the total coal production in the Republic of Kazakhstan and 62% of the coal produced in the Ekibastuz coal basin (Pavlodar region).

In 2023 coal mining company Bogatyr Komir LLP produced

42.93
million tons of coal

The volume of coal sold by Bogatyr Komir LLP in 2023 was

42.49
million tons



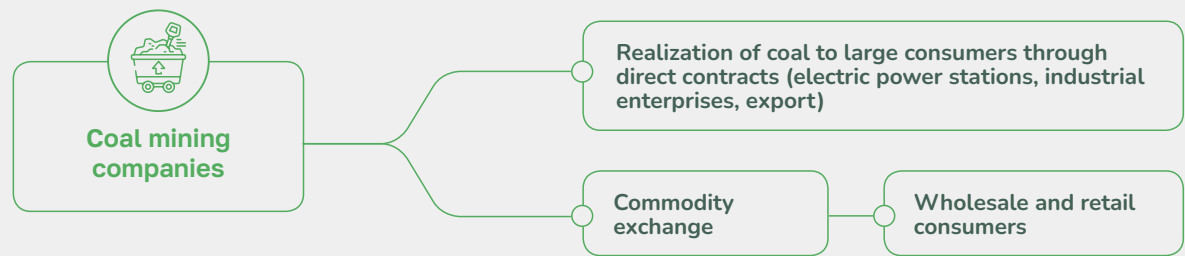
Coal production, million tons

Indicators	2021	2022	2023	Δ, 2023/2022, %
Pavlodar region	66.93	68.39	69.48	1.6 %
Karaganda region	35.36	34.28	33.58	-2.0 %
East Kazakhstan region	8.80	8.83	7.99	0.1 %
Total	111.74	113.93	112.74	-1 %

Volume of coal sales to consumers, million tons

Region	2021	2022	2023
APP JSC	3.00	3.00	3.16
Karaganda Energocenter LLP	2.78	2.31	2.56
Astana-Energy JSC	4.33	3.96	3.65
Pavlodarenergo JSC PCHPP-2, 3	2.86	2.83	2.90
Stepnogorskaya CHPP LLP	1.00	0.80	0.71
EGRES-1 LLP	13.37	13.10	13.39
EGRES-2 JSC	3.68	3.3	3.59
Bassel Group LLS LLP	0.42	0.48	0.46
SevKazEnergo JSC	2.25	1.44	2.11
Ekibastuzteploenergo LLP	0.54	0.52	0.45
SCP on PCW 'Koksh. Zhylu'	0.34	0.32	0.36
Kombyt	0.39	0.19	0.17
Total for the domestic market of the Republic of Kazakhstan	34.94	32.32	32.72
Reftinskaya GRES	9.80	10.08	9.77
Total for export to RF	9.80	10.08	9.77

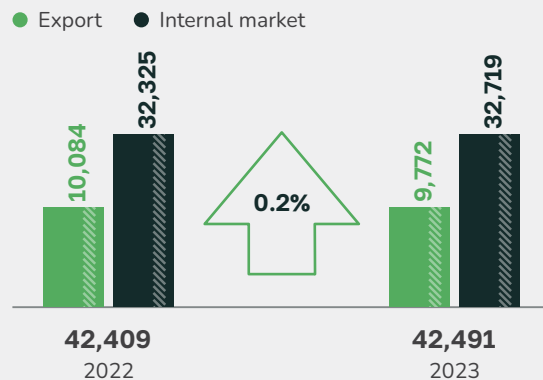
Scheme of coal sales



Stripping ratio for 2023 amounted to 0.84 m³/ton, compared to 0.79 m³/ton in the same period.

pendently organize and pay for transportation of coal from the Ekibastuz station (Bogatyr Komir LLP) to their destinations. Transportation contracts are made with freight forwarders, who coordinate with railcar owners (operators).

Coal sales of Bogatyr Komir LLP, thousand tons



Ekibastuz coal is a standard fuel for small boiler houses located in rural areas. Shipment of utility coal, according to the results of exchange transactions, is carried out: by rail and road transport.

Forecast for the future period:

The forecast for 2024 indicates a 10% increase in coal sales volume, or an additional 4.209 million tons compared to 2023. The increase is due to the growth of demand from energy producing organizations.

Major consumers of coal from Bogatyr Komir LLP include the power systems of Astana, Almaty, Karaganda, Petropavlovsk, Pavlodar, Stepnogorsk, EGRES-1, and EGRES-2. Coal buyers (power plants) inde-

Coal sales price, tenge/tonne

Name	2021 fact	2022 fact	2023 fact	2024 forecast	2025 forecast
Bogatyr Komir LLP	2,292	2,669	3,084	3,204	3,753

The price of coal sales by Bogatyr Komir LLP is approved independently by the price list for consumers of the Republic of Kazakhstan for 3 groups of consumers (power engineering at the station of joining of NC KTZh JSC, power engineering at the coal harvesting station, and municipal and household needs). Regulation is carried out on the basis of the Entrepreneurial Code of CRNM CP MNE.





Development Strategy

Development Strategy of Samruk-Energy JSC

The electric power industry is a fundamental infrastructure sector that determines the efficiency of the production complex, the service sector, and the quality of life for the population of the Republic of Kazakhstan. Our task is to develop a balanced model that includes an optimal ratio of energy supply between domestic consumers and exports, combining high economic efficiency, innovative improvements, and advanced standards of social responsibility.

On 29 October 2021, by the decision of the Board of Directors of Samruk-Energy JSC, the Development Strategy of Samruk-Energy JSC for 2022-2031 was approved, taking into account the state policy in the field of strategic planning of the national energy security system, the development of the electric power industry and corresponding to the main strategic directions, goals and objectives of the Sole Shareholder.

Mission of Samruk-Energy JSC

To create value for shareholders, to satisfy the growing demand through reliable supply of energy resources, high-tech development, and environmental friendliness, guided by the principles of sustainable development.

Vision of Samruk-Energy JSC

An efficient, high-tech energy company with high social and environmental responsibility — a leader in the energy sector of the Republic of Kazakhstan.

Strategic goals of Samruk-Energy JSC



REDUCTION OF NET CARBON FOOTPRINT



INCREASE IN PRODUCTIVITY



INCREASE IN NET ASSET VALUE




The determination of the Company's strategic goals and objectives is based on PESTEL analysis, analysis of macroeconomic and industry trends, as well as analysis of the internal environment.

In order to effectively implement the mission, taking into account the challenges and opportunities at the global, national and corporate levels, the Company through the ESG prism has identified three key priorities to ensure the achievement of the Company's three strategic goals with the most efficient use of available resources.

In order to realize the strategic goals and taking into account the key priorities, 19 main initiatives/tasks have been identified and are being implemented by the Company as part of its strategic development.



Key priorities of Samruk-Energy JSC

	Sustainable development	Responsible investments	Effective portfolio management
 Reduced net carbon footprint	1. Environmental responsibility 5. Decarbonization	2. Research and Development (R&D) 3. Green finance 19. Entering new processing facilities	4. Resource conservation
 Increased productivity	6. Human capital development 7. Social responsibility 15. HSE Best Practices	11. Modernization of equipment 12. Innovative development	8. Increase of electricity sales in the domestic and foreign markets 9. Increase of coal sales in the domestic and foreign markets 10. Improvement of operating efficiency of existing capacities 13. Digitalization 14. Improvement of business processes
 Increase in net asset value	16. Improving financial sustainability 18. Corporate governance	17. Implementation of investment projects and programs	18. Corporate governance

Key ESG principles of Samruk-Energy JSC's development strategy:

- Commitment to the principles of sustainable development at the level of the Board of Directors, executive body, and personnel;
- Analysis of internal and external situations by components: economy, ecology, social issues;
- Identification of risks in the field of sustainable development, social, economic, and environmental spheres;
- Stakeholder mapping;
- Definition of goals and key performance indicators in the field of sustainable development, development of an action plan, and identification of responsible persons;

- Integrating sustainability into key processes, including risk management, planning, human resource management, investments, reporting, operations, and others, as well as into the Development Strategy and decision-making processes;
- Professional development of officials and employees in the field of sustainable development;
- Regular monitoring and evaluation of sustainable development activities, assessment of the achievement of goals and key performance indicators (KPIs), taking corrective measures, and introduction of a culture of continuous improvement.

The following environmental indicators are set out in the approved Maps of motivational KPIs for the management employees of Samruk-Energy JSC:



"E" component:

- Indicator of environmental friendliness of generated electricity. Volume of CO /SOx /NOx / particulate matter emissions per 1 kWh. The indicator is aimed at reducing CO /SOx /NOx / particulate matter per 1 kWh;
- Ensuring the level of specific consumption of fuel equivalent at nationally significant plants EGRES-1, EGRES-2. The indicator is aimed at reducing the specific consumption of fuel equivalent per supplied electricity at EGRES-1, EGRES-2;
- Volume of RES production of operating plants. The indicator is aimed at increasing the production of electric power from RES plants.



"S" component:

- LTIFR (safety level). The indicator aims to reduce the number of LTIFR injuries occurring at the workplace;
- Absence of violations in procurements conducted in the corporate center of Samruk-Energy JSC, confirmed by the authorized body, which affected the procurement results. The indicator is aimed at reduction of violations and compliance with the norms of the Rules for Procurement of Goods, Works and Services during procurement procedures in Samruk-Energy JSC confirmed by the authorized body that affected the procurement results.



"G" component:

- Execution of measures of the Road Map for improvement of the sustainable development management system of Samruk-Energy JSC for 2023 within the authority of the Management Board. This Roadmap for improvement of the sustainable development management system of Samruk-Energy JSC for 2023-2024 was approved by the decision of the Board of Directors dated December 19, 2022 (Minutes No. 17/22) and includes the Roadmap for improvement of the sustainable development management system in order to obtain high positions for Samruk-Energy JSC in ESG rating approved by the decision of the Management Board of Samruk-Energy JSC dated October 10, 2022 (Minutes No. 37).



Implementation of the development strategy of Samruk-Energy JSC

The strategic indicators of our Company demonstrate an improving trend. The main growth factors are an increase in the volume of electricity and capacity sales on the domestic market, obtaining individual capacity tariffs, reducing specific fuel and water consumption for process needs, optimizing fuel and energy costs and energy saving, as well as reducing the debt load.

Strategic performance indicators¹²

Indicator	Fact 2020	Fact 2021	Fact 2022	Fact 2023	Forecast 2024	Forecast 2031
Net carbon footprint reduction, thousand tons	-	32,952	31,978	31,877	-	≥(-10%) к 2021
Labor productivity ¹³ , thousand tenge/ person	-	10,154	13,273	14,872	11,169	15,231
ROI (strategic ROI will be applicable if assets are realized)	-	-	-12%	-	>CoE	>CoE
Net Asset Value (NAV), million tenge	400,623	412,899	442,753	485,969	495,479	825,798
Debt/EBITDA (ratio)	2.67	2.41	1.90	1.71	≤3.5	≤3.5
Corporate governance rating	-	BB	-	-	BBB	AA
Output of non-commodity goods and services (thousand tenge)	-	332,537,144	381,464,992	444,959,627	365,790,858	498,805,716



In general, the Company's Strategic Indicators tend to improve in the period from 2021 to 2023. The main growth factors are an increase in electricity and capacity sales on the domestic market, an increase in tariffs of SDCs, obtaining individual capacity tariffs, reduction of specific fuel and water consumption for technological needs, optimisation of fuel and energy saving costs, as well as reduction of the debt load. At the same time, it is planned to increase the debt load in 2024-2031 due to the implementation of investment projects.


In accordance with the key strategic goals and 19 main development initiatives and tasks, in the reporting period, the Company implemented measures and realized projects aimed at achieving the main strategic goals. All initiatives and tasks were developed in accordance with the initiatives of the National Welfare Fund Samruk-Kazyna.




¹² Strategic KPIs approved according to the Development Strategy of Samruk-Energy JSC for 2022-2031.



¹³ Labor productivity is recalculated using the new methodology beginning in 2022.

Strategic Goal	Objective	Action	Comments on implementation
 Reduced net carbon footprint	Environmental responsibility	Installation at GRES-1, GRES-2, and APP plants of an automated system for monitoring emissions into the environment.	1. GRES-1: ASM is installed at power unit No. 2. 2. GRES-2: ASM was put into operation in test mode. 3. APP: equipment is being installed and adjusted.
		Application of low-emission vortex pulverized coal burners.	Positive conclusion on the developed design and construction project was received.
	R&D	Technologies of carbon capture and storage (CCS), production of carbon chemistry products (R&D).	A contract was concluded with Nazarbayev University JSC. Analytical review of existing and prospective technologies of capture, storage and use of CO ₂ separated from flue gases of TPPs was developed, design documentation for manufacturing of experimental laboratory unit for research of steam oxygen-free coal gasification was developed.
	Green finance	Utilization of green finance tools.	The Company issued green bonds. A report on the use/distribution of proceeds and impact of the financed green projects was prepared and published on the AIX website and the Company's corporate website.
	Resource conservation	"Construction of clarified water return pumping station" of GRES-2.	DED developed.
	Decarbonization	Sale of carbon units (offsets) from RES facilities.	Design documentation and monitoring plan approved by the authorized environmental authority. Offset units received and credited to the account. A contract for the sale of carbon units was concluded.
 Increased productivity	Human Capital Development	Creating attractive conditions for employees.	Carrying out diagnostics of corporate culture was inexpedient in accordance with the requirements of the Corporate Standard on Human Resource Management of the Samruk-Kazyna NWF Group JSC.


Strategic Goal	Objective	Action	Comments on implementation
 Increased productivity		Retaining internal talents and attracting highly professional staff.	The list of key positions and talent pool was approved by the Management Board of Samruk-Energy JSC. The list is compiled and approved annually.
		Ensuring social guarantees and social stability in the Company.	Salary indexation is carried out annually for the Group of companies of Samruk-Energy JSC.
	Social responsibility	Personnel training aimed at ensuring that employees understand ethical norms and principles, as well as zero tolerance for corruption and bribery.	74 training trainings/information mailings have been conducted. On a quarterly basis, the Board of Directors is provided with information on implemented measures in this area as part of the reports of the Compliance Service.
	Increase in domestic and foreign electricity sales	RES sales in 2023.	Actual sales of RES for 2023 amounted to 554.38 million kWh.
		Ensuring electricity supply to consumers of the Group of Companies Fund's.	At the end of 2023, electricity supply to consumers of the Group of companies Fund's in the amount of 3,276 million kWh was ensured (data for the first half of 2023). Since July 1, 2023, the transition to the mechanism of purchase and sale of electricity through the Unified Purchaser of Electricity has been carried out, therefore, the implementation of the measure is irrelevant.
		Ensuring electricity supply to energy-intensive industries (DPCs, Industrial Zones, etc.).	According to the results of 2023, electricity supply for power supply of energy-intensive production facilities (Aktogay MPP and Bozshchakol MPP) in the amount of 853,5 million kWh (data for 1 half of 2023). Since July 1, 2023, the transition to the mechanism of purchase and sale of electricity through the Unified Purchaser of Electricity has been implemented, therefore, the implementation of the measure is irrelevant.
Increase coal sales in domestic and foreign markets	Ensuring export of unprocessed coal to the Russian Federation.	At the end of 2023, export of unprocessed coal amounted to 9,772 thousand tons.	




Strategic Goal	Objective	Action	Comments on implementation
 Increased productivity	Provision of 4,000 kcal/kg beneficiated coal	Sales of enriched coal 4,000 kcal/kg	Work is underway to implement at Severny open pit mine a pilot plant for dry coal preparation of coal of the 3rd seam.
	Improving operational efficiency of existing facilities	Implementation of the program of energy saving and energy efficiency improvement in the period up to 2025.	In 2023, 61 different activities were performed, measures to improve energy efficiency were implemented in the group of companies of Samruk-Energy JSC.
		Reduction of technological losses in Alatau Zharyk Company's networks.	Actual losses in the reporting period amounted to 10.90%, which is lower than the baseline loss level of 2020 (12.6%).
		Implementation of the ASCEM system.	The ASCEM system was installed at 13 facilities.
		Implementation of SCA-DA operational dispatch system.	The works were not carried out due to changes in the project (the scope and locations of equipment installation under the project changed).
		Optimization of equipment repair cycle.	The Committee of Nuclear and Energy Supervision and Control of the Ministry of Energy of the Republic of Kazakhstan did not approve the transition from a 4-year to a 5-year equipment overhaul cycle due to increased risks of technological shut-downs and high level of equipment wear at power plants.
	Equipment modernization	Modernization of brush contact apparatuses with a permanent electronic monitoring system at Unit No. 2 (GRES-2)	Construction and installation and commissioning works have been completed.
	Innovative development	Implementation at Severny open pit mine of a pilot plant for dry coal preparation of third seam coal with calorific value of 4,000 kcal/kg, Stage I	Commercial offers from potential equipment suppliers are being updated to take into account new available technologies, after receipt it is planned to analyze the payback of the project.

Strategic Goal	Objective	Action	Comments on implementation
 Increased productivity	Digitalization	Automation and visualization of operational reports and daily reports.	Technical specification has been developed.
		Installation of automated control system at power unit No.2 of EGRES-2.	The works have been postponed to 2026-2027, taking into account the binding of the works to the overhaul of unit No.2.
	Business Process Improvement	Electronic archive (part of the measure "Reengineering of the Company's processes to maximize the effect of production, economic, financial and economic activities").	The system was installed on the servers of Samruk-Energy JSC, work on scanning and digitization of documents is in progress.
	HSE best practices	Automation of the process of registering hazardous actions/conditions/incidents to minimize accidents.	The report on the results of post-monitoring of the implemented Safe Production Project was approved by the Management Board of Samruk-Energy JSC.
Cooperation with advanced companies, conclusion of memorandums.		An agreement on cooperation in the field of occupational health and safety was reached with "Morshynsky Mineral Water Plant 'OSKAR' PJSC (Ukraine) with the signing of the relevant Memorandum, however, due to military actions on the territory of Ukraine, the signing of the Memorandum and further implementation of activities under the Memorandum was not possible.	
 Increase in net asset value	Improving financial stability	Compliance with the normative values of financial covenants of creditors, with fixation on a semi-annual and annual basis (except for debt raising and interest expenses arising, in case of force majeure (quarantine), in accordance with the order of the Fund and/or the Government of RK).	All financial covenants of the Company's creditors are observed.



Strategic Goal	Objective	Action	Comments on implementation
 Increase in net asset value	Implementation of investment projects	1. Expansion and reconstruction of Ekibastuz GRES-2 with installation of power unit No. 3.	Transition to an alternative option for replacement of the main process equipment is being considered.
		2. Expansion and reconstruction of Ekibastuz GRES-1 (restoration of unit No. 1).	A test start-up of the power unit was carried out with its inclusion into the grid. Delivery of a turbo-feeding pump is expected.
		3. Gasification of Almaty CHPPs.	1. CHPP-1: a positive conclusion of RSE "Gosexpertiza" on the feasibility study of the project was obtained. 2. CHPP-2: EPC-contract concluded. 3. CHPP-3: an EPC contract was concluded, and an agreement was signed for the purchase of a service to maintain electric capacity availability during construction of newly commissioned generating units with maneuverable generation mode.
		4. Reconstruction of cable networks in Almaty city and Almaty region.	Construction and installation works are in progress.
		5. Transition of Bogatyr open pit mine to modern cyclic-flow technology (CFT) of mining.	Pre-commissioning and commissioning works have been performed and commissioning will be carried out in December 2023.
		6. Transfer of the Kensu River flow.	Implementation of the project by attracting an investor through public private partnership is being considered.
		7. Construction of the counter-regulating Kerbulak HPP on the Ili River.	Work is underway with the Ministry of Energy of the Republic of Kazakhstan in terms of amendments to the RLA to ensure a tariff that allows the project to be realized.
		8. Construction of a 50 MW WPP near Ereimentau.	Works on construction of access and on-site roads, construction of mounting sites for wind turbines (foundations of wind turbines), rearrangement of existing power lines and laying of 35 kV CLs, as well as construction of the 220/35 kV substation (buildings of control room, centralized control room and checkpoints) have been completed.

Strategic Goal	Objective	Action	Comments on implementation
 Increase in net asset value		9. Construction of hybrid WPP, HPP with capacity of 310 MW in Almaty region.	Joint work with Akimat of Yenbek-shikazakh district and Akimat of Almaty region is underway to make decisions on land return.
	Corporate governance	Preparation of annual report in the field of sustainable development in accordance with GRI.	Integrated Annual Report for 2022 was approved by the decision of the Board of Directors dated 01.06.2023.
		Independent diagnostics of corporate governance by the Shareholder, and development of medium-term plans for improvement of corporate governance (within the terms established by the Shareholder).	The report on the Road Map of the ISDMS by the results of 2023 was approved by the Board of Directors on February 26, 2024. At the end of the reporting period, the fulfillment of the ISDMS Roadmap amounted to 94.4%.
		Regular assessment of the Board of Directors (self-assessment, independent assessment) in accordance with the internal document on assessment of the Board of Directors.	Self-assessment of the BOD by questionnaire method was conducted in the first quarter of 2023. The report was submitted and approved at the BOD meeting on 01.06.2023. Based on the results of the assessment, an action plan was developed.
		Improvement of the Company's image by means of awareness-raising activities (annually).	All measures to improve the image by implementing outreach activities are carried out.
		Obtaining ESG rating.	Based on the results of a comprehensive study of the Company's sustainability risk management performance by Morningstar Sustainalytics rating agency on December 12, 2023, the Company was assigned an ESG risk rating of 24.1, which corresponds to Medium Risk level according to the Sustainalytics Agency scale.



Risks and challenges related to the implementation of the development strategy

01

STRATEGIC DIRECTION 1. TRANSITION TO A "GREEN" ECONOMY

Name of risk or threat:

Climate risks

Risk prevention measures:

Control over compliance with environmental legislation, deadlines for submitting applications for emission permits and reporting to state regulatory authorities, mandatory environmental insurance, and compliance with technical regulations.

Monitoring of budget execution under the "environmental protection" item, compliance with the plan for modernization and repair of main and auxiliary equipment, use of greenhouse gas emission quota limits, and adjustments.

In accordance with the Environmental Code of the RK, if necessary, to obtain additional quotas for greenhouse gas emissions, including their acquisition at auction, as well as to form liquidation funds.

STRATEGIC DIRECTION 2: ENSURING RELIABLE COMPETITIVE SUPPLIES OF ENERGY RESOURCES IN THE MARKETS OF OPERATION

02

Name of risk or threat:

Information security risks

Risk prevention measures:

Preparation of spare information capacities (servers, computers).

Regulations for obtaining or limiting access rights.

Risk of industrial accidents that cause damage to the health and life of employees in the course of performing their duties

Timely provision of employees with personal protective equipment.

Control over training of employees in the field of occupational safety and health, verification of knowledge of technical operation rules, safety equipment, execution in Subsidiaries and Affiliates of measures developed within the framework of the Action Plan for management of occupational safety and environmental protection issues in the Group of companies of Samruk-Energy JSC. Monthly monitoring of their fulfillment.

Tariff setting risk

Qualitative preparation of the subject's tariff campaign for approval (coordination) of tariffs.

Timely adjustment of tariff estimates and investment programs in CRNM CP MNE to avoid introduction of compensatory (reduced) tariffs for Subsidiaries and Affiliates.

Tariff policy monitoring. Weekly report on tariff policy problems of Subsidiaries and Affiliates.

Working with government authorities of the Republic of Kazakhstan to obtain the necessary tariff for goods and services of the Company's Subsidiaries and Affiliates.

Risk of industrial accidents and disasters

Control over timely diagnostics of equipment in order to determine its technical condition.

Control over timely and complete fulfillment of necessary repairs of equipment in accordance with the established schedule.

03

STRATEGIC DIRECTION 3. INCREASING THE VALUE OF EQUITY CAPITAL

Name of risk or threat:

Risks of ongoing/prospective investment projects and investment programs of subsidiaries and affiliates

Risk prevention measures:

Work with state authorities of the Republic of Kazakhstan to obtain support for the Company's investment projects.

Report on fulfillment of the Development Plan of Samruk-Energy JSC and Samruk-Kazyna JSC Subsidiaries and Affiliates.

Monitoring of development of capital investments of Samruk-Energy JSC and investment projects being implemented.

Reputational damage risk

Control over compliance with the Rules of preparation and placement of information materials on the website. Regular monitoring of negative feedback, timely response to incidents covered in mass media and social networks.

Timely development and placement of the Annual Report on the website.

Risk of violation of external creditors' covenants and listing requirements

Formation of a report on debt and financial stability.

Monitoring compliance with covenants in accordance with the Financial Sustainability and Debt Management Policy (financial and non-financial).

Asset impairment risk

Reducing capital expenditure, analyzing the feasibility of planned capital repairs.

Performing impairment tests (in case of impairment indicators).

Centralized control over the formation and adjustment of the investment program of subsidiaries and affiliates.

Credit risk

Diversification of invested temporarily available funds into financial instruments in accordance with the requirements of the main parameters of the treasury portfolio. Examination of counterparty banks' risks related to the placement of IOUs

Compliance with limits on counterparty banks.



Investment activities

IN 2023, WE CONTINUED TO WORK ON THE IMPLEMENTATION OF INVESTMENT PROJECTS AIMED AT IMPROVING THE RELIABILITY OF ENERGY SUPPLY, ENSURING A LOW-CARBON DEVELOPMENT STRATEGY, AND DEVELOPING THE RES SECTOR, AND STRENGTHENING THE ENERGY SECURITY AND ENERGY INDEPENDENCE OF KAZAKHSTAN.

In assessing ESG, we are guided by the provisions of the Corporate Governance Code and the best international standards recognized by the international community, such as the UN Sustainable Development Goals, the Global Reporting Initiative, the standards of the International Finance Corporation (Industry Foundation Classes, IFC) and the European Bank for Reconstruction and Development, the UN Principles for Responsible Investment, etc.

Priorities of investment activity of Samruk-Energy JSC

The priority of the investment activity of the Samruk-Energy Group of Companies is the commercial expediency of investments and their focus on the creation of long-term value, the introduction of new technologies, and the creation of quality jobs.

The Company's approach in the field of investment activity is based on the principles of responsible investment, taking into account environmental, social and managerial ESG factors in investment decisions, for effective risk management and the formation of long-term sustainability.

We have implemented the best practices of investment activity management:

- project and activity portfolio management — significantly improved the allocation of financial resources to increase the share of profitable projects in the total portfolio of projects and activities;
- project management — raised the level of control at the stage of investment projects realization (budgets, timelines).

Key principles of investment activity of Samruk-Energy JSC:

- incorporation of ESG parameters into the investment analysis and decision-making process;
- compliance with the legislation of the Republic of Kazakhstan and proper use of confidential information;
- preparation of annual reports, including financial reports and sustainable development reports, including ESG factors, in accordance with generally recognized international or national auditing standards;
- a formalized risk identification, assessment, and management system in place.

In line with ESG principles, our main benefits are:

- informed investment decisions through understanding important ESG factors, relevant potential liabilities, costs and their impact on financial performance, and potential opportunities for value creation;
- minimizing exposure to reputational or legal risks;
- ensuring that adequate systems are in place to assess and monitor the effectiveness of the Fund's and portfolio companies' ESG compliance, and compliance with applicable ESG requirements and management of associated investment risks;
- forming a framework for ongoing engagement with companies to discuss, assess and manage ESG risks and the extent of ESG impacts and to identify and capitalize on opportunities;
- demonstrating appropriate consideration and management of relevant ESG factors for relevant stakeholders.

Based on the results of the analysis, Samruk-Energy JSC formed a list of capital projects, including "green energy transition projects", which are included in the Company's Development Strategy for 2022-2031 (more details on the website of Samruk-Energy JSC: www.samruk-energy.kz).

The Investment Programs are financed by the Company's own funds, borrowed financing from international financial organizations and second-tier banks of the Republic of Kazakhstan.





Implementation of the Investment Program of Samruk-Energy JSC in 2023, by development method, million tenge (excluding VAT)*

CAPEX by area			Fact	Forecast	Прогноз
	2021	2022	2023	2024	2025
Volume of capital investments, Total	61,698	100,580	132,146	272,700	754,354
Investment projects	25,206	58,372	80,393	150,262	635,550
Maintenance of production assets	35,198	41,052	49,555	117,039	117,674
Maintenance of administrative assets	1,267	1,157	2,198	3,591	416
Other investments	26	0	0	1,809	713

*The development method includes data on capital expenditures confirmed by primary accounting documents (acts of work performed, services rendered, delivery notes confirming delivery of materials, equipment, etc.), invoices and primary accounting documents on acceptance and transfer of goods, works and services. At the same time, materials are recognised for development at the moment of writing off the cost of inventories for construction and installation works. This method excludes advance payments and the results of revaluation of property, plant and equipment and intangible assets.

Capital investments to maintain production assets are aimed at carrying out repairs of main and auxiliary equipment, as well as the acquisition of fixed assets of a production nature to ensure the reliability of power plants.

In 2023, the volume of foreign investments attracted by the Company for the implementation of Investment projects amounted to KZT 3.29 billion, including VAT (excluding the shares of Bogatyr-Komir LLP — 50%).

Investment projects implemented in 2023

1. Project “Transition to cyclic-flow technology of coal mining, transportation, averaging and loading at Bogatyr open pit mine (CFT)”

Project Description and Purpose: Replacement of the main worn-out means of coal shipment, crushing and transportation, as well as phased transition of Bogatyr open pit mine to the flow-through technology of coal delivery by conveyor transport to surface averaging warehouses, with its subsequent loading at surface loading complexes is aimed at increasing the production capacity of the enterprise.

Results of 2023:

- The equipment supplier Thyssen Krupp AG (Germany) delivered 100% of the equipment to the construction site;
- Construction and installation works were completed;
- Start-up and adjustment works of the complex were completed;
- Currently, the CFT complex ships 40-45 thousand tons of coal daily;
- The act of acceptance of the facility into operation, dated December 19, 2023, was registered by the Ekibastuz Department of registration and land cadastre of the branch Government for Citizens NJSC for Pavlodar region on December 22, 2023.

2. Project “Construction of 110/10kV substation “Kokozek” with connection to the 110kV switchgear-110kV of the 220kV substation “Kaskelen” of Karasay district of Almaty region”

Project Description and Purpose: Construction of a new 110/10-10kV substation “Kokozek” aims to urgently address the deficit of free transformer capacity, and enable the implementation of investment projects in the Industrial Zone “Boraldai.”The substation will provide electricity to the Industrial Zone in Karasai district, where there is a deficit of free capacity. In addition, the new substation will provide reliable and stable power supply to small and medium-sized businesses and expand opportunities for the construction of necessary social and cultural facilities in the region.

Implementation of the Project enables the connection of new consumers with an installed capacity of 106 MVA.

Results of 2023:

- Installation of equipment at the 110kV switchgear at the Kokozek substation was completed;
- 102 110-kV overhead line supports were installed;
- The Kokozek substation became operational on October 9, 2023.

Investment projects of Samruk-Energy JSC

In the reporting period, the Company continued to implement investment projects aimed at improving the reliability of energy supply to the industrial and public utility sectors of the country, ensuring a low-carbon development strategy, support, development and integration of RES, increasing export potential, energy security and energy independence of Kazakhstan.

1. Project “Rehabilitation of Power Unit No.1 with installation of new ESPs”

Project Description and Purpose: Construction of a power unit with installed capacity of 500 MW and installation of new ESPs will increase the installed capacity of EGRES-1 up to 4,000 MW.

Results of 2023:

- Dismantling of main and auxiliary equipment of the power unit and ash collecting plant.
- Delivery of boiler, turbine and their auxiliary equipment, generator, transformers, electrical equipment.
- Total volume of work actually performed — 99.16%.

Implementation period: November 2024.

2. Project “Expansion and reconstruction of EGRES-2 with installation of power unit No.3”

Project Description and Purpose: Expansion and reconstruction of EGRES-2 and construction of power unit No.3 will improve the reliability of energy supply to all sectors of the economy and population and increase the export potential of the country.

Results of 2023:

- On December 29, 2023, the Feasibility Study of the project uploaded to the portal of RSE Gosexpertiza.
- On January 31, 2024, the ROI investment program submitted to the Market Council.
- On February 26, 2024, as part of the review of the application, a CCS meeting was held with the participation of independent experts of the Market Council, and as a result of the review, the investment program was approved. Taking into account the approval received, it is expected to send materials to the Ministry of Energy of the Republic of Kazakhstan for further conclusion of the investment agreement for return of investments.

Implementation period: 2006–2027.

3. Project “Modernization of Almaty CHPP-2 with minimization of environmental impact”

Project Description and Purpose: Construction of a new plant using gas turbine technologies with an electric capacity up to 557 MW and heat capacity of 800 Gcal/h at the site of Almaty CHPP-2 will reduce the negative environmental impact of the plant on the environmental situation of Almaty city. The project is implemented within the framework of the fulfillment of the order of the President of the Republic of Kazakhstan.

Results of 2023:

- On May 31, 2023, according to the results of competitive procedures under EBRD rules, an EPC contract was concluded between APP JSC and a consortium consisting of Dongfang Electric International Corporation & Powerchina Sepco1 Electric Power Construction Co., Ltd & Powerchina Hebei Electric Power Engineering Co. Ltd.
- On June 16, 2023, the EPC Contractor signed a Slot reservation agreement with Siemens as the gas turbine supplier.
- On July 5, 2023, APP JSC made an advance payment to the EPC Contractor in the amount of EUR 16.9 million, Yuan 192.4 million and Yuan 12.3 billion. Yuan and KZT 12.3 billion, which in total amounts to KZT 32,476,483 thousand at the exchange rate of the National Bank of the Republic of Kazakhstan as of 05.07.2023. (10% of the advance payment under the EPC Contract).
- On July 10, 2023 the EPC Contractor made the payment of the first tranche in the amount of 14 million EUR and on July 31, 2023 made the payment of the second tranche in the amount of EUR 16 million to SIEMENS ENERGY (GTP — 3 pcs., generator — 3 pcs.) according to the Slot reservation agreement.
- On October 27, 2023, a contract was signed with Siemens Energy for the supply of three gas turbine units with generators.
- On November 30, 2023, an agreement was signed between the EPC Contractor and Dongfang Electric Group Dongwan Steam Turbine Co Ltd for the supply of a steam turbine and a generator.
- On December 20, 2023, an agreement was signed between the EPC-contractor and Dongfang Electric Group Boiler Ltd for supply of hot water boilers (4 pcs.) and waste heat boilers (3 pcs.).

Implementation period: 2022–2026.



4. Project “Reconstruction of Almaty CHPP-3”

Project Description and Purpose: Reconstruction of Almaty CHPP-3 with the construction of SGP with a capacity of up to 544 MW will not only partially cover the deficit of maneuvering capacities in the Southern Zone of Kazakhstan, but also provide consumers of Almaty city and Almaty region with uninterrupted supply of electricity and heat in accordance with load schedules and temperature regimes.

Results of 2023:

- On September 08, 2023, an EPC contract was concluded between APP JSC and a consortium consisting of: KBI Energy Group LLP together with Energo Spets Stroy LLP, StandardEnergo KZ LLP and STROYINDUSTRIA LLP.
- On October 24, 2023, the advance payment to the EPC Contractor in the amount of KZT 38.5 billion (15%) was made.
- November 09, 2023, the EPC Contractor signed with Ansaldo Energia. Slot reservation agreement (SRA) for the manufacture of CHPP-3 equipment with the following terms (FCA): GTP with generator for SC-1-February 2025, GTP with generator for PC-2-May 2025.
- In January 2024, it was planned to conclude contracts for the supply of main process equipment (GTP, CHP, ST).

Implementation period: 2021–2026.

5. Project “Reconstruction of CHPP-1 named after B.Orazbayev of APP JSC with construction of SGP with capacity of 200-250 MW”

Project Description and Purpose: Expansion of Almaty CHPP-1 with construction of SGP with capacity of 200-250 MW will ensure reliability of heat supply and electrification of Almaty city and Almaty region.

Results of 2023:

- In January, 2023, positive conclusion of RSE “Gos-expertiza” of the feasibility study of the project was received.
- Corporate procedures are currently underway to approve the results of the project feasibility study. Taking into account the fact that the main purpose of gasification of Almaty CHPPs is to improve the environmental situation and that CHPP-1 is already operating on gas, the option of phased construction of the plant is being considered.
- The active phase with SGP construction is planned after completion of the CHPP-2 and CHPP-3 projects in 2027.

Implementation period: 2027–2032.



6. Project “Construction of a counter-regulating HPP on the Ili River”

Project Description and Purpose: Creation of a counter-regulating reservoir in the downstream of Kapshagay HPP is designed not only to contribute to equalization of uneven weekly and daily releases of Kapshagay HPP and transfer Kapshagay HPP to the mode of covering peak loads using all available capacity in the deficit zones of the Almaty power system and the system of the Southern energy zone of Kazakhstan, but also to improve the environmental situation in the lower reaches of the Ili River.

Results of 2023:

- According to the concluded contract, KAZHIDRO LLP developed a feasibility study (FS) for the Project.
- In the developed Feasibility Study for the Project, counter-regulator sites were identified and topographic surveys were conducted, and modernization of Kapshagay HPP was considered.
- Work has started on registration of land plots for construction of the counter-regulating hydroelectric power plant on the Ili River, situation diagrams have been obtained, and applications have been submitted for obtaining a land plot selection act for further registration for APP JSC.

Implementation period: 2011–2028.

7. Project “Reconstruction of cable networks in Almaty”

Project Description and Purpose: The reconstruction of cable networks will increase the capacity of Almaty city by 30%. Almaty by 30%, as well as reduce the accident rate in the distribution networks of Alatau Zharyk Company JSC. The project is approved under the “National Project ‘Sustainable Economic Growth aimed at improving the welfare of Kazakhstani’.”¹⁴

Results of 2023:

- On April 13, 2023, the project implementation was approved by the Decision of the Management Board of Samruk-Energy JSC. Design and estimate documentation was approved for 17 objects.
- Contracts for construction and installation works were concluded.
- 222.3 km of cable lines and 97 units of transformer substations were replaced.
- For 2024, it is planned to purchase works on development of feasibility study of the project and reconstruction of cable networks for 18 objects, as well as the development of design and construction documentation for 16 objects.

Implementation period: 2022–2030.

8. Project “Reconstruction and Modernization of Cascade of HPP”

Project Description and Purpose: Reconstruction and modernization of HPP Cascade will ensure reliability and safety of the plant operation, as well as increase of the installed capacity by 7.5 MW and increase of electricity generation by 41.7 million kWh per year to supply consumers of Almaty city and Almaty region.

Results of 2023:

- Within the framework of bilateral meetings between Samruk-Energy JSC and the World Bank, an agreement was reached to provide grant funds to finance the development of the project feasibility study. AFRY Switzerland has been identified to conduct a study on the potential for the reconstruction and modernization of the HPP. Currently, the feasibility study is in the process of approval.

Implementation period: 2022–2027

¹⁴ Order of the President of the Republic of Kazakhstan No. 670 of 7 October 2021.



New investment projects

1. Project “Construction of 1 GW wind power plant with RK energy storage system in cooperation with Total Eren”

Project Description: the project will utilize energy storage to maintain power generation within the stated forecast and therefore reduce the risk of grid instability due to intermittency of wind generation.

Results of 2023:

The project has signed:

- Intergovernmental Agreement — 11/30/2022;
- Non-binding Power Purchase Agreement (tariff 3.99 US cents/kWh) — 09.06.2023;
- Joint Venture Agreement — 01.11.2023;
- Investment Agreement — 02.12.2023.
- Capacity Delivery Scheme agreed with KEGOC on December 26, 2023.

Implementation period: 2023–2028.

2. Project “1 GW wind power plant with energy storage system in Zhambyl region in cooperation with MASDAR”

Project Description: The project will utilize energy storage, which will maintain power generation within the stated forecast and therefore reduce the risk of grid instability due to the intermittency of wind generation.

Results of 2023:

The project has signed:

- Cooperation Agreement — 09.06.2023;
- Joint Development Agreement — 02.12.2023;
- Intergovernmental Agreement — 02.12.2023.
- On August 29, 2023, a permit was obtained to conduct PSW on a land plot of 44 thousand hectares with a term until December 31, 2026 (Zhambyl Oblast). The Decree of the President of the Republic of Kazakhstan No. 670 dated October 7, 2021.
- Juru Energy was identified as the service provider for the development of the SWM. Kazselenergoproject Institute LLP (KazSep) was identified as a subcontractor.

Implementation period: 2023–2028.



3. Project “1 GW wind power plant with energy storage system in Zhetisu Oblast in cooperation with ACWA Power Company”

Project Description: the project plans to apply an energy storage, which will keep the power generation within the stated forecast and therefore reduce the risk of grid instability due to intermittency of wind generation.

Results of 2023:

The project has signed:

- Joint Development Agreement — 02.12.2023.
- ESR LLP started development of the project's capacity delivery scheme.
- Decree of the Akimat of Alakol district on allocation of land plot with the total area of 21,000 hectare for survey works was received on October 24, 2023. On December 6, 2023, an additional 3,913 hectares were allocated by the Decree of Alakol District Akimat.

Implementation period: 2023–2029.

4. Project “1 GW wind power plant with energy storage system in Zhambyl oblast jointly with China Power International Holding (CPIH)”

Project Description: the project plans to apply energy storage to the project to help maintain electricity generation within the stated forecast and therefore reduce the risk of grid instability due to intermittency of wind generation.

Results of 2023:

The project has signed:

- Joint Development Agreement — 17.10.2023.
- CPIH contracted with Electro Detail Design (EDD) to develop the power output scheme. On July 11, 2023, approval was granted for a 30,000 hectare PSW for the site with a term through July 10, 2026.
- Wind measurement masts have been installed in full. Wind measurement works have started.

Implementation period: 2023–2028.

5. Project “Expansion up to 810 MW of WPP in Almaty region (Power China)”

Project Description: Creation of a large RES facility with the possibility of balancing the errors of power output of the WPP due to the operation of HPPs in one single scheme of power output.

Results of 2023:

The project has signed:

- Joint development agreement — 17.10.2023.
- On November 7, 2023, KGTE LLP concluded an agreement on development of the power output scheme with Scientific-Engineering Center Energetika LLP.
- On January 3, 2024, KEGOC obtained approval of the capacity delivery scheme.

Implementation period: 2023–2029.



6. Project “Construction of SPP with total capacity of 1 GW together with Unigreen Energy”

Project Description: Construction of SPP with the capacity up to 1 GW with the possibility of using energy storage systems.

Results of 2023: within the framework of the project was signed:

- Charter and Shareholders’ Agreement of private company “Altyn Dala Energy Ltd.” — 24.11.2023.
- Joint Company “Altyn Dala Energy Ltd.” was established in the territory of MFCA — 15.12.2023.
- On November 20, 2023, the results of the preliminary scheme of power supply from “Energy system researches” LLP were received for the Western and Northern-Southern zones of the UES of the Republic of Kazakhstan.
- A list of projects of the first stage of 500 MW was signed on December 28, 2023.

Implementation period: 2023–2028.

7. Semey HPP construction project

Project Description: A station with a capacity of up to 300 MW on the Irtysh River. The station will be located in Abay region. The operating mode of the plant is maneuverable. The Semey HPP will serve as a counter-regulator for Shulbinsk HPP.

The location of Semey HPP is 20 km from Semey city, towards Shardara HPP. The site of projected construction is located in the interval from 10 to 40 km upstream of the Irtysh River. Absolute marks of the surface of the site of works on the river water cut-off vary within the limits of abs. marks 196 and 206 m.

The reservoir of the Semey HPP with the elevation of NPP = 212m will occupy an area of about 107 km², having a width from 1.5 to 7.0 km and a depth at the dam of 18 m.

Results of 2023:

- Implementation of the Semipalatinsk HPP Construction Project was approved by the decision of the Management Board of Samruk-Energy JSC on May 24, 2023.
- A contract for the development of a preliminary feasibility study was concluded.
- Preparatory activities are underway to conclude an agreement with potential investors for the Project implementation.

Implementation period: 2023–2028.

8. Project “Construction of a new power plant GRES-3 based on clean coal technologies”

Project Description and Purpose: Construction of a new coal-fired GRES-3 station with maneuverable generation mode based on clean coal technology with a capacity of 1,320 MW (two power units of 660 MW each), aims to address the shortage of maneuverable capacity in the country while complying with modern environmental emission standards.

Results of 2023:

- On September 29, 2023, a contract was signed for pre-feasibility study, with an estimated completion date of May 2024.

Implementation period: Unit 1 — 2028, Unit 2 — 2029.

9. Project ‘Modernization of Power Unit No.3 of GRES-1’.

Project Description and Purpose: To extend the service life of equipment, improve technical and economic indicators of reliability, efficiency, and maintainability, reduce operation and repair costs, increase the time between repairs, and comply with environmental standards.

Results of 2023:

- On August 8, 2023, the Company's EIS meeting recommended approval of the pre-investment phase of the Project, with the development of a feasibility study.
- On October 28, 2023, a contract was signed for the development of the Feasibility Study of the Project.

Implementation period: 2023–2027.



Performance indicators

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- 74 – Key financial indicators
- 88 – Operating enterprises
- 110 – Procurement Management

3



Key financial indicators

Macroeconomic factors

For the first time in the last 10 years, the growth rate of the economy crossed the 5% threshold and amounted to 5.1% by the end of 2023. The main driver was the government's expansionary fiscal policy with a significant share of government spending financed by transfers from the National Fund. This increase investment in fixed assets was also a record since 2013.

Inflation at the end of 2023 amounted to 9.8%, which was halved compared to the beginning of the year (source: halyk-finance.kz, macroeconomic report for Q4 2023).

To prevent price increases, the National Bank of the Republic of Kazakhstan maintained the prime rate at 16.75% in 2023, the highest rate in the last six years. Tightening of monetary policy in Kazakhstan occurred against the background of tightening of monetary policy by global central banks. However, in August, October and November 2023, the Monetary Policy Committee of the National Bank of the Republic of Kazakhstan made decisions to reduce the prime rate. Thus, the prime rate at the end of 2023 amounted to 15.75% per annum (source: www.nationalbank.kz, the schedule of decisions on the prime rate).

In 2023, the national currency strengthened by 18.2% against the Russian ruble and appreciated by 1.4% against the U.S. dollar. Volume of trades on KASE increased by 57%, on the secondary market of shares increased by 78%, volumes of trades on the secondary market of GS increased by 49%, and the number of deals on the exchange market increased by 53% (source: www.kase.kz, performance review for 2023).

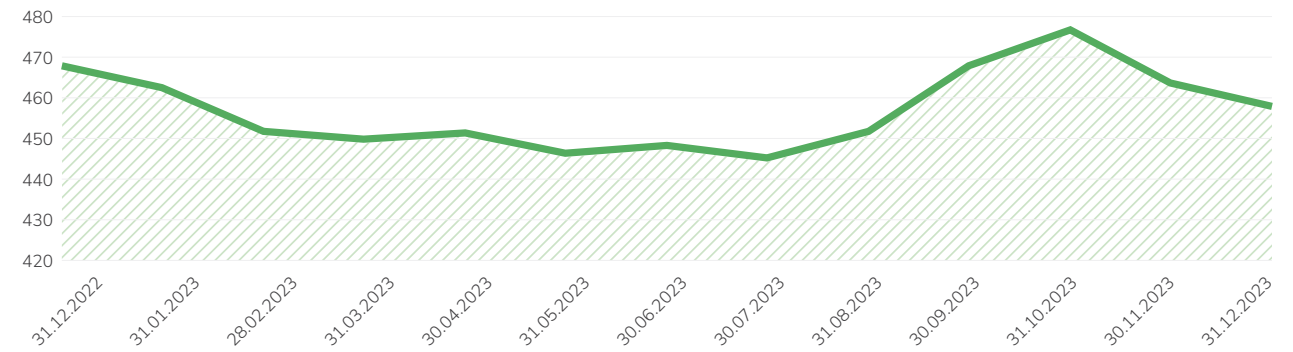
According to the data of the National Bank of Kazakhstan for 2023, the exchange rate of tenge fluctuated in the range of KZT 431.08-482.77 per U.S. dollar. At of the end of December 2023, the exchange rate of tenge to US dollar was 454.56 tenge per US dollar (source: www.nationalbank.kz, exchange rates).



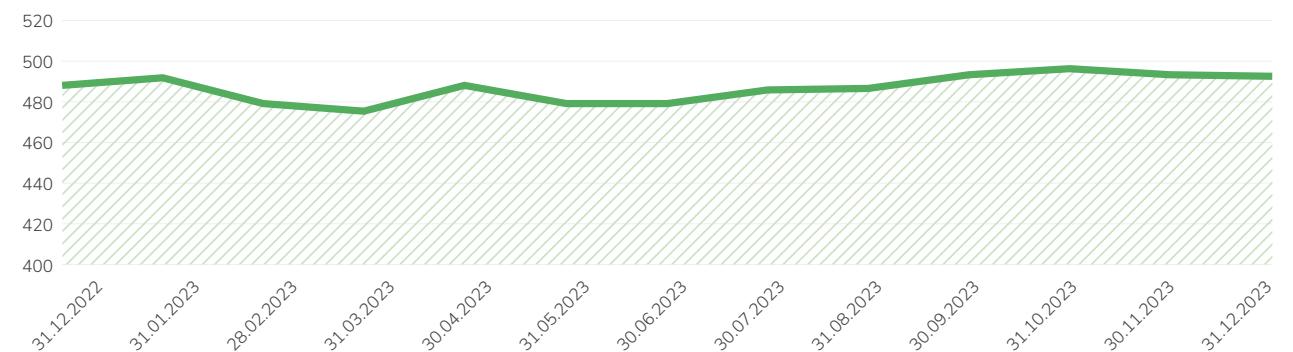
Dynamics of exchange rates

	31.12.2022	31.12.2023	%
KZT/USD	462.65	454.56	101%
KZT/EUR	492.86	502.24	104%
KZT/RUB	6.43	5.06	79%

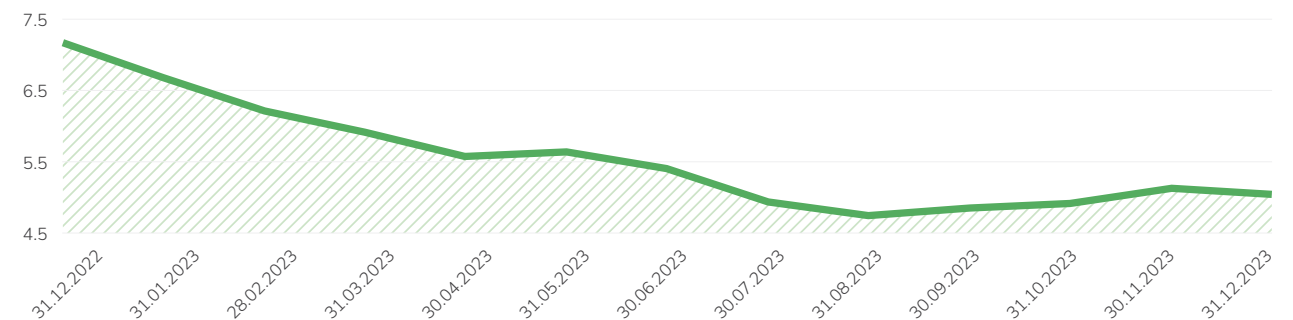
KZT/USD



KZT/EUR



KZT/RUB



The economy of the Republic of Kazakhstan continues to display certain characteristics of an emerging market. These characteristics also include, but are not limited to, a national currency that is not freely convertible outside of the country and a low level of liquidity in the securities market.

As of the date of this report, the official exchange rate of the National Bank of the Republic of Kazakhstan was KZT 451.03 to USD 1 compared to KZT 454.56 to USD 1 on December 31, 2023 (December 31, 2022: KZT 462.65 to USD 1).



The inflation rate was 9.8% in December 2023 after peaking at 21.3% in February 2023. The economy grew by 4.8% in 2023, and analysts forecast the national economy to grow at an average annual rate of just under 4% over the next three years.

The economic environment has a significant impact on the activities and financial position of the Group of companies of Samruk-Energy JSC. The management takes necessary measures to ensure the sustainable activity of the Group of companies of Samruk-Energy JSC. However, future consequences of the current economic situation are difficult to predict, and management's current expectations and estimates may differ from actual results.

In addition, the electricity sector in the Republic of Kazakhstan remains subject to political, legislative, fiscal and regulatory developments in the Republic of Kazakhstan. The prospects for economic stability in the Republic of Kazakhstan are largely dependent upon

the effectiveness of economic measures undertaken by the Government, together with legal, regulatory, and political developments, which are circumstances beyond the control of Samruk-Energy JSC Group of Companies.

The management of the Group of Companies Samruk-Energy JSC monitors current changes in the economic and political situation and takes measures it considers necessary to maintain the stability and business development of the Group of Companies Samruk-Energy JSC in the near future.

To estimate expected credit losses, the Group of Companies Samruk-Energy JSC uses confirmed forecast information, including forecasts of macroeconomic indicators. However, as in any economic forecasts, assumptions and the probability of their realization are inevitably associated with a high level of uncertainty, and, therefore, actual results may significantly differ from the forecasted ones.

Financial and economic indicators

Key financial and economic indicators, million tenge

Indicator ¹⁵			Fact		Forecast
	2021	2022	2023	2024	2025
Income from sales of products and services	332,537	381,465	444,960	638,112	695,621
Cost of sales and services rendered	254,847	288,929	329,676	483,534	531,598
Gross profit	77,690	92,536	115,284	154,578	164,023
Operating profit	53,868	64,574	92,828	124,928	132,885
Earnings before interest, depreciation, amortization and CIT (EBITDA)	123,447	129,303	160,117	225,392	227,720
Profit (loss) before income tax	23,723	47,152	63,082	103,362	115,409
Total income (loss) before minority interest	15,347	30,306	43,730	80,232	92,584
Total profit attributable to the Shareholders of the Group of companies of Samruk-Energy JSC	15,046	30,132	43,080	79,330	92,081

Income from sales of products and services

Income from sales of products and rendering of services by Samruk-Energy Group of Companies in 2023

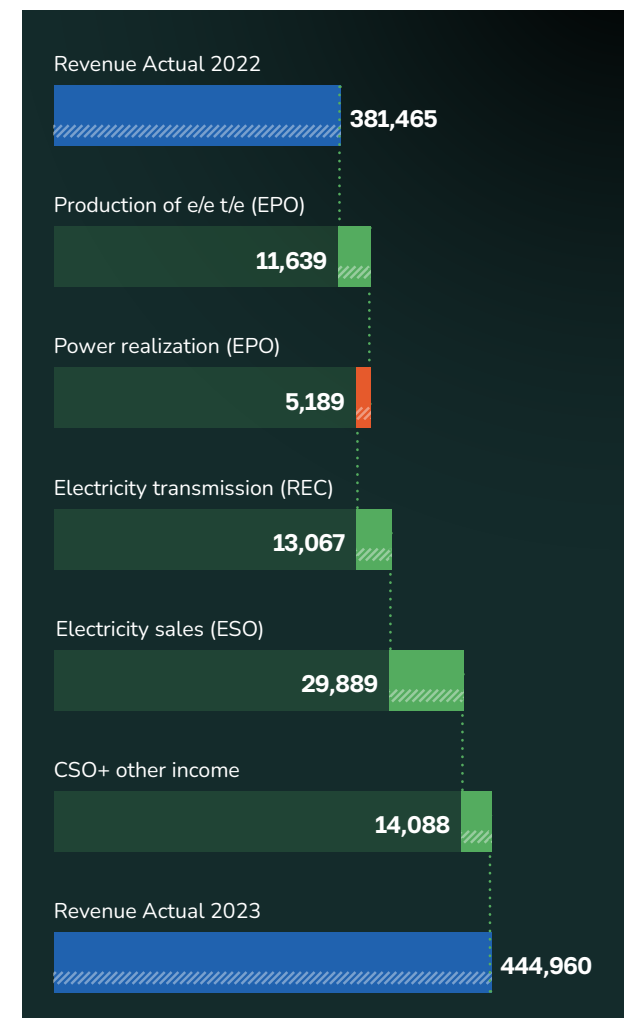
444,960
million tenge

The increase in consolidated revenues was mainly due to an increase in sales of electricity by 239 million kWh (3%) and an increase in the electricity sales tariff of AlmatyEnergoSbyt LLP from 20.09 KZT/kWh to 23.64 KZT/kWh.

The increase in revenue from electricity transmission was due to an increase in electricity transmission volumes by 533 million kWh (7%) and the electricity transmission tariff of Alatau Zharyk Company JSC from 6.58 KZT/kWh to 7.68 KZT/kWh.

In the segment of electricity generation due to an increase in the marginal tariffs of EPO from June 1, 2023, while there was a decrease in the volume of capacity sales based on the results of the conducted trades for 2023.

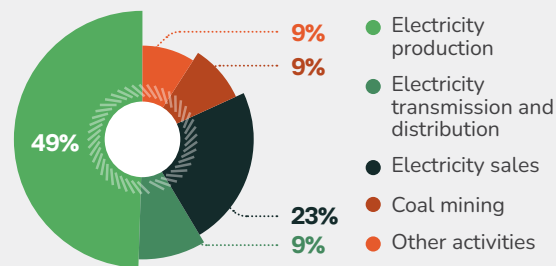
There was also an increase in the heat generation segment due to higher sales volumes (resulting from lower temperature conditions in the region) and an increase in the tariff for heat generation.



¹⁵ The breakdown of revenues and cost of sales is presented by type of activity (not by segment) and is stated without elimination.



Structure of 2023 revenues by main types of activities, %



Forecast for the future period:

In the forecast for 2024, revenue from sales is planned to be in the amount of KZT 638,112 million, which is higher than in 2023 by KZT 193,152 million or 43%. The increase is due to the growth of tariffs on production and sales of electric power, volumes and tariff for capacity (from 590 thousand tenge/MW*month to 1,065 thousand tenge/MW*month), as well as inclusion of "AES Ust-Kamenogorsk HPP" LLP and "AES Shulbinsk HPP" LLP into the perimeter of income consolidation.

In the forecast for 2025 there is an increase in income compared to the forecast for 2024 due to the growth of income from electricity generation mainly due to the growth of tariffs for production, transmission and sales of electricity, and capacity tariff from KZT 1,065 thousand/MW*months to KZT 1,215 thousand/MW*months. There is also an increase due to growth of sales, transmission and sales volumes of electricity, and capacity volumes.



Income from sales of products and services by producers, million KZT

Indicator			Fact		Forecast
	2021	2022	2023	2024	2025
Income from sales of products and services	332,537	381,465	480,476	638,112	695,621
Ekibastuz TPP-1 LLP	166,366	189,266	186,939	205,940	233,720
Almatyenergosbyt LLP	125,685	137,578	168,309	225,179	252,137
Almaty Power Stations JSC	78,654	86,220	96,660	104,980	115,247
Alatau Zharyk Company JSC	46,594	53,842	67,712	82,159	100,928
Moynak HPP JSC	19,003	22,804	21,720	20,991	21,011
Shardara HPP JSC	7,183	8,680	8,991	7,447	8,022
AES Ust-Kamenogorsk HPP" LLP	-	-	-	9,143	10,537
AES Shulbinsk HPP LLP	-	-	-	13,222	14,994
FWPP LLP	4,881	4,987	6,170	7,705	8,090
Bukhtarminskaya HPP JSC	3,927	4,181	21,837	29,644	16,100
Energy Solution Center LLP	1,128	1,515	1,595	1,836	1,935
Samruk-Green Energy LLP	399	409	500	475	504
Intragroup turnovers (elimination)	-121,285	-128,016	-99,959	-70,609	-87,605

The major share in the Company's operating income is held by EGRES-1 LLP, Almaty Power Plants JSC, Alatau Zharyk Company JSC, AlmatyEnergoSbyt LLP. At the same time, when consolidating revenues, intragroup turnovers are excluded from the total amount, mainly for energy producing and distribution companies.

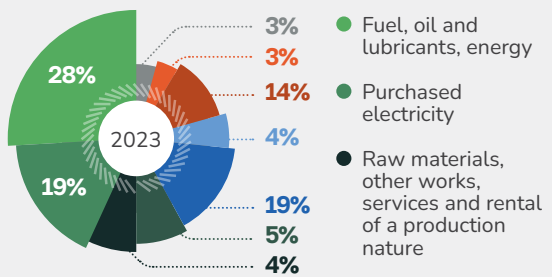
Cost of sales

Cost of products and services, million KZT

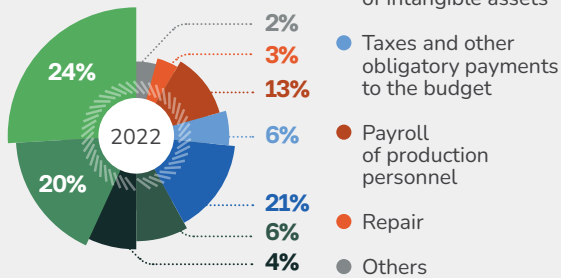
Indicator			Fact		Forecast
	2021	2022	2023	2024	2025
Fuel	60,320	68,247	91,379	119,940	127,614
Labor remuneration and related expenses	34,120	45,643	53,766	64,534	68,311
Cost of purchased electricity	42,426	50,991	56,404	116,754	124,014
Services to maintain readiness of electric capacity	8,718	8,819	8,848	15,237	17,383
Depreciation of property, plant and equipment and depreciation of property	55,168	59,764	62,556	71,396	92,850
Repairs and maintenance	9,901	9,950	11,377	15,216	17,650
Electricity transmission services	13,239	16,847	16,922	15,390	16,032
Materials	1,930	2,181	2,777	4,309	4,542
Water supply	6,329	7,106	7,582	8,631	8,771
Grid losses	2	2	2	14,986	15,193
Taxes other than income tax	4,923	4,642	4,633	6,176	6,964
Payment for emissions into the environment	7,802	7,664	4,435	11,930	13,209
Services of third-party organizations	5,649	3,385	3,350	12,823	12,712
Other	4,320	3,688	5,645	6,213	6,353
TOTAL	254,847	288,929	329,676	483,534	531,598



Cost structure by main types of activity, %



14% ↑ 40,747 KZT million



The cost of sales for 2023 amounted to KZT 329,676 million, a 14% increase compared to 2022. This rise in costs is attributed to higher variable production costs (such as coal, gas, and KEGOC services) due to increased prices for goods and services, costs associated with BEM, labor costs for production personnel as part of social support for employees of subsidiaries and affiliates, taxes and other mandatory budget payments, and the indexation of prices for raw materials and production materials.

Amortization for 2023 amounted to KZT 62,556 million, an increase of KZT 2,793 million or 5% compared to the same period last year. The primary increase for Almaty Power Stations JSC is due to the accrual of a reserve for the liquidation fund in fixed assets.

Forecast for 2024-2025

In the forecast for 2024 and 2025, the cost of production increases due to the growth of prices for goods and services, expenses for purchase of balancing electricity at BEM, increase in labor costs of production personnel, inclusion of expenses of AES Ust-Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP into the consolidation perimeter of the Group of companies of Samruk-Energy JSC, as well as due to the increase in production volumes.

Profit and expenses

Profit and expenses, million KZT

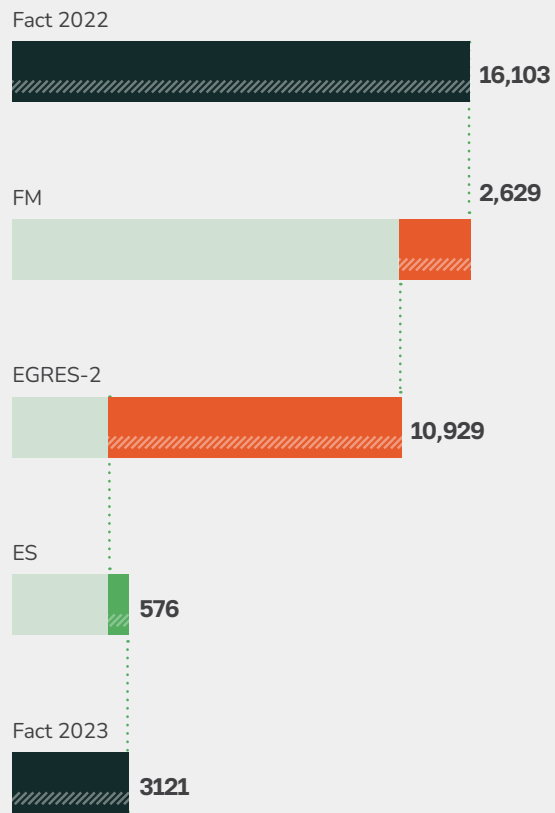
Indicator	2021	2022	Fact		Forecast	
			2023	2024	2025	
Gross profit	77,690	92,536	115,284	154,578	164,023	
Operating profit	53,868	64,574	92,828	124,928	132,885	
Earnings before amortization, interest and CIT (EBITDA)	123,447	129,303	160,117	225,392	227,720	
Profit (loss) before income tax	23,723	47,152	63,082	103,362	115,409	
Total income (loss) before minority interest	15,347	30,306	43,730	80,232	92,584	
Total profit attributable to the Shareholders of the Group of companies Samruk-Energy JSC	15,046	30,132	43,080	79,330	92,081	

In 2023, profit from equity companies amounted to KZT 3,121 million, a decrease of KZT (12,982) million or (81%) compared to the same period, mainly due to an additional provision and a reduction in the average electricity tariff at EGRES-2 JSC, as well as Forum Muider B. V. due to recording of provision for illiquid inventories and doubtful accounts receivable, as well as with decrease in expenses on sales of products related to decrease in export volumes due to decrease in demand.

Share of profit of joint ventures and associates

Indicator	2021	2022	Fact		Forecast	
			2023	2024	2025	
Share in profit of joint ventures and associates	13,455	16,103	3,121	10,691	21,870	





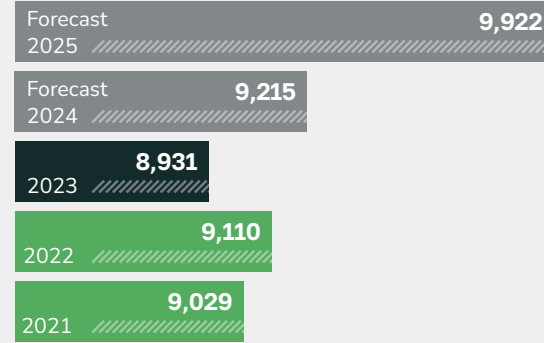
Forecast for 2023-2024

Profit growth of equity companies is planned due to increase in profit of EGRES-2 JSC, capitalization of finance costs and other expenses due to resumption of the project on power unit No.3, as well as increase in tariff for electricity generation and capacity.

Implementation costs, million KZT

Sales expenses at the end of 2023 decreased by KZT 179 million (2%) compared to 2022 and amounted to KZT 8,931 million. This decrease is attributed to lower costs for KEGOC's services related to the balancing of electricity production and consumption due to a reduced tariff.

Implementation costs, million KZT



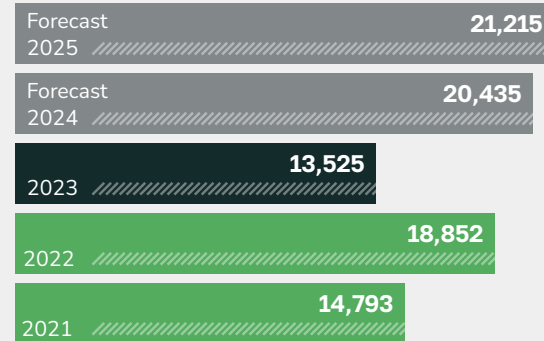
Forecast for 2024-2025

In the forecast for 2024, distribution costs are planned at KZT 9,215 million, which is KZT 284 million or 3% higher than in 2023. The increase in selling expenses is attributed to a rise in the volume of electricity output from the turbines of EGRES-1 LLP and an increase in KEGOC's service prices. For 2025, the increase compared to 2024 is expected due to further growth in electricity supply from EGRES-1 LLP turbines and an additional rise in KEGOC's service prices.

Administrative expenses

For 2023, administrative expenses amounted to KZT 20,435 million, a decrease of KZT 5,327 million or 28% compared to 2022, mainly due to EGRES-1 LLP recognising in the prior period a penalty on the additional CIT return relating to the cancellation of the tax incentive at OSH-500 for 2016-2020.

General and administrative expenses, KZT million



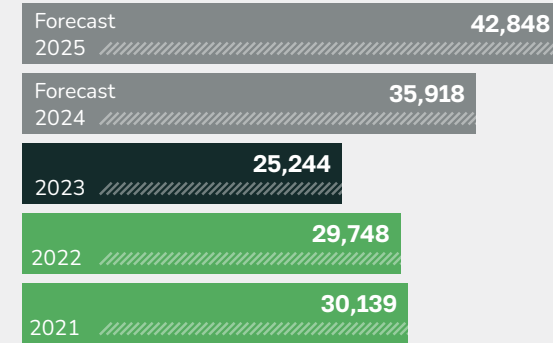
Forecast for 2024-2025

In the forecast for 2024, administrative expenses are expected to amount to KZT 20,435 million, higher than in 2023. This increase is mainly due to the indexation of salaries as part of social support for employees of subsidiaries and affiliates, growth in expenses for consulting, audit, and legal services (with some consulting expenses from 2023 reallocated to 2024), and the inclusion of AES Ust-Kamenogorsk LLP and AES Shulbinsk LLP into the Company's consolidation perimeter. For 2025, the rise in administrative expenses is primarily attributed to cost indexation.

Financial expenses

Financial expenses for 2023 totaled KZT 25,244 million, which is KZT 4,504 million lower than in 2022. This decrease is mainly due to a reduction in expenses for EGRES-1 LLP as a result of capitalization of remuneration costs during the reporting period and a decrease for the Corporate Center due to debt reduction from early and scheduled repayment of loans.

Financial expenses, KZT million



Forecast for 2024-2025

The forecast for 2024 shows finance costs of KZT 35,918 million. The increase is mainly due to the reflection of borrowing costs at EGRES-1 LLP (Unit 1) in current costs from the second half of 2024, as well as an increase in the debt portfolio. Increase in the 2025 forecast, compared to 2024, due to reflection of EGRES-1 LLP (Unit 1) borrowing costs in current expenses from the beginning of 2025.



Liquidity and financial stability indicators

Samruk-Energy JSC achieved the target indicators of financial stability ratios stipulated by the shareholder.

Execution of covenants from external creditors

Covenant	Normative	2021 actual	2022 actual	2023 actual	Note
Debt /EBITDA (ADB)	no more 3,5	2.70	2.14	1.74	observed
EBITDA/ per cents (ADB)	no more 3,0	5.00	5.92	10.8	observed
Debt /shareholders' equity (DBK)	no more 2,0	0.59	0.50	0.43	observed

Наименование	2019 actual	2020 actual	2021 actual	2022 actual	2023 actual
Debt /EBITDA	3.31	2.96	2.41	1.90	1.71
Debt /equity capital	0.56	0.54	0.59	0.50	0.43
Current liquidity	0.70	0.75	0.53	0.57	1.04

Based on the results of 2023, Samruk-Energy JSC complied with financial and non-financial covenants of creditors, which are fixed on a semi-annual basis.

Loan covenants

The Group of companies of Samruk-Energy JSC has certain covenants on all bank loans and obligations under bonds, bank guarantees of Samruk-Energy JSC, as well as the loan of Samruk-Energy JSC from Samruk-Kazyna JSC (Note 16). Non-compliance with these covenants may result in negative consequences for the Group of companies of Samruk-Energy JSC, including increase of borrowing costs and declaration of default. As of December 31, 2023, the Group of companies of Samruk-Energy JSC complied with its covenants.

Based on the results of 2023 and 2022, the Group of companies of Samruk-Energy JSC fulfilled normative values of covenants on loans, as well as received waivers to reduce thresholds, in cases where a breach event was predicted to occur.

Debt load

Based on the results of 2023, the consolidated nominal debt of the Group of companies of Samruk-Energy JSC amounted to KZT 271.7 billion, the reduction of nominal debt for the reporting period compared to the results of 2022 (KZT 314.6 billion) amounted to KZT 42.9 billion.

Decrease in nominal debt in 2023 is due to full early repayment by the Group of companies of Samruk-Energy JSC of the EBRD loan, foreign currency loan of Moynak HPP JSC to DBK and loan of EGRES-1 LLP to Halyk Bank of Kazakhstan JSC.

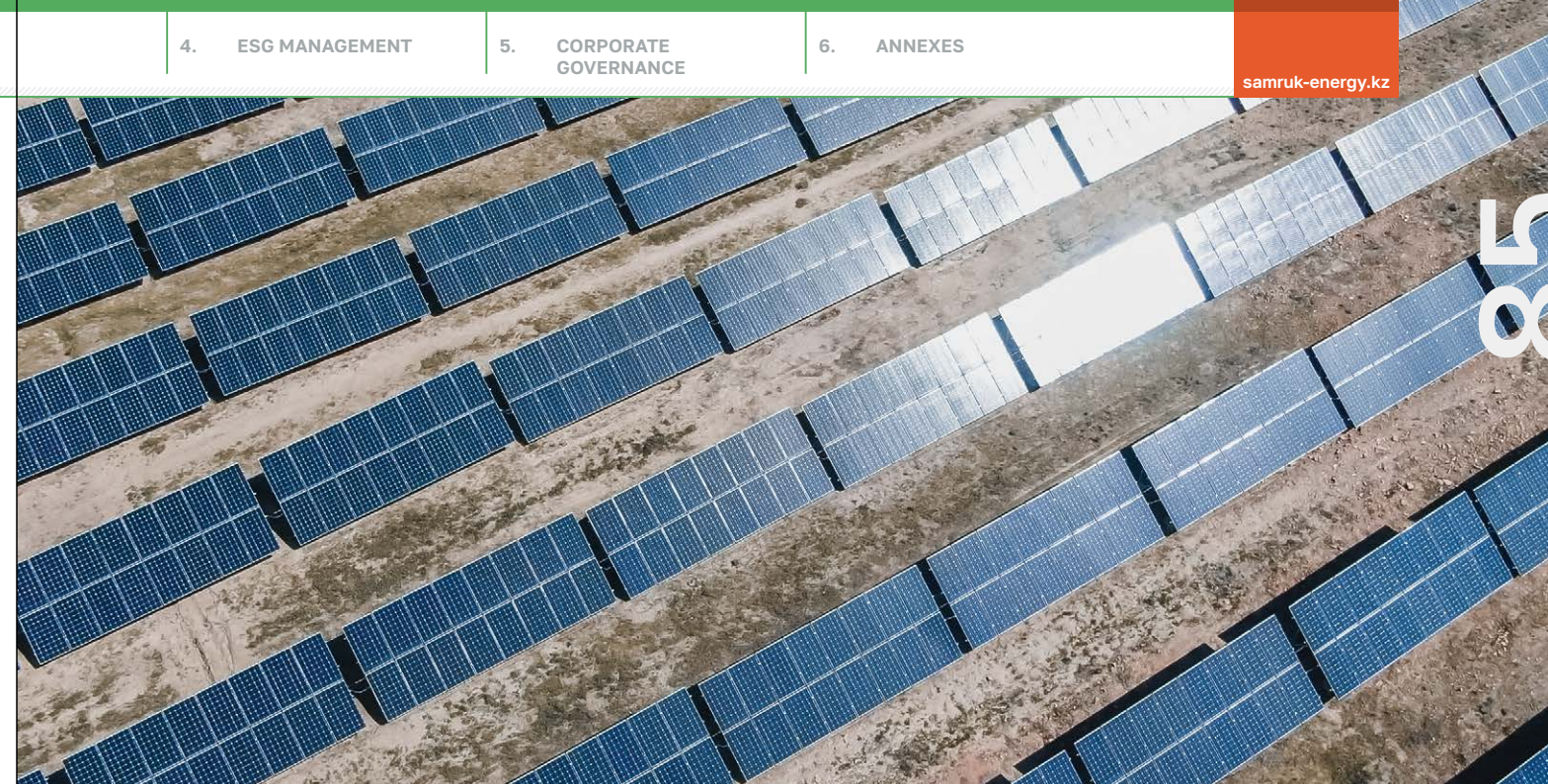
Currency and inflation risks

In order to level the currency risk in in September 2023, works on full early repayment of the currency loan of 'Development Bank of Kazakhstan' JSC in the amount of \$6.41 million with the rate of 1.15*6M LIBOR+1.15% (5.96%) in 'Moynak HPP JSC were carried out.

Reserve for liquidation of ash dumps

In accordance with the Environmental Code, the Group of companies of Samruk-Energy JSC also has a legal obligation to liquidate the site of ash dumps, which are landfills for disposal of wastes from the operating activities of the Group of companies of Samruk-Energy JSC.

As of December 31, 2023, the carrying amount of ash dump liquidation reserve was KZT 3,143,439 thousand (December 31, 2022: KZT 2,481,989 thousand). Estimation of the existing reserve for ash dumps liquidation is based on the interpretation by the Group of companies of Samruk-Energy JSC of the current environmental legislation of the Republic of Kazakhstan, supported by feasibility study and engineering research in accordance with current standards and methods of restoration and reclamation works.



This estimate is subject to change upon completion of subsequent environmental studies and revision of existing reclamation and restoration programs.

Optimization of interest expense

Reduction of interest expenses due to planned — KZT 56.6 billion and early debt repayments — KZT 76.8 billion, carrying out works to reduce interest rates due to changes in financing terms and refinancing of existing loans of the Group of companies of Samruk-Energy JSC from new alternative sources of financing.

Credit rating (Fitch Ratings)

On October 20, 2023, the international rating agency Fitch Ratings affirmed long-term credit ratings of Samruk-Energy JSC in foreign and local currency at the level of 'BB+', outlook 'Stable', as well as revised the assessment of state support to the company from 'strong' to 'very strong'.

Capital commitments

As of December 31, 2023, the share of the Group of companies of Samruk-Energy JSC in long-term contractual obligations of Forum Muider and EGRES-2 JSC amounted to KZT 3,495,602 thousand and KZT 3,137,124 thousand, respectively (December 31, 2022: KZT 3,997,304 thousand and KZT 11,812,824 thousand, respectively).

Comparative analysis (benchmarking)

Benchmarking is one of the important elements of management of Samruk-Energy JSC. The purpose of benchmarking is to compare operational and financial indicators with foreign peer companies to determine weaknesses and strengths of Samruk-Energy JSC.

When benchmarking Samruk-Energy JSC, the following indicators are used:

- EBITDA margin;
- Debt/EBITDA;
- Leverage ratio (debt/equity);
- Return on invested capital (ROIC).

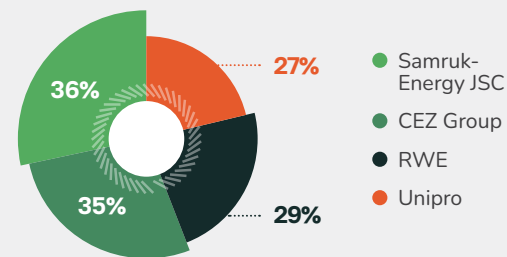
The data of the following peer companies were used for benchmarking:

- 'Unipro' PJSC (Russia);
- CEZ Group (Czech Republic);
- RWE (Germany).

Benchmarking results

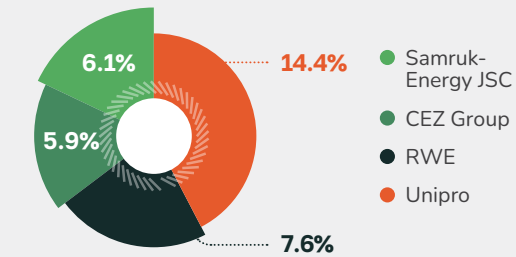
Criteria	Measure	Status	Min	Benchmarking	Max
EBITDA margin	%	●		Unipro (27) RWE (29) CEZ (35) SE (36)	
ROIC	%	●	CEZ (5.9)	SE (6.1) RWE (7.6) Unipro (14.4)	
Debt/Margin	Coefficient	●	Unipro (0.02)	CEZ (1.41) SE (1.71) RWE (2.05)	
Debt/SK	Coefficient	●	Unipro (0.01)	SE (0.43) RWE (0.54) CEZ (0.69)	

At present, Samruk-Energy JSC is inferior to foreign peer companies by some indicators.

EBITDA margin for 2023


EBITDA margin is a key indicator of the efficiency of the company's operations, reflecting its ability to generate earnings before interest, taxes, depreciation, and amortization. Compared to other companies such as Unipro, RWE, and CEZ Group, Samruk-Energy JSC shows high operational efficiency with an EBITDA margin ratio of 36%.

In terms of Debt/EBITDA and Debt/SK, Samruk-Energy JSC is on the average level compared to CEZ Group and RWE, but significantly lags behind Unipro in terms of financial stability.

Return on long-term invested capital (ROIC) for 2023


In terms of ROIC (return on long-term invested capital), Samruk-Energy JSC is below its European peers, while 0.2% higher than CEZ Group.

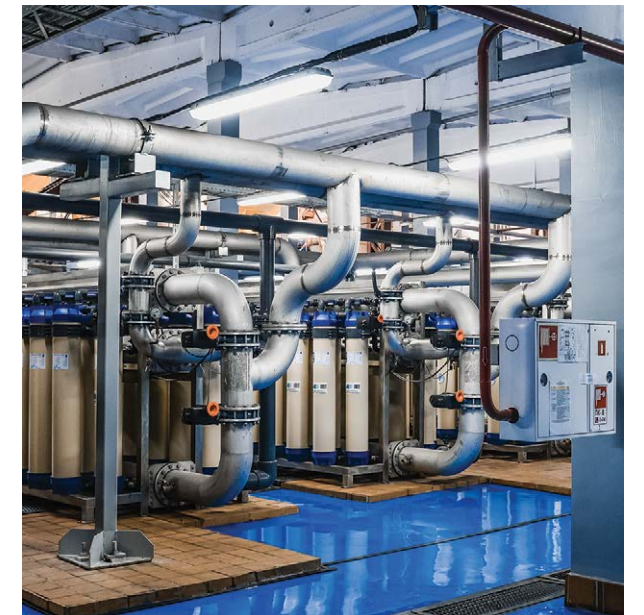
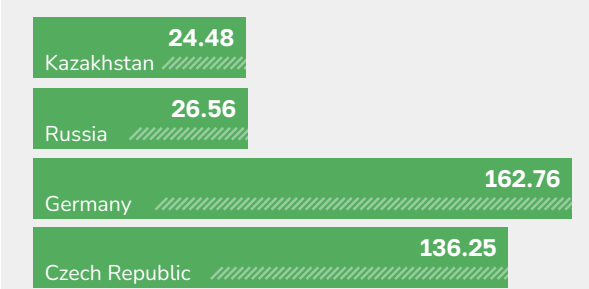
At the same time, it should be noted that, unlike public peer companies, Samruk-Energy JSC is owned by the Government of the Republic of Kazakhstan. Consequently, the Company serves as an instrument of state policy in the electric power industry. Additionally, due to the high degree of wear and tear in the energy sector, socially significant investment projects (aimed at ensuring the reliability and uninterrupted operation of the energy system of the Republic of Kazakhstan) have been implemented since 2009. These projects have led to a significant increase in invested capital and, consequently, a reduction in ROI.

An additional factor affecting ROI is the low level of electricity tariffs in the Republic of Kazakhstan compared to peer countries.

Difference in electricity tariffs in peer countries

Country	Average tariff per kWh	In KZT/kWh	Average rate for 2023
Kazakhstan	KZT 24.48	24.48 KZT/kWh	
Russia	RUB 4.91	26.56 KZT/kWh	5.41 KZT/RUB
Germany	EUR 0.33	162.76 KZT/kWh	493.22 KZT/EUR
Czech Republic	CZK 6.63	136.25 KZT/kWh	20.55 KZT/CZK

Source: Eurostat, Rosstat

Average electricity tariff for 2023, KZT/kWh




Operating enterprises

Coal mining enterprises of the Group of companies of Samruk-Energy JSC

Bogatyr Komir LLP

Bogatyr Komir LLP is the largest in Kazakhstan, dynamically developing company for open pit coal mining. The company accounts for 62% of coal production in the Ekibastuz coal basin and 38.1% of total coal production in Kazakhstan.

In December 2023, control tests of the cyclic-flow technology at Bogatyr open-pit mine were successfully conducted for compliance with the guaranteed project capacity of 5,500 ton/hour. The State Act of commissioning of cyclic-flow technology of Bogatyr Komir LLP was signed.

Accomplishments 2023:

- Commissioning of the first stage of the Cyclic Flow Technology (CFT);
- Introduction of an automated dispatch control system for overburden transportation by railway transport (ADCS railway);
- Implementation of an automated fuel flow accounting system (FFAC POL).

Supply chain of the enterprise

Bogatyr Komir LLP mines coal of KSH grade with average heat of combustion ~ 4,000 kcal/kg, ash content ~ 43%, moisture ~ 5%. The company supplies steam coal for generating facilities of the domestic market of the Republic of Kazakhstan and exports to the Russian Federation, as well as provides supplies of utility coal in the domestic market. Sales of coal for TPPs of the Republic of Kazakhstan are carried out under direct supply contracts, while for TPPs of the Russian Federation, they are handled through a trader. Utility coal is sold through commodity exchanges¹⁶.

General Director

Korsakov N.N.

Address

Republic of Kazakhstan, Pavlodar region, Ekibastuz city, Bauyrzhan Momyshtuly str. 23

Employees

6,144
persons

Ownership interest in Forum Muider B.V.

100%

Reserves and geography of the field under development

Reserves and geography of the developed field
Balance coal reserves of Bogatyr Komir LLP as of January 1, 2023, are about 2.5 billion tons, including 1.2 billion tons for Bogatyr open pit mine and 1.3 billion tons for Severny open pit mine.

Official website of the company

www.bogatyr.kz

Bogatyr Komir LLP owns the subsoil use right to extract coal from the Ekibastuz coal deposit within the Bogatyr and Severny surface mines in Pavlodar region of the Republic of Kazakhstan under Contract No. 975 dated June 29, 2002. Bogatyr cut, commissioned in 1970, produces coal reserves in fields 5,6,9,10. As of 01.01.2024 the depth of the cut reached 300 meters from the surface (bottom elevation minus 100 meters according to the Baltic elevation system).

Severny cut was put into operation in 1955, coal mining is carried out in fields 1,2,3,4. As of 01.01.2024, the depth of the open pit reached 260 m from the surface (bottom elevation minus 60 m according to the Baltic Height System).

Balance coal reserves of Bogatyr Komir LLP as of 01.01.2024 are about 2.45 billion/tons, including 1.2 billion/tons for Bogatyr open pit mine and 1.25 billion/tons for the Severny open pit mine.

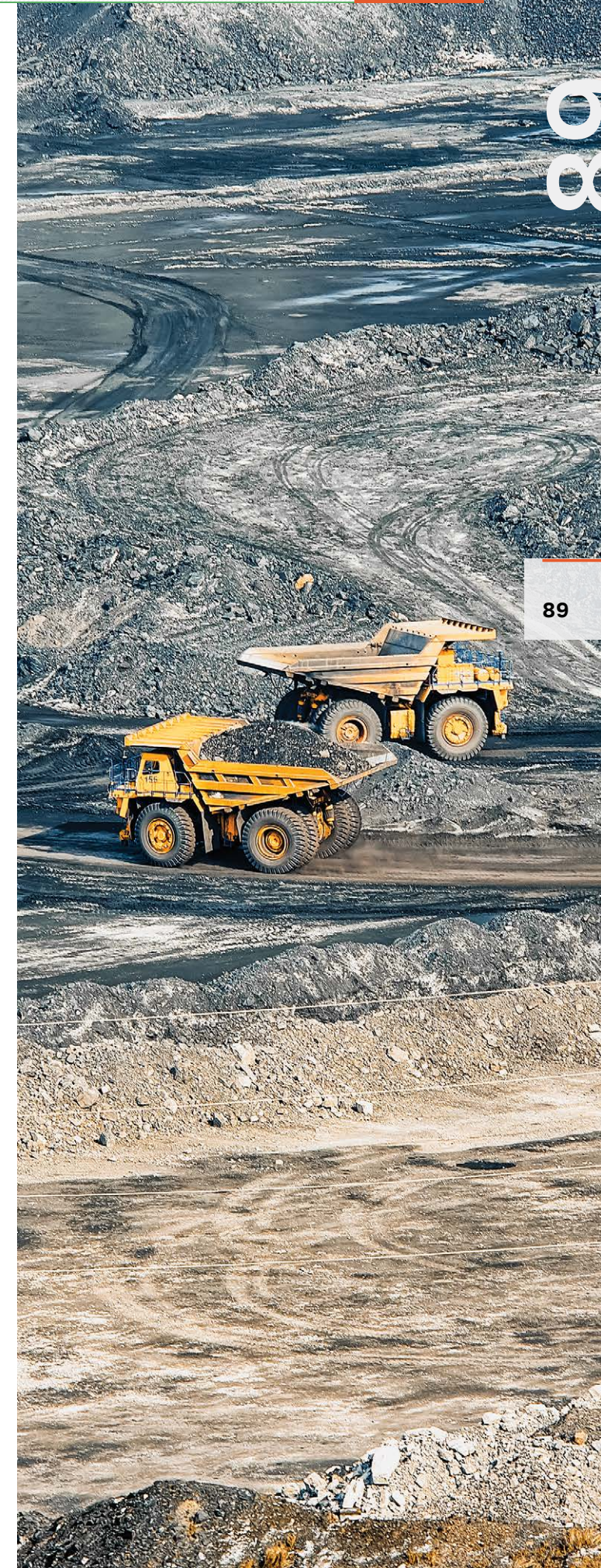
Construction and installation works were completed in 2023. Commissioning of equipment for CFT of coal transportation from the Bogatyr open pit mine to the surface, including its averaging and continuous loading into gondola cars, has started. The switch to CFT is planned for 2023. The introduction of CFT will increase the production capacity of the Bogatyr open pit mine in terms of coal shipment up to 40.0 million/tons per year. This technology will allow:

- Minimize the negative impact of deepening of mining operations;
- Modernize existing production with replacement of equipment and technologies with new ones;
- Rationalize the procedure for mining reserves within the mining allotment;
- Reduce railcar turnaround time by 2.5 times and introduce processes for accurate loading without uncoupling trains;
- Increase quality control and improve coal averaging.

The actual coal production of Bogatyr Komir LLP for 2023 amounted to 42.93 million tons, including by mining units:

- Bogatyr cut — 31.43 million/tons;
- Severny cut — 11.5 million/tons.

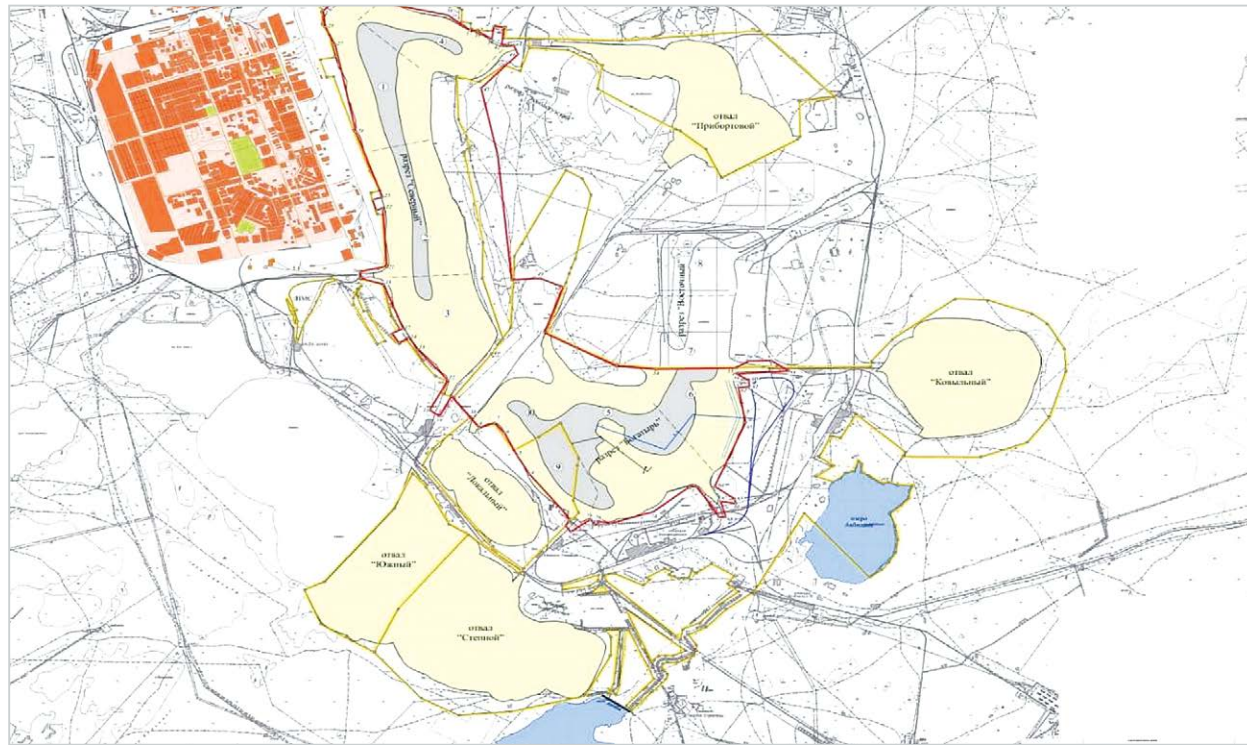
Initiated 'Development of 'Feasibility study of transition to motor-conveyor technology of overburden transportation at Bogatyr open pit'.



¹⁶ Order of the Minister of National Economy of the Republic of Kazakhstan "On approval of the list of exchange-traded goods and the minimum size of submitted lots, which are sold through commodity exchanges" No. 142 dated 26 February 2015.



Situation diagram of Ekibastuz coal basin



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	23,421	30,286	26,249
EBITDA, KZT million	34,666	37,425	32,911
EBITDA Margin, %	34	33	25
Amount of utilized investments (50%), KZT thousand	14,218,991	16,070,953	12,368,588

Production indicators

Indicator	2021	2022	2023
Volume of coal production, million/tons	44.6	42.5	42.9
Volume of coal sales in RK, million/tons	34.9	32.3	32.7
to own PP	20.0	19.5	19.4
to third-party PP	14.9	12.8	13.3
Volume of coal export, million/tons	9.8	10.1	9.8

ESG indicators

Indicator	2021	2022	2023
Pollutant emissions, thousand/tons	4.0	4.1	3.6
Average salary, KZT	301,964	391,643	505,800

Development plans at the mining facilities

In 2024 Bogatyr Komir LLP plans to produce 46,700 thousand/tons of coal (including by mining units: Bogatyr open pit — 34.7 million tons, Severny open pit — 12.0 million tons), which is 10% more than the volume of coal production in 2023 (taking into account the use of CFT).

It is planned to sell utility coal in 2024 in the amount of 500 thousand tons.





Traditional energy enterprises of the Group of companies of Samruk-Energy JSC

Almaty Power Plants JSC

Almaty Power Plants JSC is a generating enterprise producing heat and electric energy and providing supplies for all groups of consumers in Almaty and Almaty region. APP JSC is included in the Republican section of the state register of natural monopolies as a subject of natural monopoly for heat energy production for Almaty region and Almaty city.

APP JSC comprises:

- B. Orazbayev CHPP-1, A. Zhakutov CHPP-2, CHPP-3 — generation of heat and electricity;
- Sh. Chokin Kapshagay HPP and Cascade HPP — electricity generation;
- Western Heat Complex (WHC) — production of heat and electricity;
- Production and Repair Enterprise 'Energoremont';
- Fuel Receiving and Unloading Center.

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	(11,656)	4,306	1,321
EBITDA, KZT million	16,664	16,785	18,541
EBITDA Margin, %	21	19	19
Amount of utilized investments (50%), KZT thousand	9,796,738	11,036,602	14,277,526

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	1,235.7	1,235.7	1,235.7
Electricity production volume, million/kWh	5,008	5,099	5,055
Electricity sales volume, million/kWh	4,425	4,591	4,530
Heat production volume, thousand/Gcal	5,554	5,282	5,582
Volume of heat energy sales, thousand /Gcal	5,504	5,217	5,518

ESG indicators

Indicator	2021	2022	2023
Pollutant emissions, thousand/tons	47.8	48.03	48.90
Discharges, tons	1.53	1.53	1.67
Average salary, KZT	334,454	433,391	482,932

Chairman of the Management Board

Mashirov E.K.

Address

Republic of Kazakhstan, Almaty city, 7 Dostyk Ave.

Employees

3,011
persons

Share of ownership of Samruk-Energy JSC

100%

Official website of the company

www.ales.kz

Ekibastuz GRES-1 LLP named after Bulat Nurzhanov LLP

'Ekibastuz GRES -1 named after Bulat Nurzhanov LLP is a condensing type thermal power plant with a design capacity of 4,000 MW, including eight power units with a capacity of 500 MW each. The station is located on the northern shore of Lake Zhengeldy, 16 km north of Ekibastuz. It is the largest thermal power plant in the country, operating on solid fuel from Ekibastuz deposits, the main energy producing enterprise in the region, and one of the largest coal-fired power plants in the world.

The project of modernization and reconstruction of equipment is being implemented at the power unit No.1, and in December 2023 a test start-up of the power unit with an average load of 100 MW was performed. During 13 hours of operation, 1.1 million kWh of electricity were generated. The unit is scheduled to be commissioned in the 2nd quarter of 2024.

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	20,344	25,796	30,678
EBITDA, KZT million	61,497	72,267	71,803
EBITDA Margin, %	37	38	38
Amount of utilized investments, KZT thousand	19,864,472	42,557,298	84,862,571

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	3,500	3,500	3,500
Electricity production volume, million/kWh	22,788	23,048	22,870
Electricity sales volume, million/kWh	22,496	23,102	22,796
Heat production volume, thousand/Gcal	136	143	124
Volume of heat energy sales, thousand /Gcal	136	143	124

ESG indicators

Indicator	2021	2022	2023
Pollutant emissions, thousand/tons	241.12	242.813	238.9
Average salary, KZT	326,954	405,448	495,490

General Director

Naurzgaliev A.A.

Address

Republic of Kazakhstan, Pavlodar region, Ekibastuz city, Industrial zone of GRES -1, building 2

Employees

1,462
persons

Share of ownership of Samruk-Energy JSC

100%

Official website of the company

www.gres1.kz



Ekibastuz GRES-2 JSC

Ekibastuz GRES-2 JSC — a thermal power plant with an installed capacity of 1,000 MW (two 500 MW power units) and the world's highest chimney, at 420 meters, which is listed in the Guinness Book of Records. The main fuel is high-ash coal from the Ekibastuz coal basin.

Ekibastuz GRES-2 JSC — a thermal power plant with an installed capacity of

1,000
MW

Chairman of the Management Board
Klets G.M.

Address
Republic of Kazakhstan, 141216, Pavlodar region, Solnechny settlement

Employees
1,372
persons

Share of ownership of Samruk-Energy JSC
50%

Share of ownership of Samruk-Kazyna JSC
50%

Official website of the company
www.gres2.kz

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	4,413	4,536	- 17,322
EBITDA, KZT million	27,912	27,365	20,102
EBITDA Margin, %	42	40	30
Amount of utilized investments (50%), KZT thousand	1,838,052	12,457,528	2,710,689

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	1,000	1,000	1,000
Electricity production volume, million/kWh	6,433	6,002	5,659
Electricity sales volume, million/kWh	6,336	5,938	5,532
Heat production volume, thousand/Gcal	76	77.5	70
Volume of heat energy sales, thousand /Gcal	243	172	206

ESG indicators

Indicator	2021	2022	2023
Pollutant emissions, thousand/tons	67.97	63.108	63.527
Average salary, KZT	276,407	361,870	428,589



RES facilities of the Group of companies of Samruk-Energy JSC

Shardara HPP JSC

The Shardara hydropower plant with installed capacity of 126 MW, with four units, is located in the middle reaches of the Syrdarya River and is the closing HPP of the Naryn-Syrdarya cascade. The main purpose of the hydrosystem is to provide irrigated farming; the water regime is set by the Committee on Water Management of MWRI. Average annual electricity generation is 537 million/kWh, electricity is consumed in Turkestan province.

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

Average annual electricity generation

537
million kWh

Chairman of the Management Board

Berlibayev A.A.

Address

Republic of Kazakhstan, South Kazakhstan region, Shardara city, 13, Yelmuratov str.

Employees

135
people

Share of ownership of Samruk-Energy JSC

100%

Official website of the company

www.sharges.kz

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	1,124	1,939	2,624
EBITDA, KZT million	4,934	6,026	6,669
EBITDA Margin, %	69	69	74
Amount of utilized investments, KZT thousand	9,573	53,754	22,414

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	126	126	126
Electricity production volume, million kWh	456	518	529
Electricity sales volume, million kWh	468	540	549

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	327,012	413,506	478,067

Ust-Kamenogorsk HPP JSC

In October 2017, the concession agreement with AES Suntry Power Limited was terminated and the assets were transferred to the republican ownership of the Republic of Kazakhstan.

Legal address

Republic of Kazakhstan, Ust-Kamenogorsk city, Ablaketka settlement

Location of the executive body

Republic of Kazakhstan, Ust-Kamenogorsk city, 27, Kazakhstan str.

Share of ownership of Samruk-Energy JSC

89.99%

Main type of activity

Organizational and management activity

Bukhtarma HPP JSC

Bukhtarma HPP JSC is an economical hydroelectric power plant both in terms of the specific value of work volumes and in terms of cost indicators of electricity production. Installed capacity of the HPP is 675 MW, average annual output is 2.77 billion kWh. The station provides coverage of peak loads in the energy system of the Republic of Kazakhstan. In 2002, the Bukhtarma dam was recognized as the best in the world in terms of concrete quality. At the moment the plant is under lease.

Installed capacity of Bukhtarma HPP JSC

675
MW

Address

Republic of Kazakhstan, 070825, East Kazakhstan region, Zyryanovsky district, Serebryansk town, Graftio street, 5

Employees

8
people

Share of ownership of Samruk-Energy JSC

96.32%

Main type of activity

Lease and management of own real estate, lease of other machinery, equipment and tangible assets





Public company 'Qazaq Green Power PLC'

Qazaq Green Power PLC was established on November 4, 2022, to assist in the modernization of existing and construction of new generating capacities, introduction of new technologies in the energy sector, to ensure increased efficiency of energy systems, implementation of investment projects of the Republic of Kazakhstan, as well as to implement energy saving policy and ensure environmental safety of energy facilities.

General Director
Zhanadil E.B.

Address
Republic of Kazakhstan, Astana city, 15-A Kabanbai Batyr str.

Employees
13
people

Ownership share of Samruk-Energy JSC
100%

Financial indicators

Indicator	2023
Net income/loss, KZT million	2,245
EBITDA, KZT million	2,005
EBITDA Margin, %	85
Amount of utilized investments, KZT thousand	11,874

Moynak HPP JSC

Moynak HPP is located on the Sharyn River in Kegen district of Almaty region. The station was built under the State Program of Forced Industrial and Innovative Development and in accordance with the RK Electric Power Industry Development Program until 2030. The HPP successfully contributes to the reduction of electricity deficit in the Southern Zone of the UES of Kazakhstan (Almaty, Zhambyl, Kyzylorda and Turkestan Regions), covers peak loads and participates in capacity regulation in the energy system. Modern technological equipment ensures maximum automation and stability of the power generation process. Hydropower units of the latest modification with high technical parameters and efficiency are installed at the station.

General Director
Aidarbekov G.A.

Address
Republic of Kazakhstan, Almaty region, Kegensky district, Zhylysaysky v/d, Moynak village, 81.

Employees
121
people

Ownership share of Qazaq Green Power PLC
100%

Website
www.moynak.kz

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	9,532	9,981	10,738
EBITDA, KZT million	15,798	18,265	18,348
EBITDA Margin, %	83	80	84
Amount of utilized investments, KZT thousand	422,249	102,925	606,884

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	300	300	300
Electricity production volume, million/kWh	758	973	832
Electricity sales volume, million/kWh	781	1,014	912

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	384,432	535,611	570,153





First Wind Power Plant LLP

The First Wind Power Plant LLP is Kazakhstan's first project in the field of alternative energy sources development that has passed all stages of preparation in accordance with the current legislation on RES support. It was put into operation on August 14, 2015.

The wind farm of 22 turbines with a unit capacity of 2.05 MW is located in Akmola region, near the town of Ereymentau. Since commissioning, the wind farm has generated more than 920 million kWh of electricity at a total cost of KZT 13 billion. 100% of generated electricity is supplied to the National Power Grid of Kazakhstan — KEGOC.

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

General Director
Botabekov R.K.

Address
Republic of Kazakhstan, Astana city, 15-A
Kabanbai Batyr str.

Employees
37
persons

Ownership share of Qazaq Green Power PLC
100%

Website
www.pves.kz



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	1,551	2,248	3,045
EBITDA, KZT million	3,973	3,974	5,014
EBITDA Margin, %	81	80	81
Amount of utilized investments, KZT thousand	196,000	157,852	475,875

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	45	45	45
Electricity production volume, million kWh	144.59	135.72	142.60
Electricity sales volume, million kWh	144.29	135.37	142.31

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	564,775	604,532	724,813

Ereymentau Wind Power LLP

Ereymentau Wind Power LLP implements the project 'Construction of wind power plant in the area of Ereymentau with a capacity of 50 MW', and in the future the production of electricity.

General Director
Khasenov B.B.

Address
Republic of Kazakhstan, Astana city, 15-A
Kabanbai Batyr str.

Employees
12
persons

Share of ownership of Samruk-Energy JSC
100%

Website
www.ewp.kz



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	(385)	(6,487)	(10,949)
EBITDA, KZT million	(218)	(243)	(312)
Amount of utilized investments, KZT thousand	2,099,137	1,064,760	0

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	629,258	846,798	845,186



Samruk-Green Energy LLP

Samruk-Green Energy LLP — provides services on electric power generation using RES, realizes the possibility of decentralization of electric power supply to remote areas.

Implemented projects of construction of facilities:

- Solar power plant with a capacity of 2 MW in the town of Konaev;
- Solar power plant with a capacity of 416 kW in the town of Konaev;
- Solar power plant with a capacity of 1 MW in Almaty;
- Wind power plant with capacity of 5 MW in Yenbekshikazakh district of Almaty region.

Supply chain of the enterprise

Electricity sales are carried out from 01.07.2023 through the Single Buyer.

General Director

Islamov D.U.

Address

Republic of Kazakhstan, Almaty city, Zenkova str. 59, office No. 145

Employees

22
persons

Ownership share of Qazaq Green Power PLC

100%

Website

www.samruk-green.kz

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	12	(2,682)	622
EBITDA, KZT million	136	62	296
EBITDA Margin, %	34	15	59
Amount of utilized investments, KZT thousand	25,592	35,463	23,866

Production indicators

Indicator	2021	2022	2023
Installed electric capacity, MW	8.4	8.4	8.4
Electricity production volume, million kWh	20.45	19.78	21.52
Electricity sales volume, million kWh	20.22	19.53	21.23

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	370,499	481,180	576,464



Energy of Semirechye LLP

Energy of Semirechye LLP is an enterprise established in 2009 to implement the project 'Construction of wind power plant in Shelek corridor with capacity of 60 MW with the prospect of expansion up to 300 MW' and further rendering services on production and sale of electric energy, design and construction of facilities using RES.

General Director

Luo Jun

Address

Republic of Kazakhstan, Almaty region, Yenbekshikazakh district, Baiseit village, 92, Abay str.

Employees

36
persons

Share of ownership

Qazaq Green Power PLC Public Company

25%

Powerchina Chengdu Engineering Corporation Limited»

15%

Powerchina Resources Limited

60%

Website

www.energy7.kz



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	(134)	(591)	(85)
EBITDA, KZT million	(103)	872	3,824
Amount of utilized investments (25%), KZT thousand	26,130	4,946,597	56,112

Production indicators

Indicator	2021	2022
Installed electric capacity, MW	60	60
Electricity production volume, million kWh	88.26	220.75
Electricity sales volume, million kWh	86.40	216.33

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	413,968	787,204	1,012,040

Kazgidrotehenergo LLP

Kazgidrotehenergo LLP implements projects for design, construction and operation of facilities for the use of RES, independent technical devices and inter-related facilities for the production of electricity and/or heat using RES. Project of 'Construction of 310 MW hybrid WPP, HPP in Almaty region.

Energy Solutions Center LLP

Energy Solutions Center LLP is a service organization for administrative support of the Group of companies of Samruk-Energy JSC, providing services on maintenance of IT infrastructure, Internet resources, real estate management (lease, acquisition, construction), special office services (personnel outsourcing), as well as transportation services.

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	35	73	102
EBITDA, KZT million	137	204	209
EBITDA Margin, %	12	13	13
Amount of utilized investments, KZT thousand	13,946	107,511	9,536

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	537,600	618,161	709,614



Private Company Altyn Dala Energy LTD

The Company was established in December 2023 to implement RES projects in the Republic of Kazakhstan.

General Director
Bukhanov M.E.

Address
Republic of Kazakhstan, Almaty city,
Dostyk Ave. 188, BC 'Kulan', office 904

Employees
2
persons

Ownership share of Qazaq Green Power PLC
100%

General Director
Kataev A.M

Address
Republic of Kazakhstan, Astana city, 15A
Kabanbai Batyr str.

Employees
65
persons

Share of ownership of Samruk-Energy JSC
100%

Website
www.e-s-center.kz

General Director
Zharkenov B.K.

Address
Republic of Kazakhstan, Astana city,
Kabanbai Batyr Avenue, building 15/1

Share of ownership
Qazaq Green Power PLC
Public Company
25%

Tumar Commerce LLP
75%



Distribution companies of the Group of companies of Samruk-Energy JSC

Alatau Zharyk Company JSC

Alatau Zharyk Company JSC is the largest power grid company in the south of Kazakhstan, supplying electricity to all groups of consumers in Almaty city and Almaty region. Alatau Zharyk Company JSC represents the main part of the power grids of the Almaty energy hub with 220/110/35/6-10/0.4 kV voltage classes. The company's task is to ensure reliable and quality transmission of electricity, while reducing commercial and technical costs and improving the technical performance of substation equipment in compliance with the rules of labor safety and environmental protection.

Supply chain of the enterprise

Regional power grid companies perform the functions of electricity transmission from energy producing organizations to end consumers via power grids within their balance sheet boundaries. Alatau Zharyk Company JSC is a partner of the largest energy companies in Uzbekistan and Kyrgyzstan. Alatau Zharyk Company JSC transmission lines stretch from the shores of Lake Balkhash in the north to the borders with Kyrgyzstan in the south and from the borders of Zhambyl oblast in the west to the borders with China in the east. The UES of Kazakhstan operates in parallel with the United Energy System (UES) of Central Asia and the UES of the Russian Federation.

Chairman of the Management Board

Asylov A.N.

Address

Republic of Kazakhstan, Almaty city, 24 B Manas str.

Employees

3,737
people

Share of ownership

Samruk-Energy JSC

97.4%

Alatau Zharyk Company JSC

2.6%

Website

www.azhk.kz

Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	2,907	3,528	5,531
EBITDA, KZT million	13,136	14,394	20,789
EBITDA Margin, %	28	27	31
Amount of utilized investments, KZT thousand	12,727,043	11,645,174	16,512,888

Production indicators

Indicator	Unit.	2021	2022	2023
Power transmission line-220 kV	km	410.34	410.34	410.34
Power transmission line-110 kV	km	2,673.94	2,673.94	2,648.34
Power transmission line-35 kV	km	2,543.06	2,546.06	2,452.58
Power transmission line-10 kV	km	9,363.04	9,364.55	9,488.10
Power transmission line-6 kV	km	140.36	140.36	136.93
Power transmission line-0.4 kV	km	10,127.52	10,127.52	9,778.56
SS-220 kV	pcs.	8	8	8
SS-110 kV	pcs.	93	93	94
SS-35 kV	pcs.	106	106	106
Electricity transmission	million kWh	7,650	8,154	8,686
Number of consumers (commercial and other)	pcs.	12	12	12

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	261,091	352,818	425,296





AlmatyEnergosbyt LLP

AlmatyEnergosbyt LLP is one of the largest energy supplying organizations in Kazakhstan, providing electricity to more than 3.6 million residents and more than 38 thousand enterprises of Almaty city and Almaty region. The Company is a part of the energy complex of Almaty and Almaty region. The Company is part of the energy complex of Almaty city and Almaty region, which consists of energy producing, regional energy transmitting and energy supplying companies. The share of AlmatyEnergosbyt LLP in the total supply of electricity to consumers of the country is 7%.

Supply chain of the enterprise

Purchase of electric power from power transmission organizations, and sales to end consumers on the basis of public power supply contracts. Formation of electricity tariff is carried out in accordance with the requirements of the Committee for Regulation of Natural Monopolies.

The share of AlmatyEnergosbyt LLP in the total supply of electricity to consumers of the country

7%

General Director
Kopenov E.K.

Address
Republic of Kazakhstan, Almaty city,
Kozhamkulova str. 170 A

Employees
526
persons

Share of ownership of Samruk-Energy JSC
100%

Website
www.esalmaty.kz



Financial indicators

Indicator	2021	2022	2023
Net income/loss, KZT million	(1,742)	(2,784)	(3,207)
EBITDA, KZT million	(3,149)	(3,369)	(2,499)
EBITDA Margin, %	(2.5)	(2.4)	(1.48)
Amount of utilized investments, KZT thousand	90,019	84,922	80,238

Production indicators

Indicator	2021	2022	2023
Electricity sales volume, million kWh	6,723.8	6,847	7,085
Average tariff for electricity sales, KZT kWh	18.69	20.09	23.64
Total consumption by groups, million kWh	899,134	929,929	952,216
Population	862,980	891,214	911,097
Non-domestic consumers, including:	36,154	38,715	41,119
Industrial and equated consumers	1,936	1,912	1,937
Budget organizations	1,319	1,337	1,312
Other consumers	32,899	35,466	37,870

ESG indicators

Indicator	2021	2022	2023
Average salary, KZT	286,464	396,047	445,453



Procurement Management

GRI 3-3

Management Approach

Creating and developing a sustainable procurement system is one of the most important and prioritized tasks of our Company. For this purpose, we constantly improve our documents, introduce innovations, automate the procurement process and train our personnel.

The Company's procurement activities are based on the principles of:

- optimal and efficient expenditure of funds;
- openness and transparency, while respecting the rights and/or legitimate interests of suppliers to trade secrets (until the tender results are finalized);
- fair competition and prevention of collusion between participants;
- responsibility of procurement participants;
- prevention of corrupt practices;
- supporting domestic producers of goods, domestic suppliers of works and services if it does not contradict international treaties ratified by the Republic of Kazakhstan;
- acquisition of innovative and high-tech goods, works and services;
- providing equal opportunities for suppliers to participate in procurement procedures, except as provided by the Law;
- observance of intellectual property rights.

Documents regulating the Company's procurement activities:

- Law of the Republic of Kazakhstan 'On Procurement of Certain Entities of the Quasi-Public Sector';¹⁷
- Procedure for procurement by Samruk-Kazyna JSC and legal entities, fifty or more percent of voting shares (participatory interests) of which directly or indirectly belong to Samruk-Kazyna JSC on the right of ownership or trust management.¹⁸

Improvement of procurement procedures is carried out by the Authorized Body for Procurement. Relations with suppliers and potential suppliers are carried out in accordance with the Law and the Procedure, after the conclusion of the contract, relations are regulated by the civil legislation and the contract. All requirements to the quality of goods, works and services (GWS) are established by the technical specification and the contract. Contracts obligatorily provide for reporting on the share of in-country value, penalties and other reports.

To ensure and increase the level of transparency and efficiency of procurement procedures, all procurement of Samruk-Energy JSC is conducted on the web portal of procurement of Samruk-Kazyna JSC (zakup.sk.kz), designed for procurement procedures, collection of reports, evaluation and qualification of suppliers.



Import substitution program

In pursuance of the strategic objectives to stimulate the development of the national economy set by the Head of State and the Government of the Republic of Kazakhstan, Samruk-Kazyna JSC carries out large-scale work to create new competitive domestic industries in the field of processing industries.

In order to implement this task, the Fund implements the Program for Assistance to the Creation of New Productions (Import Substitution) (the Program) fo-

cused on import substitution of goods purchased by the Fund's Group on a permanent basis.

The Program provides for the conclusion of offtake contracts for the procurement of goods. Within the framework of the Program implementation in 2023, 11 offtake contracts were concluded for the Group of companies of Samruk-Energy JSC for the total amount of more than KZT 2.5 billion in 2023.

¹⁷ Decision of the Board of Directors of National Welfare Fund Samruk-Kazyna JSC Protocol No. 193 dated March 3, 2022.

¹⁸ Law of the Republic of Kazakhstan 'On Procurement of Certain Entities of the Quasi-State Sector' No. 47-VII LRK of 8 June 2021.



GRI 2-6

Category procurement management

The procurement category management process provides for optimization of procurement activities. The concept of category management of procurement is based on the reduction of total cost of ownership indicator — reduction of GWS category costs throughout the life cycle of its ownership, not only direct procurement costs, which allows choosing the most modern and cost-effective solutions. The changes introduced in procurement activities have a positive impact on procurement prices and quality of procured GWS, as well as contribute to the development of domestic commodity producers.

For example, as part of the procurement category strategy for 'Tires,' the procurement of large-size tires installed on dump trucks used for transporting overburden and coal at the Bogatyr Komir LLP mine is carried out. In 2023, large-size tires with the highest warranty mileage were purchased, which reduced the downtime of dump trucks and the frequency of tire replacement. This initiative not only provides an opportunity to procure quality tires at optimal prices, but also achieves high benefit potential.

During the period of implementation of the procurement categorization strategy, an actual economic effect of KZT 5.6 billion was achieved.



GRI 204-1, GRI 12: Coal Sector: 12.8.6
98%
of purchases of Samruk-Energy JSC in 2023 were made from local suppliers¹⁹

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Share of suppliers by the Group of companies of Samruk-Energy JSC

Indicator	Total	Local suppliers
Number of suppliers, pcs.	3,898	3,836
Amount of purchases, KZT billion	269	263

Amount of contracts concluded by the Group of companies with suppliers, KZT billion

Indicator	Amount, KZT billion	Share of local suppliers, %
Procurement conducted through the single-source procurement method	144	53
Procurement conducted by request for quotations method	12	4
Procurement conducted through open tenders	113	42

Share of in-country value (local content)²⁰ (hereinafter - IVC), in GW supply, KZT billion

Indicator	2020		2021		2022		2023	
	total supply	% IVC	total supply	% IVC	total supply	% IVC	total supply	% IVC
Goods	168.78	79	187.63	89	174.89	78.42	145.78	66
Works and services	104.66	79	144.45	93	127.06	93	207.57	92
Total	273.44		332.08		301.95		353.35	81

Decrease in the share of in-country value in goods is due to the introduction of the model of the Unified Purchaser of electric energy represented by SFCS of RES LLP and impossibility to separate Kazakhstan electric energy from the total volume of purchases. Thus, the data on FVC are presented without purchases with application of special procedure (electricity).

¹⁹ The Company operates in Kazakhstan, therefore a significant place of business is the Republic of Kazakhstan. By 'local' the Company means the relevant territory of presence.

²⁰ Share of in-country value (local content) - percentage of the value of labour remuneration of the citizens of the Republic of Kazakhstan involved in the execution of the procurement contract from the total labour remuneration fund under this contract, and (or) the value of the share (shares) of in-country origin established in the goods (goods) in accordance with the criteria of sufficient processing or full production by residents of the Republic of Kazakhstan from the total value of goods (goods) under the procurement contract.



ESG management

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- 116 – Sustainable development Management
- 126 – Our contribution to the UN Sustainable Development Goals
- 142 – Stakeholder Engagement
- 154 – Respect for human rights
- 156 – Investments in human capital
- 172 – Creation of safe working conditions
- 186 – Promoting socio-economic development
- 198 – Caring for our planet
- 214 – Contribution to combating climate change
- 236 – Environmental benchmarking

4



Sustainable development management

WE ARE CONVINCED THAT EFFECTIVE MANAGEMENT OF ESG ASPECTS ALLOWS US TO ACHIEVE HIGH RESULTS AND EFFECTIVELY CREATE VALUE IN THE LONG TERM. THE SUSTAINABLE DEVELOPMENT AGENDA ACCORDING TO THE DEVELOPMENT STRATEGY OF SAMRUK-ENERGY JSC FOR 2022-2031 IS TAKEN INTO ACCOUNT WHEN MAKING KEY DECISIONS, WORKING WITH STAKEHOLDERS AND IS A REFERENCE POINT FOR THE COMPANY'S DEVELOPMENT.

Our approach

Components of Sustainable Development of Samruk-Energy JSC

Samruk-Energy JSC actively integrates the principles of sustainable development into its strategy to achieve the Company's mission and vision. We strive to overcome global challenges and risks related to sustainable development to ensure economic development and reliable supply of electricity and heat. And aim to effectively manage impacts on society and the environment.

The Company makes voluntary commitments to responsible business conduct, human rights protection and community participation, seeking to balance the interests of all stakeholders. We carry out our sustainability activities based on global best practices and keep abreast of changes in standards and expectations, integrating them into our ESG Practices.

Sustainable development in Samruk-Energy JSC includes three components:

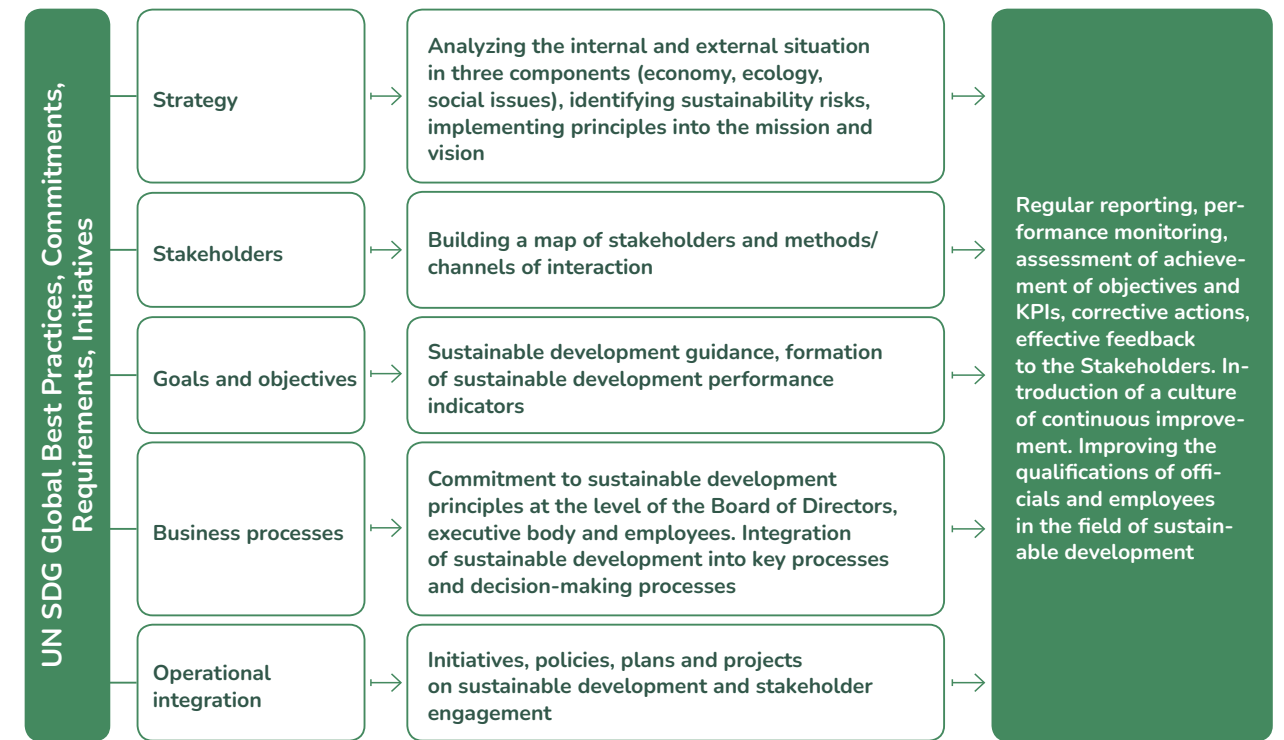
- The economic component of the Company's sustainable development is aimed at the growth of long-term value, ensuring the interests of shareholders and investors, increasing the efficiency

of processes, increasing investments in the creation and development of more advanced technologies, and improving labor productivity.

- The environmental component is aimed at minimizing the impact on biological and physical natural systems, optimal use of limited resources, application of environmentally friendly, energy- and material-saving technologies, creation of environmentally acceptable products, minimization, recycling and destruction of waste.
- The social component is focused on the principles of social responsibility, which include, among other things: ensuring occupational safety and preserving personnel health, fair remuneration and respect for employee rights, individual development of personnel, implementation of social programs for personnel, creation of new jobs, sponsorship and charity, environmental and educational activities.

We set the Company's sustainability priorities at the strategic level. Our management system then allows us to drill down to the project and program level, effectively measuring performance and disclosing information.

Sustainable development management



GRI 2-24

Samruk-Energy JSC integrates responsible business commitments at all management levels, including top management and operational levels, such as human resource management, investment activities, environmental risks, procurement procedures and internal audit. We strive for transparency and legality in all aspects of our operations, adhering to high standards of business ethics. We work to implement our policies and ESG principles both internally and in our dealings with external partners and clients.

The Board of Directors is responsible for strategic guidance and oversight of the implementation of sustainability principles. The Board of Directors approves relevant policies, approves key performance indicators and monitors the fulfillment of the Company's commitments.

The Executive Body, within the scope of its authority, carries out work on the implementation of sustainability principles, compliance procedures, execution of policies and communicates its results to the Board of Directors.

The Sustainability Guidelines regulate our ESG activities and are based on the principle of ensuring fundamental human rights and freedoms. The document expresses the Company's position on supporting internationally proclaimed human rights not only within the framework of the Company itself, but also in relation to third parties with whom Samruk-Energy JSC works. [For more information, please click here: Sustainability Guidelines](#)

As part of ensuring the successful fulfillment of our commitments and developing a corporate culture focused on social and environmental responsibility, annual sustainability training is provided to management and employees.

To promote ethics and human rights protection throughout the value chain, we have developed and implemented Supplier Guidelines.

As part of our compliance system, we monitor compliance with legal regulations and ensure zero tolerance for corruption and bribery, building an anti-corruption culture and preventing compliance risks.



In 2023, the Company conducted a diagnostic of the current level of development of ESG issues management practices. Based on the Diagnostics, a Roadmap for improvement of the sustainability management system for 2023-2024 was developed, the results of which are reported to the Company's Board of Directors on a quarterly basis.

Sustainable Development Management in Samruk-Energy JSC

Risk management is integral to sustainable development. We are committed to timely assessment, control and management of risks, including economic, environmental and social aspects, for both internal and external stakeholders.

The key groups of sustainability risks are:

- Social risks include human resource management issues, impacts on local communities, and human rights;
- Environmental risks cover environmental impacts and climate change;
- Economic risks include economic impacts on the community and the country as a whole.

We assess risks using a systems approach to sustainability:

- We assess current and future risks associated with global sustainability drivers;
- Forecast economic, socio-demographic and environmental trends;
- Analyze social, environmental and economic aspects of regional impacts;
- Develop measures to manage impacts, reduce risks and realize opportunities;
- Enhance risk culture and evaluate the effectiveness of risk management measures. (more details on Risks in the Risk Management and Internal Control section).

Sustainable development risk management

Samruk-Energy JSC implements initiatives and programs in the field of sustainable development in the following directions:

- introduction of high ethical standards and building a corporate culture based on trust;
- introduction of sustainable development principles and application of risk-oriented approach in the practice of project management at all investment stages;
- improving financial stability;
- promoting responsible procurement based on the principles of fair and free competition, mutual benefit, transparency and full responsibility for the commitments undertaken;
- improving safety culture by involving the Company's employees in the management of occupational safety issues and increasing the efficiency of the occupational safety management system control in accordance with international standards;
- improving the Company's social responsibility, adhering to the principles of the UN Global Compact, and investing in human capital;
- ensuring environmental sustainability, including the search for and implementation of environmentally and economically best technologies, optimization of production processes, implementation of projects using renewable energy sources, identification and prevention of potential emergencies.

To determine the list of sustainability initiatives, we considered a wide range of topics worthy of attention, including the materiality matrix and sustainability risks.

With a plan for sustainable development initiatives is available here: https://www.samruk-energy.kz/images/documents/plan_iniciativ_se_ru.pdf

Key events in the field of sustainable development in 2023

Morningstar Sustainalytics, an international rating agency, conducted a comprehensive study of Samruk-Energy JSC activity efficiency (ecology, social responsibility, corporate governance — ESG) for 2022, according to the results of which ESG Risk Rating was assigned — 24.1 points, which corresponds to Medium Risk level according to the Sustainalytics scale. According to the results of assessment among the world's electric power companies, Samruk-Energy JSC entered the top 20% of the best companies in the sub-sector 'Electric Power Industry' allocated by Sustainalytics, taking 43rd place out of 273.

On July 27, 2023, Samruk-Energy JSC disclosed information on the Carbon Disclosure Project (CDP). Disclosure of information on CDP climate questionnaires is a tool for effective carbon footprint management to achieve carbon neutrality based on a reasonable balance between energy and environmental security. The questionnaire was completed on two questionnaires: Climate Change and Water Security. For the two questionnaires, the results of the first year of disclosure are rated with a score of D.

In 2023 the implementation of the project: 'Action Plan and Disclosure on TCFD recommendations (Task Force on Climate-related Financial Disclosures — a standard for maintaining reports that disclose information on the possible impact of climate change on the global economy)' was started. Currently, a gap analysis of Samruk-Energy JSC's corporate governance practices in the area of climate change and TCFD disclosures is being conducted, and the maturity of Samruk-Energy JSC's corporate governance practices in the area of climate change is being assessed taking into account TCFD recommendations. The project started at the end of October 2023 and will be completed at the end of April 2024.

On December 25, 2023, a new version of the Code of Conduct was approved by the Board of Directors of Samruk-Energy JSC (Minutes No. 18/23).

Within the framework of the principle of social responsibility of business, in 2023 the Company approved the Policy on interaction with local communities of the Group of companies of Samruk-Energy JSC (approved by the decision of the Management Board No. 40 dated December 28, 2023). The Policy regulates the principles of activity, obligations, initiatives

in the field of interaction with local communities of the Company, as well as interaction mechanisms and methods of providing feedback and information disclosure with local communities in the regions of presence.

The Road Map for Improvement of Sustainable Development Management System was approved, which included the measures of the Plan for Improvement of Corporate Governance of Samruk-Energy JSC for 2022-2023, the Action Plan for Implementation of Best Practices of Corporate Governance of Samruk-Energy JSC and the Road Map for Improvement of Sustainable Development Management System.



Samruk-Energy JSC entered the top 20% of the best companies in the sub-sector 'Electric Power Industry' allocated by Sustainalytics, taking

43rd place out of 273



Raising awareness of sustainable development issues

Following the best international practices, we raise awareness of sustainable development issues:

- During the second quarter of 2023, corporate training for employees at all levels was organized on topics including climate change, carbon footprint reduction, RES development, energy efficiency, etc.
- On December 14, 2023, a meeting with participation of corporate secretaries was organized for portfolio companies of Samruk-Energy JSC on the topic: 'ESG Trends 2023. Corporate Governance and Sustainable Development in the Group of Companies of Samruk-Energy JSC based on the results of 2023'.
- On December 21, 2023, a corporate seminar was organized for the Company's management and employees on the topic: 'Risk Management and Internal Control' from KPMG.
- On December 27 and 28, 2023, experts from PricewaterhouseCoopers LLP conducted a corporate training on 'Current Issues in ESG'. The training was attended by members of the Board of Directors, the Management Board, directors of structural divisions and specialists, as well as representatives of subsidiaries and affiliates.
- On December 29, 2023, an Annual Strategy Session was organized with members of the Management Board, directors of structural divisions and specialists on the results of the year on the topic 'Corporate Governance and Sustainable Development. ESG Rating'.

ESG KPIs defined by Samruk-Energy JSC

We have implemented key performance indicators (KPIs) on environmental, social and corporate governance (ESG) aspects, reflecting the Company's commitment to sustainable development. The introduction of ESG KPIs allows the Company to form a clear system of metrics aimed at supporting and developing sustainable development practices.

The ESG KPIs are categorized into three thematic aspects:

- Occupational Health and Safety;
- Human Resources Management;
- Environmental protection.



THEMATIC ASPECT OF ESG

STATUS OF FULFILLMENT OF THE ESTABLISHED ESG KPIS



Occupational health and safety

- The first manager of the Company has a KPI 'LTIFR', with a target value of 0.30. The 'LTIFR' KPI for 2023 was 0.36 and was calculated for 11 accidents, 1 of which occurred in 2022 but was recorded in 2023 due to the actual completion of the investigation in the reporting period. However, in the context of the GRI 403-9 standard, in this Annual Report the LTIFR for 2023 is presented at the level of 0.33, calculated for 10 actually occurred cases in the reporting year.
- Samruk Business Academy, a private institution, trained internal trainers of the Company's subsidiaries and affiliates in the course 'Safe Work Culture' for further training of employees of SDCs. The management and heads of structural subdivisions of SDCs were trained under the international programs 'NEBOSH' and 'IOSH'.
- A schedule for conducting leadership behavioral safety audits (LBSA) for the first managers of SDCs was drawn up. The management of subsidiaries and affiliates held discussions with employees to identify shortcomings, pay attention to safety conditions, identify systematic causes when performing production tasks, assess the effectiveness of the workplace culture, and identify weaknesses in the occupational safety management system. For each LBSA conducted, reports were compiled and analyzed to monitor the implementation of corrective actions.
- Automated the system for recording HS incidents, potential-hazardous incidents and events through the implementation of the Safe Production Project.



Human Resources Management

- During 2023, on a quarterly basis, PI 'Center for Social Interaction and Communications' conducted research of social stability indicators for the Group of companies of Samruk-Energy JSC.
- SRS Index of Samruk-Energy JSC — 59%.
- Engagement Index of Samruk-Energy JSC — 58%.
- Social Well-being Index of Samruk-Energy JSC — 43%.
- Social peace index of Samruk-Energy JSC — 72%.



Environmental protection

- For 2023, the KPI 'Indicator of environmental friendliness of generated electricity. Volume of CO/SOx/NOx/solids emissions per 1 kWh' with a target value of 10.1 g/kWh.
- Based on the results of 2023, the specific pollutant emission for the Group of companies of Samruk-Energy JSC amounted to 9.537 g/kWh.



Plans for 2024 and the medium term

In 2024, we plan to continue to improve our sustainability management practices, including:

- Bringing all of the Company's IRD in line with the norms of the updated Corporate Governance Code;
- Further implementation of the TCFD Action Plan and Disclosure project;
- Implementation of measures of the Roadmap for improvement of the sustainable development management system of Samruk-Energy JSC for 2024, updated based on the results of the study of the efficiency of Samruk-Energy JSC's ESG risk management activities, approved by the Board of Directors on February 26, 2024;
- Receipt of ESG risk rating based on the results of 2023;
- Disclosure of information on the Carbon Disclosure Project (Carbon Disclosure Project).

GRI 3-1

Materiality assessment

The materiality assessment process is aimed at identifying and prioritizing the most significant impacts on the economy, environment, people and human rights.

The assessment of material impacts included an analysis of Samruk-Energy JSC's ESG activities, current ESG trends, legislation and regulatory framework, external standards and systems in the field of sustainable development, and also took into account the opinions of stakeholders.

We also took into account and considered the material topics for the industry highlighted by GRI 12: Coal Sector 2022, SASB, analyzed the list of material topics assessed by the leading rating agencies in the electric power industry (S&P Global Ratings and MSCI ESG Ratings) and made a benchmark analysis of peer companies of the Group of companies of Samruk-Energy JSC.

We monitored the compliance of our list of material topics with the Principles of the Global Compact and the UN Sustainable Development Goals.

The most material topics were selected based on the principle of 'double materiality': we took into account the topics that are the most material in terms of impact on the Company's financial results and the topics that are the most material for the society in terms of our impacts.

Two new topics were added to the list of material topics in 2023 compared to the last reporting period:

- Energy availability;
- Biodiversity.



List of material topics GRI 3-2

Climate change and the environment

Material topic	Type of exposure	GRI Standards	UN Global Compact Principles	SDGs UN
Climate change	Negative Direct	305	7.8	
Energy transition to sustainable sources	Negative Direct	302	9	
Energy availability	Positive Direct	302	9	
Water management	Negative Direct	303	7.8	
Air quality	Negative Direct	301	7.8	
Sustainable waste management	Negative Direct	305	7.8	
Biodiversity	Negative Direct	304	7.8	

Taking care of people

Material topic	Type of exposure	GRI Standards	UN Global Compact Principles	SDGs UN
Managing, developing and motivating employees	Positive Direct	401, 402, 404		
Safety and health in the workplace	Positive Direct	403		
Diversity, equality and inclusion	Positive Direct	405, 406	1.2,6	

Effective governance and due diligence

Material topic	Type of exposure	GRI Standards	UN Global Compact Principles	SDGs UN
Contribution to economic performance	Positive Direct	201, 203		
Sustainable supply chain	Positive Direct	204		
Compliance and anti-corruption	Positive Direct	205	10	
Public policy	Positive Indirect	415		

Principles of the UN Global Compact


Samruk-Energy JSC implements the principles of environmental protection, social responsibility and best corporate governance in all areas of activity taking into account the principles of the UN Global Compact, which the Company joined in 2016.

PRINCIPLES OF THE GLOBAL COMPACT	SECTION OF THE REPORT
Businesses should support and respect the protection of internationally proclaimed human rights	<ul style="list-style-type: none"> Respect of human rights
Businesses should not be complicit in human rights abuses	
Businesses should support freedom of association and the effective recognition of the right to collective bargaining	<ul style="list-style-type: none"> Investments in human capital Procurement management
Business should support the elimination of all forms of forced and compulsory labor	
Business must advocate for the total elimination of child labor	
Business should support the elimination of discrimination in employment and occupation	
Business should support a precautionary approach to environmental issues	<ul style="list-style-type: none"> Caring for our planet Contribution to combating climate change
Businesses should undertake initiatives to promote environmental responsibility	
Business should promote the development and dissemination of environmentally sound technologies	<ul style="list-style-type: none"> Business ethics and anti-corruption
Businesses should oppose all forms of corruption, including extortion and bribery	



Our contribution to the UN Sustainable Development Goals

Samruk-Energy JSC has integrated the Principles of Sustainable Development into its activities and is also committed to the 17 UN Sustainable Development Goals. The Company, in carrying out its activities, strives to contribute to the achievement of the following UN Sustainable Development Goal.



END POVERTY IN ALL ITS FORMS EVERYWHERE

01

UN SDG targets

- 1.1.** By 2030, eradicate extreme poverty for all people worldwide, currently measured by the number of people living on less than \$2.15 a day.
- 1.2.** By 2030, reduce by at least half the proportion of men, women and children of all ages living in poverty in all its manifestations according to national definitions.
- 1.3.** By 2030, ensure that all men and women, especially the poor and vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technologies.

Results 2023

- 1.1., 1.2. The level of personnel turnover in 2023 amounted to 14%.
- The average salary of employees in the Group of companies of Samruk-Energy JSC increased by 14% and amounted to KZT 462,244 per month. Indexation of salaries amounted to 10%, with special attention paid to low-paid employees.
- The level of employees' social well-being (well-being index) reached 59%.
- Proportion of senior managers in significant locations of operation hired from the local community 100%.
- 1.4 The Group's share in the electricity market of Kazakhstan amounted to 31.3%.
- The share of RES generation in the electricity market of Kazakhstan is 6%.
- The Company's share in production at the end of 2023 amounted to 38.1% of total coal production in Kazakhstan.

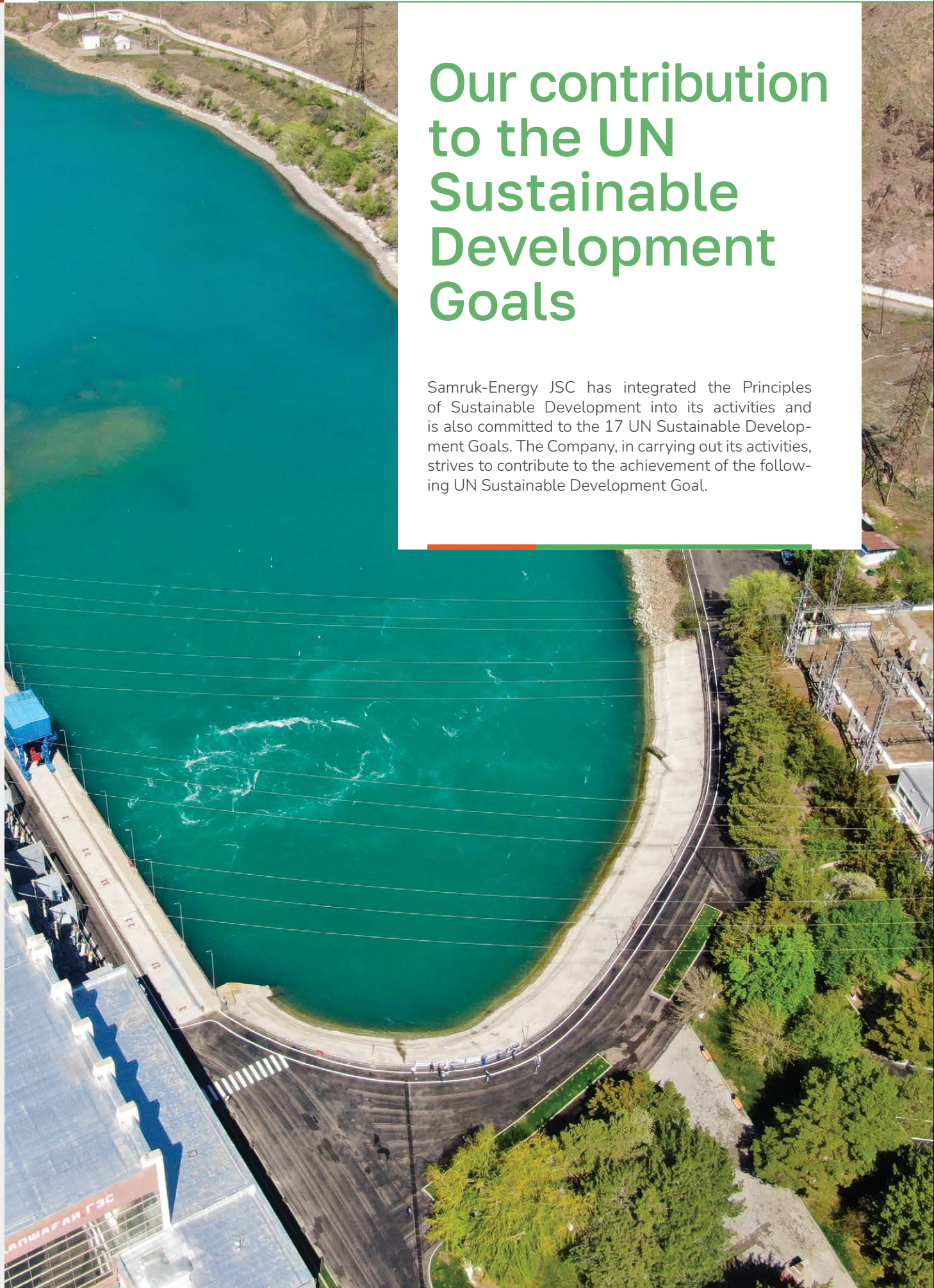
Company projects/objectives/KPIs

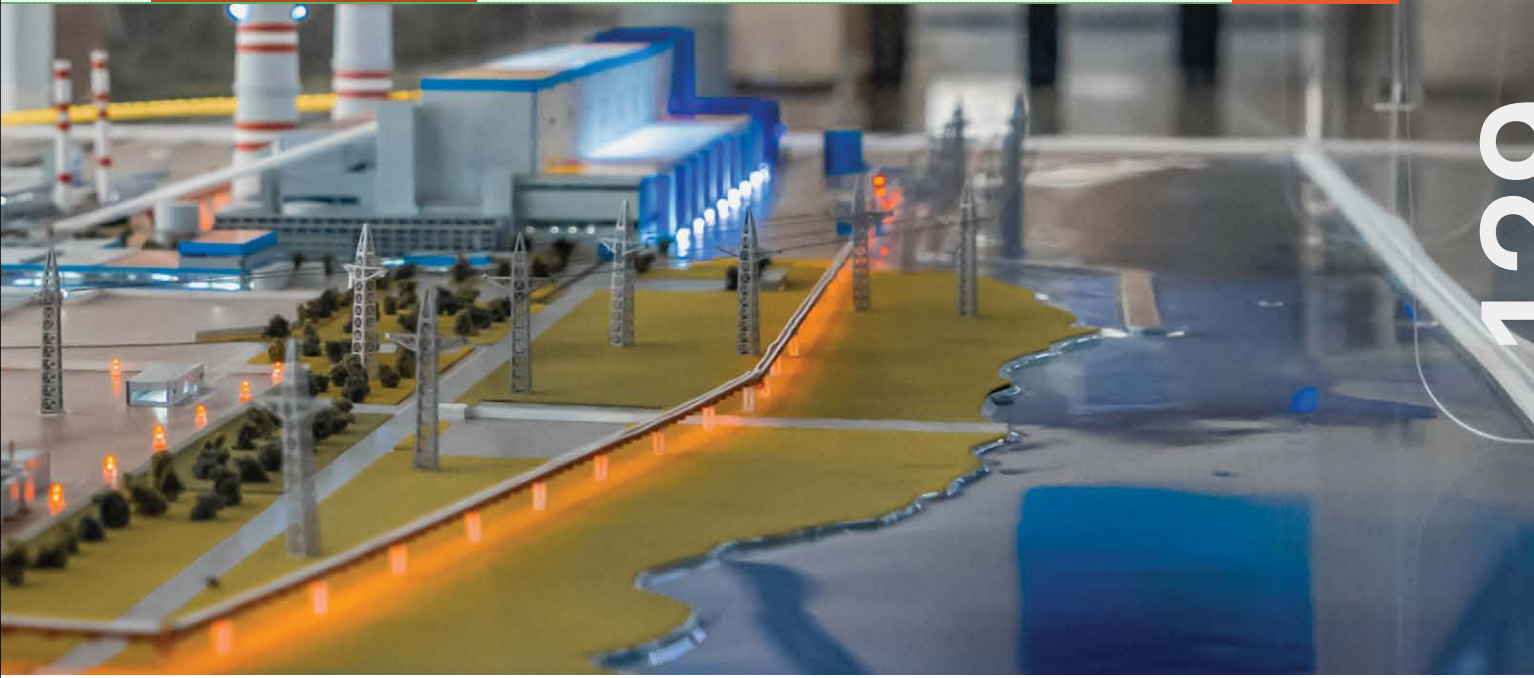
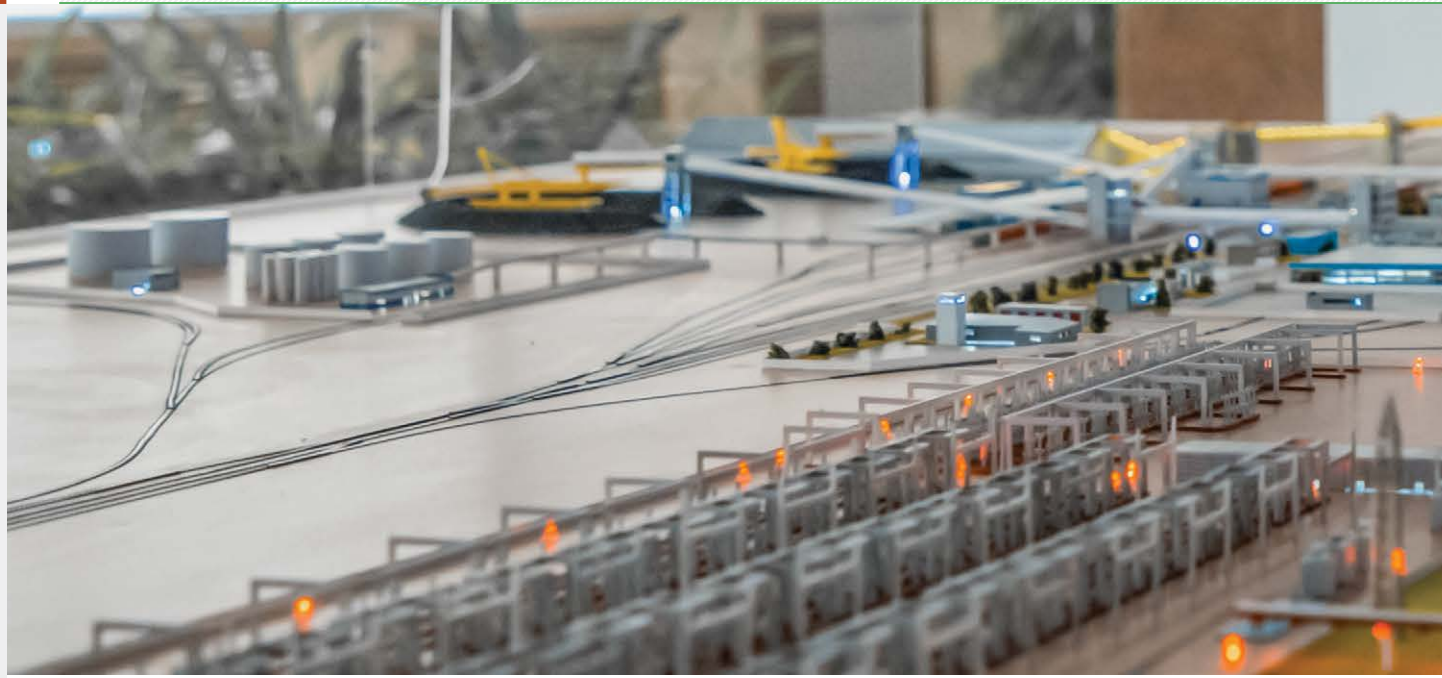
- Retention of jobs by controlling the established KPI 'Personnel turnover' not more than 14%.
- Ensuring competitive salaries, indexation of salaries.
- Action Plan to improve social stability of Samruk-Energy JSC.
- Monitoring of KPI 'Ensuring compliance with the share of top managers hired from the local population'.
- Monitoring of COP 'Degree of personnel welfare' at the level of at least 65%.
- R&D:
 - Study of the possibility of application of carbon capture and storage technologies at coal-fired power plants.
 - Implementation of technology of oil-free boiler unit refueling system (plasma-fuel system).

The Group of companies of Samruk-Energy JSC carries out its activities strictly in accordance with the requirements of the legislation, at the same time adhering to non-discrimination of consumers in terms of receiving goods and services. Taking into account that the electric power market is divided into wholesale and retail markets and that socially vulnerable population groups use electric power and utility coal within the framework of the retail market, they are subject to the services provided by AlmatyEnergoSbyt LLP and AZC. Bogatyr-Komir LLP operates for the consumers of the retail market only within the framework of communal and household supplies, the distribution of which is carried out by local executive bodies. Information on social support for vulnerable groups of population is presented on the Company's website: <https://www.samruk-energy.kz/en/sustainable-development-2#tab17>

CHPP-2 from coal-fired generation to gas fuel. Upon completion of the project, these works will make it possible to significantly reduce the volume of emissions into the environment.

Diseases and deaths related to chemical pollution of air, water and soil have never been recorded in the regions where Samruk-Energy JSC's production facilities are located. Work is also underway to reconstruct electrostatic filters, which will affect the quality of flue gas cleaning from suspended solids (dust/ash).





ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

04

UN SDG targets

4.4. By 2030, substantially increase the number of youth and adults with the necessary skills, including technical and vocational skills, for employment, decent work and entrepreneurship

Company projects/objectives/KPIs

The Jas Energy Youth Council is functioning.

The Rules for Organization and Conducting Practical Training and Internship in Samruk-Energy JSC were approved (Minutes No. 20 dated 21.07.2010).

Action plan for implementation of the youth policy of Samruk-Energy JSC.

Results 2023

4.4. For the purpose of social and professional development of personality through exchange of thoughts and experience, 'Il Youth Forum of Samruk-Energy JSC' was held with participation of 100 employees of the Company.

Within the framework of implementation of the program for development of youth policy in the Group of companies of Samruk-Kazyna JSC, 5 employees of the Company completed participation in the modular program for development of young leaders 'Zheti Kadam'.

They took part in the youth challenge of Samruk-Kazyna JSC, where young participants were trained in leadership, self-diagnostics.



ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

05

UN SDG targets

5.1. End all forms of discrimination against all women and girls worldwide.

5.2. Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other forms of exploitation.

5.5. Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

5.C. Adopt and strengthen sound policies and enforceable legislation to promote gender equality and the empowerment of all women and girls at all levels.

Company projects/objectives/KPIs

Signed Statement of Support for the Women's Empowerment Principles developed through the UN Women and UN Global Compact partnership.

An action plan was approved to increase the share of women in the Management Board of Samruk-Energy JSC and Management Boards, Supervisory Boards / Boards of Directors of subsidiaries and affiliated organizations of Samruk-Energy JSC up to 20% by 2023, up to 30% by 2030.

KPIs have been set: Increase in the number of women in the labor force.

KPI set: Increase in the number of women in the Talent pool.

Results 2023

5.1, 5.2, 5.C. No confirmed cases of discrimination, harassment, bullying was recorded.

In 2023, the Non-Discrimination Policy was approved (Board decision of March 09, 2023, Minutes No. 7).

The Human Rights Policy was approved (Board decision on July 27, 2023, Minutes No. 24).

5.5. The share of women in the total labor force is 25%.

The share of women in the internal talent pool is 33%. Within the framework of the Gender Equality Program, women of the Group of companies of Samruk-Energy JSC underwent modular training aimed at increasing the share of women in the Company's management bodies, and also took part in a business meeting with representatives of the Women's Energy Club KAZENERGY and a delegation from the Association of Women in Energy of Kyrgyzstan.

The following activities were carried out to appoint/elect women leaders to the Boards of Directors/Supervisory Boards and Executive Body who completed the Gender Equality Program: M. Aisarieva was elected to the Board of Directors of Shardara HPP JSC (Minutes of Samruk-Energy JSC BOD meeting 07/23 dated 06.06.23).

A. Rakhimova was elected as a member of the SB of 'First Wind Power Plant' and elected as a member and Chairman of the SB of 'Samruk Green Energy' LLP and 'Kazgidrotehenergo' LLP (Minutes of the meeting of the Board of Directors of 'Qazaq Green Power PLC' public company 7 dated 30.05.23).



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

06

UN SDG targets

6.3. By 2030, improve water quality by reducing pollution, eliminating waste dumping and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and significantly increasing recycling and safe reuse of wastewater worldwide.
6.4. By 2030, substantially improve water use efficiency in all sectors and ensure sustainable freshwater abstraction and supply to address water scarcity and significantly reduce the number of people suffering from water scarcity.

Company projects/objectives/KPIs

Action plan for management of labor protection and environmental protection issues in the Group of companies of Samruk-Energy JSC.

Plans for rational use of water resources.

Objectives:

- reduction of fresh water consumption;
Increase the share of reusable and recycled water;
Reduction of wastewater discharge volumes and concentrations of harmful substances in wastewater; drainage (mine) water — additionally generated by Bogatyr Komir LLP;
minimization of risks in relation to water use;
Improving the quality of discharged wastewater.

Results 2023

6.3., 6.4. In 2023, regular monitoring of the condition of water bodies was carried out by accredited specialized laboratories in accordance with the Program of industrial environmental control, including determination of chemical composition and quality of surface, underground and waste water. In the reporting period, no cases of exceeding maximum permissible concentrations of pollutants in wastewater discharges were recorded in EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC, Alatau Zharyk Company JSC.

All production enterprises have implemented Water Resources Management Plans with measures to reduce fresh water use, discharge of normatively treated water, water losses during transportation and introduction of wastewater reuse systems.



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

07

UN SDG targets

7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.
7.2. By 2030, substantially increase the share of renewable energy in the global energy mix.
7.3. By 2030, double the global rate of improvement in energy efficiency.
7.A. By 2030, increase international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency and advanced and cleaner fossil fuel technologies, and encourage investment in energy infrastructure and clean energy technologies.

Results 2023

Electricity generation by RES facilities at the enterprises of the Group of companies of Samruk-Energy JSC in 2023 increased by 32.8%
Electricity generation by RES facilities of Samruk-Energy JSC (SPP, WPP and small HPPs) for January-December 2023 was 554.4 million kWh, which corresponds to 8.1% of the total share of RES electricity generation in the Republic of Kazakhstan.
In 2023, we implemented 61 actions aimed at improving energy efficiency and rational use of resources, including construction of new substations, reconstruction and improvement of power grids, and optimization and modernization of energy infrastructures. These actions contributed to a profound transformation of our energy system, demonstrating its commitment to sustainable development and optimization of resource consumption. The measures implemented in the reporting period by Samruk-Energy JSC allowed saving 362.9 thousand t.e.f. (tonnes of equivalent fuel) for KZT 2.06 billion.



PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

08

UN SDG targets

- 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for youth and people with disabilities, and equal pay for work of equal value.
- 8.7. Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and ensure the prohibition and elimination of the worst forms of child labor, including the recruitment and use of child soldiers, and end child labor in all its forms by 2025.
- 8.8. Protect labor rights and promote safe and secure working conditions for all workers, including migrant workers, in particular migrant women, and those in vulnerable employment.

Company projects/objectives/KPIs

The Personnel Policy of Samruk-Energy JSC was updated. The Code of Conduct of Samruk-Energy JSC is in force. The Policy on Non-Discrimination has been implemented. The Human Rights Policy has been implemented.

Results 2023

8.5., 8.7., 8.8. In accordance with the HR Policy, one of the main business principles is the principle of 'Diversity and Equal Opportunities/Non-Discrimination', and the key objective 'Ensuring the principles of inclusion and balance, which implies the creation and implementation of programs with equal conditions and opportunities for representatives of different social and age groups, paying equal attention to them' has been defined. Within the framework of this goal, the Non-Discrimination Policy was approved in 2023 (Board decision of March 09, 2023, Minutes No. 7). The Human Rights Policy was approved (decision of the Management Board on July 27, 2023, Minutes No. 24). The Group of companies Samruk-Energy JSC employed 227 persons with disabilities.

Work is carried out on employment of the Presidential Youth Talent pool in case of vacancies in the Company and its subsidiaries and affiliated organizations.



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

09

UN SDG targets

- 9.1. Develop quality, reliable, resilient and sustainable infrastructure, including regional and cross-border infrastructure, to support economic development and human well-being, emphasizing affordable and equitable access for all.
- 9.4. By 2030, modernize infrastructure and modernize industries to make them sustainable, improve resource efficiency and increase the adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their capabilities.
- 9.5. Enhance research, build the technological capabilities of industrial sectors in all countries, especially developing countries, including by stimulating innovation and significantly increasing the number of R&D workers per 1 million people and public and private R&D expenditure by 2030.
- 10.2. By 2030, support by law and promote the active participation of all people in social, economic and political life regardless of their age, gender, disability, race, ethnicity, origin, religion or economic or other status.

Company projects/objectives/KPIs

Investment project portfolio management
Approved KPIs: Degree of realization of investment projects

Results 2023

- 9.1. In 2023, the Company financed activities and projects aimed at socio-economic development in local communities for a total amount of KZT 125 million.
- 9.4. KZT 49,545,803 thousand was the cost of maintaining production assets.
- KZT 80,252,344 thousand was directed to the implementation of investment projects, including RES facilities.
- KZT 17,146,550 thousand amounted to capital investments in RES.
- 9.5. R&D on the project 'Technologies of carbon capture and storage (CCS), obtaining products of carbon chemistry' is being implemented.
- 10.2. There are no confirmed cases of discrimination in the Company, including on the grounds of harassment; moreover, by the decision of the Board of Directors dated 25.12.2023 (Minutes No. 18/23), the Code of Conduct was approved, which provides for prohibition of harassment of employees who in good faith report violations of the Company's IRD or cooperate in the investigation of improper behavior.



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

12

UN SDG targets

12.2. By 2030, achieve sustainable management and efficient use of natural resources.

12.5. By 2030, significantly reduce waste generation through prevention, reduction, recycling and reuse.

12.6. Encourage companies, especially large and multinational companies, to adopt sustainable practices and include sustainability information in their reporting cycle.

Company projects/objectives/KPIs

Corporate Standard on Environmental Protection Management in the Group of companies of Samruk-Energy JSC.

Action Plan for Management of Labor Protection and Environmental Protection Issues in the Group of companies of Samruk-Energy JSC.

Results 2023

12.2. Environmental protection (EP) is managed at all levels of the Company.

To manage environmental safety as a part of comprehensive industrial safety, we have established an Environmental Management System (EMS), which is an integral part of the corporate governance system and an essential part of the non-financial risk management system. As part of the EMS, the Guidelines for Environmental Emergencies and Response have been approved.

The environmental management system of Samruk-Energy JSC is constantly evaluated for compliance with the best international practices with the involvement of Independent International Consultants and is gradually improved.

12.5. All types of waste generated at EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP are identified based on the inventory of waste generation sources.

To minimize the negative impact of Bogatyr Komir LLP on the adjacent territories, the Company is reducing the volume of overburden disposal at external dumps by developing projects to use the internal mined-out space of Severny and Bogatyr open-pit mines as internal dumps. In order to prevent oxidation processes and spontaneous combustion of carbon-containing rock stored in dumps, isolation of dumps and compaction of the dumps' roof with inert rocks is carried out.

Ash and slag wastes of EGRES-1 LLP, EGRES-2 JSC, APP JSC are buried on ash dumps, with provision of dust suppression measures — at Ekibastuz GRES under the water edge, in APP JSC by a unique combined technology with covering with a layer of soil and planting of perennial grasses and shrubs. We carry out annual reclamation of spent parts of ash dumps. Besides, along with utilization, ash and slag are processed for their further use in construction of highways and production of building materials.

In the process of production activity of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, no radioactive wastes are generated. Radiation monitoring is conducted on the territory of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP and on the border of their sanitary protection zones on a quarterly basis. According to the monitoring results, no exceedances of the permissible level of 2.5 mSv/hour were registered.

12.6. The Company annually prepares Integrated Reports, where it discloses its impact of resource consumption in the Group of companies of Samruk-Energy JSC in 3-year dynamics.

Adapted forms for collection of information on waste management in accordance with international requirements for reporting on sustainable development (GRI) have been adopted.





TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

UN SDG targets

13.1. Increase resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

13.3. Improve education, awareness raising, and human and institutional capacity for climate change mitigation, adaptation, impact reduction and early warning.

Company projects/objectives/KPIs

Energy transition program for 2022- 2060.

Results 2023

13.1. In accordance with the Energy Transition Program, the Company envisages gradual change of the generation structure, systematic increase in the share of generation from renewable sources, application of the best available technologies, study and application of carbon capture and storage technologies at the Company's coal-fired plants, as well as implementation of measures to improve energy efficiency and energy saving.

In 2023, climate risks (32-C-SE) as a result of the exposure assessment were identified as strategic and placed in the Large Risk Zone. Work was carried out jointly with the structural units concerned on the management of climate risks, including those related to water resources. Climate risks were supplemented with descriptions of water risk factors and measures to manage this risk. Thus, in turn, such risk factors as pollution of water resources, ban on the use of water resources from transboundary rivers, excess of pollutants in wastewater were supplemented. In addition, measures to manage them were developed and approved: monitoring of the impact of economic activities on aquatic ecosystems, fauna and flora, compliance with the rules of operation of buildings and structures. As part of environmental monitoring, in 2023, for the first time in test mode, an automated system for monitoring emissions into the environment (ASM) was introduced at EGRES-2 JSC. As part of this project, it is planned to introduce the automation of co-logical indicators in all major production companies in the following years.

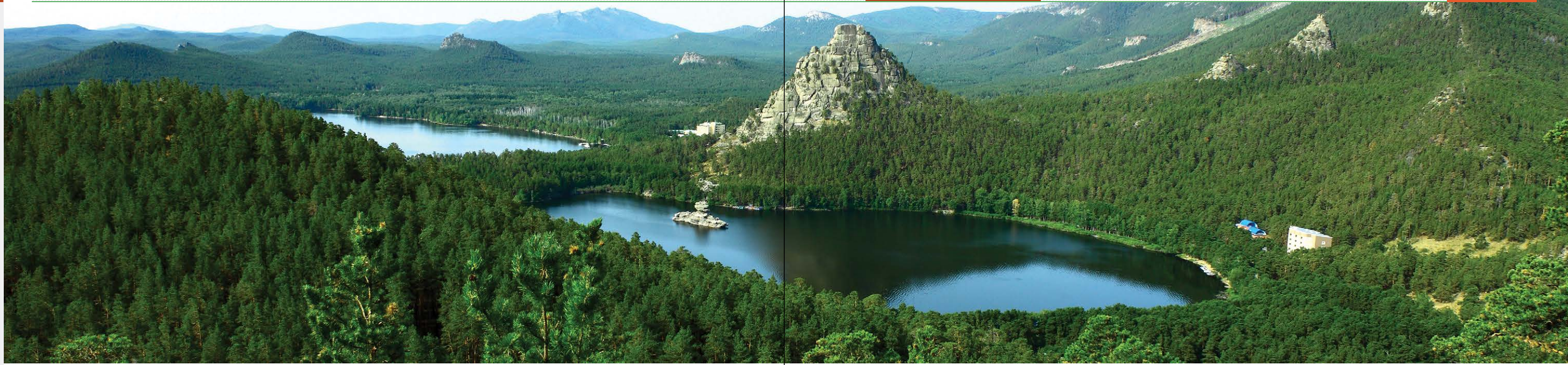
In 2023, the implementation of the project: 'Action Plan and Disclosure according to TCFD recommendations (Task Force on Climate-related Financial Disclosures — a standard for maintaining reports that disclose information on the possible impact of climate change on the global economy)' was started. Now the gap-analysis of corporate governance practices is underway 'Samruk-Energy in the area of climate change and TCFD disclosures and assessing the maturity of Samruk-Energy's corporate governance practices in the area of climate change with regard to TCFD recommendations. The project started at the end of October 2023 and will be completed at the end of April 2024.

13.3. In order to raise the level of awareness of the Company's employees about ESG best practices, during the second quarter of 2023, corporate training for employees of all levels is organized on the following topics: 'Global Climate Agreements', 'National Greenhouse Gas Regulation', 'ESG Principles/Practices', 'Carbon Cycle, Climate Change, Monitoring Methods', 'Company's Carbon Footprint. Direct Emissions, Energy Indirect Emissions, Other Indirect Emissions', 'RES: Global Trends and Development in Kazakhstan', 'Energy Saving and Energy Efficiency Improvement', 'Green Finance Carbon Asset Management Project Mechanisms', 'Corporate Strategies'. The training was conducted by Tetra Tech ES, Inc. implementing the USAID-funded project 'Energy of Central Asia'.

When disclosing information, Samruk-Energy JSC adheres to the principle of consistency and comparability, continuously works on improving the completeness of information disclosure and expanding the scope of reporting on GHG emissions, in this regard, in this regard, for the first time in 2023, fluorinated gases from the Company's quota plants, which account for about 2% of anthropogenic GHG emissions globally, will be accounted for.

Emissions of fluorinated gases, tons CO₂-eq

Name of fluorinated gas	2023
Hydrofluorocarbons (HFCs)	192.7
Perfluorocarbons (PFCs)	0
Difluorochloromethane (CHClF ₂)	424.9
Sulphur hexafluoride (SF ₆)	1,623.6
Nitrogen trifluoride (NF ₃)	0
Tetrafluoromethane (CF ₄)	555
Total for Samruk-Energy JSC	2,796.2



PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

15

UN SDG targets

15.1. By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, including forests, wetlands, mountains and drylands, in accordance with obligations arising from international agreements.

15.5. Immediately take meaningful measures to curb degradation of natural habitats, halt biodiversity loss, and ensure the conservation and prevention of extinction of endangered species by 2020.

Company projects/objectives/KPIs

Corporate Standard on Environmental Protection Management in the Group of companies of Samruk-Energy JSC.

Action Plan on management of labor protection and environmental protection issues in the Group of companies of Samruk-Energy JSC.

Results 2023

15.1., 15.5. To minimize fish kill, all hydraulic turbines of our HPPs are equipped with fish protection devices. Also, according to the recommendation of the Kazakh Research Institute of Fisheries, as a fish protection measure near the water intake in front of the turbine conduits, the water surface is illuminated with spotlights at night to deter fish.

To minimize the deaths of birds that use overhead power line (OPL) poles as roosts, we reconstruct the poles and equip them with insulated wires.

To reduce the impact on aquatic and terrestrial (coastal) ecosystems, HPP operation regimes are coordinated with the Committee for Water Resources of the Ministry of Ecology, Geology and Natural Resources, with Akimats and the management of SPNR (in the case of Moynak HPP). Water releases in the interests of agricultural land users (irrigation) and water supply are agreed with authorized bodies.

At the pre-project and design stages of wind power installations (WPI), it is envisaged to minimize their environmental impact. For example, in order to minimize the impact of light pollution on the biorhythms of living creatures and to preserve and replenish biodiversity, we minimize the lighting of wind power plants to the point of using only parking lights. Our subsidiaries and affiliates annually develop biodiversity conservation programs that include comprehensive land reclamation upon completion of operations to compensate for potential environmental damage caused by our operations. The works are carried out as part of post-utilization of subsidiaries and affiliates' construction facilities, liquidation of subsoil use consequences, liquidation and conservation of hydrogeological wells, closure of landfills and other waste storage and disposal sites, including radioactive waste. The Company did not decommission any facilities in 2023.

Based on the results of continuous environmental monitoring, no significant direct or indirect impact of subsidiaries and affiliates' activities on vulnerable ecosystems and biodiversity was observed in the reporting period.



PROMOTING JUST, PEACEFUL AND INCLUSIVE SOCIETIES

16

UN SDG targets

16.5. Significantly reduce corruption and bribery in all its forms.

16.10. Ensure public access to information and protect fundamental freedoms in accordance with national legislation and international agreements.

16.B. Promote and enforce non-discriminatory laws and sustainable development policies.

Company projects/objectives/KPIs

Compliance officers have been appointed in the Group of companies of Samruk-Energy JSC, whose terms of reference include, inter alia, issues of anti-corruption expertise and work.

Corruption risks are analyzed annually.

Compliance officers conduct due diligence of counterparties, including their involvement in corruption offenses.

Mass explanatory work on anti-corruption issues is carried out.

An anti-corruption clause has been strengthened in procurement contracts since 2022.

Results 2023

16.5. There were no confirmed cases of corruption and bribery in the reporting period.

In the reporting period, more than 70 training events were held throughout the Group of companies of Samruk-Energy JSC with explanations on changes in anti-corruption legislation, tax declaration and hotline operation procedure.

16.10, 16.B. In order to ensure compliance with the non-discriminatory policy, the Code of Conduct was approved by the decision of the Company's BOD dated 25.12.2023 (Minutes No. 18/23), which provides for prohibition of harassment of employees who report violations in good faith or cooperate in the investigation of improper behavior.

Reviewed the procurement system. The appeals received by the centralized procurement control service were reviewed, the nature of violations was determined, as well as measures to eliminate them, in addition, recommendations were made to minimize compliance risks in procurement.



REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

UN SDG targets

17.16. Strengthen the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, experience, technology and financial resources to support the achievement of sustainable development goals in all countries, especially developing countries.

Company projects/objectives/KPIs

The Company is a member of the following national and International organizations:

- CIS Electric Power Council;
- Kazakhstan Electric Power Association;
- National Chamber of Entrepreneurs of the Republic of Kazakhstan;
- KAZENERGY Association membership;
- Union of Machine Builders of Kazakhstan;
- ECOJER Association;
- World Energy Council;
- UN Global Compact.

Results 2023

17.16. 4.08.2023 Participated in the II Annual Forum on industrial safety of Samruk-Kazyna JSC. January-December 2023 Chairman of the Management Board took part in the meetings of the Board of Directors of KEA;

April 7, 2023 participated in the meeting of the Energy Council under the President of the Republic of Kazakhstan chaired by the Prime Minister of the Republic of Kazakhstan A.A. Smailov;

April 21, 2023 took part in the meeting of the Public Council of Samruk-Kazyna JSC;

June-December 2023 participated in the KEA meetings to discuss the Strategy for the development of the industry for 2025-2035;

June 21-22, 2023 participated in the 7th Annual International Congress and Exhibition 'Hydropower Central Asia and the Caspian';

July 3, 2023 took part in the meeting of the Energy Council under the President of the Republic of Kazakhstan under the chairmanship of the Prime Minister of the Republic of Kazakhstan Smailov A.A.;

August 25, 2023 participated in the meeting of heads of hydropower departments of the Kyrgyz Republic, the Republic of Kazakhstan and the Republic of Uzbekistan;

September 14, 2023 took part in an extended thematic meeting of the Committee on Ecology and Environmental Management on the topic:

'Issues of ensuring energy security of the Republic of Kazakhstan';

September 19-20 participated in the conference 'Energy Week of Central Asia and Mongolia 2023';

October 2023 took part in the meeting of the Public Council of Samruk-Kazyna JSC;

October 3-6, 2023 took part in the high-level round table of the Executive Committee of the CIS ES 'Energy security of CIS countries' KAZAKHSTAN ENERGY WEEK — 2023/XV Eurasian Forum KAZENERGY;

November 24, 2023 participated in the meeting of the Energy Council under the President of the Republic of Kazakhstan under the chairmanship of the Prime Minister of the Republic of Kazakhstan.

Chairman of the Prime Minister of the Republic of Kazakhstan Smailov A.A.;

November 25, 2023 participated in the field meeting in Bishkek to discuss the implementation of the Kamarata HPP project;

December 8, 2023 participated in the meeting of the Council of the Association KAZENERGY;

December 4 Participated in the COP-28 on climate change, presented the Company's contribution to reducing carbon footprint;

December 13, 2023 took part in the expanded general meeting of the Kazakhstan Electric Power Association;

During the year, participated in meetings on the establishment of the International Water and Energy Consortium of Central Asia.



Stakeholder Engagement

GRI 2-29

INTERACTION WITH STAKEHOLDERS IS IMPORTANT FOR SAMRUK-ENERGY JSC. GUIDED BY THE PRINCIPLE OF TRANSPARENCY, WE ARE OPEN TO MEETINGS, DISCUSSIONS, AND DIALOG, AND STRIVE TO BUILD LONG-TERM COOPERATION WITH STAKEHOLDERS BASED ON CONSIDERATION OF MUTUAL INTERESTS, OBSERVANCE OF RIGHTS AND BALANCE BETWEEN THE INTERESTS OF THE COMPANY AND STAKEHOLDERS.

The Management Board of Samruk-Energy JSC manages stakeholder engagement to ensure compliance of the Company's activities with the Company's strategy and development plan, as well as decisions of the Sole Shareholder and the Governing Body.

The main goal of our interaction with stakeholders is to make the right choice of strategic development and ways to improve the Company's activity, to assist in achieving such a level of sustainable development that benefits everyone: the Company, its stakeholders, and the society.

Effective stakeholder engagement allows to:

- identify stakeholders that have a significant impact on the Company and their degree of dependence on the Company;
- identify and analyze the needs, expectations and opinions of internal and external stakeholders;
- identify and analyze the challenges and prospects, as well as the most significant issues of concern to internal and external stakeholders;
- build a materiality matrix, develop a Stakeholder Engagement Plan and/or a Stakeholder Communication Plan.

The main principles of stakeholder engagement are:

- respect and consideration of stakeholders' interests, opinions and preferences;

- timely and regular information for stakeholders;
- responsible fulfillment of assumed obligations.

Guided by the world's best practices in the field of stakeholder engagement (AA1000 series standard, GRI), the Company applies a number of principles to build effective interaction, which allow us to consider the interests of all stakeholders at all stages of the Company's operations management process.

Thus, our interaction with stakeholders is based on the principle of 'inclusion', which is based on three principles of interaction aimed at comprehensive, mutually beneficial and effective interaction with stakeholders:

- 'materiality' — correct assessment of the significance of problems for stakeholders and the organization;
- 'completeness' — understanding of the materiality of the consequences of the Company's activities;
- 'responsiveness' — demonstration of an adequate response.

We are ready to invest in development, in the future of our customers and employees, partners and suppliers. We are ready to ensure sustainable development of both the Company and local communities. We are ready to make social investments in areas of significance for the territory of our presence. We are ready to develop interaction with all parties in order to adequately and flexibly respond to external and internal challenges.

We also share the main provisions of the precautionary principle. Before launching new projects and facilities of the Company, as part of the environmental impact assessment, a number of measures aimed at informing the public about the planned activities and their possible impact are necessarily implemented in order to identify public opinion and take it into account in the impact assessment process.

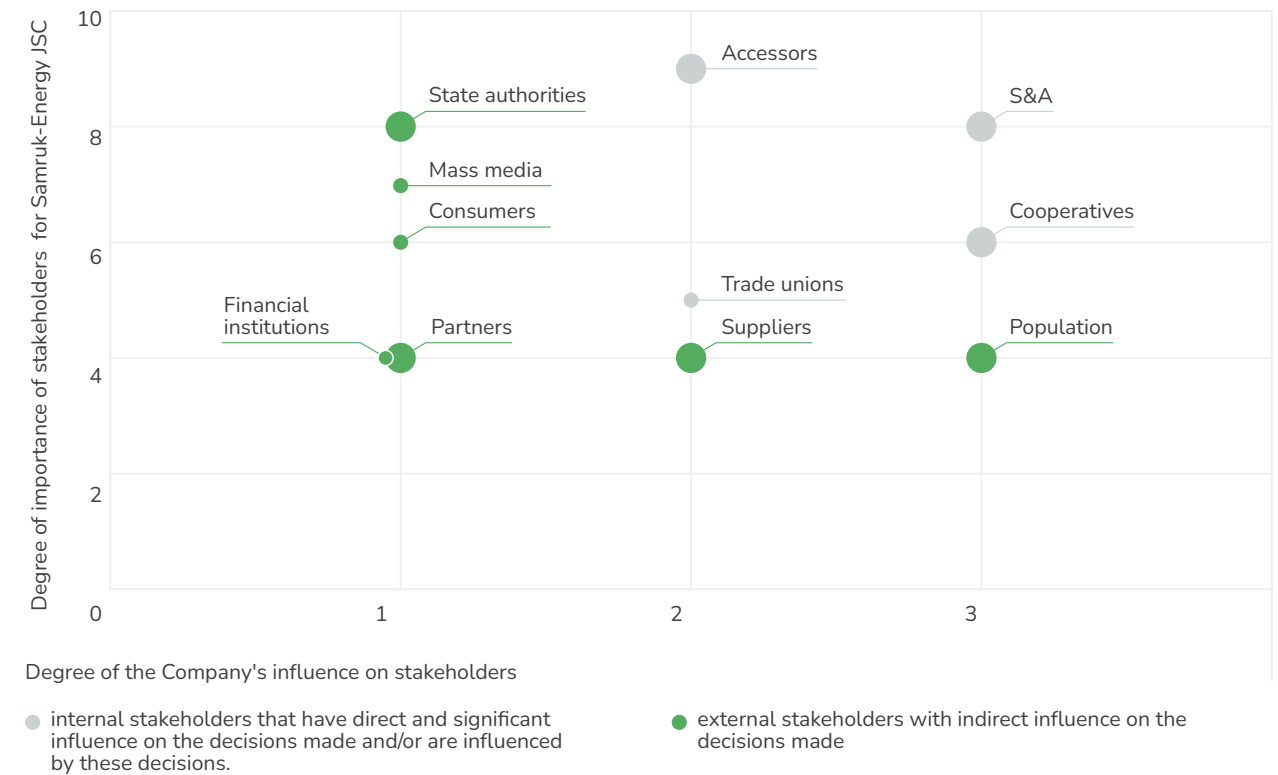
Taking into account the principle of 'transparency', within the framework of stakeholder engagement, every year after the issuance of the annual report, we review the balance and completeness of the information disclosed in the annual report, as well as identify topics and aspects that have a significant impact on the Company's operations and its stakeholders.

All such activities are included in the Stakeholder Engagement Plan, which is based on the Stakeholder Map of Samruk-Energy JSC and the practice of interaction

with stakeholders. The Plan also describes the principles of the Company's interaction with stakeholders, the approach to identification and analysis of stakeholders, requirements for interaction with stakeholders, mechanisms for filing and reviewing complaints, and measures for interaction with stakeholders. The Company monitors the implementation of the Plan, and the results are reported to the Board of Directors.

The Strategy of Samruk-Energy JSC for 2022-2031 is based on the principles of sustainable development enshrined in the UN Global Compact and, in particular, includes building a map of stakeholders and methods/channels of interaction. In 2023, the activities of the Stakeholder Engagement Plan of Samruk-Energy JSC were implemented in full. In accordance with the Plan, subsidiaries and affiliated organizations of Samruk-Energy JSC in 2023 monitored the approved Stakeholder Engagement Plans (SEP) for existing investment projects.

The stakeholder card of Samruk-Energy JSC



The size of the circle demonstrates the extent of the Company's interaction with stakeholders. The smallest size is a limited level of interaction. As the size increases, the degree of interaction increases.



Engagement with key stakeholder groups

Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Internal		
Shareholder		
<ul style="list-style-type: none"> Economic Profit/Consolidated Net Income/Economic Performance; Free funds for development and dividends; Market share/ Market presence; Social and environmental responsibility, minimization of emissions into the environment, compliance with the principles of sustainable development, no complaints and fines for violation of environmental laws. 	<ul style="list-style-type: none"> Participation in meetings/periodic reporting of Samruk-Kazyna JSC, on the results of the Company's activities for the reporting period; Provision of reporting (financial, non-financial) in accordance with the requirements of the legislation of the Republic of Kazakhstan, internal regulations of the Sole Shareholder, relevant requests; Organization of joint working groups, meetings, negotiations, meetings with stakeholders; Formation of media plan/publication of information on the Company's activities; Discussing the execution of the Development Strategy, Business Plan, Transformation Program, implementation of investment projects and sustainable development processes, etc.; Meetings and correspondence on the activities of the Group of companies of Samruk-Energy JSC; Surveys, questionnaires, testing; Channels of intra-corporate communication; Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> On April 28, 2023 the consolidated financial statements of Samruk-Energy JSC were published on the KASE platform; On June 1, 2023, Samruk-Energy JSC paid dividends on common shares for 2022 in the amount of KZT 2.041 billion; The Sole Shareholder considered the following issues: <ul style="list-style-type: none"> - on amending the Charter of Samruk-Energy JSC — January 26, 2023; - on approval of the Code of Corporate Governance of Samruk-Energy JSC in a new edition — November 10, 2023. <p>Strategic sessions:</p> <ul style="list-style-type: none"> - On February 7, 2023, a meeting of the Strategic Session of Samruk-Energy JSC was held on the issue of updating the Development Strategy for 2023-2032 (minutes dated 07.02.2023). - On March 3, 2023, a meeting of the Strategic Session of Samruk-Energy JSC was held with representatives of Samruk-Kazyna JSC, independent members of the Board of Directors of the Company, members of the Management Board of the Company, and major subsidiaries and affiliates on the issue of consideration of the draft updated Development Strategy of the Company for 2023-2032. (Minutes No. 2 dated 03.03.2023). - By resolution of the BOD of Samruk-Energy JSC (Minutes No. 04/23 dated April 14, 2023), it was decided to complete the Company's Transformation Program. <p>During the reporting period, the Company participated in 9 hearings (from April to December 2023). 290 appeals and complaints were received through all feedback channels.</p> <p>In 2023, the Ombudsman officially received 37 appeals. All appeals were consulted, answers and recommendations were given, and personal meetings (conversations, information sessions) were held with employees and managers of the Company and SACs.</p> <p>Since the beginning of the year, 60 appeals and complaints have been received through all feedback channels, 3 of which are under consideration.</p>

Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Subsidiaries and affiliated organizations		
<ul style="list-style-type: none"> Employment and remuneration, staff-management relations, non-discrimination, diversity and equal opportunities; Improved safety culture, training and education; Market share/presence in markets for products and services; Assistance in dealing with government agencies, commercial interests. 	<ul style="list-style-type: none"> Decisions of the Company as a participant/shareholder of subsidiaries and affiliates; Verification of compliance with the legislation of the Republic of Kazakhstan and internal documents of the Group of companies of Samruk-Energy JSC; Inspections of fulfillment of license and contractual obligations of Samruk-Energy JSC subsidiaries and affiliates; Management visits to production sites of subsidiaries and affiliates; Development of proposals on amendments and additions to the legislation of the Republic of Kazakhstan; Provision of information requested by state authorities in various areas of the Company's activities; Signing contracts, memorandums and agreements on strategic cooperation; Orders and instructions, hearing of the management of subsidiaries and affiliates by the Company; Information/reports on the fulfillment of the business plan, production, investment and social plans/commitments, achievement of key performance indicators and other relevant issues sent to the Company; Communicating performance targets, requirements for the development of internal regulatory documentation, etc., on an ongoing basis; Apparatus, production operational and other meetings, public hearings within the framework of investment project implementation; Industrial safety briefings, training and education; 	<ul style="list-style-type: none"> In 2023, more than 70 training events were held in all SACs to explain changes in anti-corruption legislation, tax declaration and hotline procedures In 2023, the Ombudsman of Samruk-Energy JSC visited all Company subsidiaries and affiliates Fulfillment of the investment program of the Company's SACs in 2023 — KZT 132,146 million; In early December 2023, the youth of subsidiaries and affiliates took part in the Samruk-Kazyna Youth Challenge. Reporting meetings were held in all subsidiaries and affiliates with participation of the Company's managers, Ombudsman, trade union, heads of subsidiaries and affiliates and labor collectives on improvement of social and labor relations. A strategic session was held on March 3, 2023, Minutes No.2 with the participation of the executive body and key subsidiaries and affiliates companies. The Company's management visited all production sites in 2023: <ul style="list-style-type: none"> - Alatau Zharyk Company JSC: 18.01.2023; 27.06.2023; 31.08.2023; 06.10.2023, 24.11.2023, 25.12.2023. - Bukhtarma HPP JSC: 26.04.2023, 28.08.2023. - AlmatyEnergoSbyt LLP: 03.03.2023; 28.09.2023; 24.11.2023. - First Wind Power Plant LLP: 25.01.2023; 01.09.2023. - Samruk-Green Energy LLP: 02.02.2023; 06.10.2023, 21.12.2023. - Semirechye Energy LLP: 31.05.2023. - EGRES-1 LLP: 17.02.2023, 04.07.2023, 21.07.2023, 22.08.2023, 20.09.2023; - EGRES-2 JSC: 17.02.2023, 04.07.2023, 21.07.2023, 22.08.2023, 20.09.2023, 10.10.2023, 11-12.01, 22.05, 20-21.07.2023, 17.08.2023, 22-24.10.2023, 16.11.2023; - Bogatyr Komir LLP: 17.02.2023, 04.07.2023, 21.07.2023, 22.08.2023, 20.09.2023, 20.09, 24.10, 26.12.2023;



Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Subsidiaries and affiliated organizations		
	<ul style="list-style-type: none"> Provision of feedback on appeals and complaints/hotline, social networks, internal corporate communication channels, Annual Report and the Company's online resource. 	<ul style="list-style-type: none"> APP JSC: 17.03.2023, 22.06.2023, 04.07.2023, 18-20.01, 30.06-01.07, 10-11.09, 21.08.2023.; Shardara HPP JSC: 02.10.2023, 30.09-02.10.2023; Moynak HPP JSC: 27.10.2023, 05-08.10.2023. One meeting was held in 2023 to review the results of subsidiaries and affiliates activities for 2022; Also, 17 meetings of the PEC were held to review the performance results of subsidiaries and affiliates.
Management and personnel		
<ul style="list-style-type: none"> Employment, employee-management relations, non-discrimination, diversity and equal opportunities, employee job satisfaction and the performance of the Company's services under their control; Training and education; Improving the level of safety culture. 	<ul style="list-style-type: none"> Fair and transparent conditions of personnel remuneration, ensuring professional growth of employees, safe working conditions; Development of human resources potential; Instruction on occupational safety and implementation of programs to improve working conditions; Implementation of social support measures for personnel and their family members; Professional development, training and personnel development programs; Regular meetings with management, negotiations/meetings with the team, representatives of subsidiaries and affiliates and the trade union, including year-end meetings; Informing employees about the Company's activities and opportunities for professional growth via corporate websites and social networks; 	<ul style="list-style-type: none"> Total cost of employee training in 2023 — KZT 440,080 thousand; Salary fund of Samruk-Energy JSC employees — KZT 98,570,478 thousand; In 2023, 783 employees were included in the Talent Pool; In 2023, 266 employees of the Group of companies of Samruk-Energy JSC were awarded for outstanding achievements; In 2023, 95 appeals were received to the Hotline.

Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Management and personnel		
	<ul style="list-style-type: none"> Conducting surveys, questionnaires, testing, and annual monitoring of personnel engagement indicators; Hotline, internal corporate communication channels, and the Company's Internet resource. 	
Trade unions		
<ul style="list-style-type: none"> Creation and preservation of jobs; Increasing the level of safety culture in production. 	<ul style="list-style-type: none"> Holding public hearings; Signing of contracts, memorandums, strategic cooperation agreements; Regular meetings with management, negotiations/meetings of teams, representatives of subsidiaries and affiliates, year-end report; Regulation of labor relations with the Company's employees; Remuneration of personnel in accordance with the labor legislation of the Republic of Kazakhstan, training and education, safe working conditions; Informing on current activities of subsidiaries and affiliates; Receiving letters (appeals) from the Company; Hotline, social networks, intra-corporate communication channels; Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> In the reporting year, 96% of employees were covered by the Collective Agreement; Local Trade Union 'Seriktes' organized sports competitions among the employees of Alatau Zharyk Company JSC.
External		
Public authorities		
<ul style="list-style-type: none"> Compliance, business stability and sustainability, tax revenues, economic growth; Creation and preservation of jobs; 	<ul style="list-style-type: none"> Inspections of license and contractual obligations of the Company's subsidiaries and affiliates; Verification of compliance with the legislation of the Republic of Kazakhstan, development of proposals for amendments to the legislation of the Republic of Kazakhstan; Approval of subsoil use contracts, act of state registration for subsoil use rights; 	<ul style="list-style-type: none"> In 2023, the Company transferred KZT 64,308 million to the state; Total number of inspections conducted by state authorities on industrial safety — 32; In 2023, Samruk-Energy JSC took part in the development of the Strategy for Development of the Electric Power Industry of the Republic of Kazakhstan until 2035



Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Public authorities		
<ul style="list-style-type: none"> Representation of the country's economic interests in the international arena (economic, political and image benefits for the country); Improving energy and resource efficiency of production, preserving the natural environment to ensure public health and biodiversity conservation, minimizing emissions into the environment. 	<ul style="list-style-type: none"> Information/reporting (financial, non-financial) in accordance with the requirements of the RK legislation on fulfillment of production, investment and social plans and obligations as requested; Negotiations, business correspondence, staff, production, operational and other meetings, questionnaires; Formation of a media plan/publication of information on the Company's activities; Hotline; Annual report and the Company's Internet resource. 	
Consumers		
<ul style="list-style-type: none"> Market share/Presence in markets; Quality of products and services; Marketing communications. 	<ul style="list-style-type: none"> Customer feedback system; Conducting meetings, negotiations, questionnaires; Formation of a media plan/publication of information on the Company's activities; Signing of contracts, memorandums, strategic cooperation agreements; Hotline; Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> Coal sales to consumers on the domestic market — 32.32 million tons.
Suppliers of goods, works and services		
<ul style="list-style-type: none"> Ensuring equal access to participation in tenders; Investment and procurement practices/ Benefits from procurement category strategies; Supply network and value chain efficiency; Support for domestic producers. 	<ul style="list-style-type: none"> Request for quotations; Conducting regular analytical meetings, negotiations, business correspondence; Signing contracts, memorandums, strategic cooperation agreements, licensing; Information/reporting on the fulfillment of production, investment and social plans and obligations sent to the Company; Reporting on the results of the Company's financial and economic activities; 	<ul style="list-style-type: none"> In 2023, payments to suppliers and contractors — KZT 350,498 million; Contracts concluded by Samruk-Energy JSC include provisions of the Code of Conduct, anti-corruption policy, as well as compliance with health and safety requirements, decent working conditions, and sanctions clauses.

Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Suppliers of goods, works and services		
	<ul style="list-style-type: none"> Consideration of letters (appeals) addressed to the Company; Conducting surveys, questionnaires, testing; Hotline; Annual report and the Company's Internet resource. 	
Business communities (Associations, National Chamber of Entrepreneurs, ALE)		
<ul style="list-style-type: none"> Participation in improving and complying with industry standards; Participation in improving the business environment; Support in government agencies through mechanisms of interaction between the business environment and government agencies, assistance in promoting the Company's legislative initiatives. 	<ul style="list-style-type: none"> Development of proposals for amendments and additions to the legislation of the Republic of Kazakhstan; Signing contracts, memorandums, agreements on strategic cooperation; Conducting regular analytical meetings, negotiations, business correspondence; Creation of working groups, meetings, negotiations, questionnaires; Annual report and Internet resource of the Company. 	<ul style="list-style-type: none"> In 2023, as part of the Gender Equality Program, employees of the Corporate Center underwent modular training aimed at increasing the share of women in the Company's management bodies, and participated in a business meeting with representatives of the KAZENERGY Women's Energy Club; Together with the Kazakhstan Electric Power Association ALE, the Company worked to initiate changes in the country's environmental legislation, proposing to postpone the timeline for the introduction of BAT from 2025 to 2031 for energy companies.
Public organizations and local population		
<ul style="list-style-type: none"> Increasing the level of production safety culture; Increasing the level of energy and resource efficiency of production; Minimizing emissions into the environment; Environmental protection issues within the framework of environmental impact assessment, including: <ul style="list-style-type: none"> atmospheric air; surface and underground water; surface of the bottom of water bodies; 	<ul style="list-style-type: none"> Holding public hearings; Development of proposals for amendments and additions to the legislation of the Republic of Kazakhstan; Formation of a media plan/publication of information about the Company's activities in mass media; Surveys, questionnaires, testing; Informing on current activities of the Company and its subsidiaries and affiliates; Consideration of letters (appeals) addressed to the Company; Hotline, social networks; Annual report and the Company's online resource. 	<ul style="list-style-type: none"> In the reporting year, investments in local communities amounted to KZT 125 million; The Group of companies of Samruk-Energy JSC provided assistance to the residents of Ekibastuz in an emergency situation — an accident at the CHPP; A number of meetings were held with local communities (public hearings in the form of open meetings): <ul style="list-style-type: none"> – August 30, 2023 — on the project 'Draft standards of permissible emissions', 'Waste management program' and 'Program of industrial environmental control' of Ekibastuz GRES-1 LLP;



Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Public organizations and local population		
<ul style="list-style-type: none"> – landscapes; – land and soil cover; – plant life; – animal life; – status of ecological systems and ecosystem services; – biodiversity; – health and living conditions of the population; – objects of special ecological, scientific, historical, cultural and recreational value. <ul style="list-style-type: none"> • Compliance with legal requirements, sponsorship and other assistance; • Employment opportunities, solution of social problems, transparency of the Company's activities, preservation of the natural environment. 		<ul style="list-style-type: none"> – September 4, 2023 — on the draft Possible Impact Report for the Feasibility Study 'Reconstruction with complete re-laying of the heating main of CHPP-2-ZTK' of Almaty Power Plants JSC; – November 24, 2023 — on materials of the Environmental Protection Section to the working project 'Reconstruction and expansion of ash dump of CHPP-3. Construction and installation works. Stage 5' of Almaty Power Plants JSC; – December 19, 2023 — on projects 'Norms of permissible emissions into the atmospheric air' and 'Waste Management Program' for CHPP-3 for 2025-2026 of Almaty Power Plants JSC; – September 7, 2023 — on the projects adjustment of DED 'Reconstruction and new construction of electric 10-6-0,4 kV on END-1. Replacement of overloaded and exhausted standard term KL to improve power supply', 'Reconstruction and new construction of electric 10-6-0,4 kV on END-6. Replacement of overloaded and exhausted normative term KL for increase of power supply', 'Transfer of 6 kV networks to 10 kV voltage at SS-6A, SS-3A (SS -168A) (2-stage)'. Alatau Zharyk Company JSC.
Partners		
<ul style="list-style-type: none"> • Market share/Presence in markets; • Joint implementation of projects; • Transfer of technologies, competencies and innovations. 	<ul style="list-style-type: none"> • Decisions of the Company as a participant/shareholder of subsidiaries and affiliates, joint consultative and advisory bodies; • Organization of joint working groups, inspections; • Meetings, negotiations, business correspondence, questionnaires; • Reports on current activities; • Correspondence on the activities of subsidiaries and affiliates; • Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> • In the reporting year, 100% of Samruk-Energy JSC's partners were informed about Samruk-Energy JSC's anti-corruption policy.

Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
Financial institutions		
<ul style="list-style-type: none"> • Economic profit/ Consolidated net income/ Economic performance; • Free funds for development and dividends. 	<ul style="list-style-type: none"> • Provision of reports/information on the Company in accordance with the requirements of the existing loan agreements; • Provision of reports (financial, non-financial) in accordance with the requirements of the RK legislation, internal regulations of the Sole Shareholder, relevant requests; • Formation of media plan/publication of information on the Company's activities in mass media; • Annual report and Internet resource of the Company. 	<ul style="list-style-type: none"> • On February 24, 2023, the Board of Directors of DBK approved financing of the project 'Modernization of Almaty CHPP-2 with minimization of environmental impact'; • Meetings with financial institutions (second tier banks, development banks, AIX, rating agencies) and potential investors were held during 2023.
International organizations		
<ul style="list-style-type: none"> • The Company's participation in international agreements and initiatives. 	<ul style="list-style-type: none"> • Conferences, forums, annual meetings; • Signing of contracts, memorandums, strategic cooperation agreements; • Creation of working groups, meetings, negotiations, questionnaires; • Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> • International rating agency Morningstar Sustainability conducted a study of Samruk-Energy JSC and assigned ESG Risk Rating — 24.1 points; • On October 20, 2023, the international rating agency Fitch Ratings confirmed long-term credit ratings of Samruk-Energy JSC at the level of 'BB+'.
Creditors		
<ul style="list-style-type: none"> • Economic Profit/Consolidated Net Income/Economic Performance; • Free funds for development and dividends; • Net Asset Value (NAV); • Investment and Procurement Practices/Benefits of Implementation; • Procurement category strategies. 	<ul style="list-style-type: none"> • Conducting regular analytical meetings and negotiations, business correspondence, questionnaires; • Forming a media plan/publication of information about the Company's activities in mass media; • Hotline; • Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> • A loan agreement was signed between APP JSC and the Asian Development Bank in the amount not exceeding KZT 98 billion for the implementation of the project on gasification of Almaty CHPP.



Stakeholder's interest in the Company	Mechanisms of interaction	Results of interaction
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Local executive bodies

<ul style="list-style-type: none"> Compliance, job creation and retention, sponsorship and other assistance; Health and safety of personnel; Improving energy and resource efficiency of production, minimizing emissions into the environment. 	<ul style="list-style-type: none"> Cooperation with local executive bodies to support and develop the social sphere in the regions; Organization and implementation of volunteer and charity actions; Hotline, social networks; Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> Together with the Akimat of Yenbekshi-kazakh district and the Akimat of Almaty region, work is underway to make decisions on the return of land within the framework of the project 'Construction of a hybrid plant of WPP, HPP with a capacity of 310 MW'.
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MASS MEDIA

<ul style="list-style-type: none"> Compliance, job creation and retention, and a culture of production safety; Economic profit and performance; Market share/presence in markets; Improved energy and resource efficiency of production; Minimization of emissions into the environment. 	<ul style="list-style-type: none"> Holding press conferences, providing press releases; Formation of a media plan/publication of information about the Company's activities; Hotline, social networks; Annual report and the Company's Internet resource. 	<ul style="list-style-type: none"> Samruk-Energy JSC invites media representatives when holding public hearings. In 2023, 5 public/public hearings were held on the implementation of investment projects. Within the framework of information work in 2023, 79 information messages were prepared and sent to mass media, 17 expert opinions were prepared for mass media from representatives of Samruk-Energy JSC and its subsidiaries and affiliates, 11 press tours and press conferences were organized, 25 mass media requests were processed. 53 materials on the activities of Samruk-Energy JSC and its subsidiaries and affiliates were published in SK-news, the corporate edition of Samruk-Kazyna Fund. Placement of relevant public information on the Company's corporate website is carried out on a regular basis. In the reporting period, 446 materials on the activities of the holding company's group of companies were posted on the pages of Facebook, Instagram, and YouTube social networks. On the eve of International Women's Day, the Miss Energy-2023 contest was held at Ekibastuz GRES-2 JSC — materials were published in mass media.
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GRI 2-28

International cooperation on sustainable development

Participation of Samruk-Energy JSC in national and international organizations/associations

Organization	Status and date of membership
World Energy Council (WEC)	Member since 2008
KAZENERGY Association	Member since 2009
Kazakhstan Electricity Association (KEA)	Member since 2011
UN Global Compact	Member since 2011
CIS Electric Power Council (CIS EPC)	Observer since 2012
National Chamber of Entrepreneurs of the Republic of Kazakhstan (NCE RK)	Member since 2013
Union of Machine-Builders of Kazakhstan ALE	Member from 2021
ECOJER Association	Member from 2021
Kazakhstan Association of Digital Energy	Membership application submitted
National ESG Club	Member from 2022





Respect for human rights

GRI 2-23, 3-3

BASED ON OUR ROLE IN THE ENERGY SECTOR OF THE REPUBLIC OF KAZAKHSTAN, WE RECOGNIZE OUR ROLE IN SHAPING THE COUNTRY'S ECONOMIC AND SOCIAL ENVIRONMENT. WE ARE COMMITTED TO SOCIALLY RESPONSIBLE BUSINESS PRACTICES, RESPECT FOR HUMAN RIGHTS, ENGAGEMENT WITH EMPLOYEES AND LOCAL COMMUNITIES, AND STRIVE TO INTEGRATE THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT INTO OUR STRATEGY AND CORPORATE CULTURE, ENSURING A BALANCE BETWEEN STAKEHOLDER INTERESTS AND THE COMPANY'S STRATEGIC GOALS.

The Company's activities comply with the current legislation of the Republic of Kazakhstan and universally recognized principles and norms of international law, such as the Universal Declaration of Human Rights, International Labor Organization Conventions, International Covenant on Civil and Political Rights, International Covenant on Economic, Social and Cultural Rights, and United Nations Guiding Principles on Business and Human Rights.

The Human Rights Policy of Samruk-Energy JSC, approved by the decision of the Board of Directors of Samruk-Energy JSC dated July 27, 2023 (Minutes No. 24), was created to ensure observance of human rights in all spheres and places of activity of Samruk-Energy JSC, to create equal working conditions for employees to exercise their rights and freedoms in the workplace, to prevent all forms of discrimination, to ensure diversity and inclusiveness. Within the framework of this Policy, we undertake to ensure labor conditions under which the rights of our employees are respected.

The Company's position in supporting internationally accepted human rights on the part of all stakeholders with whom Samruk-Energy JSC interacts is reflected in the Sustainable Development Guidelines. We guarantee observance of human rights and freedoms and do not accept actions that violate human rights or indirectly lead to such violations. Professional and ethical standards for employees, taking into account the principles and norms in the field of human rights observance, are reflected in the Code of Conduct of Samruk-Energy JSC. Compliance with the Code is mandatory for all employees, members of the Board of Directors, managers and third parties working with the Company.



We do not allow restrictions on the rights and freedoms of employees, as well as preferential treatment of employees based on gender, race, nationality, language, origin, social status, age, place of residence, religion, membership or non-membership in public associations or social groups, as well as other circumstances not related to professional qualifications.

We require compliance with the law and internal corporate standards by both Company employees as well as suppliers and contractors. We adhere to high ethical standards and have a responsibility to ensure respect for human rights. To strengthen relationships with suppliers, we have developed guidelines for suppliers based on corporate and social responsibility.

One of the key aspects of Samruk-Energy JSC's activities is interaction with stakeholders. We follow the best practices in this area and use principles that take into account the interests of all parties at all stages of our activities. All stakeholder engagement activities are included in the "Stakeholder Engagement Plan" (for more details see "Stakeholder Engagement", on the "Stakeholder Engagement Plan of Samruk-Energy JSC" on the website).

The Ombudsman Service assists in resolving and settling labor disputes, conflicts, problematic issues of social and labor nature, observing the principles of business ethics, ensuring informal communications between officials and our employees, as well as improving the image of the Samruk-Energy JSC Group of Companies. For all appeals during the reporting period, consultations were held and recommendations were provided to the Company's managers. Also, in 2023, work was carried out with labor collectives to explain the norms of the Codes of Ethics and Conduct and Compliance Policy.

For availability of feedback on complaints and appeals in the field of human rights, the Company operates a hotline of Samruk-Energy JSC. All appeals about possible violations of human rights and freedoms are thoroughly analyzed, after which the assessment results are sent to the Board of Directors.

Compliance and trade union organizations monitor compliance with human (employee) rights and international human rights standards. In case of rights violations, employees can contact the Company's feedback channels.

In 2023, there were no human rights violations against employees, contractors or local communities.

GRI 408-1, 409-1, GRI 12: Coal Sector: 12.16.2, 12.17.2

Samruk-Energy JSC is strictly against the use of child and forced labor and actively fights against such practices. These principles are applied to all subsidiaries and are included in the requirements for suppliers and contractors. During 2023, there were no cases of violation of these principles and the current legislation in this area.

GRI 415-1

Political activities and contributions

The Company interacts with government-related persons in accordance with the requirements of applicable law. The Company does not finance or otherwise support political parties and non-profit organizations engaged in political activities. It also does not allow sponsorship/charity/lobbying activities with the direct or indirect purpose of obtaining illegal benefits for providing such assistance.

The Company's principles in this regard are:

- Company accounts may not be used for contributions for political purposes;
- You may not use Company resources (including email) to engage in political activity;
- You may not make charitable donations in lieu of contributions for political purposes;
- You may not use Company funds or assets through industry organizations or otherwise to make contributions to political parties.

According to the results of 2023, the Company did not record any facts of sponsorship of events or holidays held solely for the purpose of political propaganda, and there are no facts of direct or indirect pressure on political parties.



Investments in human capital

We view our employees as a key asset and the greatest value inherently linked to the Company's success. As part of our social responsibility principles, we continuously improve our HR management systems in order to create favorable working conditions, attract and retain talented personnel, and ensure their social protection and stability.

We respect the interests of our stakeholders and comply with the requirements of labor laws and the principles of corporate and professional ethics. Our corporate culture strives to create equal opportunities in hiring and directly fulfillment of labor obligations, preventing any form of discrimination and protecting human rights.

As at 31 December 2023, the headcount was as follows

17,892

persons

In 2023, the average salary of employees of the Group of Companies of Samruk-Energy JSC amounted to

487,399

tenge a month

The Company's approach is in line with the principles of the UN SDGs, including improving the quality of life and well-being of people of all ages, providing inclusive and quality lifelong learning, as well as achieving gender equality and creating decent working conditions for all without exception. The key document aimed at developing human potential and meeting the needs for the development of employee competencies is the Human Resources Policy. The Company's corporate culture emphasizes equal employment opportunities, prevention of discrimination and protection of human rights, which contributes to the successful implementation of strategic initiatives.

In order to ensure implementation of the Strategy, and by the decision of the Board of Directors dated July 28, 2023 (Minutes No.10/23), a new version of the Personnel Policy of Samruk-Energy JSC for 2023-2031 was approved. The Policy of Samruk-Energy JSC defines the management system, principles, and key directions of human resources management and is mandatory for all subsidiaries of the Group of Companies of Samruk-Energy JSC.

When developing the Personnel Policy, the requirements and opinions of stakeholders were taken into account, including the opinion of the Sole Shareholder, internal stakeholders, practices complying with international standards such as GRI and ISO 10018, among others, as well as the requirements of regulatory bodies.

The Company's HR policy is based on the principles of sustainable development — respect for the interests of stakeholders, human rights, openness, accountability, transparency, legality, ethical behavior, personal example, intolerance towards corruption, inadmissibility of conflict of interest, equal employment opportunities, non-discrimination, prevention of sexual harassment and others.

The strategic role of the HR function is long-term planning of quantitative and qualitative aspects of human resources, including recruitment and training.

We regularly analyze the efficiency and effectiveness of HR management through monthly and quarterly reports, taking into account the company's business processes, goals and needs. Based on the data obtained, we improve the HR management system and develop new social programs for employees and their families. This approach contributes to the implementation of measures to achieve the UN Sustainable Development Goals.

Creating attractive working conditions

As of December 31, 2023, the headcount was 17,892. The average length of service was 16 years. The average age of employees was 41 years. In 2023, the share of full-time personnel amounted to 100%.

In 2023, the organizational structure and headcount of the Corporate Center of Samruk-Energy JSC in the amount of 150 employees was approved.²¹

GRI 2-7, 405-1, GRI 12: Coal Sector: 12.19.6

Dynamics of the number of personnel, persons



GRI 2-7c

The total headcount of Samruk Energy JSC, including joint and affiliated organizations, as of the end of 2023, excluding employees hired under CLN contract and outstaffing contract, amounted to 17,892 persons. The headcount at the end of the period is determined by the number of employees in the staff of subsidiaries and affiliated companies of Samruk Energy JSC as of December 31, 2023.

²¹ Decree of the President of the Republic of Kazakhstan № 633 'On some issues of optimization of the limits of staffing of state bodies and subjects of quasi-state sector' dated July 28, 2021, Instruction of the Fund of Samruk-Kazyna JSC №23-01-05.8/4701 dated August 20, 2021, Decision of the Management Board of Samruk-Kazyna JSC protocol №06/22 dated January 24, 2022, Decision of the Board of Directors of Samruk-Energy JSC protocol №02/22 dated February 25, 2022.



GRI 2-8, GRI 12: Coal Sector: 12.15.2

As of December 31, 2023, Samruk-Energy employed 474 freelance employees. Relations with these employees are built in accordance with the terms and conditions of the agreement on purchase of personnel services of Samruk-Kazyna Corporate University.

Number of freelance workers, persons

Indicator	Outstaffing	Civil legal nature contract	Total
Headcount	0	474	474

GRI 2-8b

The most common type of contractual relations among the personnel who are not the Company's employees is a Civil legal nature contract (CLN) and an outstaffing contract. The total number of personnel who are not the Company's employees but are controlled by Samruk Energy JSC is 474 people. Employees hired under the CLN and outstaffing contract are engaged for project or seasonal work.

Staff recruitment and turnover rate

Recruitment practices are based on the analysis of the Company's needs and strategic goals. The main criteria for selecting candidates are their professional competence, performance, motivation and compliance with the Company's corporate values. Vacancies are published on the Company's website and the Samruk Qyzmet online recruiting platform (QSamruk.kz) in Russian and Kazakh languages. Based on the results of the competitive selection process, each candidate is provided with feedback and the results are published on the Samruk Qyzmet platform. When conducting competitive procedures, internal candidates, including candidates from the Company's talent pool, have priority.

CASE

Adaptation programs for new employees

We are constantly improving the mechanisms of adaptation of new employees to develop the human resources potential of Samruk-Energy JSC. The Company has an Adaptation program, under which, through a special digital platform, new employees undergo an electronic adaptation course for three months, including theoretical and practical training. The program is designed to facilitate the process of employees' adaptation to a new working environment and create a basis for their professional growth. To develop human resources potential, Samruk-Energy JSC introduced a program aimed at facilitating the adaptation period of new employees. The program includes a three-month course on a special digital platform providing theoretical and practical training.

From 2021-2023

62%

of the Company's vacancies were closed by internal candidates.

GRI 401-1, GRI 12: Coal Sector: 12.15.2

2,818 people were hired in 2023, of which

25%

were women.



The overall employee turnover rate in 2023 was 14%, which is within the industry average of 'within range' criteria.

In 2023, Almaty Power Plants JSC has developed an Employee Discharge Program in connection with the implementation of gasification projects at A. Zhakutov CHPP-2. This program provides support for employees to be released due to decommissioning of power equipment of CHPP-2. Employment measures for the released employees include the search for new projects in the region, the possibility of transferring employees to similar jobs at 'related' enterprises in the region, and the possibility of relocating released employees to other regions if there is a need for labor at specific enterprises.

A similar release program was approved at such subsidiaries and affiliates as: EGRES-1 named after Bulat Nurzhanov LLP, Shardara HPP JSC, Moynak HPP named after JSC and EGRES-2 JSC.

Remuneration of labor

We pay special attention to ensuring fair labor remuneration. In 2023, the average salary of employees of the Group of companies of Samruk-Energy JSC amounted to 487,399 tenge per month.

The Company regularly indexes salaries and introduces bonus systems.

The Rules of labor remuneration and bonus payment to employees of Samruk-Energy JSC is a key internal document of the Company, which officially defines the main components of the packages on payment and incentives for employees' labor.

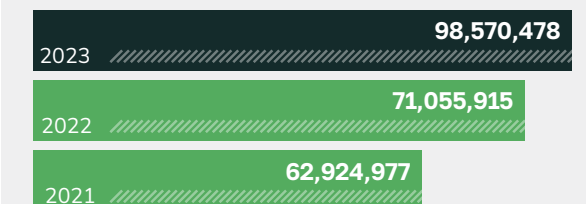
The rules of Samruk-Energy JSC on labor remuneration and remuneration of employees is a key internal document of the Company, which officially defines the main components of the employee remuneration and incentive package.

GRI 401-1, GRI 12: Coal Sector: 12.15.2

Dynamics of employee turnover, %



Payroll, KZT ths.





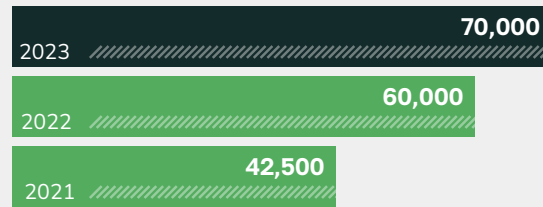
During 2023, in accordance with the Order of the Minister of Energy of the Republic of Kazakhstan No. 192 dated May 26, 2023, new marginal tariffs for electric power to the plants of Samruk-Energy JSC were approved with effect from June 01 of this year. Also, tariffs for regulated service of electric power transmission and heat generation were approved with effect from July 01 and August 01 of this year, respectively.

Expenses on payroll of SACs in the adjusted plan were brought in accordance with the approved tariffs and wages were increased in EGRES-1 named after Bulat Nurzhanov LLP, EGRES-2 JSC, Almaty Power Plants JSC, Shardara HPP JSC and Moynak HPP JSC, Alatau Zharyk Company JSC by 10%.

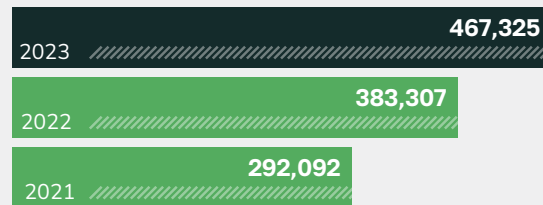
GRI 202-1, GRI 12: Coal Sector: 12.19.2

Ratio of average salary in the Company to the level in the country, KZT

Minimum wage in the country



Average monthly salary of production personnel



Ratio of standard entry-level wages of women and men to the national level, KZT

Indicator	2022		2023	
	Men	Women	Men	Women
Salary of an entry-level employee of the company	186,000	170,000	257,000	248,000
Minimum wage in the Country	60,000	60,000	70,000	70,000
Ratio, %	310	283.3	367.1	354.3



In addition to the basic salary, in accordance with the Collective Agreement the Company provides for the following:

- overtime pay, overtime work, work on holidays, weekends and at night;
- allowances and additional payments;
- Payments for employees engaged in heavy work, work in harmful (especially harmful) or hazardous working conditions;
- additional paid annual vacation;

- Compensation in the amount of three salaries is paid to employees upon termination of their employment contract or retirement.

The ratio of the minimum wage of women and men is 100%. Wages of men and women are equal. The amount depends on working conditions and remuneration. Thus, men may receive additional payments for especially harmful working conditions, for professional skills and other additional payments.

GRI 405-2, GRI 12: Coal Sector: 12.19.7

Ratio of salary and remuneration of women to men, %

Indicator	Executive positions	Specialists
Salary ratio	100	100
Remuneration ratio	100	100

Staff motivation and engagement

The current motivation system of Samruk-Energy JSC contributes to revealing the maximum potential of employees through the use of flexible bonus systems that take into account the individual contribution of each employee. In particular, lump-sum bonus payments are provided for state and national holidays, such as Power Engineer's Day, Independence Day, Miner's Day, etc., and non-material rewards and benefits (awards, letters of appreciation, certificates).

For example, employees who combine work and education are granted additional leave for the period of examinations or installation sessions, preparation and defense of diploma projects, and final exams.

In addition, corporate awards and incentives are provided to incentivize employees. As part of the celebration of the Day of the Republic of Kazakhstan and Energy Day, awarding ceremonies for outstanding employees of the Company were held, during which state, departmental, industry and corporate awards, as well as awards of Samruk-Kazyna JSC were presented. Based on the results of work in 2023, 266 employees of the Group of companies of Samruk-Energy JSC were presented for awards.

In 2023, the Center for Social Interaction and Communications conducted an engagement survey among employees of the Corporate Center of Samruk-Ener-

gy JSC to assess the level of employee well-being based on four elements of well-being: health, engagement, social well-being, physical and mental well-being, and financial well-being. According to the survey results, the overall Social Well-being Index of the personnel amounted to 43%, which corresponds to the 'satisfactory' zone. The index of social peace of mind was 72%.

Based on the feedback received, the Company will form recommendations to improve the level of personnel well-being.

In addition, in 2023, the Centre for social cooperation and communications conducted a sociological survey among the production personnel of Samruk-Energy JSC using the Samruk Research Services methodology to analyze social stability. According to the survey results, the integral SRS indicator in our company amounted to

59%



Youth Policy

To organize, improve and stimulate the activity of young specialists, the Company has a Youth Council 'Jas Energy', which promotes their active participation in solving social and operational tasks, as well as contributes to the development of corporate culture.

Within the framework of youth policy development, by the order of the Chief of Staff of the Chairman of the Management Board No. 12-P dated 24.01.2023, the Action Plan for implementation of the youth policy of Samruk-Energy JSC was approved and a number of volunteer events such as 'Vitamin Day' and 'Shyn zhurekten' were held. Also, within the framework of implementation of item 6 of the Action Plan of the Youth Council, 'II Youth Forum of Samruk-Energy JSC' was held on 14.09.2023, which was attended by 100 employees of the Group of companies of Samruk-Energy JSC.

Main objective: bringing together the youth of subsidiaries and affiliates for general organizational development of Samruk-Energy JSC, a platform for social and professional development of personality through exchange of thoughts, experience and implementation opportunities.

Within the framework of implementation of the program on development of youth policy in the Group of companies of Samruk-Kazyna JSC, 5 employees (CCs and subsidiaries and affiliates) completed participation in the modular program for development of young leaders "Zheti Kadam".

At the beginning of December of the current year, the youth activists of the Company and its subsidiaries and affiliates took part in the Youth Challenge of Samruk-Kazyna JSC. According to the results of this, the youth activists were invited to the II Youth Educational Forum of the Fund. At the forum, young participants were trained in leadership, self-diagnosis, and developed decision-making skills and emotional intelligence, as well as were familiarized with the 4D-management system.

Adaptation of newly hired young specialists

If necessary, young specialists without work experience are assigned a mentor from among the personnel of the structural subdivision. The mentor can be a direct manager of the structural unit or a supervising manager who trains no more than two new employees at a time. The role of a mentor includes informing about possible difficulties, the most common mistakes, familiarization with the procedure of interaction with the Company's structural subdivisions and external organizations in accordance with the functional area of activity, explaining the norms of corporate ethics and rules of conduct, as well as providing practical assistance in work.

CASE

Youth councils

Youth Councils were established in the Group of companies of Samruk-Energy JSC to support the youth policy. The main purpose of Youth Councils is to provide conditions and guarantees for the development of youth potential in various aspects, including social, cultural, educational and professional. At present, youth councils operate in large subdivisions of the Company, such as Alatau Jastary, Bogatyr Komir LLP – the Council of Working Youth, Youth Active at EGRES-2 JSC, Almaty Power Plants JSC – Zharkyn Bolashak Youth Organization.

GRI 3-3, 406-1, GRI 12: Coal Sector: 12.19.8

Diversity and inclusion

We adhere to the principle of equal opportunity and inclusion in the workplace as a key element of respect for human rights. Our Company is committed to ensuring the socio-cultural diversity of our employees and Board members, with zero tolerance for any form of discrimination. Diversity and inclusion are critical to the long-term success of the Company, helping to attract, retain and develop talent, ensuring employees have the support they need to achieve optimal performance. An inclusive and diverse workforce enables us to adapt more effectively to changing societal expectations and respond comprehensively to market changes.

We are categorically against any form of discrimination and strive to ensure respectful treatment of all employees and potential candidates. Samruk-Energy JSC works to create equal opportunities for everyone at every stage of career development.

Samruk-Energy JSC is guided by the principle of equality when hiring employees, trying to expand

the diversity of attracted talents, and also guarantees equality when promoting employees within the Company. This allows us to utilize different points of view, experience and knowledge of people of different genders, ages and backgrounds when implementing innovative solutions necessary for business development. We pride ourselves on diversity within our team and strive to create a positive working environment where every employee feels accepted, respected and heard. Our employees know they can reach their full potential with us and feel safe to speak up about issues.

We strive to increase diversity at all levels of the Group of companies of Samruk-Energy JSC, including the Board of Directors, top and middle management. Appointments to the Board of Directors, and to top and middle management positions, are made on the basis of merit, experience, knowledge and skills of the candidate, which ensures balance and diversity of expertise.

The combination of educational backgrounds and professional experience, as well as the personalities of the directors and staff, provides a diversity of opinions and a broader knowledge base.

In accordance with the Roadmap for Improvement of the Sustainable Development Management System²², the Company implemented a Non-Discrimination Policy in the first quarter of 2023.

Gender equality

There are more men than women among our employees, which is due to the specifics of the industry and physical labor at the enterprises. Nevertheless, our Personnel Policy adheres to the seven principles of gender equality developed by UN Women and the UN Global Compact as a key element of sustainable development:

- building active support for measures to ensure gender equality;
- equitable treatment of women and men — non-discrimination on the basis of gender, equal treatment and access to training and development programs, career advancement and employment;
- respect for and support of human rights and non-discrimination;
- ensuring health, safety and well-being for all employees;
- promoting the education, professional development and professional growth of women in business, applying practices that promote women's empowerment;

- promoting equality at the local community level;
- evaluating results and publicizing successes in achieving gender equality.

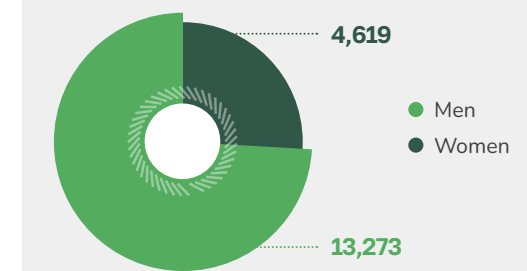
We have developed an action plan and established Key Performance Indicators in the Sustainable Development Initiatives Plan to increase the number of women in the workforce and in the talent pool, to achieve an optimal number of women in leadership positions.

In 2023, employees of the Corporate Center received modular training under the Gender Equality Program. The program is aimed at increasing the share of women in management positions. In addition, employees took part in a business meeting with representatives of the KAZENERGY Women's Energy Club and a delegation from the Association of Women in Energy of Kyrgyzstan.

Also in the reporting period, work was carried out to appoint/elect women leaders who completed the Gender Equality Program to the BODs/EBs/SBs of subsidiaries and affiliates, as a result of which 3 women were elected.

On October 21, 2023, a meeting of the participants of the Program with the Chairman of the National Commission on Women's Affairs and Family and Demographic Policy under the President of the Republic of Kazakhstan Balaeva A.G. was held in Astana.

GRI 2-7, 405-1, GRI 12: Coal Sector: 12.19.6
Employees by gender, persons



Creating an inclusive environment

We comply with all legal requirements regarding the employment of persons with disabilities. In 2023, the Company employed 227 people with disabilities.

²² Decision of the Management Board of Samruk-Energy JSC Minutes No. 37 dated October 10, 2022



Ensuring social guarantees and social stability

GRI 401-2, GRI 403-6, GRI 12: Coal Sector: 12.15.3, 12.14.7

Ensuring social security and creating comfortable working conditions for employees is one of the Company's key priorities. We offer our employees a wide range of programs aimed at improving the welfare and protection of employees and their family members.

Social guarantees and benefits of Samruk-Energy JSC:

- life insurance and voluntary medical insurance;
- disability/disability compensation, temporary disability allowance, maternity allowance;
- maternity/paternity leave, leave to care for a child up to the age of three;
- provision of pension (in accordance with legislation);
- financial aid for the birth of a child, for the burial of close relatives, as well as financial aid to relatives for the burial of a Company employee.

Voluntary health insurance programs

The Company has voluntary medical insurance programs for its employees, which include the following:

- 24-hour counseling and dispatch services;
- medical coordinator;
- round-the-clock ambulance service;
- outpatient and polyclinic care;
- house calls by a doctor or paramedic;
- inpatient care;
- additional services such as dental care and medicines, therapeutic massages, insurance for citizens traveling abroad, and free attachment of family members.

Support for pensioners and people with disabilities

Within the framework of the Sustainable Development Policy of Samruk-Energy JSC, we assume obligations to provide social support to non-working pensioners and people with disabilities, including:

- payment of lump-sum benefits to retiring employees;
- providing financial assistance to non-working pensioners of the Company on national and state

holidays of the Republic of Kazakhstan and on the Day of Power Engineer;

- inviting non-working pensioners of the Company to festive and celebratory events organized by the Company to provide moral and psychological support;
- payments, to the extent possible, of financial assistance to disabled persons (who became disabled while working for the Company and left labor activity) for medical treatment, additional nutrition, purchase of medicines, professional retraining, if the disabled person needs these types of assistance and does not receive them free of charge.

Thus, the Company in every possible way supports retired employees due to reaching the age, however, in 2023, the Company's assistance programs, which are provided to facilitate continuation of employment and management of career completion as a result of termination of employment for the Group of companies of Samruk-Energy JSC, were not approved.

Upon dismissal, the employer pays the employee on the day of dismissal in accordance with the Labor Code of the Republic of Kazakhstan wages up to and including the last day of work and compensation for any unused vacation. In the event of staff reduction, severance pay in the amount of one average monthly salary is paid.

Employees of the Company shall be paid a lump sum compensation in the amount of 3 (three monthly official salaries) upon termination of their employment contract in accordance with subparagraph 24) of paragraph 1 of Article 52 of the Labor Code of the Republic of Kazakhstan due to reaching the retirement age established by the Law of the Republic of Kazakhstan "On Pension Provision in the Republic of Kazakhstan".

Pension payments are made from the state budget and from the Unified National Pension Fund at the expense of their savings. The employer remits mandatory pension contributions (MPC) payable to the UAPF in the amount of 10% of monthly income taken to calculate MPC.

GRI 401-3

All employees of our Company are entitled to parental leave in accordance with the law. We attach great importance to family values and provide financial support to employees who have a child.

In order to analyze the level of social stability in Samruk-Energy JSC on the basis of Samruk Research Services methodology, a sociological survey among production personnel was conducted in 2023. According to the survey, the integral indicator of SRS in Samruk-Energy JSC amounted to 59%.

GRI 403-6

We provide additional days of paid annual leave for length of service to improve the health of our employees, actively promote a healthy lifestyle and partially reimburse the costs of sanatorium vacations and children's health centers to disabled and orphaned children of the Company's employees.

In particular, in 2023, more than 400 children of employees of the Group of companies of Samruk-Energy JSC were recuperated at the sports and recreation camp of power engineers in the foothills of Zailiyskiy Alatau at an altitude of 1,800 meters above sea level. In addition, the personnel of the Group of companies of Samruk-Energy JSC underwent annual health improvement at the recreation center "Birch Grove" and in the best sanatoriums of Pavlodar, Kostanay and South Kazakhstan Oblast. Health resort treatment was also provided in various medical and recreational complexes of the Republic of Kazakhstan.

We support active participation of employees in sports events. In the reporting period, the Public Association "Local Trade Union "Seriktes" held competitions among the employees of Alatau Zharyk Company JSC in various sports, including togyzkumalak, chess, arm wrestling, streetball, volleyball, billiards and tennis.

GRI 2-30, 402-1, GRI 12: Coal Sector: 12.3.2, 12.15.5

Collective agreement

The Collective Agreement of Samruk-Energy JSC is a guarantor of protection of labor rights, economic and social guarantees of employees. The agreement regulates labor relations and promotes effective dialog between the Company and personnel. The minimum period of notification of operational changes under the Collective Agreement is one month.

97%

of the Company's employees are covered by Collective Bargaining Agreements

Labor relations of employees not covered by collective bargaining agreements (if there is no Collective Bargaining Agreement in subsidiaries and affiliates) are regulated by internal regulations on labor remuneration and social benefits in accordance with the labor legislation of the Republic of Kazakhstan. Social payments and benefits provided for by collective bargaining agreements include the following:

- financial assistance for health improvement for vacations, childbirth, weddings, funeral expenses (for the employee and close relatives), treatment of pensioners, emergencies, etc.;
- financial assistance for loss of income (maternity leave, leave due to adoption of a newborn child);
- material assistance due to loss of income (maternity leave, leave due to the adoption of a newborn child)
- voluntary medical insurance;
- health resort treatment for employees and children;
- one-time incentives in connection with anniversaries — 50, 60 and 70 years, expenses for festive, cultural and sporting events, New Year gifts for children, etc.;
- loan repayment;
- allowance for injury and loss of breadwinner.

Trade union organizations

We respect the right of workers to freely choose their associations, join trade unions or other organizations, conduct collective bargaining and protect their interests without fear of negative consequences. The professional, economic and social rights of workers are protected through social partnership with the participation of authorized representatives. We ensure the right of employees to choose their representatives in accordance with the laws of the Republic of Kazakhstan.

More than 15 thousand employees of the Company are trade union members



Staff development and training

We view personnel development and training as a holistic project that not only ensures the necessary level of professionalism and qualification of employees to solve production tasks, ensure economical, accident-free and efficient operation of equipment, but also contributes to the development of the Company's corporate culture.

The current Rules of professional training and adaptation of Samruk-Energy JSC employees determine goals, objectives, main types of training, the order of interaction of Samruk-Energy JSC structural subdivisions, responsibility, powers and duties of employees, heads of structural subdivisions when organizing professional and internal training of employees. Implementation of employee training and development programs is aimed at supporting current and future business processes in accordance with individual employee development plans.

The Rules also systematize actions and procedures in the area of professional development of employees and efficient use of the Company's budget funds.

We adhere to the principle of "70-20-10" where: 70% — self-training, 20% — internal training, 10% — external training. The training system is focused on the effective development of skills, knowledge, and competencies of employees in accordance with their job responsibilities.

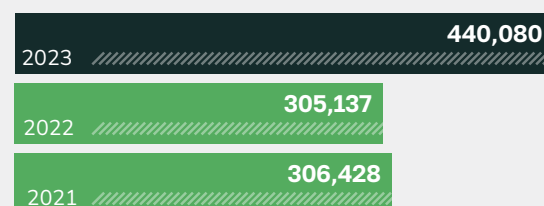
Key areas of personnel development and training programs:

- operation of coal-fired boiler/steam turbines of thermal power plants;
- "mentoring" and "training of internal trainers" trainings;
- MBA and EMBA programs;
- English language courses;
- seminars, trainings and conferences on the functional focus of personnel activities;
- training and development of the Talent Pool.

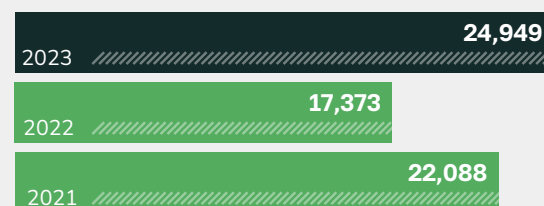
Implementation of programs is provided both on-the-job and off-the-job, with the issuance of a certificate or qualification certificate.

Employee training costs

Total expenditures on employee training, thousand tenge

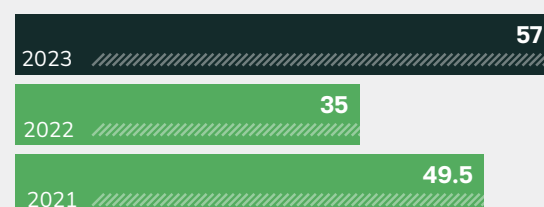


Training costs per employee per year, tenge



GRI 404-1, GRI 12: Coal Sector: 12.15.6

Average number of training hours per employee in the Company on average, person/hour



Average hours of training per employee by gender, person/hour

Indicator	2021	2022	2023
Men	39	41	59
Women	29	15	52

Average number of training hours per employee by category, man/hour

Indicator	2021	2022	2023
Top Management	32.84	22.9	35
Administrative and management personnel	38.4	31.1	36
Production personnel	44.75	35.9	51
Service personnel	1.4	1.2	63

Talent and talent pool

In order to maintain and develop competitiveness, proactively respond to external and internal challenges, build up the potential of promising and highly professional employees, and nurture our own management personnel, we are developing a system of succession and talent management.

In 2023, there were 783 employees in the Talent Pool.

We form a unified personnel reserve based on the principles of objectivity, transparency, fairness, voluntariness, and efficiency and in accordance with the Talent Management Rules of Samruk-Energy JSC.

The Board of Directors of Samruk-Energy JSC and the Company's management bodies pay increased attention to formation and fulfillment of the succession plan for managerial positions.

The process of formation and development of the personnel reserve is closely integrated with the annual evaluation of employees' performance, carried out in accordance with the Rules for Evaluation of Employees Performance of Samruk-Energy JSC, providing for:

- comprehensive (summative) assessment of objectives and competencies, including self-assessment, review of skills and capacities, evaluation and provision of directions for performance improvement and development opportunities;
- quarterly interim performance review — monitoring the degree of fulfillment of objectives for the reporting period.

Based on the assessment results, a Talent Map is formed, a talent pool is formed, and individual development plans (IDPs) for reservists are developed, including mentoring, internship and succession programs are developed.

The results of the final assessment also serve as a basis for making appropriate decisions in the formation of changes in the official salary, as well as the payment of annual bonuses. In 2023, 121 people received performance and career development assessment.

CASE Talent Pool

In order to ensure the development of human resources potential in the Company, we implement the Talent Pool Program. The main objective of the program is to train management personnel to ensure continuity of management succession and provide employees with opportunities for career growth in the Group of companies of Samruk-Energy JSC. In 2023, six employees were trained on the topic "Awareness of the corporate value: "Fairness" according to the individual development plan.



GRI 404-3

Assessment of performance and career development of the Company's employees

Indicator	2021	2022	2023
Total number of employees who underwent regular performance and career development assessments			
Men (total)	80	69	307
Leaders	19	13	82
Managers	61	56	225
Women (total)	67	61	475
Leaders	8	5	21
Managers	59	56	454
Percentage of total number of employees receiving regular performance and career development reviews			
Men (total)	54%	53%	39.25%
Leaders	24%	19%	10.48%
Managers	76%	81%	28.77%
Women (total)	46%	47%	60.74%
Leaders	12%	8%	2.68%
Managers	88%	92%	58.05%

Interaction with the education system

In order to create a reliable talent pool, we actively cooperate with leading higher education institutions in Kazakhstan. We also participate in the development of dual education. In addition, university students and graduates are offered to undergo industrial and pre-graduation internships at the Company's enterprises with the possibility of subsequent employment. In 2023, 684 students underwent training and production practice at the Company, and 94 students underwent internships and apprenticeships.

Educational institutions with which the Company cooperates:

- Ekibastuz Mining and Technical College, State public utility company;
- Ekibastuz Polytechnic College, State public utility company;
- Satbayev Ekibastuz College of Engineering and Technology Institute NJSC Ekibastuz;
- College of Innovative Eurasian University;
- Gumarbek Daukeev Almaty University of Energy and Communications NJSC;
- Almaty State College of Energy and Electronic Technologies;
- Saken Seifullin Kazakh Agrotechnical University NJSC;
- Abylkas Saginov Karaganda Technical University NJSC;
- Toraigyrov University NJSC;
- Gumilyov Eurasian National University NJSC;
- Al-Farabi Kazakh National University NJSC;
- Nazarbayev University.

In 2023

684

students underwent training and production practice at the Company

CASE

Republican Olympiad in physical and mathematical disciplines

We supported the Republican Olympiad in Physics and Mathematics in 2023 at the Almaty University of Energy and Communications. More than 60 students from 13 technical universities and applicants participated in the event. The competition included disciplines of electric power and thermal power engineering for students, as well as testing knowledge of physics and mathematics for schoolchildren. The winners received scholarships according to the established

The winners received scholarships, according to the rules established ²³

²³ Protocol of the Management Board of Samruk-Energy JSC No. 14 dated 15.10.2015

Corporate culture and internal communications

We are actively working on implementing high ethical standards and creating an effective corporate culture based on the principles of mentoring, reliability, fairness, and professionalism.

In 2023, as part of strengthening the Company's corporate values, on November 29-30, 2023, training on "Effective Team Management" was held for 26 CEO-1 and CEO-2 level managers. The main objective of this training was to realize and understand corporate values, form clear actions and measures to implement corporate values, and form a vision of the Company's future through joint teamwork.

In December 2023, we organized a meeting with the most promising employees from the Management Pool and the Functional Talent Pool. At this meeting, they discussed issues related to the awareness and application of the corporate value "Fairness". The meeting was attended by members of the Nomination and Remuneration Committee of the Board of Directors.

Main channels of communication:

- Corporate [internal portal](#);
- Corporate newsletter;
- Corporate pages in social media: [Instagram](#), [Facebook](#), [Twitter](#), [YouTube](#).

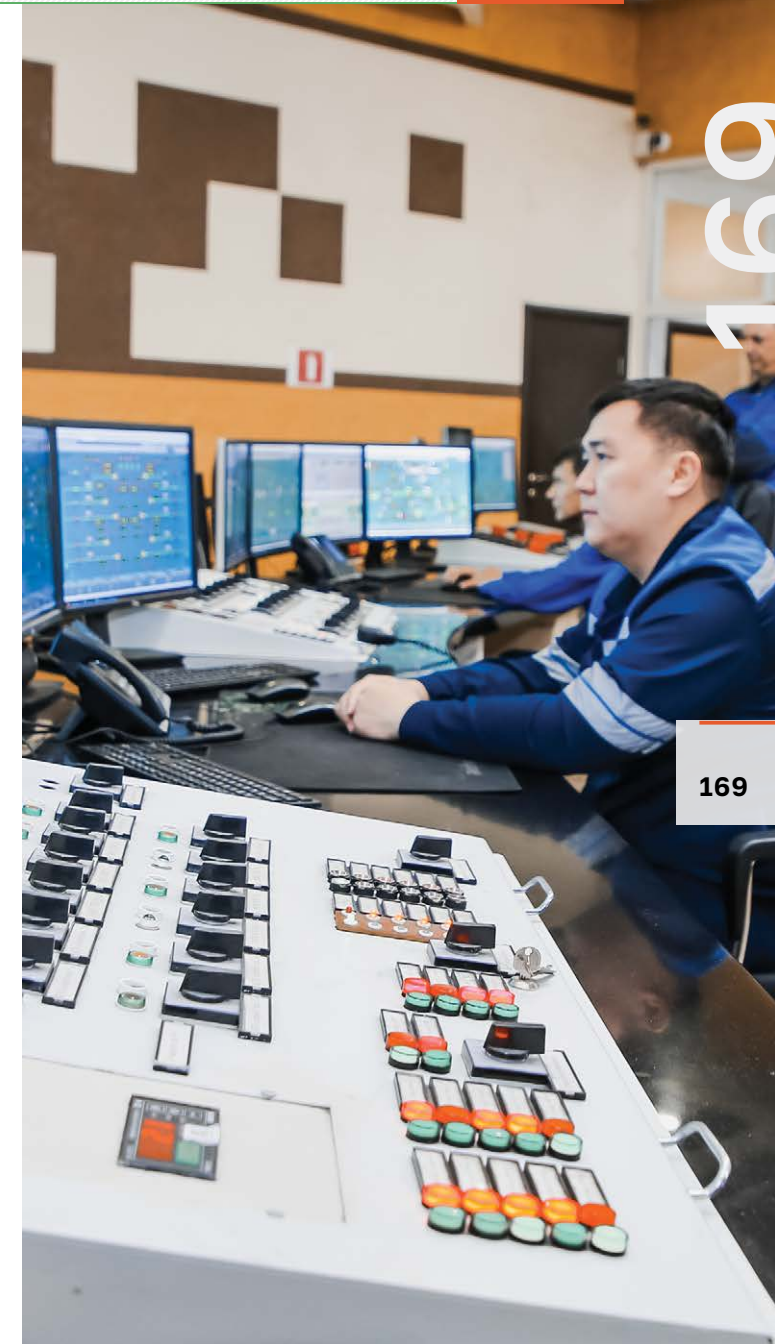
Company news, information on projects and initiatives in the sphere of social policy of the Group of companies Samruk-Energy JSC is placed on the pages of social networks.

Corporate volunteering

We actively develop and support various corporate volunteering programs to increase employee engagement, strengthen the team, and achieve moral satisfaction from doing good deeds.

Key events within the framework of corporate volunteering in 2023:

- environmental action on garbage collection — 6 weekends (more than 24 hours);
- charity event "Wishing Tree" for children with can-





Plans for 2024 and the medium term

In accordance with our Development Strategy for 2022-2031, we aim to become the key and most attractive employer in the regions where we operate. Our main priority areas of development in the social aspect within the framework of ESG principles implementation will be as follows:

- Conducting an engagement survey and “Samruk Research Services” on an annual basis, and developing measures to increase the level of personnel engagement;
- Conducting an audit of HR processes of subsidiaries and affiliates in accordance with the action plan for implementation of the Personnel Policy of Samruk-Energy JSC;
- Conducting IR audit of subsidiaries and affiliates;
- Introduction, development and updating of adaptation programs for all personnel levels;
- Introduction of mentoring for newly hired employees (Buddy program);
- Improvement of professional competencies of HR employees, including HR certification of HR employees;
- Implementation of targeted HR processes in accordance with the Corporate Standard;
- In order to implement HR policy in the Group of companies of Samruk-Kazyna JSC based on the results of the HR School program for implementation in 2024-2025, the Company selected the project “Mentor” for implementation in 2024-2025. The Company selected the project “Mentorship”.

Our aspirations to systematically improve the level of social responsibility and management of Samruk-Energy JSC employees correspond to the principles of the UN Global Compact and include a number of activities:

- increasing the level of social responsibility and following the principles of the UN Global Compact;
- introduction of high ethical standards, development of a system of values and building a corporate culture based on trust, investment in human capital and professional development;
- ensuring social guarantees and social stability in the Company (growth of personnel involvement, regulation of social and labor relations based on the principle of social partnership and social responsibility);
- social security (avoiding discrimination, violations

of human rights, observing equal rights and opportunities);

- adherence to the principles of gender equality (increasing the number of women among employees and in the personnel reserve, ensuring an optimal number of women in managerial positions);
- controlling staff turnover, retaining internal talent and attracting highly professional staff (talent management, development of internal competencies);
- development of HR branding, including introduction of an approach to EVP formation (employer value proposition) and approval of the Road Map (action plan) for building EVP of Samruk-Energy JSC;
- improvement of the occupational health and safety management system and increase of its efficiency (transparency of reports on realized incidents in order to prevent cases with more severe consequences — fatalities, accidents), increase of safety culture and efficiency of control of the management system.

Gender equality

As part of the fulfillment of the above-mentioned order, we will carry out activities for women in the Group of companies of Samruk-Energy JSC in 2024. This includes establishment of a women's club and approval of the training and development program for women included in the pool (women's club), including on-the-job training (rotation, participation in projects, replacement of managers), professional courses, as well as leadership development courses, work with a coach and psychologist, etc. It is also planned to hold conferences/information meetings/trainings/production of social videos on prevention of harassment in order to raise awareness of the Company's employees and its subsidiaries and affiliates about types of pressure, harassment and other types of violence in the workplace.

Employment of people with disabilities

Within the framework of execution of the order of the Chairman of the Management Board of “Samruk-Kazyna” JSC Zhakupov N.K., given at the staff meeting on January 29, 2024, concerning the work in the field of inclusion, by the end of 2024 we plan to carry out work on employment of 22 citizens with disabilities. Reports on the fulfillment of this order are sent weekly to the Fund.

Mentorship

In order to implement the HR policy in the Group of companies of Samruk-Kazyna JSC according to the results of the program “HR School” for implementation in 2024-2025 we have chosen the project “Mentorship is a mission”:

To implement the project “Mentorship is a Mission”, a meeting with the project team was held on January 18, 2024. At the meetings, further stages of the program implementation were discussed. Currently, work is underway to agree on a project program that provides mentoring for newly hired employees in order to minimize the adaptation period and training as much as possible.

The following phases of the program are planned to be implemented:

- Identification of participants (identifying mentors and mentees willing to participate in the program according to the criteria);
- Pair formation (formation of mentor-mentee pairs, taking into account the criteria for effective interaction);
- Start-up session (introduction to participants, dis-

ussion of key stages of interaction and mentee development goals);

- Work with the mentor (regular sessions — once a month with a duration of 1.5 hours, interim feedback, support on request);
- Summarizing the results (discussion of results within the pair, feedback from participants (online survey), “Best Mentor” contest).

The program will be implemented as instructed by the Fund over the next 2 years.

Rotation

During the reporting period, a meeting was held with the captain of the project team “Zheti Kadam”, where the issues of further implementation of the project “Staff rotation between portfolio companies of Samruk-Kazyna JSC” were discussed. At the moment, work is underway to develop draft rules for the organization of internal vertical rotation, which implies rotation within one company for further discussion with the project team.





Creation of safe working conditions

GRI 2-25, 3-3

Management of labor protection and industrial safety issues

The priority of Samruk-Energy JSC is strict compliance with industrial safety rules and norms, ensuring safe working conditions for both personnel and contractors during production activities. We act in accordance with the requirements of the legislation of the Republic of Kazakhstan and voluntarily undertake obligations in accordance with the international standard ISO 45001.

At Samruk-Energy JSC, we make every effort to create a safe labor environment, promote safety culture among personnel, maintain a healthy lifestyle, and introduce advanced technologies. We aim to exclude accidents and incidents, striving to ensure safety and comfort in the workplace for all our employees.

HSE goals of Samruk-Energy JSC:

- improving the efficiency of business processes through continuous development of the corporate management system;
- compliance with all applicable health and safety regulations and requirements defined by legislation and international standards;
- guaranteeing safe and comfortable working conditions, reducing risks to the health of personnel and all stakeholders by preventing and eliminating possible hazards;
- using modern equipment, innovative technologies and protective equipment to ensure workplace safety;

- organizing consultations with employees and ensuring their active participation in health and safety processes.

In the reporting period, we continued our efforts to implement our strategy and objectives in the field of occupational health and safety. However, realizing the constantly changing conditions and requirements, we concluded that it is necessary to revise our strategy and policy in this area.

As a result of the analysis and discussions, an Action Plan to achieve zero injuries in the Group of companies of Samruk-Energy JSC was developed, including:

- Improvement of the occupational health and safety management system to increase its effectiveness. The measure will be achieved through ensuring transparency of incident reports to prevent serious consequences such as fatalities and accidents;
- Improving safety culture by involving personnel in the occupational health and safety management system and improving monitoring of its effectiveness by applying international standards.

Principles and rules of Samruk-Energy JSC policy on reduction of occupational injuries and improvement of personnel working conditions are mandatory for all employees and contracting organizations.





GRI 403-1, 403-3, 403-8, GRI 12: Coal Sector: 12.14.2, 12.14.4, 12.14.9

Occupational health and safety management system

The management system in the field of occupational health and safety in Samruk-Energy JSC applies to all employees of the Company and personnel of contracting organizations. The system is based on the legislation of the Republic of Kazakhstan, principles of Samruk-Energy JSC in the field of labor protection, and other internal corporate documents.

Key regulatory documents defining the principles and rules in the field of occupational health and safety of the Company:

- Policy of Samruk-Energy JSC of the corporate management system of the Group of companies of Samruk-Energy JSC;

- Regulations on Transportation Safety Management in the Group of companies of Samruk-Energy JSC;
- Development Strategy of Samruk-Energy JSC for 2022-2031;
- Standard "Assessment of Industrial Safety and Labor Protection Risks";
- Standard "Motivation of Personnel to Safe Behavior";
- Standard "Accounting and Investigation of Accidents";
- Standard "Assessment of Occupational Health and Safety Management System";

Occupational health and safety issues are managed at all levels of the Company.

List of information on industrial safety service of Samruk-Energy JSC

Name of required data	Indicator*
Number of specialists in the central office/corporate PC center:	3
occupational health	3
occupational safety	-
fire safety	-
other areas	-
Number of specialists in subsidiaries and affiliates	85
occupational health	40
occupational safety	23
fire safety	11
other areas	-

Ratio of employees of occupational safety services to one employee of the Company	The total number of employees covered by the occupational health and safety management system is 17,071. Number of full-time employees covered by the HSE management system, who passed internal audit 100%, which is 17,071. Number of non-staff employees covered by the HSE management system, who passed internal audit — 100%, which is 3,914. Number of specialists — 85. The ratio of employees of OHS services to one employee — 200.
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The Director for HSE (Health, Safety and Environment) reports directly to the Chairman of the Company's Management Board and is responsible for the overall coordination of work to improve the occupational safety system both in the Company itself and in its subsidiaries.

The head of the division responsible for HSE issues performs the functions of preventing violations of HSE

norms and rules, promptly responding to incidents, and monitoring, analyzing and controlling risks in this area. Occupational safety services in subsidiaries are managed by the first manager. To ensure efficiency and prompt implementation of necessary changes to the occupational health and safety management system, we regularly analyze the qualifications composition of the personnel of the occupational safety services in the Company's subsidiaries.

* Note. Environmental protection employees are not counted.

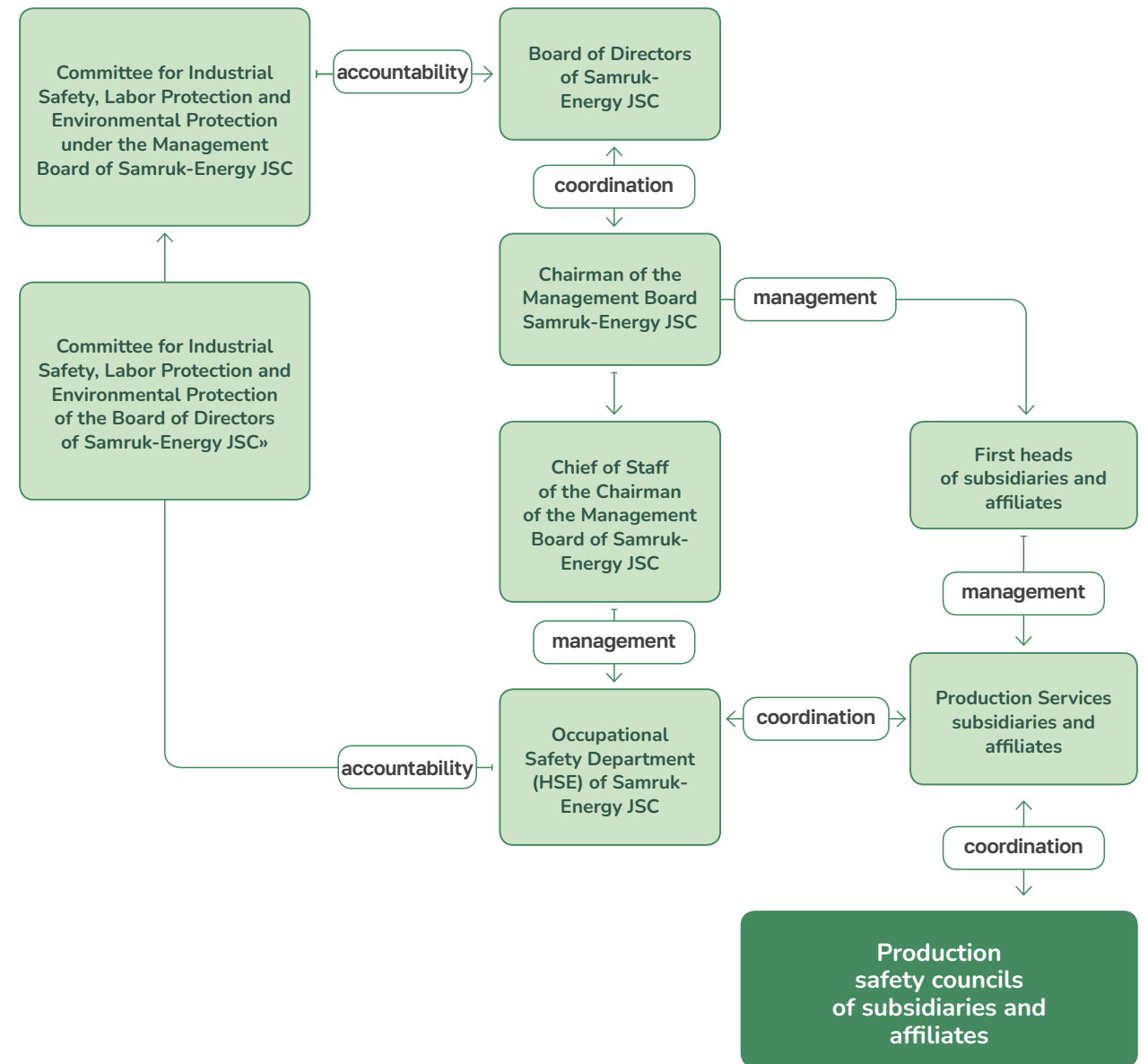
Quarterly meetings are held with the active participation of the Chairman of the Management Board, Chief Directors and top managers of subsidiaries to improve safety culture, prevent accidents, and reduce injuries.

Committees responsible for occupational health and safety conduct detailed analysis of issues in these areas and monitor the effectiveness of measures. The Board of Directors and the Management Board review and approve reports on occupational safety and risk management based on the information provided by the Committees. In addition, the Committees ensure compliance with confidentiality requirements.

During the reporting period, each of the Committees held four meetings to discuss quarterly reports on work in the field of occupational safety and health, as well as data on occupational injuries.

In 2023, Occupational Safety and Health Production Councils throughout the Group of companies of Samruk-Energy JSC held 36 meetings attended by both employer representatives and personnel representatives, including technical inspectors for occupational safety.

Labor Protection, Industrial Safety and Environmental Protection Management System of Samruk-Energy JSC





GRI 403-2, GRI 12: Coal Sector: 12.14.3

Risk assessment and effectiveness of labor protection activities

The implementation of the Standard “Assessment of Occupational Health, Safety and Environment Risks” and the creation of the Company’s Consolidated Risk Register for 2023 reflect a key principle and an important part not only of the health and safety management system, but also of the corporate risk management system as a whole. This standard provides procedures for identifying and assessing risks and hazards that may affect the life and health of personnel.

Algorithm for risk identification and assessment

- Identification of sources of hazards;
- Selection of experts to the risk identification and assessment commission;
- Approval of the sources of hazards and the composition of the commission;
- Conducting risk identification and assessment;
- Harmonization of the risk assessment;
- Development of measures to reduce unacceptable and control acceptable risk levels;
- Approval of the developed measures;
- Approval of the risk passport.

All Company employees are involved in the incident detection process. They may report such events through formal channels of communication or directly to their line manager. All incidents are investigated, and appropriate action is taken.

Samruk-Energy JSC is actively working on the development of corporate safety culture, striving to increase the competence of employees in the field of risk management. As part of this culture, our employees are given the opportunity to suspend or stop work in case of detection of violations of labor protection and industrial safety norms and rules at the workplace, as well as in case of situations that pose a threat to their health.

We support and encourage personal initiatives of employees aimed at improving safety at workplac-

es as part of occupational health and safety programs. Based on the standard “Motivating Employees to Behave Safely”, a program of monetary motivation and incentives for employees was developed. This program provides employees with the opportunity to report any hazards and risks in the workplace. In the reporting period, 1,106 employees were rewarded for active participation in this program.

In the reporting period

1,106

employees were rewarded for active participation in this program

In our work to assess and prevent potential risks in the field of occupational health and safety, we actively apply the practice of scheduled and unscheduled inspections in accordance with the established requirements. In the reporting period, we conducted 15 planned and 4 unplanned inspections at the Corporate Center/Central Office of the PC and at subsidiaries and affiliates/branches. As a result, 494 violations were identified, of which 485 were promptly eliminated. In addition, 21,326 internal audits for compliance with industrial safety requirements were conducted at subsidiaries and affiliates/branches. The total number of identified non-compliances amounted to 52,392, of which 51,374 were eliminated. In addition, governmental authorities conducted 39 inspections of the Company’s enterprises for labor protection, fire safety and sanitary and epidemiological conditions. As a result, 452 violations were identified, of which 306 were eliminated. Corrective action plans were developed based on the results of the inspections.



Investigation of incidents related to the realization of risks

The Company’s facilities investigate incidents, accidents and incidents in accordance with the established documents. We promptly inform the state authorities of each lost-time accident. In case of serious accidents or accidents with severe consequences, including fatalities, a special investigation is conducted with the participation of a state labor inspector in accordance with the requirements of the legislation of the Republic of Kazakhstan.

We use the “Tree of Reasons” and “5 Why” methods for additional internal investigation of accidents to identify root causes. The findings are discussed at quarterly meetings attended by the Chairman of the Management Board and heads of subsidiaries and affiliates. After the discussion, information on the results of the investigation is shared with all subsid-

aries and affiliates in the form of information reports, as well as within the framework of quarterly meetings and injury reports containing a full description of accidents that occurred, their causes and measures taken.

To ensure safety at the workplace in Samruk-Energy JSC, we have implemented standards and procedures for investigating incidents related to work activities. These procedures include hazard identification, risk assessment and determination of corrective actions. We have also implemented a Risk Register that includes emergencies, accidents and other events with a high potential for severe or fatal outcomes. Our goal is to create a safe working environment by eliminating hazards and reducing risks, and actively seeking and eliminating the causes of potential incidents.

Investments in safety

Our responsible position in the area of employee safety and health is demonstrated by our high level of investment in occupational health and safety. Achieving a higher level of occupational health and safety requires a systematic approach and increased investment.

In 2023, we have allocated KZT 2.995 billion for health and safety activities.

Providing employees with protective equipment at work

To ensure employee safety and develop a culture of safe labor, systematic work is implemented at production facilities. All employees of Samruk-Energy JSC are provided with necessary personal protective equipment and overalls.

1.173

million tenge is allocated for the purchase of personal protective equipment in 2023

In 2023, we have allocated

2.995

KZT billion for health and safety activities

Financing of HSE measures, KZT billion

Indicator	2021	2022	2023
The amount of money spent to meet occupational safety requirements	4.336	3.789	2.995

Safety initiatives and projects

Samruk-Energy JSC actively implements advanced global standards in the field of industrial safety and labor protection to ensure personnel safety and increase the level of protection. As part of the Concept of a unified automated system for recording incidents and violations in the field of occupational health and safety, the Safe Production Project was implemented in 2023. The goal of the project is to reduce occupational injuries and raise the level of awareness of top managers on occupational health and safety issues.

Activities carried out to improve HSE performance efficiency:

- monitoring of personnel employment in hazardous working conditions (workplace certification, production control);
- monitoring the provision of personal and collective protective equipment;
- providing methodological and informational assistance to subsidiaries and affiliates;
- monitoring of the system of transparent registra-

tion of occupational accidents;

- monitoring of the system of individual responsibility (safety coupons);
- monitoring of leadership behavioral safety audits;
- identifying hazards and assessing the significance of risks;
- developing incentive mechanisms for reporting potentially hazardous incidents;
- conducting internal accident investigations to identify the root (systemic) causes of what happened;
- recording and investigating potentially hazardous incidents that did not result in accidents;
- holding seminar meetings at production facilities with specialists of the divisions responsible for labor protection issues in the Company's subsidiaries and affiliates;
- Control over the training of the first managers and labor protection specialists at IOSH and NEBOSH courses;
- Development of the Concept of a unified automated system for registering incidents and violations;
- Conducting HSE competitions for all of the Company's subsidiaries and affiliates.

GRI 403-2, 403-9, GRI 12: Coal Sector: 12.14.10

Occupational injuries

We take all necessary measures to achieve our safety goals and minimize workplace injuries. Through the "Safe Production" system based on the ASPANS platform, accessible via mobile applications or PCs, the company informs employees about possible hazards and incidents at work. The Standard "Motivation of Personnel to Safe Behavior" has also been developed to encourage transparent safety awareness among employees. A hotline, administered by an independent company and ensuring confidentiality and protection from harassment, is provided to enable employees to make proactive enquiries. All complaints and enquiries are handled professionally

and confidentially in accordance with the proactive reporting policy. Despite the measures taken, 10 labor-related accidents were registered at the enterprises of the Group of companies of Samruk-Energy JSC in 2023.

In 2023, the Company experienced tragic fatalities among our employees. We are truly saddened by the fact that 2 full-time and 1 part-time employees lost their lives in accidents, despite our commitment to achieve zero fatalities. We extend our condolences to the families and friends of our colleagues and deeply regret these irreparable losses.

Frequency of occupational injuries among the personnel of Samruk-Energy JSC

Indicator	2021	2022	2023
Total number of fatal accidents	0	4	2
Frequency rate of fatal accidents	0	0.13	0.07
Total number of occupational injuries with severe consequences (excluding fatalities)	4	4	5
Frequency rate of high-consequence occupational injuries (excluding fatalities)	0.13	0.13	0.16
Total number of recorded occupational injuries	6	10	10
Coefficient of frequency of occupational injuries (1,000,000 hours worked)	0.19	0.3355	0.33

Frequency of occupational injuries of personnel who are not full-time employees of Samruk-Energy JSC, but whose work and/or workplace is controlled by the Company

Indicator	2021	2022	2023
Total number of fatal accidents	0	1	1
Total number of occupational injuries with high consequences (excluding fatalities)	0	2	1
Total number of recorded occupational injuries	0	3	2

All incidents were thoroughly analyzed. The investigations resulted in 35 corrective measures to prevent similar incidents in the future. These measures include improvements in equipment reliability, personnel training and changes in the organization of the work process.

Potential hazardous situations are identified in accordance with the requirements of the enterprise standard "Occupational Health and Safety Risk Assessment". Before issuing a work permit, authorized persons conduct a safety analysis of work processes, and information on workplace hazards is drawn up on a special form.

Every year we develop a risk register, based on which we develop action plans to manage significant risks and take corrective actions in the field of industrial safety and labor protection.



GRI 2-27

Indicator	2021	2022	2023
Total number of cases of non-compliance with laws and regulations, including:	54	69	40
penalty cases	43	60	40
cases of non-monetary sanctions	11	9	0
Total number of cases of non-compliance with laws and regulations whose fines have been paid	43	60	40
charged in previous reporting periods	24	36	0
charged in the reporting year	19	24	40
Total amount of fines paid for non-compliance with laws and regulations, thousand tenge	268.749	934.475	60.287
charged in the reporting year	135.903	297.069	60.287
charged in previous reporting periods	132.846	637.406	0

List of information on hazard identification, risk assessment and accident investigation of Samruk-Energy JSC

Name of required data	2021	2022	2023
Number of shutdowns of unsafe works	40	92	22
Number of fire prevention drills conducted by internal team	620	650	485
Number of fire prevention drills conducted with the involvement of public emergency services	7	9	36
Number of emergency response plan drills conducted	29	30	36
Number of emergency drills conducted according to the emergency response plan	1,052	1,081	36
Number of behaviour-based safety observations held by management of the production company (CEO, CEO-1, CEO-2), subsidiaries and affiliates (CEO, Deputy CEO, Director of department/unit, head of business unit)	1,819	3,911	2,983
Number of behaviour-based safety observations held by other employees	1,838	3,047	4,203
Number of audits held by the headquarters/central office of the production company in subsidiaries and affiliates/branches for compliance with H&S requirements	14	15	19
Number of non-compliances identified during audits held by the headquarters/central office of the production company in subsidiaries and affiliates/branches for compliance with H&S requirements	225	300	494
Number of eliminated non-compliances that were identified during audits held by the headquarters/central office of the production company in subsidiaries and affiliates/branches for compliance with H&S requirements	222	252	485
Number of internal audits in subsidiaries and affiliates/branches for compliance with H&S requirements	983	1,338	21,326
Number of non-compliances identified during internal audits in subsidiaries and affiliates/branches for compliance with H&S requirements	2,503	6,031	52,392
Number of inspections carried out by state occupational safety authorities	39	39	32
Occupational health and safety	5	3	2
Fire safety	16	20	10
Industrial safety	4	6	3
Sanitary and epidemiological condition	14	8	4
Other (specify)	7	11	18 (Energy Supervision)
Number of corrected non-compliances identified by governmental industrial safety authorities	784	387	452
Occupational health and safety	33	19	12
Fire safety	429	252	193
Industrial safety	157	46	104
Sanitary and epidemiological condition	60	24	65
Other (specify)	61	42	78
Amount of paid penalties in respect of PC by state authorities on industrial safety, tenge	237,994,405	1,545,063	7,072,500
Occupational health and safety	0	0	0
Fire safety	233,218,755	1,534,450	1,207,500
Industrial safety	656,325	765,75	0
Sanitary and epidemiological condition	3,098,375	9,847,545	5,520,000
Other (specify)	1,020,95	0	345,000





We analyze the structure and causes of occupational injuries. The most hazardous areas in the production process are service areas and elements of electrical equipment. Factors contributing to accidents include insufficient hazard recognition and risk assessment, falls from heights, exposure to moving, flying or ro-

tating objects and parts, victim inattention, poor organization of work processes, inadequate supervision of personnel, and direct violations of occupational health and safety rules.

GRI 403-9

Types of injuries among the personnel of Samruk-Energy JSC

Name of injury	2021	2022	2023
Chemical burns, thermal burns	0	1	2
Bruise	2	2	0
Traumatic amputation	0	0	0
Electrical injuries (thermal burns)	0	1	1
Fractures	3	1	1
Complex trauma (fracture, contusion, rupture of internal organs)	1	3	5
Eye trauma	0	1	1
Craniocerebral trauma, concussion.	0	1	1
Total	6	10	10

In 2023, we actively monitored the implementation of the corrective action plan taken after accident investigations to reduce the risk of injuries. We also carried out activities to improve the occupational health and safety system with a focus on improving safety culture among employees.

Measures to prevent occupational injuries:

- communicating the circumstances and causes of accidents to all employees;
- conducting unscheduled briefings for all production personnel;
- conducting unscheduled assessment of knowledge of H&S regulations, rules and instructions for employees in the units where the accident occurred;
- holding monthly Safety Days with the participation of top managers of the enterprises, with the development of measures to eliminate the identified violations;
- conducting comprehensive inspections of equipment, buildings, facilities and workplaces by the

occupational safety and health services, developing action plans with deadlines and responsible persons;

- training of all production personnel in accordance with the Rules for Training, instructing and checking the knowledge of employees on H&S issues;
- holding seminars and meetings at all enterprises before the start of repair campaigns with engineers and technicians of structural subdivisions authorized to issue work orders, be supervisors and performers of work, with practical training on the correct admission of a team to work and issue work orders;
- certification of workplaces in terms of working conditions (at least once every five years);
- replacement of equipment that has exhausted its durability and poses a serious hazard to production personnel;
- involvement of top management by conducting leadership behavioral safety audits;
- workplace risk map/registers updated, taking into account additional training/education of personnel on hazard identification and risk assessment.

GRI 403-6, 403-10, GRI 12: Coal Sector: 12.14.7, 12.14.11

Health care

At the enterprises of Samruk-Energy JSC, the main risk factors for occupational diseases are dust level, noise and vibration exposure. Parameters of these factors are regularly measured and controlled at workplaces.

In 2023, laboratory tests and certification of workplaces were carried out to identify labor conditions that may be harmful or hazardous. In addition, Samruk-Energy JSC conducts production control at workplaces.

The Company's subsidiaries and affiliates have 31 permanent medical personnel, in addition to which medical personnel work on a contractual basis. Every year, our subsidiaries and affiliates and the Corporate Center conclude contracts to insure employees against accidents that occur during the

performance of their labor or official duties, according to the results of a tender procedure.

Expenditures on measures to preserve personnel health and prevent diseases, in accordance with legal requirements, are approved annually in the Company's development plan.

In 2023, no cases of work-related personnel illnesses were reported by the Company.

List of information on health promotion and occupational diseases of Samruk-Energy JSC employees

Indicator	2021	2022	2023
Number of cases of health deterioration at the workplace, not related to labor activity and not resulting in fatal outcome	13	18	10
Number of deaths not related to labor activity due to health deterioration	3	1	7
Number of employees on the "D" register	2,021	2,060	858
Number of registered occupational diseases	0	0	0
Number of employees subject to mandatory periodic medical examination	14,497	14,679	15,077
Number of employees who have undergone periodic medical examination in accordance with the legislation of the Republic of Kazakhstan	14,282	13,877	14,878

Regular medical examinations are conducted to monitor the health of employees. During the reporting period, 14,878 employees underwent mandatory periodic medical examinations. Based on the results of the examinations, employees with chronic diseases received timely treatment and rehabilitation. Employees with a need for restrictions on working conditions were restricted in accordance with the recommendations of the medical commission. Employees engaged in hazardous work were provided with enhanced nutrition, such as milk or similar products. Within the framework of the corporate health improvement program, health resort treatment was provided to the personnel. In addition, according to the results of periodic medical examinations, a health improvement plan was developed:

- health resort treatment is organized for employees suffering from chronic diseases in accordance with the recommendation of the medical commission;
- persons who are not professionally fit were sent for additional examination, and restrictions on working conditions were provided to employees who have restrictions according to the conclusion of the medical commission.

All employees engaged in work with increased danger, machines, and mechanisms undergo pre-shift and post-shift medical examinations, in addition to regular medical examinations. In addition, we carry out ongoing preventive measures aimed at maintaining employee health and preventing negative health impacts associated with work activities.

- dispensary monitoring of employees with chronic diseases is organized for the purpose of timely treatment and rehabilitation;



GRI 403-8, GRI 12: Coal Sector: 12.14.9

Assessment of contractor labor protection and industrial safety system

We understand the importance of involving contractors in health and safety processes and integrating them into the HSE management system to ensure an overall high level of safety.

In this area, the key document is the "Regulations on the Organization of Contractors Work on the Company's Premises", which contains the basic requirements for contractors on occupational health and safety management systems. In accordance with this document, we carry out occupational health and safety audits of both potential and existing contractors to identify the causes of incidents and accidents, as well as to assess the organization of workplaces.

The occupational health and safety management system covers 100% of the personnel of contractors involved in the Company's operations.

All contractors are subject to a system of penalties for violations of H&S rules. The list of such penalties, including termination of cooperation, is set out in the contract with contractors.

During the reporting period, 342 internal audits of contractors' activities to ensure compliance with H&S requirements were conducted. As a result, 287 violations were identified.

GRI 403-4, 403-5, GRI 12: Coal Sector: 12.14.5, 12.14.6

Informing and training of personnel

Key occupational health and safety processes include risk assessment, medical examinations, training and provision of personal protective equipment. Ensuring good working conditions is an inalienable right and a key principle of decent work. The distribution of responsibility among management personnel at all levels and the active participation of all employees play an important role in the management of occupational health and safety. Workers have the right to participate in this process through trade unions.

- first aid treatment;
- safe driving;
- other vocational programs.

All personnel undergo compulsory training on OSH (Occupational Safety and Health) programs for professions and related professions, with the issuance of a certificate by the training center, or by the training center of the company itself.

We are actively working to improve our staff's competence in occupational health and safety. Occupational H&S training is available to all employees, regardless of their position. Training programs are developed in accordance with legal requirements and adapted to specific specialties, including both group and individual forms of training.

All production personnel receive training in occupational H&S.

Employees of Samruk-Energy JSC are trained in the following areas:

- occupational safety;
- occupational health;
- fire safety;

In 2023, 12,449 Company employees received occupational health and safety training.

We are actively working to raise staff awareness of occupational health and safety issues. This is done through specially designed briefings, information stands, production councils, safety leaflets, and orders. Personnel also receive information about hazards and situations through the automated Safe Production system.

Training of employees in the field of occupational safety

Training	2021	2022	2023
Number of employees trained in occupational safety within the framework of the RK legislation requirements	17,671	22,344	12,449
occupational health	5,502	7,523	1,825
occupational safety	10,341	12,291	5,459
fire safety	5,540	4,535	3,458
other areas	3,040	4,237	1,904
Number of employees trained in occupational safety outside the requirements of the RK legislation	200	236	244
occupational health	11	82	102
occupational safety	0	0	0
fire safety	0	0	0
other areas	262	294	316
Number of employees trained in first aid to the injured (paramedic) at the workplace	60	73	213
Number of employees trained under the NEBOSH program	1	7	13
Number of employees trained in the IOSH program	4	4	102
Number of employees trained in defensive driving course	0	25	11

Ensuring fire safety

We provide all enterprises within the Group of companies of Samruk-Energy JSC with basic fire extinguishing equipment, including portable and mobile fire extinguishers, as well as equipment for fire water supply, such as fire hydrants. In addition, these enterprises have boxes with powder composition (sand) and fire-resistant materials such as coshma, felt and others.

Representatives of Samruk-Energy JSC, state control bodies and labor protection specialists at all enterprises of the Company conduct scheduled and unscheduled inspections to ensure availability of serviceable fire extinguishing equipment.

In 2023, there were no cases of significant fire at the enterprises of Samruk-Energy JSC.

We actively invest in the training of our employees and organize trainings and drills on fire and fire prevention. In 2023, our internal formations conducted 485 exercises in this area. We also organized 36 exercises involving state firefighting services.

Plans for 2024 and the medium term

In 2024, we will continue to implement measures aimed at improving HSE performance with continuous improvement of the corporate management system and its processes, including:

- training on the "Safe Labor Culture" course for production personnel, international standards in the field of occupational health, and safety;
- Involvement of top managers in HS issues by con-

- ducting leadership behavioral safety audits;
- work on digitalization of HS processes;
- conducting psychological training for employees of subsidiaries and affiliates by a qualified specialist;
- organization and holding of the preventive campaign "In the Rhythm of a Healthy Heart" meetings with the heads of structural subdivisions and contractors, etc.



Promoting socio-economic development

GRI 3-3, GRI 12: Coal Sector: 12.8.1

WE PLAY A KEY ROLE IN THE NATIONAL INFRASTRUCTURE, PROVIDING ELECTRICITY TO AROUND 19 MILLION CONSUMERS AND CREATING MORE THAN 17,000 JOBS ACROSS KAZAKHSTAN. OUR ACTIVITIES CONTRIBUTE TO REGIONAL ECONOMIC GROWTH AND ESTABLISH FAIR RELATIONSHIPS WITH SUPPLIERS AND CONTRACTORS. WE ALSO PRIORITIZE IMPROVING PEOPLE'S LIVES AND SUPPORTING SOCIAL INITIATIVES BY INVESTING IN INFRASTRUCTURE, EDUCATION, AND CLEANER ENERGY FROM RES.

The basis of the social strategy of the Company of Samruk-Energy JSC is an integrated approach to sustainable development enshrined in several regulatory documents, including the Sustainable Development Guidelines, Personnel Policy, and Labor and Environmental Protection Policy. These documents define the principles and strategic directions of interaction with local communities and other stakeholders, which allows the company to effectively integrate social initiatives into its operations. On December 28, 2023, the Policy on interaction with local communities was developed in accordance with the long-term Strategy of Samruk-Energy JSC for 2022-2031 was implemented. This policy considers the existing corporate standards and norms, as well as the requirements of the applicable legislation of the Republic of Kazakhstan, ensuring harmonious and purposeful development of relations with key stakeholders.

Responsibilities and commitments in external social policy management and interaction with local communities are carried out by the Corporate Governance and Sustainable Development Department, the Human Resources Management Department, and each structural subdivision within the scope of its activity.

Samruk-Energy JSC conducts an active dialog with stakeholders with stakeholders at all stages of implementation of the Company's projects and considers their interests at all levels of activity management. The strategy of interaction with local communities describes approaches to identifying stakeholders, providing feedback, and openness in informing [\(for more details see "Interaction with Stakeholders"\)](#).

The main mechanisms of interaction with local communities are as follows:

- identification and analysis of stakeholders who are directly or indirectly affected (will be affected) or may be interested in the interaction and development of local communities;
- planning, defining procedures at all stages of preparation and implementation, and conducting consultations;
- disclosure of information to accept and understand risks/consequences, benefits, and monitoring and reporting;
- grievance mechanism.

Socio-economic contribution

In the reporting period, we consistently implemented measures aimed at ensuring long-term fruitful relations with the regions where we operate and strengthening the image of a socially responsible Company.

We make a significant contribution to the well-being and socio-economic development of the regions where we operate by:

- providing the population with electricity, heat, and coal;
- providing jobs for the local population, paying social taxes and deductions, making pension and insurance payments, costs of medical services for employees and offering other forms of employee support;
- implementing investment projects that affect the development of the regions where the Company operates, improving the lives of the population, and creating jobs;
- maintaining public infrastructure to ensure significant revenues to regional budgets through tax payments;
- investing in local communities through donations to charitable and non-governmental organizations, and research institutions through a single operator Samruk-Kazyna Trust Social Project Development Fund;
- supporting of social programs, cultural and educational events.

During the reporting period, no investments were made in infrastructure projects. However, in 2023, the Company allocated funds for activities and projects aimed at the socio-economic development of local communities totalling

125 KZT million

GRI 203-1

We have a portfolio of investment projects that are in line with the country's national economic development programs and responsible investment principles. In addition, we have identified 3 significant* investment projects, the implementation of which will create new jobs and develop infrastructure in the regions where we operate:

Rehabilitation of power unit No. 1 at Ekibastuz GRES-1 with installation of new electrostatic precipitators

By November 2024, construction of GRES-1 power unit with installed capacity of up to 500 MW is underway. Installation of new electrostatic precipitators will increase the installed capacity to 4,000 MW. In 2023, work was performed to dismantle the main power unit and auxiliary equipment of the power unit, as well as the ash collecting plant. On December 23, 2023, the power unit was successfully tested in test mode. All planned works for 2023 have been completed.

Modernization of Almaty CHPP-2 with minimization of environmental impact

In the period from 2022 to 2026, it is planned to implement a project to build a new plant using gas turbine technologies on the site of Almaty CHPP-2. Its electric capacity will be up to 600 MW, heat capacity — 800 Gcal/h. In 2023, a contract was signed with an EPC contractor and 10% of the advance payment of 32.5 billion tenge was paid. At the moment, contracts for the supply of necessary equipment have already been signed, and geological surveys of the construction site and construction of temporary structures are underway.

Reconstruction of Almaty CHPP-3

From 2021 to 2026, a project to modernize Almaty CHPP-3 is underway, which includes the construction of a SGP with a capacity of up to 545 MW. The aim of the project is to ensure uninterrupted electricity and heat supply to consumers in the Almaty region. In 2023, EPC contracts were signed with contracting organizations, and a standby agreement was reached for the manufacture of equipment. EPC-contractor has started development of project documentation, by January 2024 it is planned to conclude contracts for the supply of equipment.

* Significant projects are projects that involve an increase in existing electric generating capacity of 500 MW or more in 2024-2026.



Adhering to the principles of responsible investment, we consider environmental, social and governance (ESG) factors when making investment decisions, to effectively manage risk. The Company's stakeholder engagement varies depending on the scale and nature of the project, potential risks and negative impacts on affected communities and the environment, and the degree of public interest.

When implementing new projects, we consult with the local population in the format of public hearings with the preparation of relevant materials, within the framework of legislation, and interaction with the authorities. Disagreements are resolved within the legal framework, and the overall assessment of projects considers the interests of local communities.

GRI 201-1, GRI 12: Coal Sector: 12.8.2

Economic sustainability of regions

We create economic value for employees and local communities, and as a socially responsible Company, we support the well-being of the country by paying taxes, creating jobs, and developing infrastructure.

The economic value created reflects our primary sources of revenue generation, namely revenue from generation, transmission, and marketing of electricity, as well as from coal sales and fees received.

The created value is distributed among suppliers and contractors, employees of the Group of companies of Samruk-Energy JSC, shareholders and creditors, the state, as well as local communities.

At the end of 2023, the created economic value amounted to KZT 459.452 billion, distributed economic value — KZT 329.736 billion, as a result, unallocated economic value — KZT 129.716 billion. According to the approved Development Plan for 2024-2028, it is planned to increase the created and distributed economic value in 2024 and 2025.

GRI 201-1

Economic value created and distributed, KZT million

Indicator*	fact	fact	fact
	2021	2022	2023
Economic value created	353,826	404,850	459,452
Distributed economic value, incl.	263,314	300,995	329,736
Operating expenses	167,087	188,347	217,380
Salaries and employee benefits	41,799	54,187	62,760
Payments to capital providers	25,260	23,196	16,517
Investing in communities	0	0	0
Taxes other than income tax	13,512	13,653	8,457
Payments to the state	14,921	21,055	24,086
Other expenses	735	558	534
Unallocated economic value	90,512	103,855	129,716

* Previously the figures were calculated on an accrual basis. In order to exclude non-cash transactions, including depreciation and amortization, the current figures are calculated using cash flow statement data. Figures are based on ownership interests in joint ventures.

Tax liabilities

Being a major taxpayer and strictly complying with the regulatory and legal legislation of the Republic of Kazakhstan in the field of taxation, we contribute to the overall development of the regions of the country.

Kazakhstan tax legislation and practice are in a state of continuous development and therefore are subject to varying interpretations and frequent changes, which may be retroactive. In some instances, tax legislation refers to IFRS provisions to determine the tax base and the interpretation of the relevant IFRS provisions by the Kazakhstani tax authorities may differ from the accounting policies, judgments and estimates applied by management in the preparation of these consolidated financial statements, which may result in additional tax liabilities for the Group of companies of Samruk-Energy JSC. Tax authorities may conduct retrospective audits for a period of five years after the end of the tax year.

Since July 2020, the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan (hereinafter — the SRC) has launched a pilot project on the introduction of horizontal monitoring, which lasted until December 31, 2023. Thus, in 2021-2022, within the framework of the pilot project on horizontal monitoring, SRC examined historical data at EGRES-1 LLP and Samruk-Energy JSC (Corporate Center) for a five-year period, following the results of which tax audits were conducted and Notices on the results of tax audits were issued. The main violations identified included deductions for loan interest, as well as understatement of CIT at source. We disagreed, and lawsuits and complaints were filed with the courts and the Appeals Commission of the Ministry of Finance of the Republic of Kazakhstan. In December 2023, the Appeal Commission of the Ministry of Finance of the Republic of Kazakhstan decided on the Corporate Center in favor of the Group of companies of Samruk-Energy JSC, while the contestation in the courts continues for EGRES-1 LLP.

DISTRIBUTED ECONOMIC VALUE

Payments to suppliers and contractors	Operating expenses — cash payments to counterparties for materials, product components, equipment and services, lease payments, etc.
Employee benefits	Salary fund, social taxes and deductions, pension and insurance payments, costs of medical services to employees and other forms of employee support
Payments to capital providers	Dividends to all categories of shareholders and interest paid to creditors
Payments to the state	Tax deductions
Investing in local communities	Donations to charitable and non-governmental organizations and research institutions, costs of supporting public infrastructure, as well as direct financing of social programs, cultural and educational events



In 2023, we transferred

71,838

KZT million
in favor of the state

GRI 207-1, GRI 12: Coal Sector: 12.21.4

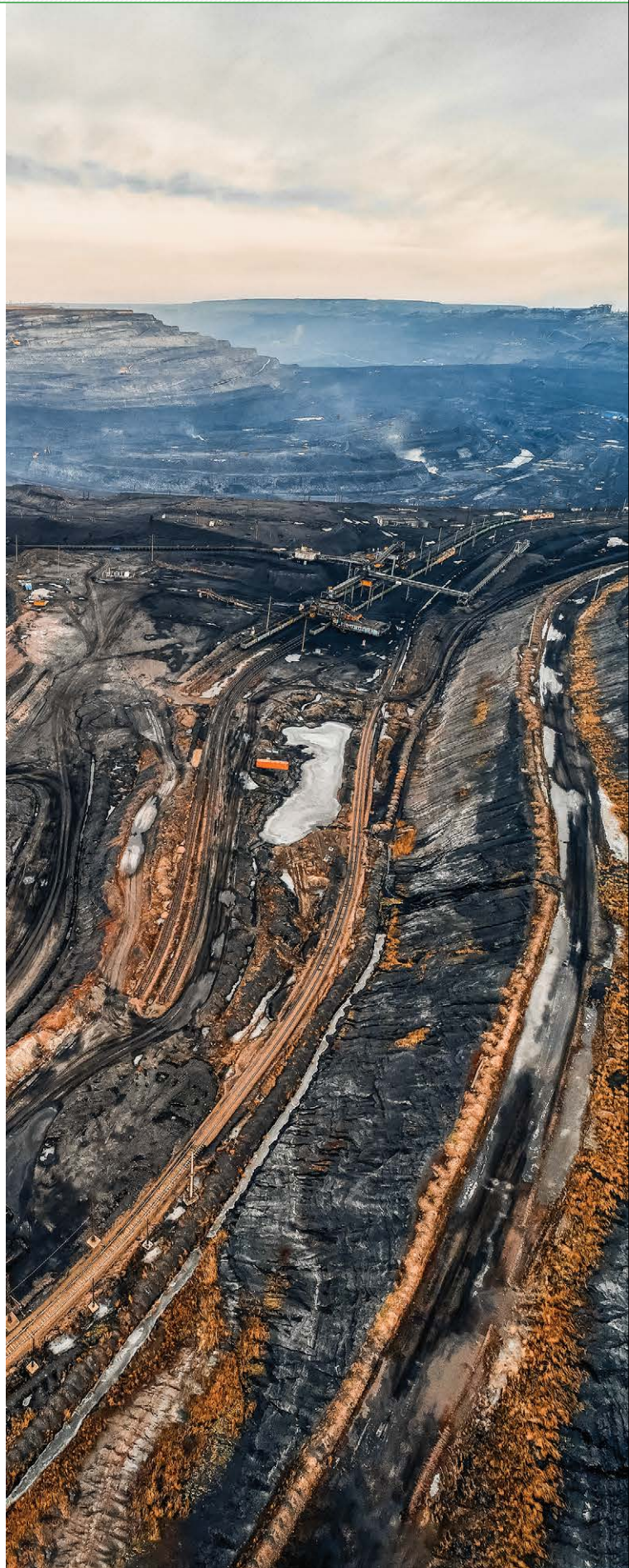
In order to regulate tax accounting based on the principles of obligation, certainty and unity of the tax system, we implemented the Tax Accounting Policy of Samruk-Energy JSC²⁴ developed on the basis of the Tax Code of the Republic of Kazakhstan and legislative acts in the field of taxation of the Republic of Kazakhstan, as well as taking into account the requirements of international financial reporting standards. developed based on the Tax Code of the Republic of Kazakhstan and legislative acts in the field of taxation of the Republic of Kazakhstan, as well as taking into account the requirements of international financial reporting standards.

The Tax Policy of Samruk-Energy JSC shall be approved by the Company's Management Board. Decisions on amendments and additions to the Tax Policy are made by the Company's Management Board. Heads of structural subdivisions of the financial and economic block may be the initiators of changes. Control over the implementation of the requirements is exercised by the Deputy Chairman of the Management Board for Finance and Economics. Responsibility for management and fulfillment of the requirements, for compliance and reliability of information presentation is borne by the Director of the Financial Accounting Department — Chief Accountant.

Changes in the Company's Tax Policy may be initiated in cases: when changes are made to the Tax Code affecting changes in tax accounting, as well as if these changes will lead to a more reliable representation of events and business transactions in the Company's tax reporting.

The adopted Tax Policy is consistent with the overall business strategy and approach to corporate governance and risk management.

The approach to taxation is to fully comply with the requirements of applicable tax laws, treaties, regulations and other tax instructions, ensuring proper control over tax accounting and tax reporting.



To support and manage risk across our business units, we have put in place a process to regularly review our risk management policies and procedures to incorporate new developments and implement best practices.

Ongoing changes in international and local tax laws, as well as changing practices in the application of these laws in the courts, may result in tax disputes and potential additional tax liabilities, and we continuously monitor and analyze domestic and international tax laws, case law, guidance and practice. We regularly evaluate our tax positions to ensure that they are adequately reflected in our financial statements.

Tax accounting in the Company is based on accounting data, which is performed by the Financial and Tax Accounting Department in accordance with regulatory legal acts and internal documents:

- The Code of the Republic of Kazakhstan "On Taxes and Other Obligatory Payments to the Budget";
- Law of the Republic of Kazakhstan "On Accounting and Financial Reporting";
- International Financial Reporting Standards;
- The Model Chart of Accounts of Accounting approved by the Order of the Minister of Finance of the Republic of Kazakhstan;
- Corporate accounting policy of the Company;
- Corporate Chart of Accounts of the Company;
- Methodological recommendations, instructions, internal regulations and other normative acts on organization and maintenance of accounting.

The tax policy has a low tolerance for tax risk — we seek to minimize the risk of disputes with the tax authorities by being open and transparent about our tax operations. We seek to mitigate tax risk arising from operations to the extent practicable, by giving due attention to processes that could materially affect compliance with tax obligations.

Our approach is based on managing tax risks and tax payments in accordance with applicable legal requirements and the highest long-term expectations of our shareholders, taking into account operational, economic and reputational factors. Maintaining an open dialog with tax authorities at various levels allows us to avoid adverse tax consequences and is an integral aspect of our Tax Policy.

GRI 207-3, GRI 12: Coal Sector: 12.21.6

Interaction with stakeholders on tax issues

We maintain an active dialog with stakeholders on tax-related issues. We advocate transparent interaction and open communication with the tax authorities, ensuring that all reporting required by applicable law is provided within the established deadlines.

In connection with tax risks arising during implementation of the SRC MF RK Horizontal Monitoring project, work was carried out with the state authorities to clarify the correctness of attributing the equipment for generation and conversion of electric power in accordance with the Fixed Assets Classifier to the Equipment group, which resulted in a favorable opinion for the Company.

We also take part in discussions on amendments to the Tax Code regarding VAT and CIT at source. Proposals are made to discuss the issues of inclusion in the New Tax Code.

We do not use unfair tax evasion schemes in carrying out our activities.

GRI 207-3

You can report any occurred and/or suspected facts of tax law violations to the "24/7 hotline" by sending a message: to mail@sk-hotline.kz, to WhatsApp 8 771 191 88 16, by phone 8 800 080 47 47, or use the feedback form on the website <https://www.samruk-energy.kz/ru/navigation-and-support/hotline>.

Tax benefits

We regularly analyze the applicability of statutory tax incentives to investment projects of the Company and its subsidiaries and affiliates, as they are an important mechanism for attracting investment in priority sectors and stimulating economic growth.

Thus, from 2012 to 2021, in accordance with the investment agreement²⁵ and the Resolution of the Government of RK²⁶, Moynak HPP JSC had preferences related to exemption from corporate income tax.

²⁴ Tax accounting policy of Samruk-Energy JSC was put into effect on January 1, 2018 based on the Law of the Republic of Kazakhstan "On Enactment of the Code of the Republic of Kazakhstan 'On Taxes and Other Obligatory Payments to the Budget' No. 121-VI of the LRK dated 25.12.2017

²⁵ Investment Agreement No. 0622-12-2005 dated December 31, 2005.

²⁶ Resolution of the Government of the Republic of Kazakhstan "On Determination of the Validity Period of Investment Tax Preferences" No. 1239 dated December 13, 2005.



GRI 413-1, GRI 12: Coal Sector: 12.9.2

Development of local communities

We actively participate in the implementation of various projects and programs that contribute to the development of socio-economic aspects in the regions where we operate and promote interaction with local communities. The activity of Samruk-Energy JSC is based on creation and implementation of programs and projects formed annually taking into account the needs and priorities of stakeholders. The initiatives are aimed at achieving the Company's strategic goals in the reporting period, including the UN SDGs.



Major projects and programs implemented in 2023



SDG 1
ASSISTANCE TO VULNERABLE GROUPS



FINANCIAL ASSISTANCE TO VULNERABLE GROUPS

Name of subsidiaries and affiliates	Action
Bogatyr Komir LLP	Religious denominations were provided funding in the amount of KZT 14,627 thousand to pay off debts on public utilities. Non-profit organizations were allocated KZT 83,130 thousand to purchase coal, crushed stone, gifts for children for the New Year, holding various forums and events, as well as for the repair of buildings, equipment and other. Individuals were provided funding in the amount of KZT 27,063 thousand for medical treatment, surgeries and funerals.
Almaty Power Plants JSC	In honor of International Women's Day on March 8, women veterans of the power industry were rewarded with cash bonuses from the Company's management.
AlmatyEnergSbyt LLP	In 2023, financial assistance of up to 100 MCF was paid to employees with children with disabilities.
Ekibastuz GRES-1 LLP	During the Kurban Ait celebration, Bulat Nurzhanov Ekibastuz GRES-1 LLP allocated funds to help those in need. Employees of the plant also took an active part by organizing fundraising for the purchase of food packages, including meat and other necessary products (rice, buckwheat, oil, pasta, etc.), which were given to parents of pupils of secondary schools No 5, 9 and No 11. In addition, another 35 food packages were distributed among the company's employees, mainly to families with many children and people in difficult life situations



ENGAGEMENT WITH VULNERABLE POPULATIONS, INCLUDING ASSISTANCE AND MEETINGS

Name of subsidiaries and affiliates	Action
Ekibastuz GRES-2 JSC	Youth activists of GRES-2 expressed their support for the Qamqor initiative aimed at helping pensioners. On the eve of Victory Day, funds were collected for veterans of the Great Patriotic War, participants of the labor front, internationalist soldiers and those who took part in liquidation of the Chernobyl accident consequences. In addition to this, a gala event was organized for veteran power engineers, which also provided financial resources for their personal needs. As part of the Umit campaign, the youth activists organized a multimedia program for disabled children of Solnechny settlement
Almaty Power Plants JSC	On the eve of Victory Day, ceremonial events were organized for veterans, during which gifts were given and meetings were held. Special attention was paid to 14 Company pensioners who took an active part in labor activity, as well as 26 employees — participants of international wars and liquidators of the consequences of the Chernobyl accident
Shardara HPP JSC	On the eve of Senior Citizens' Day, the Company's employees visited elderly residents and helped pensioners to put their household affairs in order
Bogatyr Komir LLP	Organization of food baskets and essentials for those in need is the basis of the ongoing charity program "Kindness Boxes". Various activities were carried out during the reporting period: assistance in the form of medicines in February, distribution of tea and snacks, and delivery of groceries in Ekibastuz in honor of World Kindness Day. Other activities include charity food collection and organizing friendly lunches with groups of people, including the hearing and visually impaired. At the end of the year, a distribution of sweet gifts for disabled children was organized.



On the eve of Victory Day, members of the labor front were awarded for their contribution during the Great Patriotic War, in addition, Bogatyr Komir LLP organized a festive dinner for its mining veterans for Miner's Day. 30 mining veterans had an opportunity to relax at the Zhasybay Recreation Center, where excursions were organized for them.

On 27 September 2023, World Labour Day, veterans of the power industry were invited to Ekibastuz GRES-1. The veterans were given the opportunity to visit the production facilities and return to their workplaces to share their valuable experience with young specialists. In addition, the veterans were presented with commemorative gifts from the plant.

We also organized festive programs dedicated to Children's Day, which included a short course for children on the rules of the road "Beware of the Car", drawing and creative activities, and sports competitions. Among other things, cooking master classes and educational programs were organized for children. In summer 2023, children of the Company's employees also had a vacation at the Edelweiss children's health camp.

As part of supporting children with disabilities, orphans and children from large families, we implemented a number of programs, including arranging transportation of students to school, organizing New Year celebrations and presenting gifts. Together with the Central Asian Cerebral Palsy Life Foundation, a charitable project aimed at involving children with disabilities in sports was organized.



SDG 3
ENSURING HEALTHY LIFESTYLES AND WELL-BEING

Our employees actively participate in charitable activities, including as blood donors. Employees participate in the annual Donor Day event and help raise awareness of the need to help those in medical need.

In Solnechny settlement on the basis of Ekibastuz GRES-2 JSC a physical fitness and recreation complex is functioning on a permanent basis. The complex is open to both station employees and residents of the settlement. Free swimming lessons for different age groups are held in the swimming pool of the complex under the guidance of a trainer.

In 2023, the trade union committee of Ekibastuz GRES-2 JSC organized an annual winter fishing contest "Golden Fish". Also in the reporting period, a 4 km track and field race was held at the city stadium "Miner", where EGRES-2 employees took prize-winning places.

In the period from June 16 to 18, 2023, the Spartakiade among employees of the Group of companies of Samruk-Energy JSC was held in the city of Shchuchinsk. VIII Spartakiada among the employees of the Group of companies of Samruk-Kazyna JSC in honor of the 15th anniversary of the Fund

was held in Astana. On the eve of the International Women's Day, the Youth Activity of GRES-2 organized the action "Vitamin Day" to promote healthy lifestyle and proper nutrition.

Within the framework of celebration of Nauryz meiramy and the Day of Unity of the People of Kazakhstan, AlmatyEnergoSbyt LLP "Zhas Kuat" was organized on April 30, 2023. Within the framework of this event there were solemn events, team competitions and contests. Outdoor team building for young specialists in order to develop youth policy and strengthen the image of Bulat Nurzhanov Ekibastuz GRES-1 LLP included winter sport fishing competitions, which are traditionally held at the plant every winter. This year the competitions were held on February 18 at the city reservoir. A total of 27 people competing in various disciplines took part in them.

Also in 2023, solemn events were held in honor of the Independence Day of the Republic of Kazakhstan and the Power Engineer Day, as well as a corporate party in honor of the Power Engineer Day and the New Year. Employees took an active part in creative competitions in vocal and fine arts organized for the 15th anniversary of Samruk-Kazyna JSC.



SDG 4
EDUCATION SUPPORT

In the reporting period, we organized educational excursions for students of K.I. Satpayev KazNITU, Al-Farabi KazNU, G. Dukeev AUES, and the college of G. Dukeev AUES.

Educational institutions have the opportunity to send their students to the largest power plants in Kazakhstan to practice practical skills.

In 2023, 47 students were enrolled in the dual training program, as well as 20 people under the "Bogatyr Komir LLP Name Scholarship" program. A total of 374 students completed training internships at Bogatyr Komir LLP in 2023. Information meetings were also organized with students of KSTU, Geological Exploration College of Semey, higher educational institutions and specialized secondary educational institutions of Ekibastuz.

In 2023, our employees took an active part in the "Road to School" campaign organized by the Samruk-Kazyna JSC jointly with the Committee for Protection of Children's Rights of the Ministry of Edu-

cation of the Republic of Kazakhstan. As part of the campaign, all necessary stationery was purchased for schoolchildren from low-income families.

From December 6 to 9, 2023 in Almaty, the Youth Educational Forum was held with the participation of young specialists, chairmen, supervisors and activists of youth councils of the Fund's portfolio companies responsible for youth policy. At the forum, there were Challenges on the development of physical, intellectual and emotional abilities.

Bogatyr Komir LLP implements programs for training of personnel reserve and development of managers and mid-level specialists. "Zhas talap" and "Orleu" programs are aimed at finding talented and efficient employees among highly qualified workers and specialists to train the personnel reserve. In 2023, 110 people were trained under the "Zhas talap" program, 11 people — under the "Orleu" program, of which 66 were enrolled in the personnel reserve. 20 middle managers were trained under the "Effective Manager" program.

Name of subsidiaries and affiliates

Action

Ekibastuz GRES-2 JSC

ODK Kainar in Solnechny settlement together with Ekibastuz GRES-2 supported the creation of a computer class to teach residents and children the basics of computer literacy.

The President awarded Ekibastuz GRES-2 employees who took part in accident elimination in the town of Ekibastuz.



SDG 5
ENSURE GENDER EQUALITY

A Women's Energy Club was established at Ekibastuz GRES-2 to bring together representatives of the plant's female staff. The meeting, held on June 8, this year gathered representatives of women from different shops and departments. Also, during the reporting

period, the plant worked to inform employees about the International Action "16 Days of Activism against Gender Violence" through the placement of informational materials and meetings to discuss measures to prevent and counteract violence.



SDG 7 ELECTRICITY ACCESSIBILITY

We pay significant attention to supporting vulnerable social groups. For example, in 2023, we actively participated in the program to ensure electricity affordability for the population by providing benefits for electricity, heat, and coal.

During the reporting period, the Company informed the local population in a timely manner about various issues such as planned power outages, line reconstruction works, transformer maintenance and relocation of poles from land plots. Residents were informed about upcoming scheduled outages related to substation maintenance and cleaning of high-voltage line routes.



SDG 8 ENSURING DECENT WORKING CONDITIONS

We strive to provide our employees with comfortable living and working conditions. Housing, including 77 houses, is provided in the areas where Moynak HPP JSC is located. The total number of residents is 235 people, including 100 employees and 135 of their families. All employees of the company are provided with housing with amenities, including 3-, 4- and 5-room houses with homestead plots of 6 hectares and outbuildings. In addition, there is a kindergarten for 30 children on the territory of the settlement, which is supported by the Company.

At the award ceremony within the framework of the Kazakhstan International Conference and Exhibition on Occupational Health and Safety "KIOSH 2023" in Astana city, the Chairman of the Committee of Labor and Social Protection and Migration of the Republic of Kazakhstan T. Ospankulov, the representatives of APP JSC were presented with a statuette and Diploma "Best Occupational Safety Service" on behalf of the First Vice-Minister of Labor and Social Protection of the Republic of Kazakhstan A. Sarbasov. Rasul Onalbaev and Karim Sartaeov from APP JSC participated in the XI International Conference and Exhibition on Labor Protection and Industrial Safety KIOSH-2023.

APP JSC won the Senim-2023 contest in the nomination "Best Labor Protection Service". This competition is the only one in Kazakhstan for labor protection professionals.

Name of subsidiaries and affiliates

Action

Almaty Power Plants JSC

New tables, chairs, cabinets and a cooking stove were purchased for the children's camp "Edelweiss", as well as current repairs of the buildings, including painting and whitewashing.

Bogatyr Komir LLP

A one-storey block-modular building is under construction at Yuzhnaya station, designed to meet the domestic and sanitary needs of employees, accommodating up to 150 people. The sanitary and welfare complex includes laundry, showers, dressing room, dedusting chamber, room for drying overalls, helmet and shoe washing, storage of winter overalls, as well as sanitary facilities.

From the beginning of November 2022 to February 2023, during the difficult situation with heat supply in Ekibastuz caused by a failure, we were one of the first companies to come to the aid of the city residents. During the repair works to eliminate the consequences of the accident, the Catering Combine and active youth organized delivery of hot meals, including lunches, dinners and late dinners for night shifts.



SDG 15 ENVIRONMENTAL INITIATIVES

The Group of companies of Samruk-Energy JSC actively participates in initiatives to improve the environment and enhance the territory. This includes participation in actions to clean snow from the yards of pensioners, participation in global and national initiatives on improvement, and holding months of sanitary cleaning and territory improvement.

In 2023, APP JSC also carried out landscaping in various districts of Almaty by planting 527 tree seedlings and 150 shrubs on an area of 2.72 hectares, as well as creating sanitary zones with various types of trees and shrubs.

Employees of various stations held subbotniks, during which they cleaned and collected garbage in the ar-

reas of 9.9 hectares and collected 48.5 cubic meters of garbage. Since 2020, employees of Samruk Green Energy LLP have been involved in eco-volunteering, collecting items for the needy, wastepaper and plastic containers, and then handing them over to collection points. In April 2023, Bogatyr Komir activists held a clean-up day at the Berezka Recreation Center, and in September they organized a similar event at the Karlygash Recreation Center. As a result of the efforts of the employees of Bogatyr Komir LLP, city subbotniks were held, during which the work on cleaning the territory from garbage, tree trimming, and cleaning from fallen leaves on Kunayev Avenue and adjacent streets was carried out. A total of 700 square meters of territory was cleaned, and the volume of garbage removed outside the city was 180 cubic meters.





Caring for our planet

Environmental protection

Management approach

GRI 3-3

As one of the leaders in the energy industry, we attach high importance to environmental safety, guided by the legislation of the Republic of Kazakhstan, the international standard ISO 14001, and best practices of sustainable development. We recognize our responsibility for environmental control, actively implement energy efficiency projects, and are committed to regular publication of detailed environmental reports to confirm our transparency and maintain high standards of environmental safety.

The Company has approved a set of key documents that set the basic principles and norms of Samruk-Energy JSC's activities in the field of environmental protection:

- Policy of the corporate management system;
- Corporate Standard on Environmental Protection Management in the Group of companies of Samruk-Energy JSC;
- Guidelines on environmental emergencies and response to them.

Environmental safety management occupies a central place at all levels of the Company's activities. The Energy Efficiency, Innovative Development, and Environmental Safety Department of Samruk-Energy JSC assumes the role of a responsible person in managing environmental initiatives. Departments responsible for implementation of the environmental policy and strategy, as well as for maintaining compliance of partners' and contractors' actions with the Company's established environmental standards, have been formed in subsidiaries and affiliates.

In order to maintain and confirm a high standard of environmental safety, we assume the obligation to systematically provide detailed reports related to environmental protection.

On a quarterly basis, the Energy Efficiency, Innovative Development, and Environmental Safety Department submits to the members of the Management Board, the Committee for Safety, Labor Protection and Environmental Protection, and annually to the Board of Directors of Samruk-Energy JSC a Report on the work in the field of environmental protection for the reporting period.

Samruk-Energy JSC's principles and rules in the field of environmental protection cover all activities and concern everyone in the Company, including employees, suppliers of goods and services, and contractors with whom we cooperate.

Every year, a Production Program is developed, which defines annual strategic goals. These include improving the quality management system, strengthening anti-corruption initiatives, raising environmental standards, improving working conditions and safety, and optimizing energy management. The objectives for each business unit are supported by specific, measurable metrics accompanied by clear plans or standards. Activities are focused on achieving these KPIs, and their fulfillment is regularly analyzed by the Corporate Management System Manager every quarter.

As part of our strategy to ensure comprehensive operational and environmental safety, we have developed an Environmental Management System (EMS). The EMS is regularly assessed for compliance with global standards by independent international experts and is continuously improved. As part of the EMS, we have developed an Environmental Emergency Response Manual that defines procedures, response measures, and the organization of on-site emergency response teams, which is updated after disasters and improved in line with current and effective practices.



In 2023, an internal audit was successfully implemented in accordance with the Corporate Management System Program, achieving the set objectives. The audit was conducted through interviews, document analysis and observation of management activities. The purpose of the audit was to verify the compliance of the corporate management system with the international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, and ISO 37001. It should be noted that these international standards apply to it should be noted that these international standards apply to Ekibastuz GRES-1 named after B. Nurzhanov LLP, Ekibastuz GRES-2 Station JSC, Almaty Power Plants JSC, Moynak HPP JSC, Samruk Green Energy LLP, Alatau Zharyk Company JSC, AlmatyEnergoSbyt LLP, Shardara HPP JSC, First Wind Power Plant LLP, and the corporate center of Samruk-Energy JSC ensuring uniform high standards of quality, environmental safety, health and energy efficiency throughout the organizational structure.

In addition, we performed an external audit based on international standards, legislative requirements of the Republic of Kazakhstan, internal documentation of the organization and certification procedures of MS Certification Pvt. Ltd. During the audit, measures for compliance with mandatory legislative requirements were identified (e.g., Report on execution of the action plan on key risk management for the second quarter of 2023 dated 26.09.2023), environmental aspects, potential hazardous factors and risks of the Group of companies of Samruk-Energy JSC were documented.

A significant achievement was the test launch of the automated emission monitoring system (AMS) at the site of EGRES-2 JSC on March 17, 2023, carried out in accordance with the environmental regulations of the Republic of Kazakhstan.

In 2023, all planned environmental protection measures were carried out, including measures to protect air, water and land resources, flora and fauna, as well as measures to conserve biodiversity.

In addition, low-emission vortex pulverized coal burners were successfully introduced at GRES-1, which made it possible to optimize the combustion process and reduce emissions. This achievement was strengthened by obtaining a positive opinion on the developed design and estimate documentation.

In 2023, projects were launched to construct new combined cycle gas turbine units at CHPP-2 and CHPP-3 in Almaty to replace outdated pulverized coal equipment with modern, environmentally friendly combined cycle gas turbine units. The project "Modernization of Almaty CHPP-2 with minimization of environmental impact" provides for the mothballing of current capacities of CHPP-2 after commissioning of a new gas-fired plant. The project "Reconstruction of Almaty CHPP-3 (with construction of SGP with a capacity of at least 450 MW)" provides for the replacement of existing equipment with modern combined cycle power units, thus ensuring full depreciation of the fleet of obsolete equipment and minimizing environmental impact.



Environmental protection costs

We, recognizing our responsibility to protect the environment for current and future generations, are actively targeting significant investments in environmental initiatives to minimize the impact of our operations and subsidiaries.

In 2023, we significantly increased our current spending on environmental protection measures by investing KZT 24.4 billion, a 244% increase over the previous year's investment level. This jump emphasizes the company's increased focus on environmental issues and its commitment to improving the environmental safety of its operations.

Actual investments of Samruk-Energy JSC in environmental protection measures, KZT billion

Indicator	2021	2022	2023	Δ 2023/2022, %
Current expenditures on environmental protection measures	9.1	7.1	24.4	244%

Compliance with environmental legislation and environmental reporting

The Environmental Code of the Republic of Kazakhstan classifies the main production activities of Samruk-Energy JSC subsidiaries and affiliates as special use of natural resources subject to strict environmental standards and regulations. Each subsidiary and affiliates of Samruk-Energy JSC is responsible for its impact on the environment, acting in accordance with issued environmental permits and requirements of special nature use.

We strive to meet all established environmental standards and expectations of stakeholders' interests. To this end, we systematically conduct an environmental impact assessment (EIA) before we start implementing new projects and commissioning facilities. As part of this process, an information campaign is organized to disclose information on proposed activities and their potential impact on the natural environment, which helps to gather and incorporate the views of all stakeholders.

We were among the initiators of the amendments to the Environmental Code of the Republic of Kazakhstan, expecting that these changes will contribute to the improvement of both environmental conditions and financial and economic indicators.

During the implementation of preventive inspections on environmental legislation in 2023, the authorized body for environmental protection identified a number of violations:

- The fact of dusting of ash beaches of the ash dump on the area of 1 hectare at Ekibastuz GRES-1 LLP was established, when the volume of inorganic dust emissions with the content of SiO₂ (silicon dioxide) 70-20% was 0.655 tons;
- Violation of the project documentation of the permit for technological operations on extraction of microsphere from ash and slag waste in 2022 at Ekibastuz GRES-1 LLP, in addition, extraction of microsphere was carried out without assessment of possible environmental impacts.

Emissions of pollutants

Management approach

GRI 3-3, GRI 12: Coal Sector: 12.1.1

We are committed to reducing atmospheric emissions and systematically implement a number of measures aimed at actively reducing the level of pollutants.

Our main focus is on reducing the level of atmospheric pollution in the area of environmental protection, given that the activities of enterprises such as EGRES-1 LLP, EGRES-2 JSC, fossil fuel-based APP JSC and mining company Bogatyr-Komir LLP result in significant emissions into the atmosphere.

We continuously monitor compliance with the maximum permitted emissions standards, with mandatory periodic reporting to regulatory authorities. Air quality monitoring is conducted on a regular basis to ensure compliance with all established environmental standards, as part of a specially developed Industrial Environmental Control Program for each enterprise.

In addition, real technical and environmental performance is thoroughly analyzed on a quarterly basis against established standards and data for similar periods in previous years. Information on cases when environmental risks are realized is provided to the heads of energy facilities and senior management.

Emissions into the atmospheric air are strictly regulated by the environmental legislation of the Republic of Kazakhstan. Emissions of pollutants are produced in volumes determined by production processes and in accordance with developed projects and standards agreed with authorized state bodies and regulated in special permit documents.

Monitoring of emissions to the environment includes observation of emissions at the source to track production losses, quantity and quality of emissions, and their changes. Based on monitoring data, emissions of key pollutants are analyzed in accordance with approved calculation procedures within the framework of national environmental standards:

We also paid over

8.5

KZT billion
in regulatory emission fees (tax)





- Methodology for determining air pollutant emissions from thermal power plants and boiler houses;
- Methodology for calculating air pollutant emissions from cement production facilities;
- Methodology for calculating air pollutant emissions from Category 4 facilities;
- Methodology for calculation of emission standards from non-organized sources and other national methodologies

EGRES-1 LLP, EGRES-2 JSC, APP JSC and Bogatyr-Komir LLP measure emission levels of harmful substances in flue gases, including nitrogen oxides, sulphur dioxide, carbon oxide and dust particles. These measurements are performed in accordance with the approved Production Monitoring Schedule and are carried out by specialized accredited laboratories. Specialized software is used to calculate the volume of emissions coming from the main equipment and entering the atmosphere through flue gases. Based on these data, the "Report on air protection" (Form No 2-TP (air)) is formed, the frequency of submission of which is regulated by the relevant order of the RK Agency for Statistics.

In addition, in order to minimize atmospheric emissions, we regularly check the efficiency of equipment operation and, if necessary, take appropriate measures and introduce new technological solutions. At the enterprises of EGRES-1 LLP, EGRES-2 JSC, APP JSC and Bogatyr-Komir LLP, as part of production control, constant supervision of technical and technological characteristics of equipment affecting the level of emissions, effluents and waste is carried out.

In planning new stations, we aim to take into account key factors that help to reduce our impact on the atmosphere. When selecting a site for the nationally significant Ekibastuz stations, particular attention has been paid to locating them close to fuel sources, thereby reducing the environmental risks associated with coal transportation. Also, a certain height of chimneys contributes to a more efficient distribution of emissions, taking into account local topography, wind direction and distance to settlements.

Indicators for 2023

GRI 305-7, GRI 12: Coal Sector: 12.4.2

The list of 50 largest facilities of the I category in terms of total atmospheric emissions includes EGRES-1 LLP, EGRES-2 JSC and APP JSC (CHPP-2 and CHPP-3).

The main sources of pollutant emissions in the Company are boiler units, oil and fuel oil farms, ash dumps, as well as other sources of pollutant emissions located on the territory of fuel stations and boiler houses (EGRES-1 LLP, EGRES-2 JSC, APP JSC, and Bogatyr-Komir LLP), the main pollutants characteristic for EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, which are formed during fuel combustion, are nitrogen oxides, sulphur dioxide, fuel oil ash, ash/dust, carbon oxide, and volatile organic compounds.

In 2023, air emissions of the Group of companies of Samruk-Energy JSC did not exceed the established maximum permissible values and amounted to

354,922.3
tons

In accordance with the requirements for the use of natural resources established in the environmental emission permits, EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr Komir LLP, Shardara HPP JSC and Moynak HPP JSC have developed and approved with environmental regulators a nature protection action plan (hereinafter referred to as the Plan), the implementation of which is strictly mandatory.

The Plan's budget for 2023 was set at KZT 11.398 billion, but KZT 24.434 billion was utilized during the year. Of these funds, KZT 1.6 billion was spent on the repair and modernization of dust and gas cleaning systems aimed at reducing pollutant emissions.

The following activities were carried out under the core initiatives:

- Overhaul of burners of boiler units;
- Overhaul of burners of boiler units;
- Rehabilitation of fuel supply aspiration systems;
- Electric filters were repaired to improve air cleaning quality;
- Renovation of hydraulic ash removal system;
- Repair works on dust and gas cleaning units;
- Introduction of an advanced automatic emission control system;
- Efficient waste utilization;
- Maintenance and adjustment of equipment to meet established operating standards;
- Optimization of overburden management, including its placement in temporary internal dumps, which reduced volumes in external dumps by 54,455,719 tons;
- Inventory of greenhouse gas emissions for accurate accounting and control was conducted.



Dynamics of specific air emissions per unit of production, g/kWh

2021	2022	2023	Δ 2023/2022, %
9.7	9.5	9.5	0.6

In 2023, the KPI for the Company, an indicator of environmental friendliness of electricity generation measured by the volume of CO/Sox/Nox/solids emissions per kilowatt-hour, was set with a target value of 10.1 g/kWh. As a result, the specific emission of pollutants throughout the Group of companies of Samruk-Energy JSC amounted to 9.537 g/kWh for 2023, which shows a slight increase of 0.63% compared to the previous year.

Status of implementation of plans for 2023:

Several measures are envisaged to reduce environmental impact:

- Ensuring a high degree of flue gas purification from ash (SiO2 content 70-20%) by repairing electrostatic precipitators;
- Development of design and estimate documentation for reconstruction of burner devices aimed at reducing nitrogen oxide emissions;
- Repair of aspiration units used for fuel supply;
- Repair of dust collection systems on drilling rigs.

Plans for 2024 and the medium term

As part of our commitment to comply with the RK environmental legislation and transition to BAT, we are actively studying advanced flue gas cleaning methods at EGRES-1 LLP, EGRES-2 JSC, APP JSC, especially with regard to ash, dust, nitrogen oxides (Nox) and

sulphur oxides (Sox) removal. Final costs of BAT implementation will be determined after a comprehensive analysis of available technological solutions.

In order to supervise processes and minimize accidental emissions, we are implementing stage-by-stage deployment of automated environmental monitoring systems at EGRES-1 (Units 7 and 8), SEGRES-2, as well as at APP (CHPP-1, CHPP-2, WEC), which ensures the redirection of collected data to the information system of the body responsible for environmental control.

In parallel, together with the Kazakhstan Electricity Association ALE, the work was done to initiate changes in the country's environmental legislation, proposing to postpone the timing of BAT implementation from 2025 to 2031 for energy companies. This will allow for a more thorough and qualitative selection of technologies.

There is also a proposal to modify the mechanism for financing measures to eliminate environmental impact, which will make it possible to allocate resources more effectively to modernize production to minimize its impact on nature.

At the moment, the relevant state body is working on the introduction of these changes to the legislation, with the purpose being to postpone the implementation of BAT.



Responsible water use

Management approach

GRI 303-1, 3-3, GRI 12: Coal Sector: 12.7.1, 12.7.2, 12.7.6

We strictly adhere to the norms of the Water Code of the Republic of Kazakhstan by abstracting water on the basis of permit documentation. This emphasizes our commitment to legal compliance and demonstrates our responsible use of water resources, including our obligation to reduce, reuse or recycle wastewater and fresh water. These practices ensure sustainable and efficient water management that serves the environment and society.

Although our subsidiaries, including EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC and Alatau Zharyk Company JSC, do not exploit water resources in water scarce regions, we focus on sustainable water use management. Our approach includes assessing the risks associated with water use and implementing strategies to minimize the consumption of clean water, as well as providing effective treatment of wastewater and fresh water to ensure its safe return to the natural environment.

Water resources management in the Company complies with the provisions of the Water Code of the Republic of Kazakhstan and is based on water use permits, guaranteeing careful protection of water resources.

Within the framework of the Corporate Management System Policy and the Corporate Environmental Standard, we have adopted commitments and principles of water management, emphasizing the following aspects:

- Responsible water use and maintaining a sustainable water balance;
- Careful assessment and consideration of all source points of water intake, irrespective of direct water intake or its purchase through intermediaries;
- Continuous improvement and adaptation of company strategies and actions to optimize the use of water resources;
- Prioritizing the minimum use of potable water for production purposes;
- Annual audits of water and wastewater metering devices, verifying their availability, functionality, and timely calibration and sealing by regulatory authorities;

- Exclusion of the company's operations in water-stressed regions, emphasizing environmental responsibility.

Structure and management tools

We actively cooperate with local communities and authorities to ensure access to quality drinking water. Our openness to dialog allows us to carefully consider citizens' requests related to the impact of our operations on local water resources.

The main sources of water resources for the Company are the Bestiubinskoye Reservoir (Moynak HPP), the Shardara Reservoir (Shardara HPP), the K. K. Kovalev Canal, and the K. K. Kovalev Canal. K. Satpayev Canal (Bulat Nurzhanov EGRES-1 LLP, EGRES-2 JSC), Shidertinsky Canal (EGRES-2 JSC), Big Almaty Lake and the basin of the Bolshaya Almatinka River (Cascade HPP), Kapshagay Reservoir (Kapshagay HPP).

EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC and Alatau Zharyk Company JSC abstract water in the volumes required for their production processes, while strictly complying with design and regulatory requirements approved by the regulatory authorities. These units are also actively working to develop Sustainable Water Management Plans, which include measures to reduce freshwater consumption, effectively treat and discharge wastewater, minimize water losses during transportation, and improve wastewater reuse systems.

During 2023, we effectively reduced the volume of ash and slag waste, resulting in a 2% reduction in water consumption for its transportation and a corresponding reduction in wastewater. As part of our water conservation strategy, we actively utilized closed-loop water supply systems, including storage reservoir coolers and straight-through ash removal systems at the Ekibastuz power stations. The Almaty power plants also utilized cooling tower systems and the reuse of water from ash dumps to improve water efficiency and protect the environment.

Share and total volume of reusable and recycled water, megaliters

Indicator	2021	2022	2023	Δ 2023/2022, %
Volume of reusable or recycled and recycled water	3,552,379	3,534,516	3,499,210	-1.0
Share of reusable and recycled water	17.8%	15.7%	14.8%	-5.7

In 2023, the volume of water withdrawal per unit of output amounted to 0.667 m³/kWh, which is 6.7% more than in the previous year. This indicates the increased water intensity of the enterprise's production processes in the reporting period.

Water efficiency of production, m³/kWh

Indicators	2021	2022	2023	Δ 2023/2022, %
Volume of water withdrawal per unit of output product	0.259	0.625	0.667	6.7%

At EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC and Alatau Zharyk Company JSC, the quality of surface and ground water, as well as water supply and wastewater sources, is regularly monitored. In the context of environmental surveillance, accredited specialized laboratories perform detailed analyses to detect the presence of pollutants in wastewater and water resources, thus maintaining a high standard of environmental safety and sustainability. From the analytical data obtained from these studies, a vast pool of information is generated that provides an in-depth understanding of the impact of our activities on aquatic ecosystems in terms of volume, nature and extent. Based on this information, a comprehensive corrective action plan is built to optimize water resource management aimed at minimizing the environmental footprint of our operations.

GRI 303-2, GRI 12: Coal Sector: 12.7.3

We strictly adhere to high standards of wastewater management that aim to minimize negative impacts on water areas. We also strive not to exceed effluent limits and comply with regulations governing impacts on aquatic systems, thus ensuring that our presence does not harm the biodiversity of aquatic ecosystems and their natural habitats.

In 2023, we carried out thorough water quality control using certified specialized laboratories, following the Production Environmental Monitoring Program. The analysis included assessment of the chemical composition and quality of surface, underground and wastewater. During the reporting pe-

riod, no violations of the established limits on the content of pollutants in wastewater were detected at the facilities of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC and Alatau Zharyk Company JSC.

Water discharge to river systems and accumulation ponds is from rainwater collected on industrial territories, as well as from domestic and clean technical waters that are not used in production processes. Discharge of industrial wastewater used for ash and slag materials transportation is directed exclusively to specialized ash dumps, excluding their discharge into natural water bodies.

All wastewaters, except for those used for hydraulic transportation of ash and slag materials, are thoroughly treated until they reach the norms established by sanitary and hygienic standards, in accordance with the procedures defined in the Methodology for determining the norms of emissions into the environment. Legislatively regulated pollutant concentration limits and wastewater volume are based on design data on maximum permitted discharges and results of sanitary-epidemiological and environmental assessment.

GRI 303-4, GRI 12: Coal Sector: 12.7.5

In the process of production and economic activities of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC, Alatau Zharyk Company JSC, two categories of wastewater are formed:



- The main part (over 99% of the total volume of wastewater), represented by wastewater from the ash removal system and treated water, which is used for cooling of hydroelectric units, transformers and during operation of hydroelectric generators at the HPP;
- A small volume (less than 1% of the total volume) is domestic wastewater collected from administrative buildings, canteens and other offices.

Wastewater treatment is carried out using modern physical, chemical and biological technologies. Development of standards for maximum permitted discharges is based on the methodology approved by the Order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan No 63 dated March 10, 2021. The quality of treated wastewater is reliably supervised by a certified laboratory, guaranteeing a high level of treatment and compliance with environmental standards.

Domestic wastewater is thoroughly treated at the biological treatment plant "Stok", which has two parallel treatment lines — main and backup, each with a design capacity of 15 m³ per day. The treatment system includes a biological treatment unit, a device for additional filtration of wastewater and a unit for its disinfection, ensuring a high level of purification before returning the water to natural water bodies.

Surface water quality is assessed on the basis of two categories of indicators: general and specific. Gener-

al indicators reflect the general condition of water, including salinity, pH, hardness, etc. Special indicators in turn include chemical oxygen demand (COD), biochemical oxygen demand (BOD), petroleum product content, ammonium salts, nitrates, nitrites, phosphates, surfactants, total iron, fluorides, suspended solids and copper.

In the reporting period, no cases of exceeding maximum permissible concentrations of pollutants in domestic wastewater discharges were recorded in EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC, and Alatau Zharyk Company JSC.

GRI 303-3, 303-5 GRI 12: Coal Sector: 12.7.4, 12.7.6

In 2023, 23,414,106 megaliters of wastewater were discharged to EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, Moynak HPP JSC, Shardara HPP JSC and Alatau Zharyk Company JSC to meet production and drinking needs. At the same time, 99% of the water intake volume is used to power hydroelectric generators to produce electricity. We noted an increase in the volume of water withdrawal by 4.7%, reaching 23,568,982 megaliters.

In 2023, design and estimate documentation was developed for the construction of a clarified water return pumping station at EGRES-2. The main purpose of this measure is to ensure efficient reuse of treated water in technological processes and for equipment cooling.

The process of data collection for monitoring the Company's water consumption and withdrawal is carried out as follows:

Enterprise	Data collection process
Samruk-Energy JSC	Annually, according to the reporting form, as well as in case of need for information on water use, a request is made to SACs.
APP JSC	Daily data collection on water intake/consumption is carried out by requesting data by e-mail on the amount of transferred make-up water to Heat Networks LLP, water consumption from Almaty and Talgar water intakes for the needs of CHPP-1 and CHPP-2, as well as water releases in accordance with BABI instructions by faxogram for Kapshagay HPP and Cascade HPP. All data are displayed in the daily report — Daily report by stations of APP JSC. Monthly reporting data collection is carried out using e-mail with provision of water withdrawal/consumption/withdrawal balance from each MD.
EGRES-1 LLP and EGRES-2 JSC	Detailed accounting of water consumption is maintained through an automated system, which includes daily tracking of the volume of water withdrawn from the Kanysh Satpayev Canal for domestic and drinking needs, as well as water provided to secondary users, used in ash removal systems and for other auxiliary purposes, including for production and firefighting needs. Data are collected and analyzed by entering information into an Excel spreadsheet and keeping a log of primary water accounting, which ensures accuracy and transparency of water resources monitoring.
Moynak HPP JSC and Shardara HPP JSC	The use of water through the power plant turbines is subject to continuous monitoring and recording by the plant's operational staff on a 24-hour basis. Water consumption for domestic and potable purposes is monitored by the operator of the main pump intake.
Bogatyr-Komir LLP	On a monthly basis, in accordance with the approved energy facilities maintenance procedures, specialists responsible for water meters transmit data from these devices for verification and drawing up an official statement of readings in cooperation with the State Enterprise "Gorvodokanal". Archived data on wastewater discharges recorded by meters installed at key facilities are printed monthly in accordance with the terms of the contract with the service company. To monitor the turnover of water resources, including consumption, abstraction and discharge of drainage water, data from water meters are recorded every day and entered a special logbook according to the annex to the rules of primary registration of water use.

Plans for 2024 and the medium term

As part of the Industrial Environmental Control Program for 2024, the Company's enterprises will conduct industrial control with the involvement of specialized laboratories that have licenses and accreditation certificates for certain types of work. The purpose of the control is to determine the overall impact of power plant operations on the condition of surface water in the area where production facilities are located.

The following types of observations are planned to monitor the condition of water resources in the area of the enterprise's influence:

- Control over water quality in the Satpayev Canal and Zhengeldy Reservoir;

- Control over quantitative and qualitative composition of water from the cooling system of turbine condensers and water for transportation of ash and slag waste to the ash dump;
- The schedule of monitoring of impact on water bodies presented in the program provides for observations once a month. Groundwater quality is monitored through a network of observation wells, which are located in the direction of groundwater flow. The wells are equipped with metal casing and have serial numbers.

Monitoring of water resources condition is carried out in accordance with the approved monitoring schedule developed by the Department of Environmental Protection.





Waste Management

Management approach

GRI 3-3, 306-1, 306-2, GRI 12: Coal Sector: 12.6.1, 12.6.2, 12.6.3

We strive to use resources efficiently by actively working to reduce waste generation and minimize its impact on the environment in all aspects of our operations, from power generation to facility operations. We systematically undertake analytical work to identify the causes of waste and develop strategies to effectively reduce it.

The waste management process, including waste generation, consumption, data collection and analysis, is organized in strict accordance with established standards and procedures. These covers:

- Corporate standard on environmental management;
- Waste management programs;
- Waste management action plan.

Waste management includes accurate accounting of its mass and turnover, which is tracked in special registration logs. Waste volumes are recorded in tons, ensuring strict control over their storage, timely disposal and recycling. We strictly adhere to all waste management legislation and procedures, ensuring that waste is disposed of and recycled safely and responsibly.

Facilities also closely supervise the actions of waste management contractors. Procurement procedures carefully check that candidates have the appropriate licenses to handle each type of waste and that their logistics are adequate for proper waste management. Contractors are required to sign contracts confirming their commitment to comply with environmental regulations and legislation of the Republic of Kazakhstan. Environmental services at the enterprises regularly inspect contractor activities to ensure compliance with waste management standards.

We maintain active interaction with stakeholders, giving everyone an opportunity to express their environmental concerns through specialized feedback channels of Samruk-Energy JSC. All incoming applications are formally recorded and subject to detailed consideration.

At the enterprises of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, all types of wastes were accurately identified and classified through a thorough inventory process of their sources. Specific accumulation methods have been developed for each type of waste, taking into account their hazard class, toxicity, physical state, solubility, volatility and other characteristics affecting the environment. In accordance with the classification established by the authorized body in the field of ecology, wastes at these enterprises are divided into hazardous and non-hazardous, thus ensuring their effective and safe management.

Hazardous waste such as batteries, mercury-containing lamps and waste oil require specialized disposal due to their harmful nature. Non-hazardous waste, including stationery and food waste, is separately collected and recycled.

Depending on the category of waste, separate collection and accumulation methods are organized. For this purpose, specialized collection points and temporary storage areas have been set up, equipped with containers and metal tanks with clear markings for identification. Criteria have been established for waste that should not be buried in landfills, and the types of materials suitable for reuse or recycling into secondary raw materials have been identified, with the possibility of their further transfer to legal entities and individuals.

Bogatyr Komir LLP is actively working to reduce its impact on the surrounding area by reducing the amount of overburden buried on external dumps. As part of this initiative, the Company is developing plans to adapt the mined-out areas of the Severny and Bogatyr open pits for use as internal dumps. In addition, to prevent oxidation and spontaneous combustion of carbon-containing rocks, they are being isolated with inert materials and the surface layer of the dumps is being compacted.

Development of HPPs and RES facilities in Samruk-Energy JSC contributes to the reduction of ash and slag waste per unit of output.



Indicators for 2023

The enterprises regularly organize collection of used batteries containing toxic substances such as lead, cadmium, mercury, nickel, zinc and alkalis, which can be harmful to human health and the environment. To prevent contamination of soil and water resources, used batteries are sent for specialized recycling, preventing them from ending up in municipal landfills with ordinary household waste. In the period from 2020 to 2023, 191 kg of used batteries were collected and transferred for recycling.

In the process of production activity of EGRES-1 LLP, EGRES-2 JSC, APP JSC, Bogatyr-Komir LLP, no radioactive waste is generated. Regular radiation monitoring is carried out on the territories of these enterprises and in the protective zones adjacent to them every quarter. Monitoring results show that radiation levels remain within the safe standard of 2.5 m³ per hour, confirming the effectiveness of existing radiation safety measures.

GRI 306-3, GRI 12: Coal Sector: 12.6.4

In 2023, we generated 98,496,096 tons of production waste. These data correspond to the waste classification established by the authorized body in the field of environmental protection, where waste is divided into hazardous and non-hazardous categories.

The main types of waste characteristic of this production are overburden and ash and slag waste. Comparative analysis shows that in 2023 there was an increase in the volume of waste generation by 9.5% compared to the previous year. This growth is due to the increase in the volume of steam coal production and increase of waste rock content in the developed seam of Bogatyr-Komir LLP.

In particular, there is a significant increase in ash and slag waste generation, which amounted to 24.2%. This is due to the increase in specific consumption of fuel equivalent at thermal power plants GRES-1 and GRES-2. At the first station the consumption increased from 344.2 g/kWh to 347.1 g/kWh, and at the second station — from 366.3 g/kWh to 381.3 g/kWh. These changes reflect the growing challenges in waste management and emphasize the need to adopt more efficient technologies to reduce the environmental impact of production activities.



Total waste volume of Samruk-Energy JSC enterprises, tons

Indicator	2021	2022	2023	Δ 2023/2022, %
Total waste generated, of which	88,839,712.0	89,929,927	98,496,096	9.5
Hazardous	5,586,889.2	647	1,732	169
Non-hazardous	83,252,822.0	89,928,281	98,496,364	9.5
Of these, for the main types of waste, characteristic of the specifics of production	87,472,541.0	89,912,724.9	98,474,212.4	9.5
ash and slag waste	7,226,582.0	7,129,158.2	8,853,230.0	24.2
Overburden	80,245,959.0	82,783,566.7	89,620,982.3	8.3

Plans for 2024 and the medium term

In 2024, we plan to prevent pollution of natural environment components. Accumulation and disposal of waste will be carried out in accordance with international standards and current regulations of the Republic of Kazakhstan, as well as the Company's internal standards. We will ensure that waste does not have a harmful impact on the environment and the health of employees.

As part of the implementation of the concept on transition of the Republic of Kazakhstan to 'Green Econ-

omy' we will transfer ash and slag wastes for road construction and use as construction material to individuals and legal entities in full volume.

We have devised the Action Plan for implementation of the waste management program for 2024. The main activities of the Plan include transfer of generated hazardous and non-hazardous waste to third-party organizations for further utilization and carrying out works on development of ash and slag materials with dust suppression at sections.

Biodiversity conservation

Management approach

GRI 3-3, 304-1, GRI 12: Coal Sector: 12.5.1, 12.5.2

We are deeply aware of our responsibility to conserve biodiversity and are committed to avoiding any activities in regions of high biodiversity value. We aim not only for 'zero net loss' but also to achieve 'positive net impact' on biodiversity in all our operations. This includes the construction of new facilities, the modernization and operation of existing facilities, and their subsequent dismantling.

We have implemented a Corporate Environmental Management Standard, which is the basis for our commitment to implementing measures to protect nature. This standard aims to prevent or minimize the impact of our operations on biodiversity and includes strategies to conserve nature, manage environmental risks and aspects affecting biodiversity.

As part of our conservation strategy, we have identified key areas of focus to maintain and protect biodiversity:

- Active introduction of advanced technologies that significantly reduce the environmental impact of production;
- Development and implementation of specialized programs aimed at protecting and preserving biodiversity on lands adjacent to production zones;
- Regular monitoring of the environment to promptly identify and eliminate potential threats to ecosystems.

Indicators for 2023

We are committed to avoiding activities in protected areas and do not own facilities in these areas. We do not own or lease work sites and adjacent territories located in protected areas or areas of high biodiversity outside protected areas. In addition, we strictly comply with all requirements of the environmental legislation of the Republic of Kazakhstan to ensure compliance with environmental regulations.

In all aspects of our operations, from power generation to decommissioning, we actively work to protect and enhance natural ecosystems.

In this context, wildlife conservation projects are implemented, cooperation is established with scientific and research institutes, as well as with governmental bodies. One example of subsidiaries and affiliates interaction with international environmental organizations is Moynak HPP JSC, which cooperates with UNDP experts in Kazakhstan on a project to preserve a relic ash grove located downstream of the Charyn River. In addition, we strictly comply with all established internal regulatory standards aimed at protecting and maintaining biodiversity both within and outside the Company's operations.

In accordance with the requirements of the environmental legislation of the Republic of Kazakhstan, when expanding or modernizing production activities, the Company analyzes the possible impact on the ecological system, as well as the biological diversity of the region where our production facilities are located. In order to ensure public participation in management decision-making, the Company organizes public hearings to provide access to project materials for all interested parties.

For example, in 2023, during the development of working design documentation for the construction of power units 3 and 4 of EGRES-2 JSC, public hearings were held, following the results of which a protocol was signed without public comments.

Based on the results of continuous environmental monitoring, it was established that no significant direct or indirect effects of subsidiaries and affiliates activities on vulnerable ecosystems and biodiversity were observed during the reporting period.

Investments in biodiversity conservation, KZT million

2021	2022	2023	Δ 2023/2022, %
0.095	0.058	0.115	98.3

GRI 304-4, GRI 12: Coal Sector: 12.5.5

According to the Final Report of the zoological survey, dated 07.10.2013, at the site of the proposed construction of a 45 MW wind power plant near the town of Ereimentau (FWPP LLP), two bird species listed in the Red Book of Kazakhstan were recorded in the mountainous area of Ereimentau: Imperial Eagle and Steppe Eagle. Bird groups were recorded in valleys and plantations along roads and railroad tracks, at a distance from the planned wind turbines. The assessment showed that the risk of collision of these birds and other birds with wind turbines is negligible. No incidents of collisions of migratory birds with wind turbines have been recorded during the period of operation of the wind farm, as evidenced by entries in a specialized logbook.

Our key production facilities are located in the Pavlodar and Almaty regions, which are characterized by intensive industrial development and associated high levels of anthropogenic impact on the environment. These facilities are located in areas designated for industrial use, which are not inhabited by flora and fauna species listed in the Red Book or endangered species. The environmental footprint of our operations is minimized and continuously monitored to ensure minimal impact on the natural environment.

GRI 304-2, 304-3, GRI 12: Coal Sector: 12.5.3, 12.5.4

We actively care about the preservation of biodiversity, guaranteeing the protection of flora and fauna within the framework of our activities. The implementation of targeted programs and initiatives confirms our contribution to the UN Sustainable Development Goals 14 and 15. This reflects our commitment to harmony with nature and responsible business conduct, supported by concrete actions to protect the environment and maintain its biodiversity.

In 2023, the Company's subsidiaries and affiliates invested KZT 115 thousand for the improvement and landscaping of the sanitary protection zone, which is 98.3% higher than the previous year's investment.



In an effort to reduce risks to fish populations, our Company's hydroelectric power plants are equipped with specialized fish protection systems on hydro turbines. In accordance with scientific recommendations from the Kazakh Research Institute of Fisheries, we take additional measures to protect spawning fish. One such initiative is the illumination of the water surface with spotlights at night at water intakes in front of turbine conduits, which effectively repels fish and minimizes their entry into turbine devices, contributing to the conservation of fish resources in the river ecosystem.

To reduce the risk of death to birds, which often use overhead power line poles as resting places, we are implementing a project to reconstruct these poles by equipping them with insulated wires. This reduces the likelihood of electrical contact injuries to birds, helping to maintain their populations and ensuring their safety in areas where power lines are installed.

To minimize the impact on aquatic and terrestrial ecosystems, the operating regimes of hydropower plants are coordinated with the Ministry of Water Resources, local authorities, and the management of specially protected natural areas, especially in the context of the Moynak HPP. Also, the regulation of water flows for agriculture (irrigation) and water supply is carried out in close cooperation with the relevant authorized bodies, balancing the interests of all parties and protecting natural ecosystems.

At the pre-project and project preparation stages of wind turbines, special attention is paid to reducing their impact on the natural environment. In particular, in order to reduce light pollution, which may disturb the natural biorhythms of flora and fauna, as well as to maintain and restore biodiversity, lighting on wind turbines is limited to a minimum, being used only in the form of necessary parking lights.

Land conservation

We are committed to a strong commitment to land reclamation that significantly reduces negative environmental impacts while maximizing environmental and social benefits. In order to ensure the sustainability of closure and rehabilitation of waste pits, we are committed to allocating significant resources to cover all costs associated with these processes.

A key aspect of post-closure reclamation of waste pits is community engagement, which not only increases the transparency of our actions, but also takes into account the interests and expectations of local communities. This collaboration fosters a deeper understanding of community needs and provides the basis for developing effective ecosystem restoration plans.

We pay particular attention to the development and implementation of measures aimed at reducing the impact of our activities on the natural environment. In this context, special attention is paid not only to restoring the ecological value of reclaimed areas, but also to supporting biodiversity and protecting unique ecosystems.

Elimination of ash dumps

In accordance with the Environmental Code, we have a legal obligation to eliminate ash dumps, which are specialized areas for disposal of waste generated in the course of our operations.

In 2023, the estimated value of the fund for ash dumps liquidation amounted to KZT 3,143.4 million, which is 26.6% higher than in the previous year. This increase is due to the higher cost of works and materials for reclamation.

Carrying amount of reserve for ash dumps liquidation, KZT million

2022	2023	Δ 2023/2022, %
2,482.0	3,143.4	26.6



The assessment of the current provision for ash disposal site remediation on our part is based on an interpretation of current environmental legislation of the Republic of Kazakhstan, which is supported by technical and economic arguments and engineering studies based on current standards and methodologies for reclamation and remediation works. This assessment assumes the possibility of adjustment in response to the results of future environmental studies and updates to current reclamation and remediation programs.

Plans for 2024 and the medium term

We are actively engaged in developing and implementing strategies aimed at improving the environmental situation and maintaining sustainable development. In this context, the following key actions are planned:

- Greening of the territory, increase of green areas;
- As part of industrial environmental control, regular laboratory tests are planned to monitor and assess the environmental impact of the Company's operations;
- Recultivation of spent areas of ash dumps is being designed, which includes their restoration and transformation into environmentally safe and functional zones.



Contribution to combating climate change

Management approach

GRI 3-3, GRI 12: Coal Sector: 12.2.1

We recognize our role in shaping the global carbon footprint and are committed to taking decisive measures to reduce both direct and indirect greenhouse gas emissions arising from energy production and use. These efforts to reduce the carbon intensity of production processes and products are synchronized with the developed Development Strategy and energy transition initiatives of Samruk-Energy JSC.

The Board of Directors of Samruk-Energy JSC is actively engaged in defining both short-term and long-term strategic goals, including in the field of climate policy, emphasizing our resolute approach to managing environmental initiatives and adapting to climate change. The Board of Directors approved the Energy Transition Program of Samruk-Energy JSC for 2022-2060 in accordance with the approved Development Strategy of Samruk-Energy JSC for 2022-2031.

The Energy Transition Program defines strategic guidelines for transition to efficient, resource-saving and environmentally friendly technologies aimed at achieving the goal of carbon neutrality by 2060. The objective of the Program is to gradually reduce the company's carbon footprint, and its provisions apply to all subsidiaries of Samruk-Energy. In modeling the scenarios, both external and internal factors affecting the successful fulfillment of the goal were considered, with special attention to socio-economic risks. In the context of global efforts to curb climate change and considering the challenges associated with traditional energy production, we intend to actively reduce our environmental impact while ensuring transformation into a technologically advanced and socially responsible Company by 2060.



Managing the Climate Agenda

GRI 201-2, GRI 12: Coal Sector: 12.2.2, TCFD. Governance | TCFD. Strategy | TCFD. Risk Management

Corporate climate governance

We pay considerable attention to climate risk management to provide reasonable assurance that our strategic objectives will be achieved in the face of adverse impacts. The Company makes a voluntary commitment to take action to reduce greenhouse gas emissions. The Chairman of the Board of Directors is directly responsible for control over strategic management of issues, sustainable development and achievement of the Company's strategic goals, including issues related to the reduction of Samruk-Energy JSC's carbon footprint.

In accordance with the Sustainable Development Guidelines of Samruk-Energy JSC, issues related to climate change are referred to the area of sustainable development and environmental issues.

Samruk-Energy JSC pays considerable attention to climate risk management issues to provide a reasonable guarantee of achieving strategic goals in the conditions of negative impact factors.

The Board of Directors is responsible for setting both short-term and long-term goals, including in the field of climate.

The Board of Directors approved the Energy Transition Program of Samruk-Energy JSC for the period from 2022 to 2060. The long-term goal of this Program is to achieve carbon neutrality by 2060. This objective aligns with the Republic of Kazakhstan's declared goal of achieving carbon neutrality by 2060.

In accordance with the Risk Management Policy of Samruk-Energy JSC, the Board of Directors is the first level in the process of overseeing the corporate risk management system, which includes climate risks defined as strategic risks of the Company.

The Board of Directors annually approves the levels of responsibility for monitoring and controlling risks of Samruk-Energy JSC, the Register and Risk Map, which includes climate risks, as well as key risk indicators (KRIs) and the Key Risk Management Action Plan.

In addition, the competence of the Board of Directors includes the approval of the risk appetite of Samruk-Energy JSC at the consolidated level. The risk report is submitted to the Audit Committee under the Board of Directors on a quarterly basis.

The Chairman of the Board of Directors is directly responsible for control over the strategic management of issues, sustainable development, and the achievement of the Company's strategic goals, including issues related to the reduction of Samruk-Energy JSC's carbon footprint.

Climate change risk assessment is considered when forming the conditions used to develop the strategy of Samruk-Energy JSC, assessing investment projects and formulating short- and medium-term plans.

Considering that climate change issues are one of the components of environmental protection, to facilitate the in-depth consideration of labor protection, industrial safety and environmental protection issues, Samruk-Energy JSC has a Labor Protection, Industrial Safety and Environmental Protection Committee acting under the control of the Board of Directors. The Committee discusses sustainable development issues related to labor safety and health, as well as environmental protection. In addition, it makes recommendations to the Board on policies and procedures to ensure health and safety, environmental protection and climate change issues are addressed in the context of the environment and sustainable development.

Management of the current activity of Samruk-Energy JSC is carried out by a collegial executive body in the form of the Management Board, which cooperates with the Board of Directors and interacts with all stakeholders. The Management Board ensures compliance with Samruk-Energy JSC activities, development strategy, development plan and decisions made by the Sole Shareholder and the Governing Body.

The Chairman of the Management Board, who is also a member of the Board of Directors, is responsible for implementing the established strategic goals and monitoring progress towards achieving them, including climate goals.



The duties of the Chairman of the Management Board related to climate issues include coordinating annual budgets for activities aimed at reducing damage, managing large-scale capital and operational investments supporting low-carbon products and services (including research and development). The duties of the Chairman of the Management Board of Samruk-Energy JSC also include control over the purchase, merger and sale operations that consider climate factors that coincide with the risk map of Samruk-Energy JSC. Climate-related issues are considered when revising the strategy and plans of Samruk-Energy JSC in the context of their compliance with the strategic goals of the Company.

In order to ensure strategic planning, Samruk-Energy JSC has a working group for the development and implementation of the energy transition plan of Samruk-Energy JSC. The Working Group for Development and Implementation of the Energy Transition Plan is a collegial body, which includes employees from all structural subdivisions for comprehensive consideration and management of energy transition issues. The head of the working group is the Chairman of the Management Board of Samruk-Energy JSC.

[More about the corporate governance structure of Samruk-Energy JSC can be found on page 244 of the report](#)

Strategy

Given the dynamically changing regulatory requirements and international standards, we are committed to openness and transparency in our operations. We recognize the importance of climate risks, which, among other risks, are becoming increasingly important as we build competence in climate change issues.

We are constantly working to improve the processes of managing, identifying and assessing climate risks that may affect the Company's operations.

Three development scenarios were adopted and applied for the purpose of informing the development of a strategy for achieving the goals set to reduce the net carbon footprint of Samruk-Energy JSC by 2060.

- **Business as usual** — development scenario in the absence of significant technological changes or policy measures aimed at achieving carbon neutrality, considered as a benchmark for comparing the results of scenarios;

- **Deep decarbonization** — the scenario assumes active development of RES and alternative energy with gradual conservation of power units of coal-fired plants while considering the end of their service life. Commissioning of new capacities implies development of alternative reliable energy sources, as well as the study and development of carbon capture and storage technologies at existing coal-fired plants and implementation of a forest-climatic project to compensate for CO₂ emissions;
- **Change of business structure** — provides for the reorganization of Samruk-Energy JSC's assets by creating a subsidiary organization combining the "green" assets of the Group of companies of Samruk-Energy JSC. This scenario provides for the subsequent entry of the "green" company into IPO and application of available "green" financial instruments, which will make it possible to attract the necessary additional funds that can be used for modernization, diversification and decarbonization of production, and introduction of new RES, while ensuring sustainable operation of the UES.

The deep decarbonization scenario was defined as the main development scenario adopted by Samruk-Energy JSC.

As part of the analysis of the Energy Transition Program development scenarios, the following potential climate risks have been identified as the most probable and significant in terms of their possible probability and impact on the Program:

1. Strengthening international climate change policy and regulation.

The introduction in 2023 of CBAM (Carbon Border Adjustment Mechanism), the European Union's cross-border carbon regulation mechanism, which provides for the sale by a specially created authorized body of certificates for carbon-intensive goods imported into the EU according to a set list, could have a significant impact on the Company's operations.

These types of global initiatives will put pressure on the exporting sectors of the economy, which in turn will look for opportunities to reduce their energy intensity, become more environmentally friendly and consume electricity from clean energy sources. The corresponding demands of the economy will potentially be extrapolated to the entire power sector, where there will be an increasing demand for energy sources with a low carbon footprint.

2. Tightening of environmental legislation.

In accordance with the Paris Agreement, Kazakhstan aims to reduce greenhouse gas emissions by 15% by 2030 compared to 1990. In this regard, the Environmental Code of the Republic of Kazakhstan has strengthened the requirements for reducing greenhouse gas emissions in the regulated sectors of the Kazakhstan Emissions Trading System, in which Samruk-Energy participates.

There are also requirements for the implementation of BAT and the phased increase of tax rates of environmental emission fees in case of non-application of BAT, as well as exemption from environmental

emission fees in case of implementation of BAT. In this regard, Samruk-Energy JSC plans significant investments for the implementation of the best available technologies.

To update the adopted energy transition strategy of Samruk-Energy JSC and as part of the project initiated in 2023 to improve corporate governance practices regarding climate issues, preliminary work was carried out to assess the potential impact of significant transitional climate risks on the activities of Samruk-Energy JSC. The scenarios and assumptions presented below formed the basis for this potential impact assessment:

Scenarios	Key assumptions
NDC (Nationally determined contribution) — Soft	<ul style="list-style-type: none"> • National Environmental Code — LRF 1.5%; • Provision of free allowances until 2060 — up to 42% from 2022 onwards; • Moderate CO₂ emission charge up to € 29/tonne of CO₂ in 2060; • Payments related to environmental protection and associated capital costs to achieve BAT; • Lack of investment in RES; • Coal revenue losses — 100% in 2060 compared to 2021.
NDC — Hard	<ul style="list-style-type: none"> • National Environmental Code — 4% LRF; • Provision of free allowances until 2060 — up to 15% from 2022 onwards; • High payments for CO₂ emissions up to € 222/tonne of CO₂ in 2060; • Environmental payments and associated capital costs to achieve BAT; • Lack of investment in RES; • Coal revenue losses — 100% in 2060 compared to 2021.
Net Zero — Soft	<ul style="list-style-type: none"> • USAID CN quota reduction trend (50% reduction in 2031 and 60% reduction in 2036); • Provision of free allowances until 2039 — down to 4% starting in 2022; • High payments for CO₂ emissions up to € 200/ton of CO₂ in 2060; • Environmental payments and associated capital costs to achieve BAT; • Investment in RES, ensuring business development; • Coal revenue losses — 100% in 2060 compared to 2021.
Net Zero — Hard	<ul style="list-style-type: none"> • CBAM trend of free quotas (0% in 2032); • Provision of free allowances until 2031 — up to 24% from 2022 onwards; • High payments for CO₂ emissions up to € 603/tonne of CO₂ in 2060; • Environmental payments and associated capital costs to achieve BAT; • Investment in RES, ensuring business development; • Coal revenue losses — 100% in 2060 compared to 2021.

Based on the results of our analysis of the potential impact of transient climate risks on our operations, the following results were highlighted:

- Samruk-Energy JSC is resilient to NDC Soft and Net Zero Soft scenarios. In the first case, the level of exposure is limited, while in the second case the transition prerequisites provide compensating levers for the burden of transition risks. The 2031 price shock can be offset by earlier implementation of environmental and energy transition programs to ensure sufficient profitability and liquidity. The NDC Soft scenario can be applied by 2020s to support NDC implementation by the Government of Kazakhstan, while the Net Zero Soft scenario can be applied by 2030s and beyond to support energy transition policies and achieve carbon neutrality by 2060;
- Hard versions of NDC and Net Zero scenario demonstrated a significant impact on the Company's operational activities, albeit with low proba-

bility. These can be used to assess the sensitivity of Samruk-Energy JSC to the influence of shock scenarios from a financial perspective. Given the fact that the Government of Kazakhstan continuously postpones the introduction of auctions within the existing Kazakhstan Emissions Trading System (KazETS), the carbon prices provided by NGFS are not considered realistic.

Two scenarios, NDC Soft and Net Zero Soft, are the most likely for the Samruk-Energy JSC. The corresponding impact can be assessed as low and medium, respectively, with the presence of management levers to offset them.

According to the preliminary assessment, Samruk-Energy JSC is least exposed to transitional risks under the stringent NDC and Net Zero scenarios and can mitigate these risks through one or more mitigation strategies.

Climate risk has been identified and included in the general risk register of Samruk-Energy JSC. It encompasses a range of external and internal physical and transitional risk factors, which are presented in the table below:

Physical risk factors	Transitional risk factors
<p>Extreme phenomena</p> <ol style="list-style-type: none"> 1. Changing weather patterns, natural disasters. 2. Increased severity of extreme weather events such as cyclones and floods. Potential consequences: Destruction or failure of a hydroelectric dam. <p>Chronic phenomena</p> <ol style="list-style-type: none"> 1. Global climate warming; 2. Changing weather conditions, natural disasters: Changes in precipitation patterns and variability of weather conditions, Increase in average temperature; 3. Changing weather conditions, natural disasters: Drought, which may result in a shortage of water required for the Company's operations. 	<p>Political and regulatory risks</p> <ol style="list-style-type: none"> 1. Reduction of hydrocarbon consumption by major electricity consumers; 2. Tightening of environmental and water legislation requirements, which may lead to violations of relevant legislative acts; 3. Limitation on the volume of additional greenhouse gas emission quotas, introduction of a carbon tax, which may lead to exceeding the carbon quota limit and result in additional financial costs; 4. Regulation of tariffs by the state; 5. Limitation of the volume of additional quotas for greenhouse gas emissions in the National Plan reserve; 6. Restriction by the State Authority on the volumes of water resource extraction and consumption; 7. Ban on the use of water resources from transboundary rivers (international legal agreements on joint use of water resources, lack of agreements on joint management of transboundary rivers); 8. Delayed issuance of environmental protection permits; 9. Violation of deadlines stipulated by environmental legislation for obtaining additional quotas. <p>Technological risks</p> <ol style="list-style-type: none"> 1. Outflow of investments in carbon-intensive technologies; 2. Commissioning of new sources of pollutant emissions, imperfections in the technologies used at production facilities that do not allow them to operate under changing environmental standards; 3. Presence of worn-out equipment that does not meet modern requirements for waste gas and wastewater treatment, preventing optimal operating conditions; 4. Lack of funding for modernization and environmental protection measures; 5. Inability to maintain optimal load on equipment (load determined by KEGOC). <p>Market risks</p> <ol style="list-style-type: none"> 1. Developed countries' transition to a low-carbon economy and reduced demand for traditional products; 2. Lack of funds to buy carbon units/restriction of carbon units for purchase on the exchange. <p>Reputational risks</p> <ol style="list-style-type: none"> 1. Unreliable service providers/contractors; 2. Negative impact on local communities: pollution of water sources (poor quality), excessive pollutants in wastewater.





Currently, work is being conducted to identify and analyze an extended list of climate risks, and the list of climate risks will be updated in subsequent reports.

Samruk-Energy JSC pays significant attention to managing climate risks to ensure a reasonable guarantee of achieving strategic goals amid negative impact factors.

According to the development strategy of Samruk-Energy JSC, achieving strategic goals should consider key priorities in sustainable development, responsible investing, and effective active portfolio management. This approach will allow the most efficient use of available resources and will respond to external and internal challenges and opportunities through the application of appropriate tools and mechanisms.

The Energy Transition Program sets the directions, goals, and objectives for Samruk-Energy JSC on its path to transitioning to efficient, resource-saving, and environmentally friendly technologies to achieve carbon neutrality by 2060. This Program establishes medium-term goals up to 2031 and long-term goals up to 2060.

The goal of achieving carbon neutrality by Samruk-Energy JSC by 2060 aligns with the climate goals of the Republic of Kazakhstan, as outlined in the Strategy for Achieving Carbon Neutrality by 2060.

The Program applies to the entire Samruk-Energy JSC Group of companies. When modeling scenarios, external and internal factors influencing goal achievement were analyzed, and risks, including socio-economic risks, were identified.

Indicators for achieving the strategic goal of reducing the net carbon footprint of Samruk-Energy JSC are reflected in the performance indicators (KPIs) for the members of the Management Board.

By 2031, it is planned to:

- Reduce the net carbon footprint by 10% from the 2021 level, considering ongoing activities and offset carbon units.
- Increase the share of clean energy in the generation structure of Samruk-Energy JSC to 10%.

- Study and implement Carbon Capture & Storage technologies.
- Implement a forest climate project (greening an area of 500 hectares).
- Improve the ESG rating obtained in 2023.

By 2060, it is planned to:

- Reduce the net carbon footprint by 100%, considering ongoing activities and offset carbon units.
- Increase the share of clean electricity (renewable energy sources and hydropower) in the asset structure to 82%.
- Study and implement Carbon Capture & Storage technologies.
- Implement a forest climate project (greening an area of 1,800 hectares).

In forming its strategy, Samruk-Energy JSC adheres to, but is not limited to, the principles of sustainable development outlined in the United Nations Global Compact:

1. Commitment to sustainable development principles at the level of the Board of Directors, the executive body, and employees.
2. Analysis of the internal and external situation in three areas (economy, environment, social issues).
3. Identification of risks to sustainable development in social, economic, and environmental spheres.
4. Building a stakeholder map.
5. Setting goals and KPIs in sustainable development, developing an action plan, and identifying responsible persons.
6. Integrating sustainable development into key processes, including risk management, planning, human resources management, investments, reporting, operational activities, and others, as well as into the Development Strategy and decision-making processes.
7. Enhancing the qualifications of officials and employees in sustainable development.
8. Regular monitoring and evaluation of sustainable development activities, assessing the achievement of goals and KPIs, taking corrective actions, and implementing a culture of continuous improvement.

In the process of identifying climate risks, Samruk-Energy JSC pays significant attention to the opportunities arising for the company due to the use of less carbon-intensive technologies on the path to transitioning to a green economy.

Energy efficiency is considered a key factor in achieving established climate goals. In this regard, new processes and technologies are being developed and implemented to reduce energy intensity, invest in equipment modernization, and adopt technologies to reduce greenhouse gas emissions.

Climate opportunities



Resource efficiency

We see an opportunity in implementing energy efficiency and energy conservation measures, and are committed to the efficient use of resources, including fuel, energy and water. The main measures to improve energy saving and energy efficiency are rational use of FER based on application of innovative technologies, modernization and technical re-equipment of equipment.

Implementation of the planned energy saving and energy efficiency measures will reduce specific fuel consumption per unit of production, thereby reducing specific CO₂ emissions per unit of production.



Application of new technologies

Study and subsequent implementation of new modern technologies for carbon capture, utilization and storage as a key factor in achieving climate goals and meeting the energy needs of society to reduce anthropogenic CO₂ emissions and reduce the carbon intensity of products.

[More about the development strategy of Samruk-Energy JSC can be found on page 48 of the report.](#)

Climate risk management

We implement a wide range of measures to manage climate risks and identify opportunities. Climate change risk assessment is taken into account when forming the conditions used to develop our Company's strategy, assessing investment projects and formulating annual and medium-term plans. The corporate risk management system is a key component of the corporate governance system and is aimed at timely identification, assessment, monitoring and mitigation of potential risk events that may adversely affect the achievement of strategic goals.

The Company has identified climate risks that are classified as strategic. Potential consequences associated with climate risks have been identified, such as: physical damage to production assets; an increase in tax rates for greenhouse gas emissions; fines for violations of legal restrictions; disruptions in the electricity and coal supply chain; increased cost and time of investment projects; and interruptions in production cycles.

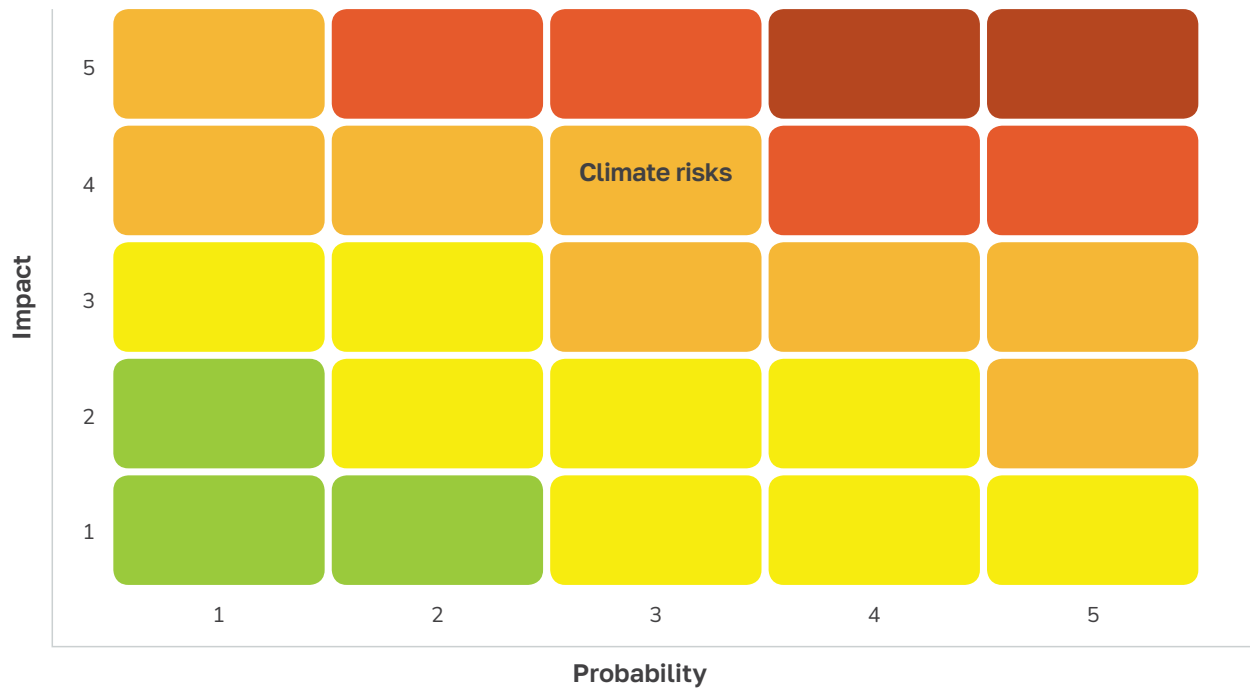
Within the framework of risk assessment and analysis, Samruk-Energy JSC uses qualitative, quantitative analysis or their combination, which creates a methodological basis for the risk management process.

Risk assessment includes consideration of sources and causes for the occurrence of each risk, negative consequences of their realization, and the probability that a certain risk will be realized.

All identified and assessed risks are reflected on the risk map. The Risk map is a graphical and textual description of a limited number of risks of Samruk-Energy JSC, located in a rectangular table, one "axis" of which indicates the strength of impact or significance of the risk, and the other the probability or frequency of its occurrence. On the map the probability or frequency is displayed on the horizontal axis, and the strength of impact or significance — on the vertical axis.



Climate Risk Assessment on the Risk Map for 2023



In order to improve the efficiency of risk monitoring, Samruk-Energy JSC applies KRIs (key risk indicators) using two approaches:

1. Determination of KRIs based on risk factors — risk factors are determined for each key risk. Risk factors can be both external and internal to Samruk-Energy JSC. Risk factors are analyzed for measurability. For each risk factor, appropriate measurement units and the frequency of measurement of the indicator are determined, which can be expressed in the form of coefficients, percentages, numbers, etc.
2. Determination of the KRI based on preventive measures for risk management — the structural subdivision responsible for risk management together with the involved structural subdivisions of Samruk-Energy JSC and/or subsidiaries and affiliates determine the unit of measurement of the level of fulfillment for each preventive measure for risk management, the frequency of measurement of the indicator and the source of information for calculation. The KRI developed on the basis of preventive measures can be expressed in percentage terms or in actual fulfillment of preventive measures.

[For more information on general corporate risk management practices, please see page 272 of this report.](#)

As mentioned above, climate risks are divided into external and internal factors, and this terminology refers to the following:

- External risk factors — risk factors arising outside the operating activities of the Group of companies of Samruk-Energy JSC and independent of the activities of the Group of companies of Samruk-Energy JSC;
- Internal risk factors — risk factors related to internal processes, organizational structure, human resources, assets of the Group of companies of Samruk-Energy JSC and arising within the framework of the Group's of companies of Samruk-Energy JSC operating activities.

In order to manage the identified climate risks and adapt to their potential impact, Samruk-Energy JSC has an action plan to manage key climate risks, consisting of the following measures Samruk-Energy JSC has an action plan for managing key climate risks, consisting of the following measures:

- Control over compliance with environmental protection legislation, water resources and deadlines for submitting applications for emission permits and reporting to state regulatory authorities;

- Monitoring of greenhouse gas emission quota limit utilization, adjustment;
- Monitoring of compliance with the plan for modernization and repair of main and auxiliary environmental protection equipment;
- Compliance with technical regulations and rules of operation of buildings and structures;
- Mandatory environmental insurance;
- Liquidation funds;
- Interaction with authorized state bodies in the process of development of environmental regulations;
- Monitoring the implementation of international environmental management standards;

- Monitoring of budget execution under the “Environmental Protection” item;
- Monitoring of the impact of economic activities on aquatic ecosystems, fauna and flora.

To manage the risks associated with greenhouse gases, the key activities that the Company is implementing to mitigate the environmental impact of greenhouse gas emissions are presented. A range of initiatives is discussed, including coal preparation and gasification, carbon dioxide capture and storage, energy efficiency and green transportation. In addition, options for carbon landfills and carbon offsets are being considered.

Measures to manage risks associated with greenhouse gas emissions into the atmosphere and mitigate related environmental impacts:



In order to manage another one of the significant risks related to water deficit, Samruk-Energy JSC reflects in the corporate standard on environmental protection management the measures applied to minimize the impact, namely:

- reducing the volume of fresh water consumption;
- increasing in the share of reusable and recycled water;
- reduction of wastewater discharge volumes and concentrations of harmful substances in wastewater; drainage (mine) water — additionally generated by Bogatyr Komir LLP;
- minimization of water use risks;
- improving the quality of discharged wastewater.

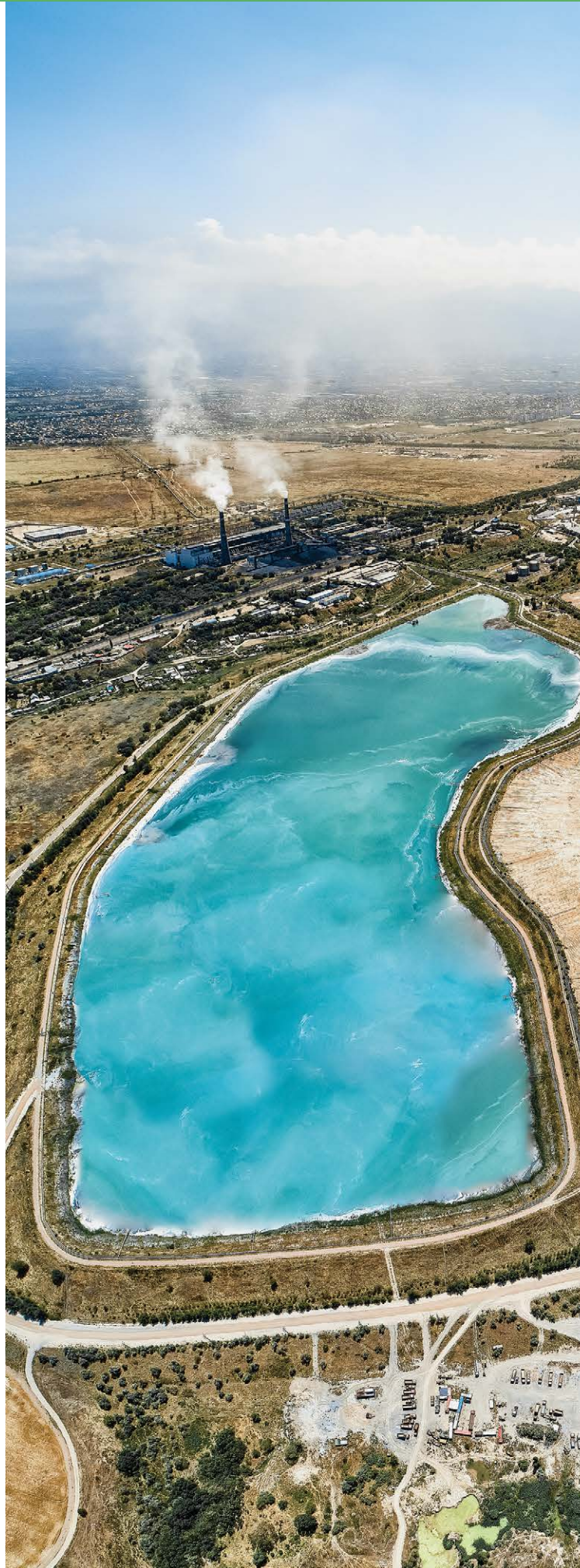
The main tasks in the field of water resources management are:

- defining key water management principles for mandatory use throughout the company;
- ensuring continuous improvement of the water management system;
- ensuring a unified process of water resources management in the company as opposed to the current practice of uncoordinated management of different divisions and use of water for different needs (drinking, production, household and other needs); —
- ensuring stakeholder involvement in the water resources management process.

[More information about the risk management system of Samruk-Energy JSC, as well as a full list of risks can be found on page 60 of the report.](#)

Metrics

The table below presents the data used by Samruk-Energy JSC to monitor the impact of climate risks on the activities of the Samruk-Energy JSC Group of companies. The year 2021 has been established as the "baseline year" for these indicators. However, it is important to note that Samruk-Energy JSC conducted its first calculation of Scope 2 emissions in 2022; therefore, the year 2022 will be considered the "baseline year" for Scope 2 indicators.



Indicator	2021	2022	2023	GRI Index
Greenhouse gases				
Scope 1, tons of CO₂e	40,294,370	32,933,413	33,009,576	GRI 305-1, GRI 12: Coal Sector: 12.1.5
CO ₂	32,951,627	31,978,242	31,877,469	
CH ₄	7,266,445	940,989	1,065,127	
N ₂ O	76,298	74,182	66,980	
Scope 2, tons of CO₂e				GRI 305-2
CO ₂	-	13,333.6861	11,343.5	
Electricity generation	-	1,526.71	1,415	
Heat generation	-	11,806.98	9,928	
Pollutant emissions				
Dynamics of specific air emissions per unit of production, g/kWh	9.68	9.48	9.5	GRI 305-7, GRI 12: Coal Sector: 12.4.2
Energy efficiency				
Total energy saving, thousand GJ	15,326	14,271	10,043	
Responsible water use				
Volume of reusable or recycled and recycled water, megaliters	3,552,379	3,534,516	3,499,210	GRI 303-1, 3-3, GRI 12: Coal Sector: 12.7.1, 12.7.2, 12.7.6
Volume of water withdrawal per unit of output, m ³ /kWh	0.259	0.625	0.667	
Share of reusable and recycled water, %	17.8%	15.8%	14.8%	
Waste management				
Total waste generated, of which:	88,839,711	89,929,927	98,496,096	GRI 306-3, GRI 12: Coal Sector: 12.6.4
Hazardous, tons	5,586,889	647	1,732	
Non-hazardous, tons	83,252,822	89,928,281	98,494,364	
of which by main types of waste, characteristic for the specifics of production, tons	87,472,541	89,912,724	98,474,212	
ash and slag waste, tons	7,226,582	7,129,158	8,853,230	
overburden, tons	80,245,959	82,783,566	89,620,982	
Biodiversity conservation				
Investments in biodiversity conservation, million tenge	0.95	0.58	0.115	GRI 304-2, 304-3, GRI 12: Coal Sector: 12.5.3.12.5.4

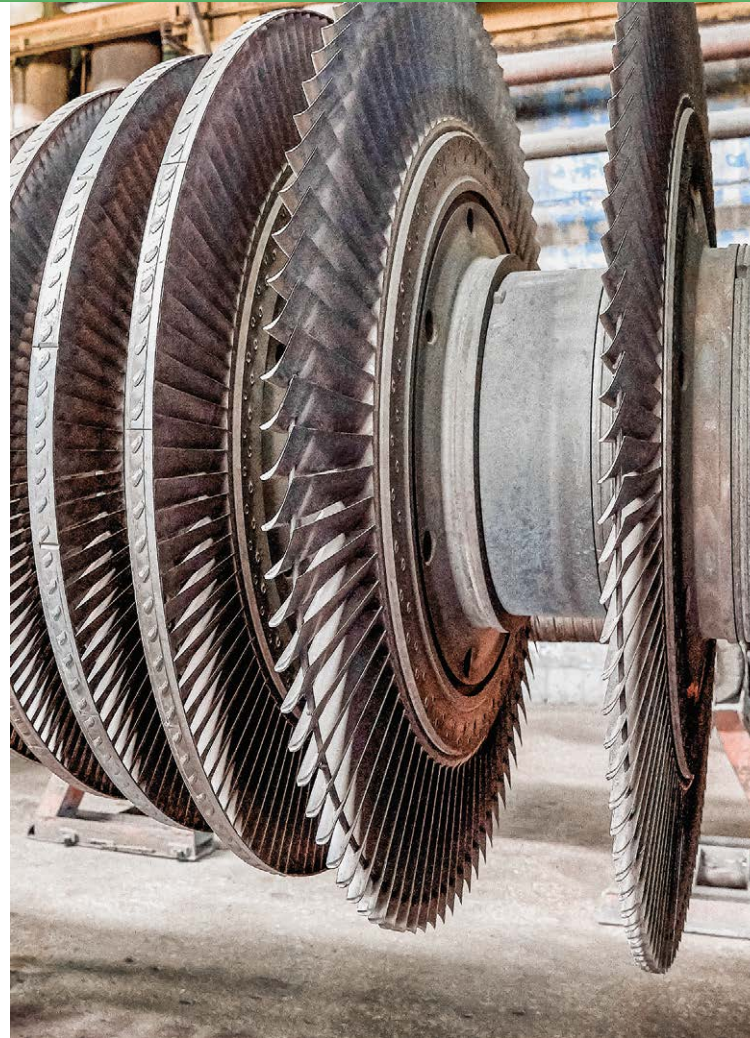


Goals

On October 29, 2021, the Board of Directors of Samruk-Energy JSC decided to confirm the new Development Strategy of Samruk-Energy JSC for the period of 2022-2031. The Strategy reflects the state policy in the sphere of strategic planning of the national energy security system and development of the electric power sector, as well as corresponds to the key strategic directions, goals and objectives of the Company. To achieve our vision and follow the strategic directions, we will focus on the fulfillment of three strategic goals, such as:

- Reduction of net carbon footprint;
- Increase in productivity;
- Increase in net asset value.

In accordance with this strategy, in 2022, the Board of Directors of Samruk-Energy JSC approved the Energy Transition Program of Samruk-Energy JSC for 2022-2060, which is a document establishing directions, goals and objectives on the company's way to transitioning to the use of efficient, resource-saving, environmentally friendly technologies and achieving carbon neutrality by 2060. According to which Samruk-Energy JSC sets the following goals:



Medium- and long-term goals of the Energy Transition Program of Samruk-Energy JSC

Until 2031

Reduction of net carbon footprint

30%

Increasing the share of clean energy in the generation structure of Samruk-Energy JSC up to

10%

Forest-climatic project

Greening of the territory of 500 hectares

- Obtaining an ESG rating in 2023 and its subsequent improvement
- Explore and implement Carbon Capture & Storage technologies

Until 2060

Reduction of net carbon footprint

100%

inclusive of activities and offset carbon units

Increasing the share of clean energy in the generation structure of Samruk-Energy JSC up to

82%

in the asset structure

Forest-climatic project

Greening of the territory of 1,800 hectares

- Explore and implement Carbon Capture & Storage technologies

Progress in achieving the goals of Samruk-Energy JSC, which allow moving towards long-term goals, according to the results of 2023 can be characterized in the following form:

Goals	2021, base year	2022	2023	Target to 2031
Reduction of net carbon footprint	32.95	31.98	31.87	23.06
Increasing the share of clean energy in the generation structure of Samruk-Energy JSC	7	8	8	35
Forest-climatic project	0	0	0	500 hectares

Greenhouse gas emissions

GRI 305-1, GRI 305-4, GRI 12: Coal Sector: 12.1.5

The Republic of Kazakhstan has demonstrated its commitment to the goal of carbon neutrality by 2060 under the Paris Agreement by declaring its intention to reduce its greenhouse gas emissions by 15% by 2030 relative to 1990 levels under the UN Framework Convention on Climate Change.

To achieve this, Kazakhstan is developing a complex of market mechanisms that includes an emissions trading system, projects for reducing emissions and absorbing greenhouse gases, as well as the development of the green investment market.

We recognize the critical importance of efforts to address climate change and reduce greenhouse gas emissions. We have taken the initiative and voluntarily committed to reducing our emissions, reaffirming our commitment to environmentally responsible business practices.

In accordance with the legislation of the Republic of Kazakhstan, enterprises, including EGRES-1 LLP, EGRES-2 JSC, APP JSC, and Bogatyr Komir LLP which fall under the greenhouse gas emissions quota system, are required to conduct an inventory of these emissions. This process involves the verification of inventory results by an independent accredited organization, ensuring transparency and accuracy of the emissions data.

In 2023, the costs of actions related to climate risk management amounted to about 8.8 million tenge (development and verification of the Report on greenhouse gas inventory for quota plants of Samruk-Energy JSC).

Direct emissions of EGRES-1 LLP, EGRES-2 JSC, and APP JSC, resulting from the combustion of fuel in boiler units to produce electric and thermal energy, as well as from coal mining at Bogatyr Komir LLP, fall under Scope 1 category. Data collection on emissions is carried out based on primary sources, including official technical reports and laboratory journals. The data is processed in accordance with national methodologies and the approach indicated in the GHG Protocol Scope 1 Guidance, after which emission factors and their total volume for each source and for the enterprises EGRES-1 LLP, EGRES-2 JSC, and APP JSC and Bogatyr Komir LLP are calculated. The calculations include analysis of emissions from boiler equipment and coal mining, with verification from independent accredited organizations for each designated source.

In the process of analyzing greenhouse gas emissions, meticulous measurements of raw material consumption and characteristics are applied, including the volume of fuel consumed, its energy value, and components (ash content, moisture, sulfur content), as well as measurements on boiler units to assess energy losses associated with incomplete combustion.

Direct GHG emissions²⁷ (Scope 1), tons CO₂-eq^{28 29}

Units	2021*	2022	2023	Δ 2023/2022, %
CO ₂ tons CO ₂	32,951,527	31,978,242	31,877,469	-0.32
CH ₄ tons CO ₂ -eq.	7,266,445	940,989	1,065,127	13.19
N ₂ O tons CO ₂ -eq.	90,021	74,182	66,980	-9.71

²⁷ The volume of direct greenhouse gas emissions is given for EGRES-1 LLP, EGRES-2 JSC, APP JSC and Bogatyr Komir LLP.

²⁸ The Company does not calculate biogenic greenhouse gas emissions.

²⁹ The Company has chosen a control-based consolidation method. The Company considers 100% of emissions from consolidated facilities controlled by the Company when determining the total amount of greenhouse gases.



In the process of converting methane, nitrous oxide emissions into equivalent tons of carbon dioxide, the actual global warming potential coefficients were applied (for methane — 28, for nitrous oxide — 265), which are determined in accordance with paragraph 4 of Conference of the Parties Decision 6/CP.27 of November 17, 2022. An official letter confirming this information was sent to subsidiaries and affiliates from the Ministry of Environment and Natural Resources.

Specific GHG emissions (Scope 1)

Type of activity	Units	2020	2021	2022	2023	Δ 2023/2022, %
Electricity generation	tons of CO ₂ eq/ thousand kWh	0.836	0.862	0.831	0.838	0.8
Heat generation	tons of CO ₂ eq/ thousand Gcal	441.913	324.485	318.530	294.127	-7.7
Coal mining	tons CO ₂ eq/ thousand tons	273.942	173.552	33.519	35.549	6.1

According to the results of 2023, there is an increase in specific GHG emissions during power generation and coal mining by Samruk-Energy JSC as compared to 2022, which was facilitated by:

- The use in 2023 of another type of coal — Angresor, in the amount of 310.4 thousand tons with carbon content of 0.423% at EGRES-1 LLP;
- The change in the global warming potential coefficient for converting methane emissions to CO₂ equivalent from 25 to 28 in 2023.

The decrease in specific GHG emissions from heat generation by 7.7% in 2023 is due to a decrease in specific consumption of fuel equivalent for heat supply at EGRES-1 LLP from 162.6 kg/Gcal to 160.9 kg/Gcal (1%) and decrease in consumption of fuel equivalent for heat supply at EGRES-2 JSC from 15,067 tons of fuel equivalent to 13,673 tons of fuel equivalent (9.2%).

GRI 305-2

For the second consecutive year, the Company has calculated Scope 2 indirect greenhouse gas emissions, which arise from the consumption of electrical and thermal energy from external power-producing organizations. As a result, 2022 was defined as the baseline year for further calculation and analysis.

Indirect GHG emissions (Scope 2), tons CO₂-eq.³⁰

Indicator	2022	2023	Δ 2023/2022, %
Gross indirect greenhouse gas emissions (Scope 2)	13,334	11,343.5	-14.9
Gases included in the calculation	CO ₂	CO ₂	

In 2024, an update of The Energy Transition Programme is planned in response to internal and external requirements, which will include mandatory monitoring of Scope 2 emissions.

The Company calculates indirect emissions according to the approved Instruction for the Calculation of Greenhouse Gases and Offset Units for the Group of companies of Samruk-Energy JSC, based on the GHG Protocol Scope 2 Guidance, using specific emission factors approved by the order of the Vice Minister of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan.

Due to changes in the energy supply system in the Republic of Kazakhstan, driven by the introduction of the Single electric power system from July 1, 2023 — hereinafter to as FSC, companies have the opportunity to use either the location-based method or the market-based method for calculating indirect energy emissions of GHGs in Scope 2 (GRI 305-2). According to the GHG Protocol, the purchase of electricity from the FSC within the Group of companies of Samruk-Energy JSC is treated as repurchase agreements in terms of consolidation prospects for the group. Therefore, only the market-based method based on direct contracts is used for calculating Scope 2.

In 2023, Scope 2 indirect emissions decreased by 14.9% compared to the previous year, reaching 0.011 million tons of CO₂, due to a reduction in the consumption of purchased thermal energy.

GRI 305-3

Samruk-Energy JSC plans to analyze relevant Scope 3 GHG emission categories in 2024, which consider all indirect GHG emissions not covered by Scope 1 and 2. Currently, Scope 3 GHG emissions are not subject to mandatory reporting under the GHG Protocol standard.

Indirect Scope 3 emissions under the GHG Protocol are divided into 15 different Categories. This multi-channel division is applied to more accurately account for all possible GHG emissions. These Categories are also divided into two types of flows in the supply chain: upstream and downstream flows: Upstream emissions and Downstream emissions, respectively. Upstream flows include emissions from raw materials, goods and services purchased by the organization, excluding those emissions accounted for in Scope 1 and 2. Downstream streams, respectively, include those emissions generated outside the organization from the operation and completion of the life cycle of the products it produces.

Greenhouse gas emission reductions, tons CO₂

Company	Measure	2023
APP JSC	Implementation of energy efficiency and energy saving measures	26,588
EGRES-1 LLP	Purchase of carbon offset	387,150
Total for Samruk-Energy JSC		413,738

Plans for 2024 and the medium-term perspective

Samruk-Energy JSC plans to analyze the relevant categories of Scope 3 greenhouse gas emissions, which account for all indirect GHG emissions not covered by Scope 1 and 2. Currently, Scope 3 emissions are not mandatorily included in reporting according to the GHG Protocol standard. Indirect emissions of Scope 3 under the GHG Protocol are divided into 15 different categories. This multi-channel division is applied for a more accurate accounting of all possible GHG emissions. These categories are also divided into two types

After approval of the categorization, Samruk-Energy JSC plans to introduce phased accounting and monitoring of Scope 3 emissions in 2025-2026.

GRI 305-5

In 2023, the implementation of energy efficiency and energy saving measures at the Almaty CHPPs (APP JSC), such as the restoration of thermal insulation of boilers and pipelines at CHPP-1 (saving 1,146 Gcal), manufacturing and replacement of the first stage air preheater for boiler No. 1, 2, and 4 at CHPP-2 (saving 8,066 tons of coal), and the repair and replacement of the end armor of boiler No. 2, 3, 4 and the air preheater of boiler No. 3, 4 at CHPP-3 (saving 657 tons of fuel oil, 210 tons of coal) among other measures, led to a reduction of greenhouse gas emissions at APP JSC by 26.59 thousand tons of CO₂.

On July 25, 2023, a contract was signed between EGRES-1 LLP and AEC Asa LLP for the purchase of a carbon offset amounting to 387.15 thousand tons of CO₂, aimed at reducing greenhouse gas emissions.

of streams in the supply chain: upstream and downstream flows. Upstream emissions include emissions from raw materials, goods, and services purchased by the organization, except for those emissions accounted for in Scope 1 and 2. Downstream emissions include those emissions that occur outside the organization from the operation and end-of-life of the products it manufactures. Subsequently, after the categorization is approved, Samruk-Energy JSC plans to introduce phased accounting and monitoring of Scope 3 emissions.

³⁰ The perimeter of the indicator includes data on purchased external energy of Bogatyr Komir LLP



Energy Efficiency

Management approach

GRI 3-3

In 2013, Kazakhstan adopted the Concept of Transition to a 'Green Economy', where a key element was the implementation of energy-saving measures and enhancing energy efficiency. As a leading electricity producer, we take responsibility and commitment to improving energy efficiency, aiming to reduce energy consumption and minimize the environmental impact of our activities, confirming our contribution to creating a sustainable economic development model in Kazakhstan.

The energy management system provides deep analysis and management of energy consumption, facilitating improvements in production operations and efficiency. The system includes assessing and monitoring energy consumption indicators, improving processes, actively searching, and analyzing data to increase energy efficiency, and forming strategic and operational plans to optimize energy supply. This approach not only helps save resources and reduce costs but also strengthens the Company's environmental responsibility, aimed at reducing environmental impact and supporting sustainable development.

The implementation and improvement of systems and procedures aimed at optimizing energy efficiency and reducing energy consumption contribute to decreasing expenses, reducing greenhouse gas emissions, and minimizing environmental impact. This is achieved through conscious and systematic management of energy resources, resulting in not only economic benefits for Samruk-Energy JSC but also improving environmental stability and sustainable development.

The foundational document shaping our principles in this area is the Energy Saving and Energy Efficiency Improvement Programme at Samruk-Energy for 2015-2025 (Programme). This Programme was developed in line with the key aspects of the national strategy for energy saving and improving energy efficiency, securing strategic goals and tasks in this field.

The main tools of the Programme include:

- Establishing key indicators to measure efficiency in energy saving and optimization of energy consumption for each division;
- Conducting continuous monitoring and management to ensure the achievement of set goals, through systematic energy saving analysis that aligns with the developed methodology for calculating key energy efficiency indicators;
- Implementing specific organizational and technical measures to enhance energy efficiency, based on thoroughly developed and approved energy saving plans for subsidiaries and affiliates.

During the reporting year, changes were made in organizational structure and job responsibilities, to reflect the commitment to compliance policy adherence. The Department of Energy Efficiency, Innovation Development, and Environmental Safety and the Managing Director of Production are responsible for the implementation of energy efficiency initiatives at Samruk-Energy JSC. To integrate environmentally sustainable practices into the corporate strategy, this year, changes were made to the organizational structure, expanding its functionality to include environmental issues.

In November 2023, we successfully passed the surveillance audit of our corporate management system and confirmed its compliance with the international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO 37001, which had been previously certified in December 2022. Highly qualified international specialists from the MS CERT certification body participated in the audit, providing a detailed report on its results.

GRI 302-1, GRI 302-4, GRI 12.1.2

In 2023, we carried out 61 activities aimed at increasing energy efficiency and the rational use of resources, including the construction of new substations, reconstruction, and improvement of power networks, as well as optimization and modernization of energy infrastructures. These actions contributed to a profound transformation of our energy system, demonstrating its commitment to sustainable development and optimization of resource consumption.

In 2023, the total energy consumption of Samruk-Energy JSC reached 200,194 thousand GJ, which represents a slight decrease of 0.3% compared to 2022. Energy consumption was reduced to 10,043 thousand GJ ([for more details, see the Appendix "Resource Consumption and Energy Efficiency"](#)).

Key energy indicators, thousand GJ

Energy reduction	2021	2022	2023	Δ 2023/2022, %
Amount of energy savings	15,326	14,271	10,043	29.6

Activities that had the most significant impact on improving energy efficiency include:

- Increasing the average unit power of energy blocks;
- Extending the operating time of energy blocks powered by turbine feed pump from the IV turbine extraction;
- Extending the operating time of energy blocks with the high-pressure heater group activated (excluding block No 3 which was dismantled);
- Conducting operational adjustments of equipment;
- Replacement of the main bundle tubes of condenser type 80KCS-1, part of Turbine Generator No2.
- Rational operating regime of power transformers (deactivating and reserving transformers for own needs during plant shutdowns);
- Disconnecting transformers during low load regimes at substations with two 220/110/35/10 kV transformers;

Energy efficiency initiatives at Samruk-Energy JSC resulted in savings of 362.9 thousand tons of equivalent fuel, reducing costs by

2.06
KZT billion in 2023

Due to the implemented measures aimed at energy efficiency, electricity consumption for own needs by EPO of Samruk-Energy JSC decreased from the planned indicator by

52.9
million kWh (5.89%)



Energy availability

GRI 3-3

A significant step towards improving energy infrastructure was the commissioning of the 110/10 kV Kokozek substation project, synchronized with the 110 kV distribution device of the 220 kV Kaskelen substation (line No. 10A "Zhandos") in the Karasai district of Almaty region. This project provided reliable and stable electricity supply to the region. The new substation facilitated the creation of new productions and the expansion of existing ones, ensuring continuous power supply to the settlements of Almaty region.

With the commissioning of the Kokozek substation on October 7, 2023, which has a capacity of 126 MW, technical conditions were issued for 34 small and medium-sized businesses with a total connected capacity of 96 MW. Among them are large manufacturing enterprises:

- Skif Trade LLP;
- Imd company LLP;
- KT&G Kazakhstan LLP;
- RG BRANDS KAZAKHSTAN LLP, Aksengir branch;
- Karasay Machine-Building Plant LLP.

Additionally, two comfortable schools designed for 1,200 and 1,500 places respectively were connected, which contributes to the development of the social infrastructure of the region.

Another important project was the implementation of a program by Alatau Zharyk Company aimed at reducing electricity losses in networks, improving energy efficiency, and energy saving. Monthly monitoring of loss reduction, technical violations, and reliability coefficients (SAIFI, SAIDI) in electrical networks is conducted.

Losses in electrical networks are calculated as follows:

Absolute value:

Electricity supply to the grid — Useful supply to consumers = Actual electricity losses (thousand kWh);

Relative value:

Actual electricity losses (thousand kWh)/Input of electricity into the grid x 100% = % Losses

The savings achieved from reducing actual losses amounted to KZT 2.282 billion, which represents a 10.90% reduction compared to the loss level in 2020, when actual losses were 12.6%.

Various activities were carried out as part of this program:

- Reconstruction of 0.4 kV overhead lines with a transition to self-supporting insulated wires and installation of external meters;
- Transformation of existing 6 kV networks into 10 kV networks;
- Progressive integration of the automated electricity metering and control system;
- Implementation of advanced high-efficiency equipment, including gas-insulated switchgear and transformers with low no-load losses, among others;
- Optimization of the operational modes of electric networks;
- Replacement of overhead line wires with larger cross-section wires or wires with increased capacity;
- Actions to reduce the overload of cable lines;
- Replacement of underloaded and overloaded transformers;
- Implementation of compensating devices in distribution networks.

A key feature of our approach to energy management system is the active involvement of all employees in the process, which is the basis for achieving the most effective results within the framework of the energy management system implementation. Our strategy includes not only continuous monitoring and analytics but also encouraging the team to find innovative ways to save resources and propose innovative solutions in energy conservation.

In anticipation of International Energy Saving Day, we stimulated innovative thinking among specialists of subsidiary enterprises by holding a competition for the best rationalization proposal in the field of energy saving and energy efficiency, rewarding the winners with generous cash prizes.

As a result of the competition, 30 rationalization proposals were submitted with an economic effect of KZT 219.7 million. One of the most significant proposals was a specially designed and manufactured nozzle for a drying unit at Bogatyr Komir LLP aimed at optimizing the fuel supply system. The implementation of this setup significantly reduced diesel fuel consumption and cut emissions into the atmosphere by 4.226 tons.



Reduction of pollutant emissions, tons

Indicator	2023
Total emissions:	4.226
NO	0.0937
NO ₂	0.5769
SO ₂	1.0484
CO	2.464
C (soot, black carbon)	0.0446

In 2023, a total of 61 various activities were completed, and the implementation of measures to improve energy efficiency in the Group of companies of Samruk-Energy JSC resulted in savings of 362.9 thousand tons of equivalent fuel, amounting to KZT 2.06 billion.

The company contributes to the formulation of energy policy, demonstrating its commitment to sharing experience and rational use of energy. The company is a member of key industry platforms and associations:

- Electric Power Council of the CIS;
- Kazakhstan Electric Power Association;
- KAZENERGY Association.

In 2023, the Company participated in the development of the Electric Power Industry Development Strategy up to 2035, which outlined initiatives for implementing energy efficiency measures. Within the framework of the strategy, initiatives for enhancing energy efficiency were highlighted, major industry challenges were discussed, an overview of international experience was conducted, and directions for the development of the electric power industry were defined. The main principles and approaches to industry development, considering current trends and market needs, were also identified.

Representatives of the Company took part in the V Energy Saving Forum, where current issues of optimizing energy consumption in key sectors of Kazakhstan's economy were addressed.



Energy saving measures to be implemented

In the field of Alternative Energy:

During the 28th UN Climate Change Conference (COP28), the Chairman of the Board of Samruk-Energy JSC participated in bilateral negotiations. Meetings were held between the President of Kazakhstan, Kassym-Jomart Tokayev, and the UAE Minister of Investments, Managing Director of ADQ Holding, Mohammed Al-Suwaidi, as well as with the Chairman of the Board of Directors of ACWA Power, Mohammed Abunayyan. The parties discussed ways to develop cooperation between Kazakhstan and the UAE and outlined plans for implementing investment projects in the renewable energy sector.

On December 2, 2023, an agreement was signed for the joint development of a 1 GW wind power station with Abu Dhabi Future Energy Company (Masdar), W Solar Investment LLC, and Kazakhstan Investment Development Fund. The agreement laid the foundation for joint project development and coordinated actions for its launch. During the COP28 conference, an intergovernmental agreement between the Republic of Kazakhstan and the UAE was also concluded regarding the implementation of the wind power station.

Additionally, an agreement was signed between Samruk-Energy JSC and Power China Resources Ltd for the joint development of a project to increase the capacity of the recently built wind power station in the Shelek corridor of Almaty region to 810 MW.

In the field of Traditional Energy:

We are making special efforts in energy conservation and improving energy efficiency, demonstrating our commitment to reducing the consumption of natural resources and minimizing environmental impact. As part of our energy strategy, we are implementing numerous projects aimed at ensuring energy accessibility, which leads to an improvement in the overall quality of life and promotes sustainable development in the regions where we operate:

- Within the project "Expansion and Reconstruction of EGRES-2 with the Installation of Power Unit No. 3", aimed at enhancing the reliability of energy supply for the economy and population, as well as increasing Kazakhstan's export potential, construction of Hangar No. 2 was completed this reporting year. Construction of Hangar No. 1 is also ongoing and is currently 90% complete.

- The "Expansion and Reconstruction of EGRES-2 with the Installation of Power Unit No. 3" project is focused on strengthening the reliability of energy supply systems, which will contribute to the stability of the economy and social sphere, as well as expand Kazakhstan's export potential. In 2023, key equipment was successfully delivered, including a boiler unit, turbo unit, generator, and electrostatic precipitators. Also, the dismantling of the old boiler unit, dust capture systems, gas-air tract, draft fans, turbine, electrostatic precipitators, and fuel supply equipment was completed. Currently, active work is underway on the assembly and installation of pipelines, air ducts, and gas ducts, as well as the repair of the condenser, including the manufacturing of tube plates, and other preparatory activities. To date, the overall volume of work completed on the project is estimated at 42%.
- In 2023, within the "Modernization of Almaty CHPP-2" project aimed at minimizing environmental impact, engineering, survey, and construction work was completed to reduce the ecological impact of the station on the city of Almaty.
- The "Reconstruction of Almaty CHPP-3" project is focused on reducing the deficit of maneuvering capacities in the Southern zone of Kazakhstan and guarantees reliable supply of electric and thermal energy for the city of Almaty and Almaty region. During the reporting year, engineering and survey works, topographic surveying, and drilling operations were conducted.
- The "Reconstruction of CHPP-1 named after B. Orzabayev of APP JSC with the Construction of a SGP Unit of 200-250 MW" project is aimed at ensuring the reliability of heating and electrification of the city of Almaty and the Almaty region. In 2023, during the Investment-Innovation Council for the project, a decision was made to refine financing options.

In the field of Emissions Management:

Samruk-Energy JSC is working on R&D titled "Development of Carbon Capture and Storage (CCUS) Technologies at Existing and Prospective Coal Power Plants of the Company." The purpose of the R&D is to study existing and prospective technologies for capturing CO₂ from thermal power plant flue gases, analyze the possibility of their integration into existing technological schemes, and assess the storage of captured CO₂, evaluating the most promising technologies for conditions in Kazakhstan. The implementation of the R&D is planned for the period 2023-2025.



A priority of the Company's energy policy is a focus on energy conservation and increasing energy efficiency, which contributes to the reduction of energy resource consumption and the level of environmental impact, as also reflected in the Program.

The Company's activities in energy conservation and efficiency are based on the methodology of the international standard ISO 50001 "Energy Management Systems."

The Company has the Energy Saving and Energy Efficiency Improvement Programme at Samruk-Energy for 2015-2025, which serves as a foundational document for planning and conducting activities in energy conservation and efficiency. The programme is developed in accordance with the main directions of state policy in energy conservation and energy efficiency and defines goals and tasks, main program-targeted tools, and mechanisms for the programme's implementation. One of the effective mechanisms for managing energy efficiency is the establishment of targeted indicators and metrics necessary for monitoring, analysis, and evaluation of effectiveness, ensuring sustainable development of Group of companies of Samruk-Energy JSC by reducing the energy intensity of gross merchandise product and, consequently, increasing competitiveness, financial stability, energy, and environmental security.

In 2023, 61 activities were completed, which allowed saving 362.9 thousand tons of equivalent fuel amounting to 2.062 billion tenge.

Plans for 2024 and the medium-term perspective

For 2024, we have planned 59 activities expected to yield an economic effect of 1.5 billion tenge. During this period, there will also be an update to the Energy Transition Program for the years 2022–2060. This decision is based on a number of important initiatives:

- Updating the Development Strategy of Samruk-Energy JSC for 2022-2032;
- Establishment of Qazaq Green Power PLC, an environmentally friendly company;
- Expansion of GRES-2 with the addition of new power units;
- Construction of GRES-3 and revision of plans for gasification of Almaty CHPPs.

Furthermore, as part of the updated Programme, we will closely monitor all greenhouse gas emissions, including carbon dioxide, methane, and nitrous oxide, subjecting them to annual verification. Adding an efficiency indicator for specific emissions to produce electricity and thermal energy will allow for a more accurate assessment of the effectiveness of environmental efforts. We will also implement calculations for Scope 2 and Scope 3 emissions. According to the plan, the key actions of the Programme will be carried out strictly within the set deadlines.



Environmental benchmarking

ENVIRONMENTAL BENCHMARKING IS A METHOD FOR ASSESSING AND MANAGING THE ENVIRONMENTAL INDICATORS OF SAMRUK-ENERGY JSC BY COMPARING ITS ACTIVITIES WITH THOSE OF THE BEST COMPANIES IN THE MARKET AND INDUSTRY. THIS APPROACH ENABLES THE STUDY OF INTERNATIONAL EXPERIENCE IN MANAGING ENVIRONMENTAL ASPECTS AND THE IMPLEMENTATION OF BEST PRACTICES IN ITS OWN PRODUCTION.

Due to the absence of publicly available environmental indicators for companies for 2023, data from 2020 to 2022 were used for the analysis.

The benchmarking relies on two indicators:

- Use of freshwater for technological and domestic purposes;
- Direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions.

To identify the environmental trend, the largest energy companies in Kazakhstan and globally were analysed:

- Enel;
- ERG;
- RusHydro PJSC.



Production indicators

Company	2020		2021		2022	
	Electricity generation, billion kWh	Installed capacity, GW	Electricity generation, billion kWh	Installed capacity, GW	Electricity generation, billion kWh	Installed capacity, GW
Samruk-Energy JSC	31.3	6.200	35.6	6.215	35.88	6.275
ERG	18.8	3.387	19.9	3.387	19.23	3.387
Enel	207.1	84	222.6	87.1	227.8	84.6
RusHydro PJSC	151.5	38.1	143.8	38.2	135.7	38.4

Greenhouse gas emissions (Scope 1, 2)^{31, 32}

Company	2020		2021		2022	
	Direct GHG emissions, million tons CO ₂ eq (Scope 1)	Indirect GHG emissions, million tons CO ₂ eq (Scope 2)	Direct GHG emissions, million tons CO ₂ eq (Scope 1)	Indirect GHG emissions, million tons CO ₂ eq (Scope 2)	Direct GHG emissions, million tons CO ₂ eq (Scope 1)	Indirect GHG emissions, million tons CO ₂ eq (Scope 2)
Samruk-Energy JSC	40.679	-	40.308	0.015	32.993	0.013
ERG***	29.710	0.116	30.268	0.1256	29.931	0.0535
Enel**	45.7	11	51.6	9.9	53.1	10.1
RusHydro PJSC **	30.13	-*	30.58	-*	30.88	-*

*The companies did not disclose Scope 2.

** Enel and RusHydro PJSC are engaged in energy production based on the operation of hydroelectric power plants, which result in minimal greenhouse gas emissions.

*** ERG, in addition to energy production facilities, has mining and processing facilities, Scope 1 includes all types of production facilities.

Freshwater withdrawal, million m³

Company	2020	2021	2022
Samruk-Energy JSC	211.380	211.247	230.694
ERG	1,910	2,069	1,989
Enel	51.5	73.10	76.0
RusHydro PJSC	706.26	672.96	686.76

Specific indicators

Company	2020		2021		2022	
	m ³ /thousand kWh	tons of CO ₂ eq/ thousand kWh	m ³ /thousand kWh	tons of CO ₂ eq/ thousand kWh	m ³ /thousand kWh	tons of CO ₂ eq/ thousand kWh
Samruk-Energy JSC	6.75	1.30	5.93	1.13	6.43	0.92
ERG	101.60	1.59	103.97	1.53	103.43	1.56
Enel	0.25	0.27	0.33	0.28	0.33	0.28
RusHydro PJSC	4.66	0.20	4.68	0.21	5.06	0.23

The companies differ in terms of capacity and volume of generated electricity, so the comparative analysis of specific indicators of greenhouse gas emissions and freshwater withdrawal will be conditional.

According to the results obtained, Samruk-Energy JSC has the following trend:

- annual decrease in specific GHG emissions: in 2021 by 13%, in 2022 by 19%; at the same time, the indicator remains approximately at the same level for ERG and Enel, and RusHydro PJSC shows an increase in specific GHG emissions: in 2021 by 5% and in 2022 by 9.5%;

- The average value of specific water withdrawal for 2020-2022 is 6.37 m³/thousand kWh, which is higher than Enel by 21 times (0.3 m³/ thousand kWh) and RusHydro PJSC by 33% (4.8 m³/ thousand kWh), but significantly lower than ERG by 16.16 times (103 m³/ thousand kWh).

Based on the results obtained, Samruk-Energy JSC should continue to reduce its carbon footprint, focus on modern technologies and methods to reduce greenhouse gas emissions, and continue modernization of both main and auxiliary equipment to reduce water intake for technological needs subsidiaries and affiliates.

³¹ Companies of Samruk-Energy JSC in 2020 and RusHydro PJSC did not disclose Scope 2.

³² Enel and RusHydro are engaged in energy production based on the operation of hydroelectric power plants, which result in minimal greenhouse gas emissions



Corporate governance

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- 240 – Corporate Governance System
- 250 – Governing Bodies
- 270 – Remuneration
- 270 – Securities
- 272 – Risk Management and Internal Control
- 276 – Information security
- 278 – Business Ethics and Anti-Corruption

5



Corporate governance system

SIGNIFICANT EFFECTIVE ACTIVITY OF SAMRUK-ENERGY JSC IS DUE TO PROPERLY DESIGNED CORPORATE GOVERNANCE PROCESSES AT EACH OF THE RELEVANT LEVELS, WHICH ENSURE TRANSPARENCY, CONTROL AND SEPARATION OF POWERS, AS WELL AS TIMELY RESPONSE TO EMERGING RISKS.

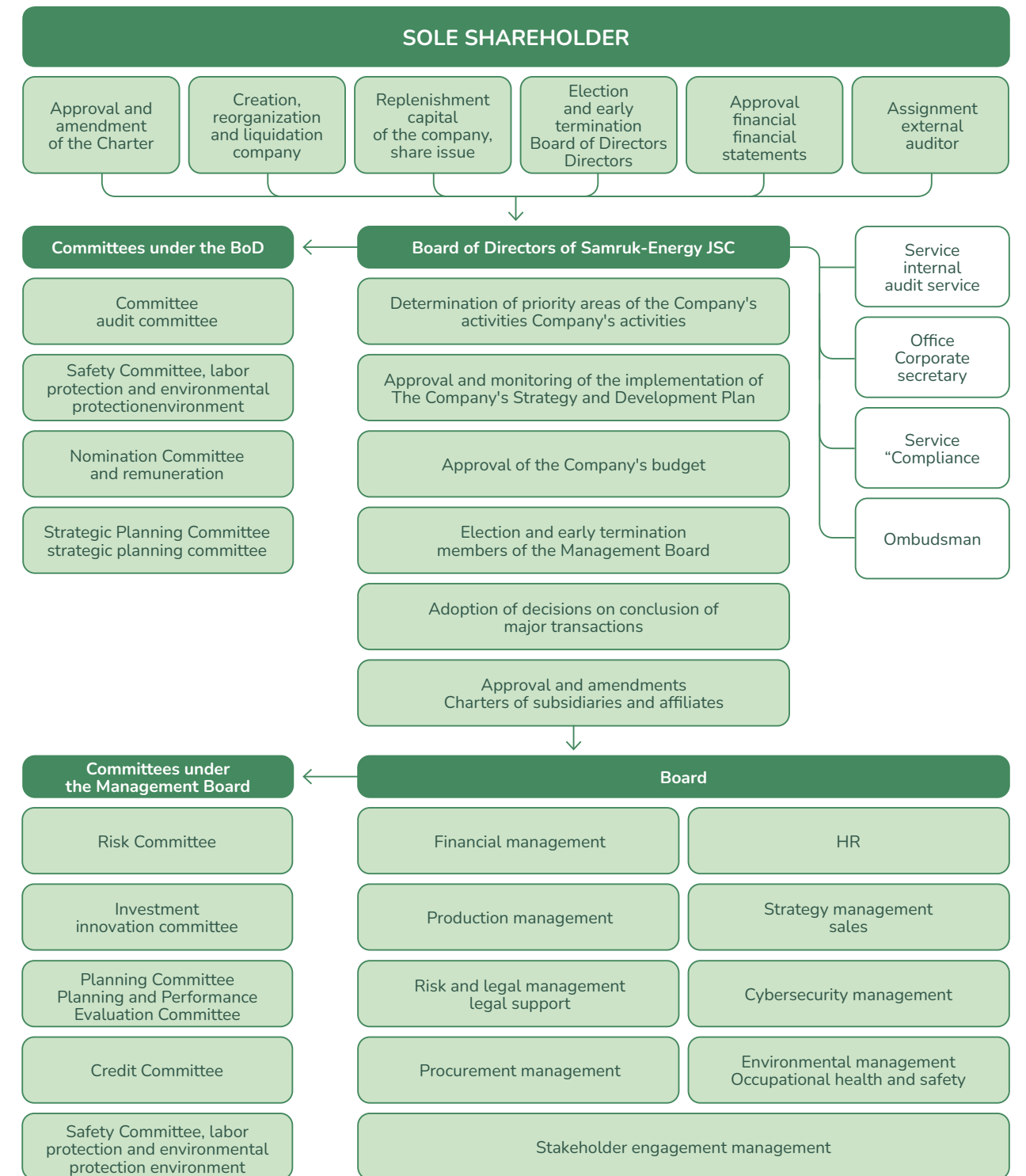
In line with best global practices, we are committed to the continuous improvement of our corporate governance system to ensure a reliable internal control system, effective risk management, facilitated access to external capital, and enhanced reputation.

The corporate governance system of the Company comprises a set of processes that manage and control the activities the group of companies of Samruk-Energy JSC, as well as a system of relationships between the executive body, the Board of Directors, shareholders, and stakeholders aimed at increasing long-term value and sustainable development. The Board of Directors periodically reviews issues to enhance the effectiveness of this system of relationships. The competencies of the bodies and the decision-making process are clearly defined and enshrined in the charter.

GRI 2-9

The corporate governance system ensures:

- adherence to the hierarchy of issue review and decision-making;
- clear delineation of powers and responsibilities among bodies, officials, and employees;
- timely and quality decision-making by the bodies of Samruk-Energy JSC and its subsidiaries and affiliates;
- efficiency of processes in the activities of Samruk-Energy JSC and its subsidiaries and affiliates;
- compliance with legislation, the Corporate Governance Code, and internal documents of Samruk-Energy JSC and its subsidiaries and affiliates.



At Samruk-Energy JSC and its subsidiaries and affiliates, regulations for bodies and structural divisions have been established, along with job descriptions for the respective positions. Compliance with these documents ensures systematization and consistency in the processes of corporate governance.

The fundamental internal documents of the Company in the area of corporate governance include:

- The Corporate Governance Code of Samruk-Kazyna JSC;
- The Action Plan for corporate governance improvement at Samruk-Energy JSC for 2022–2023.



Main policies of Samruk-Energy JSC in the sphere of corporate governance:

Document	Effective date of the latest version
Charter of Samruk-Energy JSC	26.01.2023
Corporate Governance Code	10.11.2023
Code of Conduct	25.12.2023
Regulations on the Board of Directors	24.02.2020
Regulations on the Strategic Planning Committee of the Board of Directors	14.07.2022
Regulations on the Audit Committee of the Board of Directors	25.05.2018
Regulations on the Nomination and Remuneration Committee of the Board of Directors	25.05.2018
Regulations on the Committee for Occupational Health and Safety and Environmental Protection of the Board of Directors	14.07.2022
Policy on advanced training and engagement of external experts by members of the Board of Directors	24.03.2011
Regulations on the Corporate Secretary	27.12.2021
Regulations on the Management Board	23.08.2019
Regulations on the Risk Committee	16.07.2018
Regulations on the Committee for Occupational Health and Safety and Environmental Protection of the Management Board	25.06.2018
Regulations on the Planning and Evaluation Committee	19.06.2014
Regulations on the Credit Committee	13.08.2018
Risk management policy	26.05.2014
Corporate Management System Policy	26.02.2024
Anti-Fraud and Anti-Corruption Policy	28.09.2018

The executive bodies of Samruk-Energy JSC and its subsidiaries and affiliates collaborate in a spirit of cooperation to ensure the adequacy and realism of the companies' development plans, which are directed for approval by the Company's Boards of Directors, as well as their alignment with the development plan and action plan of Samruk-Energy JSC.

The executive body of Samruk-Energy JSC maintains ongoing dialogue with the executive bodies of subsidiaries and affiliates on issues of strategy and sustainable development.

To fully realize its mission and meet the requirements of shareholders and other stakeholders (subsidiaries and affiliates, employees, partners, etc.), the Company has developed and maintains an operational system for managing its subsidiaries and affiliates.

Samruk-Energy JSC participates in the management of companies through the implementation of shareholder (participant) functions, as well as through the Board of Directors in a manner prescribed by the Company's Charters and the Corporate Governance Code.

The Boards of Directors of the Company have full autonomy in decision-making within the scope of their competence as established by the Company's Charters.

The position of Samruk-Energy JSC on specific issues is conveyed through its representatives on the company's Board of Directors.

Samruk-Energy JSC establishes a unified policy regarding the group of companies, approves methodological recommendations, and corporate standards for subsidiaries and affiliates. These areas include management of human resources, information technology, investments, risks, corporate governance, planning, economics, finance, and others.

The objectives of the asset management system are:

- Adherence to the hierarchy of issue review and decision-making;
- Timely decision-making by the corporate bodies of Group of companies Samruk-Energy JSC;
- Enhanced manageability of processes for the bodies of subsidiaries and affiliates;
- Increasing the compliance rating of the corporate governance level of subsidiaries and affiliates to match the best global practices.

Priority tools for managing subsidiaries and dependent organizations of Samruk-Energy JSC include:

- Enhancing the level of corporate governance of subsidiaries and affiliates through the formation of professional Boards of Directors/Supervisory Boards, ensuring the effectiveness of the activities of the Boards of Directors/Supervisory Boards and executives of subsidiaries and affiliates;
- Ensuring effective leadership of subsidiaries and affiliates by defining strategic objectives (KPIs) for subsidiaries and affiliates, monitoring, and evaluating the effectiveness of the execution of the Development Strategy and Development Plan of subsidiaries and affiliates;
- Forming unified policies, corporate standards, and methodological recommendations to ensure uniform approaches to key issues across the Group of companies of Samruk-Energy JSC, promoting best management practices and current activities in subsidiaries and affiliates;
- Providing support and expertise to the activities of subsidiaries and affiliates while adhering to the existing principles of corporate governance and within the competencies of the Company to implement policies, standards, and methodological recommendations, building competencies, improving performance results, and/or addressing problematic issues of subsidiaries and affiliates;
- Promoting the interests of the Company group and individual subsidiaries and affiliates with the aim of achieving the strategic objectives of the Company, increasing the value of the investment portfolio of the group of companies of Samruk-Energy JSC on issues such as interaction with government bodies, antitrust regulation, tariff policy, attracting investors, etc.;
- Seeking and implementing business synergies to achieve a synergistic effect at the level of the group of companies of Samruk-Energy JSC by identifying and proposing opportunities for cooperation between subsidiaries and affiliates, for example, through complementary activities, creating service factories, common service centers, to optimize costs, implement new functional standards, etc.

Management of organizations is carried out by their respective bodies in accordance with the competencies and procedures specified in the organization's charter. This principle also applies to organizations with multiple shareholders (participants).

The management of the asset portfolio and the shareholding (participation shares) as well as the continuous improvement of the asset management system within the Group of companies of Samruk-Energy JSC is carried out within the framework of Samruk-Energy JSC's development plan.

Issues related to the development and implementation of the development plan are considered periodically as determined by the Board of Directors, but not less than once a year, exclusively at face-to-face meetings of the Board of Directors. The Board of Directors implements a system for early detection and timely response to changes in the internal and external market conditions and force majeure situations.

The bodies, officials, and employees of the fund and organizations act and make decisions in accordance with the development plan and the charter. The development plan is a long-term document that defines the vision, mission, objectives, tasks, strategic directions, and key performance indicators for the medium term.

The development plan of Samruk-Energy JSC contains goals, tasks, and development directions for Group of companies Samruk-Energy JSC, and also includes objectives, tasks, and indicators for sustainable development.

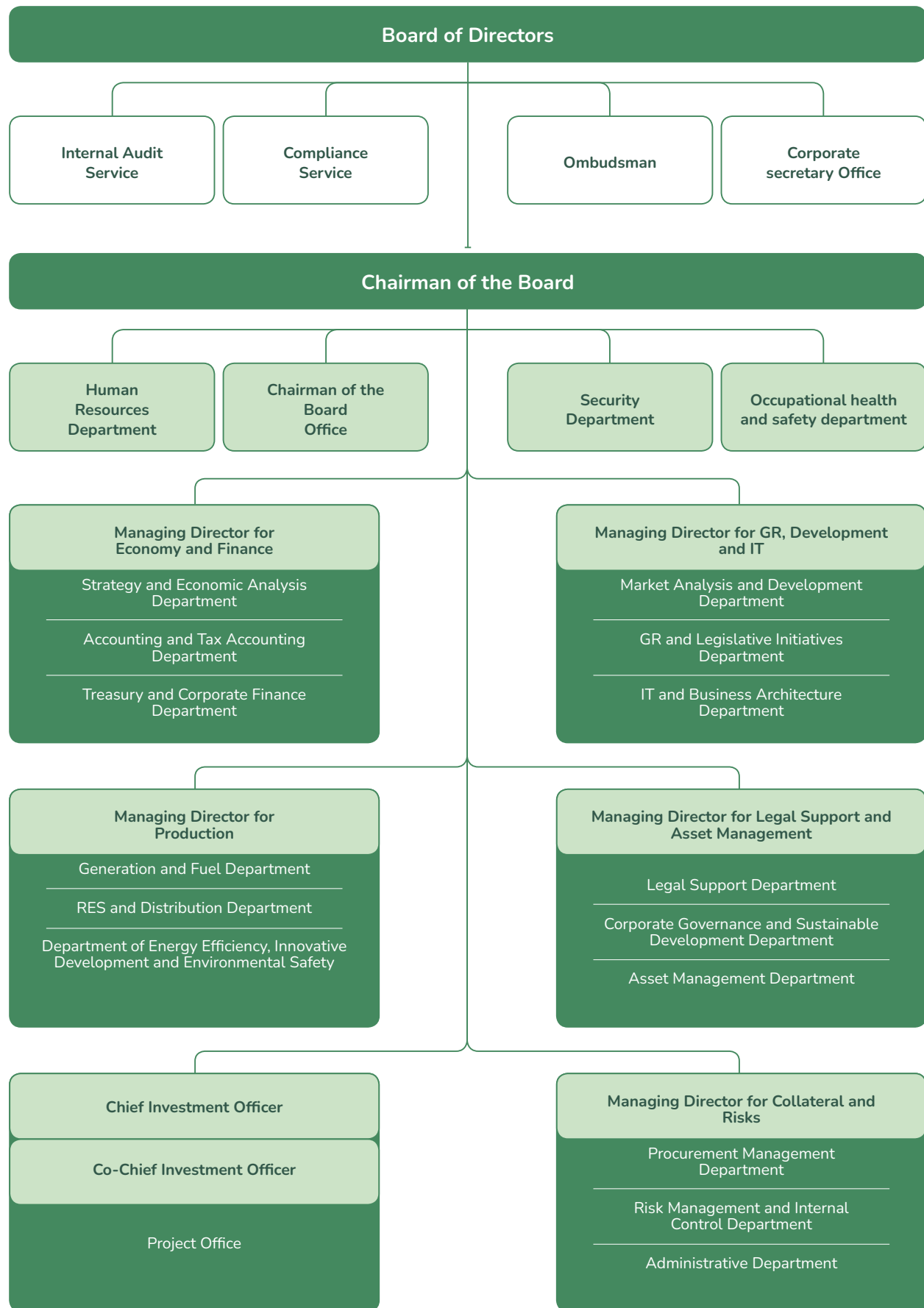
Within the framework of the development plan, the Board of Directors sets long-term goals that must meet the following criteria: be specific, measurable, achievable, relevant, and time bound. The achievement of strategic goals is assessed through long-term KPIs.

In the process of developing and monitoring the implementation of the Development Plan, the Board of Directors and the executive body conduct strategic sessions during which the main directions of activity, tasks, problematic issues, risks, and corrective measures are discussed.

In developing the Development Plan, consultations are held with key stakeholders, in particular, major shareholders, main business partners, and interested government bodies.



Organizational structure of Samruk-Energy JSC as of 31.12.2023



GRI 2-6

By the decision of the Board of Directors dated July 27, 2023 (Minutes No. 09/23), the organizational structure of Samruk-Energy JSC was approved in a new version: the positions of Chief Investment Director, Co-Chief Investment Director, Managing Director for Legal Support and Asset Management were introduced. In order to increase the efficiency of the Company's activity, as well as taking into account the current production needs of the Company, regrouping was carried out, as a result of which the following positions were introduced, and structural subdivisions were transformed:

- The position of Managing Director for Production and Asset Management was renamed to Managing Director for Production;
- The position of Managing Director for Development, Sales and Change was renamed to Managing Director for GR, Development and IT;
- The position of Managing Director for Legal Support, Assurance and Risks was renamed to Managing Director for Assurance and Risks;
- Production Efficiency Department was renamed into Energy Efficiency, Innovative Development and Environmental Safety Department;
- The position of the Managing Director for Legal Support, Collateral and Risks was renamed into the position of the Managing Director for Collateral and Risks;

- The Project Portfolio Management Department was renamed into the Project Office;
- The GR and Legislative Initiatives Department, the Market Analysis and Development Department, and the Information Technologies and Business Architecture Department were created by reorganizing the Energy Transition and Digitalization Department and the Market Development and Sales Department;
- Asset Management Department was created by transferring the reorganization and sale of assets from the Block;
- Managing Director for Economics and Finance and the functions of corporate management of subsidiaries and affiliated organizations, organization of work of corporate secretaries from the Block of the Managing Director for Production;
- Administrative Department was transferred from the Block of the Chairman of the Management Board to the Block of the Managing Director for Collateral and Risks.

Thus, the updated organizational structure is aimed at:

- efficiency in decision making;
- increased productivity;
- responsiveness of decision-making;
- organizational flexibility.





Improving the efficiency of the corporate governance system

In accordance with the diagnostic assessment of the corporate governance system carried out in 2021 by Samruk-Kazyna JSC using approved methodology in organizations where Samruk-Kazyna JSC directly or indirectly owns more than 50% of the voting shares, the corporate governance rating of Samruk-Energy JSC was established at the level of "BB" (maturity level "medium"). Key aspects of corporate governance were analyzed:

- Effectiveness of the Board of Directors and the executive body;
- Risk management;
- Internal control and audit;
- Sustainable development and shareholder rights;
- Transparency.

In line with the Development Strategy, we aim to enhance the effectiveness of corporate governance through the lens of sustainable development and ESG principles, which guide quality management, health and safety, environmental protection, energy efficiency, and anti-corruption and fraud prevention.

To ensure a management approach that considers the social and environmental impacts of activities on people and the environment, in 2023 we approved the Roadmap for Improving the Sustainable Development Management System of Samruk-Energy JSC for 2023-2024. This includes activities aimed at improving our performance in environmental and social aspects, as well as in corporate governance issues, formed based on the results of an independent diagnostic of the company's corporate governance and

the results of a GAP analysis of the company's ESG processes in compliance with rating agency criteria.

The Roadmap for Improving the Sustainable Development Management System for 2023-2024 envisages the implementation of 111 activities aimed at developing areas that require improvement and the development of corporate governance practices, with a completion timeframe of 2023-2024.

In 2023, the implementation of the Roadmap for improving the sustainable development management system amounted to

94.4%

By the decision of the Management Board of Samruk-Kazyna JSC dated November 10, 2023 (Minutes No. 54/23), Samruk-Energy JSC approved a new version of the Corporate Governance Code.

To apply unified standards, by the decision of the Management Board of Samruk-Energy JSC dated December 15, 2023 (Minutes No. 39), the updated Corporate Governance Code in a new edition was approved for the Group of Companies of Samruk-Energy JSC.

The Corporate Governance Code is available on the website https://www.samruk-energy.kz/images/Corporate_documents/KKU_2024_ru.pdf

Corporate Management System of Samruk-Energy JSC

For effective and transparent management of activities, we have implemented a corporate management system focused on the concept of sustainable development.

The key document of Samruk-Energy JSC in this area is the Corporate Management System Policy (for more details, visit the Samruk-Energy JSC website at https://www.samruk-energy.kz/images/Corporate_documents/Politika_KSM_2024_ru.pdf)

To ensure an objective assessment of the current state of the corporate management system, as well as to enhance the level of interaction, ensure the implementation of audit principles, and form a necessary knowledge base, we use a cross-functional audit approach. This approach involves conducting audits within Samruk-Energy JSC by both specialists from subsidiaries and dependent organizations and the corporate center.

In December 2022, we successfully passed the certification audit for international standards ISO 9001 "Quality Management System," ISO 14001 "Environmental Management System," ISO 45001 "Occupational Health and Safety Management System," ISO 50001 "Energy Management System," and ISO 37001 "Bribery Management System," subsequently receiving international standard compliance certificates. The audit involved international class specialists representing the conformity assessment body MS CERT.

In November 2023, we successfully passed an external audit of our corporate management system in accordance with international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO 37001.

The audit involved internationally recognized specialists from the MS CERT conformity assessment body. The results of the external audit were summarized in a report dated November 27, 2023.

The certification was conducted according to the procedures of the international conformity assessment body MS Certification Services, involving international class auditors, and covered the following assets (production sites) of the Company: EGRES-1 named after B. Nurzhanov LLP, EGRES-2 JSC, Almaty Power Plants JSC, Moynak HPP JSC, Samruk Green Energy LLP, Alatau Zharyk Company JSC, Almaty EnergoSbyt LLP, Shardara HPP JSC, First Wind Power Plant LLP, as well as the corporate center of Samruk-Energy JSC.

The results of the certification audit highlighted the positive aspects of the development and functioning of the Company's corporate management system, including:

- High degree of management's orientation towards achieving the company's set goals;
- Organization and conduct of cross-functional corporate audits of the management system in dependent organizations;
- Good level of exchange of documented information electronically in the company's activities;
- Use of information systems for planning and managing processes;
- Support for the development of the corporate management system from dependent organizations;
- Amendments to existing legislation aimed at establishing requirements to protect the interests of all participants in the energy market.





Compliance with the Corporate Governance Code

The results of the self-assessment show that in 2023, we ensured compliance with the main principles and provisions of the Corporate Governance Code. By the end of 2023, out of 64 provisions of the Code, 60 were fully compliant, and 4 were partially compliant. The discrepancies are presented in the sections "Government as a Shareholder of the Fund" and "Effectiveness of the Board of Directors and the Executive Body".

The following items have been identified as partially compliant with the provisions of the Code:

- Item 2 of Chapter 1 "Government as a Shareholder of the Fund," according to which organizations should strive to simplify the structure of their assets and their legal forms as much as possible. Thus, Group of companies of Samruk-Energy JSC includes subsidiaries of various legal forms: both joint-stock companies and limited liability partnerships. In 2023, no actions were taken to change the legal forms of the subsidiaries and affiliates of Samruk-Energy JSC.
- In 2023, within the framework of creating a "green" company, Qazaq Green Power PLC, within the structure of the Group of companies of Samruk-Energy JSC, the activities to transfer 100% of the participation share of KazHydroTechEnergo LLP and 25% of the participation share of Energia Semirechiya LLP to the charter capital of Qazaq Green Power PLC were completed. Additionally, within the framework of implementing renewable energy projects, Qazaq Green Power PLC conducted activities to create a joint venture, Altyn Dala Energy Ltd. (25%). During the reporting period, there were no activities concerning the realization/acquisition of assets by Samruk-Energy JSC.
- Item 5 of Chapter 5 "Effectiveness of the Board of Directors and the Executive Body," according to which the Board of Directors should ensure diversity in terms of experience, personal characteristics, and

gender composition. While the current composition of the Board of Directors ensures diversity in necessary skills, knowledge, and competencies, it does not provide diversity in terms of gender composition.

- Item 7 of Chapter 5 "Effectiveness of the Board of Directors and the Executive Body," according to which the Board of Directors approves an induction program for newly elected members of the Board of Directors and a professional development program for each member of the Board of Directors. The Corporate Secretary ensures the implementation of these programs. Thus, in 2023, the Corporate Secretary implemented the induction procedure for newly elected members of the Board of Directors. However, the professional development program for each member of the Board of Directors was not approved in 2023 due to cost optimization for the maintenance of the Board of Directors in accordance with item 9 of the Roadmap for the implementation of the instructions of the President of the Republic of Kazakhstan on the reform of Samruk-Kazyna JSC, approved by the decision of the Fund's Board on 24.02.2022 (Minutes No. 13/22).
- Item 18 of Chapter 5 "Effectiveness of the Board of Directors and the Executive Body," according to which the Board of Directors elects the head and members of the executive body, determines the terms of their office, the amount of their salary, conditions of their compensation, and terminates the powers of the head and members of the executive body. In accordance with the Charter and internal documents of Samruk-Energy JSC, the Board of Directors determines the number of members, the term of office of the Board, elects members of the Board, and prematurely terminates their powers (except for the Chairman of the Board). The issue of appointment (election) and early termination of powers of the Chairman of the Board of Samruk-Energy JSC is within the competence of the Sole Shareholder.

Company plans to improve the corporate governance system

The primary strategic directions for the development of Samruk-Energy JSC in the field of corporate governance for 2024 and the short-term perspective include:

- Adopting best corporate governance practices by implementing principles and provisions of the updated Corporate Governance Code.
- Increasing the proportion of women at all levels of corporate governance.
- Effective risk management and internal control system to enhance reputation.
- Developing a comprehensive system for ensuring business continuity.
- Upholding the rights of shareholders, investors, and other stakeholders.
- Differentiating powers and responsibilities between bodies and departments.
- Enhancing the effectiveness of the Board of Directors/Committees, as well as the Executive Body/Committees, and management bodies of subsidiaries and affiliates.
- Preventing corporate conflicts and conflicts of interest.
- Combating all forms of corruption and adhering to business ethics.
- Improving management reporting systems, including in the area of sustainable development across different management levels.
- Effective engagement with shareholders and other stakeholders, improving principles of information transparency.

- Ensuring efficient processes and systems for planning, internal control, compliance and internal audit, risk management, and sustainable development management.
- Implementing sustainable development principles and applying a risk-oriented approach in project management practices at all investment stages including assessing and managing impacts on the social, environmental, and economic spheres (forced relocation, biodiversity, cultural heritage, etc.) in accordance with the Company's Sustainable Development Guide.
- Enhancing financial resilience.
- Promoting responsible procurement based on the principles of fair and free competition, mutual benefit, transparency, and full accountability for commitments, as well as requiring suppliers to adhere to ethical norms and the Company's Supplier Guidelines as outlined in the Sustainable Development Guide.
- Assessing company risks related to climate change.
- Monitoring compliance with the UN Principles for Responsible Investment to attract investments.
- Evaluating the current level of development of ESG management practices and improving Samruk-Energy JSC's positions through participation in ESG ratings.
- Defining ESG criteria alongside standard financial analysis — assessing both ESG risks and opportunities.
- Developing a motivation and compensation system tied to ESG criteria performance indicators.





Governing Bodies

Shareholder of Samruk-Energy JSC

100 % of the shares of Samruk-Energy JSC are owned by the Sole Shareholder, Samruk-Kazyna JSC (for detailed information about Samruk-Kazyna JSC, please visit this link <http://www.sk.kz>).

The relationship between Samruk-Energy JSC and its Sole Shareholder is based on honesty, accountability, responsibility, and transparency, and involves protecting and respecting the shareholder's rights and legitimate interests.

The Sole Shareholder manages the Company by setting priority tasks and strategic directions. The activities, exclusive competencies, rights, and obligations of the Sole Shareholder are governed by the Charter. We strive to maintain the interests of the Sole Shareholder by ensuring the growth of long-term value and sustainable development.

The implementation of the rights of the Sole Shareholder is carried out in accordance with the Law of the Republic of Kazakhstan "On Joint Stock Companies" and the Charter of Samruk-Energy JSC. Shareholder rights include, but are not limited to:

- Timely receipt of information sufficient for decision-making, in the manner prescribed by the legislation of the Republic of Kazakhstan, the Charter, and internal documents of the Company in the field of information disclosure;
- Voting on matters within their competence;
- Participation in determining the quantitative composition, term of office of the Board of Directors, election of its members, and termination of their powers, as well as determining the size and conditions of remuneration;
- Receiving dividends based on a clear and transparent dividend policy.

In the reporting period, the Sole Shareholder considered key issues:

- On January 26, 2023 — regarding amendments to the Charter of Samruk-Energy JSC;

- On April 26, 2023 — approval of the annual financial statements of Samruk-Energy JSC for 2022, the procedure for the distribution of the net income of Samruk-Energy JSC for 2022, and the size of dividends per ordinary share of Samruk-Energy JSC, as well as information on the appeals of the Sole Shareholder of Samruk-Energy JSC concerning the actions of Samruk-Energy JSC and its officials and the outcomes of their consideration for 2022;
- On November 10, 2023 — approval of the Corporate Governance Code of Samruk-Energy JSC in a new edition.



Board of Directors of Samruk-Energy JSC

GRI 2-9

The Board of Directors provides strategic leadership to the Company and long-term activity efficiency by making informed decisions that consider the interests of all stakeholders based on the principles of sustainable development.

In 2023, Kazutin Nikolay Yurievich was appointed as the Chairman of the Board of Directors — a representative of the shareholder and Ogay Valery Dmitrievich as the Senior Independent Director.

During the reporting period, Ogay Alexey Vladimirovich and Moldabaev Kanysh Tanirbergenovich were elected to the Board of Directors as shareholder representatives, possessing deep knowledge in the fields of energy and strategic planning.

In 2023, the composition of the company's Board of Directors consisted of seven members, three of whom are independent directors — Kashkinbekov Arman Kairberlievich, Zhubaev Armanbay Saparbaevich, and Ogay Valery Dmitrievich — possessing significant experience in finance, accounting, auditing, engineering, strategic management, including the development of green energy and ESG.

The current composition of the Board of Directors of Samruk-Energy JSC is balanced in terms of industry experience, skills, international connections, and independence, however, it does not provide gender diversity.

Members of the Board of Directors do not own shares in the Company (participation shares in the company), affiliated companies, nor do they own shares of the Company's suppliers and competitors.

Selection and re-election policy

GRI 2-9, 2-10

The operation and competencies of the Board of Directors, as well as the rights and duties of its members, are defined by the Company's Charter and the Regulations of the Board of Directors. The process of forming, searching for, and selecting candidates is carried out before the expiration of the full term of office of the entire Board of Directors and the terms of individual members.

The General Meeting of Shareholders elects members of the Board of Directors based on clear and transparent procedures, considering the competencies, skills, achievements, business reputation, and professional experience of the candidates, as well as characteristics and gender composition. When re-electing individual members of the Board of Directors or its entire com-

position for a new term, their contribution to the effectiveness of the Board's activities is considered.

The selection of candidates for the Board of Directors takes into account:

- experience in executive positions, including as a member of the board of directors;
- work experience;
- education, specialty, possession of international certificates and competencies in the areas of activity;
- business reputation;
- the presence of a direct or potential conflict of interest.
- the election of the entire board of directors or individual members can be initiated by the sole shareholder or the nominations and remunerations committee.

Members of the board of directors are elected from among:

- shareholders — individuals;
- individuals proposed/recommended for election to the board of directors as representatives of shareholders' interests;
- individuals who are not the sole shareholder of the company and are not proposed/recommended for election to the board of directors as a representative of the sole shareholder.

At least one-third of the members of the Board of Directors must be independent directors. An independent director is recognized as a person who possesses sufficient professionalism and independence to make unbiased and objective decisions, free from the influence of individual shareholders, the executive body, and other interested parties. Independent directors are elected as chairpersons of key committees of the Board of Directors — including audit, nominations and remunerations, among others. An independent director must also monitor for potential loss of independence status and notify the Chairman of the Board of Directors in a timely manner about such a situation. If there are circumstances affecting the independence of a Board member, the Chairman of the Board of Directors promptly informs the Sole Shareholder to make an appropriate decision. As of 2023, the independent directors of the Company fully met the independence criteria.

In companies where all voting shares are owned by Fund of Samruk-Kazyna JSC, there are specifics regarding the process of electing members of the Board of Directors:

- The Chairman of the Board of Directors is elected by the decision of the Sole Shareholder;



- If the Chairman of the Board of Directors is elected from among the representatives of the Fund, the Board of Directors elects a Senior Independent Director from among the independent directors;
- The process of searching for and selecting candidates for the Board of Directors is conducted by the Fund jointly with the Chairman of the Board of Directors and the Chairman of the Nominations and Remunerations Committee of the Board of Directors of the Company.

Members of the Board of Directors are elected for a term of up to three years; upon satisfactory performance, they may be re-elected for another term of up to three years. Any term of election to the Board of Directors longer than six consecutive years (two three-year terms) requires special consideration with the need for qualitative renewal of the Board of Directors in mind. The term of office of the members of the Board of Directors coincides with the term of the entire Board of Directors and expires when the general meeting of shareholders decides to elect a new Board of Directors.

An independent director may not be elected to the Board of Directors for more than nine consecutive years. The election of an independent director to the Board of Directors takes place annually with a detailed explanation of the need to elect this member of the Board of Directors and the impact of this factor on the independence of decision-making.

No person shall participate in decisions relating to his or her own appointment, election, and re-election.

Role of the Board of Directors in promoting the ESG principles

GRI 2-9, 2-10

The Board of Directors implements the policy in the field of sustainable development and reviews the main documents in the field of ESG. The Board of Directors approved the Sustainable Development Guidelines, which is the main document in this area and is aimed at systematizing sustainable development processes across the Samruk-Energy JSC Group of Companies. The Board of Directors approved the Roadmap for improving sustainable development management system of Samruk-Energy JSC for 2023-2024, which includes measures aimed at improving activities and promoting ESG principles in the Company.

Evaluation of Board of Directors' performance

GRI 2-18

The effectiveness of the Board of Directors, its Committees, and individual members is evaluated annually as part of a structured process approved by the Board of Directors. The evaluation methods include self-assessment or the involvement of an independent consultant to enhance the quality of the assessment. Evaluations involving an independent consultant are conducted at least once every three years.

In line with best international corporate governance practices, the Company conducted a self-assessment of the Board of Directors' activities for 2023. The self-assessment was based on the Methodology for Assessing the Activities of the Board of Directors and its Committees in accordance with the Methodology for Diagnosing Corporate Governance, as well as leading practices in corporate governance.

According to the methodology, the evaluation technology included surveying all members of the Board of Directors and its Committees. The results of the Board of Directors activities assessment indicated areas for further development of corporate governance practices. Following the assessment, the Action Plan was formulated with practical measures aimed at addressing weaknesses to enhance the performance of the Board of Directors and the overall corporate governance of the Company.

GRI 2-16

The procedure for informing the Board of Directors about critical financial and non-financial issues is regulated in accordance with applicable laws and internal regulations. Based on the results of 2023, there were no such cases.

Training and development of members of the Boards of Directors

GRI 2-17

To raise awareness of the highest corporate governance body on sustainability and corporate governance issues, seminars were held in the reporting period on the following topics:

- Current issues in the field of ESG;
- Risk management and internal control.

Composition of the Company's Board of Directors as of 31 December 2023

GRI 2-9, 405-1, GRI 12: Coal Sector: 12.19.6

30-50 years old

57%

50 years and more

43%

Men

100%

Total number of BOD members

7 persons

Independent members of the BOD

3 persons



Kazutin Nikolay Yurevich

Chairman of the Board of Directors of Samruk- Energy Shareholder's representative

Managing Director for Legal Support, Security and Risks of Samruk-Kazyna JSC. Expert in strategic and corporate governance, economics, finance, law, and audit

Citizenship: Republic of Kazakhstan | Date of birth: 28 November 1982

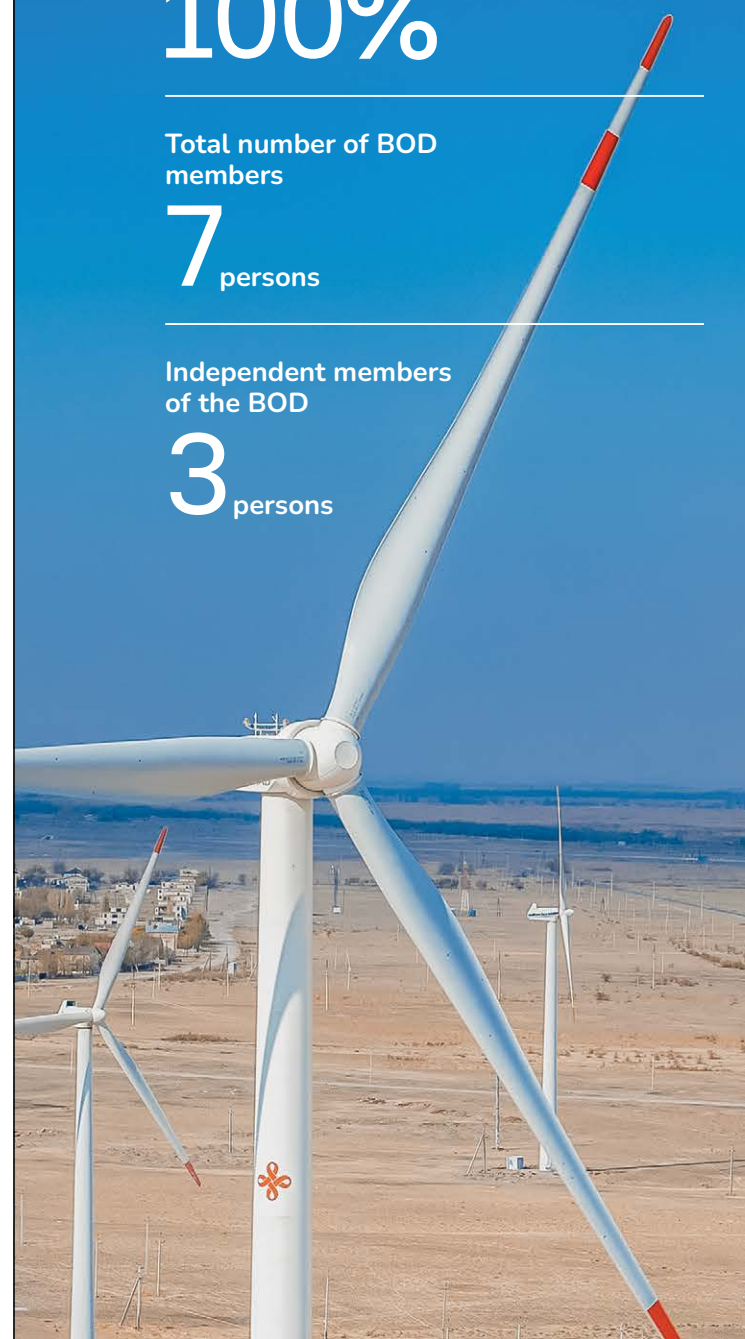
Date of first election: 18 February 2022 | Term of office: 23 June 2025

Educational background:

- Ryskulov Kazakh Economic University, majoring in accounting and audit

Professional experience:

- 2023 — Managing Director for Legal Support, Procurement and Risks of Samruk-Kazyna JSC
- 2020 — Deputy Chairman of the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan
- 2018-2019 — Head of the Internal Audit Service of East Kazakhstan Regional Energy Company JSC, Ust-Kamenogorsk
- 2016-2018 — Advisor to the Chairman of the Board of Kokshetau Mineral Waters JSC
- 2016-2006 — Senior Manager of the Department of PricewaterhouseCoopers Tax & Advisory LLP, Almaty
- 2005-2006 — Financial Analyst of Kazinterpolis Insurance Broker LLP, Almaty
- 2003-2005 — Financial Analyst of Insurance Company Amanat Insurance JSC, Almaty
- 2001-2003 — specialist in insurance and accounting of the branches of Industrial Insurance Group JSC, Almaty





Maksutov Kairat Berikovich

Member of the Board of Directors
Chairman of the Management Board

Expert in energy, strategic planning, corporate governance, finance, market development and law

Citizenship:	Date of birth:
Republic of Kazakhstan	16 May 1970

Date of first election:	Term of office:
19 June 2023	23 June 2025

Educational background:

- 1991 — Karaganda Economic University of Kazpotreboyuz, Karaganda
- 2019 — Almaty University of Power Engineering and Telecommunications, Almaty

Professional experience:

- 2018-2023 — Manager in commercial structures
- 03.2016-05.2018 — Managing Director for Economics and Finance of Samruk-Energy JSC
- 11.2013-03.2016 — Deputy Chairman of the Management Board of Samruk-Energy JSC
- 11.2012-11.2013 — Managing Director for Corporate Governance of Samruk-Energy JSC
- 02.2013-11.2012 — Managing Director for Finance and Economics of Samruk-Energy JSC
- 02.2009-02.2013 — Deputy Chairman of the Management Board for Finance and Economics of Samruk-Energy JSC
- 09.2008-01.2009 — Managing Director of Eurasian Holding Company
- 08.2004-09.2008 — Vice President for Economics of Mining and Industry Holding Company "Gefest"
- 10.1999-06.2004 — Deputy Director, Director of Karaganda branch of SB Alfa-Bank JSC Almaty city
- 09.1997-06.1999 — Deputy Chairman of Administrative Council of NWE, Deputy Akim of Karazhal city



Ogay Valery Dmitrievich

Senior Independent Director of the Board of Directors of Samruk-Energy JSC

Expert in energy, strategic planning, corporate governance, finance, generation and engineering

Citizenship:	Date of birth:
Republic of Kazakhstan	1 March 1949

Date of first election:	Term of office:
27 May 2022	23 June 2025

Contract concluded:

01.08.2023 to 26.05.2025

Participation in Committees:

- Chairman of the Committee on Appointments and Remuneration
- Chairman of the Committee on Safety, Health and Environmental Protection
- Member of the Audit Committee

Educational background:

- Kazakh Polytechnic Institute, faculty of energy, thermal power plants, speciality — thermal power engineer

Professional experience:

- 2008-2018 — Deputy Director of the Directorate, Chief Expert of Samruk-Kazyna JSC
- 2008-2001 — Head of the Laboratory "Energy Monitoring and Expertise"
- 1975-2008 — Senior lecturer, associate professor of the HPE department of Almaty University of Power Engineering and Communications

Participation in the Boards of Directors:

- 2007-2008 — Independent Director of the Board of Directors of Almaty Power Plants JSC
- 2008 — Independent Director of the Board of Directors of KazQuat JSC
- 2010-2012 — Member of the Supervisory Board of EGRES-1 LLP
- 2010-2011 — Representative of Samruk-Kazyna JSC in the BOD of Kazakh Research Institute of Power Engineering JSC



Moldabayev Kanysh Tanirbergenovich

Member of the Board of Directors
Representative of the Sole shareholder

Expert in energy, strategic planning, corporate governance, finance

Citizenship:	Date of birth:
Republic of Kazakhstan	23 October 1963

Date of first election:	Term of office:
1 August 2023	23 June 2025

Contract concluded:

01.08.2023 to 26.05.2025

Participation in Committees

- Member of the Committee on Strategic Planning
- Member of the Committee on Safety, Health and Environmental Protection

Educational background:

- 2016-2020 — Doctor of Business Administration
- Doctor of Business Administration (DBA) DBA No. 5000000219, Russian Presidential Academy of National Economy and Public Administration
- 2003-2004 — Manager of Public Service KZ No. 0155, Academy of Public Service under the President of the Republic of Kazakhstan
- 1999-2002 — Economist-lawyer JB No. 0020729, Karaganda State Technical University
- 1981-1987 — Engineer-electrician JB No. 242026, Pavlodar Industrial Institute
- International certification — IPMA Level B

Professional experience:

- from 25 November 2021 to 07.2023 — Chairman of the Management Board of KEGOC
- 04.2021-11.2021 — Director of the Directorate of Energy and Mining Assets of Sovereign Wealth Fund Samruk-Kazyna JSC
- 04.2019-04.2021 — Sovereign Wealth Fund Samruk-Kazyna JSC
- 09.2018-04.2019 — Kazakhstan Nuclear Power Plants JSC — Deputy General Director
- 12.2017-07.2018 — Samruk-Energy JSC — Managing Director for Development and Sales — Member of the Management Board
- 03.2016-11.2017 — Samruk-Energy JSC — Managing Director for Strategy and Sales — Member of the Management Board
- 02.2015-02.2016 — Samruk-Energy JSC — First Deputy Chairman of the Management Board
- 04.2014-02.2015 — Samruk-Energy JSC — Deputy Chairman of the Management Board
- 11.2012-04.2014 — Samruk-Energy JSC — Managing Director for Development
- 03.2012-11.2012 — Samruk-Energy JSC — Director of Innovation and Technology Policy and Development Department
- 06.2011-03.2012 — Sovereign Wealth Fund Samruk-Kazyna JSC — Director for Industrial Assets Management
- 02.2009-06.2011 — KEGOC — Director of the Department for Development of Outdoor Power Grids
- 10.2007-02.2009 — KEGOC — Director of the Severnye MES
- 07.2004-10.2007 — Ministry of Energy and Mineral Resources — Head of the Electric Power Industry Department
- 09.2003-07.2004 — Academy of Public Service under the President of the Republic of Kazakhstan — Trainee (training programme for top-level civil servants)
- 04.1999-09.2003 — Akimat of Bayanaulskiy district of Pavlodar region — Deputy Akim of the district
- 06.1997-04.1999 — Bayanaulsky district of power grids — President of the joint-stock company
- 05.1996-06.1997 — Bayanaulsky district of power grids — Head
- 06.1989-05.1996 — Bayanaulsky district of power grids — Chief engineer
- 08.1988-06.1989 — Bayanaulsky district of power grids — Dispatcher
- 11.1987-08.1988 — Bayanaulsky district of power grids — Master
- 08.1987-11.1987 — Bayanaulsky district of power grids — Electrical fitter



Ogay Alexey Vladimirovich

Member of the Board of Directors
Representative of the Sole shareholder

Expert in the field of corporate governance, strategy, commercial management, investments, mergers, and acquisitions

Citizenship: Republic of Kazakhstan | **Date of birth:** 1 December 1970

Date of first election: 24 August 2023 | **Term of office:** 23 June 2025

Participation in Committees:

- Member of the Nomination and Remuneration Committee

Educational background:

- Almaty University of Power Engineering and Telecommunications

Professional experience:

- 08.2023 — Director of the Department of Energy and Mining Assets Samruk-Kazyna JSC
- 2020-2023 — Director of the Department Reorganisation and Realisation of Assets, Samruk-Energy JSC
- 2016-2018 — Managing Director for Business Transformation, Samruk-Energy JSC
- 2015-2016 — CDO, Deputy Chairman of the Management Board of Samruk-Energy JSC
- 2014-2015 — Deputy Chief Director for Asset Management of Samruk-Kazyna JSC
- 2011-2014 — Director for Management of Electric Power Assets of Samruk-Kazyna JSC
- 2008-2011 — Chief Expert of the Directorate of Electric Power Assets of Samruk-Kazyna JSC
- 2006-2008 — Chief Expert, Group KEGOC JSC, Samruk Holding JSC
- 1998-2006 — Specialist, Head of the Economic Analysis Division of the Planning and Economic Analysis Department of KEGOC JSC



Zhubaev Armanbay Saparbaevich

Independent Director of the Board of Directors of Samruk-Energy JSC

Expert in strategic planning, corporate governance, finance and audit

Citizenship: Republic of Kazakhstan | **Date of birth:** 28 January 1977

Date of first election: 6 October 2022 | **Term of office:** 23 June 2025

Contract period:

06.10.2022 to 26.05.2025

Participation in Committees:

- Chairman of the Audit Committee
- Member of the Nomination and Remuneration Committee
- Member of the Strategic Planning Committee

Educational background:

- Duquesne University, Pittsburgh, USA, majoring in Business Administration (BSBA)
- University of Oxford, UK, MSc Comparative Social Policy
- The University of California, Berkeley, USA, MBA degree
- Certified Financial Analyst, CFA

Professional experience:

- from 2020 and up to date — the founder of the consulting company StrategyLab LLP
- 2006-2008 — Marketing Specialist, SAP, USA
- 2009-2010 — Consultant McKinsey Company, Russian Federation
- 2010-2012 — Polymetal company, Kazakhstan
- 2012-2013 — Senior Manager, KPMG, Kazakhstan
- 2013-2020 — Senior Manager, Director of PwC, Kazakhstan

Participation in the Boards of Directors:

- from 2022 and up to date — Independent Director of Kazakhtelecom JSC



Kashkinbekov Arman Kairberlievich

Independent Director of the Board of Directors of Samruk-Energy JSC

Expert in business management and economics, energy, strategic planning

Citizenship: Republic of Kazakhstan | **Date of birth:** 25 March 1977

Date of first election: 27 May 2022 | **Term of office:** 23 June 2025

Contract concluded:

24.06.2022 to 26.05.2025

Participation in Committees:

- Chairman of the Strategic Planning Committee
- Member of the Audit Committee
- Member of the Committee on Safety, Health and Environmental Protection

Participation in the Boards of Directors:

- Member of the National Council of Public Trust under the President of the Republic of Kazakhstan
- Member of the National Scientific Council for Energy and Mechanical Engineering
- Member of the Energy Committee of the National Chamber of Entrepreneurs ATAMEKEN
- from 2021 and up to date — independent member of the Board of Directors of Civic Initiatives Support Centre NJSC
- from 2017 and up to date — independent member of the Board of Directors of Shymkent CHPP-3 ERG JSC
- 2014-2018 — Independent member of the Board of Directors of Baiterek Venture Fund
- 2019-2020 — independent member of the Board of Directors of NIT JSC

Educational background:

- Kazakh-Japanese Development Centre, Strategic Management Programme
- Norwegian Petroleum Directorate, majoring in Petroleum Policy and Management
- VANDERBILT University USA, Master of Economics
- Bolashak Programme of the President of the Republic of Kazakhstan
- Karaganda State University

Professional experience:

- from 2022 and up to date — President of National Centre for State Scientific and Technical Expertise JSC, member of the National Kurultai under the President of the Republic of Kazakhstan
- 2021-2022 — Director of the International Snow Leopard Foundation
- 2020-2021 — Head of Sustainable Development of the United Nations Development Programme
- 2019-2020 — Deputy Chairman of the Management Board of the Science Foundation
- 2018-2019 — Deputy Chairman of the Management Board of the International Centre for Green Technologies and Investment Projects
- 2016-2017 — Vice President of Enzen
- from 2015 and up to date — Honorary General Director and Member of the Board of Directors of the Renewable Energy Association of Kazakhstan
- 2012-2014 — CEO of Rolls-Royce Energy Kazakhstan
- 2009-2012 — Member of the Management Board, Director for Government Relations and Public Relations ARSELORMITTAL TEMIRTAU
- 2008-2009 — Director for International Cooperation of the Samruk-Kazyna National Welfare Fund
- 2007-2008 — Executive Director of KAZENERGY
- 2006-2007 — President of Kazinvest
- 2005-2006 — Director of Business Development, Government and Public Relations of CONOCOPHILLIPS
- 2004-2005 — Director of the Council of Foreign Investors under the President of the Republic of Kazakhstan
- 2000-2004 — Chief Manager of NC Kazmunaygas / Kazakhoil
- 1999-2000 — Media Analyst, OWEN Business School, VANDERBILT University
- 1998-1999 — Research assistant, Institute for Public Policy, VANDERBILT University



The Board of Directors' Competence Matrix

Criteria	Required Knowledge						
	Ogay V.D	Kashkinbekov A.K	Jubaev A.S.	Moldabaev K.T.	Ogay A.V	Kazutin N.Y.	Maksutov K.B.
Professional skills	Professional skills						
	Strategic planning		+		+	+	+
	Audit, risk management, internal audit, control	+		+		+	+
	Environmental, Social, and Corporate Governance, ESG	+	+		+		+
	Finance and Economy			+		+	+
	HR management and remuneration	+		+	+	+	
	Project management	+	+	+	+	+	
	Occupational health and industrial safety	+	+		+	+	+
Energy/Renewable Energy	+	+		+	+	+	
Experience	Experience						
	Applicable industry experience (energy)	+				+	
	Experience in senior roles (CEO, CEO-1)		+	+			+
	Experience in the focus areas		+	+	+		+
	Experience as a Board of Directors member	+	+	+	+	+	+
Educational background	Educational background						
	PhD/MBA/other master's degree	+	+		+	+	+
	CFA/CPA/other equivalent degree			+			
	CIA/other equivalent degree			+			

Performance of the Board of Directors

Meetings of the Board of Directors are held in accordance with the work plan approved before the beginning of the calendar year, including the list of issues to be considered and the schedule of meetings. Consideration and decision-making on issues of an important and strategic nature shall be carried out only at in-person meetings of the Board of Directors. Materials for the meetings of the Board of Directors are sent in advance — at least seven calendar days in advance, and for more important issues at least 15 working days in advance.

In 2023, the Company's Board of Directors held 19 meetings, including 12 in-person meetings and 7 meetings in absentia.

According to the Regulation on the Board of Directors, the Chairman of the Board of Directors is responsible for the general management of the Board of Directors, ensuring the full and effective implementation of its primary functions, and fostering constructive dialogue

between the Board members, shareholders, and the Management Board.

The roles and functions of the chairman of the Board of Directors and the head of the executive body are clearly differentiated by the Charter, the Regulation on the Board of Directors, and the Regulation on the Executive Board.

Attendance of members of the Board of Directors in 2023

Name	2023
Kazutin Nikolay Yurevich	100%
Ogay Alexey Vladimirovich	100%
Moldabaev Kanysh Tanirbergenovich	100%
Ogay Valery Dmitrievich	100%
Kashkinbekov Arman Kairberlievich	100%
Zhubaev Armanbay Saparbaevich	100%
Maksutov Kairat Berikovich	100%

In 2023, the Company's Board of Directors held

19
meetings

Attendance of meetings by members of the Board of Directors was

100%

During the meetings of the Board of Directors, 201 issues were considered, including:

- Approval of changes to the Rules for assessing the performance of remuneration for executive and management personnel;
- Amendments were made to the Code of Conduct;
- A new organizational structure was approved;
- Changes and additions were made to the "Information Technology and Digitalization Strategy" for 2023-2025;
- A new Head of the Compliance Service was elected;
- A new corporate secretary was elected;
- A new Corporate Governance Code was approved.

As part of the quarterly reporting in 2023, the Board of Directors listened to reports on:

- Investment utilization and investment projects;
- Action plan for improving corporate governance;
- Activities in the area of safety and labor protection, industrial injuries, and environmental protection;

Execution of the action plan for the implementation of the development strategy.

Additionally, the Board of Directors reviewed reports on:

- Interaction with stakeholders and the feedback mechanism for 2023;
- Compliance/non-compliance with the principles and provisions of the Corporate Governance Code;
- The plan of initiatives in the area of sustainable development;
- Ensuring information security (cybersecurity), as well as analyzing and assessing the adequacy of the Company's internal controls in terms of protection and maintenance of IT systems and infrastructures.

In 2024, the focus of the Board of Directors will be on strategic issues, particularly reducing corporate matters of an administrative and operational nature.





Committees of Samruk-Energy Board of Directors

GRI 2-9

To fulfill certain tasks, ensure effective functioning, and pay due attention to in-depth examination and quality preparation of issues and decisions, the Board of Directors delegates authority to its Committees. The activities of the Committees are carried out in accordance with the Committee's Regulations.

The existing Committees of the Board of Directors are responsible for preparing recommendations in economic, environmental, and social fields:

- Audit Committee;
- Nominations and Remuneration Committee;
- Strategic Planning Committee;
- Committee on Safety, Labor Protection, and Environmental Protection.

The Board of Directors makes decisions on these aspects considering the principles of sustainable development and based on an in-depth study of the recommendations developed by the Committees.

During the reporting period, there were no changes in the functions of the existing Committees of the Board of Directors or the Executive Board, and no new Committees were created.

The Audit Committee

The purpose of the Committee is to assist the Board of Directors in in-depth examination of issues related to establishing an effective control system for the Company's financial and economic activities. This includes ensuring the completeness and accuracy of financial reporting, monitoring the reliability and effectiveness of internal control and risk management systems, overseeing the execution of corporate governance documents, controlling the independence of external and internal audit, and overseeing the process of compliance with the legislation of the Republic of Kazakhstan.

Composition of the Committee:

- Zhubaev Armanbay Saparbaevich — Independent Director, Chairman of the Committee;
- Kashkinbekov Arman Kairberlievich — Independent Director, member of the Committee;
- Ogay Valery Dmitrievich — Independent Director, member of the Committee.

In 2023, the Committee held ten meetings in person and considered

60 issues

Among the main ones — the activities of the Internal Audit Service, the Compliance Service, and the Risk Management and Internal Control Department.

The voting Committee members' attendance made up 100%.

Additionally, during the reporting period, the Committee conducted meetings with external auditors and the executive body regarding the preparation of financial reporting.

Nomination and Remuneration Committee

The Nomination and Remuneration Committee is a consultative and advisory body of the Board of Directors providing recommendations on the appointment and remuneration of members of the Board of Directors, the Management Board, the Corporate Secretary, as well as other employees in accordance with the Company's internal regulatory documents.

Composition of the Committee:

- Ogay Valery Dmitrievich — Senior Independent Director, Chairman of the Committee;
- Zhubaev Armanbay Saparbaevich — Independent Director, member of the Committee;
- Ogay Alexey Vladimirovich — member of the Committee, Representative of the Sole shareholder.

In 2023, the Committee held ten meetings in person and considered 71 issues.

Among the main ones:

- Recommendations provided to the Board of Directors on the election of members of the Supervisory Boards/Boards of Directors for Group of companies of Samruk-Energy JSC;
- Approval of job descriptions for the Chairman of the Management Board, Managing Director for Production, Managing Director for Economics and Finance, Managing Director for GR, Development and IT, Managing Director for Legal Support and Asset Management, Managing Director for Provision and Risks, Chief Director for Investments;

- Approval of the new organizational structure of the Company;
- Appointment of the Managing Director for Legal Support, Provision, and Risks of Samruk-Energy JSC;
- Appointment of the Managing Director for Economics and Finance and Managing Director for Legal Support and Asset Management of Samruk-Energy JSC;
- Review of the new version of the Rules for Evaluating the Performance and Compensation of Executive and Management Personnel of Samruk-Energy JSC;
- Review of the actual values of key performance indicators of the members of the Executive Board, the head of the Internal Audit Service, and the Corporate Secretary of Samruk-Energy JSC, as well as the motivational KPIs of these individuals.

The voting Committee members' attendance made up 100%.

Strategic Planning Committee

The purpose of the Committee's activity is to prepare recommendations on the development of priority activities (development), the Company's strategic goals (development strategy), the introduction of a sustainable development management system. This includes HSE issues, investment projects implementation, a master plan and measures contributing to improvement of the efficiency of the Company's long-term operation.

Composition of the Committee:

- Kashkinbekov Arman Kairberlievich — Independent Director, Chairman of the Committee;
- Zhubaev Armanbay Saparbaevich — member of the Committee, Independent Director;
- Moldabaev Kanysh Tanirbergenovich — member of the Committee, Representative of the Sole shareholder.

In 2023, the Committee held seven meetings in person and considered 31 issues.

Among the main ones are quarterly reports on:

- on preliminary consideration of the Development Strategy for 2022-2031;
- on preliminary review of the report on the implementation of the Roadmap for the improving of the sustainable development management system of Samruk-Energy JSC for the years 2023-2024;

- on consideration of the Company's Development Strategy Action Plan for 2018-2028;
- on preliminary review of the Development Plan (business plan) of Samruk-Energy JSC for 2024-2028 with adjustments;
- on implementation of the Company's Development Plan;
- on the development of investments and investment projects.

The voting Committee members' attendance made up 100%.

Committee on safety, labour protection and environmental protection

The Committee aims at the growth of the Company's efficiency through the preparation of recommendations, assessment, analysis and effective work on occupational health and safety and environmental protection.

Composition of the Committee:

- Ogay Valery Dmitrievich — Independent Director, Chairman of the Committee;
- Kashkinbekov Arman Kairberlievich — Independent Director, member of the Committee;
- Moldabaev Kanysh Tanirbergenovich — member of the Committee, Representative of the Sole shareholder.

In 2023, the Committee held four meetings in person and considered nine issues.

Among the main ones — quarterly reports:

- On work in the field of occupational health and safety and occupational injuries;
- On the implementation of the action plan for the management of occupational health and safety and environmental protection;
- On the action plan for achieving zero injuries in 2024;
- On the action plan for the management of environmental protection issues for 2024.

The voting Committee members' attendance made up

100%



Management Board

The Management Board, a collegial executive body, manages the current Company's operation, cooperates with the Board of Directors, and interacts with all stakeholders. The Management Board ensures the compliance of the Company's operation with the development strategy, development plan and the decisions taken by the Sole Shareholder and the Managing Body.

The Charter of Samruk-Energy JSC and the Regulations on the Management Board determine the procedure on the Management Board formation, the rights, duties, and responsibilities of its members, as well as the rules of its activities.

In accordance with the Charter, the Board of Directors determines the number of members, the term of office of the Management Board, elects members of the Management Board, terminates their powers ahead of schedule (except to the Chairman of the Management Board). At the same time, the issue of appointment (election) and early termination of powers of the Chairman of the Company's Management Board relates to the Sole Shareholder's competence. The Chairman and members of the executive body have sufficient knowledge, skills and experience required for performing their functions, as well as an impeccable business and personal reputation.

The key role of the Management Board is to ensure the prompt and effective solution of the Company's daily tasks, as well as the implementation of both the strategy and the development plan.

The Management Board ensures:

- operations in compliance with the law requirements, the Company's Charter and internal documents, decisions of the Sole Shareholder and the Board of Directors;
- proper risk management and internal control;
- allocation of resources for the implementation of decisions of the Sole Shareholder and the Board of Directors;
- occupational health and safety;
- creation of an atmosphere of interest and loyalty of employees, development of corporate culture.

Age of members	
30-50 years old	80%
50 years and more	20%
Gender Diversity	
Men	80%
Women	20%

Management Board composition

During the reporting period, the following changes occurred in the composition of the Board:

- By decision of the Board of Samruk-Kazyna JSC on June 14, 2023 (minutes No. 28/23), the powers of Tutebayev Serik Suinbekovich as the Chairman of the Management Board of Samruk-Energy JSC were prematurely terminated, and Maksutov Kairat Berikovich was elected as the Chairman of the Management Board of Samruk-Energy JSC (by decision of the Board of Samruk-Kazyna JSC (Minutes No. 28/23), he was elected as a member of the Board of Directors on June 19, 2023);
- By decision of the Company's Board of Directors on July 3, 2023 (minutes No. 08/23), the powers of the Management Board member Adylkerimov Arman Adylkerimovich were prematurely terminated;
- By decision of the Company's Board of Directors on July 3, 2023 (minutes No. 08/23), Ivchenko Yelena Dmitrievna was appointed as a member of the Management Board of Samruk-Energy JSC;
- By decision of the Company's Board of Directors on July 3, 2023 (minutes No. 08/23), Turgambayev Ruslan Yelubaevich was appointed as a member of the Management Board of Samruk-Energy JSC;
- By decision of the Company's Board of Directors on August 28, 2023, the powers of the Management Board member Ryskulov Aidar Kairatovich were prematurely terminated;
- Kamalov Almasbi Nizamaddinovich was elected as a member of the Management Board by the decision of the Company's Board of Directors on September 28, 2023 (minutes No. 12/23);
- Zhaparkhanov Nurlan Altynkhanovich was elected as a member of the Management Board by the decision of the Company's Board of Directors on September 28, 2023 (minutes No. 12/23);
- Baltabaev A.K. was elected as a member of the Management Board by the decision of the Board of Directors of the Company dated 12 April 2024 (Minutes No. 04/24);
- Aydarov A.A. was elected as a member of the Management Board by the decision of the Board of Directors of the Company dated 12 April 2024 (Minutes No. 04/24).

GRI 2-9, 405-1, GRI 12: Coal Sector: 12.19.6

The Management Board of Samruk-Energy JSC includes five members. In 2022, the share of senior executives hired from among the local community was 100%.



Maksutov Kairat Berikovich

Chairman of the Management Board

Citizenship: Republic of Kazakhstan | Date of birth: 16 May 1970

Responsibilities:

For the effective implementation of its mission and strategic objectives, the Company is responsible for the current operational activities of the Company, the timeliness of the formation and implementation of the Company's development strategy, ensuring the production of energy resources, increasing shareholder capital value, effective and active project portfolio management, enhancing productivity, and fostering human capital and social responsibility development.



Turgambayev Ruslan Yelubaevich

Managing Director for Production

Citizenship: Republic of Kazakhstan | Date of birth: 30 April 1974

Responsibilities:

To facilitate the achievement of the Company's stated business indicators in the field of production, it is responsible for executing development plans and tasks in capital construction concerning the maintenance of production assets and equipment repairs. It also effectively implements investment programs related to asset maintenance and addresses complex issues during the implementation of production programs and the management of the effectiveness of activities of subsidiaries and affiliates. It oversees the quality formation of the Company's Investment Program and subsidiaries and affiliates with an assessment of capital investment efficiency and supervises the company's processes in energy saving, increasing energy efficiency, and environmental protection. As part of the Company's innovative development, it manages the search, selection, and implementation of new innovative technologies and equipment.



Kamalov Almasbi Nizamaddinovich

Managing Director for Economy and Finance

Citizenship: Republic of Kazakhstan | Date of birth: 7 April 1989

Responsibilities:

Within the approved strategic priorities, Samruk-Energy JSC ensures medium-term and operational planning, manages the company's financial stability through the implementation of economic and tariff policies for the Group of companies of Samruk-Energy JSC, financing organization, factor analysis performance, provides timely provision of reliable financial and managerial reporting to interested parties, ensures the effectiveness of the investment activities of the company's group and effective investment decisions, ensures the process of developing, executing, and monitoring the implementation of the Company's Development Strategy.



Baltabaev Askar Kuatbaevich

Managing Director for Collateral and Risks

Citizenship: Republic of Kazakhstan | Date of birth: 16 September 1979

Responsibilities:

Within the framework of the current legislation and internal regulatory documents, ensures effective functioning and continuous improvement of risk management, internal control and business continuity systems in the Company and subsidiaries and affiliates, as well as manages and controls the procurement, marketing and administrative processes of the Company and subsidiaries and affiliates in accordance with the legislation of the Republic of Kazakhstan, the Charter and the Company's Development Strategy in order to ensure efficient use of funds and increase profitability.



Aydarov Ansar Aydaruly

Chief Investment Officer

Citizenship: Republic of Kazakhstan | Date of birth: 24 April 1986

Responsibilities:

In accordance with the Company's strategic directions and Investment Policy, manages the process of analysing and evaluating investment projects, attracting investment and financing, as well as optimising and reorganising assets in order to implement investment projects in the energy sector.

For a full summary of each Board member, please go to the website: www.samruk-energy.kz

The Management Board performance

The Executive Body conducts face-to-face meetings to discuss the implementation of the development plan, decisions of the general meeting of shareholders (sole shareholder), the Board of Directors, and operational activities. Special attention is given to issues of production safety.

In the reporting period, the Management Board limited holding its meetings in absentia.

In 2023, 41 meetings of the Management Board were held and 338 issues were considered. In particular, the issues on the Development Strategy implementation and operational activities, the Sole Shareholder's, and the Board of Directors' decisions.

The Management Board paid special attention to issues on occupational health and safety (instructions for using the Safe Production information system), in-

formation security (cyber security). They also analysed and assessed the sufficiency of the Company's internal controls in terms of protecting and maintaining IT systems and infrastructures.

The Non-Discrimination Policy at Samruk-Energy JSC and the Energy Transition Programme for Samruk-Energy JSC for 2024 have been approved.

In addition, the Board approved internal regulatory documents of subsidiaries and affiliates, the total number of personnel, organisational structure, staff list and salary schemes of the Group of companies. They considered the issues related to investment projects of subsidiaries and affiliates, on changes in their authorised capitals and amendments to their charters. The Board makes voting instructions by representatives of Samruk-Energy in the bodies of subsidiaries and affiliates.



Ivchenko Yelena Dmitrievna

Managing Director for GR, Development and IT

Citizenship: Republic of Kazakhstan | Date of birth: 9 April 1975

Responsibilities:

Within the approved Strategic priorities, controls the execution of the planned volumes/prices of electricity and coal sales, considering strategic initiatives to enter new markets and develop proposals for improving the electricity market model in Kazakhstan. Within the Development Strategy of the Company, ensures the process of automation and the introduction of new information technologies aimed at creating and developing the company's business automation system and increasing the level of digitalization in the Group of companies of Samruk-Energy JSC. Within the current legislation of the Republic of Kazakhstan, ensures interaction with the shareholder, legislative and government bodies, and prepares proposals on issues of improving legislation in the electric power and coal industries to develop the electric power and coal markets.



Zhaparkhanov Nurlan Altynkhanovich

Managing Director for Legal Support and Asset Management

Citizenship: Republic of Kazakhstan | Date of birth: 26 May 1982

Responsibilities:

Provides legal support and legal accompaniment of the activities of Samruk-Energy JSC and its subsidiaries and affiliates, as well as corporate governance of the activities of subsidiaries and affiliates and the implementation of measures to achieve the target asset structure of the Company, in accordance with the legislation of the Republic of Kazakhstan, the Charter, and the Development Strategy of the Company to ensure effective use of funds and increase the profitability of the Company.





Management Board committees

GRI 2-9

Permanent committees have been established within the Board to enable deeper and higher-quality deliberation on various issues. The activities of these committees enhance the thorough examination of matters within the Board's competence and improve the quality of the decisions made. The final decision on issues discussed by the committees is made by the Board. All committees are accountable to the Board of the Company and operate within the scope of authority granted to them by the Board. The functions, powers, composition, and process of organizing committee activities are regulated in the respective regulations and approved by the Board.

Risk Committee

This committee assists the Board in decision-making regarding risk management and internal control of the Company. It prepares recommendations and proposals for organizing and maintaining an effective risk management and internal control system, ensuring their operation and the development of processes designed to identify, measure, monitor, and control risks. Additionally, the committee is involved in preparing proposals for coordinating activities in these areas.

Composition of the Committee:

- Chairman of the Committee — Managing Director of Collateral and Risk;
- Members of the Committee — Managing Director for GR, Development and IT, Managing Director for Economy and Finance, Managing Director for Production and Asset Management, Director of the Risk Management and Internal Control Department, Head of the Internal Audit Service (non-voting), a Compliance Officer (non-voting).

- Amendments to the consolidated Risk Register and the Action Plan for managing key risks of the Group of Samruk-Energy JSC for 2023, with definitions of tolerance levels for each key risk;
- Preliminary approval of the consolidated Risk Register, the consolidated Risk Map, the Key Risk Management Action Plan with the determination of tolerance levels for each key risk, the Passports of key risk indicators of Samruk-Energy JSC for 2024;
- Preliminary approval of new editions of the risk matrices and controls for the processes of accounting and financial reporting, asset realization, and corporate financing at Samruk-Energy JSC;
- Consideration of the Report on the implementation of the Department's Working Plan for 2023;
- Consideration of the Report on the implementation of the Risk Committee Working Plan for 2023 and approval of the Risk Committee Working Plan for 2024;
- Approval of the Department's Working Plan for 2024.

The Committee members' attendance was 85%.

Planning and Evaluation Committee

The Committee aims at the improvement of the operation efficiency of the Samruk-Energy JSC Group of companies, including assets and costs structure optimisation, efficiency monitoring, consideration of their Development Plans, financial reporting.

Composition of the Committee:

- Chairman of the Committee — Managing Director for Economy and Finance;
- Deputy Chairman of the Committee — Managing Director for Development and Sales;

- Members of the Committee — Managing Director for Production and Asset Management, Managing Director for Development, Sales and Changes, Managing Director for Legal Support, Procurement and Risks, Head of the Procurement Management Department, Chief Auditor of the Internal Audit Service (non-voting)

In 2023, the Committee held 55 meetings in person and considered 107 issues.

Among the main ones: the coordination of adjustments to the budget of the Corporate Center and subsidiaries and affiliates within the limits of the approved indicators of the annual budget for the first calendar year, as well as the review of reports on the execution of the Development Plan of subsidiaries and affiliates for the first half of 2023 and the project of the Development Plan of subsidiaries and affiliates for 2024-2028.

The Committee members' attendance was 100%.

Investment and Innovation Council

The Council facilitates the enhancement of investment and innovation activities across the Group of companies of Samruk-Energy JSC. To achieve its main goal, the Council performs the following functions by reviewing and/or developing recommendations for the authorized bodies of the Company and its subsidiaries and affiliates regarding investment and innovation activities, the implementation of specific stages of pre-investment and investment projects, identifying new, prospective business development directions for the Company and its subsidiaries and affiliates, and the acquisition and disposal by the Company of shares (participations) in other legal entities.

Composition of the Council:

- Chairman of the Council — Chairman of the Management Board;
- Deputy Chairman of the Council — Managing Director for Production and Asset Management
- Members of the Council — Managing Director of GR, Development and IT, Managing Director for Development and Sales, Managing Director for Economy and Finance, Managing Director for Legal Support, Procurement and Risks, Director of the Project Portfolio Management Department, Head of the Compliance Service (non-voting), Chief Auditor of the Internal Audit Services of Samruk-Energy JSC (non-voting).

In 2023, the Council held nine meetings in person and considered 10 issues.

Among the main ones: on some issues of implementation of Project 'Reconstruction of cable networks in Almaty' and on approval of development of feasibility study on the the project 'Construction of TPP (GRES-3). I stage'.

The Council members' attendance was 80%.

Credit Committee

The main tasks of the Credit Committee include ensuring timely and high-quality decision-making on issues related to the attraction and provision of credits (loans), financial aid, and issuance of guarantees, minimizing risks, and developing recommendations for effective management of the asset and liability structure of Samruk-Energy JSC.

Composition of the Committee:

- Chairman of the Committee — Managing Director for Economy and Finance;
- members of the Committee — Managing Director for Production and Asset Management, Managing Director for Legal Support, Procurement and Risks, Director of the Treasury and Corporate Finance Department, Director of the Risk Management and Internal Control Department, Director of the Project Portfolio Management Department
- Independent expert — Head of the Compliance Service

In 2023, the Committee held five meetings in person and considered

11 issues

Among the main ones are the Reports on:

- Preliminary approval of the Risk Management Report (containing description and analysis of key risks, as well as information on the implementation of plans and programmes to minimise the risks of Samruk-Energy JSC for Q4'2021, Q1'2022, Q2'2022, and Q3'2022);

In 2023, the Committee held 15 meetings in person and considered

22 issues

Among the main ones: issues on attraction/provision of loans and financial aid, placement of free cash of Samruk-Energy JSC on deposits in second-tier banks.

The Committee members' attendance was 86%.



Committee for occupational safety, labour protection and environmental protection

The Committee aims at effective solution of HSE issues by providing appropriate recommendations on the effectiveness of policies and systems for identifying and managing risks related to occupational health and safety and environmental protection. The Committee analyses all fatal and serious incidents and the actions taken as a result of such accidents and incidents. They examine the results of independent HSE audits, review strategies and action plans developed in response to the issues raised and make recommendations to the Board of Directors in relation to these issues.

Composition of the Committee:

- Chairman of the Committee — Chairman of the Management Board;
- Deputy Chairman of the Committee — Director of the H&S Department;
- Members of the Committee — Director of the Generation and Fuel Department, Director of the RES and Distribution Department, Director of the Corporate Governance and Sustainable Development Department, Chief Manager of the H&S Department.

In 2023, the Committee held four meetings in person and considered five issues.

Among the main reports reviewed are those on occupational safety and industrial injuries, the plan to achieve zero injuries for the Group of companies of Samruk-Energy JSC for 2024, as well as the annual report on the Committee's performance.

The Committee members' attendance was 100%.

Conflict of interests

GRI 2-15

To create an effective system for managing conflicts of interest and to establish behavior requirements for employees, which minimize the risks of decision-making influenced by personal interests and relationships within the company, several measures are implemented.

We implemented a Policy on settlement of corporate conflicts and conflicts of interest, according to which executives and heads of structural divisions fill out a declaration of the absence of a conflict of interest.

To eliminate corruption risks and conflicts of interest in the selection process for nominees for vacant positions in Samruk-Energy JSC and senior positions in subsidiaries and affiliates (according to the list of positions) are checked both for compliance with qualification requirements and affiliation with officials of the Group of companies Samruk-Kazyna JSC.

Following the Policy on settlement of corporate conflicts and conflicts of interest, the members of the Board of Directors had no conflict of interest in 2023. There were no situations when the personal interest of the Board of Directors' members could affect the proper performance of their duties. The Company recorded no situations of a conflict of interest affecting and/or those that could potentially affect the impartial decisionmaking. The members of the Board of Directors did not discuss and make such decisions.

Internal and external audit

Samruk-Energy Internal Audit Service provides independent advice and objective audit guarantees to the Board of Directors aimed at improving the risk management, internal control and corporate governance systems to achieve the Company's strategic goals and objectives. (More details about the work of the Internal Audit Service of Samruk-Energy JSC <https://www.samruk-energy.kz/ru/company/corporate-governance/corporate-governance-main/internal-audit>).

In 2023, the Service performed 28 audits, including unscheduled audits and audits in accordance with the Annual Audit Plan.

As part of the audit reports, the Service provided 195 recommendations: 42 of A category, 79 of B category, 69 of C category and 5 of D category.

Priority of audit assignments was determined by selecting processes with the highest risks, as well as in connection with priority requests for audits from the Sole Shareholder and the Board of Directors of Samruk-Energy JSC.

The main areas of audits in the reporting period:

- Assessment of human resources management efficiency;
- Assessment of the degree of achievement of management KPIs;
- Assessment of the environmental protection process;
- Evaluation of procurement processes;
- Audit of the process of accounting for fixed assets and inventory items;
- Audit of financial and economic activities;
- Audit of administrative expenses.

The Audit Service performed all audit assignments in accordance with the International Standards for the Professional Practice of Internal Auditing. The assignments contain conclusions, findings and recommendations aimed at taking corrective / preventive measures to improve risk management, internal control, and corporate governance systems.

At the end of 2023, the Board of Directors rated the Internal Audit Service performance to be 'efficient'.

External Audit

Since 2012, the Company's external auditor has been the global network of firms PricewaterhouseCoopers (hereinafter referred to as PwC).

The cost of audit services provided by the external auditor of PwC in 2023 (VAT excl.), KZT million

	2023
Group of companies of Samruk-Energy JSC	152.52
Including the Head Office of Samruk-Energy JSC	46.2

The fee paid to the audit firm in 2023 for audit services (VAT incl.), KZT million

	2023
Group of companies of Samruk-Energy JSC	149.99
Including the Head Office of Samruk-Energy JSC	51.75

During 2023, PwC provided non-audit services for the verification of non-financial information of the Integrated Annual Report of the Samruk-Energy JSC for 2022 for a total amount of KZT 8,000,000 (eight million) excluding VAT. The auditors confirmed that there was no conflict of interest in providing this service. The provision of these services was approved in advance by the Audit Committee at the meeting of the external auditors with the members of the Audit Committee (Minutes of the meeting No. 1/23 dated 11 April 2023).



Remuneration

GRI 2-19

According to the Company's Charter, the Sole Shareholder's decision determines the amount and procedure for paying remuneration to members of the Board of Directors. The amount, procedure, and conditions for paying remuneration to the Chairman and members of the Management Board are determined in accordance with the Rules for assessing the performance and remuneration of executive and managerial employees of Samruk-Energy JSC.

Remuneration to members of the Board of Directors

The independent directors receive an annual fixed remuneration for performing the duties of the Samruk-Energy JSC Board of Directors' members.

The Company indemnifies independent directors for expenses (travel, accommodation, daily allowance) associated with their attending meetings of the Samruk-Energy JSC Board of Directors and its Committees held outside their permanent residence.

Remuneration to Independent Directors for 2023 amounted to KZT 38,084,964.65. As of 31 December 2023, there are three Independent Directors in the Board of Directors. There are no other payments.

Remuneration to members of the Management Board

The Company pays remuneration to the Management Board on the terms and in accordance with the Rules for assessing the performance and remuneration of executive and managerial employees of Samruk-Energy JSC.

The principles for evaluation are based on:

- interrelation of remuneration and execution of tasks that meets the interests of the Company and its Shareholder;
- interrelation of remuneration and execution of tasks that meets the interests of the Company and its Shareholder;
- dependence of the remuneration amount on the performance of the Company and its employees.

The Board of Directors evaluates the head and members of the executive body. The main evaluation criterion is the achievement of the set KPI.

Remuneration of the top management consists of salaries, bonuses, and other short-term benefits.

In 2023, the remuneration to the top management amounted to KZT 358,800.76 thousand. As of 31 December 2023, the Company has five top managers.

Securities

Share capital

Based on the results of the Company's performance, as of 31 December 2023, the number of announced securities is 8,602,187, which makes 6,311,967 of the placed ones.

The nominal value of one ordinary share as of 31 December 2023 was KZT 10,000.



Share capital Of Samruk-Energy JSC

Indicator	2021	2022	2023
Annual profit due to the shareholders of the Group of companies Samruk- Energy JSC, KZT thousand	15,046,311	30,867,497	43,080,300
Weighted average number of ordinary shares in circulation, pieces	5,601,812	5,602,741	5,849,013
Earnings per share due to the shareholders of the Group of companies Samruk-Energy JSC (rounded to the nearest KZT)	2,686	5,509	7,365

As per a decision made by the Exchange Council of Kazakhstan Stock Exchange JSC (KASE) on 4 October 2010, the consolidated financial statements should contain data on the book value of one share (ordinary and preference) as of the reporting date, calculated in accordance with the rules approved by the KASE.

As of 31 December 2023, the book value of one share (ordinary and preference), calculated by the management of Group of companies Samruk-Energy JSC based on the consolidated financial statements, amounted to 100.850 tenge (93.987 tenge as of 31 December 2022).

Book value per share, thousand tenge

Indicator	2021	2022	2023
All assets	939.820.011	965.846.026	1.088.095.831
Minus: intangible assets	(4.165.145)	(3.726.203)	(3.414.467)
Minus: all liabilities	(437.179.560)	(432.732.405)	(448.121.136)
Net Assets for Ordinary Shares	498.475.306	529.387.418	636.560.228
Number of ordinary shares as of 31 December	5.601.812	5.632.537	6.311.967
Book value per share, KZT	88.985	93.987	100.850

Dividend policy

Our dividend policy is based on principles of respecting the interests of the Sole Shareholder, increasing long-term value, transparency in determining the size of dividends, and ensuring the financial stability of the Company.

To make a decision on the payment of dividends, the Board of Directors submits to the consideration of the Sole Shareholder proposals on the distribution of the organization's net income for the past financial year and the dividend amount for the year per one ordinary share.

The calculation of the dividend size is based on the amount of the Company's net income reflected in the annual audited financial statements, prepared in accordance with the requirements of the legislation of the Republic of Kazakhstan on accounting and financial reporting, and international financial reporting standards.

Dividends are paid within the period set by the decision of the Sole Shareholder.

Dividend payment, KZT billion

Period	Amount
2023 (according to the results of 2022)	2.041
2022 (according to the results of 2021)	2.041
2021 (according to the results of 2020)	3.142

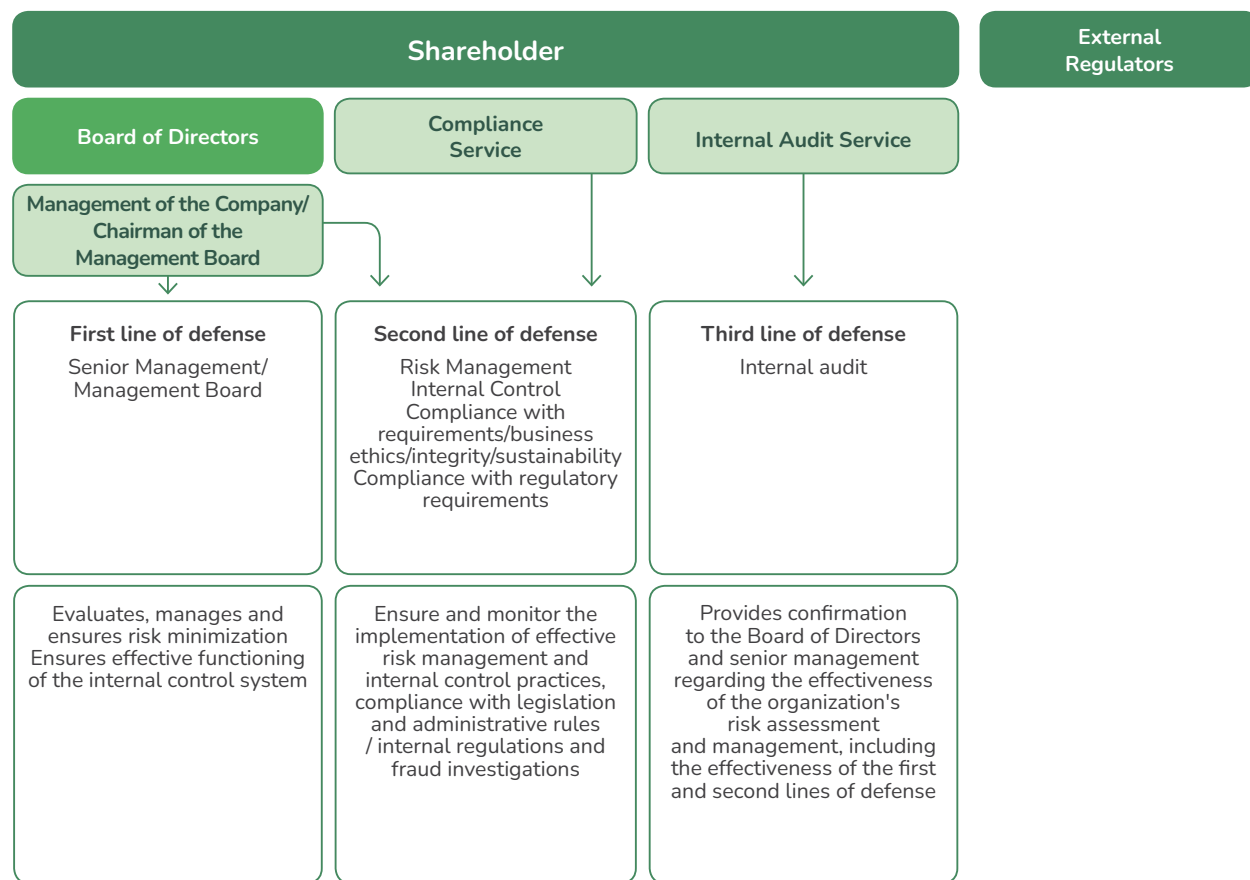
Risk management and internal control

The effective risk management and internal control system is one of the most important objectives of the Company in the near future. It aims to achieving the strategic and operational goals of the Group of companies of Samruk-Energy JSC. Compliance with the norms and principles of corporate governance allows us to effectively control the functioning of the company's management bodies, and reduces risks in their activities.

The Company's risk management system aims to accurate and timely risk identify, assess, monitor, and respond to risks. This allows the management makes decisions based on a comprehensive vision and considering the risks in the medium and long term.

The Company adheres to the COSO standard, using the model of Three Lines of Defense.

Risk management and internal control system



We regularly analyze key trends and risks in the context of the three pillars of sustainable development: economic, environmental, and social. We also study the experience of countries related to the low-carbon economy transition and regularly hold meetings engaging energy and ecology experts.

The current risk management system allows the Management Board and the Board of Directors of Samruk-Energy JSC to effectively manage and

allocate resources by priority areas to ensure the level of risks acceptable for the Group of Companies of Samruk-Energy JSC and to obtain the highest return on such investments due to identification, assessment, management and monitoring of risks.

The internal control system provides for a quick response to risks and control over the main and auxiliary business processes and daily operations of the Company. This system ensures immediate informing

of the management of any significant shortcomings and improvements.

The Board of Directors has set the Company's risk appetite in quantitative and qualitative terms, including restrictions on core activities. The Company monitors the risk appetite compliance on a quarterly basis.

The owners of key business processes regularly update the risk and control matrices, including those for the financial reporting process, and submit them for consideration and approval to the Board of Directors.

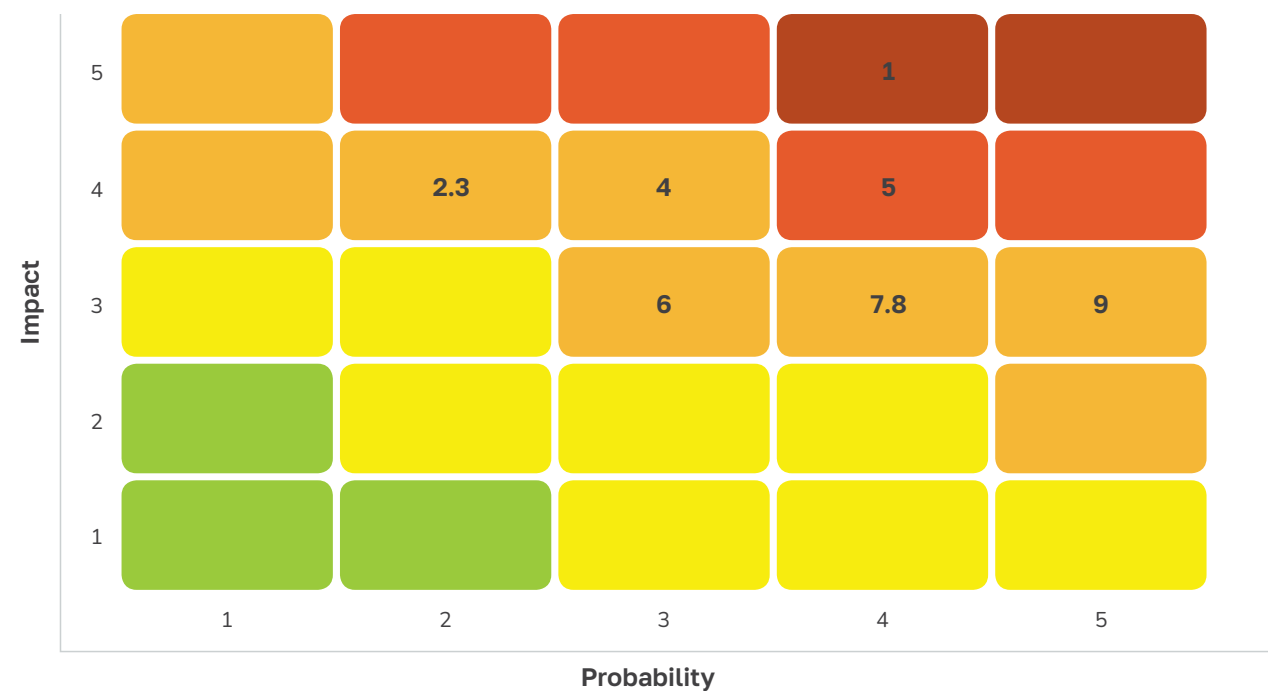
We annually form and submit for consideration and

approval to the Board of Directors the Risk Register, the Risk Map, Key Risk Indicators (KRI) and the Key Risk Management Action Plan.

Based on the results of the risks identification for the Group of companies of Samruk-Energy JSC in 2023, the Company identified and assessed 34 risks inherent in its activities, and updated the KPI thresholds. The risk owners updated the risk factors and measures to reduce them.

According to the reassessment results, nine risks fell into the key zone of the Risk Map of the Group of companies of Samruk-Energy JSC for 2022 (in 2022, there were 9 key risks).

Group of companies Samruk-Energy JSC Risk Map 2023



N°	Name of risk
1	Risk of damage to workers' health and life while performing their duties, accidents at work
2	Risk of information security
3	Risk of accidents and disasters at work
4	Climate risk
5	Risks of ongoing/promising investment projects and investment programmes of subsidiaries and affiliates
6	Reputational damage risk
7	Asset impairment risk
8	Credit risk
9	Risk of external creditors' covenants and listing requirements violation



Main changes in 2023 (key risks mitigation)

Risk	Major changes	Implemented risk management measures
Risk of occupational accidents resulting in damage to health and life of personnel in the course of performing their job duties	no change	Since the beginning of 2023, 10 work-related accidents have been recorded. Measures are taken in accordance with the Department's Work Plan 'Labour Protectio'.
Information security risk	no change	Annual risk minimisation measures (blocking of malicious information and sites, monitoring of systems, etc.) in accordance with the Risk Management Action Plan.
Risk of accidents and disasters at work	no change	Carrying out major and current repairs. Periodic inspections of the technical condition of equipment. Conducting briefings and emergency drills for the operating personnel of the enterprises
Climate Risk	no change	Annual measures to reduce specific greenhouse gas emissions.
Risk of ongoing/prospective investment projects and investment programmes of subsidiaries and affiliates	no change	The utilisation of planned expenditures is postponed to a later period.
Reputational damage risk	no change	Annual media and social media monitoring activities. Development of media plans with activities to counter the threat.
Asset impairment risk	growth by impact	Conducting impairment tests. Centralised control over the formation and adjustment of subsidiaries and affiliates' investment programme. Reflecting impairment of investments, property, plant and equipment and construction in progress in the statements of subsidiaries and affiliates
Credit risk	no change	Unstable situation in second-tier banks. Compliance with limits on counterparty banks is monitored, and the stability of the STBs is regularly assessed.
Risk of breach of external creditors' covenants and listing requirements	no change	Monitoring of compliance with covenants, as well as financial stability ratios, measures to reduce the level of debt burden and interest payments.

In 2023, we continued post-monitoring of the "Implementation of the New Risk Management Model" project. Internal regulatory documents were used in subsidiaries, such as the Rules for Organization and Conduct of Internal Control, Rules for Business Continuity, Business Continuity Plans, and Recovery Plans for subsidiaries and affiliates.

The Risk Management and Internal Control Department analyzes the effectiveness of the internal control system based on the existing Rules for the

Organization and Conduct of Internal Control for key subsidiaries and affiliates.

Monitoring of the business continuity management system was conducted, internal regulatory documents related to ensuring business continuity were updated, the composition of the business continuity working group was expanded, and tests of the business continuity plans and recovery plans were carried out.





Information security

According to the Information Security Policy of Samruk-Energy JSC, the company aims to organize its activities to ensure information security (IS) in accordance with the ISO/IEC 27001 standard "Information technology. Security techniques. Information security management systems." In this regard, internal regulatory documents have been approved, and the following activities are being carried out:

- Development and updating of the IS management system;
- Identification of IS risks and owners of information assets;
- Assessment and processing of IS risks;
- Coordination of the development/implementation of control measures;
- Execution of IS measures;
- Monitoring of IS risks, reporting;
- Improvement of the IS management system.

The responsibility for ensuring information security is assigned to the "Security" Department, which is a structural unit separate from other structural units involved in the creation, support, and development of informatization objects. According to the approved organizational structure, the Department reports directly to the Chairman of the Board of Samruk-Energy JSC. In terms of IS, this structural unit is responsible for the following functions:

- Development of regulatory and procedural documentation and requirements for IS;
- Ensuring interaction between business units on IS issues;
- Control over the compliance with IS requirements;
- Monitoring the activities of subsidiaries and affiliates in the field of information security;
- Interaction with state authorized bodies in the field of ensuring the company's information security;
- Coordination of actions related to IS risks;
- Interaction with the Information Security Operations Center.

In the process of ensuring IS, the company considers the following main directions:

- Information security management;
- Technical support for information security;

- Control and response to information security incidents.

Within the process of managing IS, the company has developed the following documents that regulate IS work:

- Information Security Policy of Samruk-Energy JSC;
- Rules for ensuring the information security of information systems at Samruk-Energy JSC;
- Instructions for ensuring the security of confidential information at Samruk-Energy JSC.

The technical support function for IS is carried out by the Security Department and specialists from Energy Solutions Center LLP. This function involves ensuring IS using software and hardware mechanisms to protect the company's information assets. The main activities for ensuring information security in the company currently include:

- Providing antivirus protection for the company's corporate network and branches by using a software suite for protection against malicious code;
- A demilitarized zone (DMZ), used to enhance the level of information security of the company's corporate network and resources that have internet access. The DMZ is implemented based on a software and hardware complex of packet filters Firewall, in addition to which a system for preventing intrusions is implemented for additional packet filtering at the distribution level. The software control used to track sent and received emails. This system blocks spam senders within the perimeter of Samruk-Energy JSC and analyzes emails for the presence of malicious software, controls software to prevent leaks of confidential information beyond the corporate network.

The function of control and response to IS incidents is carried out by employees of the "Security" Department and specialists of Energy Solutions Center LLP, registered by the Operational Center for Information Security (OCIS) and means of the software and hardware complex for information security:

- Centralized collection, storage, and analysis of security event logs;
- Detection of incidents in real-time;
- Prioritizing incidents;
- Control over the incident correction process and

- compliance with response time (SLA);
- Creation of reports on compliance with regulatory requirements.

Results on the control and response to IS incidents are recorded in the following reports:

- A monthly analytical report analyzing the state of the information security infrastructure of Samruk-Energy JSC within the framework of the contract with OCIS;
- A quarterly report on information security risks for the Board of Directors of Samruk-Energy JSC;
- An annual report on information security (cybersecurity) provision is generated, as well as an analysis and assessment of the adequacy of internal controls of Samruk-Energy JSC in terms of protection and maintenance of IT systems and infrastructure for the Audit Committee and the Board of Directors of Samruk-Energy JSC.

Throughout the year, awareness of the IS management system is enhanced by annually approving a work plan for the development of educational materials to increase the awareness of the Company's employees (reminders, screensavers, videos), distributing updates about new requirements and preventive measures for IS. Annually, Company's employees are tested online on knowledge of information security norms as per established procedures.

In 2023, 'Adaptation course' training was conducted for all newly hired employees, which also includes information security training.

GRI 418-1

During the reporting period, the Company did not record any substantiated complaints about breaches of confidentiality, leaks, theft and/or loss of customer data.

Information Security Operations Center

Samruk-Energy JSC is connected to the Operational Center for Information Security for 24/7 monitoring of all information security events under a contract with QazCloud LLP, which provides the following services:

- Round-the-clock monitoring of IS events recorded by information security event management and monitoring systems and external perimeter protection systems;

- Round-the-clock monitoring of IS events recorded on the customer's server equipment and network devices (hereinafter referred to as the Monitoring Zone);
- Identification of IS incidents that have occurred in the Monitoring Zone;
- Sending information to the customer about detected incidents and methods for responding to them, and providing recommendations for their elimination;
- Providing expert support during incident response;
- Responding to incidents coming from the external Internet network to the customer's perimeter;
- Conducting investigations of IS incidents;
- Three-tiered support line of the OCIS, consisting of team collaboration in ensuring IS monitoring (Red team and Blue team). The Blue team ensures the protection of the infrastructure by monitoring events and responding to cyber threats around the clock. The Red team professionally identifies vulnerabilities in the infrastructure;
- Protection of web applications and WEB traffic;
- Protection against DDOS attacks;
- Weekly IS digest;
- Conducting an audit (penetration test), including external penetration testing and vulnerability identification.

The company's cybersecurity initiatives are approved in the Information Technology and Digitalization Strategy of Samruk-Energy JSC for 2023–2025.





Business ethics and anti-corruption

We aim to become an effective operational energy holding of Eurasian significance — a leader in the Kazakhstan market. Without maintaining and enhancing trust in our activities from all stakeholders, including the Sole Shareholder, employees, and

business partners, we cannot achieve our strategic goals. The high ethical standards and corporate culture we have implemented, based on trust and zero tolerance for corruption, allow us to protect our reputation and the interests of all stakeholders.

Corporate ethics and concern for reputation

In 2023, the "Code of Conduct of Samruk-Energy JSC" was updated and approved, setting out the fundamental principles and standards of business behavior, as well as high professional and ethical standards, which all employees of Samruk-Energy JSC must adhere to, regardless of their position, considering the interests of all stakeholders.

- by telephone or e-mail of trust, as published on the website and in the office of Samruk-Energy JSC;
- through a mailbox for receiving complaints, reports and suggestions as installed in the office of Samruk-Energy JSC.

Violations of business ethics principles are considered by the Board of Directors.

According to the results of 2023, no violations of the Code of Conduct of Samruk-Energy JSC by members of the Board of Directors and the executive body of Samruk-Energy JSC were recorded.

The "Code of Conduct of Samruk-Energy JSC" was updated to include information on principles of (green) procurement, approaches, ESG criteria in selecting suppliers and monitoring their compliance with norms and laws in the social/environmental sphere, about money laundering, defining the role of the management body, the executive body, the Compliance Service, Ombudsman, the company's political involvement, human rights, principles of the "green office", and others.

The implementation and adherence to ethical standards are ensured by the Board of Directors. All company employees sign a statement acknowledging their understanding of the Business Ethics Code and Code of Conduct, and regularly reaffirm their knowledge.

The company regularly conducts training for staff and officials to understand the standards of the Code of Conduct of Samruk-Energy JSC and ensures the availability of a reporting system for potential violations.

GRI 2-26

For clarification of the requirements of the Codes and/or ethical issues, for violations of requirements, corruption and other illegal actions, the Company's officials and personnel, business partners and stakeholders have the right to apply:

- to the immediate supervisor;
- to the ombudsman;
- to the Internal Audit Service;
- to the Corporate Secretary Service;



Compliance policy

Compliance is one of the principles of Samruk-Energy JSC operations. The main task is to identify, assess, prevent, and control compliance risks in the activities of the Samruk-Energy JSC Group of companies. We form a zero-tolerance policy for corruption and bribery as well as develop the anti-corruption culture.

Basic principles of our compliance approach:

- involvement and support from the management in terms of the compliance system development — the Board of Directors considers reports on the compliance programme implementation;
- regular identification and updating of corruption risks;
- development and implementation of anti-corruption procedures corresponding to the level and nature of the identified risks, improvement and updating of internal policies and procedures;
- implementation and support of training programmes for employees regarding the principles and standards of compliance with anti-corruption laws;
- monitoring the effectiveness of the procedures implemented to prevent corruption.

The Compliance Service of Samruk-Energy JSC, being an independent structural unit, reports to the Board of Directors. The Service reports on a quarterly basis. The Board of Directors evaluates the Service's performance. As part of anti-corruption activities, the organisational structures of the Group's subsidiaries and affiliates contain the positions of compliance officers reporting to the Board of Directors / Supervisory Board of subsidiaries and affiliates.

In the reporting period, by the decision of the Board of Samruk-Kazyna JSC dated December 21, 2023 (Minutes No 60/23), the Corporate Standard for the compliance function of the Group of companies Samruk-Kazyna JSC was updated and approved. Samruk-Energy JSC and its subsidiaries and affiliates adhere to the norms of this Corporate Standard.

In November 2023, Samruk-Energy JSC successfully passed an external subsidiaries and affiliates audit for compliance with the ISO 37001 standard "Anti-bribery management systems. Requirements with guidance for use." To automate business processes, a procedure for submitting a "Declaration of Disclosure of Potential Conflict of Interest" was implemented at Samruk-Energy JSC, as well as at its subsidiaries and affiliates. During the reporting period, an analysis of the procurements of Samruk-Energy JSC was conducted based on inquiries received by the centralized procurement control service regarding the activities of Samruk-Energy JSC and its subsidiaries and affiliates, which identified the nature of violations, measures for their elimination, and provided recommendations to minimize compliance risks.

GRI 205-1

The management of Samruk-Energy JSC and its subsidiaries and affiliates periodically initiate risk assessments in the field of corruption in accordance with the Rules for the identification and assessment of risks.

The purpose of assessing corruption risks is to identify specific processes and activities of the Group of companies of Samruk-Energy JSC, where the likelihood of the commission of corruption offenses by officials and employees of the Company and its subsidiaries and affiliates is highest, both for the purpose of obtaining personal benefits and for the benefits of the Company and its subsidiaries and affiliates.

Total number and proportion of subsidiaries and affiliates subject to corruption risk assessment

Organization	2023	
	pcs.	%
Group of companies of Samruk-Energy JSC	11	44

Subsidiaries and affiliates for which significant risks related to corruption have been identified

Organization	2023
Group of companies of Samruk-Energy JSC	0



GRI 205-3

In the company, a practice of verifying the reliability of third parties has been implemented, used by the compliance service to eliminate corruption risks and risks of loss of business reputation. To extend the provisions of the "Code of Conduct" to business partners, suppliers, and other third parties working with

the company, standard economic contracts include "Anti-Corruption Clauses." In 2023, Group of companies of Samruk-Energy JSC had not a single case of corruption.

Training and informing employees

To form anti-corruption culture and zero tolerance for any form of bribery and corruption, we conduct regular compliance and anti-corruption training sessions for personnel to explain the requirements, adopted compliance policies and anti-corruption laws.

GRI 205-2, GRI 12: Coal Sector: 12.20.3

During the reporting period, more than 70 training events were conducted across all subsidiaries and affiliates, which included explanations about changes in anti-corruption legislation, tax declaration procedures, and the operation of the "hotline."

In 2023, as part of the implementation of anti-corruption activities, the Company carried out training sessions to form the anti-corruption culture among employees of the Company and subsidiaries and affiliates. We held meetings with authorized employees to explain current changes in anti-corruption legislation.

11,541 employees of Samruk-Energy JSC were familiarised with the requirements of the Policy of fraud and corruption prevention.

Informing about the anti-corruption policy of Samruk-Energy JSC

Indicator, including by region	2021		2022		2023	
	person	%	person	%	person	%
Board of Directors and Management Board	10	100%	12	100%	65	100%
South	-	-	-	-	25	38.4
Centre	-	-	-	-	0	0
East	-	-	-	-	12	18.4
North	10	100	12	100	28	43.2
Personnel	17,645	100%	17,650	100%	11,541	100%
South (Administrative and managerial staff)	7,851	44.5	7,856	44.5	133	1.15
South (Production staff)	-	-	-	-	7,808	67.65
Centre (Administrative and managerial staff)	258	1.45	258	1.45	0	0
Centre (Production Personnel)	-	-	-	-	0	0
East (Administrative and management staff)	10	0.05	10	0.05	12	0.1
East (production staff)	-	-	-	-	316	2.74
North (Administrative and management staff)	9,518	54	9,518	54	75	0.65
North (production staff)	-	-	-	-	3,197	27.7
Business partners	-	-	159	100%	8,420	100%
South	-	-	-	-	3,085	36.6
Centre	-	-	-	-	0	0
East	-	-	-	-	44	0.5
North	-	-	159	100	5,291	62.9

Number of employees trained in anti-corruption, by region as of 31 December 2023*

Indicator, including by region	2021		2022		2023	
	person	%	person	%	person	%
Board of Directors and Management Board	10	100%	12	100%	65	100
South	-	-	-	-	25	38.4
Centre	-	-	-	-	0	0
East	-	-	-	-	12	18.4
North	10	100	12	100	28	43.2
Personnel	17,645	100%	17,650	100%	11,541	100%
South (Administrative and managerial staff)	7,851	44.5	7,856	44.5	133	1.15
South (Production staff)	-	-	-	-	7,808	67.65
Centre (Administrative and managerial staff)	258	1.45	258	1.45	0	0
Centre (Production Personnel)	-	-	-	-	0	0
East (Administrative and management staff)	10	0.05	10	0.05	12	0.12
East (production staff)	-	-	-	-	316	2.74
North (Administrative and management staff)	9,518	54	9,518	54	75	0.65
North (production staff)	-	-	-	-	3,197	27.7

* No anti-corruption trainings were conducted among business partners in 2023.

Hotline

GRI 2-26

As part of the compliance program, all stakeholders can report actual and suspected violations of laws, regulatory requirements, and internal documents related to ethics and compliance through the Proactive Reporting Line ("hotline"/Speak up).

Compliance service, hotline — phone: 8 800 080 47 47 47
Mailing address: mail@sk-hotline.kz

Annually, the Compliance service conducts information sessions and training aimed at increasing the awareness of the company's employees, its subsidiaries, and joint ventures about the reliability of the hotline for confidential reporting of violations. At every enterprise within the Group of companies Samruk-Energy JSC, information about the operation of the hotline and the reliability of handling reported violations is displayed in public areas.

In accordance with best international practices and to protect the interests of whistleblowers, the hotline is administered by an independent company. All complaints and appeals received through the Hotline are registered and forwarded to the Compliance Service, which ensures professional and confidential consideration. Responses to anonymous reports are provided by the independent company for forwarding to the complainant.



Statistics on appeals and complaints

Source	2021	2022	2023
"Hotline" (including personal appeals to the Compliance Service)	70	91	95
Office of Samruk-Energy JSC, of which:	10,296	9,457	9,339
from State bodies	321	335	315
from the Shareholder	737	758	802
Appeals, including chancellery subsidiaries and affiliates	76	101	112
Security Service	0 (11 ³³)	4	0 (11 ³⁴)
Feedback form on the website	1	6	0
Ombudsman and trade unions	73	90	41
Courts and tribunals and affiliated bodies	5	4	4
Written appeals to the Chief Executive (including the Chief Executive's blog)	18	12	4
Conciliation committees	10	36	34
Total	253	344	290

During the reporting period, the majority of inquiries related to issues of salaries, rewards, and other payments, procurement procedures, and improper actions/inaction by employees and officials at the Group of companies of Samruk-Energy JSC.

Stakeholders were interested in issues related to salary increases and indexing, disagreements over payments, cancellations of disciplinary action orders, and non-payment of bonuses, as well as additional payments for substituting workers. There were also inquiries related to labor organization, violations of working conditions, safety techniques, and labor legislation (untimely provision of specialized clothing, inadequate social and living conditions, and labor processes such as refusal of transfer, non-transparent hiring, changing working conditions without prior agreement, and concealment of accidents).

For the first time in the reporting period, four complaints were recorded related to the non-provision of responses to inquiries, contact details, and in-

complete responses. Previously, there had been no such complaints regarding the non-provision of responses. All incoming inquiries are analyzed based on the initial data. Depending on the circumstances described, interaction with the complainant is carried out, responses are provided within the deadlines set by the Law "On the Appeals of Individuals and Legal Entities," on-site checks are conducted, or commissions are formed in accordance with the Rules for Conducting Service Investigations at Samruk-Energy JSC.

In the reporting period, appropriate measures were taken based on confirmed facts of discrepancies/violations. The confidentiality and anonymity of the inquiries were guaranteed.

During the reporting period, explanatory meetings with the staff were held, monitoring of incoming inquiries was conducted, and the popularization of feedback channels was carried out.

Ombudsman

To protect the rights of employees, the Company has the position of the Ombudsman, designed to prevent/settle corporate conflicts, conflicts of interest and reports of illegal actions. The Ombudsman promotes the establishment and development of corporate values and culture, high standards of professional behaviour and business ethics in the Company. The Ombudsman is a high-level independent manager reporting only to the Board of Directors.

The main tasks of the Ombudsman include:

- Assisting in resolving labor disputes, conflicts, and problematic issues of a social and labor nature;
- Monitoring the staff's adherence to principles of business ethics;
- Helping to enhance the rating and image of the supervised company;
- Preventing and resolving disputes and conflicts;

- Facilitating informal communications between officials and employees of the company to timely identify problems and directions for improvement;
- Making suggestions for improving the company's policies and procedures;
- Informing the Board of directors about identified systemic issues that require comprehensive measures, and providing constructive suggestions for their resolution.

The performance of the Ombudsman is based on the principles of:

- independence;
- publicity;
- impartiality;
- objectivity;
- honesty;
- integrity;
- informality;
- confidentiality.

In accordance with the Regulations on the Ombudsman (clause 15), the Ombudsman should ensure the anonymity of the employee or official who reported for violation of the provisions of the Code of Business Ethics, the laws of the Republic of Kazakhstan and the Company's internal documents.

GRI 2-26

Everyone can report the facts of illegal actions of officials and other employees of the company by calling the following helpline numbers:

+7 (7172) 55-30-15, +7 (7017) 88-84-16, as well as by sending an appeal to the following e-mail address: akylov@samruk-energy.kz, ombudsman@samruk-energy.kz

In 2023, the Ombudsman officially received 37 appeals via various channels including group electronic document management, the "Nysana" hotline, e-otynish, mobile phone, email, and written and oral communications. Most of these appeals were related to complaints and consultations on labor legislation, grievances against unlawful actions by management, conflicts between managers and employees of structural units, illegal dismissals, unfair punishments and denial of bonuses, unfair allocation of employee vacations, as well as dissatisfaction with pay and bonuses. Additionally, over 100 individuals sought telephone consultations.

The Ombudsman consulted on all appeals, provided answers and recommendations, guaranteed anonymity and confidentiality, provided comprehensive assistance (including psychological and moral support), held personal meetings (conversations) with employees, consulted and provided recommendations to the heads of the Corporate Centre and subsidiaries and affiliates.

GRI 406-1, GRI 12: Coal Sector: 12.19.8

During the reporting year, there are no confirmed facts of discrimination, infringement of rights based on nationality, gender, race or religion. All employee rights are respected, excluding possible hostile and humiliating atmosphere.

Subsidiaries and affiliates performance

During the reporting year, the Ombudsman visited all subsidiaries and affiliates of the company. During these visits:

- Employees were presented with the "Ombudsman's Report on the Work Done in 2023";
- A presentation was organized entitled "The Role of the Ombudsman at Samruk-Energy JSC";
- Frequently asked questions were addressed;
- Information about the Code of Conduct (business ethics) was disseminated, clarifying the goals and objectives of the Code. Additionally, sections such as "Ethical Behavior," "External Communications," "Equal Employment and Labor Conditions," "Prohibition of Discrimination and Harassment," and "Conflict of Interests" were thoroughly discussed;
- Employees were informed about communication channels (hotline phones, Ombudsman, Compliance Service, HR), their responsibilities, and the consequences of non-compliance with the code;
- Explanations were provided regarding the company's internal regulations and procedures to prevent and mitigate potential conflicts, including the "Policy on the Settlement of Corporate Conflicts and Conflict of Interests at Samruk-Energy JSC";
- Informative sessions were conducted on resolving social and labor disputes, explaining the provisions of Chapters 15 and 16 of the Labor Code of the Republic of Kazakhstan regarding individual and collective labor disputes, and consultative assistance was provided on labor law issues. Informal meetings with teams were held, and the social and domestic conditions were checked.

³³ Number of appeals reviewed jointly with other structural divisions

³⁴ Number of appeals reviewed jointly with other structural divisions



To prevent and mitigate potential conflicts and address problematic issues with employees of subsidiaries and affiliates, informational and explanatory talks were held, aimed at a unified understanding and resolution of social and labor disputes, problems, and conflicts. The Ombudsman also conducted personal (including confidential) receptions for those who requested it. Explanations and recommendations were provided for all inquiries.

During direct interactions with the management of subsidiaries and affiliates at the senior and middle levels, the principle of "Listening Leadership" is consistently communicated. This principle emphasizes the necessity of organizing systematic meetings with teams, recording, and resolving problematic issues, particularly those that arise on a regular basis. Thanks to the implementation of this principle, many recurrent social, domestic, and sanitary-hygienic issues have been resolved.

Furthermore, the Ombudsman of Samruk-Energy JSC continuously conducts anonymous surveys (questionnaires) among the employees of the Corporate Center and subsidiaries and affiliates to keep them informed about the Ombudsman's activities.

The questionnaire aims to identify recurrent problematic issues and gauge the collective's opinion on various aspects:

- The moral and psychological climate within the team (in the department/office);
- Frequency of independent decision-making;
- Opportunities to be creative and use innovative approaches;
- Relationships with colleagues (management/subordinates/peers);
- Satisfaction with business relationships (with the manager/subordinates/colleagues);
- Support provided by the manager;
- Trust in the company's management and strategic development plan;
- Satisfaction with the salary and bonus system;
- Satisfaction with the social benefits package;
- Awareness of and methods for submitting complaints and inquiries.

The suggestions received from employees, along with a number of recurring problematic issues, are currently under review by the Ombudsman for further discussion and resolution with the relevant structural divisions, management of subsidiaries and affiliates, and, if necessary, with the Board of Directors of Samruk-Energy JSC.

Professional development

In July 2023, on the site organised NAC Kazatom-prom JSC, training on the programme "Methods and Organisations of Negotiations in Labour Conflict Management. The role of the Corporate Ombudsman in resolving labour conflicts", where a certificate of successful completion of training was obtained based on the results.

Engagement and Communication

In 2023, the Ombudsman regularly participated in meetings of the Council of Ombudsmen (involving all ombudsmen from the portfolio companies of Samruk-Kazyna JSC), where various issues were discussed, experiences exchanged, and common problems addressed with solutions proposed.

- In July 2023, the Ombudsman participated in the Trade Union Leaders and Corporate Ombudsmen Forum organized by Samruk-Kazyna JSC and the Center for Social Interaction and Communications, where the Ombudsman of Samruk-Energy JSC spoke about "The Role of the Ombudsman in the Company," covering the moral and psychological aspects of the ombudsmen's work.
- In September 2023, the Council of Ombudsmen met at the premises of Samruk-Energy JSC. All participants visited the facilities of Bogatyr Komir LLP, EGRES-1 LLP and First Wind Power Plant LLP directly familiarizing themselves with the entire production cycle from coal mining to electricity generation.
- In December 2023, the Ombudsman participated in a forum on "Social and Labor Partnership in the Group of Portfolio Companies of Samruk-Kazyna," attended by the CEO-1 on social and labor issues, corporate ombudsmen of portfolio companies, heads of IR services, and trade union leaders of portfolio companies.
- On March 16-17, 2023, the Ombudsman participated in a meeting of the Professional Committee of Batyr Komir — the main trade union organization of Bogatyr Komir LLP.
- On October 10, 2023, the Ombudsman participated in an event dedicated to "Day of Trade Unions of Kazakhstan," where a Letter of Appreciation was presented to the Chairman of the Public Association "Kazakhstani Energy Industry Trade Union" from the Esil branch of the "Amanat" party.
- On October 11, 2023, the Ombudsman held a meeting with the Trade Union Leader of Pavlodar Region in the field of education.



Additionally, as part of external communications, the Ombudsman engaged with government agencies, conducting several meetings directly with experts on legislative activities from the Ministry of Labor and Social Protection of the Population and Deputies of the Mazhilis of the Republic of Kazakhstan.

As part of external communications, it is planned to continue working with representatives of local executive bodies (Akimat), where the Company's facilities are located, in order to improve social, sports, recreational and cultural activities, the main objective of which is to attract the Company's employees to the development of the region or personal development of employees in their free time.



Annexes

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About the report

General information

This Integrated Annual Report of Samruk-Energy JSC for 2023 (the Report) is the 17th to disclose information on financial and economic, operational activities, as well as data on the Company's achievements in the field of sustainable development management. The document is addressed to a wide range of stakeholders. This Report has been prepared in accordance with GRI Standards.

The Report reflects financial and non-financial activities of Samruk-Energy JSC related to projects both in the Republic of Kazakhstan and abroad. Non-financial disclosure elements are shown mainly for subsidiaries and affiliates with the Company's ownership share of 50% and more, i.e. for the Group of companies of Samruk-Energy JSC.

GRI 2-4

Compared to the Company's Integrated Annual Report 2022, there have been changes in the Report with respect to certain indicators, as well as in the disclosure of additional indicators. Detailed explanations are given in the body of the Report.

The financial indicators are denominated in the national currency of Kazakhstan, KZT (tenge) and correspond to the IFRS audited consolidated financial statements.

The Report comprehensively reflects:

- implementation of the Development Strategy of Samruk-Energy JSC;
- management approaches to the Company's management;
- significant financial, economic and production plans and results by main types of activities;
- results in the field of labour safety, environmental protection;
- contribution to the development of the territory of presence, implementation of social policy and other aspects of sustainable development.

To designate Samruk-Energy Group (Samruk-Energy JSC and its subsidiaries), the Report uses the names: "Samruk-Energy", "Company", "Group", and "we".

Statutory Requirements

The Report discloses key data as required by the laws of the Republic of Kazakhstan, internal requirements and regulations of the Company, and international corporate governance practices. The Report relies on the following papers:

- Law No. 415-II of the Republic of Kazakhstan dated 13 May 2003 on Joint Stock Companies;
- Rules for information disclosure by the issuer, Requirements for the content of information to be disclosed by the issuer, and the terms for information disclosure by the issuer on the internet resource of the Depository of financial statements as approved by the Resolution No. 189 adopted by the Board of the National Bank of the Republic of Kazakhstan on 27 August 2018;
- Regulatory requirements of Kazakhstan Stock Exchange (KASE), and Astana International Exchange (AIX);
- International integrated reporting standard (IR International Framework);
- International standard for sustainable development reporting, Global Reporting Initiative, including GRI 12: Coal Sector;
- AA1000SES Stakeholder Engagement Standard;
- Ten principles of UN Global Compact;
- UN Sustainable Development Goals 2030;
- ISO 26000:2010 Social Responsibility Guidance Standard.

Recommendations of the TCFD (The Task Force on Climate-Related Financial Disclosures) Working Group of the Financial Stability Board (partial disclosure).

Samruk-Energy JSC endeavours to develop reporting in terms of applicable standards, disclosing GRI industry indicators and considering TCFD recommendations/ The key feature of this Report is its interactivity and cross navigation: you will find links not only to corporate documents, but also to the official website of Samruk-Energy JSC, where key management practices are presented.

Scope of the Report

GRI 2-3

The scope of the Report corresponds to the annual reporting cycle of the Company. The previous Report was published in July 2023. Electronic copies of the reports for the previous years are available on the [official website](#) of the Company. The current Report discloses the operations and performance of Samruk-Energy JSC for the period from 1 January 2023 to 31 December 2023.

For the purpose of internal control and risk management in financial reporting, the Samruk-Energy Management Board adopted Matrices of Risks and Controls in Accounting and Financial Reporting of Samruk-Energy JSC on 16 March 2020 (Minutes No. 5).

The matrix shows a map of accounting and financial reporting processes at all levels of the Group (subsidiaries, affiliates, joint ventures, and the Fund) and includes five stages:

- Formalisation of the financial reporting process;
- Reconciliation of intra-group and related-party transactions;
- Data collection for the consolidated financial statements;
- Preparation of consolidated financial statements;
- Approval of consolidated financial statements.

In general, the document includes matrices on the following processes:

- Preparation of financial statements;
- Procurements and settlements with creditors;
- Fixed and intangible assets accounting;
- Treasury accounting;
- Dividend accounting;
- Financial aid accounting;

- Tax accounting;
- Employee remuneration accounting;
- Accounting of business trip expenses;
- Investments;
- Borrowings;
- Inventories.

"The Financial Reporting Preparation" process adjusts for key risks and controls, from formalisation of financial reporting, period closure, preparation of separate financial statements, and preparation of consolidated financial statements to the preparation of financial disclosures. The matrix features 50 control procedures to minimise key 5 risks in preparations of consolidated financial statements.

The Company's high-risk culture based on three lines of defence and a focus on continuous improvements ensure that the risk matrix and checkpoints of the financial reporting process are observed and up to date.

The Report includes important facts that fall beyond the reporting period but are directly related to it, as well as the medium-term plans of the Group. The Report discloses information on the most significant results of the operations of Samruk-Energy JSC, its subsidiaries and associates. During data collection, all data of quantitative and qualitative nature across the entire Group, which can have a significant impact on making an informed decision on a significant issue, event, or decision, is considered and disclosed. We are consistently developing a system of work with sustainable development indicators and aims to align the disclosure perimeter with the financial data disclosure to the full amount in the near future.



For the purpose of a unified approach, when compiling the Report on the results of financial and economic activities, the Group of companies of Samruk-Energy JSC uses the equity method in consolidation. In addition, in accordance with the current accounting policy, fixed assets and intangible assets are reflected at their original cost, that is, excluding revaluation. Subsidiaries are included in the consolidated financial statements using the acquisition method. Identifiable assets acquired, as well as liabilities and contingent liabilities received in a business combination, are carried at fair value at the acquisition date, regardless of the size of the non-controlling interest.

Based on the above, when using the equity method in the consolidated balance sheet, the turnover

of such large companies as EGRES-2 JSC, the company of coal assets Forum Muider B.V., in which the ownership share of Samruk-Energy JSC is 50%, is excluded. When forming the consolidated financial result of Samruk-Energy JSC, the share of profit for these companies is reflected in the article share of profit/loss of organizations accounted for using the equity method and impairment of investments.

According to the indicators that have passed independent certification, data consolidation was carried out using the operational control method (GRI 2-7, 2-30, 201-1, 203-1, 203-2, 205-1, 205-2, 302-1, 302-3, 302-4, 303-3, 303-4, 303-5, 305-1, 305-2, 305-4, 305-5, 305-7, 401-1, 401-3, 403-8, 403-9, 404-1, 404-3).

Principles of ensuring the quality of the Report

The quality of the Report is ensured by the application of the key principle of the GRI Standards:

Principles	Description
Context of sustainable development	The Report provides information on the Company's contribution in terms of economic, environmental, and social aspects. Information on the degree of contribution of Samruk-Energy JSC to 17 Sustainable Development Goals by the end of 2023 has been disclosed.
Balance	This Report reflects the positive and negative aspects of the Company's results for the reporting year.
Completeness	The indicators and content of the Report are sufficient to reflect the significant impact of the Company on the economy, the environment and society.
Comparability	The Report contains information on the dynamics over several years, which allows stakeholders to get an idea of all the important indicators for them.
Clarity	The Report is conducted in the most accessible language, understandable to a wide audience, and also contains a glossary.
Reliability	All information for the Report is provided by the relevant departments of the Company and is verified for accuracy. The text of the Report contains links to data sources.
Accuracy	Information on all significant topics is presented in detail and allows interested parties to evaluate the results of the Company's activities. All data are officially recognized by Samruk-Energy JSC and are confirmed by internal and public documents.
Timeliness	The Report provides information for the year 2023 and is published in 2024.

Feedback

Samruk-Energy JSC is interested in receiving feedback for further improvement of the integrated Annual Report and qualitative disclosure of information to interested parties. The Company would appreciate completing the online questionnaire posted on the website of Samruk-Energy JSC in the interactive version of this Report.

GRI 2-3

You can share your feedback on the 2023 Report and ask questions about the Report by contacting the contacts listed below.

Madina Aisarieva, Head of the Corporate governance and sustainable development department
Phone: +7 (7172) 55-30-20
e-mail: m.aisarieva@samruk-energy.kz

Independent assurance

GRI 2-5

Samruk-Energy JSC ensures transparency and independent confirmation of the disclosed information. In the reporting year, external assurance was conducted by PricewaterhouseCoopers in relation to financial information included in the Integrated Annual Report for 2023 and in relation to selected non-financial information.

PricewaterhouseCoopers has conducted an audit of the financial statements that was prepared in accordance with applicable law and International Financial Reporting Standards (IFRS) adopted in the United Kingdom and issued by the IASB.

In addition, PwC provided assurance regarding selected non-financial information published in accordance with GRI Standards.

Forward-looking statements

This Report should be read in its entirety, taking into account the contents of all its sections, as well as the notes and explanations contained therein, including consideration of the information set out in this section.

This Report was prepared on the basis of information available to Samruk-Energy JSC as of December 31, 2023, unless otherwise follows from the meaning or content of such information.

Forward-looking statements are not based on current circumstances and include all statements regarding intentions, opinions or current expectations. The Company in relation to the results of its activities and the implementation of its development strategy. By their nature, such forward-looking statements are characterized by risks and uncertainties, as they relate to events and depend on circumstances that may not occur in the future.

Wordings such as "assume", "consider", "expect", "predict", "intend", "plan", "project", "consider", "could", along with other similar or similar expressions, as well as those used with negation, usually indicate the forward-looking nature of the statement. These assumptions contain risks and uncertainties that are foreseen or not foreseen by the Company. Thus, future performance may differ from current expectations, so recipients of the information presented in the Report should not base their assumptions solely on it.

Samruk-Energy JSC makes no guarantees that the actual results, scope or performance of its activities or the industry in which the Company operates will be consistent with the results, scale or performance indicators expressed or implied in any forward-looking statements contained in this Report or elsewhere.

Samruk-Energy JSC shall not be liable for any losses and damages that may arise from any person due to the fact that such a person relied on forward-looking statements. Except as expressly provided by applicable law, the Company assumes no obligation to distribute or publish any updates or changes to forward-looking statements reflecting any changes in expectations or new information, as well as subsequent events, conditions, or circumstances.



Key performance indicators for 2021-2023

Social performance

GRI 2-7, 405-1, GRI 12: Coal Sector: 12.19.6

Number of employees, employees

Indicator	2021	2022	2023
Headcount of employees	17,645	17,650	17,892
Total number of employees	17,849	18,834	18,007
Men	13,061	13,053	13,273
Women	4,584	4,597	4,619

Total number of employees workforce by position and gender, employees

Indicator	2022		2023	
	men	women	men	women
Senior managers	40	5	58	7
Managers	239	84	1,892	477
Specialists	718	269	1,260	1,788
Workers	12,056	4,239	10,063	2,347

Total number of employees workforce by age and gender, employees

Indicator	2022		2023	
	men	women	men	women
Under 30 years old	1,912	672	2,022	501
30 to 50	7,236	2,542	7,178	2,752
Over 50 years old	3,905	1,383	4,073	1,366

Employment of employees workforce by gender and region, employees

Indicator	Full-time		Part-time	
	men	women	men	women
South	5,944	2,026	-	5
Center	-	-	-	-
East	2	6	-	-
North	7,325	2,582	1	-

Total number of employees workforce by gender and region, employees

Indicator	2022		2023	
	men	women	men	women
South	5,871	1,985	5,915	2,026
Center	156	110	168	111
East	4	6	2	6
North	7,022	2,496	7,188	2,476

Number of regular and temporary employees by gender and region³⁵

Indicator	2022		2023	
	men	women	men	women
Center				
Number of regular employees	151	100	130	100
Number of temporary employees	5	10	6	3
East				
Number of regular employees	4	6	2	6
Number of temporary employees	-	-	-	-
North				
Number of regular employees	6,889	2,215	7,140	2,329
Number of temporary employees	138	283	51	150
South				
Number of regular employees	5,834	1,867	5,880	1,876
Number of temporary employees	30	118	64	155

Number of full-time and part-time employees by gender and region³⁶

Indicator	2023	
	men	women
Center		
Number of full-time employees	135	103
Number of part-time employees	1	0
East		
Number of full-time employees	2	6
Number of part-time employees	0	0
North		
Number of full-time employees	7,190	2,479
Number of part-time employees	1	0
South		
Number of full-time employees	5,944	2,026
Number of part-time employees	0	0

³⁵ The consolidation perimeter in 2023 includes subsidiaries and affiliates: Bogatyr-Komir LLP, EGRES-1 LLP, FWPP LLP, Samruk Green Energy LLP, APP JSC, Alatau Zharyk Company JSC, Moynak HPP JSC, EGRES-2 JSC, AlmatyEnergSbyt LLP, Shardara HPP JSC, Ereymentau Wind Power LLP, Energy Solutions Center LLP, Bukhtarma HPP JSC, Qazaq Green Power PC.

³⁶ The following subsidiaries and affiliates were within the consolidation perimeter in 2023: Bogatyr-Komir LLP, EGRES-1 LLP, FWPP LLP, APP JSC, AZhK JSC, Moynak HPP JSC, EGRES-2 JSC, AlmatyEnergSbyt LLP, Shardara HPP JSC, Energy Solutions Center LLP.



GRI 401-1, GRI 12: Coal Sector: 12.15.2

Number of new employee hires by role, gender and region³⁷

Region	2023							
	Senior managers		Managers		Specialist		Workers	
	Men	Women	Men	Women	Men	Women	Men	Women
Almaty	5		49	17	75	93	741	184
Astana	12	1	20	5	11	2	23	25
North Kazakhstan	9	2	56	3	83	147	1,032	215
South Kazakhstan	1	-	-	-	3	-	3	1
East Kazakhstan	-	-	-	-	-	-	-	-
Central Kazakhstan	-	-	-	-	-	-	-	-
West Kazakhstan	-	-	-	-	-	-	-	-
TOTAL	27	3	125	25	172	242	1,799	425

Number of new employee hires by role, gender and age

Indicator	Senior managers		Managers		Specialists		Workers	
	Men	Women	Men	Women	Men	Women	Men	Women
Under 30 years old	0	0	6	0	51	81	733	126
30 to 50	22	0	94	21	104	128	832	178
Over 50 years old	5	3	26	4	17	33	233	121

Number of dismissed employees by role, gender and region

Region	2023							
	Senior managers		Managers		Specialists		Workers	
	Men	Women	Men	Women	Men	Women	Men	Women
Almaty	10	-	86	29	87	58	491	79
Astana	9	-	20	6	6	3	21	23
North Kazakhstan	10	1	81	12	93	147	826	230
South Kazakhstan	2	-	13	2	25	17	127	34
East Kazakhstan	-	-	-	-	2	-	-	-
Central Kazakhstan	-	-	-	-	-	-	-	-
West Kazakhstan	-	-	-	-	-	-	-	-
TOTAL	31	1	200	49	213	225	1465	366

³⁷ The following subsidiaries and affiliates were within the consolidation perimeter in 2023: Bogatyr-Komir LLP, EGRES-1 LLP, FWPP LLP, APP JSC, AZhK JSC, Moynak HPP JSC, EGRES-2 JSC, AlmatyEnergoSbyt LLP, Shardara HPP JSC, Energy Solutions Center LLP.

Number of dismissed employees by role, gender and age

Indicator	Senior managers		Managers		Specialists		Workers	
	Men	Women	Men	Women	Men	Women	Men	Women
Under 30 years old	0	0	8	0	57	55	384	72
30 to 50	23	0	120	31	115	123	636	158
Over 50 years old	8	1	75	15	39	49	444	137

GRI 401-3, GRI 12: Coal Sector: 12.15.4, 12.19.4

Key parental leave indicators, employees³⁸

Indicator	2021	2022	2023
Total number of employees entitled to parental leave	17,645	17,650	17,892
Men	13,061	13,053	13,273
Women	4,584	4,597	4,619
Total number of employees who took parental leave	310	329	354
Men	20	29	16
Women	290	300	338
Employees who returned to work after parental leave in the reporting period	146	144	132
Men	9	10	11
Women	137	134	121
Employees who returned to work after parental leave in the previous reporting period in 2022	187	203	54
Men	9	12	10
Women	178	191	34
Employees who returned to work after parental leave in 2022 and were still employed after 12 months of return	183	189	134
Men	8	11	7
Women	175	178	127
Return to work rate, %	47	44	2
Men	45	34	2
Women	47	45	3
Retention rate, %	97	93	1
Men	89	92	1
Women	98	93	1

³⁸ The following subsidiaries and affiliates were within the consolidation perimeter in 2023: Bogatyr-Komir LLP, EGRES-1 LLP, FWPP LLP, Samruk Green Energy LLP, APP JSC, Alatau Zharyk Company JSC, Moynak HPP JSC, EGRES-2 JSC, AlmatyEnergoSbyt LLP, Shardara HPP JSC, Freymentau Wind Power LLP, Energy Solutions Center LLP, Bukhtarma HPP JSC, Qazaq Green Power PC.



GRI 404-1

Average number of hours of training of per employee per year by gender and employee category, 2023³⁹

Indicator	Senior management		Administrative staff and managers		Production staff		Maintenance staff	
	Men	Women	Men	Women	Men	Women	Men	Women
	Hours of staff training per year, by employee category and gender	2,298	153	20,945	48,906	742,327	180,944	2,426
Employees in every category, by gender (average headcount)	36	7	360	863	12,495	3,599	166	113
Average hours of training per year per employee in every category, by gender	63.8	21.8	58.2	56.7	59.3	50.3	14.6	65.1

GRI 2-21

Ratio of the highest paid to the rest⁴⁰

Indicator	2021	2022	2023
Increase in the average annual pay of employees	% 5%-32%	10%	20%
Ratio of the total annual pay of the highest-paid employee to the average annual pay of other employees	ratio 270%	285%	285%

GRI 202-1, GRI 12: Coal Sector: 12.19.2

Ratio of standard entry level wage compared to local minimum wage

Indicator	2021	2022	2023
Men	ratio 343%	310%	367%
Women	ratio 296%	283%	354%

GRI 405-1, GRI 12: Coal Sector: 12.19.6

Number of employees with disabilities

Region	Administrative staff and managers		Production staff		Overall	Total	Total
Center	-	-	-	-	-	-	-
East	-	-	-	-	-	-	-
North	2	6	72	11	74	17	91
South	3	5	103	25	106	30	136
Total					180	47	227

³⁹The following subsidiaries and affiliates were within the consolidation perimeter in 2023: Bogatyr-Komir LLP, EGRES-1 LLP, FWPP LLP, Samruk Green Energy LLP, APP JSC, Alatau Zharyk Company JSC, Moynak HPP JSC, EGRES-2 JSC, AlmatyEnergoby LLP, Shardara HPP JSC, Ereymentau Wind Power LLP, Energy Solutions Center LLP, Bukhtarma HPP JSC.

⁴⁰The following subsidiaries and affiliates were within the consolidation perimeter in 2023: APP JSC, Alatau Zharyk Company JSC, Moynak HPP JSC, EGRES-2 JSC, Shardara HPP JSC.

Diversity of governance bodies by gender, 2023⁴⁰

Category	Men	Women
Senior managers	581	887
Under 30 years old	61	115
30 to 50	265	605
Over 50 years old	97	167
Managers	1,892	478
Under 30 years old	-	1
30 to 50	1,172	319
Over 50 years old	626	147

Occupational health and safety

Health and safety expenditures, thousand tenge

Types of expenditures	2021	2022	2023
Money allocated to ensure compliance with H&S standards, including occupational health and safety	5,179,481	4,822,169	3,559,017
fire safety	2,029,462	2,109,105	2,543,422
occupational safety	947,816	570,483.0	190,082
training	1,399,049.5	1,115,322.9	42,208
other (specify)	229,571	137,993	82,036
Money spent to ensure compliance with H&S standards, including occupational health and safety	274,820.1	537,909.7	701,269
fire safety	4,335,822	3,788,509	2,995,369
occupational safety	1,530,886	1,673,061	2,156,697
training	917,675	464,992	108,258
other (specify)	1,370,120.7	1,074,124.2	37,139
Money spent to ensure compliance with H&S standards, including occupational health and safety	167,031	163,437	70,092
fire safety	133,748.1	161,760.2	622,903
occupational safety			
training			
other (specify)			

Environmental performance

Environmental investments, KZT billions

Expenditure	2021	2022	2023
Waste management and remediation of environmental damage	7.182	5.220	19.794
Protection and rehabilitation of land, surface and ground water, and waste water treatment	0.810	0.452	0.463
Air protection and climate action	0.981	1.365	3.050
Landscaping and improving territories	0.095	0.058	0.115
Staff training and upskilling	0.002	0.002	0.002
Drafting documents	0.011	0.011	0.019
Other environmental activities (water and air analysis)	0.007	0.008	0.009
Total	9.088	7.117	24.433



Emissions payments (taxes) and obligatory environmental payments, KZT billions

Payments	2021	2022	2023
Air emission payments	5.963	6.197	6.992
Water use payment (water tax)	0.112	0.127	0.093
Pollution discharge fee	0.010	0.010	0.011
Charges for waste disposal in the natural environment	1.461	1.265	1.470
Total	7.546	7.599	8.566

GRI 305-7, GRI 12: Coal Sector: 12.4.2

Pollution discharges, tons

Pollutants	2022	2023
NOx	80,147.35	77,745.6
Sox	223,331.13	221,132.5
Solid substances	48,063.65	49,234.9
CO	6,217.23	6,520.5
Volatile organic compounds (VOCs)	313.382	274.5
Hazardous air pollutants (HAPs)	6.326	14.193
Persistent organic pollutants (POPs)	0	0
Total	358,079.07	354,922.3

GRI 303-3, GRI 12: Coal Sector: 12.7.4, 12.7.6

Total water withdrawal by Samruk-Energy JSC, megaliters

Total water withdrawal by source	2021	2022, ^{41, 42}	2023	Areas with water scarcity
In surface water bodies (total)	19,928,305	22,458,542	23,521,126.6	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	19,928,305	22,458,542	23,521,126.6	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
In underground sources (total)	5,390	6,527	5,703.8	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	5,390	6,527	5,703.8	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
Sea water	0	0	0	no
Produced water (total)	0	0	0	no
In municipal sources (total)	39,897	39,369	39,915.6	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	39,897	39,369	39,915.6	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
third-party water	0	132	233.4	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	0	132	233.4	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no

⁴¹ When disclosing information, the Company strives to expand the scope of the disclosed information and reporting areas to rank higher in the ESG rankings, so Samruk-Energy JSC discloses water intake by HPP Cascade and Kapshagay HP in its annual reports from 2022, and the figures for 2020 and 2021 were also recalculated taking into account these HPP;

⁴² The Company recalculated the water withdrawal data of the HPP Cascade for the years 2021 and 2022.

Total water withdrawal by source	2021	2022, ^{41, 42}	2023	Areas with water scarcity
Drainage/mine and quarry water	1,692	2,351	2,002.8	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	0	0	0	no
Other water (>1,000 mg/l of total dis-solved solids)	1,692	2,351	2,002.8	no
Total withdrawal water	19,975,284	22,506,920	23,568,982.2	no
Fuel generation, coal mining and distribution companies	211,380	211,247	230,694	no
Hydroelectric power station	19,763,904	22,295,673	23,338,288.2	no

GRI 303-5

Water consumption by Samruk-Energy JSC, megaliters⁴³

Indicator	2021, ⁴⁴	2022, ⁴⁵	2023
Water consumption	134,340	133,689	154,876

GRI 303-4, GRI 12: Coal Sector: 12.7.5

Total water discharge by Samruk-Energy JSC, megaliters

Indicator	2021	2022	2023	Regions with water deficit
Surface:	19,763,859	22,295,646	23,338,254.3	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	19,763,859	22,295,646	23,338,254.3	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
Underground	0	0	0	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	0	0	0	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
Sea water	0	0	0	no
Produced water	0	0	0	no
Artificial water bodies (evaporation ponds, storage ponds and filtration fields):	1,618	2,289	1,922.7	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	139	162	143.1	no
Other water (>1,000 mg/l of total dis-solved solids)	1,479	2,127	1,779.6	no
The volume of wastewater transferred for use to other organizations	584	609	630.2	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	584	609	630.2	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no

⁴³ The disclosure methodology for Water Consumption was changed in 2022 in accordance with GRI 303-5, therefore the Company has recalculated the Water Consumption figures for 2020 and 2021.

⁴⁴ In 2021, the volume of water consumption was defined as the entire volume of water taken away by subsidiaries, excluding HPP.

⁴⁵ The decrease in water consumption is due to a change in the disclosure methodology, so in 2022, water consumption was calculated according to GRI 305-5, as the difference between the Company's water disposal and wastewater.

Indicator	2021	2022	2023	Regions with water deficit
Ash dump	74,883	74,688	73,299.2	no
Fresh water (≤1,000 mg/l of total dis-solved solids)	74,883	74,688	73,299.2	no
Other water (>1,000 mg/l of total dis-solved solids)	0	0	0	no
Total withdrawal water	19,840,944	22,373,231	23,414,106.4	no
Fuel generation, coal mining and distribution companies	77,085	77,586	75,852.1	no
Hydroelectric power station	19,763,859	22,295,646	23,338,254.3	no

GRI 306-4, GRI 12: Coal Sector: 12.6.5
Waste generated by Samruk-Energy JSC and sent for recovery, tons

Indicator	2021		2022		2023	
	In-house	Out-sourced	In-house	Out-sourced	In-house	Out-sourced
Total waste recovered	11,468.48	29,514.44	12,856.78	22,951.87	9,663.65	28,223.13
Total hazardous waste recovered, incl.	11,468.44	9,530.27	87.58	211.53	49.71	1,097.81
reused	11,468.44	-	87.58	-	49.71	-
recycled	-	4,452.83	-	14.96	-	125.75
disposed	-	-	-	4.87	-	32.84
Otherwise treated	-	5,077.45	-	191.69	-	939.22
Total non-hazardous waste recovered, incl.	0.04	19,984.17	12,769.19	2,740.34	9,613.94	27,125.32
reused	0.04	-	12,769.19	-	9,613.94	-
recycled	-	19,940.17	-	14,057.29	-	12.13
disposed	-	44.0	-	4,770.63	-	1,885.95
Otherwise treated	-	-	-	3,912.42	-	25,227.25

GRI 306-5, GRI 12: Coal Sector: 12.6.6
Waste generated by Samruk-Energy JSC and sent for disposal, tons

Indicator	2021		2022		2023	
	In-house	Out-sourced	In-house	Out-sourced	In-house	Out-sourced
Total volume of waste sent for disposal	88,148,070	2,124.05	90,267,675	2,223.91	97,975,466	2,805.30
Total hazardous waste sent for destruction	-	988.0	-	60.54	1.34	88.80
combustion (with energy recovery)	-	-	-	-	-	-
combustion (without energy recovery)	-	95.60	-	43.15	1.11	80.64
otherwise treated	-	892.40	-	17.39	0.24	8.16
Total non-hazardous waste sent for destruction, incl.	-	16,836.18	-	3,632.60	-	4,328.92
combustion (with energy recovery)	-	-	-	-	-	-
combustion (without energy recovery)	-	-	-	1.74	-	14.92
otherwise treated	-	16,836.18	-	3,630.86	-	4,314.00

GRI 302-1
Resource consumption and energy efficiency^{46, 47, 48}

Indicator	2021	2022	2023
Resource consumption	346,258	340,079	339,604
Total energy consumption, incl.	15,654	15,153	15,171
Electricity, incl.	12,608	12,331	12,444
HPPs	24	38	48
Total electricity and thermal energy purchased	9,738	10,900	9,303
Purchased electricity, incl.	9,623	10,782	9,201
RES	4,802	5,826	4,231
HPPs (RES)	186	295	197
In-house electricity generation	128,193	129,183	127,187
Electricity generation by energy-intense subsidiaries and affiliates	127,022	127,681	125,802
RES	1,171	1,503	1,996
Total electricity supply, incl.	124,815	127,534	124,916
Total heat energy consumption, incl.	3,046	2,823	2,727
Purchased heat energy	116	118	102.4
n-house heat energy production	24,142	23,039	26,807
Heat energy sales	23,805	22,632	23,798
Coal	333,003	326,562	325,818
Gas, incl.	10,886	11,024	10,842
natural gas	10,885	11,023	10,841
LNG (LPG))	0.9	0.7	0.68
Liquid fuels, incl.	1,585	1,530	1,661
petrol	162	156	155
diesel	1,423	1,374	1,506
Boiler fuel, incl.	784	963	1,283
residual oil	784	963	1,283

⁴⁶ The methodology for calculating Key Energy Efficiency Indicators (KEIs) is designed for energy-saving analysis of operations of industrial producers, regardless of their legal status, form of ownership and type of products or services they make. The methodology also makes it possible to develop an energy strategy for industrial enterprises and their development plans and programmes for boosting energy efficiency in the long term. ISO 50001.

⁴⁷ The coefficients used are in line with the Methodology for the Fuel and Energy Balance and the Calculation of Selected Statistical Indicators Typical for the Energy Sector.

⁴⁸ The following subsidiaries and affiliates were within the consolidation perimeter in 2023: purchased energy, including from RES: EGRES-1 LLP, EGRES-2 JSC, APP JSC, Shardara HPP JSC, Moynak HPP JSC, purchased energy: Alatau Zharyk Company JSC, Bogatyr Komir LLP, APP JSC. Purchased thermal energy: Alatau Zharyk Company JSC, Bogatyr Komir LLP. Coal: EGRES-1 LLP, EGRES-2 JSC, APP JSC. Petroleum: EGRES-1 LLP, EGRES-2 JSC, APP JSC, Shardara HPP JSC, Moynak HPP JSC, Alatau Zharyk Company JSC, Bogatyr Komir LLP. Diesel: EGRES-1 LLP, EGRES-2 JSC, Shardara HPP JSC, Moynak HPP JSC, Alatau Zharyk Company JSC, Bogatyr Komir LLP. Fuel Oil: EGRES-1 LLP, EGRES-2 JSC, APP JSC. Natural gas: APP JSC.

GRI 302-3

Energy intensity⁴⁹

Specific energy consumption (by segment)	Unit of measurement	2023
Power generation	Thousand GJ/thousand MW*h	0.00961
Heat energy production	Thousand GJ/thousand MW*h	53.05

GRI 302-4

Reducing energy consumption⁵⁰, thousand GJ

	2021	2022	2023
Gasoline	0.15		0.30
Diesel fuel	-		0.34
Fuel oil	20	7	34.45
Coal	13,609	14,155	9,928
Natural gas	21	35	20.43
Electric power	1,601	47	36.15
Heat energy	75	28	23.49

Investments indicators

Implementation of the Investment Program of Samruk-Energy JSC in 2023, KZT million (excluding VAT)

№	Subsidiaries			fact		forecast	
		2021	2022	2023	2024	2025	2025
	TOTAL	61,698	100,580	132,146	272,700	754,354	
1	Investment project, incl.	25,206	58,372	80,393	150,262	635,550	
1.1	Restoration of Unit 1 with the installation of new electric filters	10,930	32,681	71,113	39,694	-	
1.2	Modernization of power unit No. 3 of GRES-1	-	-	-	3,521	64,747	
1.3	Expansion and reconstruction of EGRES-2 with installation of power unit No. 3	104	10,209	121	3,175	71,272	
1.4	Development of a feasibility study for the construction of power unit No.4 GRES-2	-	-	-	233	-	
1.5	The transition to a cyclic flow technology (CPT) of production, transportation, averaging and loading of coal at the Bogatyr section of the Ekibastuz coal deposit	9,693	7,896	5,373	88	-	
1.6	Construction of the Kokozek SS	2,000	354	-	-	-	
1.7	Construction of the Turksib SS	19			380	1,000	
1.8	Reconstruction of PS-220/110/10kV No.7 AHBK	-	2		1,315	3,773	
1.9	Reconstruction of electrical networks	-	-	1,928	9,368	12,758	

⁴⁹ The methodology for calculating energy efficiency is determined by the company taking into account the total consumption of resources within the organization, as well as the volume of products produced. The calculations take into account both the total electricity generation and the production of thermal energy.

⁵⁰ The Company takes into account the reduction of energy consumption through technical measures in accordance with the established methodology to assess their impact.

№	Subsidiaries			fact		forecast	
		2021	2022	2023	2024	2025	2025
1.10	Modernization of CHPP-2 with minimization of environmental impact. Development of a feasibility study and passing an examination	313	560	1,683	42,990	269,528	
1.11	Expansion of CHPP-1 with the construction of a 200-250 MW GTP	-	271	3	691	8,255	
1.12	Reconstruction of Almaty CHPP-3 on the basis of a GTP with an increase in the station's capacity to 450 MW	-	334	123	47,992	195,986	
1.13	Construction of a wind power plant in the Shelek corridor, with a capacity of 60 MW with the prospect of expansion to 300 MW	23	4,944	49	-	-	
1.14	Construction of the Yerementau wind farm with a capacity of 50 MW	2,099	1,065	-	123	10	
1.15	Expansion of the existing Yerementau-1 wind farm with a capacity of 45 MW into two wind power plants with a capacity of 2.5 MW each	9	56	0.06	-	-	
1.16	Development of the pre-feasibility study of the Semey HPP				418		
1.17	Other projects	15	2	-	275	8,221	
2	Maintenance of production assets	35,198	41,052	49,555	117,039	117,674	
2.1	Bogatyr Komir LLP (50%)	4,243	7,995	6,824	8,997	7,944	
2.2	EGRES-2 JSC (50%)	1,616	1,985	2,483	4,375	3,940	
2.3	EGRES-1 LLP	8,886	9,859	12,957	47,728	53,880	
2.4	Alatau Zharyk Company JSC	10,692	11,289	14,173	22,855	31,958	
2.5	Almaty Power Plants JSC	9,042	9,563	11,947	23,072	13,744	
2.6	Moynak HPP JSC	415	103	574	3,038	355	
2.7	Shardara HPP JSC	10	54	22	254	21	
2.8	AlmatyEnergSbyLLP	90	85	77	93	79	
2.9	Samruk-Green Energy LLP	26	22	21	24	14	
2.10	First Wind Power Plant LLP	180	96	476	833	686	
2.11	Ereymtau Wind Power LLP	-	-	-	-	-	
2.12	Energiya Semirechye LLP (25%)			0.3	-	-	
2.13	Energy Solutions Center LLP	-	-	-	-	-	
2.14	Shulbinsk HPP	-	-	-	4,076	4,307	
2.15	Ust-Kamenogorsk HPP	-	-	-	1,695	747	
3	Maintenance of administrative assets	1,267	1,157	2,198	3,591	416	
4	Others	26	-	-	1,809	713	
4.1	Other projects	15	2	-	275	8,221	

Financial and economic indicators

Key financial and economic indicators, KZT million

N°	Indicator, KZT million			fact		forecast
		2021	2022	2023	2024	2025
1	Income from the sale of products and services	332,537	381,465	444,960	638,112	695,621
1.1.	Power generation	253,593	286,873	289,801	336,532	377,557
1.2.	Sales of electricity by energy supply organizations	125,685	137,578	167,467	225,179	252,137
1.3.	Heat energy production	18,703	19,762	23,284	27,151	28,023
1.4.	Transmission and distribution of electricity	46,428	53,654	66,722	81,979	100,745
1.5.	Sales of chemically treated water	1,781	1,852	1,844	1,860	1,865
1.6.	Rent	3,930	4,188	21,843	29,646	16,101
1.7.	Other	3,702	5,574	9,473	6,373	6,798
2	Cost of products sold and services rendered	254,847	288,929	329,676	483,534	531,598
2.1	Cost of electricity production	183,478	202,949	210,922	234,221	265,419
2.2	The cost of electricity sales by energy supply organizations	128,428	140,490	170,278	223,336	250,368
2.3	The cost of heat production	19,306	22,168	25,649	29,857	33,444
2.4	Cost of electricity transmission	39,358	47,040	54,703	61,544	64,533
2.5	Cost of sales of chemically treated water	1,848	2,001	1,976	2,310	2,428
2.6	Cost of other core activities	767	1,140	1,220	1,518	1,591
	Depreciation of fixed assets and intangible assets	55,168	59,764	62,556	71,396	92,850
3	Gross profit	77,690	92,536	115,284	154,578	164,023
4	Income from financing	2,616	2,747	6,451	3,650	3,304
5	Other income	7,278	7,812	6,235	255	431
6	Expenses for the sale of products and services	9,029	9,110	8,931	9,215	9,922
7	General and administrative expenses	14,793	18,852	13,525	20,435	21,215
8	Operating profit	53,868	64,574	92,828	124,928	132,885
9	Profit before depreciation and amortization, interest and CIT (EBITDA)	123,447	141,382	159,484	225,392	227,720
10	Financing costs **	30,139	29,748	25,244	35,918	42,848
11	Other expenses from non-core activities * **	23,354	14,337	20,309	244	233
12	Share of profit/loss of organizations, accounted for using the equity method and impairment of investments	13,455	16,103	3,121	10,691	21,870
13	Profit (loss) from discontinued operations	0	736	0	0	0
14	Profit (loss) before taxation	23,723	46,417	63,082	103,362	115,409
15	Corporate income tax expenses	8,377	16,111	19,352	23,130	22,825
16	Total profit (loss) before deduction of minority interest	15,347	30,306	43,730	80,232	92,584
17	Minority share	300	175	649	901	503
18	The final profit, due to the Shareholders of Group of companies of Samruk-Energy JSC	15,046	30,132	43,080	79,330	92,081

(*) in the Financial Report, the 2021-2023 foreign exchange loss is recognised under "Financial expenses".

(**) in the Financial Report an impairment loss is reflected in the article "Impairment losses on non-financial assets" Note: The breakdown of income and cost is given by type of activity (not by segment) and is indicated without taking into account elimination.

Operations performance Production KPI (by producer)

Name of a subsidiary			Fact	% to the fact of	Forecast	
	2021	2022	2023	2022	2024	2025
The volume of electricity production, million kW*h						
EGRES-1 LLP	22,788	23,048	22,870	99%	23,500	24,500
EGRES-2 JSC	6,433	6,002	5,659	94%	6,101	6,101
Almaty Power Plants JSC	5,008	5,099	5,054	99%	4,958	4,958
Moynak HPP JSC	758	973	832	86%	906	906
Shardara HPP JSC	456	518	529	102%	478	537
AES Ust- Kamenogorsk HPP LLP	-	-	-	-	1,500	1,622
AES Shulbinsk HPP LLP	-	-	-	-	1,476	1,491
Samruk-Green Energy LLP	20.45	19.78	21.52	109%	20.09	20.06
First Wind Power Plant LLP	144.59	135.72	142.60	105%	166.47	166.47
Energia Semirechya LLP	-	88.26	220.75	250%	214.46	214.46
Total	35,609	35,884	35,330	98%	39,319	40,515
The volume of electricity sales, million kW*h						
EGRES-1 LLP	22,496	23,102	22,796	99%	22,410	23,373
export	400	-	-	-	-	-
EGRES-2 JSC	6,336	5,938	5,532	93%	5,758	5,756
export	192	473	577	122%	-	-
Almaty Power Plants JSC	4,425	4,591	4,303	99%	4,171	4,175
Moynak HPP JSC	781	1,014	912	90%	893	893
Shardara HPP JSC	468	540	549	102%	469	527
AES Ust- Kamenogorsk HPP LLP	-	-	-	-	1,488	1,611
AES Shulbinsk HPP LLP	-	-	-	-	1,452	1,467
Samruk-Green Energy LLP	20.22	19.53	21.23	109%	19.44	19.41
First Wind Power Plant LLP	144.29	135.37	142.31	105%	166.07	166.07
Energia Semirechya LLP	-	86.40	216.33	250%	208.03	208.03
Total	34,671	35,426	34,699	98%	37,035	38,195



The volume of capacity sales, MW

EGRES-1 LLP	1,565	2,024	1,330	66%	2,556	2,601
including electricity supplied at individual tariffs	-	-	-	-	477	477
EGRES-2 JSC	525	779	647	83%	896	896
Almaty Power Plants JSC	806	859	808	94%	850	850
including electricity supplied at individual tariffs	70	70	70	100%	70	
Moynak HPP JSC	292	289	292	101%	298	298
Shardara HPP JSC	61	61	61	100%	61	61
AES Ust- Kamenogorsk HPP LLP	-	-	-	-	326	329
AES Shulbinsk HPP LLP	-	-	-	-	571	576
Total	3,248	4,013	3,138	78%	5,558	5,610

Heat energy production, thousands Gca

Almaty Power Plants JSC	5,554	5,282	5,582	106%	5,323	5,323
EGRES-2 JSC	76	78	70	90%	76	76
EGRES-1 LLP	136	143	124	87%	194	194
Total:	5,766	5,502	5,776	105%	5,592	5,592

Electricity transmission, million kWh

Alatau Zharyk Company JSC	7,650	8,154	8,686	107%	8,815	8,947
Total	7,650	8,154	8,686	107%	8,815	8,947

Electricity supply, million kWh

AlmatyEnergSbyt LLP	6,724	6,847	7,086	103%	7,297	7,516
Total	6,724	6,847	7,086	103%	7,297	7,516
Coal sales, million tons	44.74	42.41	42.49	100%	46.70	46.36





GRI Index

Statement of use			Samruk-Energy JSC has reported in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2023		
GRI 1 used			GRI 1: Foundation 2021		
Applicable GRI Sector Standard(s)			GRI 12: Coal Sector		
Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 2: Organization and its reporting practices					
2-1	Organisational details	SECTION 1. SAMRUK-ENERGY TODAY 1.1. Company portrait 1.5 Geography of Assets			
2-2	Entities included in the organisation's sustainability reporting	ANNEXES 6.1 About the Report			
2-3	Reporting period, frequency and contact point	ANNEXES 6.1 About the Report			
2-4	Restatements of information	In the case of revisions of previous years' figures or other reporting changes, relevant comments are made throughout the Report			
2-5	External assurance	ANNEXES 6.1 About the Report			
GRI 2: Activities and workers					
2-6	Activities, value chain and other business relationships	SECTION 1. SAMRUK-ENERGY TODAY 1.1. Company portrait 1.4. Samruk-Energy Group Structure» SECTION 3. BUSINESS PERFORMANCE 3.3. Procurement Management SECTION 5 CORPORATE GOVERNANCE 5.1. Corporate Governance System			
2-7	Employees	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021-2023 The Company does not keep records of non-guaranteed hours of work of employees, broken down by gender and region.			
2-8	Workers who are not employees	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital	2-8a.		
			2-8b,2-8c.		
GRI 2: Corporate Governance					
2-9	Governance structure and composition	SECTION 5 CORPORATE GOVERNANCE 5.1. Corporate Governance System 5.2. Governing bodies			
2-10	Nomination and selection of the highest governance body	SECTION 5 CORPORATE GOVERNANCE 5.2. Governing bodies			
2-11	Chair of the highest governance body	Chair of the highest governance body is not an executive director.			
2-12	Role of the highest governance body in overseeing the management of impacts	SECTION 5 CORPORATE GOVERNANCE 5.2. Governing bodies			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 2: Corporate Governance					
2-13	Delegation of responsibility for managing impacts	The Company has Committees under the Board of Directors and the Management Board, created for thorough and in-depth study of issues, as well as the development of recommendations For environmental reasons, economic, social and managerial issues (for more information, see the section "Corporate Governance"). Besides the organizational structure, positions are provided in the Company, responsible for There is a structural division, Department of Corporate Governance and Sustainable Development			
2-14	Role of the highest governance body in sustainability reporting	The Board of Directors approves the Company's sustainability reports. Individual issues in the field of sustainable development are considered by the Committees of the Board of Directors as part of their current activities.			
2-15	Conflicts of interest	SECTION 5 CORPORATE GOVERNANCE 5.2 Governing bodies			
2-16	Communication of critical concerns	SECTION 5 CORPORATE GOVERNANCE 5.2 Governing bodies			
2-17	Collective knowledge of the highest governance body	SECTION 5 CORPORATE GOVERNANCE 5.2 Governing bodies			
2-18	Evaluation of the performance of the highest governance body	SECTION 5 CORPORATE GOVERNANCE 5.2 Governing bodies			
2-19	Remuneration policies	SECTION 5 CORPORATE GOVERNANCE 5.3. Remuneration			
2-20	Process to determine remuneration			Not applicable	The Sole Shareholder decides on the size of remuneration.
2-21	Annual total compensation ratio	ANNEXES 6.2. Key Performance Indicators 2021-2023			
GRI 2: Strategy, policies and practices					
2-22	Statement on sustainable development strategy	MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS			
2-23	Policy commitments	SECTION 4. ESG MANAGEMENT 4.4. Respect for human rights			
2-24	Embedding policy commitments	SECTION 4. ESG MANAGEMENT 4.1. Sustainable development management system			
2-25	Processes to remediate negative impacts	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment			
2-26	Mechanisms for seeking advice and raising concerns	SECTION 5 CORPORATE GOVERNANCE 5.7. Business Ethics and Anticorruption			
2-27	Compliance with laws and regulations	The total number of cases of non-compliance with legislation and regulations is 40. In all cases, fines totaling 60,287 thousand tenge were imposed. Cases. There are no non-monetary sanctions for which they were applied. The significant cases were: 1)In the field of environmental protection: removal of ash particles from the surface of the ash dump (dusting); absence of a hydro-spraying system; absence of labeling indicating the name on the packaging of hazardous waste; cluttering of the territory with dead wood, scrap metal and the absence of separate waste collection; overspending (deviation) from the design documentation of the maximum permissible emissions (MPI) Project and the Conclusion of the state environmental assessment on the MPI of annual gas consumption by boilers; incorrect data in the report of industrial environmental control 2021.; violations of environmental impact permit requirements.			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 2: Strategy, policies and practices					
		<p>2) In the field of industrial safety and labor protection: failure</p> <p>3) to comply with the requirements presented earlier; violation of fire safety standards; case of short circuit of electrical wires in the TP without subsequent goring; violation of technological operation of the equipment.</p> <p>3) In the field of labor legislation: for late payment of wages.</p> <p>4) In the field of tax legislation: additional accrual of CIT in connection with the cancellation of the preference for ORU-500 for the period 2016-2020 and the application of deductions for depreciation of fixed assets of Group I. In connection with this transfer, there was an additional charge of CIT and, as a result, there was a deviation between the previously submitted forms for advance payments for CIT and the actual CIT more less than 20%.</p> <p>5) Others: for violating the requirements of the Law of the Republic of Kazakhstan "On Accounting and Financial Reporting" dated 02/28/2007. No234. Accounting policies and Instructions on accounting for fixed assets; for misuse of loan funds. issued under a state guarantee; for violation in the field of ensuring the sanitary and epidemiological well-being of the population.</p> <p>For the purposes of disclosure of this indicator, the materiality threshold has been set at the level of KZT 100,000 this makes it possible to identify the most significant violations for the activities of the Samruk-Energy JSC Group of Companies.</p> <p>SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment</p>			
2-28	Member associations	SECTION 4. ESG MANAGEMENT 4.3. Interaction with stakeholders			
2-29	Approach to stakeholder engagement	SECTION 4. ESG MANAGEMENT 4.3. Interaction with stakeholders			
2-30	Collective agreements	SECTION 4. ESG MANAGEMENT 4.5. Investments in human capital			
GRI 3: Material topics					
3-1	Process to determine material topics	SECTION 4. ESG MANAGEMENT 4.1. Sustainable development management			
3-2	List of material topics	SECTION 4. ESG MANAGEMENT 4.1. Sustainable development management			
GRI 201: Economic performance					
201-1	Direct economic value generated and distributed	SECTION 3. PERFORMANCE INDICATORS 3.1. Key Financial Indicators in SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development ANNEXES 6.2. Key Performance Indicators 2021- 2023			
201-2	Financial implications and other risks and opportunities due to climate change	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change			
201-4	Financial assistance received from government	During the reporting period, the Company did not receive financial assistance from the state.			
GRI 202: Market Presence					
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023			
202-2	Proportion of senior management hired from the local community	The share of top-ranking managers in significant regions of the organization's activities. According to the results of 2023, the number of employed representatives of the local population amounted to 100%.			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 203: Indirect Economic Impacts					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development			
203-1	Infrastructure investments and services supported	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development			
203-2	Significant indirect economic impacts	There were no significant indirect economic impacts in 2023, caused by the Company's activities, how positive, so are the negative ones, which could be significant according to national and international standards, protocols and policy programs			
GRI 204: Procurement Practices					
204-1	Proportion of spending on local suppliers	SECTION 3. PERFORMANCE INDICATORS 3.3. Procurement Management			
GRI 205: Anti-corruption					
205-1	Operations assessed for risks related to corruption	SECTION 5 CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption			
205-2	Communication and training about anti-corruption policies and procedures	SECTION 5 CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption			
205-3	Confirmed incidents of corruption and actions taken	SECTION 5 CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption			
GRI 206: Anti-competitive Behavior					
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	During the reporting period, the Company did not receive legal action for anti-competitive behavior, anti-trust and monopoly practices			
GRI 207: Tax					
207-1	Approach to tax	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development			
207-3	Stakeholder engagement and management of concerns related to tax	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development			
GRI 302: Energy					
302-1	Energy consumption within the organization	ANNEXES 6.2. Key Performance Indicators 2021- 2023. Generating enterprises of Samruk-Energy JSC, it is produced as an electric one, so is thermal energy. Steam is used to drive (as a driving force) in steam turbines. A steam turbine is a piece of equipment, which is necessary for the production of electricity, that is, it generates steam in its own boilers in order to produce electric energy (commodity, which is being implemented/released). The generating enterprises of Samruk-Energy JSC sell steam energy to third-party consumers in the form of heated mains water. For their heating and hot water supply. In order to avoid double counting of energy consumption, steam energy is counted once in coal consumption and is not counted in energy consumption. Also, cooling energy is part of the technological chain of generating enterprises of Samruk-Energy JSC. The Company does not consume or sell cooling energy to third parties			
302-4	Reduction of energy consumption	SECTION 4. MANAGING ESG ASPECTS 4.9. Contribution to the fight against climate change			
GRI 303: Water					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 303: Water					
303-1	Interactions with water as a shared resource	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
303-2	Management of water discharge related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
303-3	Water withdrawal	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021- 2023.			
303-4	Water discharge	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021- 2023.			
303-5	Water consumption	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet The Company does not keep records of water reserves.			
GRI 304: Biodiversity					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
304-2	Significant impacts of activities, products, and services on biodiversity	According to the available data. The Company's current activities do not have a significant impact on the biodiversity of the regions, in which the facilities of the Samruk-Energy JSC Group of Companies are located. SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
304-3	Habitats protected or restored	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
GRI 305: Emissions					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
305-1	Direct (Scope 1) GHG emissions	SECTION 4. ESG MANAGEMENT 4.9. Contribution to the fight against climate change The data are calculated using the approach. The GHG Protocol Guidelines and direct greenhouse gas emissions are calculated using the method of calculating greenhouse gas emissions from boilers of thermal power plants, electric power plants and boiler houses and methods for calculating greenhouse gas emissions from open and closed coal mining, approved by the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan (The methods are available for review on the official website of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan (https://www.gov.kz/memleket/entities/ecogeo)).			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 305: Emissions					
305-2	Energy indirect (Scope 2) GHG emissions	SECTION 4. ESG MANAGEMENT 4.9. Contribution to the fight against climate change			
305-4	GHG emissions intensity	SECTION 4. ESG MANAGEMENT 4.9. Contribution to the fight against climate change			
305-5	Reduction of GHG emissions	SECTION 4. ESG MANAGEMENT 4.9. Contribution to the fight against climate change			
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
GRI 306: Waste					
306-1	Waste generation and significant waste-related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
306-2	Management of significant waste-related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
306-3	Waste generated	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet			
306-4	Waste diverted from disposal	ANNEXES 6.2. Key Performance Indicators 2021- 2023			
306-5	Waste directed to disposal	ANNEXES 6.2. Key Performance Indicators 2021- 2023			
GRI 401: Employment					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital			
401-1	New employee hires and employee turnover	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023			
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital The company strives to ensure the social security of its employees. However, contractors do not have the same benefits. what about the employees of the Company.			
401-3	Parental leave	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023			
GRI 402: Labor/Management Relations					
402-1	Minimum notice periods regarding operational changes	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital			
GRI 403: Occupational Health and Safety					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-1	Occupational health and safety management system	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-2	Hazard identification, risk assessment, and incident investigation	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 403: Occupational Health and Safety					
403-3	Occupational health services	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-4	Worker participation, consultation, and communication on occupational health and safety	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-5	Worker training on occupational health and safety	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-6	Promotion of worker health	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital 4.6. Creation of safe working conditions			
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Approaches, used by the Company to prevent and mitigate significant negative impacts on occupational health and safety, directly related to the Company's operations and its products. They are regulated by an Integrated Management System.			
403-8	Workers covered by an occupational health and safety management system	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
403-9	Work-related injuries	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions ANNEXES 6.2. Key Performance Indicators 2021- 2023 Information on man-hours accounting and LTIFR calculation, calculation of death rates as a result of occupational injuries, industrial injuries with severe consequences (excluding deaths) are not conducted for contractors.			
403-10	Work-related ill health	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			
GRI 404: Training and Education					
404-1	Average hours of training per year per employee	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023			
404-3	Percentage of employees receiving regular performance and career development reviews	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital			
GRI 405: Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital SECTION 5 CORPORATE GOVERNANCE 5.2. Governing bodies ANNEXES 6.2. Key Performance Indicators 2021-2023			
405-2	Ratio of basic salary and remuneration of women to men	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital			
GRI 406: Non-discrimination					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.6. Creation of safe working conditions			



Indicator	Disclosure	Report section/Comments	Reasons for non-disclosure		
			Not disclosed	Reason	Explanation
GRI 406: Non-discrimination					
406-1	Incidents of discrimination and corrective actions taken	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital SECTION 5 CORPORATE GOVERNANCE 5.6. Business Ethics and Anti-Corruption During the reporting period, the Company did not register any cases of discrimination on any grounds.			
GRI 408: Child Labor					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights			
408-1	Operations and suppliers at significant risk for incidents of child labor	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights			
GRI 409: Forced or Compulsory Labor					
3-3	Management of material topics	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights			
GRI 413: Local Communities					
413-1	Operations with local community engagement, impact assessments, and development programs	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development			
413-2	Operations with significant actual and potential negative impacts on local communities	No operations with significant actual and potential negative impacts on local communities in the reporting period			
GRI 418: Customer privacy					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	SECTION 5. CORPORATE GOVERNANCE 5.6 Information security.			



GRI 12: Coal Sector	Nº	Indicator	Section
Topic 12.1 GHG emissions	12.1.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.1.2	302-1 Energy consumption within the organization	ANNEXES 6.2. Key Performance Indicators 2021-2023
	12.1.5	305-1 Direct (Scope 1) GHG emissions	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change
	12.1.6	305-2 Energy indirect (Scope 2) GHG emissions	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change
Topic 12.2 Climate adaptation, resilience, and transition	12.2.2	201-2 Financial implications and other risks and opportunities due to climate change	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change
Topic 12.3 Closure and rehabilitation	12.3.2	402-1 Minimum notice periods regarding operational changes	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital
Topic 12.4 Air emissions	12.4.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.4.2	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021-2023
Topic 12.5 Biodiversity	12.5.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.5.2	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.5.3	304-2 Significant impacts of activities, products, and services on biodiversity	According to available data, the Company's current operations have no significant impact on the biodiversity of the regions where the Group's operates. SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.5.4	304-3 Habitats protected or restored	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
		304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet

GRI 12: Coal Sector	Nº	Indicator	Section
Topic 12.6 Waste	12.6.2	306-1 Waste generation and significant waste-related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.6.3	306-2 Management of significant waste-related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.6.4	306-3 Waste generated	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.6.5	306-4 Waste diverted from disposal	ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.6.6	306-5 Waste diverted to disposal	ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.7.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
Topic 12.7 Water and wastewater	12.7.2	303-1 Interactions with water as a shared resource	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.7.3	303-2 Management of water discharge related impacts	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet
	12.7.4	303-3 Water withdrawal	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.7.5	303-4 Water discharge	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.7.6	303-5 Water consumption	SECTION 4. ESG MANAGEMENT 4.8. Taking Care of Our Planet ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.8.2	201-1 Direct economic value generated and distributed	SECTION 3. PERFORMANCE 3.1. Key Financial Indicators SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development ANNEXES 6.2. Key Performance Indicators 2021- 2023
Topic 12.8 Economic impacts	12.8.4	203-1 Infrastructure investments and services supported	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development
	12.8.5	203-2 Significant indirect economic impacts	There were no significant indirect economic impacts in 2023, caused by the Company's activities, how positive, so are the negative ones, which could be significant according to national and international standards, protocols and policy programs
	12.8.6	204-1 Proportion of spending on local suppliers	SECTION 3. PERFORMANCE INDICATORS 3.3. Procurement Management



GRI 12: Coal Sector	Nº	Indicator	Section
Topic 12.9 Local communities	12.9.2	413-1 Operations with local community engagement, impact assessments, and development programmed	SECTION 4. ESG MANAGEMENT 4.7. Contributing to Social and Economic Development
	12.9.3	413-2 Operations with significant actual and potential negative impacts on local communities	No operations with significant actual and potential negative impacts on local communities in the reporting period.
Topic 12.14 Occupational health and safety	12.14.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.2	403-1 Occupational health and safety management system	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.3	403-2 Hazard identification, risk assessment, and incident investigation	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.4	403-3 Occupational health services	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.5	403-4 Worker participation, consultation, and communication on occupational health and safety	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.6	403-5 Worker training on occupational health and safety	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.7	403-6 Promotion of worker health	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital 4.6. Creating a Safe Working Environment
	12.14.8	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Approaches. used by the Company to prevent and mitigate significant negative impacts on occupational health and safety. directly related to the Company's operations and its products. They are regulated by an Integrated Management System.
		403-8 Workers covered by an occupational health and safety management system	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.14.10	403-9 Work-related injuries	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment ANNEXES 6.2. Key Performance Indicators 2021-2023
Topic 12.15 Employment practice	12.14.11	403-10 Work-related ill health	SECTION 4. ESG MANAGEMENT 4.6. Creating a Safe Working Environment
	12.15.2	401-1 New employee hires and employee turnover	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021-2023

GRI 12: Coal Sector	Nº	Indicator	Section
Topic 12.15 Employment practice	12.15.3	401-2 Benefits provided to full-time employees	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital The Company strives to ensure the social security of its employees. At the same time, contractors do not have the same benefits as employees of the Company.
	12.15.4	401-3 Parental leave	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.15.5	402-1 Minimum notice periods regarding operational changes	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital
Topic 12.16 Child labour	12.15.6	404-1 Average hours of training per year per employee	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.16.1	3-3 Management of material topics	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights
Topic 12.17 Forced labour and modern slavery	12.16.2	408-1 Operations and suppliers at significant risk for incidents of child labour and actions taken	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights
	12.17.1	3-3 Material topics management	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights
Topic 12.18 Freedom of association and collective bargaining	12.17.2	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	SECTION 4. ESG MANAGEMENT 4.4 Respect for Human Rights
	12.18.2	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	In the reporting period, the Company identified no suppliers in which the right to freedom of association and collective bargaining may be at risk.
Topic 12.19 Non-discrimination and equal opportunities	12.19.2	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021-2023
	12.19.4	401-3 Parental leave	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.19.5	404-1 Average hours of training per year per employee	SECTION 4. ESG MANAGEMENT 4.5. Investing in Human Capital ANNEXES 6.2. Key Performance Indicators 2021- 2023



GRI 12: Coal Sector	Nº	Indicator	Section
Topic 12.19 Non-discrimination and equal opportunities	12.19.6	405-1 Diversity of governance bodies and employees	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.5. Investing in Human Capital Section 5 CORPORATE GOVERNANCE 5.2. Governing bodies ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.19.7	405-2 Ratio of basic salary and remuneration of women to men	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.5. Investing in Human Capital
	12.19.8	406-1 Incidents of discrimination and corrective actions taken	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.5. Investing in Human Capital Section 5 CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption
Topic 12.20 Anti-corruption	12.20.3	205-2 Communication and training about anti-corruption policies and procedures	Section 5. CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption
	12.20.4	205-3 Confirmed incidents of corruption and actions taken	Section 5. CORPORATE GOVERNANCE 5.7. Business Ethics and Anti-Corruption
Topic 12.21 Payments to governments	12.21.2	201-1 Direct economic value generated and distributed	3. PERFORMANCE INDICATORS 3.1. Key Financial Indicators SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.7. Contributing to Social and Economic Development ANNEXES 6.2. Key Performance Indicators 2021- 2023
	12.21.3	201-4 Financial assistance received from government	In the reporting period, the Company did not receive any financial assistance from the government.
	12.21.4	207-1 Approach to tax	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.7. Contributing to Social and Economic Development
		207-3 Stakeholder engagement and management of concerns related to tax	SECTION 4. ESG MANAGEMENT 4.9. Contribute to the fight against climate change 4.7. Contributing to Social and Economic Development

Independent Auditor Report



Independent Limited Assurance Report

To the Board of Directors of joint stock company "Samruk-Energy":

Introduction

We have been engaged by the Management of joint stock company "Samruk-Energy" (hereinafter – the "Company") to provide limited assurance on the selected information described below and included in the Integrated Annual Report of the Company for the year ended 31 December 2023 (hereinafter – the "Annual Report").

Description of the subject matter and applicable criteria

We assessed the qualitative and quantitative information specified in the Appendix 1 to this report, that is disclosed in the Annual Report and referred to or disclosed in the Appendix 6.3 "Table of GRI Indicators" of the Annual Report (hereinafter – the "Selected Information"). The Selected Information has been prepared in accordance with GRI Sustainability Reporting Standards published by the Global Reporting Initiative (GRI) (hereinafter – the "GRI Standards").

The Selected information represents information related to the Company and its selected subsidiaries as indicated in the Appendix 6.1.2 "Information perimeter" of the Annual Report.

The scope of our assurance procedures was limited to the Selected Information for the year ended 31 December 2023 only. We have not performed any procedures with respect to earlier periods or any other items included in the Annual Report and, therefore, do not express any conclusion thereon.

We assessed the Selected Information using reporting requirements in the GRI Standards and methodology and guidelines developed by the Company and disclosed in the Annual Report (hereinafter – the "Reporting Criteria"). We believe that the Reporting Criteria are appropriate given the purpose of our limited assurance engagement.

Responsibilities of the management of the Company

The management of the Company is responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the Selected Information that is free from material misstatement, whether due to fraud or error;
- establishing internal methodology and guidelines for preparing and reporting the Selected Information in accordance with the Reporting Criteria;
- preparing, measuring and reporting of the Selected Information in accordance with the Reporting Criteria; and
- the accuracy, completeness and presentation of the Selected Information.



Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Selected Information is free from material misstatement, whether due to fraud or error;
- forming an independent limited assurance conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Board of Directors of the Company.

We performed the limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements other than Audits and Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements, and to plan and perform procedures to obtain limited assurance that the Selected Information for the year ended 31 December 2023 has been prepared, in all material respects, in accordance with the Reporting Criteria.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Our independence and quality management

We comply with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (the IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Work done

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. In doing so, we:

- made enquiries of the management of the Company, including those with responsibility for sustainability management and reporting;
- conducted interviews of personnel responsible for the preparation of the Annual Report and collection of underlying data;
- performed analysis of the relevant internal methodology and guidelines, gaining an understanding of the design of the key structures, systems, processes and controls for managing, recording, preparing and reporting the Selected Information; and
- performed limited substantive testing on a selective basis of the Selected Information to check



that data had been appropriately measured, recorded, collated and reported.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Reporting and measurement methodologies

Under the Reporting Criteria there is a range of different, but acceptable, measurement and reporting techniques. The techniques can result in materially different reporting outcomes that may affect comparability with other organisations. The Selected Information should therefore be read in conjunction with the methodology used by Management as described in the Annual Report, and for which the Company is solely responsible.

Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information for the year ended 31 December 2023 has not been prepared, in all material respects, in accordance with the Reporting Criteria.

Restrictions of use and distribution

This report, including our conclusion, has been prepared solely for the Board of Directors of the Company in accordance with the agreement between us, to assist the Management of the Company in reporting on the Company's and its selected subsidiaries' sustainability performance and activities.

We permit this report to be disclosed in the Annual Report, which will be published on the Company's website¹, to assist the Management of the Company in responding to their governance responsibilities by obtaining an independent limited assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors of the Company and the Company for our work or this report except where the respective terms are expressly agreed in writing and our prior consent in writing is obtained.

PricewaterhouseCoopers LLP

2 May 2024
Almaty, Kazakhstan

¹ The maintenance and integrity of the Company's website is the responsibility of management; the work carried out by us does not involve consideration of these matters and, accordingly, we accept no responsibility for any changes that may have occurred to the reported Selected Information or Reporting Criteria when presented on the Company's website.



Appendix 1 to the Independent Limited Assurance Report dated 2 May 2024

The Selected Information for the year ended 31 December 2023 disclosed on pages 94-375 of the Annual Report and prepared in accordance with the GRI Standards and the methodology and guidelines developed by joint stock company "Samruk-Energy" (hereinafter – the "Company") and subject to limited assurance procedures are set out below:

GRI Standard	Reported Performance (Selected Information)
2-7	Employees
2-30	Collective bargaining agreements
201-4	Financial assistance received from the government
203-1	Infrastructure investments and services supported
203-2	Significant indirect economic impacts
205-1	Operations assessed for risks related to corruption
205-2	Communication and training about anti-corruption policies and procedures
302-1	Energy consumption within the organisation
302-3	Energy intensity
302-4	Reduction of energy consumption
305-1	Direct (Scope 1) GHG emissions
305-2	Energy indirect (Scope 2) GHG emissions
305-4	GHG emissions intensity
305-5	Reduction of GHG emissions
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
303-3	Water withdrawal
303-4	Water discharge
303-5	Water consumption
401-1	New employee hires and employee turnover
401-3	Parental leave
403-8	Workers covered by an occupational health and safety management system
403-9	Work-related injuries
404-1	Average hours of training per year per employee
404-3	Percentage of employees receiving regular performance and career development reviews

Table of TCFD recommendation

Recommended disclosure	Sections of the Annual Report
Corporate governance Disclose the principles of corporate governance of the company in relation to risks and opportunities related to climate	a) Describe it, how the Board of Directors oversees risks and opportunities related to climate (page 215)
	b) Describe the role of management in assessing and managing risks and opportunities related to climate (page 215)
Strategy Disclose the actual and potential impact of risks and opportunities, related to the climate, on the activity, the strategy and financial planning of the company in those cases, when this information is material	a) Describe the risks and opportunities, related to the climate, which the Company has identified in the short, medium and long term (page 216)
	b) Describe the impact of risks and opportunities, related to the climate, on the activity, strategy and financial planning of the Company (page 216)
	c) Describe the sustainability of the Company's strategy, taking into account various scenarios, related to the climate, including the scenario of 2°C and below (page 216)
Climate risk management Disclose the actual and potential impact of risks and opportunities, related to the climate, on the activity, the strategy and financial planning of the company in those cases, when this information is material	a) Describe the Company's risk identification and assessment processes related to climate (page 221)
	b) Describe the company's risk management processes related to climate (page 221)
	c) Describe, as identification processes, risk assessment and management, related to the climate, integrated into the overall risk management process of the Company (page 221)
Metrics and Targets Expand metrics and targets, which are used to assess and manage relevant risks and opportunities, related to the climate, in those cases, when this information is material	a) Expand the information about the indicators, which the Company uses to assess risks and opportunities, related to the climate, in accordance with its risk management strategy and process (224, 226)
	b) Disclose greenhouse gas emissions by Scope 1, Scope 2 and, if applicable, Scope 3 and the risks associated with them (224, 226)
	c) Describe the targets, which the Company uses to manage risks and opportunities, related to the climate, and the actual results compared to the target (224, 226)



UNCTAD index

Area	Indicators	Performance indicators
A Economic area		
A.1	A.1.1: revenues	KZT 444,960 million
	A.1.2: Value added	KZT 104,463 million
	A.1.3: Net value added	KZT 33,408 million
A.2	A.2.1: Taxes and other payments to the Government	KZT 54,095 million
A.3	A.3.1: Green investment	KZT 24.4 billion
	A.3.2: Community investment	KZT 125 million
	A.3.3: Total expenditures on research and development	-
A.4	A.4.1: Percentage of local procurement	97.61%
B Environmental area		
B.1	B.1.1: Water recycling and reuse	3,499,210 megalitres
	B.1.2: Water use efficiency	Total water withdrawal was 23,568,982.2 megalitres.
	B.1.3 Water stress	Water withdrawal 2023: <ul style="list-style-type: none"> • Ground water 5,703.8 megaliters • Surface water — 23,521,126.6 megaliters • municipal and other water supply systems — 39,915.6 megaliters. • drainage/mine and quarry waters — 2,002.8 megaliters.
B.2	B.2.1: Reduction of waste generation	In 2023, the Company generated 98,496,096 tons.
	B.2.2: Waste reused, remanufactured and recycled	Total waste recovered In-house — 9,663.65 Outsourced — 28,223.13
	B.2.3: Hazardous waste	1,732 tons
B.3	B.3.1: GHG emissions (Scope 1)	33.009 million tons CO ₂ -eq.
	B.3.2: GHG emissions (Scope 2)	11,343 tons CO ₂ -eq.
B.4	B.4.1: Chemicals, including pesticides and ozone-depleting substances	NOx — 77,745.6 tons
		SOx — 221,132.5 tons
		Solid substances — 49,234.9 tons
		CO — 6,520.5 tons
		Volatile organic compound emissions (VOCs) — 274.5 tons
	Hazardous air pollutants (HAPs) — 14.2 tons	
	Persistent organic pollutants (POPs) — 0	

Area	Indicators	Performance indicators	
B Environmental area			
B.5	B.5.1: Renewable energy	In 2023 the installed capacity of renewable energy facilities operated nationwide exceeded 2,881 MW. Electricity production by Samruk-Energy's RES facilities rose by 32.8% and amounted to 6 % of the total share of renewable energy generated in the Republic of Kazakhstan.	
	B.5.2: Energy efficiency	Total resource consumption — 200,194 thousand GJ	
C Social area			
C.1	C.1.1: Proportion of women in managerial position	Number of female managers was 477 in 2023. Women accounted for 20% of Samruk-Energy's Management Board	
		C.2.1: Average hours of training per year per employee	Average number of hours spent on training of one employee was 57 person-hours
C.2	C.2.2: Expenditure on employee training per year per employee	KZT 24,949 thousand	
		C.2.3: Employee wages and benefits as a proportion of revenue, with breakdown by employment type and gender	Salary of entry-level employee across the Company: Men — KZT 257,000 Women — KZT 248,000.
C.3	C.3.1: Expenditures on employee health and safety as a proportion of revenue	Money spent to ensure compliance with H&S standards made KZT 2.995 billion in 2023.	
		C.3.2: Frequency/incident rates of occupational injuries	Work-related accidents: 10
C.4	C.4.1 Percentage of employees covered by collective agreements	The collective bargaining agreements cover 97% of employees of the Company	
D Institutional area			
D.1	D.1.1: Number of board meetings and attendance rate	In 2023, the Company's Board of Directors held 19 meetings, including 12 in-person meetings and 7 meetings in absentia. The attendance of meetings by Board members was 100%.	
		D.1.2: Number and percentage of women board members	0%
		D.1.3: Board members by age range	30-50 — 57 % 50 years and more — 43%



Area	Indicators	Performance indicators
D Institutional area		
D.1	Corporate governance disclosure	In 2023, the Committee held 5 in person meetings to consider 12 matters. The key matters covered the work of Internal Audit, Compliance, and the Risk Management and Internal Control Department. The attendance rate of voting members was 90%.
		Remuneration of Independent Directors amounted to KZT 38,084,964.65 in 2023. Key management personnel remuneration amounted to KZT 358,800.76 thousand.
D.2	Anti-corruption practices	The total number of acts of non-compliance with laws and regulations — 40. In all cases, fines totalling KZT 913.2 million were imposed. There were no cases in which non-monetary sanctions were imposed
		In the reporting period, Samruk-Energy JSC held 70 training events across the Group of companies, with the average number of training hours per employee being 0.002 hours in 2023.

Key Governance regulations

Material topic	Key regulations	Links
Climate change and the environment		
Sustainability	Samruk-Energy JSC Sustainability Guidelines	https://www.samruk-energy.kz/images/board-of-directors/1.pdf
Energy transition to sustainable sources	Samruk-Energy Energy Transition Programme 2022-2060	https://www.google.com/url?
Water management Air quality Sustainable waste management	Corporate Management System of Samruk-Energy Group of companies (covering good governance, health and safety, environmental protection, energy efficiency, information security, anti-corruption, and anti-fraud)	https://www.samruk-energy.kz/images/Corporate_documents/Politika_KSM.pdf
Care for people		
	Personnel Policy of Samruk-Energy JSC for 023-2031	https://www.samruk-energy.kz/images/document/s/kadr_politika_se_ru.pdf
HR management, development and motivation	Code of Conduct of Samruk-Energy JSC	https://www.samruk-energy.kz/images/document/s/kodeks_poved_2023_ru.pdf
	Policy on interaction with local communities of the Group of companies Samruk-Energy JSC	Available on the internal platforms
	1.SE-ST-02/01 company standard Motivating staff to behave safely 2.The Golden Rules of Safety company standard 3.SE-ST-04-02 Assessment of the HSE management system 4.Health and Safety Guidelines for Samruk-Energy JSC employees 5.HSE Risk Assessment company standard 6.SE-ST-06-02 Incident Reporting and Investigation 7.Guidelines for using the Safe Production Information System 8.Conducting a Behavioural Safety Leadership Audit company standard	Available on the internal platforms
Health and safety at work	SE-PL-03/01 Regulations on the Safety Committee occupational safety and environmental protection	https://www.samruk-energy.kz/images/corp.documents/2022/hse_2022_ru.pdf
Diversity, equality and inclusion	Human Rights Policy of Samruk-Energy JSC Policy on non-discrimination in Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/2023/politika_prava_chel_ru.pdf
Effective governance and integrity		
	Green finance policy	https://www.samruk-energy.kz/ru/corporate-governance/corporate-documents#6
Contribution to economic performance	Development Strategy of Samruk-Energy JSC for 2022-2031	https://www.samruk-energy.kz/ru/company/development-strategy
	Management Report Samruk-Energy JSC for 2022 (M&A Report)	https://www.samruk-energy.kz/images/documents/otchet_mda_final_2022_ru.pdf
	Internal Control System Regulations	https://www.samruk-energy.kz/images/corp.documents/docs5/3.pdf





Material topic	Key regulations	Links
Effective governance and integrity		
Contribution to economic performance	Risk Identification and Assessment at Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/docs5/2.pdf
	Risk Management Policy of Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/docs5/1.pdf
Sustainable supply chain	Procurement Procedures adopted by Sovereign Wealth Fund Samruk-Kazyna JSC and legal entities, which are 50+ percent directly or indirectly owned by Samruk-Kazyna JSC, either beneficially or upon trust	www.zakup.sk.kz
Compliance and anti-corruption practices	Anti-fraud and Anti-corruption Policy of Samruk-Energy JSC	https://www.samruk-energy.kz/ru/corporate-governance/corporate-documents#6
	Compliance Risk Management Policy of Samruk-Energy JSC	Available on the internal platforms
	Policy on Corporate Conflicts and Conflicts of Interest of Samruk-Energy JSC	Available on the internal platforms
	Whistleblowing Policy of Samruk-Energy JSC	https://www.samruk-energy.kz/images/documents/politika_inform.pdf
	Code of Conduct of Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/kodeks/2.pdf
	Corporate Governance Code	https://www.samruk-energy.kz/images/corp.documents/kodeks/1.pdf
	Corporate Management System of the Group of companies of Samruk-Energy JSC (covering good governance, health and safety, environmental protection, energy efficiency, information security, anti-corruption, and anti-fraud)	https://www.samruk-energy.kz/images/Corporate.documents/Politika_KSM.pdf

Samruk-Energy JSC Key financial events 2023

Date	Event
January 25	In order to reduce interest payments. Samruk-Energy JSC made early repayment of the principal debt to the European Bank for Reconstruction and Development in the amount of KZT 1.6 billion
February 22	The first stage of the tender for the Modernization of Almaty CHPP-2 with minimization of environmental impact was completed.
June 08	An agreement was signed on the opening of a credit line between APP JSC and the Development Bank of Kazakhstan on the project "Modernization of Almaty CHPP-2 with minimization of environmental impact" in the amount of KZT 117 billion.
June 09	A loan agreement has been signed between APP JSC and the Asian Development Bank in the amount not exceeding KZT 98 billion for the implementation of the project "Modernization of Almaty CHPP-2 with minimization of environmental impact". The Asian Development Bank will finance the construction of the Almaty CHPP-2.
June 22	The repurchase of bonds of Moynak HPP JSC in the amount of 1 billion tenge was carried out at the AIX site.
June 27	A loan agreement was signed between Samruk-Energy JSC and the Eurasian Development Bank (EDB) in the amount of KZT 6.6 billion to refinance the loan of EWP LLP to the EDB.
1 half of 2023	In order to modernize the 1st power unit of GRES-1, the development of borrowed funds in the amount of KZT 14 billion was carried out
July 01	A contribution to the Authorized Capital from the Samruk-Kazyna Fund in the amount of KZT 24.2 billion was received to cover its own participation in financing the Gasification Project of the Almaty CHPP-2
September 01	Moynak HPP JSC repaid the foreign currency loan of the Development Bank of Kazakhstan JSC in the amount of \$6.4 million ahead of schedule. Part of the funds was raised through the re-sale of bonds on the AIX exchange in the amount of KZT 1.5 billion in favor of Samruk-Energy JSC.
September 28	For the first time in Central Asia, the bond program (SLB — sustainable linked bonds) of APP JSC was registered on the Exchange of the Astana International Financial Center in the amount of KZT 236.9 billion within the framework of the project 'Reconstruction of Almaty CHPP-3.' with verification from the AIFC Green Finance Center.
October 20	Fitch Ratings has confirmed the Company's long-term credit ratings in foreign and national currency at the BB+ level. It also revised the assessment of the provision of state support to the company from the 'strong' level to the 'very strong' level. The forecast is 'Stable'
November 06	A Debt subordination and support Agreement has been concluded between the EBRD. Samruk-Energy JSC and APP JSC on the project "Modernization of Almaty CHPP-2 with minimization of environmental impact"
November 13	A debt subordination and support Agreement has been concluded between ADB. Samruk-Energy JSC and APP JSC on the project "Modernization of Almaty CHPP-2 with minimization of environmental impact"
November 30	A project agreement has been concluded between the DBK. Samruk-Energy JSC and APP JSC on the project "Modernization of Almaty CHPP-2 with minimization of environmental impact". An agreement has been signed on the joint implementation of the Almaty CHPP-3 reconstruction project between APP JSC and the Eurasian Development Bank.



Glossary

AIX	Astana International Exchange, a stock exchange for investment in Kazakhstan and Central Asia, established under Astana International Financial Centre. AIX's mission is to develop sound and liquid capital markets in Central Asia and beyond by offering innovative products and services to businesses and investors.
Association «ECOJER»	Kazakhstan Association of Regional Environmental Initiatives 'ECOJER'.
CAPEX	Capital expenditure.
CDP	Carbon Disclosure Project.
CCS	Carbon capture and storage.
EBITDA	Earnings before interest, taxes, depreciation and amortization.
EPC	Engineering, Procurement and Construction.
FCA	Free career.
FCF	Free Cash Flow.
HSE	Health, Safety and Environment.
IEA	The International Energy Agency.
IFC	The International Finance Corporation.
I-REC	International Renewable Energy Certificate.
LTIFR	Lost Time Injury Frequency Rate.
MASDAR	An Emirati state-owned renewable energy company.
NAV	Net Assets Value.
PPA	Power Purchase Agreement.
PESTEL	A framework or tool used by marketers to analyze and monitor the macro-environmental (external marketing environment) factors that have an impact on an organization, company, or industry. It examines the Political, Economic, Social, Technological, Environmental, and Legal factors in the external environment.
ROACE	Return on Average Capital Employed.

SCADA	Supervisory Control And Data Acquisition.
SLB	Sustainability Linked Bonds.
SRA	Slot reservation agreement.
Samruk-Kazyna Sovereign Wealth Fund	A Kazakh investment holding company founded in 2008 to promote Kazakhstan's national welfare and modernise the national economy. The Government of Kazakhstan is the sole shareholder of the company.
ADCS	Automated dispatch control system designed to monitor and control the operation of the equipment.
ASCEA	The Automated System of Commercial Electric power Accounting.
Electricity balance of a grid	A system of indicators to show the match between electricity consumption in the grid, auxiliary consumption, and losses in networks against electricity supply, taking into account power flows.
Benchmarking	A process to identify, understand, and adapt current good practices to improve organization's performance. Analysis involves two processes: evaluation and comparison. Usually the best products and marketing process used by direct competitors and firms in other similar fields are taken as a baseline to see how the organisation can improve its products and practices.
RES	Renewable energy sources where relatively constant or cyclical energy flows derived from natural sources are replenished at a rate that exceeds the rate of consumption. RES include solar (SPP), wind power plants (WPP), small hydropower plants, and biogas plants.
The World Bank	An international financial institution established to provide financial and technical assistance to developing countries.
WPP	A wind farm with one or more wind turbines assembled in one or more locations and interconnected into a grid. Large wind farms can have 100+ wind turbines. WPPs are sometimes called wind parks.
GTU	Gas turbine unit.
GRES	A state district power plant/condensing power plant, a thermal power plant producing mainly electricity using local energy resources (peat, lignite, etc.) and supplying power primarily to a specific district.
HPP	A hydroelectric power plant that uses the movement of water in watercourses and tidal movements as a source of energy.
Monetary environment/monetary policy (MP)	A public policy, a set of measures aimed at managing aggregate demand through money market (short-term interest rate, nominal exchange rate or current liquidity level of the banking sector) to achieve a combination of ultimate objectives, which may include price stability, stable exchange rate, financial stability, and boosting balanced economic growth.
EDB	Eurasian Development Bank, a multilateral development bank with a charter capital of \$7 billion and the mission to promote economic growth in its member states, expand their trade and other economic ties and foster Eurasian integration through investment.
EBRD	European Bank for Reconstruction and Development.

UES of the Republic of Kazakhstan	Unified Electric Power System of the Republic of Kazakhstan. a set of electric stations. power transmission lines and substations. providing reliable and high-quality energy supply to consumers of the Republic of Kazakhstan.
KASE	Kazakhstan Stock Exchange.
AIFC	The Astana International Financial Centre, a financial hub in Astana, Kazakhstan.
R&D	Research and development.
Available capacity	Installed capacity of the generating unit (power plant) minus its capacity limitations.
ROI	Return on investment.
Capacity market	A market where capacity is a special commodity. When purchasing it, a wholesale market player is entitled to demand from capacity sellers to keep generating equipment ready to generate electricity.
POS	Power output system.
OHSMS	The occupational health and safety management system of the organisation, which ensures the safety and health of all employees and prevents occupational accidents and diseases at work.
SPP	A solar power plant that converts solar radiation into electrical energy. The ways in which solar energy is converted vary and depend on the design of the power plant.
Feasibility study	A paper that provides information on the feasibility/non-feasibility of a product or service, as well as a cost-benefit analysis of the project.
Installed capacity	The total nominal electrical power of the electric machines of the same type. The term is used to estimate the generated or consumed capacity of electricity systems, both of individual organisations and enterprises, and of industries and geographical regions as a whole. The nominal capacity can be either the rated active power expressed in watts, or the rated apparent power expressed in volt-amperes. In the energy sector, the installed capacity of an electrical installation is also referred to as the highest active electrical power at which the installation can operate continuously without overload, as specified in the technical specifications of the equipment.
CFT	Cyclic-flow technology of coal mining and transportation in which the organization of production is carried out in a single technological flow of a mining enterprise, some processes are carried out in a cyclic manner. others are in continuous modes.