INVESTING
DEVELOPING
GROWING

SAMRUK ENERGY

2024

Annual report



VOLUME 1

Contents

4 Message from the Chairman of the Board of Directors
6 Message from the Chairman of the Management Board
8 Samruk-Energy JSC 2024 in figures
10 Key events of Samruk-Energy JSC in 2024



1 Samruk-Energy JSC Today

15 Company portrait
17 Mission, values and principles
20 Business model
24 Structure of the Group of companies of Samruk-Energy JSC
26 Geography of assets

2 Strategic Report

30 Overview of the global electricity and coal market
32 Overview of the electricity and coal market in Kazakhstan
52 Development Strategy
75 Investment activities



3 Performance Indicators

91 Key financial indicators
102 Operating companies
122 Sustainable supply chain and procurement policies



4 ESG Aspects Management

129 Managing sustainable development
139 Our contribution to the UN Sustainable Development Goals
151 Stakeholder engagement
161 Respect for human rights
165 Investments in human capital
186 Creation of safe working conditions
196 Promoting socio-economic development
206 Caring for our planet
226 Contribution to climate change mitigation
246 Environmental benchmarking

5 Corporate Governance

250 Corporate governance system
261 Governing bodies
290 Remuneration
292 Securities
294 Risk management and internal control
301 Information security
304 Business ethics and anti-corruption activities





6 Annexes

318 About the report
328 Key performance indicators 2022–2024
348 GRI index
368 Independent auditor's report
373 UNCTAD index
376 TCFD index
377 Key corporate documents
379 Major financial events of Samruk-Energy JSC in 2024
380 Glossary

MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS



Nikolay Kazutin

Chairman of the Board of Directors

2024 marked a period of stable growth, transformation, and responsible leadership for us. Operational and financial performance remains reliably strong, and the fulfillment of ESG commitments confirms the resilience of our business model

Dear Shareholders!

I am pleased to present to your attention the Annual Report of Samruk-Energy JSC for fiscal year 2024. This document reflects not only our financial and operational results but also progress in implementing the Company's long-term strategy aimed at sustainable development, efficiency growth and enhancing public value.

Today, Samruk-Energy JSC occupies a strategically favourable position for further development due to a diversified portfolio of power generation and distribution assets. We focus on reliable electricity supply to the country by actively investing in environmentally friendly and innovative energy sources. This approach allows us to respond effectively to external challenges while creating long-term social and economic value.

During 2024, I had the opportunity to personally visit production facilities, meet with employees, partners and stakeholders. These meetings only confirmed the relevance of our strategic priorities: energy security, efficiency, energy transition and sustainable development.

Samruk-Energy JSC demonstrated strong financial results. In July 2024, the Company made a record dividend payment for the Group for 2023 – KZT 24.8 billion in favour of the Sole Shareholder, thus confirming the profitability and sustainability of its business model.

I would especially like to highlight our achievements in the field of sustainable development. We are consistently implementing an energy transition program until 2060, which includes decarbonisation and the development of renewable energy sources. By 2030, the Company plans to reduce its carbon footprint by 40%. Strategic partnerships, asset modernization, and a high level of corporate governance enable us to confidently move towards this goal.

In 2024, the Company ranked 1st in the PwC Kazakhstan ESG disclosure rating among 98 Kazakhstani companies, receiving A+ record score.

We paid special attention to gender representation: the Company has set a target to increase the share of women on the Board of Directors and Executive Bodies to 30%, demonstrating its commitment to inclusiveness and international governance standards.

The Board of Directors in 2024 actively supported the Management Board in implementing key initiatives: modernization of capacities, development of RES, implementation of ESG principles and strengthening of safety culture. Occupational health and safety, industrial safety and environmental issues were of special attention.

Corporate governance remains in our focus. In 2024, the Board of Directors ensured compliance with the best international practices and requirements of Samruk-Kazyna Fund. Strengthening the role of independent directors was an important step in enhancing control, transparency and objectivity in decision-making.

Samruk-Energy JSC is confidently moving towards its strategic goal of becoming a leader of sustainable and innovative energy in Central Asia. In the coming years, we will focus on implementing major projects in the field of renewable energy, digitalisation, and the development of smart grids, as well as continue the transition to a low-carbon economy within the framework of Kazakhstan's Strategy for Achieving Carbon Neutrality until 2060.

I would like to thank all of the Company's employees for their contribution to achieving our goals, the Management Board for its effective management, and the shareholders for their unwavering trust and support. I am confident that our joint work will continue delivering sustainable results and benefits for the entire country.

MESSAGE FROM THE CHAIRMAN OF THE MANAGEMENT BOARD



Kairat Maksutov

Chairman of the Management Board of Samruk-Energy JSC

In 2024, Samruk-Energy JSC updated its Development Strategy, prioritising the green agenda

This is not just a step towards global challenges – it is a reflection of our internal transformation. The revision of the Strategy was a logical response to new challenges and expectations – both from shareholders and investors, as well as from consumers, employees and regulators. We have set a course aimed at reducing the carbon footprint, increasing transparency in corporate governance, respecting human rights, and improving working conditions.

Dear partners, investors, and colleagues!

Our mission at Samruk-Energy JSC is to ensure energy security of the country and promote accelerated energy transition adhering to the principles of sustainable development and efficient resource management. In 2024, we made notable progress in these areas.

2024 was a year of sustainable growth, strategic decisions and significant achievements for Samruk-Energy JSC. We confidently overcame a number of challenges achieving substantial progress both in financial and economic development and in the ESG agenda, confirming our status as one of the leaders in Kazakhstan's energy sector.

The year was successful both in terms of operational and financial performance. We achieved a record net profit of KZT 112.5 billion – twice the figure of the previous year. The Company successfully issued bonds on the exchange of the Astana International Financial Centre and introduced cache pooling which improved liquidity management efficiency.

We also made significant progress in investment activities focusing on renewable energy projects. This is already yielding results: by the end of 2024, the share of renewables in the total electricity generation of our Group of companies increased by 7.7%.

We commissioned Power Unit No. 1 at Ekibastuz GRES-1 – the station reached full capacity for the first time in 30 years. We also began reconstruction of CHPP-2 and CHPP-3 in Almaty to partially cover the shortage of manoeuvre capacity in southern Kazakhstan and ensure stable energy supply to the city and region.

We signed a number of strategically important agreements with international partners for the construction of new capacities, including RES. The Board of Directors approved the Portfolio of Investment Projects, the implementation of which will increase the total installed capacity by 16.4 GW.

In 2024, Samruk-Energy JSC updated its Development Strategy, prioritising the green agenda.

As part of this course, we continue implementing our comprehensive emissions reduction plan and remain confident in achieving our targets. In 2024, we managed to reduce pollutant emissions by 2.7%.

Energy efficiency is one of the key factors of sustainable development, and we are proud of the results we have already achieved in this area. A total of 67 activities aimed at improving energy efficiency and rational resource use were implemented. This saved more than KZT 1.2 billion. These results became possible due to teamwork, new technologies and continuous performance monitoring. We do not intend to stop there and are already working on new initiatives to make our energy consumption even more responsible.

Our achievements have become possible thanks to more than 18,000 employees working daily on the development of Samruk-Energy JSC. We constantly pay attention to employee training and talent development encouraging career development based on merit. Samruk-Energy JSC considers our suppliers to be another important element and shares with them the goal of creating sustainable supply chains bringing economic, social and environmental benefits.

We also continuously monitor workplace safety: safety is not only a corporate goal but also a shared responsibility of the Company, employees, and suppliers.

Samruk-Energy JSC is confidently moving towards digital transformation, introducing modern technologies into all key processes. We launched the Situation Centre that provides real-time monitoring of key production and economic indicators across the Group of companies. HR processes, compliance, IT services, as well as ESG and HSE data collection have also been automated. Projects for payment management and an Electronic Archive have been implemented, simplifying document flow and increasing operational efficiency.

Of course, we have also faced challenges. Infrastructure wear and tear, the shortage of manoeuvre capacity, and strict environmental requirements – all required quick and well-considered solutions. We responded to these challenges with a large-scale modernisation programme and active development of renewable energy aimed at reducing our carbon footprint and meeting international standards.

I thank all employees and partners of Samruk-Energy JSC for their commitment to our common goals. We enter 2025 with strong self-confidence and high responsibility for the future of Kazakhstan's energy sector. We will continue to implement our strategy and create value for shareholders, partners and all stakeholders – today and in the future.

SAMRUK-ENERGY JSC 2024 IN FIGURES

Sustainable development

Sustainable Fitch, scores
52

Number of personnel
18,907

Occupational injury fatality rate
0.09

Gross volume of pollutant emissions, thousand tonnes
345.373

Investments in environmental protection, KZT billion
18.5

Financial indicators

Gross profit, KZT million
201,845

EBITDA, KZT million
226,241

Income from sales of services, KZT million
573,490

Volume of capital investments (including SCR), KZT million, excluding VAT
229,787

Corporate governance

Corporate governance rating
BB

Independent members of the Board of Directors
3

Meetings of the Board of Directors
19

Meetings of the Committees of the Board of Directors
36

Production indicators

Electricity generation volume, billion kWh
39.77

Electricity generation by RES facilities, billion kWh
0.58

Volume of coal production by Bogatyr Coal LLP, million tonnes
42.68

Capacity sales volumes at DH, MW
3,594

Electricity transmission volumes, million kWh
9,259

Coal sales volume, million tonnes
43.00

KEY EVENTS OF SAMRUK-ENERGY JSC IN 2024

5 March — Astana Green Energy Holding Ltd is registered as a project company to implement a 1 GW wind power plant project.

6 March — Samruk-Energy JSC and China International Water and Power Corporation signed a Cooperation Agreement on the project of the first hydro-storage power plant in the Republic of Kazakhstan.

8 April — Samruk-Energy JSC allocated KZT 1.0 billion to the regions affected by floods.

2 May — The perimeter of Samruk-Energy JSC portfolio companies includes AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP.

10 May — Samruk-Green Energy LLP has issued more than 15 thousand I-REC green certificates.

17 June — Samruk-Energy JSC Group took into trust management the property complex of Ekibastuz CHPP owned by Akmat of Ekibastuz city.

24 June — The perimeter of Samruk-Energy JSC's portfolio companies includes Kokshetau TPP LLP, Semey Energy LLP and Өskemen Energy LLP.

19 July — The Development Strategy of Samruk-Energy JSC for 2024 to 2033 was approved.

26 July — A Joint Activity Agreement was signed between Qazaq Green Power PLC and Powerchina to expand the RES project to 810 MW in Almaty and Karaganda regions in the Shelek corridor.

7 August — Kaizen lean technology system was implemented at Almaty CHPP-3.

14 August — A unified Women's Club has been established across Samruk-Energy JSC Group of companies.

September — Launching a new corporate portal with ChatGPT, ESG, HSE.

6 September — The First Forum of Samruk-Energy JSC Group of companies – "Women in Power / Әйелдер қуаты / Energy of Women" – was held under the theme: "WOMEN IN ENERGY: PARTNERSHIP, PROGRESS, PROSPECTS".
The objective of the Forum was to create a platform for experience sharing, discussion of current issues, and the strengthening of the women's community within Samruk-Energy JSC.

9 October — Launch of online monitoring of emissions at CHPP-1 and ZTK (AIES).

15 October — An agreement on joint development of a 800 MW RES project was signed between Samruk-Energy JSC and Energy China. The project includes construction of a 500 MW wind power plant in Karaganda region and a 300 MW solar power plant in Turkestan region.

15 October — Investment Agreement and Power Purchase Agreement signed for the Construction of 1 GW Wind Power Plant with SNE together with MASDAR project.

October — Samruk-Energy JSC was honoured with the first place and the highest award in the nomination "Best Annual Report in Non-Financial Sector" in the Kazakhstan Stock Exchange (KASE) competition for 2023.

4 November — Samruk-Energy JSC – silver winner in the Grand Prix nomination – "Best Annual Report of a Non-Public Company" of the XXVII Annual Report Contest of the Moscow Exchange.

26 November — The Annual Report of Samruk-Energy JSC for 2023 was awarded the highest rating – 5 stars and the status of "Highest Quality Annual Report" in the RAEX rating.

30 November — III Youth Forum of Samruk-Energy JSC Group of companies.

4 December — The Chairman of the Management Board of Samruk-Energy JSC and the President of Power International Holding Group of companies signed an Agreement on joint implementation of the Project on construction of a power plant based on a combined cycle gas turbine with a capacity of 1,100 MW.

11 December — Winning the PwC Kazakhstan ESG Disclosure Rating for 2023 among 98 Kazakhstani companies. Awarded with the highest A+ grade.
Samruk-Energy JSC also won in additional nominations of the Rating: best disclosure of corporate governance issues; best disclosure of the Sustainable Development Strategy; best disclosure of ESG information in the energy sector.

23 December — Power unit No. 1 of EGRES-1 was commissioned.

31 December — Construction of the Kokozek substation was completed.

1 SAMRUK-ENERGY JSC TODAY

15 Company portrait
17 Mission, values and principles
20 Business model
24 Structure of the Group of companies of Samruk-Energy JSC
26 Geography of assets



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 aimed at formation of a highly efficient energy supply system and implementation of the long-term state policy on modernisation of existing facilities and commissioning of new generating capacities to ensure sustainable development of all sectors of the country.

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

more information about the Company

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



Registered address of the head office of Samruk-Energy JSC

15A, Kabanbay Batyr Avenue,
Block B, Q Business Centre,
Astana, 010000

Types of activity of Samruk-Energy JSC

GRI 2-6

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;
- modernisation 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 Electricity Purchaser. The Unified Electricity Purchaser is a legal entity with 100% state participation, determined by the authorised body, which performs centralised purchase and centralised 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 modernisation of existing facilities and commissioning of new generating capacities, Samruk-Energy Joint Stock Company (Samruk-Energy JSC) was established on 18 April 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 Management of State Assets Samruk JSC and KazTransGas JSC. Samruk-Energy JSC was registered in Almaty on 10 May 2007.

On 3 November 2008, as a result of reorganisation through the merger of JSC 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 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 GRES-2, as well as plants producing electricity and heat of regional importance. The Group also includes the main hydroelectric power stations of the Republic of Kazakhstan, which are part of the Irtysh HPP cascade, and hydroelectric power plants in the southern regions of the country, as well as renewable energy facilities (RES).

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 Coal LLP. The enterprise supplies coal both to generating facilities of Samruk-Energy JSC Group of companies and to third parties in Kazakhstan and Russia. More about the asset structure of Samruk-Energy JSC can be found on page 24 of this Report.

Mission, values and principles

Mission

We ensure the country's energy security and promote accelerated energy transition by adhering to the principles of sustainable development and efficient resource management.

Values

Mentoring

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

Professionalism

conscientious attitude to assigned tasks, improvement, implementation of various methods and approaches to enhance efficiency.

Reliability

ensuring uninterrupted and high-quality work, awareness of responsibility to future generations in environmental and ecological issues, creation of safe, comfortable and competitive working conditions, and being faithful to the commitments made.

Fairness

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

Principles

Professionalism

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

Compliance

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

Safety

we generate energy and strive to do so in safe methods.

Risk-oriented approach

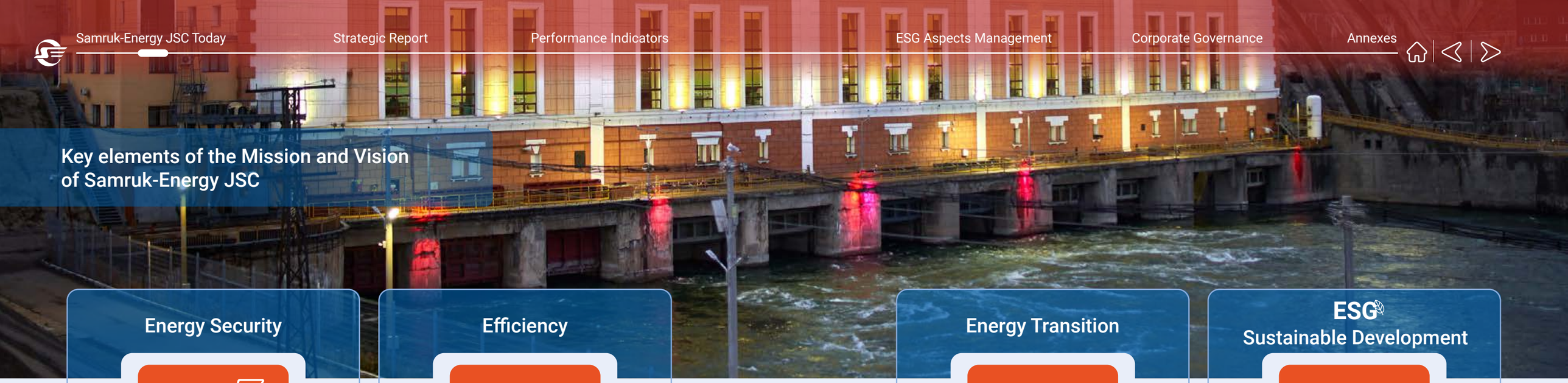
we recognise the importance of risk management and take measures aimed at timely identification and mitigation of risks.

Social responsibility

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

Transparency

long-term cooperation, dialogue, respect for rights and balance between the interests of the Company and stakeholders.



Key elements of the Mission and Vision of Samruk-Energy JSC

Energy Security

- Security
- Reliability
- Base generation
- Pillar, foundation, core, backbone
- Social support
- Flexibility
- State
- People

Efficiency

- Low resource consumption
- Advanced and best available technologies
- High CUF
- Energy efficiency



Energy Transition

- National commitments
- Accelerated deployment of renewables
- Clean coal
- International cooperation



ESG Sustainable Development

- Sustainable development
- Ecology
- Environment
- Personnel
- 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

Staff of the best industry professionals, efficient and fair HR policies

Operating model

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

29.8% of the total installed capacity of Kazakhstan's power plants

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

7,344.9 MW

1,859.8 MW HPP

5,328 MW TPP

157.1 MW RES

(HPP Cascade, SES and WPP)



Mining and sale of coal

- **42.7 million tonnes** of coal production
- **66.8%** of the Company's share of total coal produced in the Ekibastuz coal basin
- **38.1%** of the Company's share of total coal production in Kazakhstan
- **33.7 million tonnes** sold on the domestic market
- **9.32 million tonnes** exports to Russia

Electricity generation

- **39.8 billion kWh** electricity production volume of Samruk-Energy JSC
- **33.7%** share of Samruk-Energy JSC in the total volume of electricity generation in Kazakhstan
- **577.9 million kWh** electricity generation by RES facilities of Samruk-Energy JSC (SPP, WPP and small HPPs)
- **7.7 per cent** of the Company's share of total RES power generation in Kazakhstan

Electricity transmission and distribution

- **10,476.59 MVA** capacity of the Group's substations
- **30,722.35 km length** of 220-0.4 kV overhead and cable power lines
- **7,468 number** of substations
- **9,259 million kWh** electricity transmission volumes

Sales of heat and electricity

- **38.1 billion kWh** electricity sales volume
- **6.8 million Gcal** heat production
- **5.99 million Gcal** volume of heat supply by AIES JSC[1]



Impact

Financial impact

- **KZT 112.5 billion** annual profit attributable to shareholders of the Group of companies of Samruk-Energy JSC
- **KZT 173.0 billion** operating profit
- **1.66 debt/EBITDA** (ratio)

Environmental impact

- **KZT 2.5 billion** environmental protection costs
- **KZT 8.6 billion** environmental payments
- **KZT 1.3 billion** provision for environmental damage liabilities

Economic impact

- **KZT 80.8 billion** taxes of the Republic of Kazakhstan[2]
- **KZT 24.816 billion** dividends
- **KZT 1.568 billion** loan interest
- **KZT 330.0 billion** amount of goods, works and services purchased from domestic

Social impact

- **KZT 7.86 billion** investment in recreation and education
- **KZT 0.18 billion** investments for social support in the regions of operations
- **KZT 1.3 billion** charity
- **KZT 3.1 billion** investments in occupational health and safety

[1] Excluding Energy Solutions Centre LLP (Ekibastuz CHPP).

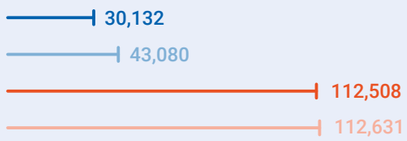
[2] Excluding IPN.

Key indicators of the Business Plan of Samruk-Energy JSC

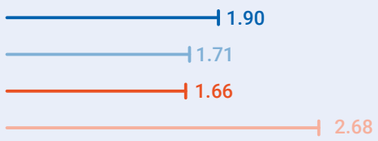
Tier 1 Strategic KPIs for PCs

Tier 1 Strategic and Analytical KPIs for PCs

Net income, KZT million



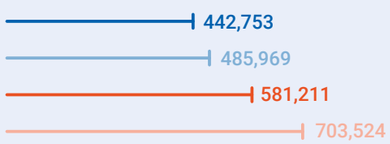
Debt/EBITDA (ratio)



ROACE, %



Net asset value (NAV), KZT million



	2022 fact	2023 fact	2024 fact	2025 forecast
ROI, coefficient	-12%	-	-	-
FCF, KZT billion	42.2	37.0	93.3	26.20
ESG rating, score[3]	-	24.1	52	≥44
Share of in-country value in goods purchasesв, %[3]	-	66	73[4]	57.31
Share of in-country value in procurement of works and services, %	-	92	90[4]	67.38

Leadership Behavioural Safety Audit



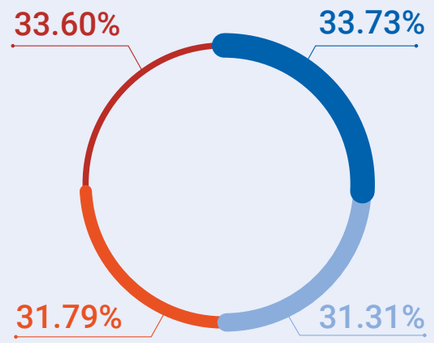
2022 fact
2023 fact
2024 fact
2025 forecast

[3] These efficiencies are introduced from 2023 onwards.

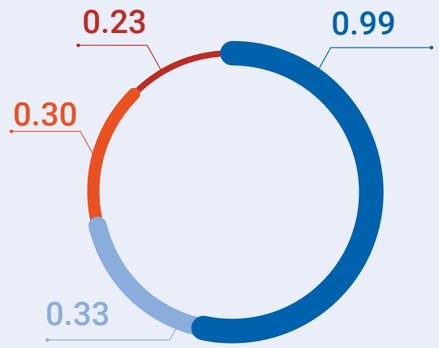
[4] Fact of 2024 for SAC taking into account newly entered subsidiaries and affiliates (AES Ust-Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, ESC LLP (Ekibastuz CHPP), Kokshetau CHPP LLP).

Industry KPIs

Electricity market share in RoK



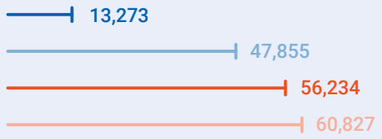
LTIFR



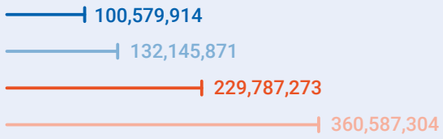
2024 fact
2023 fact
2022 fact
2025 forecast

Key national indicators

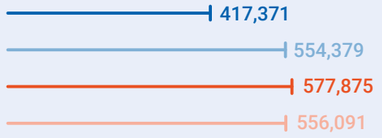
Labour productivity, thousand KZT/person



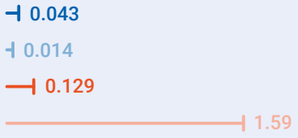
Investments in fixed assets, ‘000 KZT



Electricity generation from renewable energy sources, ‘000 kWh



Gross inflow of foreign direct investment, USD billion



2022 fact
2023 fact
2024 fact
2025 forecast

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 2024, Samruk-Energy JSC made a number of strategic changes aimed at optimisation of asset management and development of the energy sector. On 14 May, 100% participation shares in AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP were included in the perimeter of the company's assets. On 17 June, the Group of Samruk-Energy JSC took into trust management the property complex of Ekibastuz CHPP owned by Ekibastuz Akimat. On 24 June, together with Samruk-Kazyna JSC, three joint ventures with equal distribution of shares (50% each) were established: Kokshetau TPP LLP, Semey Energy LLP and Oskemen Energy LLP.

As part of asset optimisation, liquidation of LLC Resursenergougol was completed on 28 October 2024 due to the absence of financial and economic activities since 2021. On 30 October, liquidation of Shulbinsk HPP JSC was registered due to the absence of financial and economic activities since 1997. November 14, reorganisation of Forum Muider B.V. (Netherlands) through a merger with Forum Muider Limited (Cyprus) as part of the redomiciliation of foreign assets in the Astana International Financial Centre (AIFC). December 30, the Government of the Republic of Kazakhstan adopted Resolution No.1138 on issuance of permission to Samruk-Energy JSC to transfer strategic facilities, including AES Ust-Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP and Shardara HPP JSC, to Qazaq Green Power PLC. On 31 December, pursuant to the Law of the Republic of Kazakhstan On Electricity, AlmatyEnergoSbyt LLP was reorganised by merging with Alatau Zharyk Company JSC.

Assets of Samruk-Energy





Coal mining

- 50% Forum Muider Limited
- 100% Bogatyr Coal LLP



Coal and gas generation

- 100% Ekibastuz GRES-1 LLP
- 50% SEGRES-2 JSC
- 100% AIES JSC
- 100% Energy Solutions Centre LLP
- 50% Semey Energy LLP
- 50% Oskemen Energy LLP
- 50% Kokshetau CHPP LLP
- 100% Balkhash TTP JSC



Distribution

- 99.16% Alatau Zharyk Company





Hydro generation

- 96.32% Bukhtarminskaya HPP JSC
- 89.99% Ust-Kamenogorsk HPP JSC
- 100% Moynak HPP JSC
- 100% AES Ust Kamenogorsk HPP LLP
- 100% AES Shulbinsk HPP LLP
- 100% Shardara HPP JSC



RES

- 100% Ereymentau Wind Power LLP
- 100% Qazaq Green Power PLC
- 100% FWPS LLP
- 100% Samruk-Green Energy LLP
- 25% Energiya Semirechiya LLP
- 25% Altyn Dala Energy L.t.d.
- 100% Kazhydrotechnenergo LLP
- 95% Teploenergomash LLP

Subsidiary companies

Affiliated companies

Geography of assets

GRI 2-1



2 STRATEGIC REPORT

30 Overview of the global electricity and coal market
32 Overview of the electricity and coal market in Kazakhstan
52 Development Strategy
75 Investment activities

Overview of the global electricity and coal market

Global electricity consumption

Electricity is becoming a key factor in the development of the modern economy and daily life, especially against the backdrop of rapid technological advancements such as electric vehicles and heat pumps. According to the International Energy Community, in 2024, global electricity demand increased by 3%, reaching about 28,000 TWh that exceeds the 2.4% growth recorded in 2022. The main contribution to this growth was made by China, followed by the USA and India, reflecting a shift in the global energy balance and the growing influence of emerging markets.[5]

While many developing economies are experiencing steady growth in electricity demand, Africa is lagging behind. Despite progress in recent years, 600 million people in sub-Saharan Africa still lack access to reliable electricity.

Emerging markets are showing significant growth in electricity demand, supported by economic development and electrification of residential and transport sectors. Key drivers of growth also include rapidly expanding energy-intensive production of solar panels, batteries, electric vehicles, and related materials. Meanwhile, developed economies have shown a decline in demand: in the EU, it is expected to return to 2021 levels only by 2027, after a significant decline in 2022 and 2023 caused by the energy crisis.

Forecast for the Future Period

Electricity demand growth is projected to accelerate to a higher level of 4% that by 2027 will lead to a record 3,500 TWh – an indicator exceeding Japan's annual consumption. This growth continues the trend established in 2023, with key drivers being China, India, Southeast Asian countries, and the USA. The distribution of electricity consumption between these regions reflects the transformation of global energy markets, emphasising the growing role of emerging economies in the global energy system.

[5] https://www.iea.org/reports/electricity-2025/executive-summary

Coal market

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

According to preliminary data from BigMint, global coal exports (both thermal and metallurgical) in 2024 increased by more than 4% compared to 2023 and reached 1,587 million tonnes (1.58 billion tonnes) compared to 1,524 million tonnes a year earlier.

Indonesia remains the leader in exports, supplying around 563 million tonnes of coal to the global market, up 7% from 524 million tonnes in 2023. The growth in export volumes is due to increased domestic production, which has allowed the country to increase shipments by almost 200 million tonnes since 2022.

Australia became the world's second-largest coal exporter with total shipments of about 360 million tonnes in 2023, slightly below the 2020 figure (367 million tonnes).

Other major exporters in 2024 included Russia and the US, which supplied 199 million tonnes and 138 million tonnes of coal, respectively. At the same time, Russian exports decreased by about 5% compared to 2023, while the US increased supplies by more than 6%.

Notably, Mongolia, despite being landlocked, increased coal exports by more than 20%, while Africa's largest exporter, South Africa, recorded a decrease in supply volumes by about 4%.[6]

Forecast for the future period

In most developed countries, coal demand has already peaked and is projected to continue declining until 2027. The rate of decline will depend on the adoption of tough policy measures implemented in the European Union, as well as the availability of alternative energy sources. In particular, cheap natural gas in the USA and Canada plays a key role in the gradual displacement of coal from the energy mix.[7]

[6] https://www.metallplace.ru/news100225_12/
[7] https://www.iea.org/news

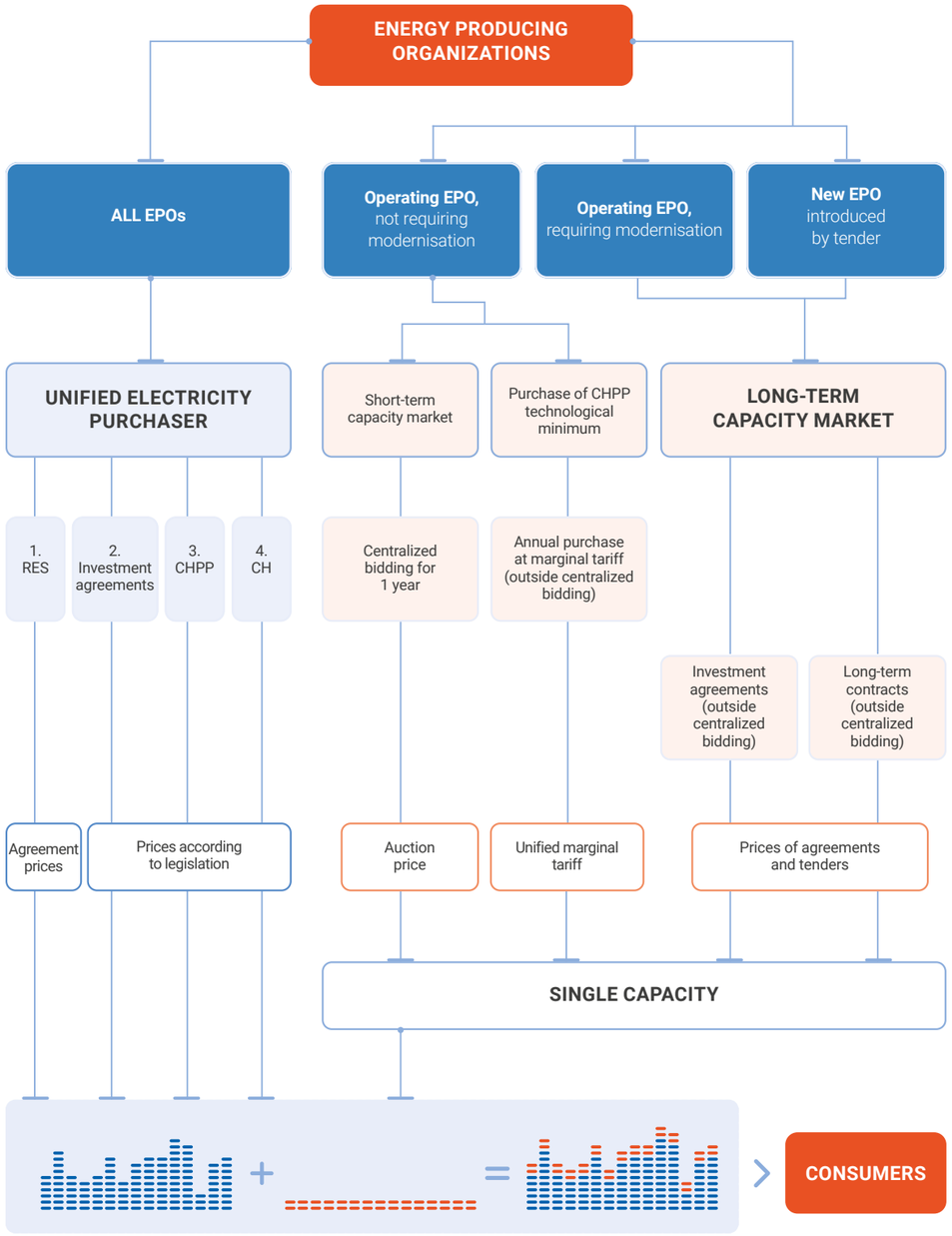
Overview of the electricity and coal market in Kazakhstan

The electric power industry of the Republic of Kazakhstan operates within the Unified Electric Power System (UES), which is a combination of power plants, transmission lines, and substations providing reliable and high-quality electricity supply to consumers throughout the country.

The energy sector is regulated by an authorised state body – the Ministry of Energy of the Republic of Kazakhstan[8], including the renewable energy sector[9]. The state policy in the field of natural monopolies regarding regulated services for electricity transmission, production, transmission, distribution, and supply of thermal energy is implemented by the Natural Monopolies Regulation Committee under the Ministry of National Economy of the Republic of Kazakhstan[10]. The Ministry of Industry and Infrastructural Development of the Republic of Kazakhstan provides guidance in the coal industry[11].

[8] Law of the Republic of Kazakhstan On Electric Power Industry No.588-II of 9 July 2004.
[9] Law of the Republic of Kazakhstan On Supporting the Use of Renewable Energy Sources No.165-IV of 4 July 2009.
[10] Law of the Republic of Kazakhstan On Natural Monopolies No.204-VI dated 27 December 2018.
[11] Code of the Republic of Kazakhstan On Subsoil and Subsoil Use No.125-VI dated 27 December 2017.

Electricity and capacity market of Kazakhstan



Electricity balance

In 2024, electricity generation in the UES was mainly provided by coal-fired thermal power plants (TPPs) – 74.9%.

As of 31 December 2024, the installed capacity of power plants in the Republic of Kazakhstan amounted to

24,641.9 **MW**

with available capacity at

20,428.4 **MW**



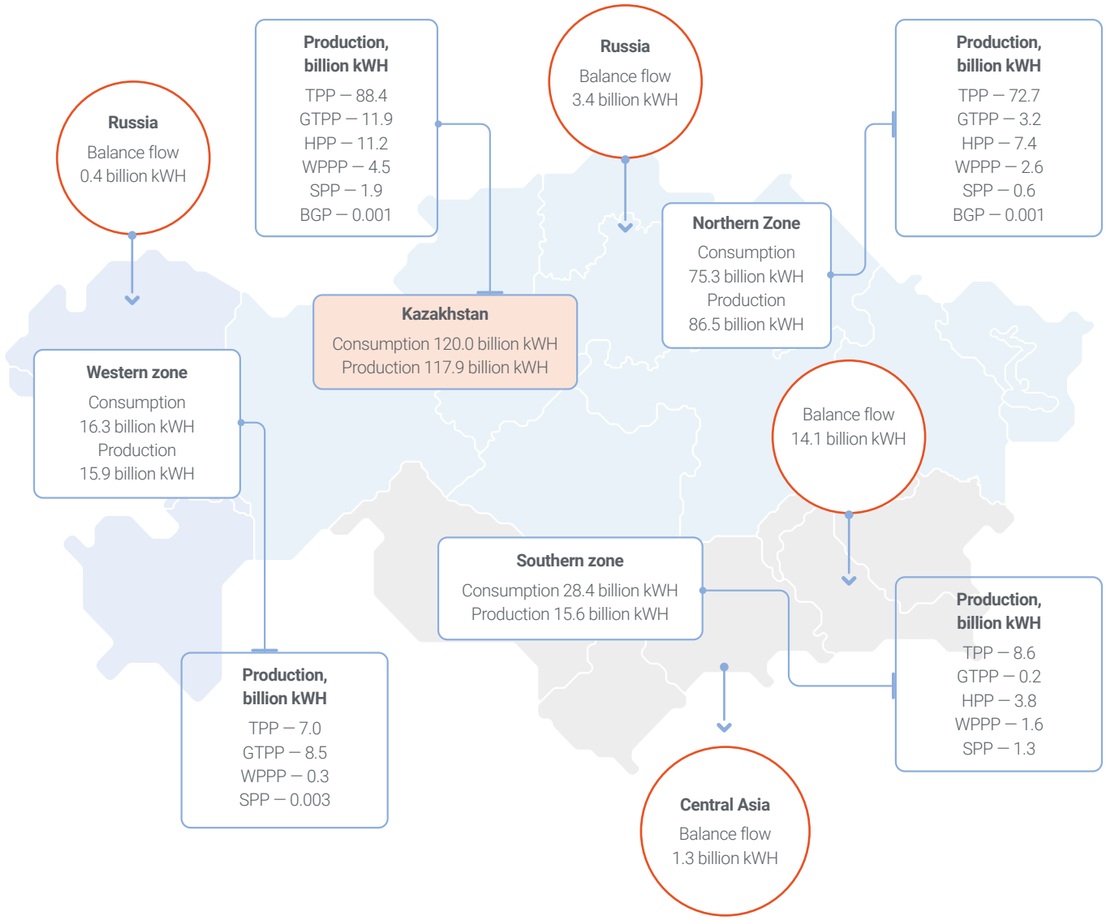
According to the System Operator, in January–December 2024, Kazakhstan's power plants generated 117.9 billion kWh of electricity, which is 4.3% (5.1 billion kWh) more compared to 2023.

Electricity generation/consumption balance, billion kWh

Electricity indicators	2022	2023	2024	Δ 2024/2023, %
Electricity generation, including:	112.86	112.82	117.92	4.3
Thermal power plants (TPP)	88.62	87.36	88.38	1.1
Gas turbine power plants (GTPP)	10.94	11.02	11.92	0.73
Hydropower plants (HPPs)	9.19	8.75	11.22	22.1
Wind power plants (WPP)	2.36	3.80	4.50	15.4
Solar power plants (SPP)	1.75	1.89	1.90	0.7
Biogas plants (BGU)	0.04	0.001	0.01	-127.3
Electricity consumption	112.94	115.07	120.00	4.1
Balance-flow "+" deficit, "-" surplus, including:	0.79	2.24	2.08	-7.9
Russia	0.47	3.62	3.41	-6.0
Central Asia	-0.40	-1.37	-1.33	3.1

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

Unified power system of the Republic of Kazakhstan



In the Northern zone, where the main coal deposits and hydropower resources are located, 73.3% (86.5 billion kWh) of the country's total electricity was generated in 2024. The surplus Northern zone covers electricity deficits in the Southern zone and also provides Kazakhstan's export potential.

In 2024, electricity generation in the Southern Zone amounted to 13.2% (15.6 billion kWh) of the total volume. The electricity deficit in the Southern Zone was covered by supplies from the Northern Zone.

During the reporting period, the Western zone produced 13.5% (15.9 billion kWh) of the total electricity generated. The peculiarity of this zone is the absence of power grid connections with the power grids of the Northern and Southern zones of the UES of Kazakhstan.

According to the System Operator, power plants in the Republic of Kazakhstan generated 117,915.4 million kWh of electricity in January–December 2024, which is 5,092.3 million kWh or 4.3% more than in the same period of 2023. A decrease in generation was observed in the western and southern zones of the UES of Kazakhstan.



In January–December 2024, electricity generation increased in almost all regions of Kazakhstan compared to the same period in 2023.

At the same time, a decrease in electricity production was observed in Akmola and Kyzylorda regions.

Electricity production in the Republic of Kazakhstan, billion kWh

According to the System Operator, in the period from January to December 2024, there was an increase in electricity consumption in the Republic of Kazakhstan compared to the same period in 2023 by 4,927.9 million kWh or 4.1%. Thus, in the northern and southern zones of the country, consumption increased by 2.4% and 5.3%, respectively.

In January–December 2024, compared to the same period of 2023, electricity consumption among large consumers increased by 1,638.2 million kWh, or 4.5%. In particular, in January–December 2024, electricity consumption by Samruk-Energy JSC companies increased by 1,656.6 million kWh, or 19.6% compared to 2023.

Electricity consumption in the Republic of Kazakhstan, billion kWh

Electricity exports and imports

In 2024, electricity exports to Russia increased by 21.2% compared to 2023. At the same time, there was also a significant increase in electricity imports from Russia, which rose by 47.3%.

Electricity exports/imports of the Republic of Kazakhstan, billion kWh

Areas	2023	2024	Δ 2024/2023, %
Kazakhstan's exports:	**1.73**	**2.70**	**35.8**
to Russia	1.15	1.46	21.2
in the ECO of Central Asia	0.57	1.24	54.0
Kazakhstan's imports:	**2.28**	**4.33**	**47.3**
from Russia	2.21	4.33	47.3
Balance-flow "+" deficit, "-" surplus	**0.55**	**1.63**	**66.3**

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

Electricity generation

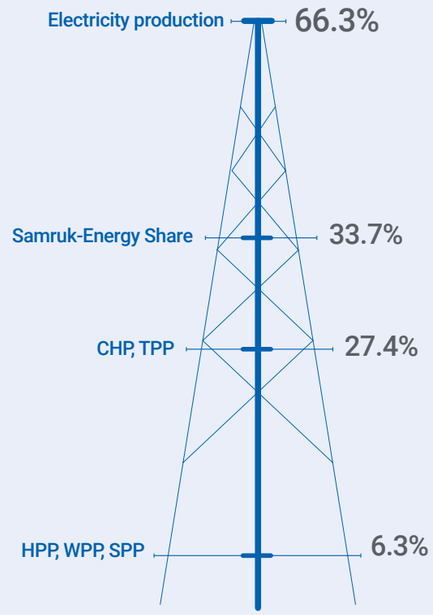
In 2024, the share of Samruk-Energy JSC in the country's total electricity generation increased by

2.426%

compared to 2023 and amounted to

33.7%

Share of Samruk-Energy JSC in total electricity generation in the Republic of Kazakhstan for 2024



Share of generating companies in the electricity market in 2024, %

Electricity producers in the Republic of Kazakhstan	Indicator
Samruk-Energy JSC	33.7
ERG	16.0
Central Asian Electric Power Corporation JSC	4.9
Kazzinc LLP	2.9
Kazakhmys Energy LLP	4.5
KKS LLP	5.3
Zhambyl SDPP JSC	2.9
Others	29.8

Electricity generation volumes in Kazakhstan, billion kWh

Electricity producers in the Republic of Kazakhstan	2022	2023	2024
Samruk-Energy JSC	35.88	35.33	39.77
ERG	19.23	19.16	18.87
Central Asian Electric Power Corporation JSC	5.09	5.59	5.75
Kazzinc LLP	2.69	2.33	3.37
Kazakhmys Energy LLP	4.22	5.8	5.35
KKS LLP	6.14	6.1	6.2
Zhambyl SDPP JSC	3.65	3.07	3.44

Electricity generation at TPPs, CHPPs, million kWh

Indicator	2023	2024
EGRES-1	22,870	22,544
EGRES-2	5,659	6,045
AIES (CHPP-1,-2,-3)	3,955	3,724

Electricity generation in 2024 amounted to 39,772 million kWh, which is 12.6% or 4,442 million kWh higher than last year. The main increase was due to Moynak HPP JSC by 238 million kWh (28.6%), Shardara HPP JSC by 54 million kWh (10%) due to increased water inflow, Ekibastuz GRES-2 JSC by 386 million kWh (7%) due to increased electricity sales to the Single Buyer as a result of equipment failure at Ekibastuz GRES-1 LLP. The 2024 electricity generation volume also included the output of UKHPP and SHPP, included in the perimeter of Samruk-Energy JSC from 2024.

Competitive advantages of Samruk-Energy JSC in the electric power market of the Republic of Kazakhstan in 2024:

- significant reserves of steam 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 (SKKZ).

Challenges for Samruk-Energy JSC:

- high level of asset wear;
- insufficient return on investment when implementing social projects;
- high level of debt load;
- regulatory environment in tariff setting;
- limited ability to manage price offers;
- limitations on export supplies of steam coal due to the substitution of Ekibastuz coal in traditional markets, as well as non-competitiveness in other markets due to low coal parameters;
- lack of exploration works to increase coal production.



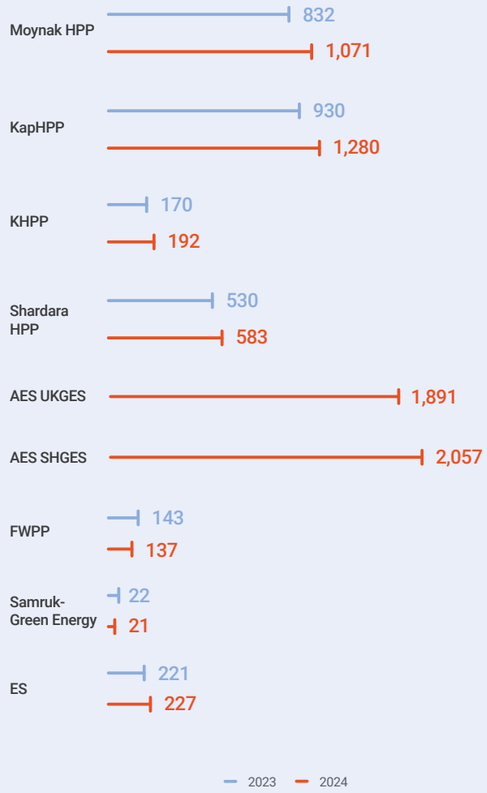
Turgambayev Ruslan Yelubaevich

Managing Director for Production, member of the Management Board

The Company's production unit ensured the smooth operation of assets despite challenges, including a shortage of wind turbine components caused by their withdrawal from production.

In 2024, large-scale repairs were carried out, and a power unit at the Ekibastuz GRES-1 was modernized (+500 MW). A surplus coal reserve beyond the standard level was formed. A record-high electricity generation of 39.8 billion kWh was achieved (102% of the plan). Losses were reduced, and the number of technical incidents in Almaty and the region decreased by 31.8%. The implementation of alternative solutions and technological development is ongoing.

Electricity production volumes (million kWh) at HPP, WPP, SPP



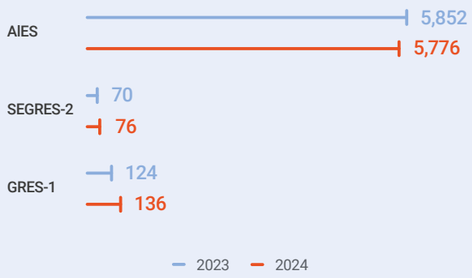
Outlook for the future period

Electricity generation volumes for 2025 are projected with a gradual increase compared to the actual 2024 figures. The increase in electricity generation in 2025 by 3% is mainly forecasted due to the growth in electricity consumption.

Heat energy production

Heat energy production in 2024 amounted to 7,491 thousand Gcal. Compared to the same period last year, the increase is 17%, which occurred due to the inclusion of Energy Solutions Center LLP (Ekibastuz CHPP) in the consolidation perimeter.

Dynamics of changes in heat production, '000 Gcal



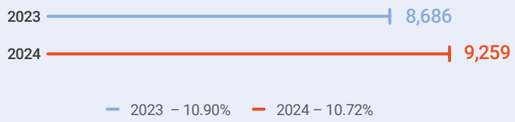
Outlook for the future period

Heat energy production volumes in the 2025 plan are forecasted to increase by 10% compared to the actual 2024 figures, mainly due to the fact that in 2024, the volume of Energy Solutions Center LLP (Ekibastuz CHPP) was accounted for 5 months from the start of the trust management agreement.

Electricity transmission

The volume of electricity transmission through Alatau Zharyk Company JSC (AZhK) grids in 2024 amounted to 9,259 million kWh, which is 7% or 572 million kWh higher than the 2023 actual.

Dynamics of electricity transmission



Outlook for the future period

In terms of electricity transmission and distribution volumes, an increase of 3% is expected in 2025 compared to the 2024 actual, due to the projected growth in consumption in the Almaty region.

Electricity sales

The total volume of electricity sales by the energy supplying organisation AlmatyEnergoSbyt LLP for the reporting period amounted to 8,737 million kWh, which is 23% higher than the same period in 2023 and associated with an increase in electricity consumption in the Partnership's service area and changes in legislation in the electricity sector.



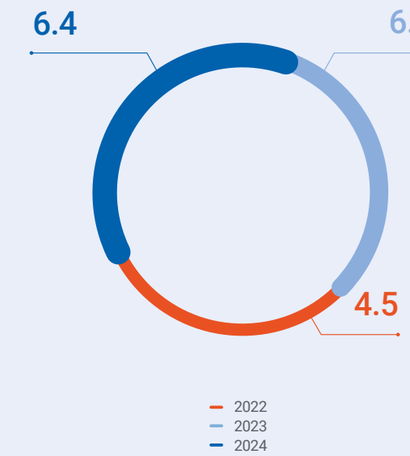
AlmatyEnergoSbyt LLP

Name	Actual 2023	Fact 2024	Off.	Δ 2024/2023, %
Number of consumers, incl:	929,929	987,583	57,654	106%
Population	891,214	943,134	51,920	105%
Legal entities	38,715	44,449	5,734	114%
Sales volume, million kWh	7,086	8,736	1,650	123%

Outlook for the future period

Electricity sales volume in the 2025 forecast will increase by 3% from the 2024 actual, due to the projected growth in electricity consumption in the service area of AlmatyEnergoSbyt LLP.

Share of Renewable Electricity Generation in the Electricity Market of Kazakhstan, %



Electricity generation by renewable energy facilities of the Samruk-Energy JSC Group increased by

4.2% **in 2024**

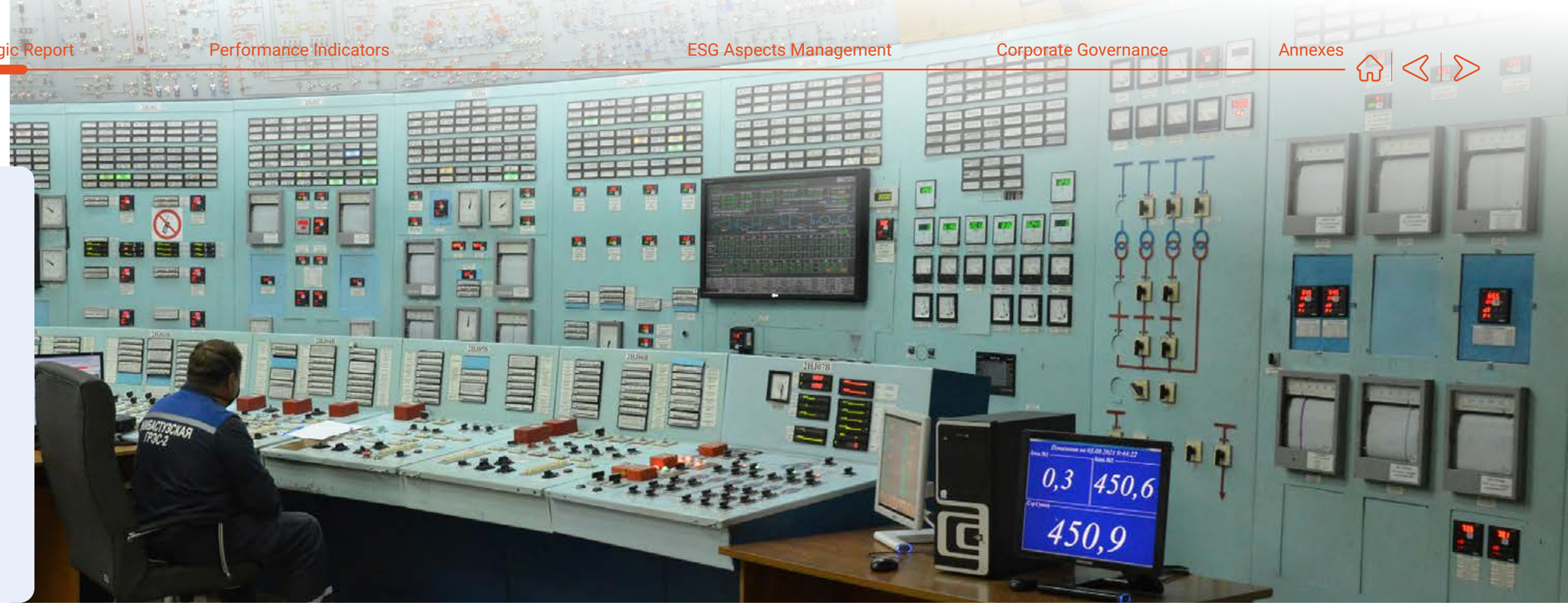
Development of RES in the Republic of Kazakhstan

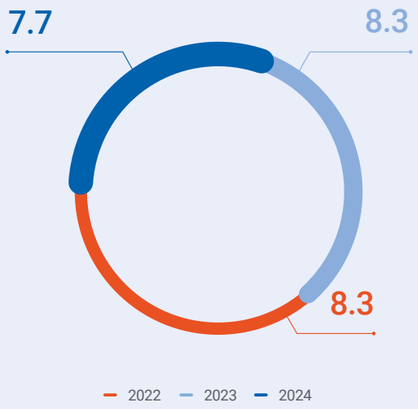
Renewable energy is one of the most promising areas for investment. Despite the significant growth of this sector in recent years – since 2014, the installed capacity of RES facilities in the Republic of Kazakhstan has increased more than 17 times – the share of solar and wind generation in the country, both in absolute and relative terms, still significantly lags behind other developed and developing countries.

According to the Ministry of Energy of the Republic of Kazakhstan, as of 1 January 2025, there are 153 RES facilities in operation in Kazakhstan with a total capacity of about 3,032 MW, providing 6.4% of the total electricity in the country. In the reporting period, there was an increase in electricity generation using solar and wind power plants, as well as small HPPs. Overall, in 2024, RES facilities (SES, WES, BGP, small HPPs) generated 7.5 billion kWh of electricity, which is 12.5% more than in 2023.

In 2024, 8 new renewable energy facilities with a capacity of 163.5 MW were commissioned in Kazakhstan. In 2014, the installed capacity of RES facilities in operation in the country was 177.52 MW, and in 2024 it exceeded 3,032 MW.

Electricity generation by RES facilities of Samruk-Energy JSC (SPP, WPP and small HPPs) for January–December 2024 was 578 million kWh, which corresponds to 7.7% of the total share of RES electricity generation in the Republic of Kazakhstan.





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

Group of companies of Samruk-Energy JSC	Installed capacity, MW	2023	2024
AIES JSC, cascade of small HPPs	43.7	169.5	192.2
Samruk-Green Energy LLP, SPP	3.4	5.6	5.42
Samruk-Green Energy LLP, Shelek WPP	5	16.1	15.8
First Wind Power Plant LLP, WPP	45	142.6	137.4
Energy of Semirechye LLP, Shelek WPP	60	220.8	227.3
Total		**554.6**	**578**

Electricity generation by HPPs, WPPs, SESs, million kWh

Indicator	2023	2024
Moynak HPP	832	1,071
Kapchagayskaya HPP	932	1,280
Almaty HPP Cascade	170	192
Shardara HPP	529	583
Ust-Kamenogorsk HPP	1,466[12]	1,891
Shulbinsk HPP	1,6329	2 057
FWPP	142	137
Samruk-Green Energy	22	21
Energy of Semirechye LLP	220	227

Capacity market

In Kazakhstan, along with the electricity market, a capacity market has been functioning since 2019. Its main goal is to attract investment to maintain existing and create new capacities, as well as to ensure the balance between electricity supply and demand in the country. The capacity market also stimulates the use of renewable energy and increases the efficiency of the energy system.

In 2024, power plants took part in trading on the electric capacity market held on the trading floor of KOREM JSC.

According to the results of centralised bidding held on 27 November 2024, power plants of Samruk-Energy JSC sold 3,594 MW of capacity at a price of 1,165 thousand KZT/MW*month. In particular:

- GRES-1 LLP – 1,390 MW;
- SEGRES-2 JSC – 877 MW;
- AIES JSC – 421 MW.

In accordance with the legislation[13] individual capacity tariffs were set for Moynak HPP JSC, Shardara HPP JSC in 2022. For Shardara HPP JSC the volume of capacity was 61 MW, for Moynak HPP JSC – 298 MW. These tariffs will allow enterprises to ensure repayment of borrowed funds used for construction of the power plant (MGES JSC), modernisation of equipment (SharHPP JSC).

Kazakhstan coal market

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

According to the Bureau of National Statistics, in January–December 2024, Kazakhstan's coal mining companies produced 108.46 million tonnes of hard coal, which is 3.8% less compared to the same period in 2023.

Coal production, million tonnes

Indicators	2022	2023	2024	Δ, 2024/2023, %
Pavlodar region	68.39	69.48	67.01	-3.6 %
Karaganda region	34.28	33.58	32.36	-3.6 %
East Kazakhstan Region	8.83	7.99	20.00	614.3 %
Total	113.93	112.74	108.46	-3.8 %

[12] UKHPP and SHHPP are not taken into account in the total generation of Samruk-Energy JSC in 2023, as they entered the Company's perimeter in 2024.

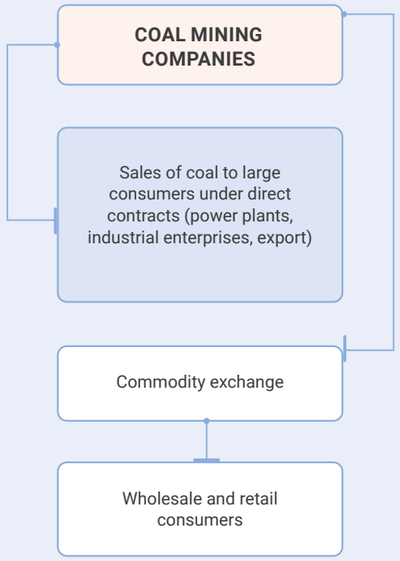
[13] Law of the Republic of Kazakhstan On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Special Economic and Industrial Zones, Attracting Investments, Development and Promotion of Exports, and Social Security No.243-VI dated 3 April 2019.

42.68 million tonnes

of coal were produced by the coal mining company Bogatyr Coal LLP in 2024

At the end of the reporting period, Bogatyr Coal LLP produced 42.68 million tonnes of coal, which is 0.6% less than in 2023. At the same time, the company's share in production at the end of 2024 was 38.1% of the total volume of coal production in the Republic of Kazakhstan and 66.8% of the volume of coal produced in the Ekibastuz coal basin (Pavlodar region).

Scheme of coal sales



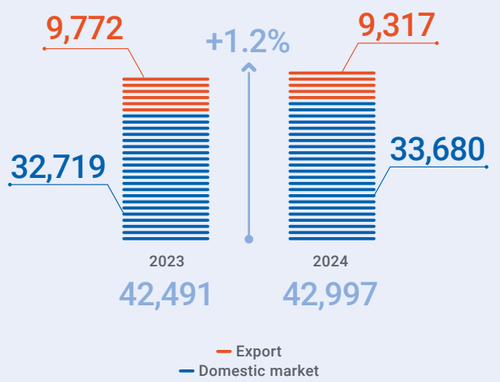
The volume of coal sold by Bogatyr Coal LLP in 2024 amounted to

43 million tonnes



The stripping ratio for 2024 was 0.94 m³/tonne, compared to 0.84 m³/tonne in 2023.

Coal sales by Bogatyr Coal LLP, thousand tonnes



Outlook for the future period

The volume of coal sales in the forecast for 2025 will increase by 2,003 thousand tonnes, or by 4.7% compared to the actual figures for 2024. The growth is due to increased demand from energy-producing organisations.

Among the major coal consumers include Bogatyr Coal LLP, as well as power systems of Astana, Almaty, Karaganda, Petropavlovsk, Pavlodar, Stepnogorsk, Ekibastuz GRES-1 and GRES-2. Coal buyers, including power plants, independently organised and paid for coal transportation from Ekibastuz station (Bogatyr Coal LLP) to the place of destination. Contracts for transportation were concluded with freight forwarders who engage wagon owners (operators).

Ekibastuz coal is the passport (standard) fuel for small boiler houses located in rural areas. The shipment of utility coal, according to the results of exchange transactions, was carried out both by railway and motor transport.

Coal sales to consumers, million tonnes

Area	2022	2023	2024
AIES JSC	3.00	3.16	3.21
Karaganda Energy Centre LLP	2.31	2.56	2.57
Astana-Energy JSC	3.96	3.65	3.63
Pavlodarenergo JSC PTETs-2, 3	2.83	2.90	3.07
Stepnogorskaya CHPP LLP	0.80	0.71	0.70
EGRES-1 LLP	13.10	13.39	13.28
JSC EGRES-2 Station	3.3	3.59	3.65
Bassel Group LLS LLP	0.48	0.46	0.33
SevKazEnergo JSC	1.44	2.11	2.17
Ekibastuzteploenergo LLP	0.52	0.45	0.54
SCP on PCV Koksh. Zhylu	0.32	0.36	0.32
Combite	0.19	0.17	0.16
Total to the domestic market of the Republic of Kazakhstan	**32.32**	**32.72**	**33.68**
Reftinskaya GRES	10.08	9.77	9.31
Total exports to the Russian Federation	**10.08**	**9.77**	**9.31**

Weighted average selling price of coal, KZT/tonne

Name	2021 fact	2022 fact	2023 fact	2024 fact	2025 forecast
Bogatyr Coal LLP	2,292	2,669	3,084	3,215	4,168

The price of coal sales by Bogatyr Coal LLP is approved independently by the price list for consumers of the Republic of Kazakhstan for 3 groups of consumers (power engineering at the KTZ junction station, power engineering at the coal harvesting station, municipal and household needs).

Tariff Policy

The operating activities of the subsidiaries of the Samruk-Energy JSC Group of companies and its joint ventures, which are subjects of natural monopoly, competitive and socially significant markets, are regulated by the laws of the Republic of Kazakhstan On Electric Power Industry, On Natural Monopolies, On Supporting the Use of Renewable Energy Sources and the Entrepreneurial Code of the Republic of Kazakhstan. Tariff regulation, depending on the type of activity of energy companies, falls under the competence of the Natural Monopolies Regulation Committeeand Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan (the Committee) or the sectoral ministry – the Ministry of Energy (MoE).

By order of the Minister of Energy of the Republic of Kazakhstan dated May 22, 2020 No.205, the 'Methodology for Determining Fixed Profit, taken into Account When Approving Ceiling Tariffs for Electric Energy, as well as Fixed Profit for Balancing, taken into Account When Approving Ceiling Tariffs for Balancing Electricity' was approved.

Based on the Concept for the Development of the Fuel and Energy Complex (FEC) of Kazakhstan until 2030, adopted in 2014, the Capacity Market was introduced in 2019 as an effective mechanism to ensure a sufficient level of investment in the sector, which will have a positive impact on the market in the long term.

Since 2019, taking into account the introduction of the capacity market for energy-producing organizations, the following have been established:

- ceiling tariffs for capacity, which include costs for investment projects and repayment of principal debt (on borrowed funds attracted for the implementation of investment projects).
- ceiling tariffs for electricity, which include costs for electricity production and the profit margin. By order of the Minister of Energy of the Republic of Kazakhstan dated March 11, 2021 No.76, amendments were made to Order No.205 dated May 22, 2020, approving the 'Methodology for Determining the Profit Margin, taken into Account When Approving Ceiling Tariffs for Electric Energy, as well as Fixed Profit for Balancing, taken into Account When Approving Ceiling Tariffs for Balancing Electricity'.

From July 1, 2023, the Single Buyer model was launched in the Republic of Kazakhstan, which provides for centralized procurement of electricity and the introduction of a real-time balancing electricity market (until July 1, 2023, it operated in simulation mode).

Tariffs for transmission and distribution of electricity for transmission companies, for heat energy production, and tariffs for energy supply organisations (ESO) are regulated by the Natural Monopolies Regulation Committeeand Protection of Competition of the Ministry of Economy. Regulation and control by the Committee are carried out in strict accordance with legislative and regulatory acts.

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

The transition to a new model of the electricity market based on the mechanism of a Single Buyer 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 Buyer.

In 2024, the electricity tariff for end-users was formed taking into account:

- electricity purchases from a Single Buyer;
- prices for transmission/use of electricity on the National Grid;
- prices for transmission and distribution on the grids of the REC;
- the cost of regulation, balancing and dispatching services;
- the cost of services to ensure the availability of electric capacity.

Weighted average tariffs for electricity generation (excluding VAT)

Name of subsidiaries and affiliates	2022 fact[14]	2023 fact[15]	2024 fact[16]	2025 forecast
Ekibastuz GRES-1 LLP	**8.06**	**8.00**	**9.18**	**10.50**
electricity tariff, KZT/kWh.	7.44	7.59	8.12	9.09
RK tariff	7.44	7.59	8.12	9.09
capacity tariff, thousand KZT/MW*month	590	590	1,049	1,165
individual capacity tariff, thousand KZT /MW*month	-	-	-	1,199
Station Ekibastuzskaya GRES-2 JSC	**11.39**	**11.46**	**13.65**	**17.92**
export tariff, KZT /kWh.	13.76	13.76	-	-
electricity tariff, KZT /kWh.	10.17	10.27	11.76	15.75
capacity tariff, ths KZT/MW*month	590	590	1,020	1,160
Almaty Electric Stations JSC	**14.05**	**15.52**	**20.38**	**22.99**
electricity tariff, KZT/kWh.	12.27	13.79	17.81	20.29
weighted average tariff for capacity, ths KZT/MW*month	796	809	1,180	1,160
capacity tariff, thousand KZT/MW*month	590	590	1,062	1,160
individual capacity tariff, thousand KZT /MW*month	3,139	3,139	2,479	-
JSC Moynak HPP	**21.69**	**23.51**	**21.59**	**24.05**
electricity tariff, KZT /kWh.	12.92	13.65	14.08	13.77
capacity tariff, thousand KZT/MW*month	2,564	2,564	2,564	2,564
JSC Shardara HPP	**16.03**	**16.33**	**14.69**	**15.53**
electricity tariff, KZT /kWh.	10.79	11.17	9.84	9.82
capacity tariff, ths KZT/MW*month	3,868	3,868	3,868	3,868
AES Ust Kamenogorsk HPP LLP	**-**	**-**	**5.79**	**6.85**
electricity tariff, KZT /kWh.	-	-	3.57	4.19
capacity tariff, thousand KZT/MW*month	-	-	1,060	1,160
AES Shulbinsk HPP LLP	**-**	**-**	**8.15**	**9.56**
electricity tariff, KZT /kWh.	-	-	4.55	4.93
capacity tariff, thousand KZT/MW*month	-	-	1,060	1,160
Samruk-Green Energy LLP, KZT/kWh.[17]	**20.94**	**23.54**	**27.63**	**30.76**
First Wind Power Plant LLP	**36.84**	**43.36**	**48.47**	**52.35**
Energy of Semirechye LLP, share 25%	**22.68**	**24.65**	**28.17**	**31.58**

By the Order of the Minister of Energy of the Republic of Kazakhstan dated 23.10.2023 No.376 ceiling tariffs for the service of maintaining the availability of electric capacity are set at the level of 1,065 thousand KZT/MW*month, and for 2025 – 1,170 thousand KZT/MW*month.[18]

[14] The electricity tariff consists of a feed-in tariff and a pass-through RES surcharge.

[15] The electricity tariff is a weighted average of the feed-in tariff and the RES pass-through allowance until 1 July 2023, and of the feed-in tariff and the BRE tariff from 1 July 2023.

[16] The electricity tariff consists of a marginal tariff and a BRE tariff.

[17] The electricity tariff of Samruk-Green Energy LLP is a weighted average of the four RES plants.

[18] Order of the Acting Minister of Energy of the Republic of Kazakhstan dated 19 November 2024 No.407.

Due to the expected increase in p operating expenses (increase in personnel, fuel costs, etc.), to achieve tariff break-even, from 2024, the EPO submitted an application for adjustment of the ceiling tariff in accordance with the rules for approving the ceiling tariff for electricity[19]. The application was submitted by 1 September 2023. As a result, new ceiling tariffs for electricity were approved, which come into force on January 1, 2024.[20]

Thus, during 2024, the following ceiling electricity tariffs (KZT/kWh, excluding VAT) were in effect for EPO:

Name of EPO	Approved tariff 01.01.2024	Approved tariff from 01.11.2024	Off, %	Approved tariff from 01.02.2025	Off, %
1	2	3	4=3/2	5	6=5/3
EGRES-1 LLP	8.05	8.27	3%	9.50	15%
SEGRES-2 JSC	13.17	13.17	0%	15.67	19%
AIES JSC	17.82	17.82	0%	20.93	17%
NPP SHGES LLP	4.14	4.14	0%	5.04	22%
NPP UKGES LLP	3.44	3.44	0%	4.29	25%
SharGES JSC	9.82	9.82	0%	9.82	0%
MGES JSC	12.77	12.77	0%	12.77	0%

Also, the Order of the Minister of Energy of the Republic of Kazakhstan dated 27 January 2025 (No.42-n/k) approved the ceiling tariffs for electric power of EPO with effect from 1 February 2025.

Starting from 2020, the Ministry of Energy of the Republic of Kazakhstan is working with the Ministry of Energy of the Republic of Kazakhstan to approve investment tariffs for plants implementing large-scale investment projects – Moynak HPP JSC, Shardara HPP JSC, Almaty Electric Stations JSC and Ekibastuz GRES-1 LLP.

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

Name of EPO	Scope	Individual tariff (excluding VAT)	Period
Almaty Electric Stations JSC	69.5 MW	4,168.60	2020–2024
Moynak HPP JSC	298 MW	2,563.67	2020–2026
Shardara HPP JSC	61 MW	4,069.3	2020–2028

On December 28, 2021, Ekibastuz GRES-1 LLP concluded an Investment Agreement with the Ministry of Energy of the Republic of Kazakhstan for modernisation, reconstruction, expansion, and renewal under the project for the restoration of power unit No.1, with a tariff of 1,199 thousand KZT /MW*month for the period 2025–2031, based on a service volume of 476.6 MW.

During 2024, applications were submitted for individual tariffs for the construction of Power Units No.3 and No.4, taking into account changes in the Rules for Selection of Investment Programmes and clarification of completion dates for power unit No.3 until September 2028 and for power unit No.4 until September 2030. The Presidium of the Market Council approved the updated applications and sent them to the Ministry of Energy of the Republic of Kazakhstan. Investment Agreement No.41 was signed with the Ministry of Energy of the Republic of Kazakhstan for implementation of power unit No.3 with a 10-year investment payback period (4Q 2028 – 3Q 2038). The signing of the agreement for power unit No.4 was postponed until the issue of increasing limits on the capacity market is resolved. Corporate procedures were completed to conclude a contract for the purchase of capacity availability maintenance service with Settlement and Financial Centre for RES Support LLP. The contract for the purchase of the electric capacity readiness service for the 3rd power unit was signed with Settlement Financial Centre LLP.

[19] Order of the Minister of Energy of the Republic of Kazakhstan dated 27.02.2015.

[20] DOE Order No.479 dated 28 December 2023.

Tariffs for heat production[21], KZT/Gcal (excluding VAT)

Name	2022 fact	2023 fact	2024 fact	2025 forecast
Almaty Electric Stations JSC	3,782	4,215	5,195	5,394
Station Ekibastuzskaya GRES-2 JSC	812	874	902	929
Ekibastuz GRES-1 LLP	221	189	183	178
Energy Solutions Centre LLP (Ekibastuz CHPP)	-	-	6,018	6,654

As a subject of natural monopoly, the legislation provides for the approval of long-term (5+ years) ceiling tariff levels for organisations producing heat energy, including an investment component and annual indexation of costs. Ceiling tariffs are approved by the Committee. However, the increase of tariffs at the initiative of the CEM is made not 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.

Due to the social significance of heat energy prices, the Natural Monopolies Regulation Committee implements the state policy of restraining the growth of heat energy tariffs, which leads to unprofitability of heat energy production activities.

From 1 January 2023, the tariff of Almaty Electric Stations JSC for heat energy was 4,003.36 KZT/Gcal. As a result of work with DKREM, new tariffs for heat energy were approved taking into account the increase in prices for strategic commodities (coal, fuel oil) and growth of average monthly wages:

- from 01.08.2023 – 4,550.44 KZT/Gcal, growth to the previous tariff – 13,7%;
- from 01.01.2024 – 5,063.54 KZT/Gcal, growth to the tariff of 2023 – 26.5%;
- from 01.09.2024 – 5,412.67 KZT/Gcal, growth to the tariff of 2023 – 36.8% (average annual tariff in 2024 was 5,195 KZT/Gcal);
- from 01.01.2025 – 5,394.18 KZT/Gcal.

In 2025, Almaty Electric Stations JSC and the Company plan to further work with DKREM to ensure break-even heat operations.

Tariffs for electricity transmission services, KZT/kWh (excluding VAT)

Name	2022 fact	2023 fact	2024 fact	2025 forecast
Alatau Zharyk Company JSC	6.58	7.68	9.95	10.6

Joint Order of the Department of the Natural Monopolies Regulation Committeeof the Ministry of National Economy of the Republic of Kazakhstan for Almaty city from 25 July 2024 No.64-OD and the Department of the Natural Monopolies Regulation Committeeof the Ministry of National Economy of the Republic of Kazakhstan for Almaty region dated 26 July 2024 No.92-OD, made changes to the joint Order of the Department of the Natural Monopolies Regulation Committeeof the Ministry of National Economy of the Republic of Kazakhstan for Almaty city dated 6 November 2020 No.126-OD and the Department of the Natural Monopolies Regulation Committeeof the Ministry of National Economy of the Republic of Kazakhstan for Almaty region dated November 6, 2020 No. 154-OD "On Approval of Ceiling Tariff Levels and Tariff Estimates for the Regulated Service of JSC 'Alatau Zharyk Company' for Electricity Transmission for 2021–2025".

The changes were made in accordance with paragraph 1 of Article 22 of the Law of the Republic of Kazakhstan On Natural Monopolies in connection with the submitted application of AZhK JSC within the framework of the Tariff in exchange for investment programme on the following grounds:

- change in the cost of strategic goods (electricity);

[21] Heat tariffs are annual averages.

- change of the approved investment programme in connection with the implementation of state programmes, as well as documents of the state planning system approved by the authorised body;
- increase in the volume of regulated services provided;
- obtaining property used in the technological cycle in the provision of regulated services by natural monopolies on the balance sheet and (or) in trust management;
- change in the average monthly nominal wage of one employee by type of economic activity in the region (city), developed according to statistics for the year.

In connection with the amendments, the tariff ceilings of AZhK for regulated services for 2024–2025 have been approved:

- from 1 January 2024 – 8.87 KZT/kWh (excluding VAT);
- from 1 August 2024 – 11.4 KZT/kWh (excluding VAT) (average annual transmission tariff in 2024 was 9.95 KZT/kWh);
- for 2025 – 10.6 KZT/kWh (excluding VAT).



Tariffs for electricity sales to ESOs, KZT/kWh (excluding VAT)

Name	2022 fact	2023 fact	2024 fact	2025 forecast
AlmatyEnergoSbyt LLP	20.09	23.64	28.03	-
Alatau Zharyk Kompanasy JSC – Power Supply Company	-	-	-	34.14

In December 2023, as a result of the work carried out, AlmatyEnergoSbyt LLP was included in the list of recipients of targeted support for energy supplying organisations by Order No.276 of the Minister of National Economy of the Republic of Kazakhstan dated 22 December 2023. As a result, the price for electricity purchase from the Single Buyer was 13.00 KZT/kWh, which allowed AlmatyEnergoSbyt LLP to avoid losses in 2024 from the difference between the electricity prices stipulated in the tariff estimates and the actual prices of the Single Buyer.

On 10 October 2024, the Department of the Natural Monopolies Regulation Committee of Almaty city and Almaty region approved the ceiling price of AlmatyEnergoSbyt LLP at 29.04 KZT/kWh (an increase of 3.7%) effective from 15 October 2024.

Due to the amendments made in the Law of the Republic of Kazakhstan On Electricity, the Law of the Republic of Kazakhstan On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Heat Power, Electricity and Regulated Services dated 31 December 2024, AlmatyEnergoSbyt LLP ceased its activity as an energy supplying organisation from 1 January 2025 and was reorganised by joining the regional energy transmission company Alatau Zharyk Company JSC as a Branch of Alatau Zharyk Company JSC – Energosbyt.

Earlier tariffs of AlmatyEnergoSbyt LLP agreed with the Departments of the Committees for Regulation of Natural Monopolies in Almaty city and Almaty region are transferable for Alatau Zharyk Company JSC and are effective from 1 January 2025.

AZhK JSC plans to revise its electricity sales tariff in 2025, taking into account the increase in electricity purchase tariffs from the Single Buyer and other expenses.

Development Strategy

New Strategy 2024-2033

On 19 July 2024, the Board of Directors of Samruk-Energy JSC approved the Development Strategy of Samruk-Energy JSC for 2024–2033 (hereinafter – the Strategy). The new Strategy takes into account global and internal changes in the energy sector, aims to develop renewable energy sources (RES), improve efficiency and reliability of energy supply, and implement ESG principles.

Key trends and challenges

- An energy deficit of 2.8 GW is forecast by 2024 and 6.2 GW by 2030. This requires urgent commissioning of new baseload capacity, including construction of coal-fired plants and expansion of gas-fired generation.
- It is planned to increase the capacity of RES projects by 6.2 GW by 2030. However, the accelerated development of RES creates a need for the construction of manoeuvring capacities, such as SGP in Turkestan and Kyzylorda, as well as new HPPs and PSPPs.
- To improve the efficiency of asset management, the assets are being restructured. In particular, it is considered expedient to transfer RES and HPP assets to a separate legal structure under control, specialising in the development of green energy - Public Company Qazaq Green Power PLC.
- The introduction of the Unified Electricity Purchaser and balancing market leads to a revision of the Tariff Policy. This requires adaptation of investment mechanisms and new ways to return investments in the energy sector.
- Deleveraging remains a priority and funds are being raised through green bonds and other sustainable financial instruments to finance new projects.
- The Company follows the national strategy of carbon neutrality until 2060. This increases the investment attractiveness of RES and stimulates the development of green finance, including the issuance of ESG bonds.
- Automated emission monitoring systems, digital solutions for energy management and artificial intelligence in load forecasting are being introduced to improve the efficiency of the energy system.
- New tariff setting standards and support mechanisms for strategic projects aimed at ensuring stable energy supply and accelerated transition to RES are being introduced at the state level.
- New vector for regional heat supply, construction of CHPPs in Kokshetau, Ust-Kamenogorsk, Semey and transfer of Ekibastuz CHPP into trust management.

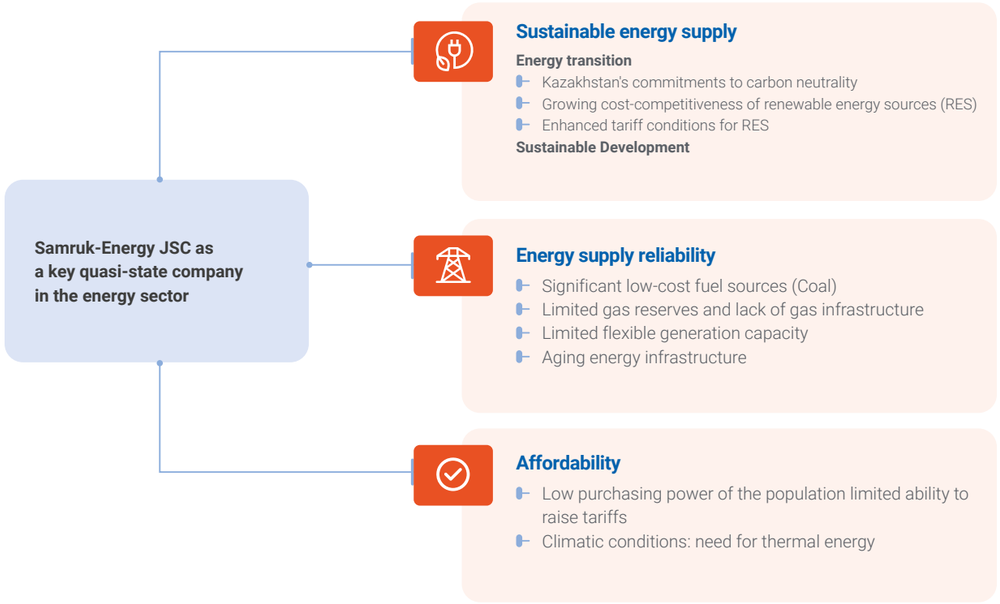
Kamalov Almasbi Nizamaddinovich

Managing Director for Economy and Finance, member of the Management Board

The integration of ESG approaches into the Company's operations is a conscious necessity, driven both by stakeholder expectations and the global challenges of sustainable development.

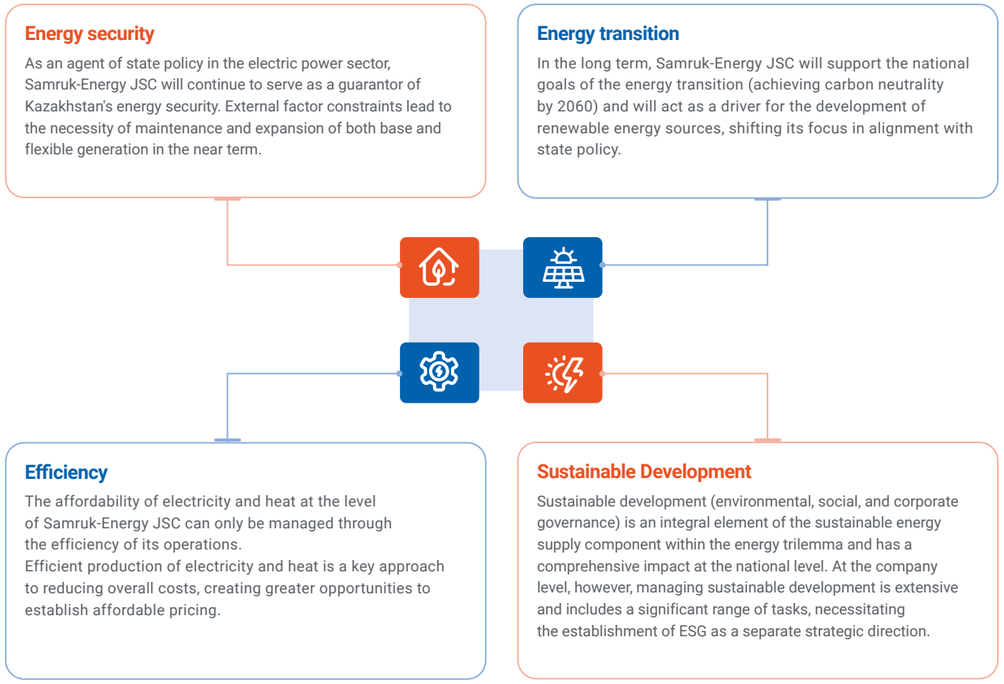
We have revised our strategy, made the "green" agenda a priority, and focused on reducing our carbon footprint, developing renewable energy, and practicing responsible management. Sustainability is our path toward growth, trust, and positive change in society.

The energy trilemma shapes the external environment and development path of Samruk-EnergyJSC



Priorities of Samruk-Energy JSC – Energy security, Energy transition, Sustainable development and Efficiency

Linking the energy sector trilemma to the strategic development directions of Samruk-Energy JSC



Strategic Directions, Goals, Objectives and KPIs

Strategic directions	Energy security	Efficiency	Energy transition	Sustainable development
Strategic goals	Ensuring coverage of the economy's growing demand for electric capacity and electricity	Improving efficiency operating, financial and investment activities	Advance development of RES and reduction of negative impact on the environment	Following the best ESG practitioners
Objectives	- Implementation of investment projects for the construction of base and manoeuvre capacity through international cooperation - Modernisation and reconstruction of existing assets using state-of-the-art technologies - Carrying out timely and quality maintenance and repair work - Ensuring the reliability of the supply chain	- Improvement of energy efficiency and introduction of energy-saving technologies and processes - Optimisation of the asset management structure - Improvement of operational efficiency (optimisation of production costs, business processes) - Ensuring financial sustainability - Introduction of modern digital solutions and technologies, including artificial intelligence - Formation of legislative initiatives and tariff setting - Realisation of investment projects with acceptable profitability, within the established timeframe and cost	- Implementation of RES and HPP investment projects and international co-operation - Decarbonisation and carbon footprint reduction - Introduction of waste recycling and utilisation practices (use of ash slag) - Ensuring stable power supply from facilities RES generation through the use of energy storage systems - Minimisation of emission levels pollutants - Localisation of production facilities	- Improving the efficiency of corporate governance and compliance - Implementation of climate risk-management - Human capital development - Provision of social guarantees, social stability and defences - Reduction of occupational injury rates by applying advanced H&S practices - Improving the efficiency of interaction with key stakeholders - Introduction of modern practices to minimise harm to water, biodiversity and soil when implementing new projects
KPIs	- Total volume of electricity sales from baseload and gas-fired generation - Volume of commissioning of base and gas-fired generation capacities - CTG - Implementation of the plan to meet coal requirements	- Debt/EBITDA - Specific consumption of fuel equivalent (SCF) - Investments in fixed assets - Gross inflow of foreign direct investment - NAV - EBITDA margin by business segments	- Decrease in specific CO_2-eq emissions (in relation to the base year 2021) in relation to the total electricity generation - Ratio of installed capacity - RES and HPPs in the generation structure	- Increasing the ESG rating - Improvement of social stability rating – SRS index - Achieving zero injuries and fatalities (reduction of LTIFR and LDR, FIFR)

Taking into account the approval of the Development Strategy for 2024–2033, strategic performance indicators have been defined to achieve the relevant strategic development goals.

Strategic performance indicators according to Development Strategy 2024–2033.

Goal	KPI	Unit of measurement	Forecast 2025	Forecast 2027	Forecast 2033
Energy security					
Ensuring coverage of the economy's growing demand for electricity power and electricity	Total volume of electricity sales from baseload and gas-fired generation	Coefficient to base year 2023	≥1	≥1,0	≥2.0
	Volume of commissioning of baseload and gas-fired generation capacities	GW, cumulative total from 2023	≥0.5	≥1.5	≥7.0
	Technical availability factor (TAF)	%	≥75%	≥75%	≥80%
	Implementation of the plan to meet coal requirements	%	≥90%	≥90%	≥90%
Efficiency					
Enhancement of operational, financial, and investment efficiency	Debt/EBITDA	Coefficient	≤5.5	≤5.5	≤3.5
	Specific consumption of fuel equivalent	Gram per 1 kWh	≤400	≤350	≤330
	Investments in fixed assets	KZT trln, cumulative total from 2024	≥1	≥2.5	≥4.0
	Gross inflow of foreign direct investment	billion USD, cumulative from 2024	≥1,5	≥4.0	≥8.0
	NAV	Coefficient to base year 2023		≥1.3	≥2.0
	EBITDA margin by business segments	Coefficient to base year 2023	Coal mining (≥25%) Electricity generation (≥40%) Heat generation (≥0%) Electricity distribution (≥20%)	Coal mining (≥25%) Electricity generation (≥45%) Heat generation (≥0%) Electricity distribution (≥20%)	Coal mining (≥30%) Electricity generation (≥55%) Heat generation (≥0%) Distribution of electricity (≥20%)
Energy transition					
Advanced development RES and reduction of negative impacts on environment	Reduction of specific CO_2-eq emissions (relative to the base year 2021) in relation to the total electricity generation	% to base 2021 year	≥20%	≥30%	≥40%
	Share of RES and HPP installed capacity in the generation structure	%	≥25%	≥25%	≥40%
Sustainable development					
Following the best ESG practitioners	Increase in ESG rating level	Rating	Medium ESG rating/ Medium Risks	Medium ESG rating/ Medium Risks	High ESG rating/Low Risks
	Improvement of social stability rating – SRS index	Rating	Conditionally stable	Stable	Favourable
	Achieving zero injuries and fatalities (reduction of LTIFR, FIFR, LDR)	Coefficient	LTIFR (0.26) FIFR (0.09) LDR (195)	LTIFR (0.24) FIFR (0.07) LDR (185)	LTIFR (0.18) FIFR (0.01) LDR (155)

Several key bodies and subdivisions are responsible for the fulfilment of Samruk-Energy JSC's strategy. The Board of Directors approves the Company's development strategy, determines key performance indicators and controls the fulfilment of strategic goals. The Management Board is responsible for direct management of strategy implementation, coordinates the work of structural subdivisions and subsidiaries, and integrates sustainable development principles into key business processes. The Sustainability Management Board oversees compliance with ESG principles, strategic planning in this area and the implementation of relevant initiatives. In turn, responsible persons in structural divisions develop detailed action plans and monitor their implementation in their areas.

Strategy implementation is monitored through several mechanisms. Regular monitoring makes it possible to analyse the implementation of key performance indicators and, if necessary, to update strategic plans. An important role is played by monitoring the implementation of investment projects, which includes tracking timelines and budgets, as well as assessing their efficiency in accordance with the established strategic objectives. Post-investment monitoring allows us to assess the results achieved after the implementation of projects, analyse the return on investment and the impact of the implemented measures on the overall strategy of the Company.

Risks and challenges related to implementation of the development strategy

Name of risk or threat	Risk management measures
Strategic Direction – Energy Security	
Risks of ongoing/ prospective investment projects and investment programmes	- Monitoring and adjusting action plans for prospective projects; - Monitoring of investment projects in progress; - Report on execution of the Development Plan of Samruk-Energy JSC and subsidiaries and affiliates, and monitoring of capital investment utilisation; - Formation of weekly briefs and presentations on Samruk-Energy JSC projects and submission to Samruk-Kazyna JSC; - Work with the RK state authorities to obtain support for the Company's investment projects: 1. Construction of Ekibastuz GRES-3 with installation of power units of plants No.1 and No.2; 2. Expansion of Ekibastuz GRES-2 with installation of power unit No.3; 3. Expansion and reconstruction of Ekibastuz GRES-2 with installation of plant unit No.4; 4. Construction of the Semipalatinsk HPP on the Irtysh River with a capacity of over 300 MW; 5. Construction of combined station of WPP, HPP with capacity of 310 MW in Almaty region.
Risk of failure to fulfil the coal sales plan	- Development of additional sales channels in the domestic and foreign markets, retention of existing customers; - Interaction with the shareholder, state bodies and organisations on coal market development issues; - Monitoring of execution of the coal sales plan and implementation of the annual repair programme.
Risk of failure to fulfil the electricity generation plan	- Preventive maintenance; - Careful selection of equipment suppliers; - Training of operating and maintenance personnel; - Monitoring the implementation of the annual work programme; - Monitoring the implementation of investment projects; - Monitoring of repair programmes in terms of disbursement of funds and physical volumes in terms of maintaining the technical condition of production assets; - Timeliness of making adjustments to the Development Plan, post-investment monitoring of implemented investment projects in terms of reaching design capacity.
Risk of failure to fulfil the electricity transmission and distribution plan	- Preventive maintenance; - Careful selection of equipment suppliers; - Training of operating and maintenance personnel; - Monitoring the implementation of the annual work programme; - Monitoring the implementation of investment projects; negotiating with consumers.
Risk of failure to fulfil the electricity sales plan	- Interaction with the shareholder, state bodies and organisations on the development of the electricity and electric capacity market; - Harmonisation of the medium-term Electricity Sales Plan; - Development and execution of measures aimed at reducing the cost of electricity; - Control over receipt of cash from the Single Buyer for purchased electricity; - Writing letters, claim letters pre-trial investigation, litigation of stations with the Single Buyer.
Procurement process risk	- Monitoring of changes in the Procurement Procedure of Samruk-Energy JSC and timely notification of structural subdivisions; - Approval of draft contracts by the procurement department; - Thorough examination by the Tender Commission of applications of potential suppliers for compliance with the requirements of the tender documentation and the Procurement Procedure of Samruk-Energy JSC; - Monitoring the implementation of procurement processes; - Monitoring the proportion of local content; - Conducting explanatory work with the initiator of the procurement to eliminate remarks; - Timely staff training (as per the training schedule); - Timely posting of e-procurement announcements; - Monitoring the implementation of procurement category strategies.
Risk of failure to fulfil the coal production plan	- Preventive maintenance; - Careful selection of equipment suppliers; - Training of operating and maintenance personnel; - Monitoring the implementation of the annual work programme; - Monitoring the implementation of investment projects; - Monitoring of repair programmes in terms of disbursement of funds and physical volumes in terms of maintaining the technical condition of production assets; - Negotiating with consumers; - Timeliness of making adjustments to the Development Plan, post-investment monitoring of implemented investment projects in terms of reaching design capacity.
Risk of failure to fulfil the heat production and sales plan	- Monitoring the implementation of the repair plan-schedule to maintain equipment operability and increase available capacity; - Monitoring of modernisation and reconstruction of existing equipment and commissioning of new capacities according to the investment programme; - Monitoring the implementation of investment projects; - Adjustment of Development Plans.
Strategic Direction – Efficiency	
Information security risk	- Conducting events to practice the behavioural model of employees responsible for information security in crisis situations; - Preparation of spare information capacity (servers, computers); - A regulation for obtaining or restricting access rights.

Name of risk or threat	Risk management measures
Risks of information systems	- Conducting events to practice the behavioural model of employees responsible for information security in crisis situations; - Preparation of spare information capacity (servers, computers); - A regulation for obtaining or restricting access rights.
Energy efficiency risks	- Conducting energy audits in subsidiaries and affiliates in accordance with the legislation of the Republic of Kazakhstan.
Tariff setting risk	- Making proposals regarding the need to make appropriate amendments to the legislation of the Republic of Kazakhstan on regulation of tariffs of natural monopolies, regulated markets and competitive market; - Timely identification of negative factors and risks in tariff setting; - Qualitative preparation of the subject's tariff campaign on approval (harmonisation) of tariffs; - Timely adjustment of tariff estimates and investment programmes by the Committee for Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan in order to avoid introducing compensatory (reduced) tariffs for subsidiaries and affiliates; - Tariff Policy monitoring; weekly report on Tariff Policy issues of subsidiaries and affiliates; - Qualitative work with state authorities of the Republic of Kazakhstan to obtain the required tariff for goods and services of the Company's subsidiaries and affiliates.
Credit risk of counterparty banks	- Diversification of invested temporary free funds in financial instruments, according to the requirements of the main parameters of the treasury portfolio; - Examination of counterparty banks' risks on placement of VSDS; - Compliance with limits on counterparty banks.
Sanctions risk	- Checking the reliability of partners (beneficiaries) for sanctions by state authorities and international organisations; - Checking for updates to the sanctions lists; - Implementation of measures to remove the Company and subsidiaries and affiliates from the sanctions list (SC); - Involvement of risk minimisation consultants (RMCs); - Termination of contracts with partners subject to sanctions imposed by state authorities and international organisations (FCA).
Risk of violation of legislation and non-compliance with NAPs	- Litigation Preparation; - Legal expertise of materials; preparation of reference materials, conclusions, recommendations of legal nature; - Expertise and approval of draft contracts, including labour contracts and full material responsibility contracts, agreements, memorandums and other transactions in accordance with the established procedure, preparation of opinions on the drafts; - Working with legal advisors and other consultants on legal services; - Consideration of claims, appeals regarding the Company's receivables and payables, as well as enforcement proceedings; - Monitoring of changes/additions to the RK legislation regulating the Company's activities; - Timely notification of employees of significant events requiring assessment and payment of taxes.
Interest rate risk	- Timely implementation of measures to reduce the average interest rate for the Company's Group to optimal values (refinancing, reduction of current rates, etc.); - Generation of a report on percentage gaps by currency.
Currency risk	- Setting limits on the open currency position; - Refinancing of foreign currency loans; - Monitoring of the open currency position.

Name of risk or threat	Risk management measures
Risks related to acquisition, disposal of shares/participatory interests in the charter capital of legal entities	- Monitoring of fulfilment of concluded agreements with independent consultants (financial, tax, legal and other) (as required); - Compliance with the requirements of the Fund's and the Company's rules on the transfer of the Company's assets to a competitive environment; - Participate in Investor Day to attract investors/buyers; - Having an electronic data room to work with potential investors/buyers.
Risk of failure to fulfil the Company's Development Strategy	- Monitoring of the implementation of the Sustainable Development Guidelines; - Monitoring of the implementation of the Action Plan for Strategy implementation/strategic KPIs; - Timely updating of the Company's Development Strategy; - Timely completion of investment projects.
Risk of a terrorist attack	- Participation in the Coordination Council on ensuring security at strategic facilities and countering terrorism in the Group of companies of Samruk-Kazyna JSC, and implementation of its recommendations; - Analysing and improving the technical equipment of the facility security system; - Monitoring the development and implementation of the Anti-Terrorism Security Action Plan; - Scheduled drills and inspections of antiterrorist security of subsidiaries and affiliates' facilities with interested government agencies; - Development of an IRD on personnel actions in case of terrorist threats. Conducting staff training on an ongoing basis; - Annual briefing (drills) of personnel on how to respond to threats of terrorist acts.
Risk of lack of liquidity for operating, investment and financing activities	- Compiling cash forecasts on a monthly basis; - Approval of subsidiaries' Development Plans as they become available, and reports on their execution, on a quarterly basis; - Generating a report on the Company's debt and financial stability on a quarterly basis; - Criticality analysis of planned capital repairs; - Working with financial institutions to refinance and/or restructure existing loan agreements to reduce remuneration payments (lower finance costs); - Scheduled and early repayment of the principal debt of the Company's Group; - Ensuring all SPs provide timely submission of primary documentation to, and ensure staff are aware of significant events that need to be reflected in the financial statements.
Risk of breach of external creditors' covenants and listing requirements	- Monitoring compliance with covenants in accordance with the Debt Management and Financial Stability Policy (financial and non-financial); - Information on compliance with external creditor covenants and listing requirements; - Timely activities aimed at obtaining a letter of waiver from counterparties (in case of threat of covenant breach) (letter of waiver).
Asset impairment risk	- Reduction of capital expenditures, analysing the feasibility of planned capital repairs; - Performing an impairment test (if there are indications of impairment); - Centralised control over the formation and adjustment of subsidiaries and affiliates' investment programme with the determination of tolerance levels for each key risk.
Strategic Direction – Energy Transition	
Climate Transition Risks (entered into the Register by the decision of the Board of Directors dated 23 December 2024 (Minutes No.17/24))	- Implementation of measures for 2025 from the Energy Transition Program of Samruk-Energy JSC until 2060; - Interaction with authorised state bodies in the process of development of NAPs in the field of climate; - Disclosure of information on climate risk within the framework of the Annual Integrated Report.

Name of risk or threat	Risk management measures
Strategic Direction – Sustainable Development	
Environmental Risks	- Monitoring of greenhouse gas emission quota limit utilisation, adjustment; - Mandatory environmental insurance; - Liquidation Funds; - Interaction with authorised state bodies in the process of development of NAPs in the field of environmental protection; - Monitoring the implementation of international standards of environmental management; - Monitoring of budget execution under the item of environmental protection; - Monitoring of compliance with the modernisation and repair plan for the main and auxiliary environmental protection equipment; - Monitoring of the impact of economic activities on aquatic ecosystems, fauna and flora.
Risk of violation of the corporate governance regime	- Carrying out work to obtain an ESG rating; - Development, monitoring and implementation of the Roadmap for improvement of the sustainable development management system; - Defining and regulating the rights and duties of members of management and control bodies, officials; - Formalisation of corporate governance processes, development and implementation of internal regulatory documents in the area of corporate governance; - Control over the execution of corporate documents; - Stakeholder Engagement; - Control over execution of the Regulations on preparation of the Company's annual report and ensuring that the Audit Committee of the Company's Board of Directors evaluates the Report; - Updating of information on the corporate website.
Risk of damage to health and life of employees in the course of fulfilment of their duties, industrial accidents	- Control over fulfilment in subsidiaries and affiliates of measures developed under the Action Plan for achieving zero injuries in the Samruk-Energy JSC Group of companies; - Timely provision of employees with personal protective equipment; - Carrying out scheduled and unscheduled on-site inspections of subsidiaries and affiliates for compliance with the Labour Protection Laws and IRD; - Participation in accident investigations. Participation in the development of effective measures aimed at preventing accidents; - Control over the implementation of measures specified in accident investigation reports in the subsidiaries and affiliates that allowed the accident, as well as the development of measures to prevent accidents in other subsidiaries and affiliates. Control over their implementation; - Control of employee training in the field of occupational health and safety, testing of knowledge of technical operation rules, safety techniques; - Control over fulfilment by contractor organisations of the requirements on OSH (Occupational Safety and Health), within the framework of international standards.
Risks of human resources of the Company's Group	- Work with the Personnel Reserve, organisation of succession of key positions, professional development of the Personnel Reserve; - Interaction with educational organisations on issues related to training of specialists in priority specialties for the electric power and coal industries (in accordance with the Company's strategic goals); - Organisation of training seminars and trainings for employees of the Company/subsidiaries and affiliates; - Development of meritocracy principles and motivation system.
Risk of accidents and disasters at work	- Control of timely diagnostics of equipment to determine its technical condition; - Supervise the timely and complete execution of necessary equipment repairs according to the deadlines set by the schedule.

Name of risk or threat	Risk management measures
Risk of substandard insurance protection	- Compliance with the requirements of the Rules for Organisation of Insurance Protection of Samruk-Energy JSC; - A highly qualified organisation's assessment of the insurable amount of assets; - Consent of creditors/shareholders (if any) when selecting an insurance company.
Social risks	- Conducting the annual Samruk Research Services survey of production staff and administrative staff and managers wellbeing; - Formation of a pool of mediators, development of the institution of mediators; - Signing of labour collective bargaining agreements in the Company and subsidiaries and affiliates; - Involvement of employees in the trade union, introduction of meritocracy principles, development of the motivation system; - Conclusion of contracts for voluntary medical insurance; - Ensuring indexation of salaries in accordance with the Development Plan for the relevant year; - Introduction of sustainable development principles into project management practice.
Risk of reputational damage	- Preparation and publication of thematic articles on the Company's activities in mass media, in the Company's official social networks and on the Company's corporate website; - Control over compliance with the Rules of preparation and placement of information materials on the website; - Timely development and posting of the Annual Report on the website; - Timely preparation and dispatch of responses to media enquiries regarding the activities of the Company and its subsidiaries and affiliates; - Sending letters to first line managers to prevent compliance with information standards; - Regular monitoring of negative feedback, timely response to incidents that received coverage in the media and social networks; - Timely initiation of amendments to the Legislation/NPA.
Fraud risk/corruptions/ Theft by staff and third parties	- Annual testing of employees on knowledge of the Anti-corruption Policy; strengthening internal control procedures for safeguarding assets; - Bringing to legislative responsibility the employees who allowed the fact of fraud, theft, corruption; - Familiarising newly recruited officers and employees with the Anti-corruption Policy; - Compliance with the requirements of the Anti-corruption Policy by employees; - Development of an annual anti-corruption plan; - Conducting training for employees on ethical business conduct and building a compliance culture; - Conducting performance audits and investigations to identify the causes of irregularities and eliminate them in the future.
Climatic physical risks	- Modernisation of production facilities; - Investment in the installation of cooling/heating systems; - Monitor compliance with the modernisation and repair plan for equipment and production sites; - Compliance with technical regulations and rules of operation of buildings and structures; - Insurance against natural disasters; - Disclosure of information on climate risk as part of the Annual Integrated Report.
Compliance risks	- Expertise of materials, consultations, preparation of compliance opinions; - Identifying and assessing inherent risk, defining control procedures and developing a risk prevention action plan; - Checking the reliability of partners (beneficiaries) for sanctions by state authorities and international organisations; - Timely consideration of complaints and appeals through proactive reporting and communication to the Company's Executive Body and Management Board; - Conducting training for employees on ethical business conduct and formation of anti-corruption compliance culture; - Conducting performance audits and investigations to identify the causes of irregularities and eliminate them in the future.

Implementation of Samruk-Energy JSC development strategy in 2024

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

Strategic performance indicators according to Development Strategy 2022–2031

Indicator	Fact 2021	Fact 2022	Fact 2023	Fact 2024
Net carbon footprint reduction, thousand tonnes	32,952	31,978	31,877	30,880
Labour productivity[22], thousand KZT/person	10,154	13,273	14,872	56,234
ROI (strategic ROI KPI will be applicable if assets are realised)		-12%		
Net asset value (NAV), KZT million	412,899	442,753	485,969	581,211
Debt/EBITDA (ratio)	2.41	1.90	1.71	1.66
Corporate governance rating	BB	-	-	BB
Output of non-primary goods and services, thousand KZT	332,537,144	381,464,992	444,959,627	573,489,842

[22] Labour productivity is recalculated using the new methodology from 2022.



Strategic performance indicators according to Development Strategy 2024–2033

Purpose	EFFICIENCY	Unit of measurement	Plan 2024	Fact 2024	Forecast 2033
Providing coverage growing demand economies on electrical power and electricity	Total volume of electricity sales from baseload and gas-fired generation	Coefficient to base year 2023	35.2	30.1	≥2.0
	Volume of commissioning of base and gas-fired generation capacities	GW, cumulative total from 2023	500	500	≥7.0
	Technical availability factor (TAF)	%	89.7%	90.9%	≥80%
	Implementation of the plan to meet coal requirements	%	90%	92%	≥90%
Enhancement of operational, financial, and investment efficiency	Debt/EBITDA	coefficient	2.9	1.66	≤3.5
	Specific consumption of fuel equivalent	Grams per 1 kWh	390	365	≤330
	Investments in fixed assets	KZT trln, cumulative total from 2024	0.2	0.2	≥4.0
	Gross inflow of foreign direct investment	billion USD, cumulative from 2024	0.1	0.1	≥8.0
	NAV	Coefficient to base year 2023	1.3	1.2	≥2.0
	EBITDA margin by business segments	Coefficient to base year 2023	Coal mining (22.3%) Electricity generation (44.4%) Heat generation (0.3%) Distribution of electricity (34.9%)	Coal mining (15.1%) Electricity generation (50.6%) Heat generation (4.04%) Distribution of electricity (36.2%)	Coal mining (≥30%) Electricity generation (≥55%) Heat generation (≥0%) Distribution of electricity (≥20%)
Advanced development RES and reduction of negative impacts on environment	Reduction of specific CO_2-eq emissions (relative to the base year 2021) in relation to the total electricity generation	% to base 2021 year	-25.6%	-28.9%	≥40%
	Share of RES and HPP installed capacity in the generation structure	%	31.6%	31.6%	≥40%
Following the best ESG practitioners	Increase in ESG rating level	Rating	Average ESG rating/Medium Risks	3/52 points (average rating)	High ESG rating/Low Risks
	Improvement of social stability rating – SRS index	Rating	Conditionally stable	69	Favourable
	Achieving zero injuries and fatalities (reduction of LTIFR, FIFR, LDR)	coefficient	LTIFR (0.27) FIFR (0.10) LDR (200)	LTIFR (0.99) FIFR (0.09) LDR (170.69)	LTIFR (0.18) FIFR (0.01) LDR (155)



The Company's strategic performance continues to improve. Key growth drivers include:

Production: increase in electricity generation, increase in installed capacity, supply of coal fuel to plants and accurate forecasting of needs.

Economic: tariff growth, reduction of unit costs, cost and debt optimisation. Debt is expected to increase by 2033 due to investment projects.

Environmental: reduction of greenhouse gas emissions, development of RES and hydro generation.

Social: compliance with ESG criteria, increased satisfaction and safer working conditions.

In the reporting period, the Company implemented the approved stages of initiatives and projects corresponding to the strategic goals and 24 key objectives agreed with the Samruk-Kazyna JSC.

Strategic goal	Task	Event	Implementation status
Ensuring coverage of the economy's growing demand for electric capacity and electricity	Construction of coal-fired power plant GRES-3, blocks 1-4	Pre-feasibility study results obtained	The pre-feasibility study project was developed, approved by the SE Board on 17.04.2025 and sent to the State Property and Privatisation Committee for further submission to the RK Ministry of Energy.
	Transition of Bogatyr open-pit mine to cyclic-flow technology	Coal shipment started	Currently, the coal is being shipped by the CPT complex, and after completion of the commissioning and elimination of the existing remarks, the CPT will be put into commercial operation by the end of 2025.
	Modernisation of Almaty CHPP -2	The documentation is subject to expert review	Receipt of the opinion is scheduled for August 2025.
	Reconstruction of Almaty CHPP-3 (450 MW CCGT)	Adjustments to the feasibility study	Receipt of the opinion is planned for July 2025.
	Modernisation of power unit No.3 of EGRES-1	Feasibility study under examination	On 30 December 2024, a positive opinion was received from RSE Gosexpertiza on the feasibility study of the project.
	Expansion of EGRES-2 (installation of unit st. No. 3)	An investment agreement has been concluded	In September 2024, the Ministry of Energy of the Republic of Kazakhstan and GRES-2 JSC concluded an investment agreement for return of investments.
	Reconstruction of electrical networks Almaty	102.22 km of 10 kV cable lines were laid	By the end of 2024, 102.22 km of 10 kV cable lines were laid, compared to the plan of 77.53 km. Construction and installation works for laying cable lines, procurement of cable and wiring products are underway.
	Rehabilitation of power unit No. 1 at EGRES-1	Unit 1 is commissioned	The act of acceptance of the facility into operation dated 23 December 2024 was signed.
	Reduction of wear and tear of power grids	Planned reduction of depreciation to 88.85% by the end of 2024	By the end of 2024, the depreciation of power grids will be reduced to 88.8%.
	Coal exports to the Russian Federation	Ensuring export of unprocessed coal to the Russian Federation (50% shareholding)	By the end of 2024, coal exports totalled 9.317 million tonnes.
	Reduction of losses in the networks of AZhK JSC	Reduction of the level of technological losses in 2024 to 11.25%	At the end of 2024, the level of actual technical losses for the reporting period was 10.72%.

Strategic goal	Task	Event	Implementation status
Improving the efficiency of operating, financial and investment activities	Implementation of the Energy Saving and Energy Efficiency Programme	Improvement of energy resource accounting; organisational, technical, repair, maintenance and operational measures	67 different activities were implemented (including the Eastern HPPs). Implementation of measures to improve energy efficiency in the Samruk-Energy JSC Group of companies allowed saving more than KZT 1.2 billion. 54 rationalisation proposals with an economic effect of KZT 594 million were approved.
	Redomiciliation of Forum Muider to the jurisdiction of AIFC	Cross-border merger of Forum Muider B.V. (Netherlands) into Forum Muider Ltd (Cyprus)	In November 2024, a court order was obtained from Nicosia (Cyprus) for the merger of Forum Muider B.V. (Netherlands) into Forum Muider Ltd (Cyprus).
	Liquidation of Ust-Kamenogorsk HPP JSC and Shulbinsk HPP JSC	Measures to liquidate Shulbinsk HPP JSC were carried out	Shulbinsk HPP JSC was liquidated. Start of measures on liquidation of Ust-Kamenogorsk HPP JSC is planned in the 2nd quarter of 2025.
	Automation of HR processes	Automation of HR processes for the Group of companies of Samruk-Energy JSC	The system has been implemented. The stage of customising the system to meet the requirements of the stakeholders is underway.
	Implementation of information security system	Information security services	Perimeter of information security system projects Corporate Centre and 9 subsidiaries and affiliates. Virtual server deployment with remote access, network and system configuration, running test scans according to specific techniques. Implementation period 2024–2025.
	Implementation of the production monitoring system	Production monitoring system (Situation Centre), which carries out monitoring of business processes related to the economic and production activities of the Company and making operational and managerial decisions	The system is operational in December 2024.
	Roboticisation of business processes (RPA)	Services on the use of the business process robotisation software product	Analysed business processes in 8 subsidiaries and affiliates, described key marketing, procurement and finance processes, and implemented RPA bots in IBM to automate the processes. Implementation period – 2024–2025.
	Electronic archive	Automation of the business process of organising archival storage of documents	The work has been completed and the system has been put into operation.

Strategic goal	Task	Event	Implementation status
	Compliance with financial covenants	Financial covenants of creditors are met	Debt/EBITDA – 1.62 with a threshold of no more than 3.5. EBITDA/interest – 12.23 with a threshold of less than 3.0.
	Implementation of the Modernisation of 1C platform project (ERP)	Works on implementation of an automated information system based on 1C:ERP software in GRES-1	In 2024, EGRES-1 LLP completed such key stages of the project as: system customisation, user training, data migration (loading of NSI), software installation, test operation; data migration (transfer of balances and additional loading of NSI).
	Implementation of the Horizontal Monitoring project	Acquisition of Horizontal Monitoring licence in the KC of Samruk-Energy JSC	The licence has been purchased and the technical specification for the implementation of the Horizontal Monitoring project at the Corporate Centre will start in 2025.
	Installation at GRES-1 of an automated system for monitoring emissions into the environment (station-wide ASM)	Installation at GRES-1 of an automated system for monitoring emissions into the environment at power units st. No. 7 and 8	Installation and commissioning works have been completed. Acts of putting the equipment into pilot operation were signed.
	Installation of an automated environmental emission monitoring system at GRES-2	Installation of an automated emission monitoring system at GRES-2	Since 26 June 2024, SEGRES-2 JSC has been transmitting data from the ASM to the system of the authorised body in the field of environmental protection every 20 minutes on a stream in online mode. The Commissioning Act has been signed.
	Installation of an automated system for monitoring emissions into the environment at AIES	Installation of an automated environmental emission monitoring system at CHPP-1 and ZTK (AIES)	Since 21 November 2024, CHPP-1 and ZTK (AIES JSC) have been transmitting data from the ASM to the system of the authorised body in the field of environmental protection every 20 minutes on the stream in online mode. Signed Acts of Completed Works.
		Installation of an automated environmental emission monitoring system at CHPP-2 (AIES)	Commissioning and test work is currently underway. Expected date for the start of data transfer to the system of the authorised body in the field of environmental protection – May 2025.
	Formation of legislative initiatives and tariff setting	Amendments to regulatory and legal acts in order to include costs for auxiliary equipment in the tariff on the electricity capacity market within the framework of modernisation, reconstruction and (or) expansion of existing energy producing organisations	Amendments are included in the Law of the Republic of Kazakhstan On Electric Power Industry (Draft Law signed on 08 July 2024), as well as in the Rules of Organisation and Functioning of the Electric Capacity Market (Order of the Ministry of Energy of the Republic of Kazakhstan signed on 25 November 2024).
		Amendments to regulatory and legal acts in order to include costs for heat recovery equipment and remuneration on relevant loans in the tariff for the service of maintaining the availability of electric power capacity	On 13 September 2024, amendments to the NAP for CHPP-2 "Rules for consideration of investment programmes for modernisation, reconstruction and (or) expansion with construction of generating units using gas as an alternative fuel type, conclusion of investment agreements for modernisation, reconstruction and (or) expansion with construction of generating units using gas as an alternative fuel type, corresponding conclusion of agreements on purchase of service for maintenance of electric capacity availability" came into force.
		Introduction of amendments to regulatory legal acts in order to reduce the terms of tender procedures. Possibility of determining the winner of the tender by the Government of the Republic of Kazakhstan, if there are less than two bidders	25 November 2024 registered with the Ministry of Justice of the Republic of Kazakhstan. Amendments were made to the Rules for Tendering for Construction of Generating Plants to be Commissioned Again.
		Participation in the development and discussion of legislative initiatives, preparation of relevant recommendations in co-operation with industry associations in order to take into account the interests of the Company and subsidiaries and affiliates	Work is underway to develop and discuss legislative initiatives with government agencies and accredited organisations.
		Monitoring of amendments to legislation in the energy sector in order to adapt the Company's operations in a timely manner	Monitoring of amendments to regulatory acts in the field of electric power industry is carried out on an ongoing basis.
		Amendments to legislation in terms of revising the priority purchase of electricity from CHPPs, which will allow Samruk-Energy's coal-fired plants to additionally sell generated electricity	On 25 November 2024, the amendments were registered with the Ministry of Justice of the Republic of Kazakhstan.
		Introduction of amendments to the Environmental Code of the Republic of Kazakhstan, in terms of postponing the deadline for providing the authorised body in the field of environmental protection with financial security for the fulfilment of its liquidation obligations from 1 July 2024 to 1 July 2026	According to the Law of the Republic of Kazakhstan of 8 July 2024 No.121-VIII of the Law of the Republic of Kazakhstan of 8 July 2024 on heat, electricity and regulated services Amendments were made to the Environmental Code of the Republic of Kazakhstan in terms of financial security of claims on obligations related to the liquidation of the consequences of the implementation of activities.

Strategic goal	Task	Event	Implementation status
		Introduction of amendments to the legislation regarding the possibility of adjusting the investment programme for modernisation, reconstruction and (or) expansion with construction of generating facilities using gas as an alternative fuel type during the period of decision-making by the Ministry of Energy of the Republic of Kazakhstan on conclusion of the Investment Agreement for modernisation, reconstruction and (or) expansion with construction of generating facilities using gas as an alternative fuel type through reconsideration by the Market Council	On 13 September 2024, amendments to the NAP for CHPP-2 Rules for consideration of investment programmes for modernisation, reconstruction and (or) expansion with construction of generating units using gas as an alternative fuel type, conclusion of investment agreements for modernisation, reconstruction and (or) expansion with construction of generating units using gas as an alternative fuel type, corresponding conclusion of contracts for purchase of service for maintaining the availability of electric capacity came into force.
		Introduction of amendments and additions to the Methodology for calculating the level of depreciation of fixed assets of energy producing organisations	Proposals to the Methodology for calculating the level of depreciation of fixed assets of energy producing organisations were submitted to the Kazakhstan Electric Power Association to initiate relevant amendments to the NAP. Amendments were sent to the Ministry of Energy of the Republic of Kazakhstan for adoption.
		Development of alternative mechanisms for financial support of the fulfilment of obligations to eliminate the consequences of the operation of facilities that have a negative impact on the environment	According to the introduced amendments and additions to some legislative acts of the Republic of Kazakhstan on the issues of heat power, electric power and regulated services Law of the Republic of Kazakhstan dated 8 July 2024 No.121-VIII to the Environmental Code of the Republic of Kazakhstan introduced a postponement of the term on financial provision of covering the costs of liquidation of consequences for 5 years. Proposing alternative arrangements at the design stage.
		Participation in improvement of the RK legislation to ensure return on investment for projects for construction of hydro-storage power plants/ hydroelectric power plants (PSPPs/HPPs)	Amendments aimed at establishing an investment return mechanism were developed within the framework of a specially established working group. A working meeting was held at the Ministry of Energy of the Republic of Kazakhstan to discuss the proposed amendments. As part of this work, site visits were conducted to facilities in the People's Republic of China and to the Zagorskaya HPP in the Russian Federation. Based on the outcomes of the visits, a review of applicable investment return mechanisms at operating facilities was prepared and submitted.
		Participation in improving the legislation of the Republic of Kazakhstan in order to ensure return on investment for projects for the construction of electricity storage systems (ESS) through the capacity market (within the framework of the project for the implementation of ESS up to 1 GW (United Green)	Amendments aimed at establishing an investment return mechanism were developed as part of the work of a specially established working group. A working meeting was held at the Ministry of Economic Development of the Republic of Kazakhstan to discuss these amendments. At present, a general concept of the business model for the realisation of ESS projects has been defined.
		Participation in the improvement of legislation to ensure return on investment in the implementation of BAT through the mechanism of the capacity market	According to the amendments and additions made to some legislative acts of the Republic of Kazakhstan on heat, power and regulated services Law of the Republic of Kazakhstan dated 8 July 2024 No.121-VIII amended the Law of the Republic of Kazakhstan On Electricity allowing to include the costs of implementing BAT, within the framework of investment agreements on the capacity market (in the list of auxiliary equipment), in the list of investment agreements on the capacity market.
Advanced development of RES and reduction of environmental impact	Construction of SPP (1 GW) with UNIGRIN ENERGY	The first stage contracts have been signed. The list of projects of the 2nd stage of 500 MW was approved	Power purchase agreements were signed with PGU-Turkestan LLP, KEGOC and Kazatomprom. On 31 December 2024, a protocol was signed to define the 2nd phase of the project with a total capacity of up to 500 MW.
	Carbon Capture and Storage (CCS) technologies	R&D with Nazarbayev University	According to the results of 2024, experiments were carried out on the laboratory unit of steam oxygen-free coal gasification (PBCGU), selectivity, permeability and efficiency of membrane materials with improved characteristics were studied. The influence of mode and design parameters on the coal steam gasification process was investigated. The report is presented, signed by AWR for 2024.
	Sale of carbon units (offsets) and I-REC certificates	Contracts concluded	Consideration is being given to obtaining I-REC certificates.
	Placement of green bonds on KASE and AIX	Information about the Society is provided in AIX	All reports and information about the Company are submitted to AIX as required within the appropriate timeframe.
	Attracting funding from DFO, ECA	Received terms and conditions from MIGA	Received terms and conditions from MIGA as well as various proposals from commercial banks.
	Construction of a 1 GW wind power plant with energy storage system jointly with China Power International Holding Ltd.	Signed by the MEA	On 12 November 2024, an MEA was signed between the Governments of the Republic of Kazakhstan and the PRC on the implementation of RES projects. The project is included in the list of major projects.

Strategic goal	Task	Event	Implementation status
	Construction of WPP (1 GW) with energy storage system together with Masdar	Signing of Project documentation (SoI, SHA, PPA) Establishment of a joint venture	11 November 2024 Qazaq Wind Power LLP project company is established on the basis of AIFC. In November 2024, the Investment Agreement and the Power Purchase Agreement under the project were signed. On 31 December 2024, the SHA was signed.
Adherence to ESG best practices	Strengthening the quality and accessibility of information in public reporting by using international standards and developing best practices of information disclosure. Impact assessment and identification of material topics for the Integrated Annual Report	The 2023 Integrated Annual Report has been prepared in accordance with GRI Standard 2021, AA1000, AIX, KASE, ISO 26000:2010, certain LSE indicators, IR, SASB, TCFD	In determining material topics, the impact was assessed using the double materiality principle. The Integrated Annual Report prepared in accordance with GRI was preliminarily reviewed by the Management Board (Minutes No.13 of 10.05.2024) and approved on 31 May 2024 by the Board of Directors (Minutes No. 07/24).
	Conducting regular training and education for employees on anti-corruption policies and ethical standards to raise awareness and prevent corrupt practices	Trainings and educations for employees on anti-corruption policy and ethical norms were conducted	Trainings have been conducted: 1. Anti-corruption measures in the quasi-public sector; 2. Introduction to Compliance. Anti-corruption legislation. Hotline. Conflict of Interest Management; 3. Code of Conduct as amended. Anti-corruption legislation. Hotline. Universal declaration; 4. Code of Conduct in the new edition. Anti-corruption legislation. Hotline; 5. Anti-Corruption Policy of Samruk-Energy JSC in a new version; 6. Requirements of anti-corruption legislation of the Republic of Kazakhstan, Anti-Corruption Policy of Samruk-Energy JSC, Code of Conduct of Samruk-Energy JSC; 7. Requirements of anti-corruption legislation of the Republic of Kazakhstan, Anti-Corruption Policy of Samruk-Energy JSC, Code of Conduct of Samruk-Energy JSC.
Improvement of ESG rating	An ESG rating was obtained with a score of 52, with an average of "3"	30 December 2024 Report received from Sustainable Fitch Ltd, assigned an ESG rating with a score of 52, average "3".	
Human capital development	Regular training programmes for managers on management skills, leadership, strategic planning and innovation, as well as best practices in management and operational management	During the reporting period, employees of the Company and subsidiaries and affiliates underwent training on the following topics: corporate training HR in ESG context, Diversity, Equality and Inclusion (DEI), strategic session Creating a culture of occupational safety and zero tolerance for workplace fatalities, Public speaking skills in difficult situations, Professionalism within the Company's values, Effective negotiation skills, Public speaking, talent pool meeting with the EIS members on Leader in the new world, etc.	
	Reducing staff turnover	Reduction of staff turnover, except for measures related to personnel optimisation	According to the 2HR report for 2024, staff turnover across the Group was 10% (target is no more than 14%).
	Ensuring social guarantees and social stability in the Company	Samruk Research Services conducted a survey of production personnel of Samruk-Energy JSC's subsidiaries and affiliates and a survey of wellbeing of administrative and management personnel of Samruk-Energy JSC and its subsidiaries and affiliates	The result of Samruk Research Services Company's subsidiaries and affiliates production staff survey for the year 2024 was 69%. According to the results of the study of well-being of administrative and management personnel of Samruk-Energy JSC and its subsidiaries and affiliates, the well-being index was 46%
	Employment of persons with disabilities in jobs that do not require physical activity, e.g. dispatchers, call centre employees in subsidiaries and affiliates	Approved the Programme on creation and maintenance of favourable, inclusive and accessible environment for persons with disabilities in the Samruk-Energy JSC Group of companies by the decision of the Management Board of Samruk-Energy JSC dated 19 June 2024	In 2024, 31 persons with disabilities (PWDs) were employed in the Group of companies of Samruk-Energy JSC, which is higher than the quota (22 PWDs) set by Samruk-Kazyna JSC.
	Approval of the Plan for the implementation of the Occupational Safety Management System Development Strategy of Samruk-Kazyna JSC for 2024–2028	The Plan was developed and sent to subsidiaries and affiliates for implementation	Implementation of the Plan for the implementation of the Occupational Safety Management System Development Strategy of Samruk-Kazyna JSC for 2024–2028 is in progress.
	Preparation of an annual sustainability report in accordance with GRI	Integrated Annual Report prepared in accordance with GRI approved	The Integrated Annual Report prepared in accordance with GRI is preliminarily reviewed by the Management Board and approved on 31 May 2024 by the Board of Directors.
	Providing reports/ information about the Company to creditors, financial institutions, rating agencies in accordance with their requests	Providing reports/information on the Company to creditors, financial institutions as required by the existing loan agreements, rating agencies as per their requests	All reports and information about the Company to creditors, financial institutions in accordance with the requirements of the existing loan agreements are provided in due time. Information to the rating agencies was provided in due time and the rating was confirmed on 14 October 2024.
	Reproduction of fishery resources	Stocking of reservoirs	On 16 August 2024, AES Shulbinsk HPP LLP stocked the reservoir with 22,180 yearlings of carp (carp). On 8 October 2024 AES Ust Kamenogorsk HPP LLP stocked the reservoir with 107,931 pieces of carp (carp).

Aydarov Ansar Aydaruly

Chief Investment Officer

Samruk-Energy JSC applies a comprehensive approach to risk management. During the project selection stage, technical, financial, environmental, and regulatory risks are analyzed.

To this end, highly qualified experts and international consulting firms are engaged. Particular attention is given to climate-related risks – for example, based on the results of a feasibility study and in light of the annual decline in water levels in the Ili River, a decision was made to terminate the construction of the regulating hydropower plant ahead of schedule. Such measures enable effective risk management and ensure the successful implementation of projects.

Investment activities

In 2024, Samruk-Energy JSC continued the implementation of major investment projects, taking into account the dynamically changing external economic conditions. The Company maintains its focus on improving the reliability of energy supply, developing the renewable energy sector, minimizing the environmental impact of its activities, and strengthening Kazakhstan's energy security and independence.

Our approach

Samruk-Energy JSC's strategy in investment activities focuses on diversification of financing sources, including active attraction of funds from international financial organisations and energy companies. In 2024, the Company signed agreements with Total Energies, Masdar, Power China, and Energy China to implement renewable energy projects. We use various investment attraction mechanisms, such as public-private partnerships and green bonds, which allows us to ensure stable financing.

The priority of Samruk-Energy JSC's investment activities is to create long-term value, introduce new technologies and create quality jobs. The Company focuses on commercial feasibility and a responsible approach, taking into account environmental, social and governance factors to effectively manage risks and ensure sustainability.

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, sustainability reports, including ESG factors, in accordance with generally recognised international or national auditing standards;
- a formalised 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;

- minimising 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, 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.

Samruk-Energy JSC applies a comprehensive approach to risk management in the implementation of investment projects. At the project selection stage, a thorough analysis of technical, financial, environmental, and regulatory risks is carried out with the involvement of highly qualified experts and international consulting companies. Special attention is paid to climate risks. For example, based on the results of the feasibility study, taking into account the annual decrease in the water level of the Ili River, a decision was made to terminate the construction of the regulating HPP ahead of schedule. This approach allows for effective risk minimization and guarantees the successful implementation of projects.

The effectiveness of Samruk-Energy JSC's investment projects is assessed by key indicators such as implementation timelines, budget utilization, achievement of planned capacities, and environmental outcomes.

Samruk-Energy JSC has formed a list of capital and "green energy transition projects" included in the 2024–2033 Strategy (more details on the website of Samruk-Energy JSC: www.samruk-energy.kz).

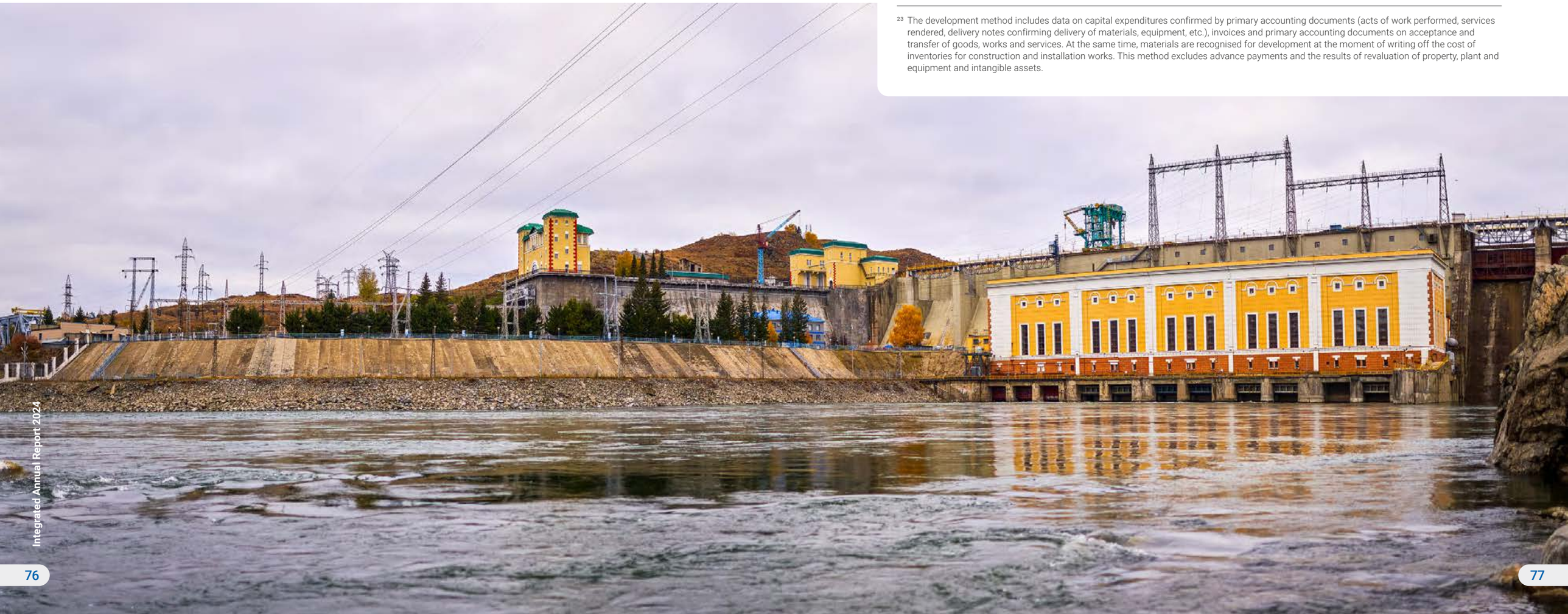
Implementation of the Investment Programme of Samruk-Energy JSC in 2023, by development method, million KZT (excluding VAT)[23]

CAPEX by area	2022 fact	2023 fact	2024 fact	2025 Forecast	2026 Forecast
Volume of capital investments, total	100,580	132,146	229,787	360,587	1,394,336
Investment projects	58,372	80,393	136,375	193,275	1,202,537
Maintaining production assets	41,052	49,555	89,715	152,403	189,977
Maintenance of administrative assets	1,157	2,198	2,967	12,107	1,806
Other investments	0	0	731	2,803	15

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 2025, Samruk-Energy JSC will continue implementing key projects, including construction of CHPPs in Kokshetau, Semey and Ust-Kamenogorsk, completion of gasification of Almaty CHPP-2 and CHPP-3, as well as development of RES – wind and solar power plants in various areas. It is planned to complete construction of Semey HPP to increase the regulating capacity of the energy system. Within the framework of the 1,100 MW combined cycle gas turbine project in Kyzylorda region, feasibility studies, expertise and financial close will be completed in 2025. The Company will also continue to work with international partners to attract investment and technology, which will improve energy security and promote decarbonisation.

[23] 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.



Investment projects implemented in 2024

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 electrostatic precipitators will increase the installed capacity of GRES-1 up to 4,000 MW.

Results 2024:

- Start-up and commissioning works were completed between August and October 2024;
- On 23 December 2024, an act of acceptance of the facility for operation was signed;
- On 26 December 2024, the act of the results of the attestation by the system operator KEGOC JSC was signed.

2 Project Construction of 110/10kV substation Kokozek with connection to 110kV switchgear-110kV of 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.

Results 2024:

- Adjustment of the design and construction project with a favourable conclusion of the State Expertise Committee was completed;
- Completed construction and assembly works on 10 kV CL-10 kV of substation No.180 A Kokozek – substation No.77A Kokozek;
- The Act of Acceptance of the facility into operation was signed.

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



Investment projects of Samruk-Energy JSC

1 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.

Implementation period:

2006–2028

Results 2024:

- On 31 May, the Feasibility Study of the project received a positive opinion from RSE Gosexpertiza, and corporate procedures are underway to approve the results of the project Feasibility Study;
- 28 August 2024 EPC – contract with the Russian-Kazakh consortium was signed;
- On 12 September 2024, an Investment Agreement was signed with the DOE of the Republic of Kazakhstan for Block 3;
- On 8 November 2024, a public hearing on the Environmental Impact Assessment (hereinafter referred to as EIA) was held;
- On 27 November 2024, an opinion on the EIA public hearing was received from the Environmental Regulation and Control Committee;
- On 27 November 2024, during the state visit of V.V. Putin, an agreement was signed with LLC ORGRES on cooperation to reduce environmental emissions. Putin signed an agreement with OOO ORGRES on co-operation to reduce environmental emissions.

2 Project Modernisation 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.

Implementation period:

2022–2026

Results 2024:

- 19 June 2024 The Law of RK On Electric Power Industry was amended to include in the tariff for installed capacity the possibility of recovering capital costs for the construction of the heating part;
- On 2 July 2024, received the First Drawdown of KZT 21.2 billion from the EBRD;
- On 20 September 2024, the Invest Headquarters approved access to the site until the positive conclusion of RSE Gosekspertiza on the design and environmental permits with minimisation of environmental impact;
- On 27 September 2024, the positive conclusion of RSE Gosexpertiza on the feasibility study adjustment was received;
- On 01 November 2024, the development of the project design and construction documentation was completed and uploaded to the portal of RSE Gosexpertiza;
- On 2 December 2024, received an additional tranche under the first sample in the amount of KZT 22.9 billion from the EBRD;
- On 20 December 2024, received a tranche of the first sample of KZT 15 billion from ADB;
- 31 December 2024 Investment Agreement was signed between AIES JSC and the Ministry of Energy of the Republic of Kazakhstan.

3 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.

Implementation period:

2021–2026

Results 2024:

- On 16 February 2024, by the order of the Acting Minister of Energy of the Republic of Kazakhstan, the Rules for Organising Auction Bidding were adopted, increasing the commissioning period from 36 to 48 months (corporate procedures are underway to sign the Additional Agreement with RFC LLP);
- On 20 February 2024 the EPC Contractor signed a contract with Ansaldo Energia (Italy) for supply of 2 gas turbine units with the following deadlines for equipment manufacturing (FCA): GTP with generator for PK-1 – February 2025, GTP with generator for PK-2 – May 2025;
- On 17 May 2024, the EPC Contractor signed a Slot Reservation Agreement with Dongfang Electric International Corporation (Slot Reservation Agreement) for the supply of steam turbines with generators;
- On 20 June 2024, the EPC Contractor signed a Contract with Dongfang Electric International Corporation for the supply of steam turbines with generators;
- On 30 June 2024, the EPC Contractor signed a Contract with ZIO Podolsk for the supply of the HRSG;
- On 20 September 2024, the Invest Headquarters approved access to the site until the positive conclusion of RSE Gosekspertiza on the design and environmental permits with minimisation of environmental impact;
- On 12 December 2024, the first tests of the Ansaldo Energia equipment took place.
- On 26 December 2024, the draft DCP was checked for completeness after being uploaded on the portal of RSE Gosexpertiza.

4 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.

Implementation period:

2027–2032

Results 2024:

- The active phase with SGP construction is planned after completion of the CHPP-2 and CHPP-3 projects in 2027.

5 Project Project Reconstruction of cable networks in Almaty

Project Description and Purpose:
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"".

Results 2024:

- 98 km of cable lines were replaced, one distribution substation (DS), transformer substations (TS) for KTPB – 8 units, 13 TS were reconstructed, 15 transformers were replaced;
- 3 facilities were put into operation;
- Adjustment of design and estimate documentation was carried out for 3 projects;
- Construction and installation works on 9 projects continued.

Implementation period: **2022–2030**

6 Project Reconstruction and Modernisation 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 2024:

- Under the order of the World Bank under the allocated grant, the consulting company AFRY Switzerland conducted a feasibility study (FS), proposing five options for modernisation and reconstruction of the HPP. The Technical Council of AIES JSC chose the most optimal option (2A), which includes complete replacement of the existing power and mechanical equipment (EMO), as well as all auxiliary equipment. Under this option, it is envisaged to increase the capacity of HPP-11 through direct connection with HPP-7 and reduce the number of units from 3 to 2 at HPP-1 and HPP-2.
- Activities were carried out to organise financing for the project. Proposals were received from the Asian Development Bank (ADB) (grant for feasibility study development), BCC-Invest, Halyk Bank, Zhusan Bank. Familiarisation meetings were held with potential project participants, including Eser Contracting & Industry Co. Inc (Turkey) and Genc Kz Construction LLP.
- A Project Roadmap has being developed jointly with ADB. A Memorandum of Understanding was signed with ADB for feasibility study development by the bank's project proponent.

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

Project Description and Purpose:
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 2024:

- On 2 February 2024 the Decree of the President of the RK on ratification of the MEA was signed;
- On 28 November 2024, supplementary agreement to the Investment Agreement was signed.

Implementation period: **2021–2028**

8 Project 1 GW wind power plant with energy storage system in Zhambyl region in cooperation with MASDAR

Project Description and Purpose:
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 intermittency of wind generation.

Results 2024:

- On 12 November 2024, Qazaq Wind Power LLP Portfolio Company was established on the basis of Astana International Financial Centre (AIFC);
- On 12 November 2024, an Investment Agreement (IA) was signed on the margins of the COP-29;
- On 15 November 2024, a PPA (power purchase agreement) was signed on the margins of COP-29.

Implementation period: **2023–2029**

9 Project 1 GW wind power plant with energy storage system in Zhambyl region in cooperation with China Power International Holding (CPIH)

Project Description and Purpose:
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 2024:

- On 5 March 2024, Astana Green Energy Holding Ltd was registered on the MFCA;
- On 12 November 2024, an intergovernmental agreement (IGA) was signed between the ROK and the PRC on the margins of COP29.

Implementation period: **2023–2029**

10 Project Construction of SPP with a total capacity of 1 GW together with Unigreen Energy

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

Implementation period:

2023–2028

Results 2024:

- On 28 December 2023, the List of projects of the first phase of 500 MW was signed;
- Offtake contracts were concluded with the Fund's subsidiaries and affiliates with conditions precedent;
- On 31 December 2024, a protocol was signed to define the 2nd stage of 500 MW.

11 Project Semey HPP construction project

Project Description and Purpose:
The main prerequisite for the implementation of the Semey HPP project is the deficit of regulating and manoeuvring capacity in the Unified Energy System of the Republic of Kazakhstan. The HPP project, which is a counter-regulator for the Shulbinsk HPP, is included in the Hydropower Sector Development Plan of the Republic of Kazakhstan. The construction of Semey HPP on the Irtysh River is planned in the north-eastern part of Kazakhstan, in the Abai region, near the Semey city, in the middle reaches of the Irtysh River.

Implementation period:

2023–2031

Main parameters of the project (based on the results of the pre-feasibility study):

- The installed capacity of Semey HPP is about 300 MW.
- The average annual electricity generation of Semey HPP is approximately 1.244 billion kWh.

In addition to its own energy effect, the project provides for the creation of a weekly-daily regulation reservoir to equalise the uneven discharges of the Shulbinsk HPP. This will make it possible to transfer the Shulbinsk HPP into the mode of covering the peak and semi-peak parts of the UES of Kazakhstan electric load schedules, using the entire installed capacity of the plant. Thus, the regulating capacity of Shulbinsk HPP can be increased up to 500 MW.

Results 2024:

- On 20 March 2024, the Government of the Republic of Kazakhstan and the Government of the State of Qatar signed an Agreement to establish a long-term strategic partnership for the development of projects in priority sectors, including construction of the Project;
- Work has been completed to develop a pre-feasibility study for the Project;
- On 31 December 2024, a Joint Development Agreement for the Project (Joint Development Agreement) was signed with Nebras Power.



12 Project Construction of a new power plant GRES-3 based on clean coal technologies

Project Description and Purpose:
Construction of a new coal-fired power plant GRES-3 with manoeuvrable mode of generation based on clean coal technology with a capacity of 2,640 MW (four power units of 660 MW each), which will cover the shortage of maneuverable capacity in the country with compliance with modern environmental standards on emissions into the atmosphere.

Implementation period:

Block 1 – 2030

Block 2 – 2031

Blocks 3,4 – 2034-2035

Results 2024:

- Together with the Ministry of Energy of the Republic of Kazakhstan, the location of GRES-3 in Pavlodar region on the territory adjacent to GRES-2 was determined (minutes of the meeting of the Ministry of Energy of the Republic of Kazakhstan dated 25 January 2024);
- In May 2024, an additional agreement was concluded for the development of pre-feasibility study taking into account 4 power units;
- The preliminary short-list of potential investors represented by KCG Trading/Sun Mir Astana LLP (China/RK consortium), Zhong Mao Group (China) and East Hope Group (China) was determined;
- On 8 July 2024, the necessary legislative amendments for the project were signed by the Head of State as part of the amendments to the legislative acts on heat, electricity and regulated services;
- On 15 November 2024, the materials of the feasibility study developed by Power China were received from the investor KCG and handed over to the project organisation for adaptation with the pre-feasibility study materials;
- On 20 November 2024 the Order of Akimat of Solnechny settlement on allocation of land plot of 170 ha was received;
- On 22 November 2024, a Temporary Compensated Land Use Agreement was signed with the Ekibastuz OZO for the station site;
- On 27 December 2024, the Order of the Akimat of Solnechny settlement was received, and the Agreement on temporary compensated land use was signed with the OZO of Ekibastuz for the land plot with the area of 32.8 hectares.

13 Project Modernisation of Power Unit No. 3 of GRES-1

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

Results 2024:

- On 11 October 2024, the developed Feasibility Study was uploaded to the portal of RSE Gosexpertiza for non-departmental expertise of the project;
- On 30 December 2024, a positive opinion of RSE Gosekspertiza was received.

Implementation period: **2023–2028**

New investment projects

1 Project Construction of 500 MW HPP in Karaganda region, 300 MW HPP in Turkestan region jointly with China Energy Overseas Investment Co., Ltd (China Energy)

Project Description and Purpose:
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 and solar generation.

Implementation period:

2024–2028

Results 2024:

- On 17 January 2024, a Memorandum of Understanding was signed with the Akimat of Turkestan region;
- On 17 April 2024, the ROK DOE and Energy China signed a Memorandum of Understanding on investment in the energy sector;
- On 2 July 2024, an Agreement of Principles was signed between Energy China and Samruk-Kazyna JSC for the implementation of the Project;
- On 15 October 2024, an Agreement on joint project development was signed between Samruk-Energy JSC and Energy China (JDA);
- On 12 November 2024, at the COP29 conference, an Agreement on joint project development was signed between Samruk-Energy JSC and Energy China (JIA). On 12 November 2024, an intergovernmental agreement (IGA) between the Republic of Kazakhstan and the People's Republic of China was signed on the sidelines of COP29.

2 Project Construction of a combined heat and power centre in Kokshetau city

Project Description and Purpose:
Construction of a new combined heat and power plant in Kokshetau city with an electric capacity of 240 MW and a heat capacity of 520 Gcal to ensure reliable heat and power supply in the region.

Implementation period:

2023–2028

Results 2024:

- On 17 April 2024, an agreement was signed between the Governments of the Republic of Kazakhstan and the Russian Federation on projects for the construction of coal-fired combined heat and power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk on the territory of the Republic of Kazakhstan;
- On 24 June 2024 the project company Kokshetau TPP LLP was registered;
- On 29 August 2024, a contract was signed between Kokshetau TPP LLP and LLC Inter RAO-Export for the development of design and estimate documentation for the project;
- Technical conditions were obtained for connection to heat and water supply and water disposal networks, for connection to power grids for the construction period and for connection to railway tracks;
- A land plot for the construction of the station was obtained.

3 Project Construction of a combined heat and power centre in Semey city

Project Description and Purpose:
Construction of a new combined heat and power plant in Semey city with an electric capacity of 360 MW and heat capacity of 1,060 Gcal to ensure reliable heat and power supply in the region.

Implementation period:

2023–2029

Results 2024:

- On 17 April 2024, an agreement was signed between the Governments of the Republic of Kazakhstan and the Russian Federation on projects for the construction of coal-fired combined heat and power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk on the territory of the Republic of Kazakhstan;
- On 24 June 2024 the project company Semey Energy LLP was registered;
- Technical conditions for connection to the power grid were obtained;
- Land plots were obtained for construction of the station, water intake, construction and operation of the ash dump.

4 Project Construction of heat and power centre in Ust-Kamenogorsk city

Project Description and Purpose:
Construction of a new combined heat and power plant in Ust-Kamenogorsk city with an electrical capacity of 360 MW and a thermal capacity of 1,007 Gcal to ensure reliable heat and power supply to the region.

Implementation period:

2023–2029

Results 2024:

- On 17 April 2024, an agreement was signed between the Governments of the Russian Federation and the Republic of Kazakhstan on projects for the construction of coal-fired combined heat and power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk in the Republic of Kazakhstan;
- On 24 June 2024, the project company Oskemen Energy LLP was registered;
- Connection points to engineering networks (design boundaries) have been obtained.

5 Project Construction of a power plant based on a combined cycle gas turbine with a capacity of about 1100 MW in Kyzylorda region

Project Description and Purpose:
The project is being implemented to introduce new manoeuvring capacities in the South Zone of UES RK. The project also includes construction of the Kyzylorda-Shymkent and Kyzylorda-Zhezkazgan transmission lines, which will be transferred to the ownership of the system operator KEGOC JSC.

Implementation period:

2024–2029

Results 2024:

- On 14 February 2024, an Agreement of Principles (Heads of Agreement) was signed between the Ministry of Energy of the Republic of Kazakhstan, Samruk-Kazyna JSC and Urbacon Concessions Investments WLL (UCC) – the Project investor;
- On 20 March 2024, an Intergovernmental Agreement was signed between the Government of Qatar and the Government of the Republic of Kazakhstan (MPS);
- On 30 October 2024, the IGA was ratified by the Law of the Republic of Kazakhstan No.133-VIII On Ratification of the Agreement between the Government of the Republic of Kazakhstan and the Government of the State of Qatar on the Establishment of a Long-Term Strategic Partnership for the Development of Projects in Priority Sectors;
- December 2024, Samruk-Energy JSC and UCC signed a Joint Implementation Agreement (JIA) for the Project;
- On 25 February 2025, the Shareholders Agreement (SHA) of the Project was signed between Samruk-Energy JSC and UCC in Doha, Qatar.



3 PERFORMANCE INDICATORS

91 Key financial indicators
102 Operating companies
122 Sustainable supply chain and procurement policies



Key financial indicators

Macroeconomic factors

In December 2024, the annual inflation rate in Kazakhstan was 8.6%, down from 9.8% in 2023.

Food prices in December increased by 5.5% year-on-year, indicating some acceleration in growth compared to previous months. This trend is driven by a number of factors, including seasonal price fluctuations, changes in global food prices, as well as the impact of domestic factors such as transportation and logistics costs. Non-food products showed an increase of 8.3% over the year, which is also within forecasted values. However, the most pronounced growth was observed in the paid services sector, where the annual price increase was 13.3%.

The foreign exchange market also underwent significant changes. In December 2024, the exchange rate of the KZT against the USD reached KZT 523.54 per dollar, reflecting a 15% depreciation of the national currency since the beginning of the year, which is due to a combination of factors, including increased demand for foreign currency from importers, increased dollarization of the economy, as well as external economic factors such as commodity price dynamics and the policies of the world's largest central banks.

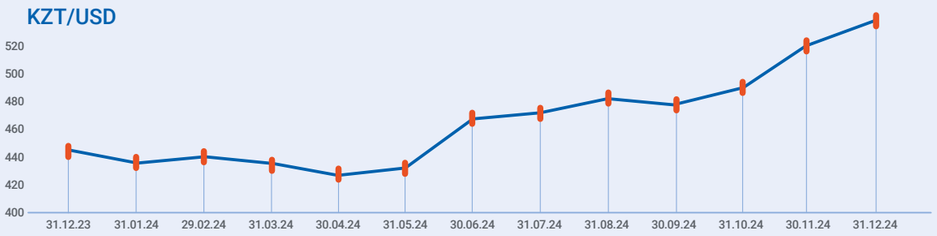
The reduction of the current account deficit to USD 4.4 billion and the growth of international reserves to USD 105.7 billion indicate an improvement in the country's external economic position. However, ongoing budget expenditures and continued deficit financing from the National Fund represent a long-term challenge to macroeconomic stability. In the future, a possible reduction in budget dependence on transfers and diversification of the country's economic structure may play a key role in ensuring sustainable economic growth.[24]

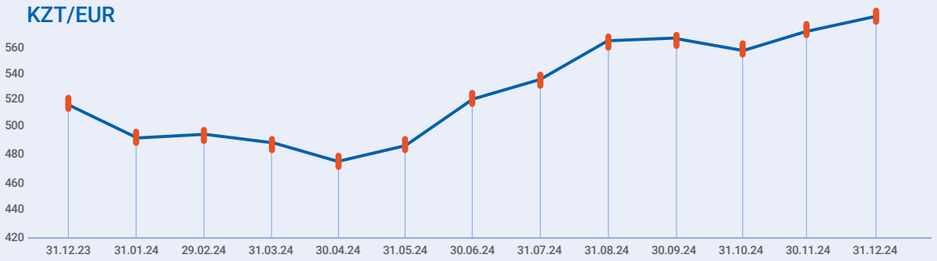
Exchange rate dynamics

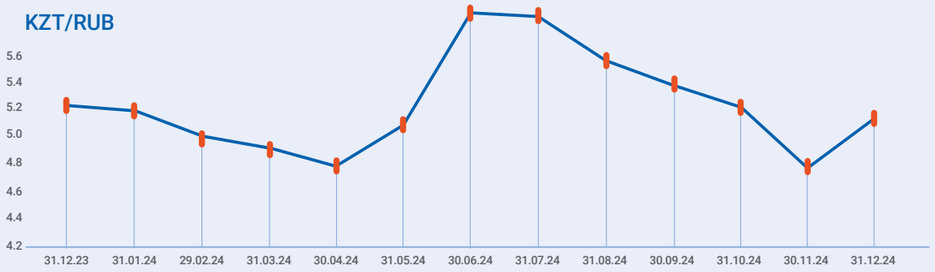
	31.12.2023	31.12.2024	%
KZT/USD	454.56	523.54	115%
KZT/EUR	502.24	546.47	109%
KZT/RUB	5.06	4.99	99%

[24] Bureau of National Statistics of the Agency for Strategic Planning and Reforms of RK, National Bank of RK, Halyk Finance.









Financial and economic indicators

Key financial and economic indicators, KZT million[25]

Indicator	2022 fact	2023 fact	2024 fact	2025 forecast
Income from sales of products and services	381,465	444,960[26]	573,490	691,659
Cost of sales and services rendered	288,929	329,676[26]	371,645	479,409
Gross profit	92,536	115,284	201,845	212,250
Operating profit	64,574	92,828	172,987	176,610
Profit before depreciation, interest, and CIT (EBITDA)	141,382	159,484	226,241	266,714
Profit (loss) before tax	46,417	63,082	147,524	147,352
Corporate income tax expenses	16,111	19,352	34,555	34,009
Total income (loss) before minority interest	30,306	43,730	112,969	113,342
Minority interest	175	649	461	712
Total income attributable to the Group's Shareholders	30,132	43,080	112,508	112,631

[25] The breakdown of revenues and cost of sales is shown by type of activity (not by segment) and is stated without elimination.

[26] The financial indicators for 2023 are presented without restatement to reflect the acquisition of entities under common control – AES Shulbinsk HPP LLP and AES Ust Kamenogorsk HPP LLP.

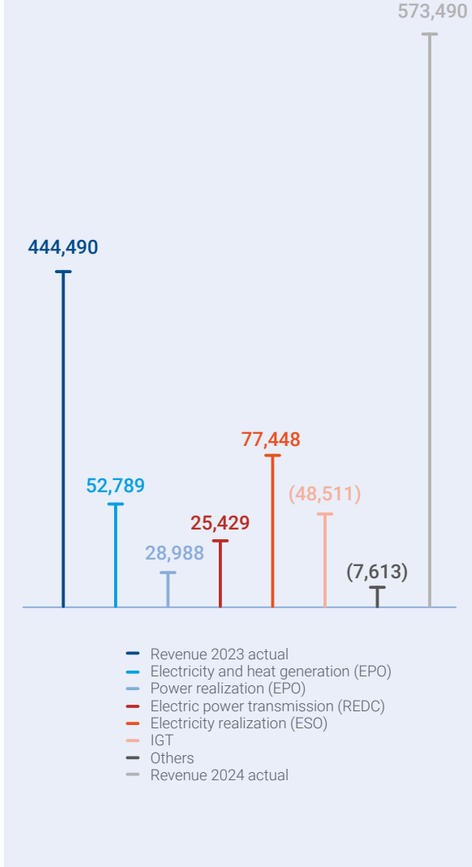
Kamalov Almasbi Nizamaddinovich

Managing Director for Economy and Finance

In 2024, we surpassed the milestone of 110 billion tenge in net profit for the first time – 2.5 times higher than last year's level.

This growth became possible thanks to the coordinated efforts of our entire team, a balanced financial policy, effective liquidity management, and the timely implementation of investment projects. This achievement not only confirms the resilience of our business model but also opens new opportunities for further development, investment attraction, and strengthening our position in the market.

Revenue from Sales of Products and Services



Revenue from sales of products and services for the Group of companies of the Society in 2024 amounted to

573,490 KZT million

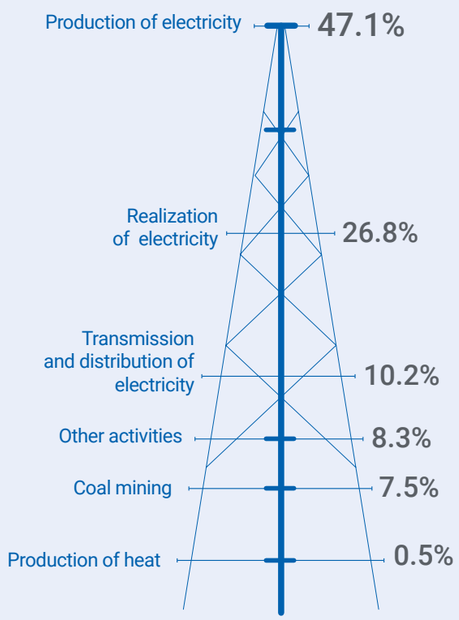
The increase in consolidated revenue occurred mainly in the sales segment; the growth in revenue is associated with an increase in electricity sales volumes by 1,651 million kWh (23%) and the electricity sales tariff of the Branch of Alatau Zharyk Company JSC – Energysales from 23.64 KZT/kWh to 28.03 KZT/kWh. The increase in revenue from electricity transmission is due to the growth in electricity transmission volumes by 572 million kWh (7%) and the electricity transmission tariff of Alatau Zharyk Company JSC from 7.68 KZT/kWh to 9.95 KZT/kWh.

In the power generation segment, revenue growth was due to the inclusion of AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP into the consolidation perimeter, growth in sales volumes of hydroelectric power plants due to higher inflow, increase in marginal tariffs of EPO from 1 January 2024, as well as due to the increase in the volume of capacity sales based on the results of the conducted tenders for 2024 and inclusion of capacity volumes of AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP into the consolidation perimeter.

Additionally, an increase is observed in the heat energy production segment due to the growth in sales volume of Almaty Electric Stations JSC and the inclusion of volumes of Energy Solutions Center LLP (Ekibastuz

CHPP) in the consolidation perimeter. Furthermore, the tariff of Almaty Electric Stations JSC for thermal energy increased from 4,215 KZT/Gcal to 5,195 KZT/Gcal.

Revenue structure for 2024 by main types of activity



Forecast for the future period

In the forecast for 2025, revenue from sales is planned at KZT 691,659 million which is KZT 118,169 million or 21% higher than the actual for 2024. The increase is due to the growth of tariffs for electricity generation and sales, volumes and tariff for capacity (from KZT 1,065 k/MWh*month to KZT 1,169 k/MWh*month), as well as the commissioning of Block No.1 of LLP "Ekibastuz GRES-1".



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

Indicator	2022 fact	2023 fact	2024 fact	2025 forecast
Income from sales of products and services	381,465	444,960	573,490	691,659
Ekibastuz GRES-1 LLP	189,266	186,939	198,847	257,776
Branch of Alatau Zharyk Company JSC – Energy Sales	137,578	168,309	247,127	304,146
Almaty Electric Stations JSC	86,220	96,660	125,605	133,983
Alatau Zharyk Company JSC	53,842	67,712	94,009	110,428
Moynak HPP JSC	22,804	21,720	25,768	21,761
Shardara HPP JSC	8,680	8,991	8,602	7,729
AES Ust Kamenogorsk HPP LLP	-	-	10,915	11,190
AES Shulbinsk HPP LLP	-	-	16,603	16,371
First Wind Power Plant LLP	4,987	6,170	6,641	7,918
Bukhtarma HPP JSC	4,181	21,837	16,520	24,135
Energy Solution Center LLP (ETEC)			4,233	10,594
Branch of Energy Solution Center LLP – SSC	1,515	1,595	1,945	3,209
Samruk-Green Energy LLP	409	500	659	755
Intragroup turnovers (elimination)	-128,016	-135,475	-183,986	-218,337

The major share in the Company's operating income is held by Ekibastuz GRES-1 LLP, Almaty Electric Stations JSC, Alatau Zharyk Company JSC, Branch of Alatau Zharyk Company JSC – Energosbyt. 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

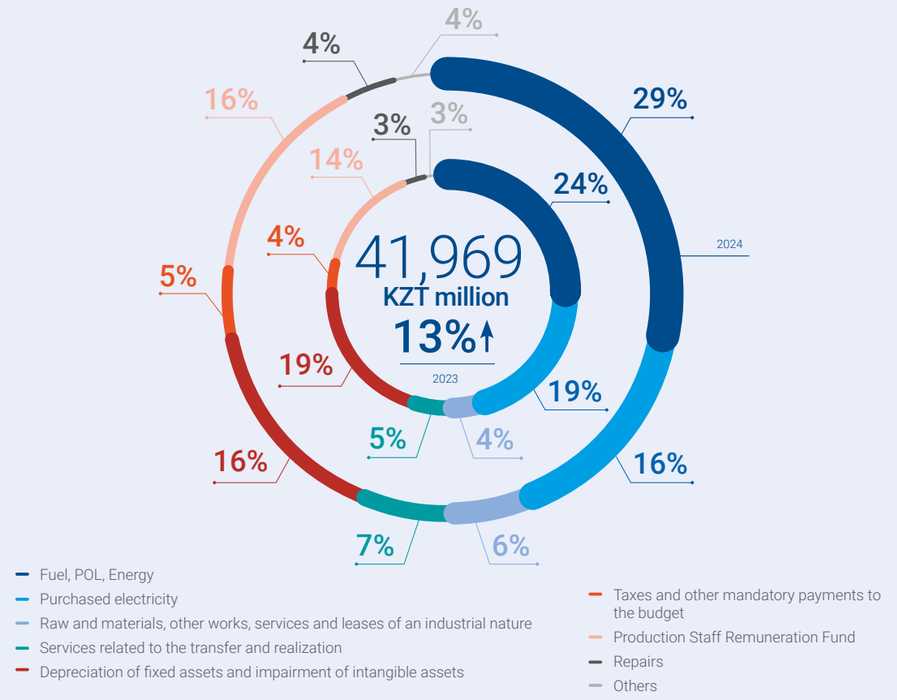
Cost of products and services, KZT million

Indicator	2022 fact	2023 fact	2024 fact	2025 forecast
Fuel	68,247	91,379	105,269	138,644
Labour remuneration and related costs	45,643	53,766	69,099	85,019
Cost of purchased electricity	50,991	56,404	46,366	63,763
Electric capacity availability maintenance services	8,819	8,848	15,644	20,714
Depreciation of property, plant and equipment and amortisation of NMA	59,764	62,556	58,020	76,220
Repairs and maintenance	9,950	11,377	12,979	16,757
Electricity transmission services	16,847	16,922	20,307	20,752
Materials	2,181	2,777	4,335	5,425
Water supply	7,106	7,582	10,464	12,092
Network losses	2	2	0	0
Taxes, except income tax	4,642	4,633	5,042	7,127
Environmental emission charges	7,664	4,435	5,337	9,223
Third-party services	3,385	3,350	11,719	14,507
Others	3,688	5,643	7,064	9,166
Total	288,929	329,676	371,645	479,409

Cost of sales for 2024 totalled KZT 371,645 million, which is 13% higher than in 2023. The increase in costs is due to an increase in variable production costs (coal, gas, services of KEGOC JSC, etc.) in connection with the growth of prices for goods and services, costs on the balancing electricity market (hereinafter – BEM), labour costs of production personnel as part of social support to employees of subsidiaries and affiliates, taxes and other mandatory payments to the budget, indexation of prices for raw materials and production materials.

Depreciation for 2024 was KZT 58,020 million, a decrease of KZT 4,536 million or 8% compared to the same period last year. The main decrease for Ekibastuz GRES-1 LLP is due to revision of service life of fixed assets.

Cost structure by main types of activity



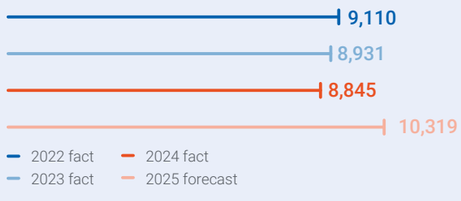
Forecast for the future period

In the forecast for 2025, the cost of production increases due to higher prices for goods and services, the cost of purchasing balancing electricity at the BRE, an increase in labour costs for production personnel, as well as an increase in production volumes.

Profit and selling expenses

Sales expenses for 2024 decreased by KZT (86) million (by 1%) compared to 2023 and totalled KZT 8,845 million. This deviation is caused by a decrease in costs for KEGOC JSC services in organising the balancing of electricity production-consumption due to the tariff reduction.

Distribution costs, KZT million



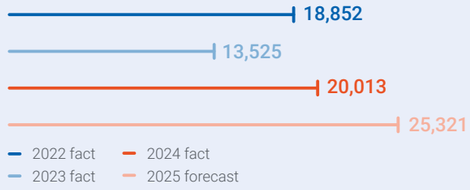
Forecast for the future period

In the forecast for 2025, distribution costs are planned at KZT 10,319 million, which is KZT 1,474 million or 17% higher than in 2024. The increase in distribution costs is due to an increase in the volume of electricity output from the tyres of Ekibastuz GRES-1 LLP (commissioning of Block No.1), as well as an increase in the prices for the services of KEGOC JSC.

Administrative expenses

At year-end 2024, administrative expenses totalled KZT 20,013 million, up KZT 6,488 million or 48% on the same period in 2023, mainly due to the inclusion of AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP and Energy Solutions Centre LLP (Ekibastuz CHPP) within the consolidation perimeter.

Administrative expenses, KZT million



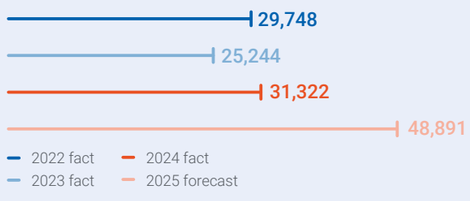
Forecast for the future period

In the forecast for 2025, administrative expenses are higher than the 2024 level by KZT 5,308 million. The increase is mainly due to the indexation of wages as part of social support for employees of subsidiaries. Also, the increase is due to the inclusion in the consolidation perimeter of the Company of OAR Energy Solutions Center LLP (Ekibastuz CHPP) (in the actual for 2024, these expenses were consolidated for 5 months).

Finance costs

Finance costs for 2024 amounted to KZT 31,322 million, which is KZT 6,078 million higher than the actual value for 2023. The increase is due to the recognition of expenses on loans of Ekibastuz GRES-1 LLP (Block No.1) in current expenses.

Financial costs, KZT million

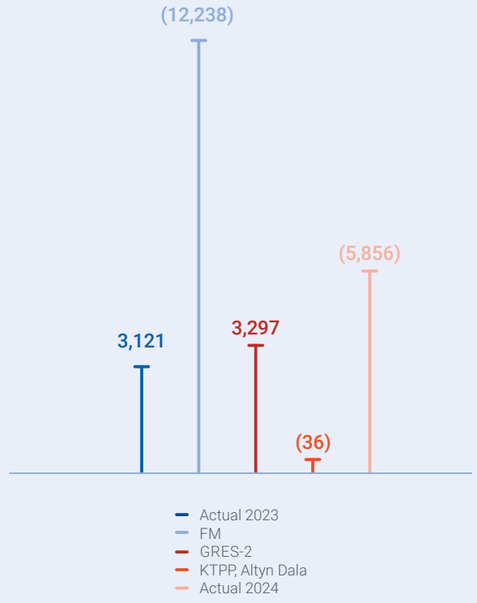


Forecast for the future period

In the forecast for 2025, finance costs amount to KZT 48,891 million. The increase is mainly due to the recognition of expenses on loans of Ekibastuz GRES-1 LLP (reconstruction and modernisation of fuel supply) and Almaty Electric Stations JSC (gasification of the Almaty energy complex) in current expenses.

Share of profit of joint ventures and associates

Indicator, KZT million	2022 fact	2023 fact	2024 fact	2025 forecast
Share of profit of joint ventures and associates	16,103	3,121	-5,856	12,499



Loss from equity companies for 2024 totalled KZT 5,856 million, a decrease of KZT 8,977 million compared to the same period, mainly due to a decrease in operating profit as a result of lower operating income (lower export volumes) and higher operating costs, as well as higher financing costs (exchange rate difference) and other expenses from non-core activities (including impairment loss on other assets).

Liquidity and financial stability indicators

Samruk-Energy JSC has achieved the target indicators for financial stability ratios set by the shareholder.

Fulfilment of covenants from external creditors

Covenant	Normative	2021 fact	2022 fact	2023 fact	2024 fact	Note
Debt/EBITDA (EBRD, ADB)	no more than 3.5	2.70	2.14	1.74	1.62	Observed
EBITDA/Interest (EBRD, ADB)	at least 2.2	5.00	5.92	10.8	12.23	Observed
Debt/Equity (BDC)	no more than 2.0	0.59	0.50	0.43	0.49	Observed

Name	2019 fact	2020 fact	2021 fact	2022 fact	2023 fact	2024 fact
Debt/EBITDA	3.31	2.96	2.41	1.90	1.71	1.66
Debt/Equity	0.56	0.54	0.59	0.50	0.43	0.49
Current liquidity	0.70	0.75	0.53	0.57	1.04	1

Based on the results of 2024, Samruk-Energy JSC complied with financial and non-financial covenants of creditors, which are fixed on a semi-annual basis.

Debt burden

According to the results of 2024, the consolidated nominal debt of the Company totalled KZT 403.3 billion, the increase in nominal debt for the reporting period compared to the results of 2023 (KZT 310.3 billion) amounted to KZT 93 billion.

The increase in nominal debt in 2024 is due to borrowings for the investment projects of Almaty Electric Stations JSC for the CHPP-2 project and projects of Ekibastuz GRES-1 LLP.

In order to mitigate interest rate risk, in September 2024 the partial early repayment of the KZT 34.7 billion loan from Halyk Bank of Kazakhstan JSC was carried out with a reduction in the rate from 16.5%–18.75% to 16.25% at Ekibastuz GRES-1 LLP.

Credit rating (Fitch Ratings)

On October 14, 2024, the international rating agency Fitch Ratings affirmed the long-term credit ratings of Samruk-Energy JSC in foreign and national currency at BB+, outlook "Stable".



Comparative analysis (benchmarking)

Benchmarking is one of the important elements of the Company's management. The purpose of benchmarking is to compare operational and financial indicators with foreign analogue companies in order to determine the Company's weaknesses and strengths. The following indicators were used for benchmarking:

- EBITDA margin (EBITDA margin);
- Debt/EBITDA;
- Debt-to-equity ratio (Debt/Equity);
- Return on Invested Capital (ROIC).

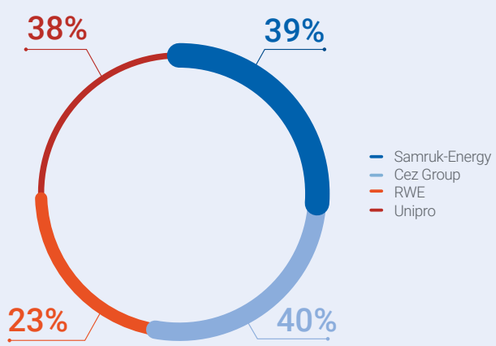
Data from the following peer companies were used for benchmarking:

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

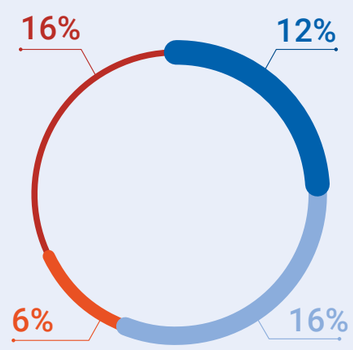
Benchmarking results

Criteria	Measure	Status	Min	Bechmarking	Max
EBITDA margin	%		RWE (23)		Unipro (38) SE (39) CEZ (40)
ROIC	%		RWE (6)	SE (12)	CEZ (16) Unipro (16)
Debt/EBITDA	coefficient		Unipro (0.02)	SE (1.66) CEZ (1.79)	RWE (3.29)
Debt/Equity	coefficient		Unipro (0.005)	SE (0.49) RWE (0.56)	CEZ (0.98)

EBITDA margin for 2024



Return on Invested capital (ROIC) for 2024



Currently, compared to foreign peer companies, the Company lags behind in some indicators.

The EBITDA margin is a key indicator of the Company's operational efficiency, reflecting its ability to generate profit before interest, taxes, depreciation, and amortization. Compared to other companies such as Unipro, RWE, Samruk-Energy JSC demonstrates a high level of operational efficiency with an EBITDA margin of 39%, but is slightly behind CEZ Group.

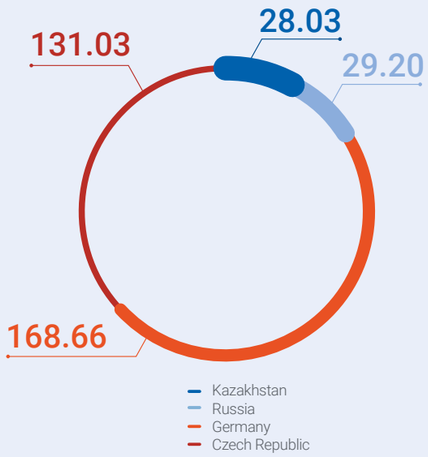
In terms of Debt/EBITDA and Debt/Equity, Samruk-Energy JSC is at an average level compared to CEZ Group and RWE, but significantly lags behind Unipro in terms of financial stability.

In terms of ROIC (return on invested capital), Samruk-Energy JSC is below CEZ Group and Unipro, but 6% higher than RWE.

It should be noted that, unlike public peer companies, Samruk-Energy JSC is owned by the Government of the Republic of Kazakhstan, and therefore, the Company acts as a conduit for state policy in the electric power sector. In this regard, and also due to the high degree of wear and tear in the energy sector, since 2009, socially significant investment projects have been implemented (aimed at the reliability and uninterrupted operation of the energy system of the Republic of Kazakhstan), which has led to a significant increase in invested capital and, accordingly, reduced the return-on-investment indicator.

An additional factor affecting the return-on-investment indicators is the low level of electricity tariffs in the Republic of Kazakhstan compared to the countries of peer companies.

Average tariff for electricity 2024, tenge/kWh



Difference in electricity tariffs in the countries of peer companies[27]

Country	Medium tariff per kWh[28]	In KZT/kWh	Medium rate for 2024[29]
Kazakhstan	KZT 28.03	28.03 KZT /kWh	
Russia	RUB 5.75	29.20 KZT /kWh	5.08 KZT/RUB
Germany	EUR 0.33	168.66 KZT/kWh	507.86 KZT/EUR
Czech Republic	CZK 6.48	131.03 KZT/kWh	20.22 KZT/CZK

[27] Source: Eurostat, Rosstat.
[28] The average tariff for the end consumer for the Company's group, excluding VAT.
[29] Average rate according to the data of the National Bank of Kazakhstan.



Operating companies

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

Bogatyr Coal LLP

Chief Executive Officer
Rgaybek K.R.

Address
Republic of Kazakhstan, Pavlodar region, Ekibastuz, Bauyrzhan Momyshuly St., 23

Employees
6,239
people

Forum Muider Limited ownership share
100%

Reserves and geography of the developed deposit

Balance coal reserves of Bogatyr Coal LLP as of January 1, 2025, amount to about
2.5 billion tonnes

including Bogatyr mine –
1.2 billion tonnes

Severny mine –
1.3 billion tonnes

Official company website
www.bogatyr.kz

Bogatyr Coal LLP supplies coal to the power plants of the Samruk-Energy JSC Group of companies and third parties located both in Kazakhstan and Russia, on market terms. The coal mines of Bogatyr Coal LLP are located 35 km from Ekibastuz GRES-1 LLP and 53 km from Ekibastuz GRES-2 JSC (distance by rail), which allows minimizing coal transportation costs for the Samruk-Energy JSC Group of companies. Most coal-fired power plants in Kazakhstan use the KSN-300 coal grade produced by Bogatyr Coal LLP.

Enterprise supply chain

Bogatyr Coal LLP mines KSN grade coal with an average calorific value of ~4,000 kcal/kg, ash content ~43%, moisture ~5%. The enterprise supplies energy coal for generating facilities of the domestic market of the Republic of Kazakhstan and exports to the Russian Federation, as well as supplies household coal to the domestic market. Coal for Kazakhstan's thermal power plants is sold under direct supply contracts, for Russian thermal power plants – through a trader. Household coal is sold through commodity exchanges.[30]

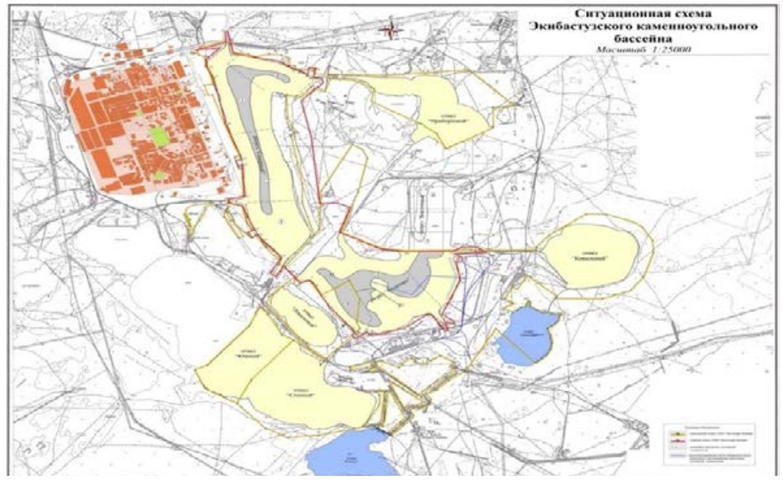
Bogatyr Coal LLP holds the subsoil use right for coal mining at the Ekibastuz coal deposit within the Bogatyr and Severny open-pit mines in Pavlodar region of the Republic of Kazakhstan under Contract No.975 dated 29 June 2002. The Bogatyr open-pit, commissioned in 1970, is mining coal reserves in fields 5, 6, 9, 10. As of 1 January 2025, the pit depth reached 300 m from the surface (bottom elevation minus 100 m according to the Baltic height system).

The Severny open-pit was commissioned in 1955, coal is mined in fields 1, 2, 3, 4. As of 01.01.2025, the pit depth reached 260 m from the surface (bottom elevation minus 60 m according to the Baltic height system).

The balance coal reserves of Bogatyr Coal LLP as of 01.01.2025 amount to about 2.45 billion tonnes, including 1.2 billion tonnes at the Bogatyr open-pit mine and 1.25 billion tonnes at the Severny open-pit mine.

[30] 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 Batches to be Sold through Commodity Exchanges" No.142 dated 26 February 2015.

Situational scheme of the Ekibastuz coal basin



Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	30,286	26,249	677
EBITDA, KZT million	37,425	32,911	20,936
EBITDA Margin, %	33	25	15
Amount of disbursed investments (50%), '000 KZT	16,070,953	12,368,588	9,378

Production figures

Indicator	2022	2023	2024
Coal production volume, million tonnes	42.5	42.9	42.7
Volume of coal sales in RoK, million tonnes	32.3	32.7	33.7
to own power plants	19.5	19.4	20.2
third-party ES	12.8	13.3	13.5
Coal export volume, million tonnes	10.1	9.8	9.3

ESG indicators

Indicator	2022	2023	2024
Emissions of pollutants, thousand tonnes	4.1	3.6	3.4
Average salary, KZT	391,643	505,800	551,146

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

Almaty Electric Stations JSC

Chairman of the Management Board
Mashirov E.K.

Address
Republic of Kazakhstan, Almaty, 7 Dostyk Ave.

Employees
2,971
people

Share of ownership of Samruk-Energy JSC
100%

Official website of the company
www.ales.kz

Almaty Electric Stations JSC is a generating enterprise producing thermal and electric energy and supplying all consumer groups in Almaty city and the Almaty region. It covers about 70% of the needs of the city and region. AIES JSC is included in the Republican section of the state register of natural monopoly entities as a natural monopoly entity for the production and supply of heat and electricity for the Almaty region and Almaty city.

AIES JSC includes:

- CHPP-1 named after B. Orazbayev, CHPP-2 named after A. Zhakutov, CHPP-3 – heat and electricity generation;
- Kapshagai HPP named after Sh. Chokin and Cascade HPPs – electricity generation;
- Western Thermal Complex (WTC) – heat generation;
- Production and Repair Enterprise Energoremont (PRP);
- Fuel Reception and Unloading Center (FRUC).

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	4,306	1,321	19,043
EBITDA, KZT million	16,785	18,541	39,194
EBITDA Margin, %	19	19	31
Amount of disbursed investments, '000 KZT	11,036,602	14,277,526	105,440,749

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	1,235.7	1,235.7	1,235.7
Electricity generation volume, million kWh	5,099	5,055	5,196
Electricity sales volume, million kWh	4,591	4,530	4,596
Volume of heat production, thousand Gcal	5,282	5,852	6,091
Volume of heat sales, thousand Gcal	5,217	5,582	5,775

ESG indicators

Indicator	2022	2023	2024
Pollutant emissions, thousand tonnes	48.03	48.90	47.5
Discharges, tonnes	1.53	1.67	1.56
Average salary, KZT	433,391	482,932	571,663

Ekibastuz GRES-1 named after Bulat Nurzhanov LLP



Chief Executive Officer
Naurzgaliev A.A.

Address
Republic of Kazakhstan, Pavlodar region, Ekibastuz, Industrial Zone GRES-1, building 2

Employees
1,462
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.gres1.kz

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 of 500 MW each. The station is located on the northern shore of Lake Zhegel'dy, 16 km north of Ekibastuz city. It is the largest thermal power plant in the country operating on solid fuel from the Ekibastuz deposits, the main power generating enterprise of the region, and one of the largest coal-fired power plants in the world.

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	25,796	30,678	45,462
EBITDA, KZT million	72,267	71,803	92,443
EBITDA Margin, %	38	38	46
Amount of disbursed investments, '000 KZT	42,557,298	84,862,571	68,529,562

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	3,500	3,500	3,500
Electricity generation volume, million kWh	23,048	22,870	22,544
Electricity sales volume, million kWh	23,102	22,549	21,619
Volume of heat production, thousand Gcal	378	344	441.7
Volume of heat supply, thousand Gcal	143	142	135.7

ESG indicators

Indicator	2022	2023	2024
Pollutant emissions, thousand tonnes	242.813	238.9	234.3
Average salary, KZT	405,448	495,490	618,416

Renewable energy facilities of the Samruk-Energy JSC Group of companies

Station Ekibastuzskaya GRES-2 JSC



Chairman of the Management Board
Kashaganov B.Z.

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

Employees
1,368
people

Samruk-Energy JSC ownership share
50%

Samruk-Energy JSC ownership share
50%

Official website of the company
www.gres2.kz

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

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	4,536	-17,322	-10,728
EBITDA, KZT million	27,365	20,102	34,501
EBITDA Margin, %	40	30	43
Amount of disbursed investments (50%), '000 KZT	12,457,528	2,710,689	6,611,681

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	1,000	1,000	1,000
Electricity generation volume, million kWh	6,002	5,659	6,045
Electricity sales volume, million kWh	5,938	5,532	5,823
Volume of heat production, thousand Gcal	172	206	217.5
Volume of heat supply, thousand Gcal	77.5	70	76.2

ESG indicators

Indicator	2022	2023	2024
Pollutant emissions, '000 KZT	63.108	63.527	60.115
Average salary, KZT	361,870	428,589	611,068

Shardara HPP JSC



Chairman of the Management Board
Kundakov AS.

Address
Republic of Kazakhstan, South Kazakhstan region, Shardara, Yelmuatova St., 13

Employees
135
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.sharges.kz

Shardara hydropower plant with an 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 hydro complex is to provide irrigated agriculture, the water regime is set by the Committee for Regulation, Protection and Use of Water Resources of the Ministry of Water Resources and Irrigation of the Republic of Kazakhstan, electricity is consumed in the Turkestan region. In Q1 2025, Shardara HPP JSC was transferred to the asset structure of Qazaq Green Power PLC.

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	1,939	2,624	2,999
EBITDA, KZT million	6,026	6,669	6,466
EBITDA Margin, %	69	74	75
Amount of disbursed investments, thousand KZT	53,754	22,414	129,802

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	126	126	126
Electricity generation volume, million kWh	518	529	583
Electricity sales volume million kWh	540	549	577.4

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	413,506	478,067	656,192



AES Ust Kamenogorsk HPP LLP

Chief Executive Officer
Aidabulov T.I.

Address
Republic of Kazakhstan, Ust-Kamenogorsk Shlyuznaya 35

Employees
140
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.ukges.kz



Ust-Kamenogorsk HPP is a hydroelectric power plant on the Irtysh River, located in the city of Ust-Kamenogorsk, East Kazakhstan Region. It is a part of the Irtysh HPP cascade, being its second, middle stage. Main function – generation of electric power and compensatory regulation of Irtysh river flow. In Q1 2025, AES Ust Kamenogorsk HPP LLP was transferred to the asset structure of Qazaq Green Power PLC.

Enterprise supply chain

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

Financial performance

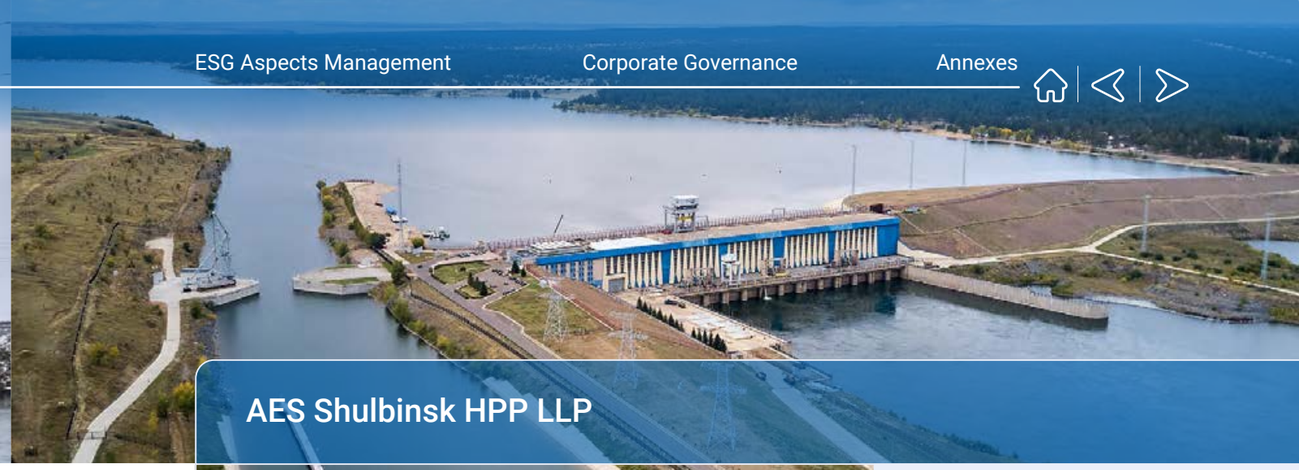
Indicator	2022	2023	2024
Net income/loss, KZT million	2,674	2,763	5,029
EBITDA, KZT million	3,842	3,927	7,092
EBITDA Margin, %	42	48	65
Amount of disbursed investments, '000 KZT	1,809	1,070	1,871

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	367.8	367.8	367.8
Electricity generation volume, million kWh	1,659.8	1,465.5	1,891
Electricity sales volume million kWh	1,731.1	1,507.1	1,882

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	450,981	564,941	724,672



AES Shulbinsk HPP LLP

Director General
Aidabulov T.I.

Address
Republic of Kazakhstan, Abai region, 071426, Semey, Shulbinsk, Promzona microdistrict, building 1

Employees
173
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.shges.kz



Shulbinsk HPP is located 70 kilometres from the city of Semey, is the third station in the Irtysh HPP cascade and the largest HPP in Kazakhstan in terms of installed capacity.

Main function – electricity generation; designed for compensatory regulation of the Irtysh River flow, accumulation of the Ulba and Uba Rivers runoffs, providing spring flooding of floodplain meadows of Pavlodar region. In Q1 2025, AES Shulbinsk HPP LLP was transferred to the asset structure of Qazaq Green Power PLC.

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	3,182	4,500	8,883
EBITDA, KZT million	4,943	6,460	11,981
EBITDA Margin, %	49	57	72
Amount of disbursed investments, '000 KZT	2,193	2,388	3,509

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	702	702	702
Electricity generation volume, million kWh	1,553.4	1,631.7	2,057
Electricity sales volume million kWh	1,604.8	1,670.0	2,035

ESG indicators

Indicator	2023	2024
Average salary, KZT	562,417	692,015



Ust-Kamenogorsk HPP JSC



Director
Egorov A.V.

Legal address
Republic of Kazakhstan, Ust-Kamenogorsk city, Ablaketka settlement

Location of the executive body
Republic of Kazakhstan, Ust-Kamenogorsk city, 303, Kazakhstan str.

Samruk-Energy JSC ownership share
89.99%

Main type of activity
Organisational and management activities

A joint stock company engaged in organisational and management activities.

Bukhtarminskaya HPP JSC

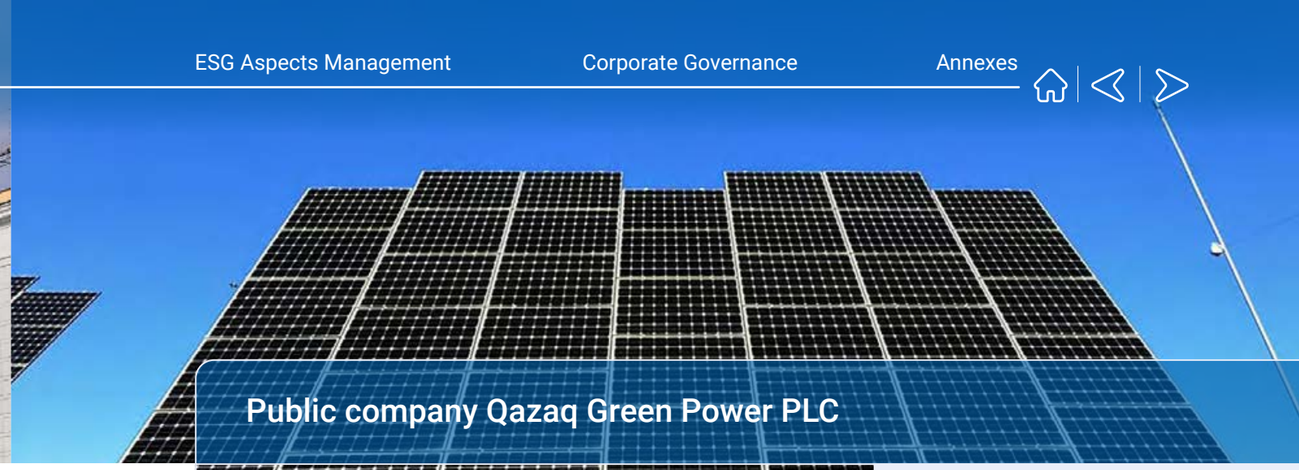
Address
Republic of Kazakhstan, 070825, East Kazakhstan region, Zyryanovsk district, Serebryansk, Graftio St.

Employees
8
people

Samruk-Energy JSC ownership share
96.32%

Main type of activity
Renting and managing your own property, leasing other machinery, equipment and tangible assets

Bukhtarminskaya HPP is an economical hydroelectric power plant in terms of both the specific volume of work and the cost of electricity production. The installed capacity of the HPP is 675 MW, and electricity generation for the reporting period amounted to 3,179,770 thousand kWh. The station provides coverage of peak loads in the power system of the Republic of Kazakhstan. In 2002, the Bukhtarma Dam was recognised as the best in the world in terms of concrete quality indicators. Currently, Bukhtarminskaya HPP is under lease.



Public company Qazaq Green Power PLC



Qazaq Green Power PLC was established on November 4, 2022, with the aim of facilitating the modernization of existing and construction of new generating capacities, introducing new technologies in the energy sector, improving the efficiency of power systems, implementing investment projects of the Republic of Kazakhstan, as well as conducting energy-saving policies and ensuring environmental safety of energy facilities.

Chief Executive Officer
Kasymbekov A.K.

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

Employees
12
people

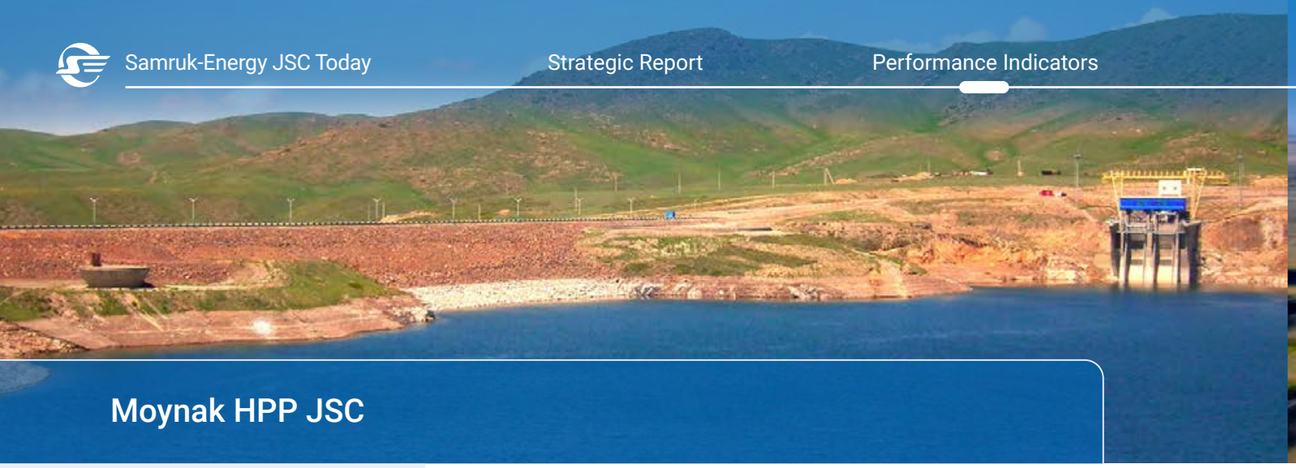
Samruk-Energy JSC ownership share
100%

Financial performance

Indicator	2023	2024
Net income/loss, KZT million	2,245	3,181
EBITDA, KZT million	2,005	3,930
EBITDA Margin, %	85	87
Amount of disbursed investments, '000 KZT	11,874	120

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	568,718	1,297,570	2,244,991



Moynak HPP JSC

Chief Executive Officer
Zhanabaev B.K.

Address
Republic of Kazakhstan, Almaty region, Kegen district, Zhylisay rural district, Moynak village, 81

Employees
123
people

Qazaq Green Power PLC ownership share
100%

Official website of the company
www.moynak.kz

Moynak HPP is located on the Sharyn River in the Kegen district of Almaty region. The station was built within the framework of the State Program for Accelerated Industrial and Innovative Development and in accordance with the Electricity Development Program of the Republic of Kazakhstan until 2030. The HPP successfully contributes to reducing the electricity deficit in the Southern zone of the Unified Energy System of Kazakhstan (Almaty, Zhambyl, Kyzylorda, and Turkestan regions), covers peak loads, and participates in power regulation in the energy system. Modern technological equipment ensures maximum automation and stability of the electricity generation process. The station is equipped with the latest modification hydro units, which have high technical parameters and efficiency.

Enterprise supply chain

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

Financial performance

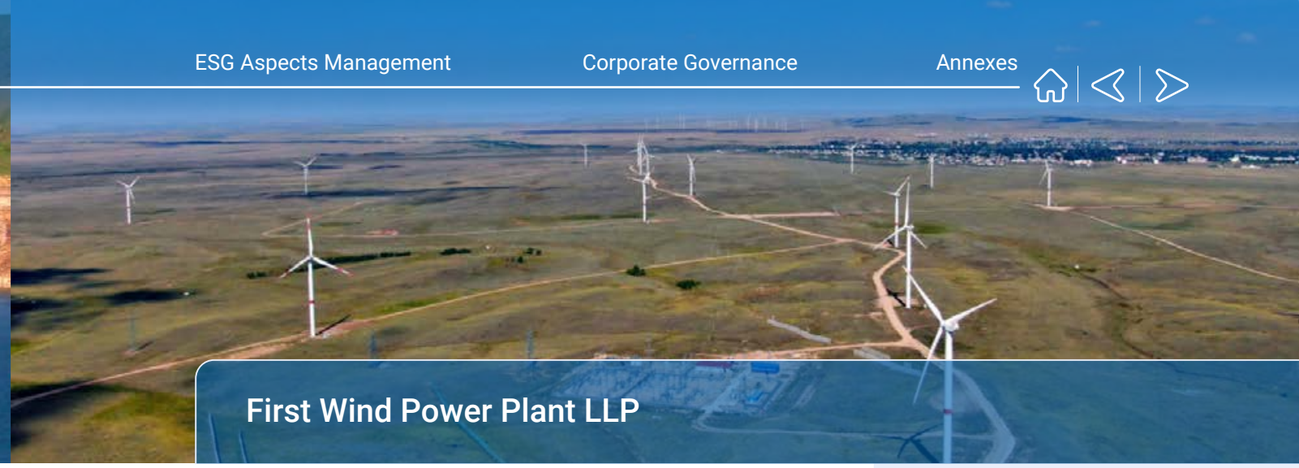
Indicator	2022	2023	2024
Net income/loss, KZT million	9,981	10,738	14,115
EBITDA, KZT million	18,265	18,348	22,331
EBITDA Margin, %	80	84	87
Amount of disbursed investments, '000 KZT	102,925	606,884	1,286

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	300	300	300
Electricity generation volume, million kWh	973	832	1,071
Electricity sales volume, million kWh	1,014	912	1,183

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	535,611	570,153	776,445



First Wind Power Plant LLP

Chief Executive Officer
Botabekov R.K.

Address
Republic of Kazakhstan, Astana, Kabanbay Batyr St., 15-A

Employees
38
people

Qazaq Green Power PLC ownership share
100%

Official website of the company
www.pves.kz

First Wind Power Plant LLP is Kazakhstan's first project in the field of alternative energy sources development, which has passed all stages of preparation in accordance with the current legislation on support for renewable energy sources. Commissioned on August 14, 2015.

A wind farm consisting of 22 turbines, each with a capacity of 2.05 MW, is located in the Akmola Region, near the city of Ereymentau. Since its commissioning, the wind power plant has generated 1,428,158 thousand kWh of electricity.

Enterprise supply chain

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

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	2,248	3,045	3,231
EBITDA, KZT million	3,974	5,014	5,200
EBITDA Margin, %	80	81	78
Amount of disbursed investments, '000 KZT	157,852	475,875	774,329

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	45	45	45
Electricity generation volume, million kWh	135.72	142.60	137
Electricity sales volume, million kWh	135.37	142.31	137

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	604,532	724,813	882,310



Ereymentau Wind Power LLP

Chief Executive Officer
Nurgaliev A.K.

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

Employees
9
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.ewp.kz

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

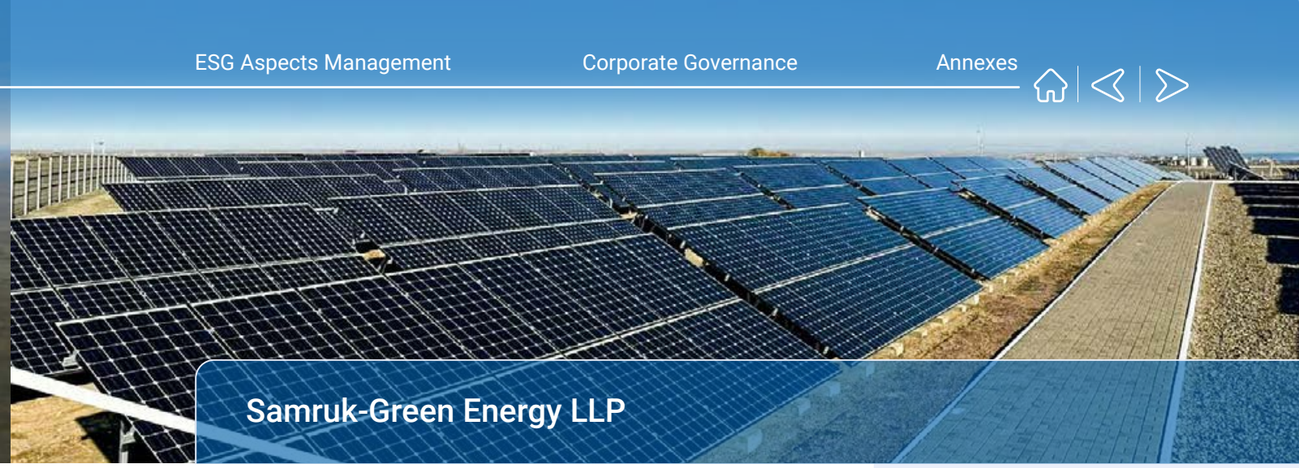
Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	(6,487)	(10,949)	(1,802)
EBITDA, KZT million	(243)	(312)	(194)
Amount of disbursed investments, '000 KZT	1,064,760	0	0

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	846,798	845,186	855,393





Samruk-Green Energy LLP

Samruk-Green Energy LLP provides electricity generation services using RES, enabling the decentralization of electricity supply to remote areas.

Realised projects for the construction of facilities:

- 2 MW solar power plant in Konajev;
- 416 kW solar power plant in Konajev;
- Solar power plant with a capacity of 1 MW in Almaty;
- 5 MW wind power plant in Yenbekshikazakh district, Almaty region.

Enterprise supply chain

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

Chief Executive Officer
Islamov D.U.

Address
Republic of Kazakhstan, Almaty, Amangeldy St., 70a

Employees
23
people

Qazaq Green Power PLC ownership share
100%

Official website of the company
www.samruk-green.kz

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	(2,682)	622	147
EBITDA, KZT million	62	296	192
EBITDA Margin, %	15	59	29
Amount of disbursed investments, '000 KZT	35,463	23,866	31,678

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	8.4	8.4	8.4
Electricity generation volume, million kWh	19.78	21.52	21.01
Electricity sales volume, million kWh	19.53	21.23	23.84

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	481,180	576,464	700,790



Energia Semirechya LLP

Chief Executive Officer
Luo Jun

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

Employees
29
people

Share of ownership
Public company Qazaq Green Power PLC
25%

Powerchina Chengdu Engineering Corporation Limited
15%

Powerchina Resources Limited
60%

Official website of the company
www.energy7.kz



Energia Semirechya LLP is an enterprise established in 2009 to implement the project "Construction of a wind power plant in the Shelek corridor with a capacity of 60 MW with the prospect of expansion up to 300 MW" and further provision of services for the production and sale of electric energy, design, and construction of facilities using renewable energy sources. In 2022, Energia Semirechya LLP completed the implementation of the investment project "Construction of a wind power plant in the Shelek corridor with a capacity of 60 MW".

Financial performance

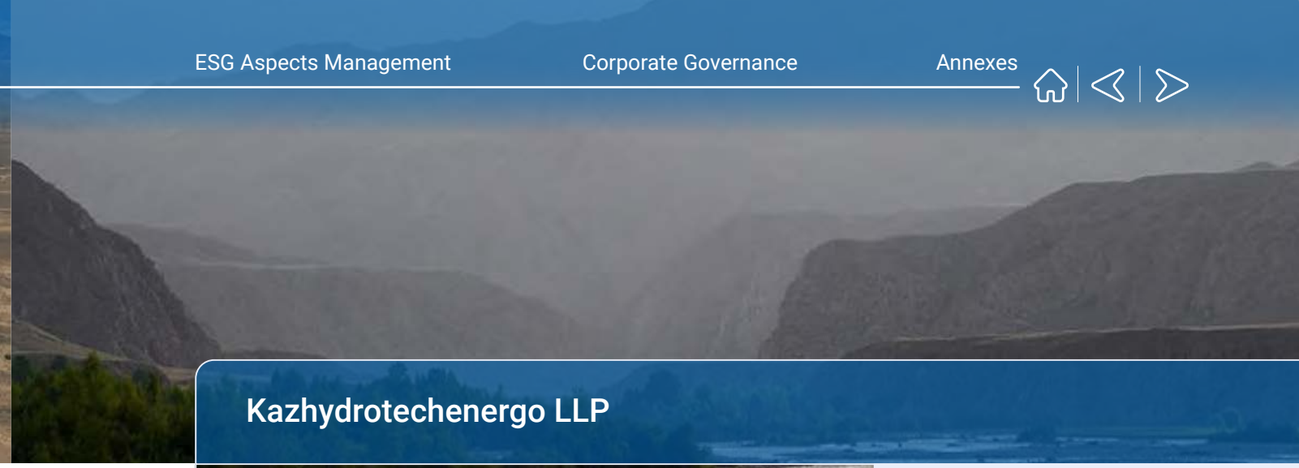
Indicator	2022	2023	2024
Net income/loss, KZT million	(591)	(85)	(2,295)
EBITDA, KZT million	872	3,824	(137)
Amount of disbursed investments (25%), KZT ths.	4,946,597	56,112	5,963

Production figures

Indicator	2022	2023	2024
Installed electric capacity, MW	60	60	60
Electricity generation volume, million kWh	88.26	220.75	227.29
Electricity sales volume, million kWh	86.40	216.33	222.76

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	787,204	1,012,040	1,499,970



Kazhydrotechenergo LLP



Chief Executive Officer
Bukhanov M.E.

Address
Republic of Kazakhstan, Almaty, Mkr, Miras d. 99, 2nd floor, office 201

Employees
2
people

Qazaq Green Power PLC ownership share
100%

Within the framework of the project "Expansion to 810 MW of RES project in Almaty region (Power China)" KGTE is working on the 1st stage – "Construction of 70 MW HPP on the Shelek River in Almaty region together with Powerchina", the project is expected to carry out design and survey works and inclusion in the additional agreement to the signed MEA between the Republic of Kazakhstan and the PRC dated 12 November 2024.

Private Company Altyn Dala Energy LTD

Chief Executive Officer
Zharkenov B.K.

Address
Republic of Kazakhstan, Kabanbai Batyr Avenue, Building 15/1

Employees
2
people

Ownership share
Public company Qazaq Green Power PLC
25%

Ownership share
Tumar Commerce LLP
75%

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

Semey Energo LLP

Chief Executive Officer
Bimuratov B.Sh.

Address
RK, Astana, Kabanbai Batyr Ave., building 15A, block B, BC "Q"

Employees
1
person

Ownership share
Samruk-Kazyna JSC
50%

Ownership share
Samruk-Energy JSC
50%

On 17 April 2024, in order to implement the projects of construction of thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk by building new coal-fired power units, an Agreement was signed between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on the projects of construction of coal-fired thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk on the territory of the Republic of Kazakhstan. On 24 June 2024, Samruk-Energy JSC together with Samruk-Kazyna JSC established a joint legal entity in equal shares of 50% – Semey Energy LLP.



Energy Solutions Center LLP

Chief Executive Officer
Kystaubaev A.T.

Director of the CLC Branch
Esenbekov R.R.

Address
Republic of Kazakhstan, Ekibastuz, Kunaev St., 105

Address of the CLC Branch
Republic of Kazakhstan, Nur-Sultan, Kabanbay Batyr St., 15A

Employees
485
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.e-s-center.kz

On 17.06.2024, an agreement was signed between the Akimat of Pavlodar region and Samruk-Energy JSC on the transfer of Ekibastuz CHP to trust management through Energy Solution Center LLP. Ekibastuz CHP was built in 1960 and is the oldest CHP in Pavlodar region. The installed thermal capacity is 750 Gcal/hour. Since 2023, a large-scale repair campaign has been carried out at the CHP.

A service organization for the administrative support of the Group of companies of Samruk-Energy JSC, providing services for IT infrastructure support, internet resources, real estate management (rental, acquisition, construction), special office services (personnel outsourcing), as well as transport services. From the moment of transfer of Ekibastuz CHP, it has been a Branch of Energy Solutions Center LLP – Shared Service Center.

Financial performance of Energy Solutions Centre LLP

Indicator	2024
Net income/loss, KZT million	299
EBITDA, KZT million	400
EBITDA Margin, %	9.45
Amount of disbursed investments, '000 KZT	4,074,092

Financial indicators of Energy Solutions Center LLP – Branch of DCO

Indicator	2022	2023	2024
Net income/loss, KZT million	73	102	104
EBITDA, KZT million	204	209	314
EBITDA Margin, %	13	13	16
Amount of disbursed investments, '000 KZT	107,511	9,536	659,391

Production indicators of CHPP

Indicator	2022	2023	2024
Installed electric capacity, MW	12.0	12.0	12.0
Electricity generation volume, million kWh	68.8	38.8	70.3
Heat supply, thousand Gcal	1,477	1,379	1,499

ESG indicators

Indicator	2021	2022	2023
Average salary (branch), KZT	537,600	618,161	709,614
Average salary (ETETS), KZT	-	-	507,598

Oskemen Energy LLP



On 17 April 2024, in order to implement the projects for construction of thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk by building new coal-fired power units, an Agreement was signed between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on projects for construction of coal-fired thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk on the territory of the Republic of Kazakhstan. On 24 June 2024, Samruk-Energy JSC together with Samruk-Kazyna JSC established a joint legal entity in equal shares of 50% – Oskemen Energy LLP.

Chief Executive Officer
Bimuratov B.Sh.

Address
RK, Astana, Kabanbai Batyr Ave., building 15A, block B, BC "Q"

Employees
1
person

Ownership share
Samruk-Kazyna JSC
50%

Samruk-Kazyna JSC
50%

Kokshetau CHP LLP

On 17 April 2024, in order to implement the projects of construction of thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk by building new coal-fired power units, an Agreement was signed between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on the projects of construction of coal-fired thermal power plants in the cities of Kokshetau, Semey and Ust-Kamenogorsk on the territory of the Republic of Kazakhstan. On 24 June 2024, Samruk-Energy JSC together with Samruk-Kazyna JSC established a joint legal entity in equal shares of 50% – Kokshetau TPP LLP.

On August 29, 2024, a Contract was signed between Kokshetau CHP LLP and Inter RAO – Export LLC (RF) for the development of the project "Construction of CHP in the city of Kokshetau".

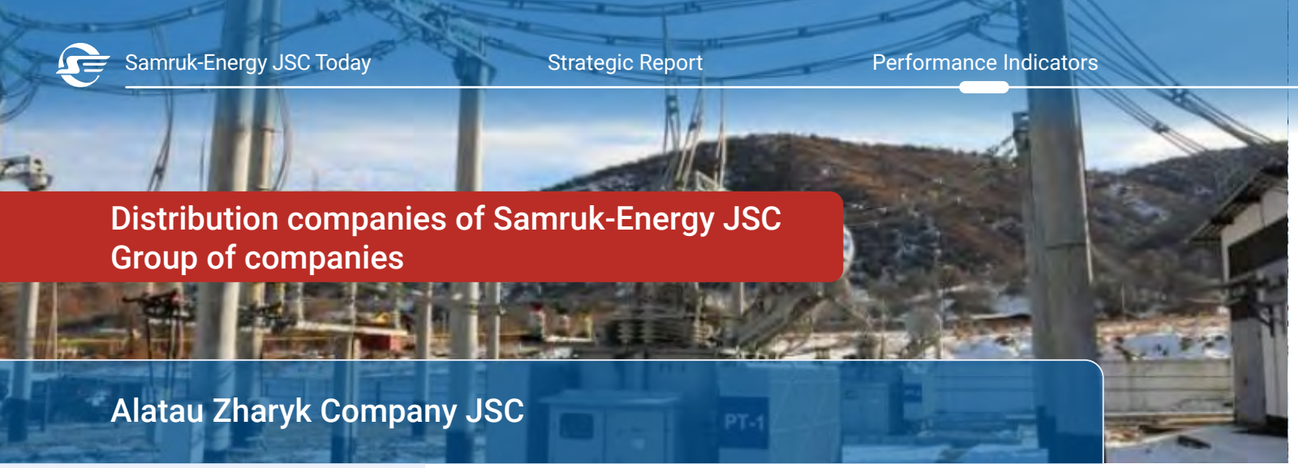
Chief Executive Officer
Tyutebaev S.S.

Address
RK, Astana, Kabanbai Batyr Ave., building 15A, block B, BC "Q" (actual address: Astana, Turan Avenue, building 21/6, offices 304-305)

Employees
14
people

Ownership share
Samruk-Kazyna JSC
50%

Samruk-Energy JSC
50%



Distribution companies of Samruk-Energy JSC Group of companies

Alatau Zharyk Company JSC

Chief Executive Officer
Asylov A.N.

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

Employees
3,896
people

Ownership share Samruk-Energy JSC
99.16%

AZhK JSC
0.84%

Official website of the company
www.azhk.kz

The electric grid company Alatau Zharyk Company JSC (AZhK JSC) is the largest power system in southern Kazakhstan, supplying electricity to all consumer groups in the city of Almaty and Almaty region. AZhK JSC represents the main part of the electric networks of the Almaty energy hub with networks of voltage classes 220/110/35/6–10/0.4 kV. The company's task is to ensure reliable and high-quality electricity transmission, while reducing commercial and technical costs and improving the technical performance of substation equipment, in compliance with occupational health and safety and environmental protection rules.

Enterprise supply chain

Regional power grid companies perform the functions of electricity transmission from power generating organisations to end consumers via power grids within their balance sheet boundaries.

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	3,528	5,531	20,497
EBITDA, KZT million	14,394	20,789	34,014
EBITDA Margin, %	27	31	36
Amount of disbursed investments, '000 KZT	11,645,174	16,512,888	29,902

Production figures

Indicator	Unit	2022	2023	2024
220 kV transmission line	kilometres	410.34	410.34	409.6
110 kV transmission line	kilometres	2,673.94	2,648.34	2,680.61
35 kV transmission line	kilometres	2,546.06	2,452.58	2,451.13
10 kV transmission line	kilometres	9,364.55	9,488.10	9,461.62
6 kV power line	kilometres	140.36	136.93	138.72
0.4 kV transmission line	kilometres	10,127.52	9,778.56	9,935.16
220 kV substation	pcs.	8	8	8
110 kV substation	pcs.	93	94	94
35 kV substation	pcs.	106	106	104
Electricity transmission	million kWh	8,154	8,686	9,259
Number of consumers (commercial and other)	pcs.	12	12	12

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	352,818	425,296	476,979

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 in the city of Almaty and Almaty region. The company is part of the energy complex of Almaty and Almaty region, consisting of generation, regional transmission, and energy supply companies. The share of AlmatyEnergoSbyt LLP in the total supply of electricity to consumers in the country is 7%.

On July 8, 2024, the Law of the Republic of Kazakhstan On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Heat Power Engineering, Electric Power Industry, and Regulated Services was adopted, according to which transmission organizations are required to obtain a license for the type of activity of purchasing electricity for the purpose of supplying consumers by January 1, 2025. In turn, licenses issued to energy supplying organizations remain valid until January 1, 2025, and such energy supplying organizations are required to ensure the transfer of consumers to transmission organizations by January 1, 2025.

Chief Executive Officer
Islamova G.K.

Address
Republic of Kazakhstan, Almaty, Kozhamkulov St., 170A

Employees
518
people

Samruk-Energy JSC ownership share
100%

Official website of the company
www.esalmaty.kz

Thus, in order to comply with the requirements of the law, AlmatyEnergoSbyt LLP will cease its core activities from January 1, 2025, and Alatau Zharyk Company JSC will begin activities for supplying electricity to consumers.

Enterprise supply chain

Purchase of electricity from transmission organizations and sale to end consumers based on public energy supply contracts. The formation of the electricity tariff is carried out in accordance with the requirements of the Committee for Regulation of Natural Monopolies.

Financial performance

Indicator	2022	2023	2024
Net income/loss, KZT million	(2,784)	(3,207)	2,841
EBITDA, KZT million	(3,369)	(2,499)	3,581
EBITDA Margin, %	(2.4)	(1.48)	1.4
Amount of disbursed investments, '000 KZT	84,922	80,238	89,514

Production figures

Indicator	2022	2023	2024
Electricity sales volume, million kWh	6,847	7,085	8,736
Average electricity sales tariff, KZT/kWh	20.09	22.18	28.03
Total number of consumers by groups, persons	929,929	952,216	987,583
Population	891,214	911,097	943,134
Non-domestic consumers, including:	38,715	41,119	44,449
Industrial and equated to them consumers	1,912	1,937	2,154
Budget organisations	1,337	1,312	1,399
Other consumers	35,466	37,870	40,896

ESG indicators

Indicator	2022	2023	2024
Average salary, KZT	396,047	445,453	501,331

Sustainable supply chain and procurement policies

Management approach

GRI 3-3

The transformation of the energy system along with the digital revolution is leading to changes in the organisation of work, as well as in the way goods and services are delivered. It also means that suppliers are becoming key partners in achieving sustainable development in all areas of the Company's activities.

Samruk-Energy JSC requires suppliers not only to comply with applicable laws and permits but also to commit to best practices in corporate governance, ethics, human rights, health, safety, and environmental protection. These principles are consistent with the Company's strategy, as well as its Code of Conduct and global compliance programs.

Procurement principles:

- Optimal and efficient use of funds;
- Openness and transparency, while respecting the rights and/or legitimate interests of suppliers regarding commercial confidentiality (until the tender results are announced);
- Fair competition and prevention of collusion among participants;
- Responsibility of procurement participants;
- Prevention of corruption;
- Support of domestic producers of goods – priority of purchases from Kazakhstani suppliers subject to compliance with international treaties ratified by the Republic of Kazakhstan;
- Procurement of innovative and high-tech goods, works, services;
- Providing equal opportunities for suppliers to participate in procurement procedures, except in cases provided by law;
- Respect for intellectual property rights.

Documents regulating the Company's procurement activities:

- Law of the Republic of Kazakhstan On Procurement of Certain Subjects of the Quasi-Public Sector;[31]
- Procurement Procedure of Samruk-Kazyna JSC and legal entities, fifty percent or more of the voting shares (participation interests) of which directly or indirectly belong to Samruk-Kazyna JSC by right of ownership or trust management[32] (hereinafter – the Procedure).

Procurement Procedures Management

The Authorised Body for Procurement carries out continuous improvement of procurement processes, ensuring their transparency and efficiency. Relations with suppliers and potential suppliers are regulated by the Law of the Republic of Kazakhstan On Procurement of Certain Entities of the Quasi-Public Sector and the Procurement Procedure. Once a contract is concluded, the parties are governed by the norms of civil legislation and the terms of the contract.

All requirements for the quality of goods, works, and services (GWS) are established by the technical specification and contract. Contracts must provide for reporting on the share of in-country value, penalties, and other reports.

In contracts for the procurement of construction and installation works, which provide for estimate, pre-design, or design and estimate documentation, suppliers and subcontractors are required to purchase necessary materials from manufacturers and organizations implementing projects for the creation of new production facilities. Procurement is carried out based on commercial offers posted on the Samruk-Kazyna JSC procurement web portal (zakup.sk.kz). This portal provides open access to procurement information and promotes fair competition among suppliers.

In case of non-fulfillment of procurement obligations, the supplier is subject to penalties of no more than 10% of the total contract value.

[31] Decision of the Board of Directors of National Welfare Fund Samruk-Kazyna JSC Minutes No.193 dated 3 March 2022.

[32] Law of the Republic of Kazakhstan On Procurement of Certain Entities of the Quasi-State Sector No.47-VII ZRC dated 8 June 2021.



In 2024, changes were made to tender security. Now, potential suppliers can provide tender security in the form of an electronic bank guarantee or funds placed in an electronic wallet on the procurement web portal.

Samruk-Energy JSC applies a unified approach to supplier assessment from a sustainable development perspective. The main tool is the ESG questionnaire, which includes questions on environmental aspects, human rights compliance, prevention of child and forced labor, as well as compliance with international labor standards (including ILO conventions and the UN Declaration on Human Rights).

Completion of the ESG questionnaire and compliance with the criteria is a mandatory condition for contract conclusion and is carried out at the procurement stage. Thus, each supplier, when concluding a contract, confirms compliance with the specified requirements. In accordance with the current Procurement Procedure established by the shareholder, additional checks, audits, or in-depth impact assessments are not currently conducted.

The questionnaire is also publicly available on the Company's website and can be used by suppliers for preliminary self-assessment.

The Company considers the ESG questionnaire as a key risk management tool in the supply chain within the current regulatory framework.

Baltabaev Askar Kuatbaevich

Managing Director for Security and Risks

In 2024, we signed 41 offtake contracts under the import substitution programme – these are not just transactions, but a deliberate contribution to the development of national industry and the reduction of dependence on imported supplies.

This approach helps stimulate local production, create new jobs, and strengthen industrial cooperation within the country. We view import substitution as one of the key tools for enhancing the resilience and competitiveness not only of our company, but also of Kazakhstan's entire energy sector amid global challenges and supply chain instability.

Import substitution

In order to fulfill strategic tasks 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 is actively working to create new competitive domestic production facilities in the processing industries.

To achieve this goal, the Fund is implementing a program to promote the creation of new production facilities (import substitution), aimed at replacing imports of goods that are regularly purchased by the Group of companies of the Fund.

The programme includes the conclusion offtake contracts for the purchase of goods. As part of the programme implementation, 41 off-take contracts with a total amount of over KZT 10.2 billion were concluded for the Group of companies of Samruk-Energy JSC.



Category procurement management

GRI 2-6, 204-1, GRI 12: Coal Sector: 12.8.6

The category management process is aimed at optimizing procurement activities, ensuring a reduction in the total cost of ownership – reducing the costs of the GWS category throughout the entire life cycle, not just at the procurement stage. This approach allows for the selection of the most modern and economically efficient solutions. The implemented changes in procurement activities contribute not only to reducing procurement prices but also to improving the quality of purchased goods, works, and services, as well as supporting the development of domestic manufacturers.

For example, as part of the implementation of the category procurement strategy for the IT equipment category (hereinafter – the Strategy), which is managed at the level of Samruk-Kazyna JSC, a unified workplace standard was developed, consisting of 14 types of equipment to unify technical specifications.

The Strategy also provides for the supply of customers with quality equipment through initial procurement by request for quotations with priority for domestic manufacturers included in the Register of Trusted Software and Electronic Industry Products, which is formed by the authorized body in the field of the electronic industry.

The results of the strategy implementation show positive dynamics of growth in the share of domestic producers and increase in the share of in-country value.

As a result of the implementation of the category procurement strategy in 2024, an actual economic effect of KZT 230 million was achieved.

98%

of purchases by Samruk-Energy JSC in 2024 were purchases from local companies[33]

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

Indicator	Total	Local suppliers
Number of suppliers, pcs.	2,859	2,808
Amount of purchases, KZT billion	350	330

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

Indicator	Amount	Share of local suppliers, %
Procurement conducted by single-source method	229	94
Procurements made by means of request for quotation method	11	100
Procurements made by open tender method	110	93

Share of in-country value (local content),[34] in supplied goods, works and services, KZT billion

Indicator	2022		2023		2024	
	Total amount of delivery	% DVC	Total amount of delivery	% DVC	Total amount of delivery	% DVC
Goods	174.89	78.42	145.78	66	140.73	73
Works and services	127.06	93	207.57	92	313.25	90
Total	301.95		353.35	81	453.98	84.8

[33] 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.

[34] Data on SACs taking into account newly entered subsidiaries and affiliates (AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, ESC (Ekibastuz CHPP) LLP, Kokshetau CHPP LLP).

4 ESG ASPECTS MANAGEMENT

129 Managing sustainable development
139 Our contribution to the UN Sustainable Development Goals
151 Stakeholder engagement
161 Compliance with human rights
165 Investments in human capital
186 Creation of safe working conditions
196 Promoting socio-economic development
206 Caring for our planet
226 Contribution to climate change mitigation
246 Environmental benchmarking



Zhaparkhanov Nurlan Altynkhanovich

Managing Director for Legal Support and Asset Management

We view sustainable development not as an external requirement, but as an internal guiding principle embedded in the Company's Development Strategy and upheld at all levels of governance.

We do not merely declare an ESG-oriented approach – we consistently integrate it into our investment programmes, operational processes, corporate governance system, and stakeholder engagement. This approach enables us to keep pace with global trends while creating long-term value for society and the national economy.

Managing sustainable development

Our approach

At Samruk-Energy JSC, sustainable development is embedded in everything we do, including our business goals and strategy, corporate culture, processes and guiding principles. For us, sustainability is not just a goal, but a reflection of our commitment to protecting the planet, supporting our employees, serving our customers and consumers, and ensuring the long-term sustainability and success of our business.

We continue to develop our climate-related reporting. We are progressively integrating and expanding information on climate risks and opportunities consistent with TCFD recommendations. These ongoing measures demonstrate our strong commitment to sustainable development and responsible practices.

In addition, in 2024, we reaffirmed our support for the UN Global Compact, the UN Guiding Principles on Business and Human Rights, and the Sustainable Development Goals (SDGs).

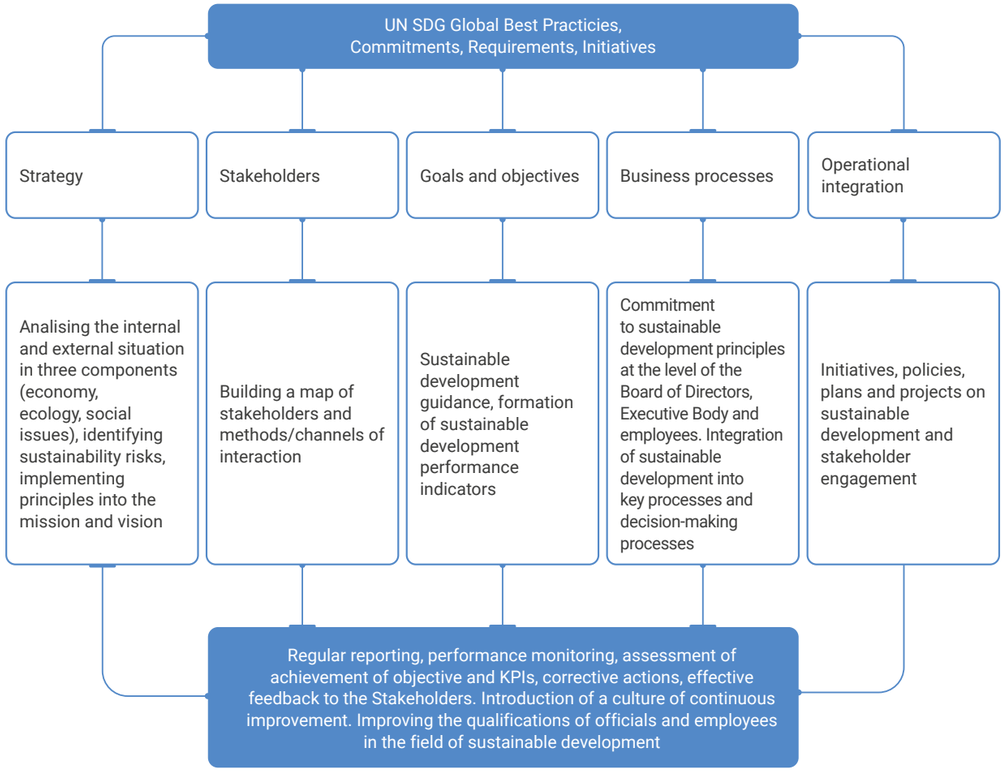
Our achievements in the field of sustainable development in 2024 gave us many reasons to be proud. In 2024, the share of RES in electricity generation in the Group of companies of Samruk-Energy JSC increased by 7.7%. At Ekibastuz SDPP-2, Almaty TPP-1 and ZTK AIES, an automated air emissions monitoring system was implemented in 2024. Data from the AEM is transmitted online to the information system of the Ministry of Ecology and Natural Resources. In 2024, specific emissions of pollutants into the atmosphere for the Group of companies of Samruk-Energy JSC decreased by 13.8% compared to 2023. Sustainable Fitch Agency within the framework of ESG rating in 2024 noted the active work of Samruk-Energy JSC Group on biodiversity protection and reduction of greenhouse gas emissions (Scope 1) for the last 4 years.

Our employees remain at the centre of our success and we remain committed to creating a balanced and inclusive working environment. To this end, we continue to promote pay equity and actively challenge unconscious bias. Our commitment to inclusivity includes creating a positive working environment where wellbeing, career development and collaboration are prioritised. The safety and wellbeing of our employees remains our top priority.

Unfortunately, in 2024, our operations experienced accidents that resulted in the deaths of three of our colleagues. These tragedies have strengthened our resolve to raise safety awareness and enhance measures to protect our employees. Our thoughts remain with the families, friends and colleagues affected by these tragic events.

Looking ahead, we remain focused on our mission – to improve the lives of people around the world by caring for the well-being of our employees, supporting communities and protecting the environment. We express our sincere gratitude to our colleagues, customers, partners and suppliers for their continued commitment and co-operation. Together, we will continue to make a difference.

We set the Company's sustainability priorities at a strategic level. Our management system then allows us to drill down to the project and programme level, effectively assess performance and disclose information.



GRI-2-24

Samruk-Energy JSC integrates commitments to responsible business conduct at all management levels, including the highest governing bodies and executive 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 within the Company and in our work with external partners and clients.

The Board of Directors is responsible for strategic guidance and control over the implementation of sustainable development principles. The Board of Directors approves relevant policies, approves key performance indicators and monitors the fulfilment of the Company's commitments.

The Executive Body, within the scope of its authority, works on the implementation of sustainable development principles, compliance procedures, policy implementation and communicates its results to the Board of Directors.

The approved Maps of motivational KPIs for the management employees of Samruk-Energy JSC for 2025 set ESG indicators.

ESG indicators in motivational KPIs of executives Samruk-Energy JSC for 2024

Component	Indicator	Weight	Description
E (Environment)	Implementation of RES projects	16%	Implementation of investment projects operating on renewable energy sources.
	Investment projects to reduce environmental impact	10%	Investment projects aimed at minimising environmental impact.
	Updating of the Energy Transition Programme until 2060	25%	Updating the company's carbon footprint reduction strategy.
	Ensuring the level of specific consumption of fuel equivalent of national significance (EGRES-1, SEGRES-2)	20%	Improving fuel efficiency at key stations.
	Implementation of an automated environmental emissions monitoring system	15%	Emissions control at EGRES-1, SEGRES-2, AIES (CHPP-2, ZTK).
	Carbon intensity dynamics (3 years to base year)	5%	Indicator of the environmental performance of generated electricity.
S (Social)	Occupational safety (LTIFR, behavioural observations)	15%	Reducing injuries and improving safety culture.
	Share of local content value in procurement	10%	Increasing localisation of goods, works and services.
	No procurement violations confirmed by the authorised body	30%	Compliance with procurement procedures affecting the bottom line.
G (Governance)	Implementation of major and priority investment projects	40%	Fulfilment of the plan for 20 key projects of the Group of companies.
	Implementation of the Action Plan on Key Risk Management of Samruk-Energy JSC	30%	The indicator is aimed at managing key risks of Samruk-Energy JSC.





Special session on sustainable development

On 26 December 2024, Samruk-Energy JSC held a special session for members of the Management Board and heads of structural subdivisions dedicated to sustainable development issues. The session discussed key aspects of the Company's Development Strategy for 2024–2033, including changes in ESG initiatives, focus on sustainable development, introduction of RES and progress in achieving energy efficiency targets.

The main discussion topics are:

- Estimation of Scope 3 emissions;
- Support gender equality and employee engagement;
- Reduction of occupational injuries;
- Strengthening Compliance Practices;
- Expansion of disclosed ESG metrics;
- Sustainable Fitch rating results.

As part of the special session, areas for further refinement of certain environmental indicators related to the implementation of infrastructure projects were identified. Measures to strengthen coordination in the field of energy transition and sustainable development were also initiated. In addition, among the priorities, consideration was given to the possible expansion of the scope of indirect impact assessment within the framework of the Company's climate initiatives.

By resolution of the Board of Directors dated 23 December 2024 (Minutes No.17/24), the following ESG indicators were additionally set for the Company's executive employees for 2025:

- Execution of measures of the Roadmap on improvement of the sustainable development management system of Samruk-Energy JSC for 2025 within the authority of the Management Board with the weight of 10% of the relevant functional map of the employee;
- Implementation of IT investment projects with the weight of 25% of the relevant employee functional map.

The Guidelines in the field of sustainable development regulate our work in the field of ESG, and are based on the principle of ensuring fundamental human rights and freedoms. The document expresses the Company's position to support 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.

More information on the guidelines can be found here: Sustainability Guide

The Company has embedded responsible business commitments, including commitments to respect human rights, in all of its operations and business relationships, as set out in policies and other internal documents. We regularly conduct training on documented sustainability aspects for employees (business ethics, occupational health and safety, protection, human rights, etc.), as well as conduct to suppliers on sustainable supply chain requirements.

ESG risk and opportunity management

Risk and opportunity management is embedded in our business practices at all levels of Samruk-Energy JSC. Our Risk Management Policy describes the Company's approach to identifying, analysing, managing and reporting significant risks and opportunities.

Our approach is formalised through the Group's risk management process, which sets out how our business units and Company functions assess risks and opportunities and develop response plans for the most significant identified risks and opportunities. This takes place in parallel with the development of our business plans.

Key groups of sustainability risks:

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

We assess risks using a systematic approach to sustainable development:

- Assess current and future risks associated with global sustainability factors;
- Forecast economic, socio-demographic and environmental trends;
- Analyse social, environmental and economic aspects of regional impacts;
- Develop measures to manage impacts, mitigate risks and realise opportunities;
- Increase risk culture and evaluate the effectiveness of risk management measures.

Read more about Risks in the section Risk Management and Internal Control.

Positions in ratings

Name of rating	Current position
Sustainable Fitch	ESG 3 rating with an enterprise rating of 52 points
ESG Disclosure Rating of PWC Kazakhstan	A+ 1. Best ESG information disclosure in the energy sector 2. Best Sustainability Strategy Disclosure 3. Best disclosure of corporate governance issues
Moscow Exchange Annual Report Contest	Silver winner in the Grand Prix nomination – Best Annual Report of a Non-Public Company
Rating of annual reports RAEX Rating Agency	5 stars, Highest Quality Annual Report status

Key sustainable development events in 2024

On 26 February 2024, the Board of Directors of Samruk-Energy JSC approved the updated Sustainable Development Management Roadmap for 2024. Changes were made taking into account the ESG rating and the need to maintain and improve it, as well as the completion of part of the activities in 2023. The roadmap aims to improve ESG processes, increase transparency and manage ESG risks. In 2024, measures to improve the quality of information disclosed in the Annual Report and on the company's website were successfully implemented, along with the introduction of a number of ESG-related policies and regulations. At year-end, the Roadmap was 98% fulfilled.

On 25 September 2024, the Board of Directors of Samruk-Energy JSC approved a new version of the Sustainability Guide. Changes were made to improve practices and compliance with international standards. In particular, in the field of ecology, priority areas were expanded, aspects related to air, water, waste, biodiversity and site restoration were detailed. A new section on site closure and rehabilitation has been included.

In 2024, a Local Community Engagement Programme was developed based on annual community development initiatives. Initial monitoring of the Programme implementation in subsidiaries, including Alatau Zharyk Company JSC, AlmatyEnergoSbyt LLP, Moynak HPP JSC and others.

In the reporting period, Samruk-Energy JSC implemented a centralised digital system of ESG data collection and storage. It allows processing and exporting data on key sustainability indicators, including energy consumption, water use, emissions, human resources and social indicators. The system has been put into commercial operation in 14 subsidiaries since 15 April 2024.

In 2024, Samruk-Green Energy LLP for the first time issued and sold more than 15 thousand I-REC certificates confirming the production of electricity from RES. This demonstrates the growing demand in the domestic and international markets. I-REC certificates are recognised in 50+ countries and help attract investments, develop ESG strategies and support sustainable development.

On 8 October 2024, Samruk-Energy JSC posted the CDP 2024 Questionnaire on the ORS online platform to assess the company's greenhouse gas, water and biodiversity management system. The questionnaire covers the topics of governance, risk, strategy and stakeholder engagement. According to the results of the International Greenhouse Gas Emissions Disclosure Agency, the Company was assigned a rating of "D" for greenhouse gas emissions and "C-" for the "Water" aspect.

To ensure the proper implementation of corporate governance and sustainable development principles across the Group, the Company conducts annual audits of these processes and develops recommendations for subsidiaries in line with international best practices. In 2024, an analysis of corporate governance and sustainable development was carried out at AES Shulbinsk HPP LLP and AES Ust Kamenogorsk HPP LLP following their inclusion within the perimeter of portfolio companies.

Training and development in ESG and corporate values

In 2024, workshops and online meetings are organised to raise employee awareness of ESG best practices.

- On 25 September 2024, an online meeting was held for all portfolio companies on the topic Annual Report. Best Practices organised by the Corporate Governance and Sustainable Development Department.
- On 28 November, a corporate seminar on Climate Risks for Energy Sector Enterprises was held, organised by the Risk Management and Internal Control Department with the involvement of a training organisation.
- On 9 December 2024, a meeting was held for portfolio companies of Samruk-Energy JSC on Sustainable Development: Global Context, National Challenges and Contribution of Samruk-Energy JSC Group. Results of 2024 and Plans for 2025.
- On 10 December 2024, McKinsey conducted training for Board members, top management and executives on Climate Change and Energy Outlook.

In addition, as part of strengthening corporate values:

- On 10 July 2024, a webinar was organised for employees on Effective Negotiation Skills. The Harvard Method.
- On 11 July 2024, a training session for employees on Effective Communications. Conflict Management.
- On 8 August 2024, the Department of Human Resource Management, with the involvement of a training organisation, conducted training for all employees on the topic of Professionalism.
- On 27 November 2024, the Compliance Service held a seminar on Formation of anti-corruption culture in Samruk-Energy JSC.



Materiality assessment

GRI-3-1

The materiality assessment process is aimed at identifying and prioritising the most significant impacts on the economy, environment, people and human rights. The assessment of significant impacts included 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, as well as stakeholder opinions were taken into account.

We also took into account and considered the material topics for the industry highlighted by GRI 12: Coal Sector 2022, SASB, analysed 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 the peer companies of Samruk-Energy JSC Group of companies.

We ensured that our list of essential topics was in line with the Global Compact Principles and the UN Sustainable Development Goals.

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

The list of material topics in 2024 has not changed from the last reporting period.



List of material topics

GRI 3-2

Material topic	Type of impact: Negative	Type of impact: Positive	Type of impact: Direct	Type of impact: Indirect	GRI Standards	Principles GC	UN SDGS
Climate change and the environment							
Climate change					305	7, 8	
Energy transition to sustainable sources					302	9	
Energy availability					302	9	
Water resources management					303	7, 8	
Air quality					301	7, 8	
Sustainable waste management					305	7, 8	
Biodiversity					304	7, 8	
Caring for people							
Management, development and motivation of employees					401, 402, 404		
Safety and health in the workplace					403		
Diversity, equality and inclusion					405, 406	1, 2, 6	
Good governance and integrity							
Contribution to economic performance					201, 203		
Sustainable supply chain					204		
Compliance with legislation and anti-corruption					205	10	
Public policy					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 2011.

Principles of the Global Compact	Section of the Report
Businesses should support and respect the protection of internationally proclaimed human rights	Respect for human rights
Business should not be complicit in human rights violations	
Businesses should support freedom of association and real recognition of the right to collective bargaining	Investments in human capital Procurement management
Businesses should advocate for the elimination of all forms of forced and compulsory labour	
Businesses should advocate for the total elimination of child labour	
Businesses should advocate for the elimination of discrimination in labour and employment	
Businesses should support a precautionary approach to environmental issues	Caring for our planet Contribution to climate change mitigation
Businesses should undertake initiatives to increase environmental responsibility	
Businesses should promote development and dissemination of environmentally sound technologies	Business ethics and anti-corruption
The business community must stand up to 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, carrying out its activities, endeavours to contribute to the achievement of the following UN Sustainable Development Goals.

01 Eradicate poverty in all its forms everywhere

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 2024:

- The staff turnover rate in 2024 was 10.9%.
- The average salary of employees in the Group of companies of Samruk-Energy JSC increased by 15% and totalled KZT 561,704 per month. Salary indexation was 9.5%, with special attention paid to low-paid employees. During 2024, in accordance with the approved tariffs, additional indexation of wages by 10% was made for employees of Shardara HPP JSC, Moynak HPP JSC, Ekibastuz SDPP-1 LLP, Ekibastuz SDPP-2 JSC and Almaty Electric Stations JSC.
- The level of employees' social well-being (well-being index) reached 69%.
- Percentage of senior management hired from the local community at significant locations of operation was 100%.
- The share of the company's group in Kazakhstan's electricity market was 33.7%
- The share of RES generation in the electricity market of Kazakhstan is 6.4 %.
- The company's share in production accounted for 38.1% of the total coal production in Kazakhstan.

Company projects/objectives/KPIs

Job retention by controlling, set KPI "Staff turnover" not more than 14%.
Ensuring competitive salaries, indexation of salaries.
The Action Plan for Enhancing Social Stability of Samruk-Energy JSC.
Monitoring of KPI "Ensuring compliance with the proportion of senior managers hired from the local community".
Monitor the KPI "Staff Wellbeing Rate" at a minimum of 65%.
The Company ensures uninterrupted power supply to all its regions of operation, including remote areas and settlements to enable sustainable farming of the local population.
Research and Development (R&D) Activities.
Study of the possibility of application of carbon capture and storage technologies at coal-fired power plants. Introduction of technology for oil-free firing of boiler units (plasma-fuel system).



04 Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all

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 Organisation and Conduct of Practice and Internship in Samruk-Energy JSC were approved.
The Action Plan for the Implementation of the Youth Policy of Samruk-Energy JSC is in effect.
The Rules for Professional Training and Employee Adaptation at Samruk-Energy JSC are in effect.
The "Talent Pool" programme is being implemented within the Company.

Results 2024:

- Samruk-Energy JSC and AUES have been jointly identifying talented youth for over 10 years through the Republican Olympiad in physics and mathematics.
- On 30 September 2024, a cooperation agreement was signed between AUES and Almaty Electric Stations JSC (AIES). The agreement provides for the organisation of student internships at AIES, followed by a placement at the University of Genoa (Italy). This initiative aims to deepen students' knowledge, enhance their professional skills, and provide international experience in the field of thermal power engineering.
- 700 students underwent training and production internships at the Company, and more than 60 students underwent dual training.
- For the purpose of social and professional development of personality through exchange of thoughts and experience, "III Youth Forum of Samruk-Energy JSC" was held with participation of 100 employees of the Company's group.
- Within the framework of implementation of the programme for development of Youth Policy in the Group of companies of Samruk-Kazyna JSC, 5 employees of the Company completed participation in the modular programme for development of young leaders "Zheti Qadam".
- The Company cooperates with 28 leading educational institutions, including Nazarbayev University, Al-Farabi Kazakh National University, Almaty University of Power Engineering and Telecommunications named after Gumarbek Daukeyev, and the Kazakh-British Technical University, as well as a number of technical colleges, ensuring the training of qualified specialists.

05 Achieve gender equality and empower all women and girls

UN SDG targets

5.1 End all forms of discrimination against all women and girls around the world.

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.

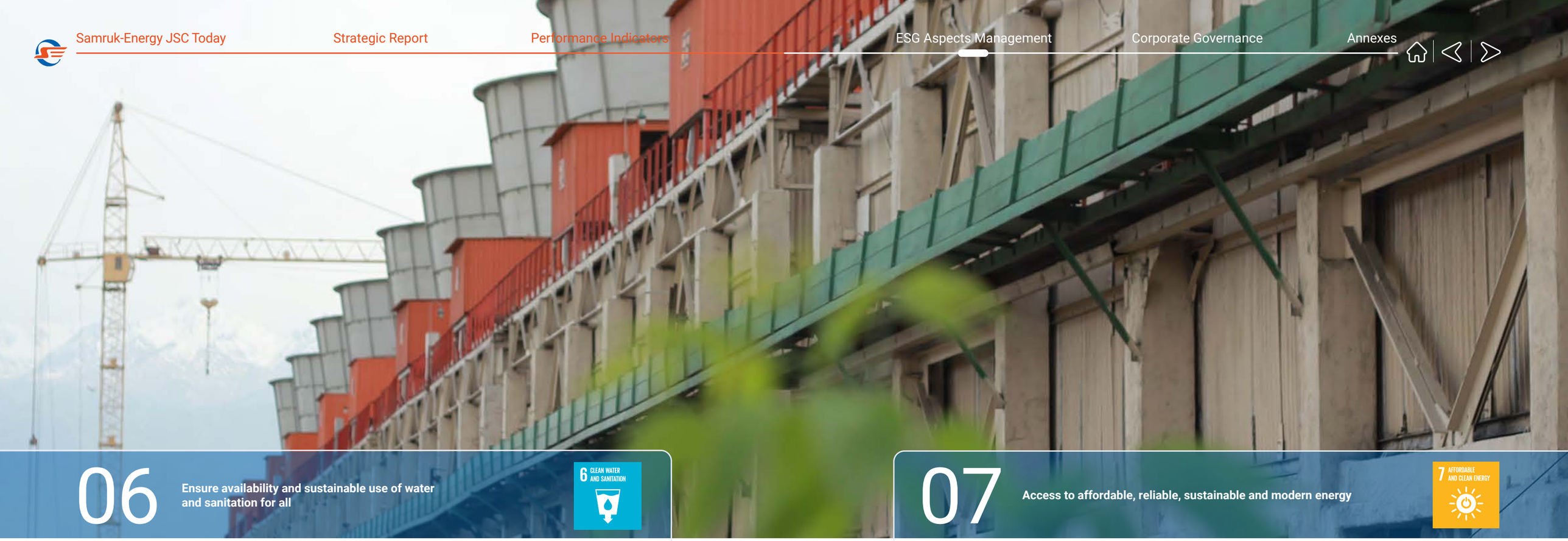
5.C Adopt and strengthen sound policies and enforceable legislation to promote gender equality and the empowerment of all women and girls at all levels.

Results 2024:

- There have been no confirmed cases of discrimination, harassment, or bullying.
- The share of women in the company is 35%.
- The share of women in the Board of Directors is 14%.
- In 2024, a united Women's Club was established in Samruk-Energy JSC to support and develop women.
- The I Forum of Samruk-Energy JSC Group of companies: 'Women in Power/Women's Energy' on the theme: "Women in Energy: Partnership, Progress, Prospects".

Company projects/objectives/KPIs

Statement of support for the Women's Empowerment Principles developed through the UN Women and UN Global Compact partnership signed.
The Action Plan on increasing the share of women in the Management Board of Samruk-Energy JSC and Management Boards, Supervisory Boards/Boards of Directors of subsidiaries and affiliated organisations of Samruk-Energy JSC up to 30% by 2030 was approved.
Established KPIs: Increase the number of women in the labour force.
KPIs have been set: Increase in the number of women in the talent pool.



06 Ensure availability and sustainable use of water and sanitation for all

UN SDG targets

6.3 By 2030, improve water quality by reducing pollution, eliminating waste dumping and minimising the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and significantly increasing recycling and safe wastewater reuse worldwide.

6.4 By 2030, significantly 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

The Action Plan for the Management of Labour Protection and Environmental Protection Issues is in effect across the Group of companies of Samruk-Energy JSC.

Water Resources Management Plans are in place.

Objectives:

- reducing freshwater consumption;
- increasing 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 Coal LLP;
- minimising risks in relation to water use;
- improving the quality of discharged wastewater.

Results 2024:

- In 2024, regular monitoring of the condition of water bodies was carried out by accredited specialised laboratories in accordance with the Industrial Environmental Control Programme, including determination of the chemical composition and quality of surface, ground 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, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, and AZhK JSC.
- All production enterprises have implemented Water Resources Management Plans with measures to reduce the use of fresh water, discharge of treated water, water losses during transport and introduction of wastewater reuse systems.

07 Access to affordable, reliable, sustainable and modern energy

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 Double the global rate of energy efficiency improvements by 2030.

7.A By 2030, enhance 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 2024:

- Electricity production by RES facilities at the enterprises of the Group of companies of Samruk-Energy JSC increased by 4.2%.
- Electricity generation by RES facilities of Samruk-Energy JSC in 2024 totalled 578.1 million kWh, which corresponds to 7.7% of the total share of RES electricity generation in the Republic of Kazakhstan.
- Energy efficiency initiatives in Samruk-Energy JSC resulted in savings of 258.1 thousand tonnes of fuel equivalent and cost reduction by KZT 1.2 billion.
- The Company is implementing a number of investment projects aimed at increasing the share of renewable energy sources and ensuring access to reliable energy services. For more details, see the section: “Investment Activities”.



08

Promote inclusive and sustainable economic growth, employment and decent work for all

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 labour, end modern slavery and human trafficking, and ensure the prohibition and elimination of the worst forms of child labour, including the recruitment and use of child soldiers, and end child labour in all its forms by 2025.

8.8 Protect labour rights and promote safe and secure working conditions for all workers, including migrant workers, in particular migrant women, and those in vulnerable employment.

Results 2024:

- At the end of 2024, the Company employed 206 people with disabilities. At the end of 2024, 31 disabled persons were employed in subsidiaries and affiliates, which exceeds the established quota.
- The ratio of the minimum wage for women to men is 100%.
- In 2024, conditions were created at the Company's subsidiaries to improve accessibility for employees with disabilities, including parking spaces, ramps with call buttons, tactile paving, and adapted restrooms. Priority services are also provided for persons with disabilities, including the option to submit applications online.

Company projects/objectives/KPIs

Personnel Policy of Samruk-Energy JSC has been approved.
Non-Discrimination Policy is in effect.
Human Rights Policy is in effect.
Programme for Creating an Accessible and Inclusive Environment for Persons with Disabilities (PwDs) within the Group of companies of Samruk-Energy JSC has been approved.

09

Building sustainable infrastructure, promoting sustainable industrialisation and stimulating innovation

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, emphasising affordable and equitable access for all.

9.4 By 2030, modernise infrastructure and upgrade 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 according to their capabilities.

9.5 Enhance research, build the technological capabilities of industrial sectors in all countries, especially developing countries, including by fostering innovation and significantly increasing the number of R&D workers per 1 million people and public and private R&D expenditure by 2030.

Results 2024:

- The Group of companies of Samruk-Energy JSC provided material assistance in the amount of KZT 800 million to eliminate consequences of floods in the regions of Kazakhstan. The funds were transferred to the Samruk-Kazyna Trust.
- KZT 89 million was the cost of maintaining production assets.
- KZT 136 million was allocated for the implementation of investment projects, including RES facilities.
- KZT 229 million was capital investments, including in RES.
- R&D under the project "Carbon Capture and Storage (CCS) Technologies, Production of Carbon Chemistry Products" is underway.



12 Ensure sustainable consumption and production patterns

UN SDG targets

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

12.5 By 2030, substantially 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 is in effect.
Action Plan for the Management of Labour Protection and Environmental Protection Issues in the Group of companies of Samruk-Energy JSC has been approved.

Results 2024:

- Environmental protection issues are managed at all levels of the Company through the environmental management system integrated into corporate governance and non-financial risk management. The Guidelines for Response to Environmental Emergencies have been approved. The system is regularly evaluated and improved with the participation of international experts.
- All types of waste at EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP are identified on the basis of inventory.
- Bogatyr Coal LLP is reducing overburden disposal by utilising internal waste dumps and conducting insulation to prevent spontaneous combustion.
- Ash and slag is buried with dust suppression and reclamation measures, part of it is recycled for construction.
- No radioactive waste is generated. Quarterly radiation monitoring is carried out at the enterprises and in the sanitary protection zones; no exceedances of the permissible level have been recorded.
- 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.
- Adopted adapted forms for collection of information on waste management in accordance with international requirements for reporting on sustainable development (GRI).

13 Take urgent action to combat climate change and its impacts

UN SDG targets

13.1 Build 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

Samruk-Energy JSC's Energy Transition Program until 2060.

Results 2024:

- In accordance with Samruk-Energy's Energy Transition Programme until 2060, 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.
- Climate risks at key production facilities were assessed. Adaptation measures were developed and implemented.
- The company actively participates in national and international climate forums, sharing its experience in reducing its carbon footprint and adapting to climate change.
- On 28 November, a corporate seminar on "Climate Risks for Energy Sector Enterprises" was held, organised by the Risk Management and Internal Control Department with the involvement of a training organisation.
- On 10 December 2024, McKinsey conducted training for Board members, top management and executives on "Climate Change and Energy Outlook".
- Emissions of fluorinated greenhouse gases in terms of CO_2-equivalent (tonnes) have been accounted for:

Name of fluorinated GHG	2024
Hydrofluorocarbons (HFCs)	526.7
Perfluorocarbons (PFCs)	0
Difluorochloromethane ($CHClF_2$)	424.9
Sulphur hexafluoride (SF_6)	258.5
Nitrogen trifluoride (NF_3)	0
Tetrafluoromethane (CF_4)	216.8
Total for Samruk-Energy JSC	**1,426.9**



15 Sustainable forest management, combating desertification, halting and reversing land degradation, halting biodiversity loss

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 under international agreements.

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

Results 2024:

- To protect aquatic ecosystems, all hydroturbines are equipped with fish protection devices, and during dark hours the water intake is illuminated to deter fish.
- To protect birds, power lines are being reconstructed with the installation of insulated wires.
- HPP operation modes are coordinated with water and environmental authorities to reduce the impact on ecosystems.
- Environmental impact is taken into account when designing wind turbines: light pollution is minimised and lighting is limited to parking lights.
- Subsidiaries and affiliates annually implement biodiversity conservation programmes, including reclamation, abandonment of wells, landfills and other facilities.
- According to the monitoring data, no significant impacts on vulnerable ecosystems were recorded in 2024.

Company projects/objectives/KPIs

Corporate Standard on Environmental Protection Management in the Group of companies of Samruk-Energy JSC has been approved.
Action Plan for the Management of Labour Protection and Environmental Protection Issues in the Group of companies of Samruk-Energy JSC has been approved.

16 Promote just, peaceful and inclusive societies

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.

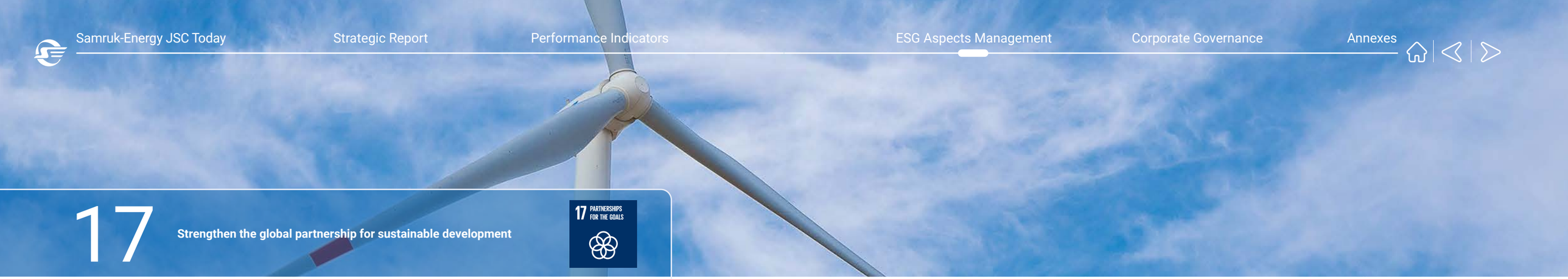
16.B Promote and enforce non-discriminatory laws and sustainable development policies.

Results 2024:

- There were no confirmed cases of corruption and bribery in the reporting period.
- More than 290 training events were held to explain changes in anti-corruption legislation, tax declaration and hotline procedures.

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 analysed on an annual basis.
Compliance officers conduct compliance due diligence of counterparties, including their involvement in corruption offences.
Explanatory work on anti-corruption issues is carried out.
Equal opportunities in employment, career development and pay apply.
Ethical standards and non-discrimination are regularly assessed.



17 Strengthen the global partnership for sustainable development

UN SDG targets

17.16 Strengthen the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, 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 organisations:

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

Results 2024:

- 14 October 2024 participated in the 7th Vienna Energy Security Dialogue.
- 08 November 2024 took part in the VI International Forum on Energy Saving in Astana.
- 13 November participated in COP-29 on climate change.

In 2024, the management of Samruk-Energy JSC actively interacted with state bodies, profile associations and international organisations, taking part in a number of significant events:

- 16 January – meetings of the Energy Council under the President of Kazakhstan and the Government of Kazakhstan on the development of the electric power industry;
- 31 January – meeting of the Council of the KAZENERGY Association;
- 8 February – General Meeting of the EcoJer Association;
- 22–25 April – participation in the 26th World Energy Congress, Rotterdam (Netherlands);
- 25 April – QMS Machine Builders Forum;
- 3 May – meeting of the Energy Council under the President of the Republic of Kazakhstan;
- 30 May – International RES Forum "Qazaq Green Fest", Shchuchinsk;
- 6 June – 64th meeting of the CIS Electric Power Council, St. Petersburg;
- 14 June – General Meeting of the Union of Machine Builders of Kazakhstan;
- 18–19 June – II International Forum "Thermal Power Engineering Central Asia 2024", Almaty;
- 11 July – meeting on electric power industry chaired by the Vice-Minister of Energy of the RK;
- 18 July – General Meeting of the JMC;
- 14 August – meeting on problematic issues of the oil and gas industry chaired by the Prime Minister of Kazakhstan;
- 1-4 October – event on experience exchange in the field of AI and neural networks in the fuel and energy sector, Novosibirsk;
- 18 November – meeting of the Energy Council under the President of the Republic of Kazakhstan;
- 4 December – meeting of the Council of the KAZENERGY Association;
- 10 December – meeting of the CIS EES Working Group on Low Carbon Development of the Electricity Sector;
- 20 December – meeting of the Coordination Council of the JMC and the kick-off meeting of the working group of the Ministry of Energy of the Republic of Kazakhstan on amendments to the legislation in the field of RES;
- During 2024, attendance at CEA Board of Directors meetings.

Stakeholder engagement

GRI 2-29

Stakeholder engagement is a key element of our approach to doing business. This approach fosters trust and transparency, helping us to better understand external changes, market expectations and new opportunities and risks.

Systematic work with stakeholders and analyses of their views on economic, social, environmental, ethical, and human rights issues allow us to take into account their needs and effectively manage both direct and indirect impacts on Samruk-Energy JSC. This strategic approach helps build long-term relationships with key partners, prevent or mitigate negative consequences and ensure business success. By creating value for all stakeholders, including employees, customers and society as a whole, we develop a sustainable business model that links success with the well-being of the entire ecosystem.

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

We identify the key stakeholders with whom we interact within the framework of our activities. To assess their importance, we use the Mitchell, Agle and Wood model, dividing stakeholders into internal and external groups. Based on the analysis and identification, we form a Stakeholder Map, including the most important groups for the Company. This approach allows us to take into account their expectations and build long-term partnerships.

Basic principles of stakeholder engagement:

- respecting and taking into account the interests, opinions and preferences of stakeholders;
- timely and regular informing of stakeholders;
- responsible fulfilment of the obligations undertaken.

We regularly gather stakeholder views, inviting them to discuss critical issues and strategic priorities. This is done by setting up special groups to assess the impact of our business on stakeholders and identify key aspects to manage.

We have various channels of stakeholder engagement working across departments and teams. This includes information and feedback from day-to-day operations.

We are committed to transparency and ethics in our stakeholder engagement. Our Business Principles set clear standards of integrity, respect and responsibility. With transparency in mind, as part of our stakeholder engagement, we review the balance and completeness of the information disclosed in the annual report, and identify topics and issues that have a material impact on the Company and its stakeholders each year after the issuance of the annual report.

We ensure responsible and sustainable business conduct through a comprehensive corporate governance framework, including regularly updated policies and a Human Rights Policy.

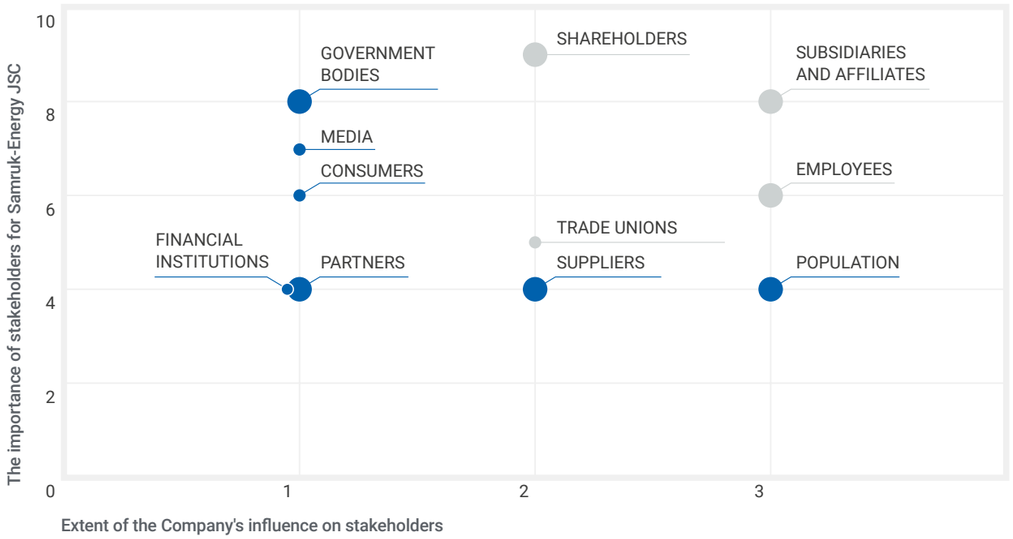
We emphasise open communication and encourage feedback, responding promptly to issues as they arise. Our employees receive in-depth training on data protection, non-discrimination and privacy, which fosters a culture of trust.

External audits confirm our commitment to high ethical standards, providing stakeholder confidence in our operations. In a changing business landscape, we remain flexible, building trust through transparent and responsible practices.

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 stakeholder engagement. The Plan also describes the principles of the Company's stakeholder engagement, approach to identification and analysis of stakeholders, requirements to stakeholder engagement, mechanisms for filing and reviewing complaints, and stakeholder engagement activities. 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 2024–2034 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 2024, the activities of the Stakeholder Engagement Plan of Samruk-Energy JSC were fulfilled in full. In accordance with the Plan, subsidiaries and affiliated organisations of Samruk-Energy JSC in 2024 monitored the approved Stakeholder Engagement Plans (SEP) for existing investment projects.

Map of Samruk-Energy JSC stakeholders



– internal stakeholders that have direct and significant influence on the decisions made and/or are influenced by those decisions.

– external stakeholders with indirect influence on the decisions made

The size of the circle demonstrates the extent of the Company's interaction with stakeholders. The smallest size indicates 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	Engagement mechanisms	Engagement results
Internal		
Shareholder		
• Economic Profit/Consolidated Net Income/Economic Performance; • Free funds for development and dividends; • Market Share/Market Presence; • Social and environmental responsibility, minimisation of emissions into the environment, compliance with the principles of sustainable development, absence of complaints and fines for violation of environmental legislation.	• Participation in meetings/periodic reporting of Samruk-Kazyna JSC, on the results of the Company's activity for the reporting period; • Provision of reporting (financial, non-financial) in accordance with the requirements of the RK legislation, internal regulations of the Sole Shareholder, relevant requests; • Organisation of joint working groups, meetings, negotiations, meetings with stakeholders; • Formation of a media plan/publication of information on the Company's activities; • Discussion of the implementation of the Development Strategy, business plan, implementation of investment projects and sustainable development processes, etc; • Meetings and correspondence on the activities of the Group of companies of Samruk-Energy JSC; • Conducting surveys, questionnaires, testing; • Channels of intra-corporate communication; • The Company's annual report and online resource.	Detailed information is provided in the Corporate Governance section
Management and personnel		
• Employment, employee-management relations, non-discrimination, diversity and equal opportunities, level of staff satisfaction with their jobs, as well as with the work of the Company's services under their control; • Training and Education; • Increasing the level of safety culture in production.	• Fair and transparent conditions of personnel remuneration, ensuring professional growth of employees, safe working conditions; • Development of human resource capacity; • Occupational safety briefings and implementation of programmes to improve working conditions; • Implementation of social support measures for personnel and their family members; • Professional development, training and staff development programmes; • Regular meetings with management, negotiations/meetings with the team, representatives of subsidiaries and affiliates, trade union, including year-end meetings; • Informing employees about the Company's activities and opportunities for professional growth via corporate websites and social networks; • Conducting surveys, questionnaires, testing, annual monitoring of employee engagement indicators Hotline, internal corporate communication channels, the Company's Internet resource.	Detailed information is provided in the ESG Aspects Management section

Stakeholder's interest in the Company	Engagement mechanisms	Engagement results
Subsidiaries and associates		
• Employment and pay levels, staff-management relations, non-discrimination, diversity and equal opportunities; • Improving industrial safety culture, training and education; • Market Share/Presence in the markets for products and services; • Assistance in dealing with state authorities, commercial interests.	• 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 fulfilment of licence and contractual obligations of Samruk-Energy JSC subsidiaries and affiliates; • Management visits to subsidiaries and affiliates' production sites; • Elaboration of proposals on amendments and additions to the legislation of the RK; • Providing information at the request of public authorities on various business lines of the Company; • Signing of contracts, memorandums, agreements on strategic co-operation; • Orders and instructions, hearing of SDC management by the Company; • Information/reports on the fulfilment 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; • Hardware, production operational and other meetings, holding public hearings within the framework of investment projects implementation; • Occupational safety briefings, training and education; • Providing feedback on appeals and complaints/ hotline, social media, internal corporate communication channels, the Annual Report and the Company's online resource.	Detailed information is provided in the sections Performance Indicators, ESG Aspects Management, Corporate Governance
Trade unions		
• Job creation and retention; • Increasing the level of safety culture in production.	• Holding public hearings; • Signing of contracts, memorandums, agreements on strategic co-operation; • Regular meetings with management, negotiations/ team meetings, representatives of subsidiaries and affiliates, year-end report; • Regulation of labour relations with the Company's employees; • Staff remuneration in accordance with the labour legislation of the Republic of Kazakhstan, training and education, safe working conditions; • Informing about current activities of subsidiaries and affiliates; • Receiving letters (appeals) from the Company; • Hotline, social media, intra-corporate communication channels; • The Company's annual report and online resource.	Detailed information is provided in the ESG Aspects Management section

Stakeholder's interest in the Company	Engagement mechanisms	Engagement results
External		
State authorities		
• Compliance, business stability and sustainability, tax revenues, economic growth; • Job creation and retention; • Representation of the country's economic interests in the international arena (economic, political and image benefits for the country); • Increasing the level of energy and resource efficiency of production, preserving the natural environment to ensure public health and biodiversity conservation, and minimising emissions into the environment.	• Inspections of fulfilment of licence 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; • Information/reporting (financial, non-financial) in accordance with the requirements of the RK legislation on fulfilment 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; • The Hotline; • The Company's annual report and online resource.	Detailed information is provided in the sections ESG Aspects Management, Corporate Governance
Consumers		
• Market Share/Market Presence; • Quality of products and services; • Marketing Communications.	• Customer feedback system • Conducting meetings, negotiations, questionnaires; • Formation of a media plan/publication of information on the Company's activities; • Signing of contracts, memorandums, agreements on strategic co-operation; • Hotline; Annual Report and the Company's online resource.	Detailed information is provided in the Strategic Report section
Suppliers of goods, works and services		
• Ensuring equal access to participation in competitions; • Investment and Procurement Practices/Benefits from Procurement Category Strategies; • Supply network and value chain efficiency; • Support of domestic commodity producers.	• Request for Quotations; • Conducting regular analytical meetings, negotiations, business correspondence; • Signing of contracts, memoranda, strategic co-operation agreements, licensing; • Information/reporting on the fulfilment of production, investment and social plans and commitments sent to the Company; • Reporting on the results of the Company's financial and economic activities; • Consideration of letters (appeals) addressed to the Company; • Conducting surveys, questionnaires, testing; • The Hotline; • The Company's annual report and online resource.	Detailed information is provided in the sections Performance Indicators, ESG Aspects Management

Stakeholder's interest in the Company	Engagement mechanisms	Engagement results
Business communities (Associations, National Chamber of Entrepreneurs, LLCs)		
- Participate in improving and adhering to industry standards; - Participate in the improvement of 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.	- Elaboration of proposals on amendments and additions to the legislation of the Republic of Kazakhstan; - Signing of contracts, memorandums, agreements on strategic co-operation; - Conducting regular analytical meetings, negotiations, business correspondence; - Establishment of working groups, meetings, negotiations, questionnaires; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators
Public organisations and local communities		

- Increasing the level of safety culture in production;
- Increasing the level of energy and resource efficiency of production;
- Minimising emissions into the environment;
- Environmental protection issues within the framework of environmental impact assessment, including
  - atmospheric air;
  - surface water and groundwater;
  - the surface of the bottom of water bodies;
  - landscapes;
  - land and soil cover;
  - plant life;
  - animal life;
  - the state of ecological systems and ecosystem services;
  - biodiversity;
  - health status and living conditions of the population;
  - objects of special ecological, scientific, historical, cultural and recreational value.
- 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.
	- Holding public hearings;
	- Elaboration of proposals on amendments and additions to the legislation of the RK;
	- Formation of media plan/publication of information about the Company's activities in mass media;
	- Surveys, questionnaires, testing;
	- Informing on current activities of the Company and subsidiaries and affiliates;
	- Consideration of letters (appeals) addressed to the Company;
	- Hotline, social media;
	- The Company's annual report and online resource.
		Detailed information is provided in the ESG Aspects Management section

Stakeholder's interest in the Company	Engagement mechanisms	Engagement results
Partners		
- Market Share/Market Presence; - Joint implementation of projects; - Transfer of technologies, competences and innovations.	- Decisions of the Company as a participant/ shareholder of subsidiaries and affiliates, joint consultative and advisory bodies; - Organising joint working groups, carrying out inspections; - Meetings, negotiations, business correspondence, questionnaires; - Current Activity Reports; - Maintaining correspondence on the activities of subsidiaries and affiliates; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators
Financial institutions		
- Economic Profit/Consolidated Net Income/Economic Performance; - Free funds for development and dividends.	- Providing reports/information on the Company as required by the applicable loan agreements; - Provision of reporting (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 about the Company's activities in mass media; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators
International organisations		
- The Company's participation in international agreements and initiatives.	- Conferences, forums, annual meetings; - Signing of contracts, memorandums, agreements on strategic co-operation; - Establishment of working groups, meetings, negotiations, questionnaires; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators
Creditors		
- Economic Profit/Consolidated Net Income/Economic Performance; - Free funds for development and dividends; - Net Asset Value (NAV); - Practices Investment and Procurement/Benefits from the implementation of procurement category strategies.	- Conducting regular analytical meetings and negotiations, business correspondence, questionnaires; - Formation of media plan/publication of information about the Company's activities in mass media; - The Hotline; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators
Local executive bodies		
- Compliance, job creation and retention, sponsorship and other assistance; - Occupational health and safety of personnel; - Increasing the level of energy and resource efficiency of production, minimising emissions into the environment.	- Co-operation with local executive bodies to support and develop the social sphere in the regions; - Organising and running volunteer and charity events; - Hotline, social media; - The Company's annual report and online resource.	Detailed information is provided in the sections Strategic Report, Performance Indicators

Stakeholder's interest in the Company	Engagement mechanisms	Engagement results
MEDIA		
▪ Compliance, job creation and retention, and a culture of production safety; ▪ Economic Profit and Performance; ▪ Market Share/Market Presence; ▪ Increasing the level of energy and resource efficiency of production; ▪ Minimising emissions into the environment	▪ Holding press conferences, providing press releases; ▪ Formation of a media plan/publication of information about the Company's activities; ▪ Hotline, social media; ▪ The Company's annual report and online resource.	Detailed information is provided in the ESG Aspects Management sections



Cases 2024

Subsidiaries and associates

In 2024, the management of Samruk-Energy JSC conducted a number of working visits to production facilities of subsidiaries and affiliates. In addition, all subsidiaries and affiliates held reporting meetings with participation of the Company's management, the Ombudsman, representatives of trade unions and labour collectives, where issues of social and labour relations were discussed.

As part of the 2024 engagement, a general meeting was held to review the performance of S&As for 2023. In addition to this, 18 meetings of the CP&ED were held to review the performance of subsidiaries and affiliates.

The Company's management visited the enterprises of Alatau Zharyk Company JSC, EGRES-1 LLP, SEGRES-2 JSC, Bogatyr Coal LLP, Moynak HPP JSC, AIES JSC and other key assets.

Management and Personnel

In 2024, the Samruk-Energy JSC Group of companies held many events aimed at strengthening corporate culture and employee involvement. Employees took part in celebrations dedicated to state and professional holidays, sports competitions (spartakiade among employees of the Samruk-Kazyna JSC Group of companies) and a forum to promote gender diversity. The III Youth Forum of the Group of companies was also held.

To improve transparency and accessibility of information on vacancies for administrative positions in 2024, information was posted on the internal corporate portal with notification of employees by email. The portal is integrated with the unified online recruitment platform QSamruk.kz, providing access to current vacancies.

The Centre for Social Cooperation and Communications conducted quarterly surveys of social stability in the Group of companies. At the end of 2024, positive dynamics was noted:

- SRS index for Samruk-Energy JSC increased by 17%
- The engagement index increased by 16%
- Social well-being index increased by 35%
- Social tranquillity index increased by 15%

The research results confirm the growth of employee confidence and improvement of social conditions in the company.

As part of feedback with the staff, a reporting meeting of the Chairman of the Management Board of Samruk-Energy JSC with the employees of the corporate centre was held on 31 January 2024, where the results of work for 2023 and plans for 2024 were presented.

Public organisations and local communities

In 2024, the enterprises of the Samruk-Energy JSC Group of companies held public hearings on key environmental and social issues.

AIES JSC organised discussions on projects for modernisation of Almaty CHPP-2 and CHPP-3, emission standards and waste management. SEGRES-2 JSC presented the project of expansion and reconstruction of the plant. Ekibastuz SDPP-1 LLP held hearings on reconstruction of the cooling pond and modernisation of equipment to reduce emissions. AlmatyEnergoSbyt LLP discussed the upcoming change in electricity tariffs.

The hearings were held with the participation of local residents, government agencies and experts, ensuring that decisions were transparent and public opinion was taken into account.

Media

In 2024, interaction with mass media covered several key areas. Among them, the results of Samruk-Energy JSC's activities for the past year were covered, as well as information support of investment projects implementation and signing of agreements and contracts. Also, much attention was paid to the coverage of the Company's ESG initiatives.

Work with mass media included preparation and distribution of press releases on the activities of Samruk-Energy JSC and subsidiaries, as well as publications in the corporate edition "SK news". An important part was placement of information materials on the official website of the Company and in social networks such as Telegram, Instagram and Facebook.

The Company also actively covered various corporate, sports and cultural events, including the final round of KVN, Spartakiade, Women's and Youth Forums. One of the directions was information support of the company's employees' participation in sports and cultural events organised by Samruk-Kazyna JSC, such as the charity race and the IX Spartakiade.

In addition, the company provided information support for management's working trips to energy facilities,

as well as employees' participation in national and international forums and conferences. As part of the "Taza Kazakstan" environmental campaign, events were organised and several thematic videos were produced.

An important area was the creation of presentation videos about the company's activities, as well as information support for various contests, such as the children's drawing contest and the Best Production Specialist contest among employees. The press service also promptly responded to media enquiries and appeals, monitored materials and references about the company in the media and social networks, and updated information on the official website.

The press service of the Company prepared 85 materials published in the leading national and regional media, such as TV channels 24 KZ, Qazaqstan, KTK, newspapers Egemen Qazaqstan, Kazakhstanskaya Pravda and internet portals tengrinews.kz, zakon.kz, nur.kz and others. Also 21 interviews, 5 briefings and 6 press tours for journalists were organised.

The Company's official website posted 126 materials about key events, and 705 posts, infographics and videos were published on social media. Over the year, the number of followers on the Company's Telegram channel increased from 500 to 7,000, and on Instagram from 7,100 to 8,700, which contributed to increased audience engagement.

Key partnerships

GRI 2-28

Commitments and calls to action What we want to achieve	UN Global Compact UN Sustainable Development Goals UN Women
Reporting How we communicate our achievements	GRI TCFD <IR> Kazakhstan Stock Exchange (KASE) Astana International Exchange (AIX)
Membership and co-operation Who we work with to achieve our commitments	KAZENERGY Association Kazakhstan Electricity Association (KEA) CIS Electric Power Council (CIS EPC) World Energy Council National Chamber of Entrepreneurs of the Republic of Kazakhstan (NCE RK) Union of Machine-Builders of Kazakhstan LLC ECOJER Association National Confederation of Employers of RK PARYZ UN Global Compact Carbon Disclosure Project (CDP)
Assessments and ratings External assessment of our performance	Fitch Ratings Sustainable Fitch PwC Kazakhstan RAEX



Compliance with human rights

GRI 2-24, 3-3, 408-1, 409-1, GRI 12: Coal Sector: 12.16.1, 12.6.2, 12.17.1, 12.17.2

Samruk-Energy JSC strives to actively implement human rights principles in all its activities. Our comprehensive approach is based on the current legislation of the Republic of Kazakhstan, as well as internationally recognised standards and commitments that we uphold and implement, including:

- UN Guiding Principles on Business and Human Rights (UNGPs);
- UN Sustainable Development Goals;
- Ten Principles of the UN Global Compact;
- Universal Declaration of Human Rights;
- International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work;
- International Covenant on Civil and Political Rights;
- International Covenant on Economic, Social and Cultural Rights;
- United Nations Guiding Principles on Business and Human Rights.

The Company takes a holistic approach to respecting human rights throughout the value chain and endeavours to ensure compliance with relevant laws and regulations through a robust risk management framework. We continuously assess actual and potential adverse impacts on people and the environment and integrate our findings into the Company's due diligence policies, procedures and processes.

Our policities

Samruk-Energy JSC expresses its commitment to human rights and approach to their protection, and sets expectations in this area through relevant policies and regulations:

- The Code of Conduct of Samruk-Energy JSC describes expectations with regard to employees and sets standards of corporate behaviour that apply to the entire Group. All employees and persons acting on behalf of Samruk-Energy JSC are obliged to comply with the Code, regardless of location and nature of their work.
- The Human Rights Policy of Samruk-Energy JSC describes the Company's approach to human rights protection.
- The Samruk-Energy JSC Non-Discrimination Policy affirms the Company's commitment to the principles of equality, inclusivity, and respect for human rights, establishing a prohibition on all forms of discrimination and outlining mechanisms for employee protection.
- The Samruk-Energy JSC Sustainability Guidance outlines the Company's commitments to respecting and protecting human rights across all areas of activity, including the prohibition of discrimination, the provision of safe and decent working conditions, freedom of association, and a responsible approach to engagement with communities and other stakeholders.
- The Personnel Policy of Samruk-Energy JSC regulates labour practices within the Company, defining obligations to employees and expectations from them.

Governance and accountability

Organ	Responsibility
Board of Directors and Committees under the Board of Directors	- Set strategic priorities and approve human rights policies. - Oversee the management of human rights risks. - Define expectations for third parties (contractors, partners, etc.) from a human rights perspective.
Management Board	- Integrates human rights policies into business processes. - Manages the implementation of human rights protection programmes/plans.
Corporate Governance and Sustainable Development Department	- Develops and implements human rights policies and procedures. - Responsible for reporting, disclosure and stakeholder engagement.
Department of Human Resources Management	- Implements policies to ensure equal opportunities, non-discrimination and protection of employees' rights. - Develops policies on human rights, non-discrimination, etc. - Develop and implement programmes to ensure gender equality, social support, inclusion development, etc. - Manages internal complaints and conflicts related to labour legislation.
Procurement Management Department	- Integrates human rights requirements into contracts with suppliers and contractors.
Compliance Service	- Conducts internal checks of job candidates and other third parties to confirm their good reputation and compliance with ethical standards and legal requirements. - Provides employee training on ethical standards, anti-corruption policy, and codes of business conduct. - Manages grievance and dispute resolution mechanisms.
Occupational Health and Safety Department	- Ensures that employees' health, safety and security rights are protected. - Conducts audits of working conditions and compliance with safety standards.
Ombudsman	- Receive complaints and applications from employees and stakeholders. - Independently reviews complaints and facilitates dispute resolution.
Working groups and committees on human rights	- Formed to address specific human rights issues.



Akylov Nariman Beketovich

Ombudsman

Relationships with management, opportunities for professional and personal development, as well as mutual respect – these are the key principles on which trust within our Company is built.

When employees see support and openness from management, and also have a real opportunity to grow and develop, a strong foundation is formed for long-term cooperation and successful teamwork.

Our priority human rights areas

We respect the basic human rights of all people by complying with all legal requirements. We have rigorous policies, procedures and other actions to mitigate potential risks in the following five human rights categories:

- **Forced labour and child labour**
  We have zero tolerance for any type of forced and/or child labour in our operations and supply chain.

During **2024**

there were no cases of violation of these principles and current legislation in this area

- **Occupational health and safety**
  Health and safety is our top priority and we are committed to continuous improvement to achieve zero injuries. We are committed to the safety of our products and operations, and this extends to contractors and visitors to our sites.

- **Wages and working hours**
  We do not employ people whose wages are below the minimum wage permitted by local law for the type of work involved. We are committed to monitoring and taking steps to reduce excessive working hours and support flexible working conditions where possible.

- **Freedom of association**
  It is a fundamental right for employees to have freedom of association and collective bargaining. We recognise and respect the rights of employees under local law, including, where applicable, the right to collective representation and bargaining, without any negative consequences for engaging in legitimate trade union activities.

- **Discrimination**
  We are committed to promoting equal opportunity and are proud to build a culture with zero tolerance for discrimination, harassment and bullying.

Grievance mechanism and channels

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

In 2024, no confirmed violations of human rights with respect to employees, contractors, or the local population were recorded

The Company's managers were consulted on all appeals in the reporting period and provided with recommendations. Also in 2024, work was carried out with labour collectives to explain the norms of the Codes of Ethics and Conduct and Compliance Policy.

Political activities and contributions

GRI 415-1, GRI 12: Coal Sector: 12.22.2

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 organisations 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 area:

- You may not use Company accounts for contributions for political purposes;
- It is prohibited to use Company resources (including email) for political activities;
- You may not make charitable donations in lieu of contributions for political purposes;
- It is prohibited to allow the Company's funds or assets to be used through industry organisations or otherwise to make contributions to political parties.

According to the results of 2024, the Company has not recorded any facts of sponsoring events or holidays held solely for political propaganda purposes, and there are no facts of direct or indirect pressure on political parties.



Maksutov Kairat Berikovich

Chairman of the Management Board

Every success of the Company is the result of our people's work. No technology, investment, or strategy can replace the contribution of passionate, goal-oriented, and dedicated employees.

They are the true driving force that brings ambitious goals to life every day and ensures business resilience in a rapidly changing world. We are proud to have talented professionals on our team who are ready to take responsibility, propose initiatives, and achieve results. That is why one of our main priorities is to create an environment where everyone feels valued, has opportunities for growth, and believes that their work is a contribution to our common cause and the future of the country's energy sector.

Investments in human capital

In 2024, Samruk-Energy JSC remained faithful to its obligations to its employees. Within the framework of social responsibility principles, we continued to develop best practices to protect each employee, creating comfortable and safe working conditions, ensuring social protection and equality of opportunities for all employees, and providing a favourable environment for professional and personal development. This approach of the Company is in line with 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.

Approach to human resources management

GRI 3-3, GRI 12: Coal Sector: 12.15.1, 12.19.1

In the reporting year, we continued to implement a comprehensive Personnel Policy, focusing our efforts on the following areas:

- formation of a professional and balanced staff composition, recruitment and adaptation of personnel;
- development of staff training and development programmes;
- creation of a talent pool;
- implementation of social policy;
- improvement of the incentive system.

The general approach of Samruk-Energy JSC to personnel management is based on the best international practices. When managing personnel, we are guided by international and national regulations and standards, as well as internal corporate documents

To ensure high managerial efficiency and compliance with changing regulatory requirements, the Company keeps its internal policies and regulations up to date. In 2023, the Company's Personnel Policy for 2023–2031 was approved, which is aimed at developing employee competences and implementing strategic initiatives and is one of the main corporate documents. As part of the implementation of the Personnel Policy, regular monitoring of the achievement of the set goals is carried out using key performance indicators, which allows comparing the results with benchmarks of international companies.

The efficiency of human resources management is assessed based on the key KPIs defined in the Personnel Policy. The Sustainable Development Management System also monitors the KPIs of the Plan of initiatives aimed at increasing the Company's social responsibility, compliance with the principles of the UN Global Compact, investing in human capital and ensuring social security. This includes non-discrimination, protection of human rights, ensuring equal rights and opportunities for all employees, and following the principles of gender equality – increasing the number of women among employees and the talent pool, as well as ensuring their presence in management positions.

Key regulatory documents in the field of human resources management:

- Constitution of the Republic of Kazakhstan;
- Labour Code of the Republic of Kazakhstan;
- UN Global Compact;
- Corporate Standard on Human Resource Management of Samruk-Kazyna JSC Group;
- Personnel Policy of Samruk-Energy JSC;
- Non-Discrimination Policy of Samruk-Energy JSC;
- Human Rights Policy of Samruk-Energy JSC;
- Programme on release of employees of Samruk-Energy JSC Group of companies.

Responsibility for personnel management issues is divided between the Company's various management bodies in accordance with their competences.

Management body/structural unit	Area of responsibility
Sole shareholder	• Appointment and early termination of the Chairman of the Company's Management Board.
Board of Directors	• Approval of the Company's organisational structure, headcount and HR policies. • Determination of the composition, term of office, terms of remuneration and bonuses of the Management Board (except for the Chairman), as well as evaluation of its performance. • Appointment and termination of powers of employees reporting to the Board (internal audit, compliance, corporate secretary, ombudsman), determination of their remuneration terms. • Formation and termination of the powers of the Executive Body or its individual members. • Setting the terms of remuneration of labour and bonuses for the management of the Executive Body, and assessing their effectiveness.
Nomination and Remuneration Committee of the Board of Directors	• Preparing recommendations for the Board of Directors on the appointment and remuneration of independent directors, members of the Board of Directors, the Management Board, the Corporate Secretary, and other employees in accordance with the Company's internal documents. • Conducting meetings with the Company's Talent Pool. • Preliminary review of HR priorities and key documents. • Preliminary consideration of issues related to human capital development.
Audit Committee of the Board of Directors	• Recommendations on the remuneration policy and structure for the Head and employees of the Internal Audit and Compliance Services. • Consideration and development of qualification requirements for candidates for the positions of the Head and/or employees of the Internal Audit and Compliance Service submitted by the Head of the Internal Audit and Compliance Service. • Providing recommendations on candidates for the positions of the Head and employees of the Internal Audit Service and Compliance Service.
Management Board	• Approval of the Company's staffing table (except when the Board of Directors does so). • Approval of labour remuneration rules, salary schemes and bonuses for employees (except for members of the Management Board, IAS, Compliance Service and Corporate Secretary). • Determination of composition, term of office, appointment and early termination of management of Executive Bodies of affiliated JSCs in which the Company holds ≥10% of shares. • Setting the terms of remuneration, bonuses and performance evaluation of such executives. • Approval of internal documents regulating the Company's activity (except for those approved by the Sole Shareholder or the Board of Directors).
Ombudsman	• Receiving complaints and appeals related to the rights of the Company's employees. • Assistance in resolving labour disputes, conflicts, social and labour issues, as well as in compliance with the principles of business ethics by the Company's employees.
Human Resource Management Department	• Development and implementation of personnel policy. • Development and implementation of social policy.

Creating attractive working conditions

GRI 2-7, 2-8, 405-1, GRI 12: Coal Sector: 12.15.2, 12.19.6

As of 31 December 2024, the list number of employees was 18,907. The average length of service is 16 years. The average age of employees is 41 years. In 2024, the share of full-time personnel was 99.86%.

Dynamics of the number of personnel, persons

Indicator	2022	2023	2024
Headcount	17,650	17,892	18,907
Average headcount	17,834	18,007	18,731

Listed number of personnel of Samruk-Energy JSC, including joint and dependent organisations, as of the end of 2024, excluding employees under GPH contract, amounted to 18,907 persons. The increase in the list number of personnel compared to 2023 is due to the inclusion of AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, transferred to Samruk-Energy JSC in 2023, as well as due to taking Ekibastuz TPP into trust management in 2024 and creation of Kokshetau TPP LLP into the perimeter of the Annual Report.

To increase the level of project management, improve the Cash Pooling System and reduce the level of industrial injuries, as well as to ensure industrial and occupational safety in the Group of companies, the staff of the Corporate Centre of Samruk-Energy JSC was increased by 24 persons. As of December 31, 2024, the headcount of the Corporate Centre was 174 persons.

As at 31 December 2024, the number of freelance engaged for outsourced services was 496. Relationships with these employees are governed by contracts for the purchase of outsourcing services. The main volume of personnel outsourcing services is provided through a branch of Energy Solutions Center LLP's subsidiary, General Service Centre, which was established as part of business transformation to withdraw non-core functions and specialises in IT services and personnel outsourcing.

Number of non-staff employees in 2024, persons

Indicator	Outstaffing	Civil law contract	Total
Headcount	0	496	496

Outsourcing allows the Company to optimise core processes while transferring non-core functions to non-staff employees. The main types of activities performed by outsourced employees are: office management, translation, personnel management, secretarial services, and project work.

Staff recruitment and turnover

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

Recruitment practices are based on analysing 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 Samruk Qyzmet online recruiting platform (QSamruk.kz) and on the internal corporate portal integrated with the Samruk Qyzmet online platform 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, are given priority.

Between 2021 and 2024

53.5%

of the Company's vacancies were closed by internal candidates

During the reporting period, the total number of vacancies posted on qsamruk.kz totalled 1,817 vacancies. Of these, 419 were for administrative positions and 1,398 for production positions.

The search for candidates for vacancies in the Samruk-Energy JSC Group of companies is carried out taking into account the specificity of positions through recruiting resources such as SamrukQyzmet, enbek, HH and others most effective in the search region, including newspapers, local television and online platforms.

In 2024, the Company's Group of companies recruited 2,191 people, of which 1,180 through the SamrukQyzmet recruitment portal (294 women and 886 men) and 1,011 through resources such as enbek, HH, employment centres, social networks and other channels.

To ensure efficient selection of candidates for the positions of first managers of subsidiaries and affiliated organisations that meet the necessary requirements in terms of qualification and personal qualities, the Company has developed and approved the Rules for Approval of Appointment and Early Termination of Powers of the Heads of Executive Bodies of Subsidiaries of Samruk-Energy JSC. These Rules regulate the procedure of search and selection of candidates for executive positions in companies, more than 50% of shares of which are owned by the Company, as well as coordination of appointment and early termination of powers.

In addition, during the reporting period, the Rules of search and selection of administrative and managerial personnel were harmonised with the changes in the Corporate Standard on Human Resource Management of Samruk-Kazyna JSC Group[35].

[35] Decision of the Management Board of Samruk-Energy JSC, Minutes No.17 dated 3 June 2024.



In order to assess the competences of candidates for the positions of CEO-1 level, a contract was concluded with Samruk-Business Academy for a structured in-depth interview. However, due to staffing of the management team, no competitive procedures for these positions were held in the reporting period.

At the same time, in the reporting period, materials on appointment and early termination of powers of the heads of Executive Bodies of subsidiaries and affiliated organisations were prepared. Samruk-Kazyna JSC regularly provides information on vacancies, employment of SICP reservists and appointments to positions at the level of CEO and CEO-1.

Onboarding programme for new employees

Samruk-Energy JSC actively improves mechanisms for adaptation of new employees in order to develop the Group's human resources potential. The Company has an adaptation programme, under which new employees undergo an electronic adaptation course through a special digital platform. The course lasts for three months and includes theoretical and practical parts, helping employees to settle in faster and creating a basis for their professional growth.

For young specialists without work experience, if necessary, a mentor is appointed from among the employees of the structural subdivision. The mentor can be either a direct supervisor or a supervising manager, who can train no more than two new employees at a time. The main duties of a mentor include helping employees overcome difficulties, informing them about common mistakes, familiarising them with the procedure of interaction with other divisions and external organisations, explaining the norms of corporate ethics and rules of conduct, and providing practical assistance in their work.

Mentorship programme

As part of the implementation of Samruk-Kazyna JSC's instruction to introduce the HR School project, Samruk-Energy JSC approved the Mentorship Programme[36]. The Mentorship Programme for managers and employees reporting to the Board of Directors was also approved[37].

[36] Decision of the Management Board of Samruk-Energy JSC dated 10 May 2024 (Minutes No.13).

[37] Decision of the Board of Directors dated 2 August 2024 (Minutes No.11/24).

Objectives of the Programme:

- developing a mentoring culture in the company;
- leadership development;
- reducing staff turnover;
- improving employee performance;
- adaptation of new employees.

Mentor-Mentee pairs were created within the Programme[38]. To increase the motivation of participants, an online training on Public Speaking Skills in Difficult Situations was held on 7 August 2024. The Programme is active in the company and the tandems have monthly meetings, share experiences and perform tasks to achieve goals.

Staff turnover

In 2024, the total personnel turnover rate in the Group of companies of Samruk-Energy JSC, including joint and dependent organisations, was 15%. At the same time, the personnel turnover rate was 10.9%, which corresponds to industry norms (the target indicator is no more than 14%).

Dynamics of staff turnover, %

Indicator	2022	2023	2024
Total staff turnover ratio by attrition rate	13	14	15
Staff turnover[39]	10	9	10.9

Samruk-Energy JSC actively works to reduce staff turnover. Due to decent working conditions, annual indexation of salaries and effective motivation system, the turnover rate remains stable.

In 2024, the Programme for Release of Employees of Samruk-Energy JSC Group of companies was approved. It is aimed at supporting employees dismissed due to staff reduction, production volume reduction, restructuring or transformation.

The programme provides for:

- Searching for new projects in the region to employ released workers;
- Transferring employees to similar positions in related businesses;
- Possibility of relocation to other regions if vacancies are available.

Remuneration of labour

GRI 202-1, 405-2, GRI 12: Coal Sector: 12.19.2, 12.19.7

Samruk-Energy JSC endeavours to provide employees with competitive remuneration, which consists of salary, bonuses and additional incentives. The Rules of labor remuneration and bonus payment to employees of Samruk-Energy JSC are the key internal document determining the system of remuneration and incentives for employees. This document fixes the basic principles of labour remuneration, bonuses and motivation of personnel.

The Company's labor remuneration and bonus payment rules establish transparent and fair conditions of material incentives aimed at improving performance and developing human resources potential.

In 2024, the average salary of employees of the Samruk-Energy JSC Group of companies, including joint and dependent organisations, was KZT 561,704 per month.

The Company regularly indexes salaries and implements bonus systems. Since January 2024, all subsidiaries and affiliates of the Group of companies have had their wages indexed by an average of 9.5%. Additionally, following the adjustment of the Development Plan for 2024, in accordance with the approved tariffs, the salaries of employees at Shardara HPP JSC, Moynak HPP JSC, Ekibastuz GRES-1 LLP, Ekibastuz GRES-2 JSC and Almaty Electric Stations JSC were increased by 10%.

[38] Order of the Chairman of the Management Board of Samruk-Energy JSC (No.66-P dated 11.06.2024 and No.91-P dated 07.08.2024).

[39] The indicator of staff turnover is calculated according to the methodology of Samruk-Kazyna JSC for HR reporting, according to which the number of employees who terminated labour relations on the grounds of turnover (on their own initiative, by agreement of the parties and through the fault of the employee) is taken into account.

Wage fund (including joint ventures and associates), '000 KZT

Indicator	2022	2023	2024
Wage fund	80,631,049	100,687,218	120,316,436

Ratio of average salary in the Company to the national level, KZT

Indicator	2022	2023	2024
Minimum wage in the country	60,000	70,000	85,000
Average monthly salary of production personnel	383,307	467,325	536,542

Ratio of standard entry-level wages of women and men to the national level, KZT

Indicator	2023		2024	
	Men	Women	Men	Women
Employee's salary of the company's entry-level	257,000	248,000	279,837	276,080
Minimum wage in Country	70,000	70,000	85,000	85,000
Ratio, %	367.1	354.3	329	325



In addition to the basic salary, the Company's Collective Bargaining Agreement provides for:

- payment for overtime work, work on public holidays, weekends and at night;
- allowances and surcharges;
- remuneration of labour of employees engaged in heavy work, work with harmful (especially harmful) or hazardous working conditions;
- additional paid annual leave;
- employees are paid a compensation payment of three salaries upon termination of their employment contract due to retirement.

The ratio of the minimum wage for women to men is

100%

Wages are determined by the working conditions and the company's remuneration system. In addition, allowances for work in hazardous conditions, professional skills and other types of payments are provided.

Ratio of salary and remuneration of women to men, %

Indicator	Executive positions	Specialists
Salary ratio	100	100
Remuneration ratio	100	100

Average remuneration of male/female labour including operational (production) employees

	2022	2023	2024
Average monthly salary			
women	412,927	518,696	641,747
men	536,730	640,294	791,833
including production personnel			
women	306,523	374,815	483,618
men	356,974	421,895	560,536
Average gender pay gap in the labour force			
by average remuneration of women's/men's labour	23	19	19
including female/male production personnel	14	11	14
Average monthly salary in the Republic of Kazakhstan			
women	265,762	311,217	-
men	355,296	418,788	-
Gender wage gap (ratio of wages of women to men) in the Republic of Kazakhstan[40]	25.2%	25.7%	-

The gender structure of the workforce is traditionally male-dominated due to the specific nature of the energy sector, which requires physical work, technical skills and is associated with increased risks. The difference in remuneration between women and men is due to the low representation of women in technical and production areas, where the majority of jobs in the energy sector are located, as well as the low level of women's participation in senior management. At the same time, the Company guarantees equal pay for women and men in similar positions.

Staff motivation and engagement

The motivation system of Samruk-Energy JSC is aimed at unlocking the potential of employees through flexible bonus mechanisms that take into account their individual contribution. The Company provides for:

- One-off bonuses for state and national holidays (Power Engineer's Day, Independence Day, Miner's Day, etc.);
- Intangible rewards (awards, letters of appreciation, certificates);
- Additional leave for employees combining work and training.

In 2024, more than

250 employees

were honoured with various awards

In honour of the Power Engineer's Day, an award ceremony was held for 250 employees, including 32 people who have devoted more than 30–40 years to the power industry. The event was attended by representatives of the Ministry of Energy of the Republic of Kazakhstan, Samruk-Kazyna JSC and industry associations, who noted the Company's contribution to the development of the industry.

To motivate personnel and improve professionalism, subsidiaries and affiliates hold annual competitions to identify the best employees of the companies. In 2024, the following competitions were held:

- "Best in Profession" – Bogatyr Coal LLP, Ekibastuz SDPP-1 LLP, AlmatyEnergoSbyt LLP;
- "Best Welder" and "Best Gas Cutter" – Almaty Electric Stations JSC;
- "Best Employee" (monthly) – Alatau Zharyk Company JSC;
- "The best division in the field of occupational health and safety" – Shardara HPP JSC;
- "Best Production Specialist" is a corporate competition where the winners were determined by online voting among 23 participants.

In 2024, PSU Centre for Social Interaction and Communications conducted an engagement survey of employees of the Corporate Centre of Samruk-Energy JSC to assess their well-being in four key areas: health, engagement, social, physical and mental state, and financial stability. According to the results of the survey, the index of personnel social well-being was 46%, which corresponds to the satisfactory zone.

Additionally, in 2024, a sociological survey was conducted among production personnel using the Samruk Research Services methodology to analyse social stability. According to the survey results, the integral SRS indicator was 69%.

Indicator, %	2022	2023	2024	Δ (difference by 2023)
SRS Index	62	59	69	10
Social well-being index	35	43	46	3



[40] Data from https://stat.gov.kz/en/industries/labor-and-income/stat-wags/publications/ (for 2024, data not published at the time of completing the report).

Youth Policy

Perspective, qualified and active young specialists influence the future of sustainable business development. Samruk-Energy JSC continues to invest in training and development programmes for young talents to increase their motivation and create an interesting working environment.

To organise, improve and stimulate the activity of young specialists, the Company has a Jas Energy Youth Council, 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, the Company adopted the Action Plan for Implementation of Youth Policy of Samruk-Energy JSC aimed at development and support of various initiatives. During the reporting period, a number of volunteer events such as "Vitamin Day" and "Shyn zhurekten" were also held.

One of the key events of 2024 was the III Youth Forum, which became a platform for professional and social development of employees. It was attended by 100 young specialists from Samruk-Energy JSC subsidiaries and affiliates, the Corporate Centre and portfolio companies of Samruk-Kazyna JSC. The main purpose of the forum was to bring young people together and create conditions for sharing experience and self-realisation.

Within the framework of the Youth Policy development programme in the Samruk-Kazyna Group of companies, five employees (from the Corporate Center and subsidiaries and affiliates) successfully completed participation in the module programme "Zheti Qadam" aimed at developing young leaders.



Youth Councils

Youth Councils aimed at supporting the Company's Youth Policy are functioning in the Samruk-Energy JSC Group of companies. The main objective is to create conditions for development of youth potential in various spheres, including social, cultural, educational and professional. Youth Councils are actively working in major subdivisions of the Company, such as Alatau Zharyk Company JSC (youth organisation "Alatay Jastary"), Bogatyr Coal LLP (United Youth Movement), Youth Active at SEGRES-2 JSC, Almaty Electric Stations JSC (youth organisation "Zharkyn Bolashak").

Key activities of the Youth Council in 2024:

Environmental initiatives	▸ Participation in the action "Taza Kazakstan": collection of waste paper, batteries, clean-up days. ▸ Cleaning of the territory of Ile-Alatau National Park and Edelweiss Camp.
Charity and volunteering	▸ Organising "Vitamin Day" and "Shyn zhurekten" campaigns. ▸ Participation in waste paper collection with subsequent exchange for animal feed in Astana shelters. ▸ Visiting veterans to provide financial assistance and food packages. ▸ Organisation of the campaign "Let's Get a Child to School": fundraising and purchase of certificates for stationery for children in need. ▸ Together with Nariman Akylov, Ombudsman of Samruk-Energy JSC, visiting the NGO Association of the Deaf "Jasnur" and presenting certificates and sweet gifts to children. ▸ Participation in the action "Kushimiz birlikte": collection and sorting of humanitarian aid for the affected settlements.
Educational and social initiatives	▸ Career guidance excursions to GRES-1, GRES-2 and AIES for schoolchildren and students. ▸ Participation in Donor Day, popularisation of donation among employees.

The share of women in the composition of Executive Bodies and the Boards of Directors/ Supervisory Boards of the Samruk-Energy JSC Group in 2024 was

20%

Diversity and inclusion

GRI 2-7, 3-3, 405-1, 406-1, GRI 12: Coal Sector: 12.19.6, 12.19.8

Employees of Samruk-Energy JSC have equal access to training and professional development programmes, as well as equal opportunities for career growth based on their professional competencies, regardless of age, nationality, gender, race or religion. The Company's regulatory documents contain provisions that ensure equal pay for men and women performing the same work. This approach ensures that salaries, incentives, benefits and other forms of compensation – both monetary and non-monetary – are free from discrimination.

The company trains employees on inclusion and equality. In November 2024, HR professionals received Diversity, Equality and Inclusion (DEI) training to raise awareness and understanding of the importance of equal opportunities in the workplace.

Gender equality

Our workforce is predominantly male due to the nature of the industry and the physical work at our facilities. Nevertheless, our Personnel Policy adheres to the seven principles of gender equality developed by the UN Women partnership and the UN Global Compact as a key element of sustainable development:

- building active support for gender equality measures;
- fair treatment of women and men – no gender discrimination, equal treatment and access to training and development programmes, career advancement and employment;
- respect and support for human rights, non-discrimination;
- ensuring health, safety and welfare for all employees;
- promoting education, skills development and professional growth of women in business, implementing practices that promote women's empowerment;
- promoting equality at the local community level;
- evaluating results and informing the public about successes in achieving gender equality.

Several important activities have been carried out as part of the realisation of gender equality in 2024:

- On 11 July 2024, an online training "Effective Communications. Conflict Management" for the development of the company's women.
- Women's clubs were established in Samruk-Energy JSC and its subsidiaries and affiliates (Samruk-Energy JSC, Ekibastuz SDPP-1 LLP, ALES JSC, SharGES LLP, AlmatyEnergoSbyt LLP, FWPP LLP).
- On 6 September 2024, the First Women's Forum of the Group of companies of Samruk-Energy JSC was held in Astana, which was attended by 150 female employees of the Company's subsidiaries and affiliates.

The Company aims to increase the share of women in Executive Bodies and Boards of Directors/Supervisory Boards across the Group.

First Forum of Samruk-Energy JSC Group of companies: Women in Power/Әyelder kuaty/ Women's Energy.

On 6 September 2024, the I Forum of Samruk-Energy JSC Group of companies:

"Women in Power/Әyelder kuaty/Women's Energy" was held on the theme: "Women in Energy: Partnership, Progress, Prospects".

Purpose of the Forum: Creating a space for sharing experience, discussing topical issues and strengthening the community of women of Samruk-Energy JSC. Increasing professional empathy, developing leadership skills and forming a support network for women in the energy sector.

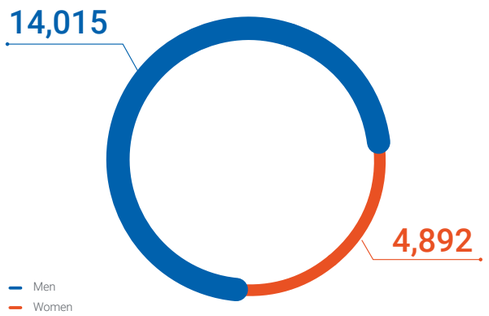
The Forum featured speeches by women in energy, CEOs, representatives of the National Commission and top managers of national and international energy companies.

Panel discussions were held with representatives of national companies and Samruk-Energy JSC. Exchange of experience on introduction of gender equality and development of women's clubs in companies. Discussion of successful cases and initiatives.

A practical facilitation session with coaches and trainers was conducted. A roadmap for the Women's Club using AI (ChatGPT) was developed. Identified next steps to remove barriers and support women's career development.

The results of the event validated the results of the forum with recommendations for the implementation of inclusive policies, gender equality, mentoring programmes and the creation of a safe work environment free from discrimination.

Employees by gender, persons



Creating an inclusive environment

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

Samruk-Energy JSC cares about equal opportunities and provides workplaces for people with disabilities. In 2024, as part of the implementation of the Roadmap for Improving Sustainable Development Management, the Programme for Creating an Accessible and Inclusive Environment for Persons with Disabilities (PWD) in the Samruk-Energy JSC Group of companies was approved. The main objectives of the programme are employment of PWDs, elimination of physical and technical barriers at workplaces, as well as provision of social guarantees and benefits.

For example, in 2024, the Company's subsidiaries and affiliates created conditions for the convenience of employees with disabilities: car parks, ramps with call buttons, tactile tiles and equipped sanitary facilities. Priority services for citizens with disabilities are also provided, including the ability to submit applications online.

At the end of 2024, the Company employed 206 people with disabilities. At the end of 2024, 31 disabled persons were employed in subsidiaries and affiliates, which exceeds the established quota.

Women's Club of Samruk-Energy JSC Group of companies

On 14 August 2024, a united Women's Club was established in the Group of companies of Samruk-Energy JSC to support and develop women. It will become a platform for sharing experience, finding mentors, professional growth and self-confidence.

The main objectives of the club are:

- Development of programmes to support women's career development.
- Running workshops and meetings on leadership, work-life balance, returning from maternity leave.
- Increase in the number of women in leadership positions.
- Improving working conditions, especially in difficult and hazardous environments.
- Removing barriers to women's active participation in company life.
- Supporting women's initiatives and co-operation with other organisations.
- Creating conditions for equal opportunities.

Ensuring social guarantees and stability

GRI 401-2, GRI 403-6, GRI 12: Coal Sector: 12.15.3, 12.14.7

Samruk-Energy JSC strives to create a favourable working environment and provide social guarantees that meet the needs of employees. We offer our personnel a wide range of programmes 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 health insurance;
- Disability/disability compensation, temporary disability allowance, maternity allowance;
- Maternity/paternity leave, parental leave for children up to three years of age;
- Provision of pension (in accordance with legislation);
- Material aid for the birth of a child, for the burial of close relatives, as well as material aid to relatives for the burial of a Company employee.

Voluntary health insurance programmes

The Company has voluntary medical insurance programmes for its employees, which include:

- Round-the-clock counselling and dispatch service;
- Medical Coordinator;
- 24-hour ambulance service;
- Outpatient and polyclinic care;
- Calling a doctor or paramedic to your home;
- Inpatient treatment;
- Additional services such as dental care and medication, therapeutic massages, insurance for citizens travelling abroad, and free attachment of family members.

The total number of insured persons in the Corporate Centre of Samruk-Energy JSC at the end of 2024 was 168 persons.

In 2024, insured employees received all necessary medical care under a voluntary health insurance contract for the Corporate Centre of Samruk-Energy JSC, totalling KZT 66.4 million.

Support for pensioners and people with disabilities

Samruk-Energy JSC provides social support to pensioners and people with disabilities:

- Lump sum benefits upon retirement;
- Material assistance for holidays and Power Engineer's Day;
- Invitations to holiday events for moral and psychological support;
- Material assistance to disabled persons in need of treatment, medicines, professional retraining.

Upon termination of the employment contract due to reaching retirement age, the employee is paid a lump-sum compensation in the amount of three-monthly salaries.

Pension payments are made from the state budget and the Unified National Pension Fund. The employer transfers mandatory pension contributions in the amount of 10% of the employee's monthly income.

Childcare leave

GRI 401-3, GRI 12: Coal Sector: 12.15.4, 12.19.4

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 2024, 345 people took parental leave, of whom 26 were men and 319 women.

Recreation and health improvement programmes

GRI 403-6, GRI 12: Coal Sector: 12.14.7

To improve employee health and maintain a healthy lifestyle, we provide additional paid leave days for long service. We also partially reimburse the costs of health resort treatment and recreation centres for disabled and orphaned children of employees.

In 2024, summer holidays were organised for 259 children of employees and holidays for employees themselves at Chunja Hot Springs, Alakol, Balkhash, Issyk-Kul lakes and Kapshagai Reservoir.

In addition, the trade union of Almaty Electric Stations JSC organised recreation for 200 employees at Hot Springs, and more than 200 children spent time at Arman Dala and Baksy camps. More than 350 employees spent their holidays at the resorts and sanatoriums of Alakol and Issyk-Kul, and more than 100 employees visited the Eight Lakes eco-resort.

The trade union of AlmatyEnergoSbyt LLP organised recreation for employees at the Tau-Samal health resort in the Talgar Mountains, and provided preferential vouchers to trade union members. In 2024, 50 children and 18 employees underwent recreational treatment in sanatoriums, receiving compensation in the amount of 50% of incurred costs.

The trade union of Stantsiya Ekibastuzskaya GRES-2 JSC organised recreation for 151 children at the Parus children's recreation centre.

Vouchers and advances for health resort treatment at various centres are organised for Bogatyr Coal LLP employees. In 2024, 397 employees received advances for medical treatment, 3,462 employees had a rest at the Berezka recreation centre, and over 1,300 children spent time at the Karlygash children's camp.

Improvement of working conditions

Samruk-Energy JSC continues to improve social and living conditions for employees, providing comfort, protection and favourable working environment. These initiatives are a strategic priority of the Company aimed at increasing personnel motivation and sustainable development.

Remote monitoring was organised to monitor conditions at 77 of the Company's facilities through the platform of the Unified Operator for the Development of Industrial Relations. In 2024, plans were developed to improve conditions, including measures to:

1. Developing internal communications and feedback.
2. Preventing violence in the workplace.
3. Improved interaction with contracting organisations.
4. Updating conditions in cloakrooms, sanitary facilities and showers.
5. Modernisation of the dining rooms.

Samruk-Energy JSC generates consolidated reports on social and living conditions on a quarterly basis. In 2024, 380 out of 1,004 identified non-compliances were eliminated, which is 37% of the total number of violations. The remaining 512 non-compliances are expected to be eliminated in 2025.

Prioritise areas for improvement in 2024:

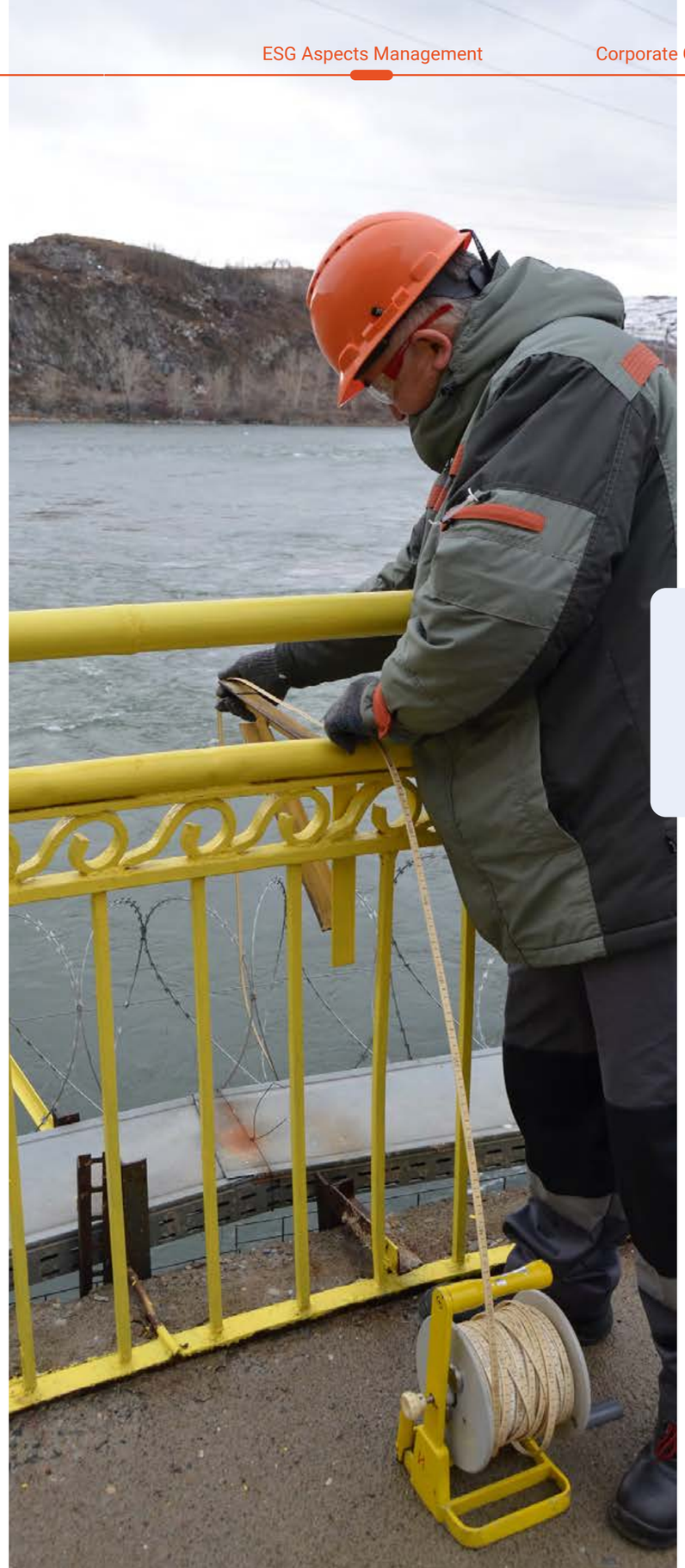
1. Modernisation of sanitation infrastructure:
   - 3 modern modular blocks and 12 new sanitary units were commissioned.
   - All sanitary areas are equipped with separate sections for men and women.
2. Improving water supply:
   - 32 drinking fountains have been installed to provide clean water to staff.
   - An improved water supply system has been introduced.
3. Renovation of catering facilities:
   - The canteen has been modernised to meet modern requirements.
   - A speciality shop for employees has been opened.

Recreation and sport

We actively support employees' participation in sports events. In the reporting period, the Local Trade Union “Energy” of Almaty Electric Stations JSC organised championships in mini-football, volleyball, basketball (streetball), chess, table tennis, arm wrestling and billiards.

The local trade union Seriktes of Alatau Zharyk Company JSC held table tennis tournaments, Counter Strike 2, a team bowling tournament for women, as well as competitions in arkan tart, arm wrestling, basketball, asyk atu, chess, togyzkumalak and swimming. In addition, a large mini-football tournament and an annual volleyball tournament were organised.

With the participation of the Local Trade Union of AlmatyEnergoSbyt LLP employees “Zhas Kuat” a billiard tournament was held, in which 16 employees took part. Competitions were held without restrictions on age and gender in the discipline “free pyramid”.



The main purpose of these events is to promote a healthy lifestyle, develop physical culture and strengthen corporate spirit among employees.

Collective agreement

GRI 2-30, 402-1, GRI 12: Coal Sector: 12.3.2, 12.15.5

The Collective Agreement of Samruk-Energy JSC is a guarantor of protection of labour rights, economic and social guarantees of employees. The agreement regulates labor relations and promotes effective dialogue between the Company and personnel. The minimum period of notification of operational changes under the Collective Agreement is one month.

94% **of the Company's employees**

are covered by Collective Bargaining Agreements

Collective agreements provide for the following social payments and benefits:

- Material aid for health improvement, birth of a child, wedding, burial (of an employee and relatives), treatment of pensioners, as well as in emergency situations;
- Assistance due to loss of income (maternity leave, adoption);
- Voluntary health insurance;
- Health resort treatment of employees and children;
- One-time incentives on anniversaries (50, 60, 70 years), expenses for cultural and sports events, New Year gifts for children;
- Loan repayment;
- Injury and bereavement allowance.

Labour 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 remuneration and social benefits in accordance with the labour legislation of the Republic of Kazakhstan.

Trade union organisations

We respect the right of workers to freely choose their associations, join trade unions or other organisations, bargain collectively 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 authorised representatives. We ensure the right of employees to choose their representatives in accordance with the laws of the Republic of Kazakhstan.

More than 17,000

of the Company's employees are trade union members



In August 2024, Samruk-Energy JSC joined the National Confederation of Employers of the Republic of Kazakhstan PARYZ to create favorable conditions for increasing efficiency, competitiveness and status of employers in the Republic of Kazakhstan and protecting their common interests through social dialogue, social partnership and other generally significant platforms.

Personnel development and training

GRI 3-3, 404-1, GRI 12: Coal Sector: 12.15.6, 12.19.5

Samruk-Energy JSC strives for continuous development of human resources potential, providing employees with access to modern educational programmes and opportunities for professional growth. We offer corporate trainings, professional development programmes, mentoring, cooperation with educational institutions and online training. Special attention is paid to the development of managerial competences and adaptation to digital changes. By investing in training, we strengthen corporate culture and improve business competitiveness.

The Company has the Rules of Professional Training and Adaptation of Employees of Samruk-Energy JSC, which define goals, objectives, key areas, and the procedure for interaction of subdivisions, regulating the responsibility and duties of employees and managers.

We adhere to the 70-20-10 principle, where 70% of learning takes place on the job, 20% through mentoring and internal programmes, and 10% through external training. This approach provides a balance between theory and practice, enabling employees to apply new knowledge effectively.

The main areas of training include power equipment operation, mentoring programmes, management skills development (MBA, EMBA), English language learning, thematic seminars and trainings, talent pool development, and corporate ESG programmes. We are committed to systematic personnel development, promoting professional growth and improving performance.

During the reporting period, corporate training on the following topics was organised and conducted for employees of the Company and its subsidiaries and affiliates: "HR in ESG context", "Diversity, Equality and Inclusion (DEI)", strategic session "Creating a culture of labour safety and zero tolerance to workplace fatalities", "ESG, sustainable development and circular economy: from fundamentals to application practice".

Implementation of programmes is provided both on-the-job and off-the-job, with the issuance of a certificate or qualification certificate.

Employee training costs

Indicator	2022	2023	2024
Total employee training costs, '000 KZT	305,137	440,080	570,000
Training costs per employee per year, KZT	17,373	24,949	30,430

Average number of training hours per employee in the Company on average, man/hour

2022	2023	2024
35	57	53

Average hours of training per employee by gender, person/hour

Indicator	2022	2023	2024
Men	41	59	56
Women	15	52	47

Average hours of training per employee by category, man/hour

Indicator	2022	2023	2024
Administrative staff	31	36	50
Production personnel	36	51	54

Talent and talent pool

GRI 404-3

To maintain competitiveness, respond quickly to challenges and train management personnel, we are developing a succession and talent management system.

In 2024, the talent pool and talent pool consisted of 784 employees, of which 23% were women. Thanks to the succession system, 27% of vacancies (33 out of 121) for key positions were closed by internal candidates.

The formation of the talent pool is based on the principles of objectivity, transparency, fairness, voluntariness and efficiency in accordance with the corporate talent management rules. The Board of Directors and management pay special attention to succession planning for management positions.

The succession pool process is integrated with the annual employee appraisal system, which includes a comprehensive analysis of goals, competencies, potential and the development of individual development plans.

In 2024

1,186 employees

completed performance and career development assessments

Based on the results of the assessment, a talent map is formed, and mentoring, internship and succession programmes are developed. The results are also taken into account when revising salaries and paying annual bonuses.

Total number of employees who have undergone regular performance and career development reviews

Indicator	2022	2023	2024
Men (total)	69	307	630
Executives	13	82	103
Managers	56	225	527
Women (total)	61	475	556
Executives	5	21	25
Managers	56	454	531

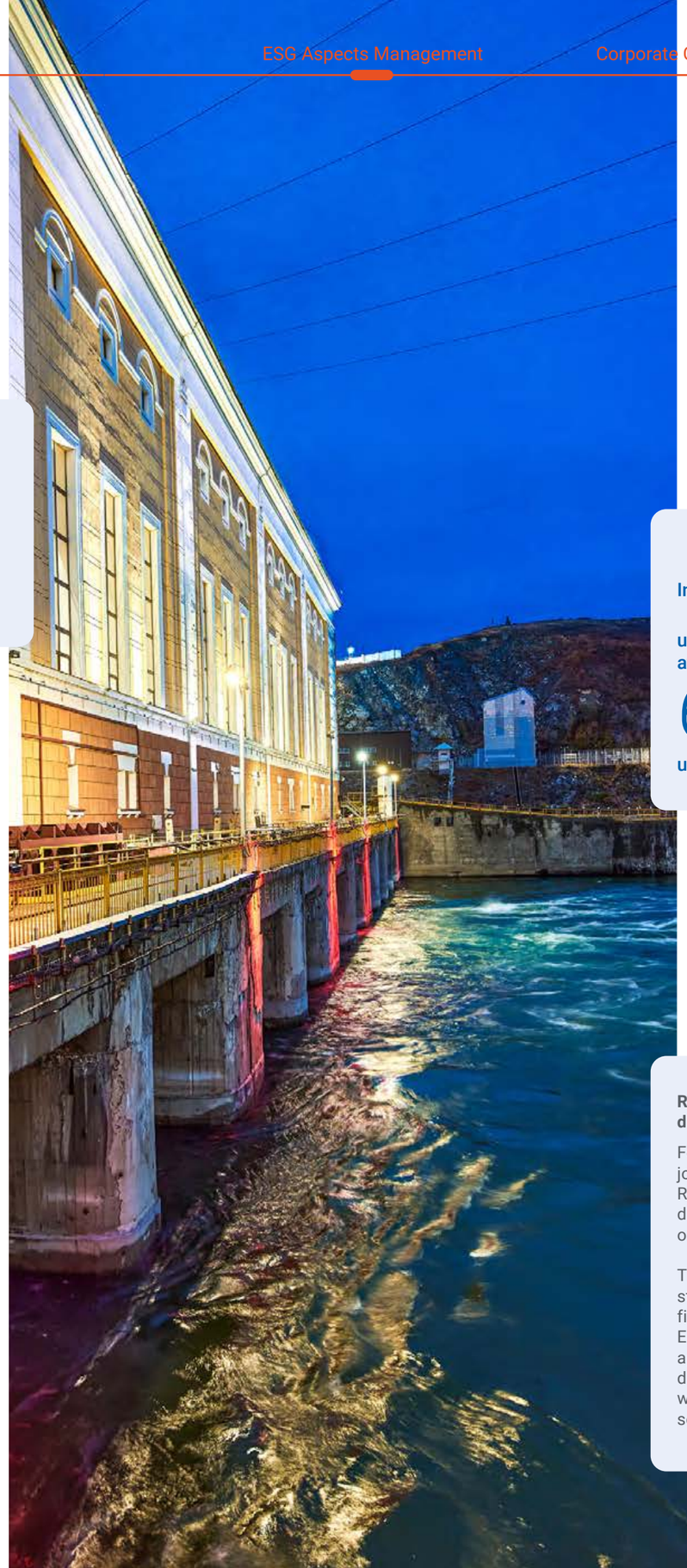
Percentage of total number of employees receiving regular performance and career development reviews

Indicator	2022	2023	2024
Men (total)	53%	39.25%	4.5%
Executives	19%	10.48%	
Managers	81%	28.77%	
Women (total)	47%	60.74%	11.37%
Executives	8%	2.68%	
Managers	92%	58.05%	

Talent pool

To develop human resources potential, the Company implements the Talent Pool Programme aimed at training managers, ensuring succession and creating opportunities for career growth of employees in the Group of companies of Samruk-Energy JSC.

On 1 October 2024, the members of the Nomination and Remuneration Committee met annually with prospective employees included in the Talent Pool and the Corporate Centre Succession Programme.



Interaction with the education system

To attract the most talented young personnel to Samruk-Energy JSC, we traditionally carry out active work with students and university graduates. Our HR management strategy is aimed at creating an image of the best employer.

We annually provide students with places for on-the-job and pre-graduation internships and work placements for further employment of the best graduates, as well as participate in the development of dual training.

In 2024, more than 700 students

underwent training and production internships at the Company, and more than

60 students

underwent dual training

The Company co-operates with 28 leading educational institutions, including Nazarbayev University, Al-Farabi Kazakh National University, G. Daukeev AUES, Kazakhstan-British Technical University and a number of technical colleges, providing training for qualified specialists.

Republican Olympiad in physical and mathematical disciplines

For 10 years, Samruk-Energy JSC and AUES have been jointly identifying gifted young people through the Republican Olympiad in physical and mathematical disciplines. Its purpose is career guidance, popularisation of energy specialties and training of future specialists.

The Olympiad is held among school leavers and 2–3 year students of technical universities of Kazakhstan in the fields of Electric Power Engineering and Heat Power Engineering. In 2024, 33 students from 13 universities and applicants took part in it. Contestants competed in profile disciplines and testing in physics and mathematics. Prize-winning places were taken by 7 participants, including schoolchildren of graduating classes.

Internships at the University of Genoa

On 30 September 2024, a cooperation agreement was signed between AUES and Almaty Electric Stations JSC (AIES). The purpose of the agreement is professional orientation of students, popularisation of energy professions, identification of talented young people, as well as improving the quality of specialist training and development of human resources for production activities.

The document envisages the organisation of student internship at the AIES and subsequent internship at the University of Genoa (Italy), which will deepen students' knowledge, expand their professional skills and provide international experience in the field of thermal power engineering.

The programme started on 3 December 2024. At present, applications from students wishing to become participants of the internship programme are actively being collected.

Corporate culture and internal communications

We strive to implement high ethical standards and create an effective corporate culture centred on the principles of mentorship, trust, fairness and professionalism.

In October 2024, we organised a meeting with the most promising employees from the Management Pool and Functional Talent Pool to discuss leadership in today's world. The event was attended by members of the Nomination and Remuneration Committee of the Board of Directors.

In 2024, the Human Resources Management Department of Samruk-Energy JSC organised an annual reporting meeting with HR of subsidiaries and affiliates, where the results of the year were summarised and plans for the coming period were discussed. The meeting gathered managers and specialists of HR areas of subsidiaries and affiliates, including AIES JSC, AZhK JSC, BK LLP, GRES-1 LLP, GRES-2 JSC, NPP LLP, FWPP LLP, EWP LLP and others, as well as representatives of the Centre for Social Interaction and Communications.

Also in the reporting period, the Human Resources Management Department of Samruk-Energy JSC organised HR Connect, which was attended by managers and specialists of the HR direction of the PC of the Fund. Within the framework of the meeting, the HR team presented key projects: “Retiree Support Programme”, “Dual Training Programme”, “Workplace Ergonomics”, “Continuous Improvements (Kaizen System)”, “Women's Clubs of Samruk-Energy JSC” and “Employer Brand: EVP”.

In 2024, the Company held an internal Spartakiade, which became a stage of preparation for the superfinal of the Spartakiade of the Samruk-Kazyna Fund. The qualifying competitions among the Group companies were held in an atmosphere of sports enthusiasm and friendly competition, where the participants demonstrated a high level of preparation and sports achievements.

The main channels of communication:

- Corporate internal portal;
- Corporate newsletter;
- Corporate pages in social networks: Instagram, Facebook, Twitter, YouTube, Telegram.

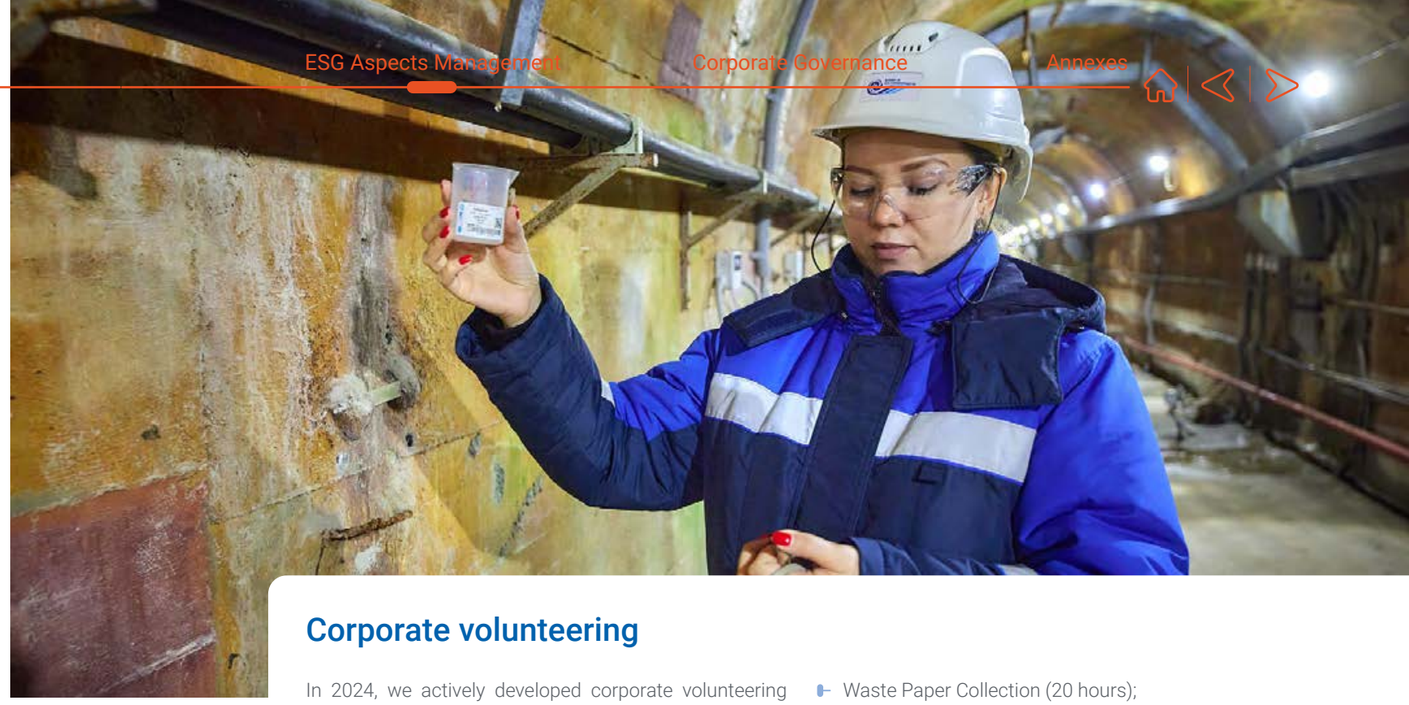
The Company's news, information on projects and initiatives in the sphere of social policy of the Samruk-Energy JSC Group of companies is placed on the pages of social networks.

Launch of the new Corporate Portal

In September 2024, a new Corporate Portal was launched, which has become a key tool for improving internal communication and business process management.

The main functions of the portal are:

- ChatGPT is an AI-powered virtual assistant for quick consultations.
- Automation of routine processes – planning, payment reconciliation modules, as well as integrated Compliance, ESG and HSE (health and safety) blocks.
- Corporate storage is a convenient platform for sharing files and documents, increasing transparency and consistency in the work of departments.



Corporate volunteering

In 2024, we actively developed corporate volunteering programmes aimed at increasing employee engagement, strengthening team spirit and achieving moral satisfaction from good deeds.

The main activities of the volunteering programme included:

- Environmental clean-up campaign (over 24 hours);
- Wishing Tree charity event for children with cancer (28 hours);
- Chess tournament for charity (20 hours);
- Jas Energy Youth Council with the Road to School campaign (112 hours);
- Waste Paper Collection (20 hours);
- Food baskets for the needy within the framework of Shyn zhurekten (8 hours);
- Vitamin Day (8 hours);
- Visit to veterans with material support (8 hours);
- Career guidance activities and excursions for children and students (20 hours);
- Donor Day (4 hours);
- Helping the victims of the Kushimiz Birlikte action (8 hours);
- Let's get your child ready for school action (5 hours).

Plans for 2025 and the medium term

In line with the Strategy for 2024–2033, our goal is to become the leading and most attractive employer in the regions where we operate. As part of the implementation of ESG principles, the key priorities for 2025 include:

- Conducting annual employee engagement and well-being surveys, as well as HR and IR audits in subsidiaries and affiliates;
- Introduction and updating of adaptation programmes for employees at all levels;
- Grading and automation of HR processes;
- Improving the professional competences of HR employees and organising corporate events to strengthen the employer's values and brand;
- Professional skills competitions and activities to increase the number of women in leadership positions to 25 per cent by 2025.

We follow the principles of the UN Global Compact and strive to improve social responsibility, employee engagement, human rights and gender equality. In particular, we plan to create women's clubs, train women in leadership skills and develop a gender equality programme in the company.

Also, as part of the commission on inclusion, by the end of 2025 it is planned to employ citizens who have left children's homes.

Creation of safe working conditions

Occupational health and safety management

GRI 3-3, 2-25, 403-1, 403-3, 403-8, GRI 12: Coal Sector: 12.14.1, 12.14.2, 12.14.3, 12.14.4, 12.14.9.

Samruk-Energy JSC provides safe working conditions for employees and contractors, strictly complying with the legislation of the Republic of Kazakhstan and is guided by the recommendations of ISO 45001 international standard, which is confirmed by regular audits.

HSE objectives 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;
- application of modern equipment, innovative technologies and protection means to ensure workplace safety;
- organising consultation with employees and ensuring their active participation in health and safety processes.

In the reporting period, we continued to work on improving labour safety and adapting our strategy to new conditions. As part of this, we have developed a Zero Injury Plan, including:

- Visualisation of briefings (slides/video) and testing of employee knowledge.
- Proactive measures: behavioural audits, registration and investigation of dangerous situations (Near Miss), right to suspend work, collective responsibility for health and safety violations.

To maintain and improve the level of safety at production facilities, Samruk-Energy JSC systematically invests significant resources in the implementation of HSE measures.

4.648 billion KZT

invested in health and safety activities in 2024

Financing of HSE measures, KZT billion

2022	2023	2024
3.789	2.995	4.648

The main cost items include costs of laboratory tests, protective clothing and personal and collective protective equipment, costs of providing milk and other food products, medical examinations, minimisation of injury risks (introduction and/or modernisation of technical devices), etc.

Company HSE regulatory documents

The labour protection and industrial safety management system in Samruk-Energy JSC covers all employees of the company and contractors. It is based on the legislation of the Republic of Kazakhstan, internal corporate standards and safety principles. The regulatory framework of Samruk-Energy JSC in the field of labour protection and industrial safety includes a set of documents developed in accordance with the legislation of the Republic of Kazakhstan, international standards and internal corporate regulations.

- Corporate Governance System Policy of the Samruk-Energy JSC Group of companies;
- Regulations on Transportation Safety Management in the Group of companies of Samruk-Energy JSC;
- Regulations on prevention and improvement of employees' health;
- Regulation on the organization of work of contractors in the Group of companies of Samruk-Energy JSC;
- Strategy for the H&S Development (2024–2028);
- Occupational Health and Safety Risk Assessment Standard;
- Motivation of Personnel for Safe Behavior Standard;
- Accounting and Investigation of Accidents Standard;
- Assessment of Industrial Safety and Labor Protection Risks Standard.

HSE management structure

The Company manages occupational health and safety at all levels.

The Occupational Safety Service includes 6 specialists in the central office, of which 4 are responsible for labour safety, 1 for industrial safety and 1 for fire safety. Subsidiaries employ 85 specialists: 40 for occupational safety, 23 for industrial safety and 11 for fire safety. The entire labour safety system covers 17,898 employees who have undergone internal audits, and the ratio of safety specialists to the total number of employees is 1:200.

Safety issues are coordinated by the HSE Director, who reports to the Chairman of the Management Board and oversees the implementation of measures to improve the occupational safety system in the Company and subsidiaries and affiliates. The head of the HSE division is responsible for preventing violations, responding to incidents, monitoring and analysing risks. In subsidiaries, the occupational safety services report to the first managers, and their qualifications are regularly reviewed to improve efficiency.

Monthly meetings are held with the Chairman of the Management Board, Chief Directors and heads of subsidiaries to improve safety culture and reduce injuries. Occupational Health and Safety Committees analyse

Maksutov Kairat Berikovich

Chairman of the Management Board

As part of the development of its corporate culture, Samruk-Energy JSC makes significant efforts to enhance employees' competencies in the area of occupational safety risk management.

Our employees are authorized to suspend or stop work if a workplace does not comply with occupational health and industrial safety (OHS) standards and regulations and/or if a work situation arises that could result in injury and/or harm to health.

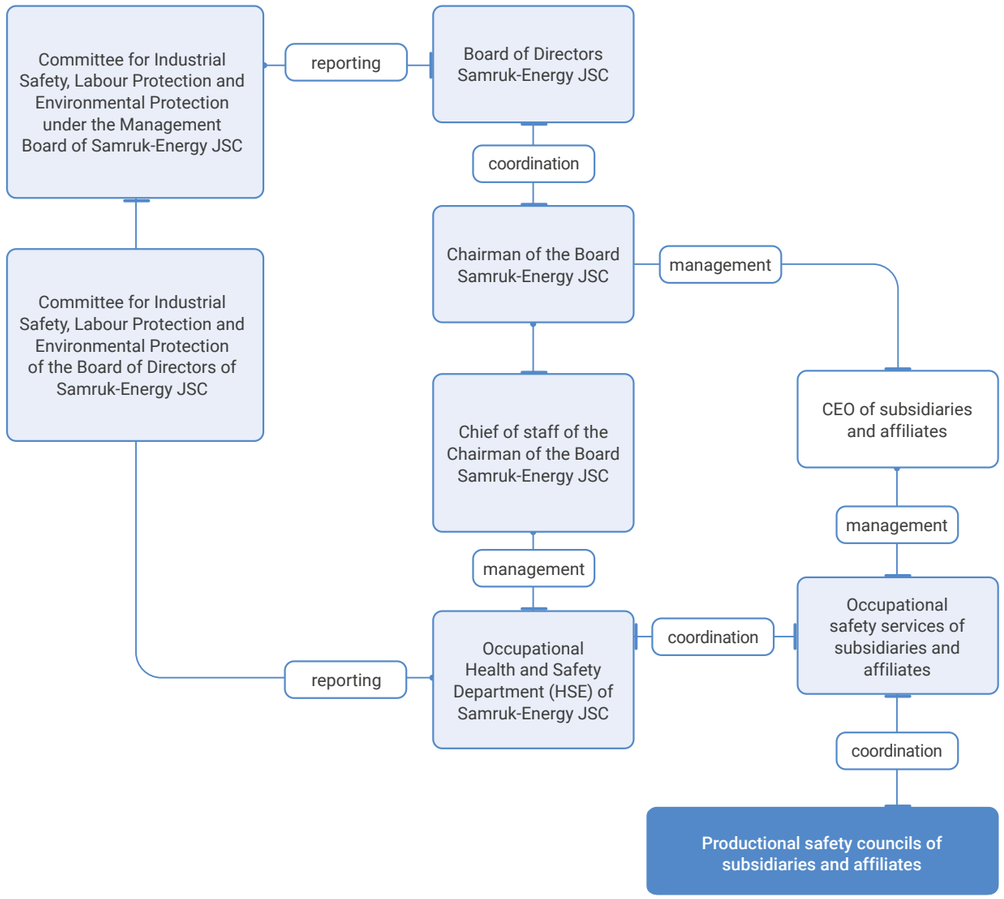
To encourage and engage personnel in OHS programs, individual initiatives aimed at improving workplace safety are supported and encouraged. At Samruk-Energy JSC, a monetary incentive/reward program has been implemented based on the "Employee Motivation for Safe Behavior" standard. Through this program, employees can report hazards and dangerous work-related situations.

Safe working conditions are being created: repair works have been carried out in shower rooms, modular toilets and drinking fountains have been installed. Employees are provided with all necessary personal protective equipment.

the safety status and monitor the implementation of measures. In 2024, 5 meetings of the committees and 48 meetings of production councils were held with the participation of employer representatives and technical inspectors for occupational health and safety.

Thanks to these measures, the company maintains a high level of control and continuously improves its occupational health and safety management system.

Occupational Health, Industrial Safety and Environmental Protection Management System of Samruk-Energy JSC



Risk assessment and occupational health and safety performance

The introduction of the Risk Assessment Standard and the creation of the Consolidated Risk Register reflect a key principle of the occupational health and safety management system and corporate risk management. The standard provides procedures for identifying and assessing risks affecting the life and health of employees.

Risk Assessment Algorithm:

- 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;
- Carrying out risk identification and assessment;
- Harmonisation of the risk assessment carried out;
- Development of measures to reduce unacceptable and control acceptable levels of risk;
- Harmonisation of the measures developed;
- Approval of the risk passport.

Employees can report incidents through official channels or to their manager. All incidents are investigated and appropriate action is taken.

Samruk-Energy JSC develops safety culture and improves employees' competence in risk management. Employees can suspend work when labour protection and safety violations are detected. In addition to this, we encourage personal initiatives of employees aimed at improving safety within the framework of specially designed motivation programmes. In the reporting period, 1,303 employees were rewarded for active participation in the safety programme.

In order to monitor compliance with the standards and detect violations in a timely manner, we actively conduct scheduled and unscheduled inspections. In the reporting period, 13 planned and 2 unplanned audits were conducted, during which 1,024 violations were identified. 29,333 internal audits were conducted at subsidiaries and affiliates, and 51,348 non-compliances were identified, of which 50,356 were eliminated. 51 audits of state authorities revealed 452 violations, for which corrective actions were developed.

List of hazard identification, risk assessment and accident investigation activities

Indicator	2022	2023	2024
Number of stoppages of unsafely performed work	92	22	52
Number of fire prevention drills conducted	650	485	512
Number of exercises involving public services	9	36	56
Number of training alarms under the emergency response plan	30	36	64
Number of PABs/PNBs/PDPs conducted by PC management	3.911	2.983	2.765
Number of conducted internal audits on industrial safety	1.338	21.326	29.333
Number of identified non-conformities during internal audit	6.031	52.392	51.348
Number of inspections by state authorities	39	32	51
Number of non-compliances eliminated by state authorities	387	452	247
Amount of fines paid by state authorities, KZT million	1.55	7.07	9.97

Accident investigation

To enhance safety in the workplace, the company also investigates all incidents, accidents and incidents in accordance with established procedures. In the case of incapacitating accidents, we promptly inform government authorities. In case of serious incidents with severe consequences, including fatalities, a special investigation is carried out with the participation of a state labour inspector.

To analyse the causes of incidents in depth, we apply the "Cause Tree" and "5 Why" methods, which allows us to identify root causes and develop more effective remedial actions. The results of investigations are discussed at quarterly meetings with managers and then disseminated to all subsidiaries and affiliates in the form of information reports.

The Company has implemented strict standards and procedures for incident investigation, which include risk assessment, hazard identification and development of corrective measures. In addition, the Risk Register takes into account emergencies and accidents with a high potential for serious consequences. All these measures are aimed at creating a safe working environment, eliminating hazards and actively working to prevent potential incidents.



Key activities in the field of occupational health and industrial safety

- Monitoring of personnel employment under hazardous exposure conditions (including workplace certification and industrial control);
- Control over the provision of personal and collective protection equipment;
- Providing methodological and information support to subsidiaries and affiliates;
- Monitoring of a transparent system for registering industrial accidents;
- Control of the system of individual employee responsibility (e.g. safety coupons);
- Conducting leadership behavioural safety audits;
- Identification of hazards and assessment of the significance of risks;
- Develop mechanisms to reward staff for reporting potentially dangerous incidents;
- Conducting internal accident investigations to identify root (systemic) causes;
- Record and investigate potentially dangerous incidents that did not result in accidents;
- Holding seminars and meetings at production facilities with the participation of specialists supervising labour safety issues in the Company's subsidiaries and affiliates;
- Supervise the training of first managers and labour protection specialists on IOSH, NEBOSH courses;
- Development of the concept of a unified automated system for recording incidents and violations;
- Holding competitions in the field of occupational health and safety among all the Company's subsidiaries and affiliates.

Occupational injuries

GRI 403-2, 403-9, GRI 12: Coal Sector: 12.14.3, 12.14.10

We take all necessary measures to ensure safety and minimise workplace injuries. The Safe Production system, accessible via mobile apps or PCs, provides employees with information about potential hazards and incidents. In 2024, we achieved a number of important steps in improving workplace safety and continued to actively work to improve the working environment for our employees. Despite the measures taken, tragic incidents unfortunately occurred at our facilities during the reporting period, resulting in the deaths of 3 full-time and 1 part-time employee. The main causes: personal and gross negligence of the injured person; unsatisfactory work organisation. The main measures taken: familiarisation of all the personnel of the enterprise with the causes and circumstances of the accident, conducting unscheduled briefings on the observance of safety techniques, etc. These events became an important stimulus for a deep understanding of the causes and circumstances of the accident. These events became an important incentive for in-depth analysis and development of specific measures aimed at eliminating the root causes.

In response to the incident, we have implemented improved procedures to manage HSE and improve our safety culture. We are confident that these changes will help prevent similar incidents in the future and make our processes even safer.

In addition, as part of our commitment to continuous improvement of safety standards, thorough investigations were conducted into each case. We carefully analysed the circumstances of the incidents, leading to specific findings and recommendations to prevent similar events in the future. During the investigations, 52 corrective measures were developed to prevent the recurrence of similar incidents in the future. These measures cover improving equipment reliability, improving personnel qualifications and optimising the organisation of the work process.

This approach allows us to respond quickly to incidents, implement corrective actions and develop strategic improvements based on the results of investigations. This integrated approach to risk and security management strengthens our ability to provide a high level of protection at all levels of our organisation.

Frequency of industrial injuries among the personnel of Samruk-Energy JSC

Indicator	2022	2023	2024
Total number of fatal accidents	4	2	3
Frequency rate of accidents with fatally	0.13	0.07	0.09
Total number of occupational injuries with severe consequences (excluding fatalities)	4	5	10
Frequency rate of high-consequence occupational injuries (excluding fatalities)	0.13	0.16	0.31
Total number of recorded occupational injuries	10	10	32
Frequency rate of production injuries (1 million hours worked)	0.36	0.33	0.99

Frequency of occupational injuries among contractor organisations

Indicator	2022	2023	2024
Total number of fatal accidents	1	1	1
Total number of occupational injuries with high consequences (excluding fatalities)	2	1	1
Total number of recorded occupational injuries	3	2	3

Types of injuries among the personnel of Samruk-Energy JSC

Name of injury	2022	2023	2024
Chemical burns, thermal burns	1	2	2
Contusion	2	0	20
Traumatic amputation	0	0	2
Electrical injuries (thermal burns)	1	1	-
Fractures	1	-	2
Complex trauma (fracture, contusion, rupture of internal organs)	3	5	3
Eye injury	1	1	-
Craniocerebral trauma, concussion, cerebrum	1	1	3
Total	**10**	**10**	**32**

Measures to prevent occupational injuries:

- Informing all employees of the circumstances and causes of accidents to raise awareness and prevent recurrence;
- Conducting unscheduled briefings for all production personnel to update safety knowledge;
- Regular unscheduled knowledge checks for employees on technical operation rules, safety rules, and occupational health and safety instructions, especially in units where an accident occurred;
- Monthly "Safety Days" organised with the participation of the first managers of the enterprises, with the development of measures to eliminate the identified violations;
- Comprehensive inspections of equipment, buildings, facilities and workplaces by occupational health and safety services, with the development of specific action plans, deadlines and assignment of responsible persons;
- Training of all production personnel in accordance with established standards, including briefings and knowledge checks on industrial safety and labour protection issues;
- Holding seminars and meetings with engineering and technical personnel prior to the start of repair campaigns, including practical training on the proper authorisation of crews to carry out work and drawing up the necessary work orders;
- Carrying out certification of workplaces in terms of working conditions, at least once every five years, with mandatory adjustment of work processes and conditions;
- Replacing obsolete equipment that has exhausted its useful life and poses a hazard to workers;
- Active engagement of senior management through leadership behavioural safety audits, to build a safety culture at all levels;
- Continuous updating of the workplace hazard map/risk register to include additional training and education on hazard identification and risk assessment.

Health protection

GRI 403-6, 403-10, GRI 12: Coal Sector: 12.14.7, 12.14.11

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 2024, the Company did not record any cases of work-related illnesses

In the reporting period, laboratory tests and certification of workplaces were carried out to identify potential harmful or hazardous working conditions. In addition, continuous industrial control is carried out at workplaces.

The Company's subsidiaries and affiliates have 48 permanent medicals, and medical personnel are also employed on a contractual basis. Every year, subsidiaries and affiliates and the Corporate Centre conclude contracts to insure employees against accidents that occur in the course of employment on the basis of tender procedures.

The costs of health protection and disease prevention measures for personnel, in accordance with legal requirements, are approved annually in the Company's development plan.

Indicators of health and occupational diseases of employees Samruk-Energy JSC

Indicator	2022	2023	2024
Number of cases of health deterioration at the workplace, not related to labour activity and not resulting in fatal outcome	18	10	4
Number of deaths not related to labour activity due to health deterioration	1	7	3
Number of employees on the D register	2,060	858	738
Number of registered occupational diseases	0	0	0
Number of employees subject to mandatory periodic medical examination	14,679	15,077	16,556
Number of employees who have undergone periodic medical examination in accordance with the legislation of the Republic of Kazakhstan	13,877	14,878	15,228

Regular medical examinations are an important part of employee health control. In 2024, 15,228 employees underwent mandatory periodic medical examinations. Based on these examinations, employees with chronic diseases receive timely treatment and rehabilitation. Employees with labour restrictions are provided with necessary recommendations and restrictions.

Employees engaged in harmful work are provided with enhanced nutrition (milk or its analogues), as well as health resort treatment as part of the corporate health improvement programme. An individual health improvement plan is developed based on medical examinations:

- dispensary monitoring of employees with chronic diseases for timely treatment and rehabilitation;
- sanatorium-resort treatment of employees with chronic diseases on the recommendation of the medical commission;
- refer workers with no occupational aptitude for further examination, followed by restrictions on working conditions.

In addition, all employees engaged in hazardous work undergo pre-shift and post-shift medical examinations. Ongoing preventive measures are taken to maintain the health of employees and prevent the negative impact of work activities on their health.

Interaction with suppliers and contractors

GRI 403-8, GRI 12: Coal Sector: 12.14.9

We recognise the importance of involving contractors in health and safety processes and integrating them into the HSE management system to ensure a high level of safety at all stages of operations.

The key document in this area is the Regulations on the Organisation of Contractors' Work on the Company's premises, which sets out the basic requirements for contractors' occupational health and safety management systems. In accordance with this document, we conduct occupational health and safety audits for both potential and existing contractors to identify the causes of incidents and accidents and assess the organisation of workplaces.

The Occupational Health and Safety Management System covers 100% of the personnel of contractors working at Samruk-Energy JSC enterprises. The Company establishes specific requirements and conditions for its suppliers and contractors aimed at compliance with industrial safety standards and respect for workers' rights, which contributes to maintaining a high level of safety at all facilities.

All contractors are subject to a system of penalties for violations of industrial safety and labour protection rules. The list of such penalties, including termination of cooperation, is detailed in the contract with contractors.

During the reporting period, 505 internal audits of contractors' activities were conducted to ensure compliance with OHS requirements. As a result, 1,058 violations were identified, which confirms the importance of continuous monitoring and auditing to maintain a high level of safety at all stages of operations.

Personnel training and competence development

GRI 403-4, 403-5, GRI 12: Coal Sector: 12.14.5, 12.14.6

We are actively working to improve the competence of our staff in the area of occupational health and safety. Occupational health and safety training is available to all employees, regardless of their position. Training programmes are developed in accordance with the requirements of legislation and adapted to specific professions, including both group and individual forms of training.

All production personnel have received health and safety training, which is a prerequisite for maintaining high safety standards at all levels of operation.

Employees of Samruk-Energy JSC are trained in the following areas:

- Behavioural safety audits;
- Occupational Health and Safety;
- Fire Safety;
- Provision of first aid;
- Safe Driving;
- Safe basics for working at height;
- Safe Work Culture;
- Other professional programmes.

All personnel undergoes compulsory training under the OHS (Occupational Health and Safety) programme in their profession and related specialties with the issuance of certificates, or by the company's training centres.

23,874 employees

of the Company received occupational health and safety training in 2024

We are actively working to raise staff awareness of health and safety issues. Specialised briefings, information stands, production councils, safety leaflets and orders are used for this purpose. Information about hazards and possible situations is transmitted through the Safe Production automated system, which allows us to promptly inform employees and improve safety culture at workplaces.

Training of employees in the field of industrial safety

Training	2022	2023	2024
Number of employees trained in occupational safety within the framework of the requirements of the RK legislation	22,344	12,449	23,874
occupational health and safety	7,523	1,825	4,058
industrial safety	12,291	5,459	9,664
fire safety	4,535	3,458	5,232
other areas	4,237	1,904	4,920
Number of employees trained in the field occupational safety beyond the requirements of the RK legislation	236	244	12,350
occupational health and safety	82	102	12,350
industrial safety	0	0	0
fire safety	0	0	0
other areas	294	316	0
Number of employees trained to provide first aid to victims (paramedics) at the workplace	73	213	410
Number of employees trained under the NEBOSH programme	7	13	15
Number of employees trained in the IOSH programme	4	102	55
Number of employees trained in defensive driving course	25	11	117



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.

In 2024, there were no cases of significant fire at the enterprises of Samruk-Energy JSC

Representatives of Samruk-Energy JSC, state control authorities and labour protection specialists at all enterprises of the Company conduct scheduled and unscheduled inspections to ensure availability of serviceable fire extinguishing equipment.

We actively invest in the training of our employees and organise training and drills on fire and fire prevention. In 2024, our internal formations organised 355 exercises in this area. We also organised 8 exercises with the involvement of state firefighting services.

Plans for 2025 and the medium term

In 2025, we will continue to implement measures aimed at improving the efficiency of health and safety activities, with a focus on continuous improvement of the corporate management system and its processes. Priority areas include:

- Training of production personnel on the course Culture of Safe Labour and international standards in the field of Biosafety;
- Involvement of frontline managers in Biosafety issues through leadership behavioural safety audits;
- Development and implementation of digital solutions in safety management processes, including digitalisation of HS processes;
- Launch of a project with artificial intelligence "Video Analytic" to improve risk control and prevention;
- Implementation of the Action Plan for the Year of Safety;
- Increased number of camera helmets and video badges to improve safety;
- Conducting psychological trainings for employees of subsidiaries and affiliates with the participation of qualified specialists;
- Organising and holding a preventive campaign "In the Rhythm of a Healthy Heart";
- Holding meetings with heads of structural divisions and contractor organisations to discuss topical health and safety issues.

Promoting socio-economic development

GRI 3-3, GRI 12: Coal Sector: 12.8.1, 12.9.1

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 prioritise improving people's lives and supporting social initiatives by investing in infrastructure, education and cleaner energy from renewable energy sources.

The basis of the social strategy of Samruk-Energy JSC is an integrated approach to sustainable development, enshrined in a number of regulatory documents, including the Sustainable Development Guidelines, Personnel Policy, and Labour 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. In particular, the Company has implemented the Policy on engagement with local communities developed in accordance with the long-term Strategy of Samruk-Energy JSC for 2022–2031. This policy takes into account 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 obligations in the area of 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 maintains an active dialogue with stakeholders at all stages of implementation of the Company's projects and takes into account 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 Stakeholder Engagement).

The main mechanisms of interaction with local communities are:

- identification and analysis of stakeholders who are (will be) directly or indirectly affected or may be affected by the interaction and development of local communities;
- planning, defining procedures at all stages of preparation and implementation, consulting;
- 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 through:

- supplying the population with electricity, heat and coal;
- providing jobs for the local population, paying social taxes and contributions, pension and insurance payments, covering medical service costs for employees, and offering other forms of employee support;
- implementation of investment projects that affect the development of the regions where the Company operates, improve the lives of the population, and create jobs;
- maintenance of public infrastructure to ensure significant revenues to regional budgets through taxes;
- investment in local communities through donations to charitable and non-governmental organisations and research institutions through a single operator, the Samruk-Kazyna Trust Social Project Development Fund;
- supporting social programmes, cultural and educational events.

GRI 203-1, 203-2, GRI 12: Coal Sector: 12.8.4

In 2024, the Company implemented a number of social initiatives aimed at supporting society. Within the framework of humanitarian programmes, assistance to flood victims was organised, including collection of necessary resources and provision of financial support in the amount of KZT 800 million. The Company also took an active part in the charity marathon organised by Samruk-Kazyna JSC, allocating KZT 18 million for this purpose.

We have a portfolio of investment projects that are in line with the country's national economic development programmes and responsible investment principles.

In addition, we have identified 3 significant[41] 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 ESPs	In December 2024, the rehabilitation of GRES-1 power unit with installed capacity of up to 500 MW was completed, and new electrostatic precipitators are being installed. In 2024, a favourable opinion was received from Gosexpertiza RSE on the project feasibility study, and procedures are underway to approve the results. The EPC contract with the Russian-Kazakh consortium and investment agreement with the Ministry of Energy of the Republic of Kazakhstan on Block 3 were signed. A public hearing on the EIA was held, and a conclusion was received from the Environmental Regulation Committee.
Modernisation of Almaty TPP-2 with minimisation of environmental impact	In the period from 2022 to 2026 it is planned to implement a project for the construction of a new plant using gas turbine technologies at the site of Almaty CHPP-2. Its electric capacity will be up to 600 MW, heat capacity – 800 Gcal/h. In 2024, several tranches were received from international financial organisations, including EBRD and ADB, totalling KZT 59.1 billion. Approved access to the site pending receipt of conclusions of RSE Gosexpertiza and finalised the development of the project's design documentation. An investment agreement was signed between AIES JSC and the Ministry of Energy of the Republic of Kazakhstan.
Reconstruction of Almaty CHPP-3	From 2021 to 2026, a project to modernise Almaty TPP-3 is underway, which includes the construction of a CCGT 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 2024, important contracts were signed with international companies for the supply of gas turbine units, steam turbines and a HRSG. Site entry and initial testing of the equipment were approved.

In line with the principles of responsible investment, we consider environmental, social and governance factors when making investment decisions, in order 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 level of public interest.

When implementing new projects, we consult with the local community through public hearings, preparing relevant materials within the legal framework, and liaising with the authorities. Disagreements are resolved within the legal framework, and the overall assessment of projects takes into account the interests of local communities.

Economic sustainability of regions

GRI 201-1, GRI 12: Coal Sector: 12.8.2, 12.21.2

We create economic value for our employees and local communities, and as a socially responsible Company, we support the well-being of the country through taxes, jobs and infrastructure.

[41] Substantial projects are projects that involve an increase in existing electric generating capacity of 500 MW or more in 2024–2026.

The economic value created reflects our main sources of income generation for the Company, namely income from the 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 Samruk-Energy JSC, shareholders and creditors, the state, and local communities.

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 contributions, 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 organisations and research institutions, costs of supporting public infrastructure, as well as direct financing of social programmes, cultural and educational events.

At the end of 2024, the created economic value totalled KZT 579 billion and distributed economic value totalled KZT 491 billion, resulting in unallocated economic value of KZT 88 billion. According to the approved Development Plan for 2025-2029, it is planned to increase the created and distributed economic value in 2025.

Economic value created and distributed, thousand KZT

Area of focus	2024
1. Economic value created	**579,349,549**
Revenue and other income	573,489,841
Other income/expenses	2,126,560
Revenue from share in profits of associates and joint ventures	(5,855,910)
Financial income	9,589,058
2. Distributed economic value	**(491,196,605)**
Operating expenses	(307,768,150)
Wages and employee benefits	(81,532,105)
Wages	(80,957,740)
Other employee benefits and allowances	(574,365)
Payments to providers of capital	(35,671,225)
Interest expense	(10,855,356)
Dividends	(24,815,869)
Community investments	(823,878)
Payments to government	(44,934,278)
Taxes, excluding income tax	(10,379,183)
Current income tax expense	(34,555,095)
Other expenses	(20,466,969)
Rent expenses (%)	(368,739)
Other financial expenses	(20,098,230)
3. Undistributed economic value	**88,152,944**

Tax obligations

GRI 3-3, 207-1, GRI 12: Coal Sector: 12.21.1, 12.21.4

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 country's regions.

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, judgements 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 within 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 31 December 2023. Thus, in 2021–2022, within the framework of the pilot project on horizontal monitoring, the SRC examined historical data at EGRES-1 LLP and Samruk-Energy JSC (Corporate Centre) for a five-year period, following the results of which tax audits were conducted and Notifications 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 Appeal 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 ruled in favour of the Group on the Corporate Centre, on 14 August 2024, the Supreme Court ruled in favour of EGRES-1 on the deduction of loan interest that was used for the "Unit No. 1 Restoration Project" and dividend payment obligations, and in favour of the tax authority on the deduction of loan interest that was used for the acquisition of bonds. As a result, EGRES-1 paid a fine and penalty in the amount of KZT 502 million out of the previously accrued provision.

KZT 93,424 million

was transferred in favour of the state in 2024

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 JSC, 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.

The Tax Policy of Samruk-Energy JSC shall be approved by the Company's Management Board. Decision on amendments and additions to the Tax Policy shall be 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 Managing Director for Economics and Finance. The Director of the Accounting and Tax Accounting Department is responsible for management and fulfilment of the requirements, for compliance and reliability of information presentation.

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 presentation 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 applicable tax laws, treaties, regulations and other tax instructions, ensuring proper control over tax accounting and tax reporting.

To support and manage risk across all of our business units, we have implemented 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 practice in the application of these laws in the courts, may lead to tax disputes and potential additional tax liabilities, therefore we continuously monitor and analyse domestic and international tax legislation, 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 Department of Financial and Tax Accounting 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;
- The Law of the Republic of Kazakhstan On Accounting and Financial Reporting;
- International Financial Reporting Standards;
- The Standard Chart of Accounts approved by the order of the Minister of Finance of the Republic of Kazakhstan;
- The Company's corporate accounting policies;
- The Company's Corporate Chart of Accounts;
- Methodological recommendations, instructions, internal regulations and other normative acts on organisation and maintenance of accounting records.

The Tax Policy has a low tolerance for tax risk – we seek to minimise the risk of disputes with the tax authorities by being open and transparent about our tax operations. We seek to mitigate the level of 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 dialogue with tax authorities at various levels allows us to avoid adverse tax consequences and is an integral aspect of our Tax Policy.

Stakeholder engagement on tax matters

GRI 207-3, GRI 12: Coal Sector: 12.21.6

We maintain an active dialogue with stakeholders on tax-related issues. We advocate transparent interaction and open communication with tax authorities, ensuring that all reporting required by applicable law is done in a timely manner.

In connection with tax risks arising in the course of implementation of the MF RK KGD project "Horizontal Monitoring", work was carried out with the state authorities to clarify the correctness of attributing the equipment for generation and conversion of electric energy in accordance with the Classifier of Fixed Assets to the group "Equipment", which resulted in a favourable opinion for the Company.

We also take part in discussions on amendments to the Tax Code regarding VAT and CIT at the source of payment. Proposals are submitted for discussion of issues to be included in the New Tax Code.

We do not use unfair tax evasion schemes in carrying out our activities.

You can report any incidents 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/en/navigation-and-support/hotline



Development of local communities

GRI 413-1, GRI 12: Coal Sector: 12.9.2

We actively participate in the implementation of various projects and programmes 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 programmes 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.

Main projects and programmes implemented in 2024

SDG 1 No poverty

Name of subsidiaries and affiliates	Event
Financial assistance to the population	
JSC Ekibastuz SDPP-2	Station employees voluntarily organised fundraising and assistance to regions affected by floods. The funds raised were used to purchase 41 power generators. GRES-2 employees teamed up with residents of Solnechny settlement to raise funds and sent humanitarian aid to Atyrau, Uralsk and Atbasar. In addition, a collection point was organised to collect items for the victims. Together with Lider.kz volunteers from Ekibastuz, aid was sent to those most in need.
Almaty Electric Stations JSC	In response to the natural disaster, AIES JSC promptly allocated KZT 50 million to support the affected regions. The funds were allocated to restore infrastructure and help local residents affected by natural disasters.
AlmatyEnergoSbyt LLP	On 16 April 2024, a charitable donation agreement was concluded to support the residents of Atyrau region affected by floods. The funds are used to provide assistance to the affected people, as well as to purchase necessary materials to strengthen the coastal dams, including polythene bags, rubber boats, boots, shovels, lanterns and other means.
Shardara HPP JSC	Monthly payments are made to 39 pensioners of the Company and 8 soldiers-internationalists for 350 kWh of consumed electricity. Within the framework of the action Biz birgemiz humanitarian aid was provided to the residents of the West Kazakhstan region affected by floods in the amount of KZT 1,040,000.
Samruk Green Energy LLP	In April 2024, the Company's employees initiated an action to help flood victims by voluntarily allocating 1% of their salaries to support the victims. Necessary items were purchased and donated for the amount of about KZT 500,000.
Bogatyr Coal LLP	Charity care provided: - Religious confessions – KZT 8,252,000 (coal, repayment of debts on public utilities). - Non-profit organisations – KZT 248,568,000 (coal, crushed stone, New Year gifts for children, organisation of forums and events, repair of buildings and equipment). - Individuals – KZT 15,561,000 (for treatment, surgeries, funerals).
AES Ust Kamenogorsk HPP LLP	Payment of electricity to veterans of the WWII (East Kazakhstan region): KZT 6,500 was credited to the personal accounts of veterans to pay for electricity. The campaign has been organised since 2010. Assistance to flood victims: the funds of employees (KZT 355,000) were used to purchase pillows, blankets, gas cookers, cylinders, stew, hygiene products and handed over to the victims in Kostanay region.



Name of subsidiaries and affiliates	Event
Alatau Zharyk Company JSC	Employees of the company voluntarily transferred one day's salary, collecting KZT 29.4 million. The funds were donated to the Kazakhstan Khalkyna public fund. In support of the affected regions, the company sent 20 tonnes of humanitarian aid, including food, hygiene products and other necessary items in accordance with the requests of the population.
AES Shulbinsk HPP LLP	The company organised a festive event for the residents of the village including: - Treating with pilaf, nuryz kozhe, hot tea. - Handing out sarkites. - Setting the festive table. Total expenses amounted to KZT 1,221,000.
Support for socially vulnerable groups	
Ekibastuz GRES-1 LLP	In 2024, as part of the Kurban Ait holiday, food packages were given to families with many children and parents of pupils from local schools. Also, as part of the Road to School project, 162 employees from socially vulnerable groups were provided with monetary assistance.
Ekibastuz GRES-2 JSC	Two Stars charity music contest was held, which raised KZT 6 millionfor children in need of treatment. The funds were donated to the families of children with serious illnesses.
Almaty Electric Stations JSC	Charity events for children and the elderly were organised, including assistance to orphanages and nursing homes in Almaty and Iliysk district. An action in honour of Ramadan – auyzashar – was also held for children in the Perzent Muslim orphanage.
Shardara HPP JSC	Participation in the Mektepke Zhol campaign, with KZT 250,000 allocated for school supplies for children from low-income families.
Samruk Green Energy LLP	The collection of items from Kindness Boxes and the distribution of food packages were organised for large and low-income families, along with charity concerts and fairs.

SDG 3 Good health and well-being

Name of subsidiaries and affiliates	Event
Improving the health of employees and their families	
Ekibastuz GRES-1 LLP	The Company provided 1,064 employees with recreation in the areas of Anzyz land and Birch grove in winter, and in summer 1,045 employees were able to relax on the shore of Zhasybay Lake. Also, 136 employees underwent health resort treatment, and 110 children of employees had a holiday at the Karlygash children's camp.
Almaty Electric Stations JSC	Supported the recreation of 247 children and grandchildren of Company employees by organising their trip to the Edelweiss camp with 50% of the voucher cost compensated, totalling over KZT 16 million.
AlmatyEnergoSbyt LLP	Financial assistance was provided to 21 employees for health resort treatment, allocating KZT 1.2 million from the trade union fund. Also, with the support of the trade union, a children's summer camp was organised, where 39 children of the Company's employees had a rest.
Shardara HPP JSC	131 employees were sent for health resort treatment. In addition, one child of an employee took part in an excursion tour to the cities of Kazakhstan under the TuFan Yelge Sayakhat programme from Samruk-Kazyna JSC.
Bogatyr Coal LLP	The Company allocated 130 vouchers to the Saryagash sanatorium, of which 49 employees have already taken the opportunity to rest, including 18 people who received the benefit free of charge due to working in challenging conditions. In addition, 397 employees received an advance payment for sanatorium and health resort treatment. During the summer period, 2,595 employees spent their holidays at the Berezka recreation center, and 1,340 children enjoyed their time at the Karlygash children's wellness center.
AES Shulbinsk HPP LLP	Partially paid (50%) for sanatorium treatment and children's vouchers for 5 employees in the amount of KZT 455,520.

SDG 4 Quality education

Name of subsidiaries and affiliates	Event
Interaction with educational institutions	
Almaty Electric Stations JSC	As part of the training program for future turbine and boiler equipment operators, dual education has been implemented, combining theoretical knowledge with practical skills. The Company actively cooperates with Satbayev University and Al-Farabi KazNU, offering students opportunities for site visits, internships, and work placements. In 2024, students from the Kazakh-German University also visited the Company's production facilities.
Samruk Green Energy LLP	A contract was signed with Al-Farabi KazNU to provide professional internships for four students. The Company also organised an excursion to the solar power plant in Konaev for 20 students and specialists under a USAID project on renewable energy.
Bogatyr Coal LLP	Quarterly meetings with students were held, and agreements on practice were signed with colleges and universities in Ekibastuz. In 2024, more than 300 students were accepted for internship.

SDG 15 Life on land

Name of subsidiaries and affiliates	Event
Environmental initiatives	
Ekibastuz GRES-1 LLP	Greening of the industrial site: 1,800 trees were planted (plan 1,200). Greening of the sanitary protection zone of the ash dump: 500 Karagach trees were planted. 8.58 tonnes of waste paper were recycled. City-wide subbotniks were organised, with 5,210 tonnes of rubbish collected.
Ekibastuz SDPP-2 JSC	Spruce seedlings were planted in Victory Park, Solnechny settlement. Plogging was held for World Environment Day, with the collected rubbish sent for recycling.
Almaty Electric Stations JSC	6.099 hectares were landscaped, 11,100 trees and 623 saplings were planted. Environmental actions included the cleaning of the Prokhodnaya River and Butakov Gorge. Containers for battery collection were installed (80.1 kg). A "Be in the Eco-Trend!" challenge promoting refusal of plastic bags was organised.
Shardara HPP JSC	0.84 hectares were landscaped, 240 seedlings were planted. Clean-up days were held (19 March and 12 April) – cleaning of the station territory, car garage, central road. A contest "Cleanest site/workshop" was organised for the Environment Day.
Bogatyr Coal LLP	Greened 16.2213 hectares, planted: silver elm – 1793 pcs, small-leaved elm – 554 pcs, spruce – 64 pcs, acacia – 413 pcs. 25.2 tonnes of waste paper were sold. Participation in subbotniks – 1,600 employees were involved, 700 m² of territory was cleaned, 115 tonnes of rubbish was removed.



Caring for our planet

Management approach

GRI 3-3

Samruk-Energy JSC, as the leading energy company in Kazakhstan, pays priority attention to environmental safety issues. We are guided by national legislation, ISO 14001 international standard and best practices of sustainable development, striving to minimise environmental impact.

The Company works in the field of environmental protection in the following main areas:

- preventing and reducing environmental impacts, including improved air quality, responsible waste management and water management;
- contribution to the fight against climate change;
- conservation and rational use of energy resources;
- effective environmental monitoring and environmental impact assessment;
- conservation of landscapes and biodiversity.

To effectively control and manage environmental aspects, the Company has approved key documents:

- Corporate governance system policy;
- Corporate Environmental Protection Management Standard in the Group of companies of Samruk-Energy JSC;
- Guide to emergency environmental situations and response to them;
- Environmental Safety Programme of the Group of companies of Samruk-Energy JSC.

Environmental safety is integrated into all levels of the Company's corporate governance. Senior management is responsible for compliance with the Company's environmental commitments, targets and performance indicators. The Board of Directors approves the environmental strategy and policies.

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 the 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.

A Production Programme is developed each year, setting out key strategic objectives including:

- Raising environmental standards;
- Improvement of the quality management system;
- Optimisation of energy management;
- Improvement of working conditions and safety;
- Strengthening anti-corruption initiatives.

As part of its comprehensive environmental safety strategy, the Company has implemented an Environmental Management System (EMS). The EMS is regularly assessed for compliance with global standards with the help of independent international experts and is continuously improved. As part of the EMS, an Environmental Emergency Response Manual has been developed that defines procedures, response measures, and the organisation of on-site emergency response teams, which is updated after natural disasters and improved in line with modern and effective practices.

In the context of sustainable development and environmental responsibility, Samruk-Energy JSC systematically monitors key environmental indicators, such as the intensity of greenhouse gas and pollutant emissions, water intake and waste generation. In the reporting year 2024, the Group of companies demonstrated positive dynamics in reducing specific environmental impacts relative to economic performance indicators.

Dynamics of specific indicators of carbon intensity, pollutant emission intensity, water intake and waste generation of the Samruk-Energy JSC Group of companies (relative to income)

Indicator	2021 (fact)	2022 (fact)	2023 (fact)	2024 (fact)
GHG emissions, million tonnes CO_2eq	40.323	33.007	33.021	32.020
Direct GHG emissions, million tonnes CO_2eq (Scope 1)	40.308	32.993	33.010	32.007
Indirect GHG emissions, million tonnes CO_2eq (Scope 2)	0.015	0.013	0.011	0.014
Pollutant emissions, tonnes	362,647.6	358,079.1	354,922.3	345,373.0
Total volume of water withdrawn, million m^3	63,842.0	63,520.8	63,686.2	80,188.8
Waste generated, thousand tonnes	88,839.7	89,928.9	98,498.1	108,784.9
Income from sales of products and services, KZT million	332,537	381,465	444,960	573,490
Carbon intensity, tonnes CO_2eq/tonne KZT	0.121	0.087	0.074	0.056
Average value of carbon intensity for 3 years, tonnes CO_2eq/'000 KZT		0.094		
Dynamics relative to the average value 2021–2023, %				-41
Deviation from 2021, %	-	-29	-39	-54
Intensity of pollutant emissions, kg/'000 KZT	1.091	0.939	0.798	0.602
Average value of intensity of pollutant emissions for 3 years, kg/'000 KZT		0.942		
Dynamics relative to the average value 2021–2023, %				-36
Deviation from 2021, %	-	-14	-27	-45
Water withdrawal intensity, m^3/KZT	0.192	0.167	0.143	0.140
Average value of water withdrawal intensity over 3 years, m^3/KZT		0.167		
Dynamics relative to the average value 2021–2023, %				-16
Deviation from 2021, %	-	-13	-25	-27
Waste generation intensity, tonnes/'000 KZT	0.267	0.236	0.221	0.190
Average value of waste generation intensity for 3 years, tonnes/'000 KZT		0.241		
Dynamics relative to the average value 2021–2023, %				-21
Deviation from 2021, %	-	-12	-17	-29

Environmental Safety Programme of the Samruk-Energy JSC Group of companies

To implement the key strategic goals of the Company for the period until 2033, in 2024 the Board of Directors approved the Environmental Safety Programme of the Company's Group of companies. This Programme is the main tool for planning the Group's environmental activities, defining goals and measures aimed at achieving environmental sustainability and increasing social responsibility.

The Programme is of a long-term target nature and serves as a basis for inclusion of the activities envisaged by it in the Group's long-term, medium-term and operational planning documents. The overall Programme implementation period is from 2024 to 2033. The actual results of achieving the target values for 2024 are presented in the table below.

Environmental Action Plan of the Samruk-Energy JSC Group of companies for 2024–2027

Name of the event	Unit of measurement	2023 (fact)	2024 (target)	2024 (fact)
Reduction of pollutant emissions				
Increase in electricity generation by RES facilities.	billion kWh	2.85	5.64	7.46
Implementation of an automated system for monitoring emissions (NOx, SO_2, CO and dust) into the atmosphere.	Number of businesses: %	0	57	57
Conversion of Almaty CHPPs to gas.	thousand tonnes of pollutants	49.1	48.6	46.4
Improving the efficiency of electrostatic precipitators by performing repair work.	%	99.4	99.4	99.4
Efficient management of water resources				
Reduction of water withdrawal per unit of production.	m^3/kWh	0.67	0.66	2.02
Compliance with water quality requirements, including wastewater.	%	100	100	100
Repair of hydraulic ash removal systems of pipelines and pumping equipment at treatment facilities.	%	100	100	100
Safe waste management				
Transfer of hazardous industrial waste to specialised organisations.	Number of businesses: %	100	100	100
Recultivation of ash beaches at the waste accumulator (ash dump).	%	100	100	50
Placement of overburden into temporary internal dumps.	million m^3	21.98	25.1	28.0
Realisation of dry fly ash.	tonnes	15,829	at least 11,000	14,461
Transfer of ash and slag waste for secondary utilisation.	tonnes	1,000	2,000	4,116
Biodiversity conservation				
Participatory environmental impact assessment of new projects with local residents and communities.	Number of businesses: %	100	100	100
Greening of the territory of the sanitary protection zone of the enterprise.	%	100	100	100
Weekly monitoring of bird collisions with wind turbines.	No. of WPPs: %	100	100	100
Weekly inspection of the riverbed for fish kills.	Number of HPPs %	100	100	100
Reproduction of fish resources (stocking).	%	100	100	100

Deviations were recorded for two indicators:

1. Reduction of water withdrawal per unit of production (m^3/kWh) – the target was not achieved due to transfer of assets of AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP into the Company's charter capital, which affected the calculation base and structure of water use.

2. Recultivation of ash beaches at the ash disposal area – the activity was not implemented due to protracted tender procedures at SDPP-1 to select a contractor organisation. The tender was held only in January 2025.

At the same time, taking into account the unfulfilled volume of reclamation of 30 hectares in 2024, in 2025 works on the area of 60 hectares are planned, which will allow to fulfil the obligations of the previous year in full.

At the end of 2024, out of 17 measures envisaged by the Environmental Safety Programme, target values were achieved for 15 indicators.

Precautionary Principle

GRI 2-23

Samruk-Energy JSC pays special attention to the assessment of possible consequences and environmental risks when planning and implementing projects. In accordance with corporate standards, a thorough risk analysis, including environmental impact and potential long-term consequences, is carried out for each project. Risk assessment is carried out with the involvement of qualified experts, which is in line with internal regulations on risk management of investment projects.

As part of the implementation of the environmental policy, both current and capital measures are taken to minimise environmental risks. Their effectiveness is constantly monitored and tools for assessing and managing environmental risks are improved.

To increase motivation and responsibility of employees for the implementation of measures to reduce environmental risks, environmental key performance indicators were introduced in Samruk-Energy JSC, which makes it possible to manage environmental safety more efficiently and achieve the set goals.

Monitoring and transparency

In order to maintain a high level of environmental responsibility, the Company provides detailed reports on environmental protection activities on a regular basis. Quarterly reports are submitted to the members of the Management Board and the profile Committee for Safety, Occupational Health and Environmental Protection, as well as annually to the Board of Directors of Samruk-Energy JSC – Report on Environmental Protection Activities for the Reporting Period.

In 2024, the Samruk-Energy JSC Group of Companies successfully passed an external surveillance audit confirming the compliance of its corporate management system with the requirements of international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, and ISO 37001.It should be noted that these international standards apply to the following assets (production sites) of the Company: Ekibastuz GRES-1 named after B. Nurzhanov LLP, Ekibastuz GRES-2 JSC, Almaty Electric Stations JSC, Moynak HPP JSC, Samruk Green Energy LLP, Alatau Zharyk Company JSC, AlmatyEnergoSbyt LLP, Shardara HPP JSC, First Wind Power Plant LLP, as well as the corporate centre of Samruk-Energy JSC.

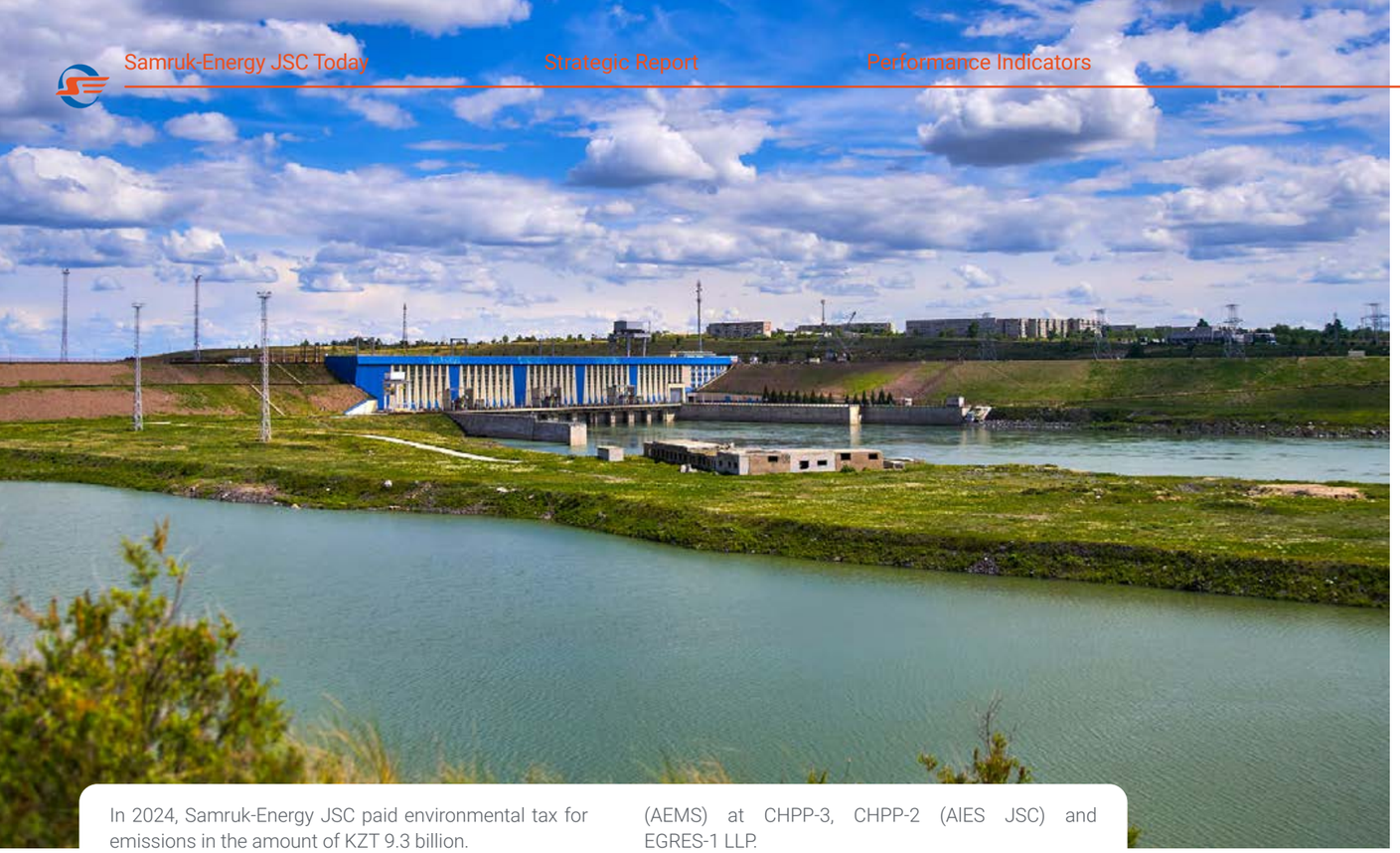
Investments in environmental protection activities

Within the framework of implementation of the Action Plan for environmental protection management in the Samruk-Energy Group of companies for 2024, as well as the Environmental Action Plans of subsidiaries and affiliates for 2024 agreed with the authorised body in the field of environmental protection, 94% of the planned environmental protection measures were implemented. KZT 14.416 billion of the envisaged KZT 16.192 billion was utilised. The main activities aimed at reducing environmental impact and improving environmental efficiency included:

- Equipment modernisation: repair of burners of boiler units, reconstruction of electrostatic precipitators to reduce dust emissions.
- Optimisation of industrial processes: repair of the industrial circulation system (baghouse), maintenance of dust and gas purification plants.
- Systemic measures to reduce pollution: introduction of automated monitoring of pollutant emissions, dust suppression of ash beaches at the waste accumulator (ash dump).
- Rational waste management: waste recycling, overburden disposal into temporary internal dumps, which will reduce the volume of overburden in external dumps by 69.511 million tonnes.
- Water conservation and wastewater treatment: maintenance of storm and melt water collection and treatment system complexes.
- Greening and landscaping: increase the area of green spaces on the territory of enterprises.
- Improvement of equipment reliability: repair of units and adjustment of equipment operating mode in accordance with regime maps.

Investments of Samruk-Energy JSC in environmental protection measures, KZT billion





In 2024, Samruk-Energy JSC paid environmental tax for emissions in the amount of KZT 9.3 billion.

Compliance with environmental legislation

The Environmental Code of the Republic of Kazakhstan refers the main activities of Samruk-Energy JSC subsidiaries to the category of special nature management, which requires strict compliance with environmental standards and regulations. Each enterprise of the Company is responsible for environmental impact acting within the framework of environmental permits and norms.

We endeavour to meet all established requirements and stakeholder expectations. In accordance with the Environmental Code and the Aarhus Convention, an Environmental Impact Assessment (EIA) with mandatory public hearings in the format of open meetings is conducted before launching new projects and facilities. This process includes an information campaign to ensure transparency and consideration of public opinion.

Samruk-Energy JSC actively participates in the development of proposals to improve the Environmental Code, which contributes to the improvement of the environmental situation and financial and economic indicators of enterprises.

In 2024, authorised bodies carried out preventive inspections for compliance with environmental standards. As a result, the following violations were identified:

- Lack of automated emission monitoring systems (AEMS) at CHPP-3, CHPP-2 (AIES JSC) and EGRES-1 LLP.
- Unauthorised accumulation of construction waste on the territory of the ash dump of CHPP-3.
- Soil contamination with hazardous chemicals (fuel oil leakage at CHPP-1 due to damage to the flange connection of the fuel oil heater), which did not cause significant environmental damage.

All identified violations were promptly eliminated, additional measures were taken to prevent similar cases in the future, and control over compliance with environmental norms was strengthened at all Company facilities.

Environmental protection activities

In 2024, 94% of planned environmental protection measures, including protection of air, water and land resources, flora, fauna and biodiversity, have been implemented.

The key achievement was the introduction of an automated emission monitoring system at JSC SEGRES-2 and AIES JSC (CHPP-1 and ZTK), as well as at Bogatyr Coal LLP (for the discharge of drainage and wastewater into the Akbidayik tailings pond) with data transfer to the National Environmental Data Bank every 20 minutes in online mode.

From 1 January 2025, enterprises from the TOP-50 list are required to obtain a Comprehensive Environmental Permit (CEP), which stimulates the introduction of the best available technologies (BAT). The basis for obtaining a CEP is the BAT Reference Guide approved by the Resolution of the Government of the Republic of Kazakhstan dated 11.03.2024 No.161.

One of the prerequisites for obtaining the ERC is the development of an Environmental Performance Improvement Programme (EPIP). The Company has set a task to prepare such programmes for all subsidiaries and affiliates included in the TOP-50.

Due to the high costs of BAT implementation, EPO and KEA initiated the postponement of the implementation period. As a result, by the Resolution of the Government of the Republic of Kazakhstan dated 27.12.2024 No.1131 the deadline for implementation of BAT for energy enterprises was postponed from 2025 to 2031.

Together with subsidiaries and affiliates, preliminary measures to reduce NOx, SO_2 emissions and ash capture have been developed and will be included in the EPIP. Also, updated Roadmaps for transition to CEP were prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan for approval.

17 January 2025 summarised the results of the implementation of the Environmental Action Plan for 2024 and identified further steps for subsidiaries and affiliates to comply with environmental legislation.

Within the framework of the republican environmental action "Taza Kazakstan", during 2024 Samruk-Energy JSC implemented a number of environmental events aimed at improving environmental culture and forming a responsible attitude to the environment among employees and the population. One of the significant events was the ECO Challenge, where participants were invited to follow environmentally friendly habits in their daily lives:

- Abandon the use of plastic bags in favour of reusable eco-bags (shoppers, briefcases);
- Use your own (reusable) utensils instead of disposable crockery;
- Use paper and other resources wisely.

On a regular basis, subbotniks were held on the territory of subsidiaries and affiliates to clean up adjacent territories. As part of the ECO Challenge, the Company's young activists took part in an environmental clean-up day on the bank of the Bolshaya Almatinka River and also held a plogging event in Borovoye settlement.

In addition, within the framework of implementation of the Action Plan for Environmental Management in the Group of companies of Samruk-Energy JSC for 2024, a number of cultural, educational and environmental events were held among employees of subsidiaries and affiliates timed to celebrate World Environment Day on 5 June. The key events include:

- The employees of SEGRES-2 JSC organised an environmental action – plogging, aimed at preserving the environment and forming a careful attitude to nature;
- Environmental specialists of the production departments and specialists of the head office of AIES JSC held an environmental action "#Birge – taza taular"/"Together – clean mountains" in Butakovo gorge, as a result of which 18 bags (160 litres) of rubbish were collected;
- EGRES-1 LLP held a team building event Green Unity among the plant's employees in order to improve environmental culture and form responsibility for environmental conservation;
- Bogatyr Coal LLP organised a contest of video clips and children's drawings on the theme World Environment Day;
- Various thematic events and actions at the enterprises of AJK JSC, Shardara HPP JSC, Moynak HPP JSC, AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP and FWPP LLP aimed at popularisation of careful attitude to nature and formation of ecological thinking among employees.

Participation of Samruk-Energy team in the city-wide clean-up day

Within the framework of the republican environmental action "Taza Kazakstan", which was held in Astana in April 2024, the staff of Samruk-Energy JSC took an active part in the city-wide clean-up day. The main purpose of the event was to raise awareness of environmental culture and the importance of preserving the environment.

The Company's employees cleaned the Alley of Power Engineers, which was planted by Samruk-Energy JSC in honour of the 15th anniversary of the Samruk-Kazyna Fund. This event became an important contribution to improving the environmental situation in the city and once again emphasised the company's responsibility for sustainable development and care for the environment.

Open dialogue with stakeholders on environmental issues

We constantly maintain a dialogue with stakeholders on environmental protection issues. This allows us to monitor the effectiveness of decisions made and measures implemented, as well as to update environmental risks.

In 2024, the Company held public hearings on four projects, which resulted in favourable conclusions.

Guided by the principle of information transparency and accountability, Samruk-Energy JSC organises meetings, press conferences and round tables to discuss environmental issues with representatives of the public, mass media, volunteer and non-profit organisations. Top managers of the Company, as well as representatives of the management of subsidiary organisations participate in these initiatives.

In 2024, representatives of the company participated in the following activities:

1. Discussion of the impact on tariffs and further amendments on return on investment for EPO as part of the dialogues with the Kazakhstan Electricity Association.
2. Participation in roundtables on the issue of alternative option of financial provision for facilities of I category together with NPP Atameken and other associations.
3. Development of proposals to amend the Code of Administrative Offences of the Republic of Kazakhstan with regard to exceeding technological standards for emissions and discharges. These proposals were submitted as part of the work of the joint working group on energy, environment and oil and gas industry of the Foreign Investors Council under the President of the Republic of Kazakhstan.
4. Participation in the Round Table on waste management. The Chief Manager of Department of Environmental and Industrial Safety of Samruk-Energy JSC moderated the session "Sustainable Management of Industrial and Hazardous Waste: ESG Approaches".
5. Webinar organised by Samruk-Energy JSC for subsidiaries and affiliates on environmental regulation with participation of speakers discussing environmental regulation issues.

Direct appeals on environmental issues can be made through the official https://samruk-energy.kz/en/navigation-and-support/hotline, which allows messages to be registered in the incident management system. They are then analysed, verified and forwarded to the relevant departments for appropriate action.

Training of employees in the field of environmental protection

Samruk-Energy JSC has a Corporate Environmental Training Programme aimed at formation, development and advanced training of employees in the field of environmental protection. The purpose of the programme is to provide the necessary level of knowledge and competencies for efficient performance of environmental tasks, as well as to promote sustainable strategic development of the Company.

Training is provided at least once a year and covers a wide range of environmental topics including:

- Basic requirements of the environmental legislation of the Republic of Kazakhstan;
- Identification and management of environmental risks;
- Methods of minimising the negative impact on the environment;
- Implementation of the best available technologies;
- International sustainability standards and practices (including ISO 14001, ISO 9001, GRI, TCFD, CDP, ESG principles).

Within the framework of the Corporate Programme in 2024, an online seminar for Samruk-Energy JSC subsidiaries and affiliates was held on the topic: Innovations in the field of environmental regulation and bylaws regarding the procedure for conducting EIA and issuing environmental permits.

On 28 November, the Risk Management and Internal Control Department with the involvement of a training organisation held a corporate seminar on the topic: Climate Risks for Energy Sector Enterprises.

On 10 December 2024, McKinsey conducted training for members of the Board of Directors, top management and executives of the Company on the topic: Climate Change and Energy Outlook.

Atmospheric emissions

Management approach

GRI 3-3, GRI 12: Coal Sector: 12.1.1, 12.4.1

We are committed to reducing atmospheric emissions and are implementing measures aimed at reducing pollutants. Particular attention is paid to minimising atmospheric pollution at enterprises such as EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP, which operate on fossil fuels and have a significant impact on emissions.

The Company ensures control over compliance with the maximum permissible emission standards with mandatory reporting to supervisory authorities. Air quality is regularly monitored as part of the Industrial Environmental Control Programme to ensure compliance with environmental standards.

Actual technical and environmental performance is analysed on a quarterly basis, comparing it with norms and data from previous years. Information on possible environmental risks is provided to facility managers and senior management.

Pollutant emissions are strictly regulated by RK legislation and comply with design and regulatory documents agreed with state authorities.

Emissions monitoring includes observation of emissions at sources to track their volume and quality. Based on monitoring data, pollutants are analysed in accordance with national environmental standards.

EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP measure emissions of harmful substances in flue gases, such as nitrogen oxides, sulphur dioxide and dust



particles, in accordance with the Production Monitoring Schedule. Measurements are performed by accredited laboratories, and specialised software is used to calculate emissions. Based on these data, an Atmospheric Air Protection Report (Form No. 2-TP (air)) is prepared.

To minimise emissions, equipment efficiency is regularly checked and, where necessary, new technological solutions are introduced. The facilities are continuously monitored for equipment specifications affecting emissions, effluents and waste.

When planning new facilities, factors are taken into account to minimise the impact on the atmosphere. In the case of the new plants at Ekibastuz, particular attention is paid to location close to fuel sources to minimise the environmental risks of coal transport. The correct choice of chimney heights helps to better distribute emissions, taking into account topography, wind direction and distance to settlements.

Indicators of pollutant emissions

GRI 305-7, GRI 12: Coal Sector: 12.4.2

The main sources of pollutant emissions in the Company are boiler units, oil farms, fuel oil farms, ash dumps and other facilities located on the territory of fuel stations and boiler houses (EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP). The key pollutants generated by fuel combustion at these enterprises are nitrogen oxides (NOx), sulphur dioxide (SO_2), fuel oil ash, ash/dust, carbon monoxide (CO) and volatile organic compounds.

Calculation of pollutant emissions is carried out in accordance with the methodological documents in the field of environmental protection approved by the Order of the Minister of Environment and Water Resources of the Republic of Kazakhstan dated 12 June 2014 No. 221-Ө. The calculations take into account the main characteristics of the fuel used: lower calorific value (kCal/kg), working ash content (%), working sulphur content (%), share of ash in the fly ash (%) and its consumption in physical terms.

Pollutant emissions are monitored in accordance with subsidiaries and affiliates' Environmental Control Programmes agreed with the authorised body in the field of environmental protection.

In accordance with the requirements for the use of natural resources established in environmental emission permits, Ekibastuz SDPP-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Shardara HPP JSC and Moynak HPP JSC developed and agreed with the authorised body in the field of environmental protection plans of environmental protection measures.

The said plans include a set of measures aimed at:

- protection of atmospheric air;
- rational use and protection of water resources;
- land conservation;
- preservation of biodiversity (flora and fauna);
- safe handling of production and consumption waste;
- ensuring radiation, biological and chemical safety;
- implementation of environmental management systems and best available technologies.

The implementation of activities within the framework of these plans is mandatory and is carried out in accordance with the established procedure.

In 2024, atmospheric emissions of the Samruk-Energy JSC Group of companies did not exceed the established maximum permissible values and amounted to

345,373 tonnes

Dynamics of specific air emissions per unit of production, g/kWh

2022	2023	2024	Δ 2024/2023, %
9.5	9.5	8.2	-13.8

Based on 2024 data, specific air pollutant emissions decreased by 13.8 per cent compared to the 2023 figure.

The positive trend is due to:

- reduction of the specific consumption of conventional fuel at SEGRES-2 JSC from 381.3 g/kWh to 374.7 g/kWh.
- increase in electricity production from RES by 2.6 times, from 2.849 billion kWh to 7.460 billion kWh as a result of transfer of assets of AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP into the authorised capital of the Company.

Key activities in the field of atmospheric air protection in 2024:

- Provision of 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 units to reduce nitrogen oxide emissions;
- Carrying out repairs to aspiration units used in fuel supply;
- Repair of dust collection systems on drilling machines.

Environmental control in online mode

In 2024, Samruk-Energy JSC implemented automated monitoring and control systems (AMS) for emissions into the atmospheric air at stationary emission sources of SEGRES-2 JSC, power units No. 7 and No. 8 of EGRES-1 LLP, as well as B. Orazbayev CHPP-1 and the Western Heat Complex (WHC) of AIES JSC. These systems are an important element of the Company's Environmental Safety Programme of the Samruk-Energy JSC Group of companies.

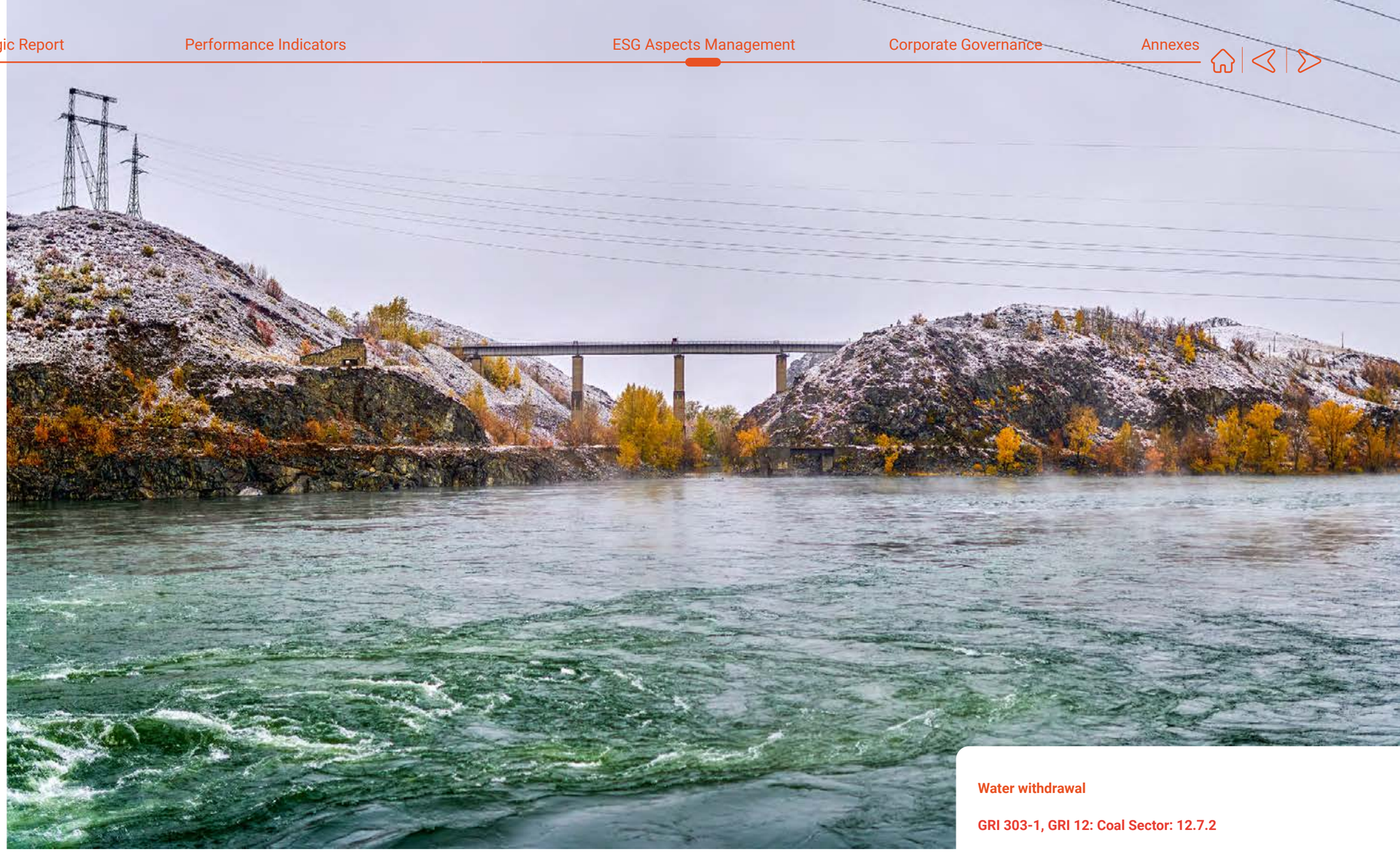
The purpose of AMS installation is to provide control, monitoring, and incentives for enterprises to reduce their impact on the urban and natural environment. The system allows tracking emissions of such substances as nitrogen oxides (NO, NO_2, NOx), sulphur dioxide (SO_2) and others, as well as calculating the gross volume of these emissions.

All data are transmitted in real time to the information system of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan.



Plans for 2025 and the medium term

1. Study of advanced methods of flue gas cleaning at EGRES-1 LLP, SEGRES-2 JSC, AIES JSC with focus on removal of ash, dust, nitrogen oxides (NOx) and sulphur oxides (SOx).
2. Determination of the final cost of implementing BAT after a comprehensive analysis of available technological solutions.
3. Construction of clarified water return pumping station within the framework of design and estimate documentation at P stage for the project “Expansion and reconstruction of Ekibastuz GRES-2 with installation of power units No. 3,4”.



Responsible water use

Management approach

GRI 3-3, GRI 12: Coal Sector: 12.7.1, 12.7.2, 12.7.6

Samruk-Energy JSC works to identify and prevent possible impacts of its activities on water resources. The Company carefully controls the withdrawal and use of water resources at its production enterprises to ensure compliance with environmental standards.

Our subsidiaries, including EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, AES Shulbinsk HPP LLP, AES Ust Kamenogorsk HPP LLP and AZhK JSC do not operate water resources in water scarce regions, but we place great importance on sustainable water management. This includes assessing risks and implementing strategies to minimise clean water consumption and effectively treat wastewater to ensure it is safely returned to nature.

Our water resources management complies with the Water Code of the Republic of Kazakhstan and major permits, ensuring proper protection of water resources.

Basic principles in water resources management:

- Responsible water use and maintaining a sustainable water balance;
- Assessment and accounting of all water abstraction points, including water abstraction through intermediaries;
- Continuous improvement strategies to optimise the use of water resources;
- Minimising the use of potable water for industrial purposes;
- Annual revision of metering devices for water intake and wastewater disposal, checking their availability, functionality, and timely calibration and sealing by regulatory authorities;
- Excluding operations in water scarce regions, which emphasises our environmental responsibility.

We actively co-operate with local authorities to ensure access to quality drinking water. Our openness to dialogue allows us to carefully consider citizens' requests regarding the impact of our activities on local water resources.

Main sources of water resources:

- Bestiubinskoye reservoir (Moynak HPP);
- Shardara reservoir (Shardara HPP);
- Shulbinsk water reservoir (Shulbinsk HPP);
- Ust-Kamenogorsk reservoir (Ust-Kamenogorsk HPP);
- K. Satpayev Canal (Bulat Nurzhanov Ekibastuz GRES-1 LLP, Station Ekibastuzskaya GRES-2 JSC);
- Shidertinskiy Canal (Station Ekibastuzskaya GRES-2 JSC);
- Big Almaty Lake and the basin of the Big Almatinka River (HPP Cascade);
- Kapshagai reservoir (Kapshagai HPP).

At the enterprises of EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, AES Shulbinsk HPP LLP, AES Ust Kamenogorsk HPP LLP and AZhK JSC monitoring of water resources quality is regularly conducted. Accredited laboratories analyse waste water and water supply sources, identifying pollutants and ensuring a high level of environmental safety. Based on this data, an action plan is developed to optimise water management and minimise environmental impact.

Water withdrawal

GRI 303-1, GRI 12: Coal Sector: 12.7.2

EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP withdraw water in volumes required for production processes, in strict compliance with design and regulatory requirements approved by the regulatory authorities. These enterprises are actively developing sustainable water management plans, including measures to reduce freshwater consumption, effectively treat wastewater, minimise water losses during transportation and improve wastewater reuse systems.

As part of our water conservation strategy, we actively utilised closed-loop water supply systems, including storage reservoir coolers and direct ash removal systems at the Ekibastuz TPPs. At the Almaty CHPPs, recirculating cooling systems with cooling towers were used, and water from ash dumps was utilised to improve water use efficiency and protect the environment.

Volume of reusable and recycled water, megalitres

Indicator	2022	2023	2024	Δ2024/2023, %
Volume of reusable water	7,327	8,328	8,620	3.5
Volume of recycled water	3,527,190	3,490,881	3,541,091	1.4

In 2024, the volume of water withdrawn by TPPs per unit of output was 6.81 m³/ thousand kWh, which is 3.1% less than in the previous year. This indicates a decrease in the water intensity of TPP production processes in the reporting period.

Water efficiency of production, m³/ thousand kWh

Indicator	2022	2023	2024	Δ 2024/2023, %
Volume of water withdrawal per unit of output	6.30	7.03	6.81	-3.1

Water discharge

GRI 303-2, 303-3, 303-4, 303-5,
GRI 12: Coal Sector: 12.7.3, 12.7.4, 12.7.5, 12.7.6

We adhere to high standards of wastewater handling to minimise its negative impact on aquatic ecosystems. Samruk-Energy JSC endeavours not to exceed the established wastewater discharge limits and to comply with regulations, which allows protecting biodiversity and natural habitats.

In 2024, we conducted thorough quality control of water resources, including surface, ground and waste water, using certified laboratories, as part of the Environmental Monitoring Programme. According to the results of analyses at the facilities of EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, AES Shulbinsk HPP LLP, AES Ust Kamenogorsk HPP LLP and AZhK JSC did not record violations of established norms on the content of pollutants.

Water is discharged to specially designated places: rainwater is directed to river systems and accumulation ponds, and industrial wastewater for ash and slag transport – to ash dumps, excluding discharge into natural water bodies. All wastewaters, except those used for hydraulic transport of ash and slag, are treated until they reach sanitary and environmental standards established by legislation.

In the process of production and economic activity of EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, AES Shulbinsk HPP LLP, AES Ust Kamenogorsk HPP LLP and AJK JSC two categories of wastewater are formed:

- More than 99% of the total volume is wastewater from the hydraulic ash removal system, as well as treated water used for cooling technical units of CHPPs and water used for electricity generation at HPPs.
- Less than 1% of the total volume is domestic wastewater collected from administrative buildings, canteens and offices.

Wastewater treatment is carried out using modern physical, chemical and biological technologies. The development of standards for maximum permitted discharges is based on the methodology approved by the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan in March 2021. The quality of treated wastewater is monitored by a certified laboratory, ensuring compliance with environmental standards.

Domestic wastewater is treated at the biological treatment plant Stok, which has two parallel treatment lines with a capacity of 15 m³ per day. The treatment system includes a biological treatment unit, additional filtration and a water disinfection unit, ensuring a high level of treatment before discharge into natural water bodies.

Surface water quality assessment is carried out by general and special indicators. General ones include mineralisation, pH, hardness and other parameters, while special ones include chemical and biochemical oxygen demand, content of oil products, ammonium salts, nitrates, phosphates and other pollutants.

GRI 303-3, 303-4, 303-5, GRI 12: Coal Sector: 12.7.4, 12.7.6

In 2024, EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, Moynak HPP JSC, Shardara HPP JSC, AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP and AZhK JSC will be allocated 80,043,391 megalitres of wastewater for production and household and drinking needs. At the same time, 99% of the withdrawn water is used for operation of hydroelectric generators of HPPs to produce electric power. The total volume of water withdrawal was 80,188,759 megalitres in the reporting period.

Data collection process for monitoring water consumption and abstraction

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 subsidiaries and affiliates.
AIES 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 Heating 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 fax for Kapshagay HPP and HPP Cascade. All data are displayed in the daily report – Daily report by stations of AIES JSC. Monthly reporting data collection is carried out using email with provision of water withdrawal/ consumption/discharge balance from each production unit.
EGRES-1 LLP and GRES-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 industrial and firefighting needs. Data are collected and analysed by entering information into an Excel spreadsheet and keeping a log of primary water accounting, which ensures the accuracy and transparency of water resources monitoring.
AES Ust-Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, MGES JSC and SHHPP JSC	The use of water through the power plant turbines is subject to continuous monitoring and recording by plant operatives 24 hours a day, 7 days a week. Water consumption for domestic and potable purposes is monitored by the operator of the main pump intake.
Bogatyr Coal 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 co-operation with the State Utility Enterprise Gorvodokanal. Archived data on wastewater discharge recorded by the meters installed at key facilities are printed out on a monthly basis 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 into a special logbook according to the annex to the rules of primary registration of water use.

Plans for 2025 and the medium term

As part of the 2025 Production Environmental Control Program, the Company's enterprises, with the involvement of licensed and accredited specialised laboratories, will conduct environmental monitoring to assess the impact of power plant operations on surface water in the areas where they are located.

The following types of observations are planned for monitoring of water resources in the zone of influence of the enterprise:

- Monitoring of water quality composition;
- Monitoring of the quantitative and qualitative composition of water of the cooling system of turbine condensers and water for ash and slag waste transportation to the ash dump;
- Monthly observations of impacts on water bodies, according to the monitoring schedule provided in the programme.

Groundwater quality will be monitored through a network of observation wells located along the groundwater flow direction. The wells are equipped with metal casing and are numbered in sequence..

Waste management

Management approach

GRI 3-3, 306-1, 306-2, GRI 12: Coal Sector: 12.6.1, 12.6.2, 12.6.3

Responsible waste management is an important component of Samruk-Energy JSC's environmental strategy. We strive for efficient use of resources and minimisation of waste impact on the environment at all stages of our activities, from power generation to facility operation.

The Company carries out waste management activities in accordance with the requirements of the legislation of the Republic of Kazakhstan, including keeping records of waste generated, treated, utilised, neutralised, transferred to other persons or received from other persons, as well as disposed waste. The data are summarised quarterly and annually.

Waste management is organised in strict accordance with established standards and procedures, including:

- Corporate standard for environmental protection;
- Waste Management Programmes;
- Waste Management Action Plan.

Contractors working with waste are closely monitored at the facilities. During the procurement process, contractors are checked to ensure that they have the necessary licences and that they have the appropriate logistics for safe waste management. Contractors are required to sign contracts confirming compliance with environmental regulations and legislation of the Republic of Kazakhstan. Environmental services regularly inspect their activities.

We actively engage with stakeholders by providing channels for submitting environmental comments through Samruk-Energy JSC; all appeals are recorded and thoroughly reviewed.

Waste inventory was carried out in EGRES-1 LLP, SEGRES-2 JSC, AIES JSC, Bogatyr Coal LLP, and methods of waste accumulation were developed for each type of waste, taking into account its hazard class, toxicity, physical state and other characteristics.

Hazardous waste requires specialised disposal, while non-hazardous waste is subject to separate collection and recycling. For separate collection of waste, special points and areas with containers and metal containers labelled for easy identification have been set up. Criteria for waste that cannot be buried and materials suitable for recycling have also been established.

Bogatyr Coal LLP is actively working to minimise its environmental impact by reducing the volume of overburden placed on external dumps. The Company is developing plans to adapt the mined-out areas of the Severny and Bogatyr open pits for use as internal dumps. To prevent oxidation and spontaneous combustion of carbon-containing rocks, inert materials are used to isolate and compact the surface layer of the dumps.

Development of HPPs and RES facilities in Samruk-Energy JSC contributes to the reduction of ash and slag waste per unit of output.

Waste management indicators

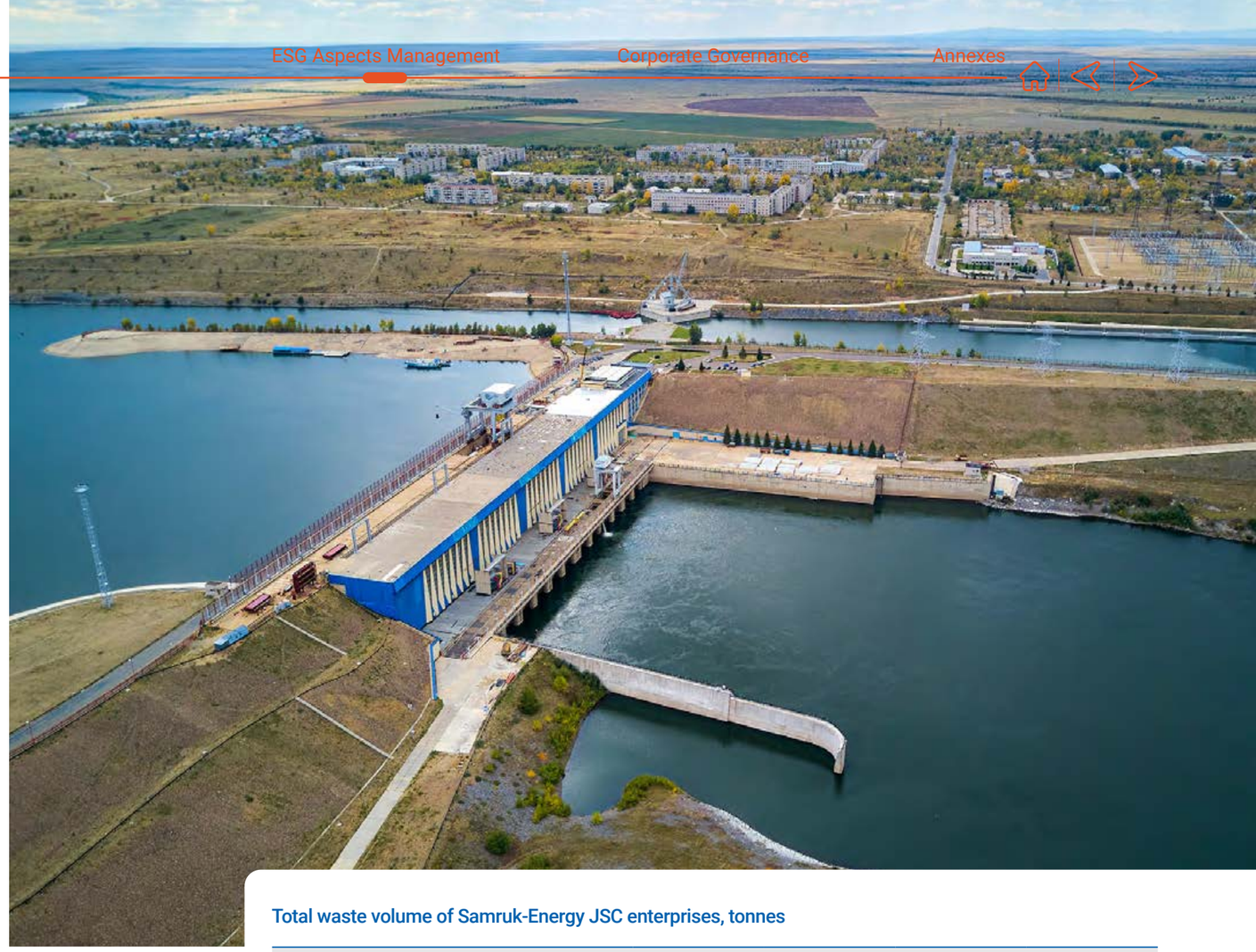
GRI 306-3, GRI 12: Coal Sector: 12.6.4

The companies organise the collection of used batteries containing toxic substances such as lead, mercury and cadmium, which can be harmful to health and the environment. Used batteries are sent for recycling to avoid them ending up in landfills. From 2020 to 2024, 285kg of batteries were collected and sent for recycling.

In the course of their operations, EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP do not generate radioactive waste. Radiation monitoring is conducted every quarter and the results show that radiation levels remain within the safe standard of 2.5 μSv/hour, confirming the effectiveness of existing radiation safety measures.

In 2024, 108.784 million tonnes of waste were generated, which meets environmental requirements. The main wastes are overburden and ash and slag waste. The volume of waste increased by 10% compared to 2023 due to the acquisition of an excavator and dump trucks by Bogatyr Coal LLP, as well as the engagement of a contractor to perform stripping works. These measures allowed to increase the volume of stripping works from 2.344 million m³ to 8.364 million m³ in 2024.

At the same time, the volume of ash and slag waste decreased by 0.8% due to a decrease in electricity generation at GRES-1 and Almaty CHPP-2, as well as a decrease in specific fuel consumption at GRES-2.



Total waste volume of Samruk-Energy JSC enterprises, tonnes

Indicator	2022	2023	2024	Δ 2024/2023, %
Total waste generated, of which	**89,929,927**	**98,496,096**	**108,784,900**	**10.4**
Dangerous	647	1,732	534	-69.2
Non-hazardous	89,928,281	98,496,364	108,784,366	10.4
Of these, for the main types of waste characteristic of the specifics of production	**89,912,725**	**98,474,212**	**108,760,267**	**10.4**
ash and slag waste	7,129,158	8,853,230	8,781,174	-0.8
overburden	82,783,567	89,620,982	99,979,093	11.6

Plans for 2025 and the medium term

- Development and implementation of measures aimed at minimising the impact of waste on the environment and employee health.
- Monthly records of waste generation, delivery, recovery and disposal.
- Transferring waste to third party organisations for recycling or disposal.
- Development of technologies for effective ash and slag waste management using dust suppression.
- Compliance with norms for temporary storage of waste (not more than 6 months) before its further disposal or recycling.



Biodiversity conservation

Management approach

GRI 3-3, 304-1, 304-2, GRI 12: Coal Sector: 12.5.1, 12.5.2

We care about biodiversity conservation and monitor the effectiveness of biodiversity mitigation measures. We do not operate in protected areas or areas of high biodiversity value.

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 minimise the impact of our operations on biodiversity and includes strategies to conserve nature, manage environmental risks and aspects affecting biodiversity.

Key areas for maintaining and protecting biodiversity:

- Introduction of advanced technologies that reduce the environmental impact on the environment during the production process.
- Development and implementation of programmes to protect and conserve biodiversity in areas adjacent to production zones.
- Regular monitoring of environmental conditions in order to promptly identify and eliminate threats to ecosystems.

In accordance with the environmental legislation of the Republic of Kazakhstan, when expanding or modernising its operations, the Company analyses the possible impact on the ecological system and biodiversity of the region where our production facilities are located.

Results of biodiversity protection activities

GRI 304-2, 304-3, 304-4, GRI 12: Coal Sector: 12.5.3, 12.5.4, 12.5.5

We actively work to protect and enhance natural ecosystems at all stages of our operations, from power generation to decommissioning.

As part of this work, wildlife conservation projects are being implemented, co-operation is being established with scientific and research institutes, as well as with government agencies. One example of cooperation with international environmental organisations is the project of Moynak HPP JSC to preserve a relic ash grove on the Charyn River, implemented with UNDP experts in Kazakhstan.

In accordance with the 2024 Environmental Protection Action Plan of the Samruk-Energy JSC Group of companies, plans for monitoring the impact of economic activities on fauna and flora were developed and approved in Shardara HPP JSC, Moynak HPP JSC, AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, AZhK JSC and FWPP LLP.

As part of the implementation of these plans, the following activities have been carried out in 2024:

- visual inspection of water surface of Bestiubinsk, Shardara, Ust-Kamenogorsk and Shulbinsk reservoirs for possible fish kill;
- conducting environmental briefings to improve the environmental culture of the personnel;
- planting of spruce and elm saplings;
- stocking of water bodies with fish;
- visual inspection of power line routes and territories of wind power plant areas to detect bird deaths.

All planned activities on biodiversity conservation in 2024 were implemented in full. No cases of fish and bird mortality were recorded in the reporting period. The Shulbinskoye Reservoir and the Irtysh River were stocked, spruce and elm seedlings were planted, environmental awareness was organised for employees of subsidiaries and affiliates, and thematic environmental bulletins were published.

In 2024, the activities of subsidiaries did not have a significant direct or indirect impact on vulnerable ecosystems and biodiversity

Two bird species listed in the Red Book of Kazakhstan have been recorded in the area of the 45 MW HPP near the town of Ereimentau (FWPP LLP): the Imperial Eagle and the Steppe Eagle[42]. The birds inhabit valleys and along roads, but at a distance from the turbine sites. The assessment showed that the risk of bird collisions with wind turbines is minimal. No incidents with migrating birds have been recorded during the operation of the wind farm, as confirmed by records in the logbook.

Our sites are located in Pavlodar and Almaty regions characterised by a high level of anthropogenic impact. They are located in industrial areas that are not home to flora and fauna species listed in the Red Book or endangered species. We strive to minimise our ecological footprint and constantly monitor the impact on the natural environment.

We actively support biodiversity by implementing programmes aimed at protecting flora and fauna. Our efforts in this area contribute to the fulfilment of the UN Sustainable Development Goals No. 14 and No. 15, which underlines our commitment to responsible business and environmental protection.

In 2024, the Company's subsidiaries and affiliates invested KZT 224.1 million in the improvement and landscaping of the sanitary protection zone, which is 95.4% higher than the previous year's investments.

[42] As per the Final Report of the zoological survey dated 07.10.2013.

Investments in biodiversity conservation, million KZT

2022	2023	2024	Δ 2024/2023, %
57.9	114.7	224.1	95.4

In order to protect fish populations at our Company's hydroelectric power plants, specialised fish protection systems have been installed on hydro turbines. In accordance with the recommendations of the Kazakh Research Institute of Fisheries, a measure has been implemented to protect spawning fish: illumination of the water surface with floodlights at night near water intakes in front of turbine conduits. This effectively discourages fish and minimises their ingress into the turbines, contributing to the preservation of the ecosystem.

To protect birds that use overhead power line poles as resting places, AZhK JSC implements projects to reconstruct poles with the installation of insulated wires and special ruffles that prevent birds from landing on the traverses. These measures significantly reduce the risk of electrical contact damage, contributing to the safety of birds and the conservation of their populations.

The operating regimes of our hydropower plants are coordinated with the Ministry of Water Resources, local authorities and the management of specially protected natural areas, especially in the area of Moynak HPP. Regulation of water flows for agriculture and water supply is carried out in close cooperation with authorised bodies to balance interests and protect ecosystems.

During the pre-design and design phase of the wind turbine, special attention is paid to minimising the impact on nature. For example, in order to minimise light pollution that could disturb the biorhythms of flora and fauna, lighting on the wind turbine is limited to the required position lights, which contributes to the maintenance and restoration of biodiversity.



Land reclamation

We are rigorous in our commitment to land reclamation, which significantly reduces negative environmental impacts while maximising environmental and social benefits. To ensure the sustainability of the closure and rehabilitation of waste pits, we allocate significant resources to cover all associated costs.

A key element of reclamation is the active participation of local communities, which increases the transparency of our actions and takes into account the interests of residents. This co-operation helps us better understand community needs and provides the basis for developing effective ecosystem restoration plans.

We pay special 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.

Restoration of fish population in the Irtysh River

Ust-Kamenogorsk and Shulbinsk HPPs continue to contribute to the preservation of the ecological balance of the region by regularly implementing measures to reproduce aquatic bioresources. In 2024, 130,111 young carp were released into the Irtysh River as part of the environmental action. The choice of location for the release of fish was carefully coordinated with a scientific organisation, which made it possible to determine the optimal location for this process – the village of Azovoye, located along the bed of the Irtysh River. This section of the reservoir was not chosen by chance: its natural conditions are favourable for the habitat and reproduction of young fish, which in turn contributes to the strengthening of the population of these fish species.

Such ecological actions have a positive impact on maintaining the fish balance in the water body and contribute to the preservation of the ecosystem of the region as a whole.

Carrying amount of reserve for ash dumps liquidation, KZT million

2023	2024	Δ 2024/2023, %
3,143.4	3,739.3	18.96

Elimination of ash dumps

Under the Environmental Code, we have a legal obligation to dispose of ash dumps, which are specialised areas for the disposal of waste generated by our operations.

In 2024, the estimated value of the fund for the liquidation of ash dumps totalled KZT 3,739.3 million, which is 18.96% higher than in the previous year. This increase is due to an increase in the cost of works and materials for reclamation.

The assessment of the current reserve for ash disposal site remediation is based on the current environmental legislation of the Republic of Kazakhstan and is supported by feasibility calculations and engineering studies that comply with current reclamation standards and methodologies. The estimate may be adjusted depending on the results of future environmental studies and updates to reclamation and remediation programmes.

Plans for 2025 and the medium term

- Greening the territory and increasing the area of green spaces;
- Regular laboratory tests as part of industrial environmental control to monitor and assess the environmental impact of the Company's operations;
- Recultivation of worked-out areas of ash dumps, including their restoration and transformation into ecologically safe and functional zones.

Contribution to climate change mitigation

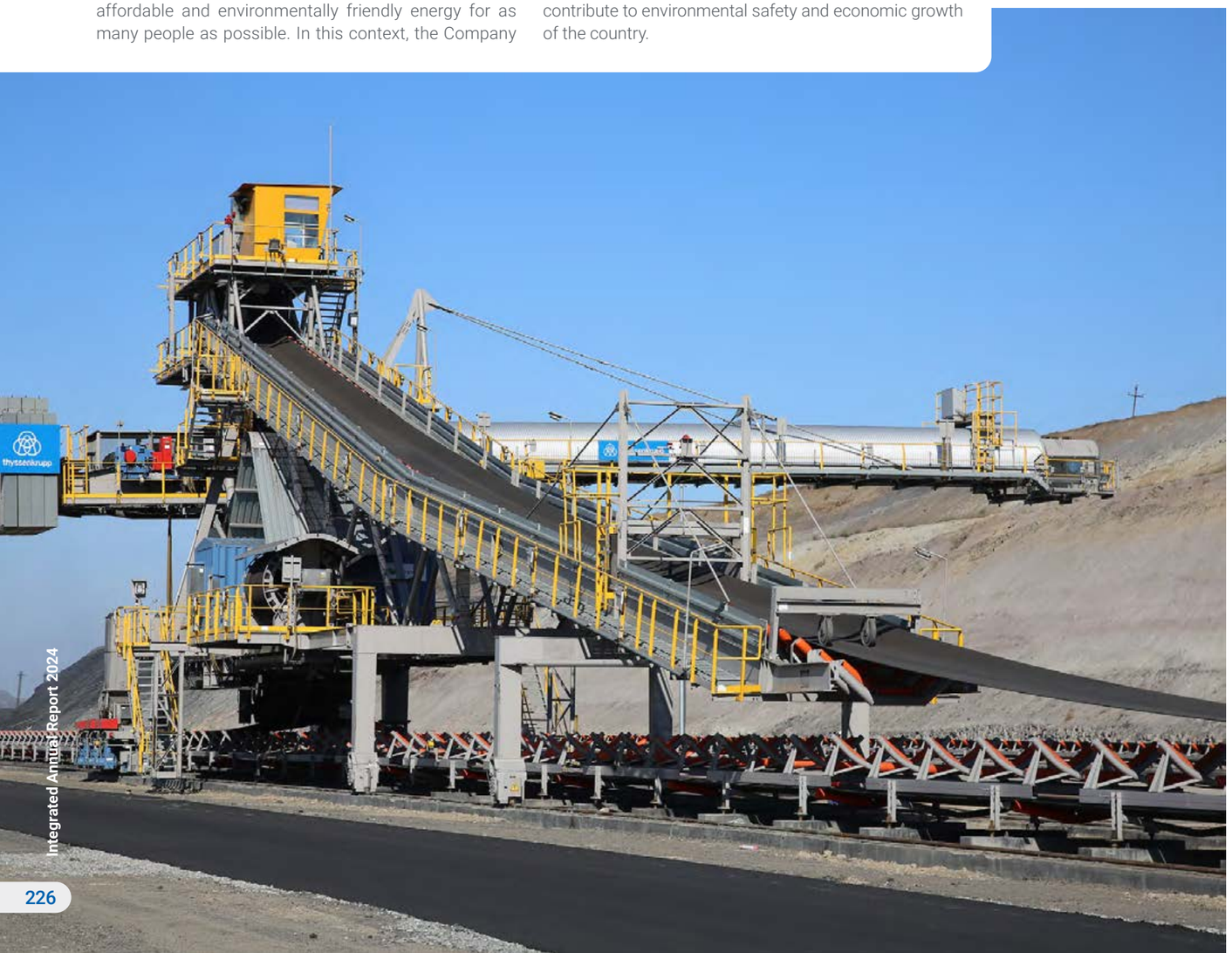
Management approach

GRI 3-3, GRI 12: Coal Sector: 12.2.1

Samruk-Energy JSC supports the goals of the Paris Agreement aimed at reducing greenhouse gas emissions in the context of sustainable development and improving the quality of life of the population. The Company endeavours to contribute to the goal of limiting the increase in the average temperature of the planet to well below 2 °C above pre-industrial levels. This requires a major transformation of the energy system, which is an important task for society as a whole. Both government, business, investors and consumers play an important role in this process.

Samruk-Energy JSC strives to provide access to reliable, affordable and environmentally friendly energy for as many people as possible. In this context, the Company is focused on achieving carbon neutrality by 2060. As part of this goal, Samruk-Energy actively implements innovative and sustainable technologies aimed at improving energy efficiency, decarbonisation and reducing carbon footprint.

In its activities, the company focuses on implementing initiatives to reduce greenhouse gas emissions, improving energy efficiency and introducing modern environmentally friendly technologies. Samruk-Energy is actively working to improve its energy infrastructure, integrate renewable energy sources and develop sustainable solutions for sustainable energy supply that contribute to environmental safety and economic growth of the country.



Climate change mitigation management model

GRI 2-9, 2-12, 2-13, 2-24, GRI 12: Coal Sector: 12.2.2, TCFD: Governance

The corporate governance system of Samruk-Energy JSC is focused on achieving sustainable success, as it is aimed at creating long-term value for shareholders, realising the importance of environmental and social aspects of the Company's activities and, as a consequence, the need to take into account the interests of all stakeholders.

Samruk-Energy JSC attaches paramount importance to climate risk management, providing a reliable basis for achieving strategic goals. Voluntarily assuming obligations to reduce greenhouse gas emissions, the Company actively implements decarbonisation measures.

Board of Directors

The Chairman of the Board has direct responsibility for the strategic direction of sustainable development, including reducing our carbon footprint. The Board sets both short-term and long-term climate targets.

In addition, the Board of Directors is the first level in the process of overseeing the corporate risk management system, which includes climate risks defined as the company's strategic risks.

The Board of Directors shall approve annually:

- Levels of responsibility for monitoring and controlling risks;
- Register and Risk Map, including climate risks;
- Key Risk Indicators (KRIs);
- Action plan for key risk management.

The Board also approves the company's risk appetite at a consolidated level and risk reports are provided to the Audit Committee on a quarterly basis.

The Board of Directors periodically undergoes training on the climate agenda. In 2024, on 28 November, the Risk Management and Internal Control Department with the involvement of a training organisation held a corporate seminar on the topic “Climate Risks for Energy Sector Enterprises”.

On 10 December 2024, the training organisation held a training seminar with the involvement of international experts for the members of the Board of Directors, top management and executives of the Company on the topic: “Climate Change and Energy Development Prospects”.

Role of the Executive Body

The day-to-day operations of the Company are managed by the Management Board, which interacts with the Board of Directors and stakeholders. The Chairman of the Management Board, as a member of the Board of Directors, is responsible for the implementation of strategic goals, including climate policy.

The responsibilities of the Chairman of the Management Board in the area of climate include:

- Coordination of budgets for carbon footprint reduction activities;
- Leading capital and operational investment in low carbon technologies;
- Oversee climate-sensitive acquisitions, mergers and divestitures.

Climate issues are considered when reviewing the company's strategy and plans.

Specialised committees and working groups

The Company has a specialised committee overseen by the Board of Directors to consider health, safety and environmental issues in depth. It develops recommendations on policies and procedures related to sustainable development and climate policy.

In addition, there is a working group on energy transition, which brings together employees from various divisions to comprehensively manage this process. The working group is headed by the Chairman of the Management Board.



Climate change and long-term scenarios

GRI 3-3, 201-2, TCFD: Strategy

Samruk-Energy JSC develops short-, medium- and long-term scenarios of macroeconomic, financial, energy and climate conditions to support planning, capital allocation, strategic positioning, and strategy sustainability and risk assessment.

To analyse scenarios and the external context, the Company identifies and studies short-, medium- and long-term trends, forming an overall view of how structural factors and current macroeconomic trends affect the pace of the energy transition and the expected consequences for the energy sector, in particular for the business areas in which the Company operates.

Samruk-Energy JSC Energy Transition Programme until 2060

TCFD: Strategy

Samruk-Energy JSC aims to achieve carbon neutrality by 2060. To implement this goal, the Samruk-Energy JSC Energy Transition Programme until 2060 was developed, which defines strategic directions, goals and objectives for the introduction of resource-saving and environmentally friendly technologies. The programme covers the entire Group of companies and includes medium-term (until 2030) and long-term (until 2060) plans, taking into account socio-economic and climate risks.

To assess the risks and opportunities associated with the energy transition, alternative scenarios to the baseline scenario have been identified, depending on the level of climate ambition at global and local levels:

- **Business as usual** – **A baseline scenario** assuming no significant technological changes or policy measures aimed at achieving carbon neutrality. This scenario serves as a benchmark for comparison with the results of other scenarios. It envisages further development of all types of generation (RES, alternative energy, conventional generation) and extrapolation of historical trends observed in Kazakhstan into the future. The scenario has been modelled under STEP (The Stated Policies Scenario) conditions, which allows to assess possible trajectories of the energy sector development under the conditions of maintaining existing and planned policy measures without introducing additional solutions. The model does not assume that governments and companies will achieve all of their stated objectives.
- **Decarbonisation scenario** assumes a moderate reduction in greenhouse gas emissions. It is based on APS (The Announced Pledges Scenario) modelling conditions, which reflect possible ways of developing the energy system using advanced technologies. This allows the Company to assess the maximum potential effect of the country's current climate commitments and to determine how ambitious these commitments are and whether they can contribute to the achievement of global climate goals within the Company's operations. This scenario helps to identify areas where climate action needs to be strengthened to achieve more ambitious targets.
- **Deep decarbonisation (ambitious) scenario** assumes a significant increase in the share of RES (renewable energy sources) in the company through prospective and future projects, as well as the application of existing low-carbon technologies. This scenario is in line with the key principles of the NZE50 (Net Zero Emissions) model. Under NZE, countries are assumed to achieve zero carbon emissions by 2050. The deep decarbonisation scenario takes into account the weaknesses of the more moderate scenario and significantly increases ambitions to decommission conventional power units as well as to expand renewable energy capacity. Emission trajectories in the deep decarbonisation scenario correspond to a 50% probability of limiting global warming to 1.5°C, without exceeding the critical temperature threshold.

Decarbonisation scenario (unconditional)

Name	2030	2040	2050	2060
SE market share	64%	63%	55%	47%
Share of clean energy	33%	30%	34%	37%
Share of traditional generation (coal, gas)	67%	70%	66%	63%
Net RS	+33%	-22%	-87%	-100%

Deep decarbonisation scenario (conditional)

Name	2030	2040	2050	2060
SE market share	64%	65%	56%	48%
Share of clean energy	33%	32%	40%	46%
Share of traditional generation (coal, gas)	67%	68%	60%	54%
Net RS	+33%	-30%	-100%	-100%

The Business as usual scenario is used as a comparison model and is not a target scenario. Carbon neutrality is not achieved in this scenario. The Decarbonisation scenario represents an unconditional target model and optimal development pathway, while the Deep Decarbonisation scenario can be implemented under favourable conditions.

As part of the analysis of the Programme development scenarios, the Company has identified significant climatic physical as well as climatic transition risks (environmental risks are not considered within the Programme).

Climate risks and their impact on the energy sector

Energy category	Risks	Consequences	Minimisation measures
Physical risks			
Wind power	Low wind speed.	Instability of power generation, reduction of system efficiency.	Infrastructure modernisation, monitoring and adaptation to changes in wind conditions.
Solar energy	Cloudiness and precipitation.	Decrease in solar panel capacity, unstable power generation.	Development of technologies to improve efficiency under cloudy and precipitation conditions.
Hydropower	Uneven precipitation, temperature and wind fluctuations.	Instability in power generation, possible fluctuations in water resources.	Development of water management systems, creation of reserve reservoirs and dams.
Traditional energy (TPP)	Extreme temperatures.	Increased risks of accidents, increased costs for equipment and system maintenance.	Strengthening the structural stability of the equipment, modernisation for operation in extreme temperatures.
Energy infrastructure	Precipitation and extreme weather events.	Increase in the risk of accidents, decrease in the overall efficiency of energy systems.	Creation of backup energy sources, improvement of resistance to extreme weather conditions, modernisation of equipment.
Climate Transition Risks			
Political and legal risks	Tougher international and national climate change policies, implementation of a crossborder carbon tax (CBT), stricter environmental legislation, carbon pricing.	Increased costs of complying with new standards, possible fines and penalties, and the need for changes in business models.	Adaptation of the company to new requirements, active participation in shaping climate policy, compliance with environmental norms.
Reputational risks	Stakeholder perceptions of the company's involvement in the transition to a low-carbon economy.	Loss of confidence on the part of consumers, investors and other stakeholders, reduction of competitiveness.	Transparency in operations, public reporting on climate strategy, participation in environmentally sustainable initiatives.
Investment risks	Untimely or poor execution of investment projects, high cost, lack of financing, technological difficulties and tariff issues.	Project delays, budget overruns, technological failures, increased financial risks.	Attracting strategic investors, careful planning and evaluation of investment projects, risk management.
Technological, social and economic risks of the energy transition			
Technological risks	Accelerating the transition to a low-carbon economy and the need for continuous monitoring and deployment of new technologies.	Delays in the transition process, insufficient adaptation to new technologies, reduced competitiveness.	Investing in research and development, implementation of innovative solutions, monitoring and implementation of new technologies.
Social risks	Job cuts in traditional industries and the need to retrain staff.	Increased social tension, employee dissatisfaction, shortage of qualified personnel.	Development of retraining programmes, transition support for employees, creation of new jobs in green sectors.
Economic risks	Threat to energy security, growth of electricity consumption, limited energy resources, currency risks associated with financing projects in foreign currency.	Higher energy costs, resource scarcity, financial risks due to currency fluctuations.	Diversification of energy sources, attraction of strategic investors, monitoring of currency risks and stability of financing.

The scenarios and assumptions presented below have formed the basis of this assessment of potential impacts:

Scenarios	Key assumptions
NDC – Soft	- National Environmental Code – LRF 1.5%; - Provision of free quotas until 2060 – up to 42% from 2022 onwards; - Moderate CO_2 emission charges to 29 EUR/tonne CO_2 in 2060; - Payments related to environmental protection and related capital expenditures to achieve BAT; - Lack of investment in RES; - Coal revenue losses are 100% in 2060 compared to 2021.
NDC – Hard	- National Environmental Code – 4% LRF; - Provision of free quotas until 2060 – up to 15% from 2022 onwards; - High CO_2 emission payments up to 222 EUR/tonne CO_2 in 2060; - Payments related to environmental protection and related capital expenditures to achieve BAT; - Lack of investment in RES; - Coal revenue losses are 100% in 2060 compared to 2021.
Net Zero – Soft	- USAID CN quota reduction trend (50 per cent reduction in 2031 and 60 per cent reduction in 2036); - Provision of free quotas until 2039 – up to 4% from 2022 onwards; - High CO_2 emission payments of up to 200 EUR/tonne CO_2 in 2060; - Payments related to environmental protection and related capital expenditures to achieve BAT; - Investing in RES, ensuring business development; - Coal revenue losses are 100% in 2060 compared to 2021.
Net Zero – Hard	- CBAM free quota trend (0% in 2032); - Provision of free quotas until 2031 – up to 24% from 2022 onwards; - High CO_2 emission payments up to 603 EUR/tonne CO_2 in 2060; - Payments related to environmental protection and related capital expenditures to achieve BAT; - Investing in RES, ensuring business development; - Coal revenue losses are 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 associated with transition risks. The 2031 price shock can be offset by earlier implementation of environmental and energy transition programmes to ensure sufficient profitability and liquidity. The NDC Soft scenario can be applied by 2020s to support the implementation of the NDC by the Government of Kazakhstan, while Net Zero Soft by 2030s and beyond to support energy transition policies and achieve carbon neutrality by 2060.
- The hard versions of NDC and Net Zero scenarios are less realistic and are used rather to test the financial sensitivity of shock scenarios for the financial position of Samruk-Energy JSC. Given the fact that the Government of Kazakhstan is constantly postponing the introduction of CO_2 pricing within the framework already established by KazETS, following the NGFS pricing trends is less realistic.

Two most probable scenarios – NDC Soft and Net Zero Soft – are acceptable for the Group of companies of Samruk-Energy JSC. The respective impact can be assessed as low and medium, respectively, if there are management levers to compensate for it.

The hard versions of the NDC and Net Zero scenarios are less realistic, not applicable, and should be offset by one of the mitigation strategies or a combination of both.

Climate change strategy

GRI 3-3, TCFD: Strategy

Samruk-Energy JSC's efforts to combat climate change are one of the key components of the Company's strategy both in the short and long term. We fulfil our role through identifying the best adaptation measures to adjust to changes that will inevitably occur to a greater or lesser extent, with greater or lesser frequency and intensity.

Adaptation includes all initiatives undertaken by the Company to improve the resilience of its assets, increase its ability to respond to extreme climate events and develop strategic options and business models that will address different needs in the face of climate change.

The Company is leading the energy transition through decarbonisation of electricity generation, increasing the share of RES, reducing pollutant emissions, and implementing new investment projects. These factors present opportunities both to increase value creation for all stakeholders and to more rapidly achieve the goals of the Paris Agreement as well as the Sustainable Development Goals defined by the United Nations in the 2030 Agenda.

In particular, the main climate and environmental mitigation actions undertaken by the Group are as follows:

- **Increasing the share of RES.** Samruk-Energy JSC aims at increasing the share of renewable energy sources in its generation and reducing the negative impact on the environment. The Company focuses on the development of alternative energy sources such as RES and hydro generation. The company plans to modernise existing RES facilities and build new ones, as well as expand hydroelectric power plants. Already now Samruk-Energy provides more than 70% of RES capacity in Kazakhstan, and in the future the company plans to increase this share by implementing projects in partnership with international strategic partners.

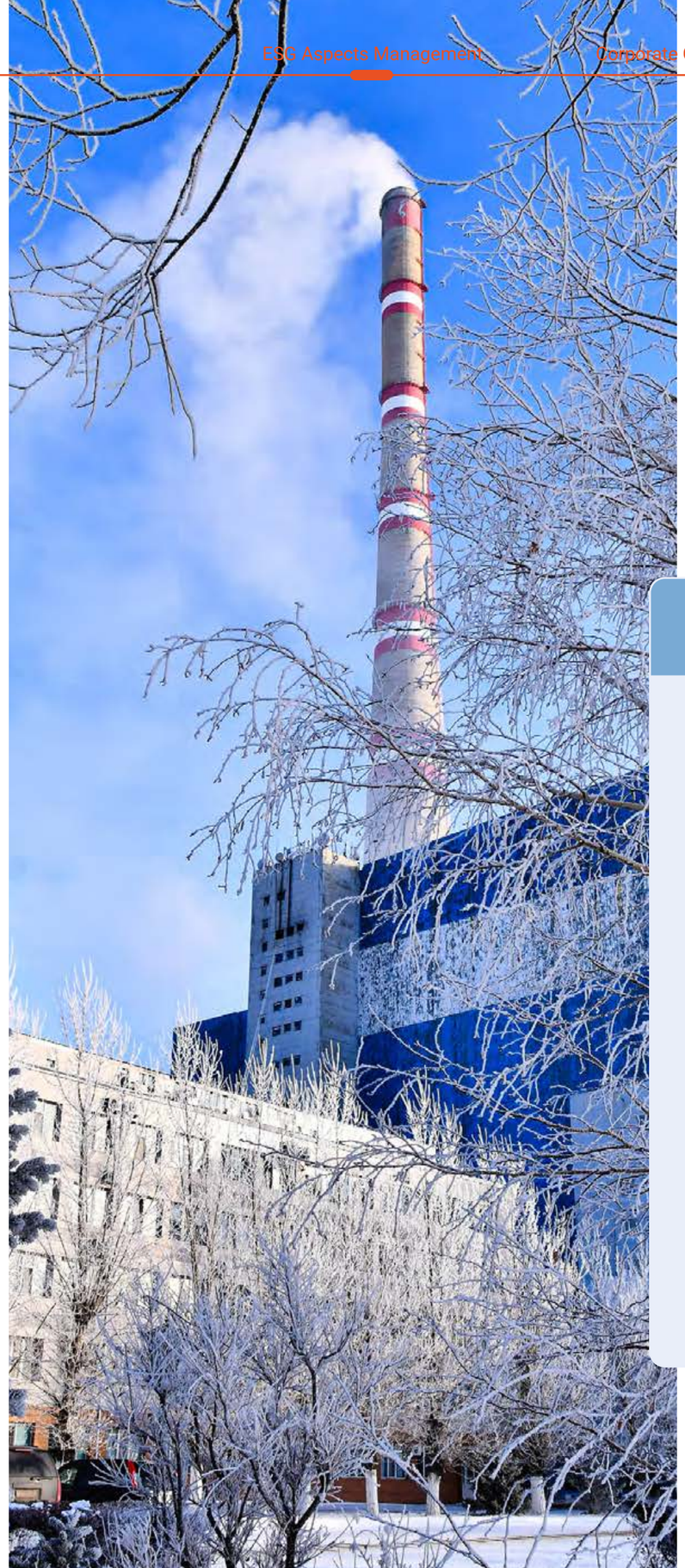
- **Redistribution of the generation structure.** Comparing the growth rates of RES and coal-fired plants, Samruk-Energy plans to significantly outpace traditional energy sources by increasing the share of RES in capacity growth to 40%, while the share of coal-fired plants will be 34%. This will significantly change the generation structure towards more environmentally friendly and sustainable energy sources.

- **Decarbonisation and reduction of carbon footprint.** Until 2033, Samruk-Energy JSC's activities to reduce net carbon footprint will focus on increasing the share of RES in the power generation structure, implementation of carbon offset and climate projects. It is also planned to introduce new technologies and implement climate projects that contribute to the reduction of net greenhouse gas emissions.

- **Implementation of RES and HPP investment projects and international co-operation.** A key objective of the energy transition is the construction of new RES and HPP facilities. RES will provide a 6.2 GW (40%) capacity increase, including large-scale wind and solar projects with energy storage in co-operation with international partners. The development of hydro generation involves both the construction of new plants and modernisation of existing ones, providing an increase of 1.6 GW (10%). These measures will significantly increase the share of clean energy in the overall energy mix.

- **Introduction of waste recycling and utilisation practices (use of ash slag).** Adopting recycling practices reduces environmental impact and carbon footprint, supporting a circular economy. In the power sector, ash slags can be used in the production of building materials, replacing part of the original components, which reduces costs and saves natural resources.

- **Ensuring stable power supply from RES generation facilities through the use of energy storage systems.** Electricity generation from renewable energy facilities strongly depends on weather conditions (wind speed for wind turbines) and time of day (light level for solar power plants), so the introduction of energy storage and accumulation systems at RES facilities will ensure stable electricity supply to consumers during periods of high demand and peak power consumption, as it will make it possible to accumulate previously generated electricity from RES facilities and release it to the grid during the next few hours.



Climate risks and opportunities

TCFD: Strategy and Risk Management

As part of its strategic approach to climate risk management, Samruk-Energy JSC pays special attention to the opportunities offered by the transition to a green economy. We strive to use less carbon-intensive technologies and consider energy efficiency as a priority to achieve our climate goals. This includes developing and implementing new processes and technologies to reduce energy intensity, as well as investing in equipment modernisation and technologies that reduce greenhouse gas emissions.

Climatic possibilities

Resource efficiency

We see an opportunity in implementing energy efficiency and conservation measures, and are committed to the efficient use of resources, including fuel, energy and water.

The main measure to improve energy saving and energy efficiency is the rational use of fuel and energy resources through the use of innovative technologies, modernisation 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, thus reducing specific CO_2 emissions per unit of production.

Application of new technologies

Study and subsequent introduction of new modern technologies for carbon capture, utilisation and storage as a key factor in achieving climate goals and meeting the energy needs of society to reduce anthropogenic CO_2 emissions and reduce the carbon intensity of products.

In the next reporting periods, we plan to deepen disclosure of information on the impact of climate change issues on the Company, risks and opportunities in accordance with the international TCFD methodology (Recommendations for Reflecting the Impact of Climate Risks in Financial Reporting).

Risk management

TCFD: Risk Management

Managing climate and environmental risks is key to delivering our Strategy, helping the transition to a low carbon economy, and fulfilling our ambitions to achieve zero carbon emissions by 2060.

In December 2024, the Company identified Climatic Physical Risks and Climatic Transition Risks, which were included in the Consolidated Risk Register and Risk Map for 2025.

The approach to risk identification was based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which provided a comprehensive analysis of both current climate risks and prospective changes in the company's activities in the process of transition to carbon neutrality.

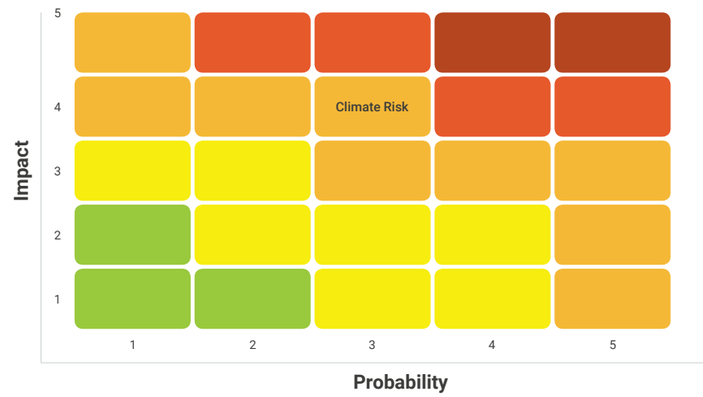
Physical risk factors	Transitional risk factors
Changing weather conditions, natural disasters. **Chronic phenomena** Global climate warming, physical risks associated with weather and climate change; Changing weather conditions, natural disasters, water scarcity.	**Political and regulatory risks** Reduction of hydrocarbon consumption of the main electricity consumers; Stricter requirements of environmental and water legislation; Limiting the volume of additional quotas for greenhouse gas emissions, introducing a carbon tax; Regulation of tariffs by the state; Limiting the amount of additional greenhouse gas emission allowances in the National Plan reserve; Restriction by the State Authority of volumes for extraction and consumption of water resources; Violations of legal requirements in the sphere of environmental, water regulation; Exceeding the volume of greenhouse gas emission quotas; Prohibition on the use of water resources from transboundary rivers (international legal agreements on water sharing, lack of agreements on joint management of transboundary rivers); Pollution of water sources (unsatisfactory quality), impossibility of water application for use at subsidiaries and affiliates; Failure to issue environmental permits in a timely manner; Violation of deadlines stipulated by environmental legislation for obtaining additional quotas. **Technological risks** Outflow of investment in carbon-intensive technologies; Commissioning of new sources of pollutant emissions, imperfection of applied technologies at production facilities that do not allow to work in the mode of changing environmental standards; Availability of worn-out equipment that does not meet modern requirements for waste gas and wastewater treatment, preventing optimal operation modes; Lack of funding for modernisation and environmental protection measures; No possibility to maintain optimal load on the equipment (load is determined by KEGOC); Exceedance of pollutants in wastewater; Destruction or accident of a hydroelectric dam. **Market risks** Developed countries' transition to low-carbon economies and declining demand for traditional products; Lack of funds to buy carbon units/restriction of carbon units to buy on the exchange. **Reputational risks** Unreliable service providers/contractors.

Within the framework of risk assessment and analysis in Samruk-Energy JSC, qualitative, quantitative analyses or their combination are used, which create a methodological basis for the risk management process.

Risk assessment includes consideration of the sources and causes of each risk, the negative consequences if they materialise, and the likelihood that a particular risk will materialise.

All risks are reflected on the Risk Map, where one axis shows their significance and the other axis shows their probability of occurrence.

Climate Risk Assessment on the Risk Map for 2024



In order to improve the efficiency of risk monitoring, Samruk-Energy JSC applies KRIs (key risk indicators) using two approaches:

- Based on risk factors – risk factors for each key risk are determined. Risk factors can be both external and internal to Samruk-Energy JSC. Risk factors are analysed for measurability. For each risk factor, appropriate measurement units and frequency of measurement of the indicator are determined, which can be expressed in the form of coefficients, per cent, numbers, etc.

- 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 performance 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 the actual performance of preventive measures.

Risk management activities

To effectively manage climate risks and adapt to their potential impact, Samruk-Energy JSC has developed a comprehensive action plan aimed at reducing environmental risks and complying with legislation. The following actions are envisaged within this plan:

- Monitoring compliance with environmental and water resources legislation, including deadlines for submitting applications for emission permits and reporting to state regulatory authorities;

- Monitoring of the use of quotas for greenhouse gas emissions with possible adjustment of limits;

- Monitoring compliance with environmental equipment modernisation and repair plans;

- Compliance with technical regulations and rules of operation of buildings and structures;

- Mandatory environmental insurance and establishment of liquidation funds;

- Interaction with state authorities in the process of developing regulations in the field of environmental protection;

- Monitoring the implementation of international environmental standards and environmental management;

- Control of budget execution for environmental protection;

- Assessment of the impact of economic activities on aquatic ecosystems and flora and fauna.

Measures to manage risks associated with greenhouse gas emissions into the atmosphere and mitigate related environmental impacts:

Alternative energy	Wind and hydropower; Solar Energy; Geothermal energy; Hydrogen power; International Co-operation.
Traditional energy	Reduction of CO_2 emissions through gasification of coal-fired power plants.
Grid infrastructure and regulation	Grid modernisation and Smart Grid implementation; Energy storage systems and flexible generation.
Emissions management	Coal enrichment and gasification; Carbon dioxide capture and storage (CCUS); Energy efficiency and resource conservation; Green Transport; Carbon farms and offsets.
Supporting activities	Carbon accounting and digitalisation; Changes to the regulatory environment; Green funding. Compliance with ESG criteria; Localisation of production.

Results of climate change mitigation activities

GRI 303-1, 304-2, 304-3, 305-1, 305-2, 305-7, 306-3, GRI 12: Coal Sector: 12.1.5, 12.1.6, 12.4.2, 12.5.3, 12.5.4, 12.6.4, 12.7.1, 12.7.2, 12.7.6, TCFD: Metrics & Targets

To achieve carbon neutrality at a global level, we have developed targets and implemented key indicators to effectively manage our operations and reduce our carbon footprint.

Medium- and long-term objectives of the Energy Transition Programme of Samruk-Energy JSC

2031

Reduction in GHG emissions intensity

>=40%

Increasing the share of clean energy in the generation structure of Samruk-Energy JSC up to

31%

- Obtaining an ESG rating in 2023 and its subsequent improvement
- Explore and implement Carbon Capture & Storage technologies

2060

Reduction in GHG emissions intensity

100%

inclusive of activities and offset carbon units

Increasing the share of clean energy in the generation structure up to

46%*

Forest-climatic project

Greening of the territory of 1,000 hectares

- Explore and implement Carbon Capture & Storage technologies

*In the "deep decarbonisation" scenario





Progress in achieving the goals of Samruk-Energy JSC in 2024

Indicator	2021, Base year	2023	2024	Target 2060*
Net carbon footprint reduction, million tonnes CO_2	32.95	31.87	30.88	0
Forest-climatic project, ha	0	starting in 2045	starting in 2045	1,000 Ha

* In the "deep decarbonisation" scenario.

In 2024, 8 new RES facilities with a capacity of 163.5 MW were commissioned in Kazakhstan. In 2014, the installed capacity of RES facilities in operation in the country was 177.52 MW, and in 2024 it exceeded 3,032 MW.

In 2024, Samruk-Energy JSC considered the possibility of offsetting the negative environmental impact from production activities by obtaining carbon (offset) units. One offset unit is equivalent to one metric tonne of CO_2.

Within the framework of implementation of the Action Plan on management of environmental protection issues in the Samruk-Energy JSC Group of companies for 2024, the Roadmap for obtaining offset units of subsidiaries and affiliates (HPPs) was approved. In accordance with the Rules for Approval of Carbon Offset and Provision of Offset Units[43], the relevant project concepts were developed.

However, the authorised body returned the submitted documents for revision. The reason was the provision of the Large-Scale Consolidated Methodology ACM0002 "Production of electricity from RES connected to the grid", according to which HPPs can receive offset units only for the volumes of electricity produced after modernisation or reconstruction of facilities.

Currently, all comments have been taken into account and the documents are planned to be resubmitted for review in 2025. For the rest of the Company's RES facilities (except for HPPs), receipt of offset units for 2024 is also planned for 2025.

Additionally, obtaining international I-REC certificates is considered as an alternative mechanism, which will not only confirm the origin of the produced "clean" energy, but also generate additional revenues and stimulate the development of existing RES facilities.

[43] Order of the Acting Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated 5 November 2021 No.455, SAC (HPP).

Indicators related to climate change

Indicator	2022	2023	2024
Greenhouse gases			
Scope 1, tonnes CO_2e			
Carbon dioxide (CO_2)	31,978,242	31,877,469	30,883,547
Methane (CH_4)	940,989	1,065,127	1,058,713
Nitrous oxide (N_2O)	74,182	66,980	64,326
Scope 2, tonnes CO_2e			
CO_2	13,334	11,343	13,883
Electricity generation	1,527	1,415	1,515
Heat generation	11,807	9,928	12,368
Pollutant emissions			
Dynamics of specific atmospheric emis-sions per unit of production, g/kWh	9.48	9.54	8.22
Energy efficiency			
Total energy saving, thousand GJ	14,271	10,043	9,192
Responsible water use			
Volume of reused water	7,327	8,328	8,620
Volume of recycled water	3,534,517	3,499,210	3,549,726
Volume of TPP water intake per unit of output	6.30	7.03	6.81
Waste management			
Total waste generated, of which:	89,929,927	98,496,096	108,784,900
Hazardous, tonnes	647	1,732	534
Non-hazardous, tonnes	89,928,281	98,496,364	108,784,366
of which by main types of waste charac-teristic of the specifics of production, tonnes	89,912,725	98,474,212	108,760,267
ash and slag waste, tonnes	7,129,158	8,853,230	8,781,174
overburden, tonnes	82,783,567	89,620,982	99,979,093
Biodiversity conservation			
Investments in biodiversity conservation, million KZT	57.9	114.7	224.1

Greenhouse gas emissions

GRI 305-1, GRI 305-4, GRI 12: Coal Sector: 12.1.5, 12.1.8, TCFD: Metrics & Targets

The EU taxonomy includes specific criteria for determining a significant contribution to climate change mitigation. Hydropower plants meet the significant contribution criteria (SCC) if the plant is a riverine plant without an artificial reservoir, or if the specific power of the plant exceeds 5 W/m^2, or if the lifetime emissions are below 100 g CO_2/kWh.

In Samruk-Energy JSC, the declared criterion is met by: Moynak HPP – 28.7 W/m^2, Almaty HPP cascade – 54.6 W/m^2, UKHPP – 9.7 W/m^2. Not satisfied: Kapshagay HPP – 0.26 W/m^2, Shardara HPP – 0.14 W/m^2, Shulbinsk HPP – 2.75 W/m^2.

There are no CO_2 emissions from the hydropower plant.

In accordance with the legislation of the Republic of Kazakhstan, enterprises, including EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP, subject to the greenhouse gas emissions quota system, are required to conduct an inventory of these emissions. The inventory process includes certification of the results by an independent accredited organisation, which ensures transparency and reliability of emissions data.

In 2024, the costs of climate risk management measures totalled about KZT 8.6 million, including the development and verification of the Report on greenhouse gas inventory for quota installations of Samruk-Energy JSC.

Direct emissions of EGRES-1 LLP, SEGRES-2 JSC, and AIES JSC, originating from fuel combustion in boiler units for electricity and heat generation, and from coal mining at Bogatyr Coal LLP, belong to coverage category 1. Emissions data are collected from primary sources such as official technical reports and laboratory logs. These data are processed in accordance with national methodologies and guidelines specified in the GHG Protocol Scope 1 Guidance. Based on the collected data, GHG emission factors and their total amount are calculated for each source and each enterprise: EGRES-1 LLP, SEGRES-2 JSC, AIES JSC and Bogatyr Coal LLP. The calculations include analysis of emissions from boiler equipment and coal mining, and are confirmed by independent accredited organisations for each subsidiary.

To analyse greenhouse gas emissions, accurate measurements of feedstock consumption and characteristics are made, including the volume of fuel consumed, its composition (carbon content, lower heating value), and heat losses caused by incomplete combustion of the fuel. The conversion of methane and nitrous oxide emissions into equivalent tonnes of carbon dioxide shall apply the current global warming potential coefficients (28 for methane and 265 for nitrous oxide) determined in accordance with paragraph 4 of Decision of the Conference of the Parties 6/CP.27 dated 17 November 2022.

Direct GHG emissions[44] (Scope 1), tonnes CO2-eq[45,46]

Indicator	Units of measurement	2022	2023	2024	Δ 2024/2023, %
Carbon dioxide (CO_2)	tonnes of CO_2	31,978,242	31,877,469	30,883,547	-3.1
Methane (CH_4)	tonnes of CO_2eq.	940,989	1,065,127	1,058,713	-0.6
Nitrous oxide (N_2O)	tonnes of CO_2eq.	74,182	66,980	64,326	-4.0

All Scope 1 emissions showed a reduction in 2024 compared to 2023. This demonstrates the Company's success in reducing its carbon footprint. We continue to implement environmentally friendly technologies and improve processes, which helps not only to improve the environmental situation, but also to strengthen our reputation as a sustainability-oriented Company.

Specific GHG emissions (Scope 1)

Type of activity	Units of measurement	2021	2022	2023	2024	Δ 2024/2023, %
Electricity generation	tonnes CO_2eq/ thousand kWh	0.862	0.831	0.838	0.728	-13.1
Heat generation	tonnes of CO_2eq/ thousand Gcal	324.485	318.530	294.127	288.945	-1.76
Coal mining	tonnes CO_2eq/ thousand tonnes	173.552	33.519	35.549	25.978	-26.9

[44] The volume of direct greenhouse gas emissions is given for EGRES-1, EGRES-2, AIES, Bogatyr Coal.

[45] The Company does not calculate biogenic greenhouse gas emissions.

[46] The Company has chosen the control-based consolidation method. In determining the total volume of greenhouse gases, 100% of emissions from those consolidated facilities controlled by the Company are taken into account.

According to the results of 2024, there is a decrease in specific GHG emissions by all types of activities of Samruk-Energy JSC compared to 2023. The following key factors contributed to this:

- increase in RES electricity production by 2.6 times – from 2.849 billion kWh to 7.460 billion kWh;
- reduction of specific consumption of fuel equivalent for heat energy supply at EGRES-1 LLP from 161.0 kg/Gcal to 156.7 kg/Gcal;
- reduction in the volume of stockpiled internal overburden at Bogatyr Coal LLP from 3.084 million tonnes to 2.652 million tonnes.

GRI 305-2, GRI 12: Coal Sector: 12.1.6

The Company calculates indirect emissions in accordance with the approved Instruction on calculation of greenhouse gases and offset units for the Samruk-Energy JSC Group of companies based on the GHG Protocol Scope 2 Guidance, as well as on the list of benchmarks in regulated sectors of the economy approved by the Order of the Acting Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan No. 260 dated 19 July 2021.

Due to the changes in the energy supply system in the Republic of Kazakhstan, caused by the introduction of the Unified Electricity Purchaser from 1 July 2023 – hereinafter referred to as the SEP, companies have the opportunity to apply both the location-based method and the market-based method to calculate indirect energy GHG emissions in Scope 2. In accordance with the GHG Protocol, the purchase of electricity from the SEP in the Samruk-Energy JSC Group of companies is considered as buy-back contracts from the point of view of prospects for the purposes of consolidation of the group. Therefore, only market-based method based on direct contracts (market-based) is applied for calculation of Scope 2.

Indirect GHG emissions (Scope 2), tonnes CO_2-eq[47]

Indicator	2022	2023	2024	Δ 2024/2023, %
Gross indirect greenhouse gas emissions (Scope 2)	13,334	11,344	13,883	22.4
Gases included in the calculation	CO_2	CO_2	CO_2	

In 2024, indirect Scope 2 emissions increase by 22.4% compared to 2023, reaching 0.014 million tonnes of CO_2. The increase is due to increased consumption of purchased heat.

Samruk-Energy JSC in 2025 plans to analyse Scope 3 greenhouse gas emission categories, which take into account all indirect emissions not covered by Scopes 1 and 2. Currently, these emissions are not subject to mandatory reporting under the GHG Protocol standard.

Indirect emissions in Scope 3 are divided into 15 categories and classified into Upstream emissions and Downstream emissions. Upstream emissions include emissions from purchased raw materials, goods and services, excluding those reported in Scopes 1 and 2. Downstream emissions include emissions associated with the operation and end-of-life of products outside the organisation.

After approval of the categorisation, Samruk-Energy JSC plans to gradually introduce accounting and monitoring of Scope 3 emissions in 2025-2026.

GRI 305-5, GRI 12: Coal Sector: 12.2.3

In 2024, implementation of energy efficiency and energy saving measures at Almaty TPPs (AIES JSC) contributed to reduction of GHG emissions by 17.587 thousand tonnes of CO_2. Among the implemented measures, replacement of air heater cubes of the 1st stage of boilers No. 2, 5 and 6 of CHPP-2 saved 8.9 thousand tonnes of coal, as well as a number of other measures aimed at improving energy efficiency.

Greenhouse gas emission reductions, tonnes CO_2

Company	Event	2023	2024
AIES JSC	Implementation of energy efficiency and energy saving measures	26,588	17,587
EGRES-1 LLP	Buying carbon offset	387,150	-
Total for Samruk-Energy JSC		**413,738**	**17,587**

[47] The perimeter of the indicator includes data on purchased external energy of Bogatyr Coal LLP.

Energy efficiency

GRI 3-3, GRI 12: Coal Sector: 12.1.1

Samruk-Energy JSC continues to work on improving the energy efficiency of its enterprises to reduce environmental impact and support the fight against climate change. We implement innovative solutions and optimisation measures to reduce consumption of energy and natural resources.

The Company has an Energy Saving and Energy Efficiency Improvement Programme for 2015-2025. The Programme is a fundamental document for planning and implementing activities in the field of energy saving and energy efficiency improvement and is aimed at reducing the energy intensity of products and improving the energy efficiency of subsidiaries. This is achieved through rational use of resources, reduction of environmental impact and fulfilment of established targets.

The main tools of the Programme are:

- Establishment of key indicators for energy savings.
- Ongoing monitoring and analysis of goal achievement.
- Implementation of measures to improve energy efficiency.

In November 2024, we successfully passed a surveillance audit of our corporate management system and confirmed compliance with the requirements of international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001, ISO 37001.

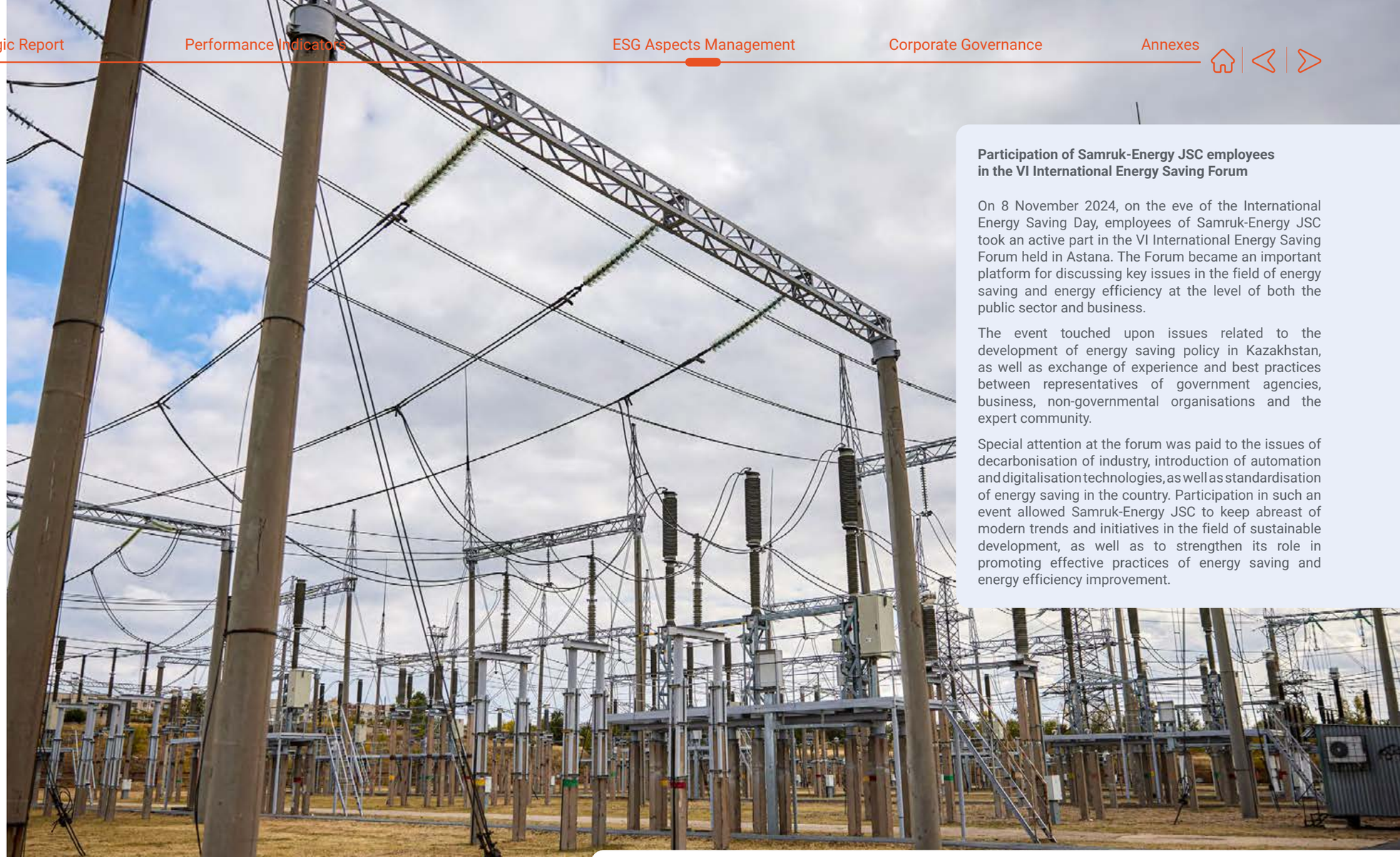
Energy saving and energy efficiency improvement measures

GRI 302-1, GRI 302-4, GRI 12: Coal Sector: 12.1.2

The main reliability indicators are the reduction in the number of process failures. Thanks to the implementation of the planned measures, daily work of power engineers, phased reconstruction of power facilities and financial investments, we managed to reduce the number of process failures by 11%.

In accordance with the Law of the Republic of Kazakhstan On Energy Saving and Energy Efficiency Improvement, energy audits were conducted at the facilities of SEGRES-2 JSC and AIES JSC in 2024.

A total of 67 measures were implemented, including work at the Eastern HPPs, aimed at improving energy efficiency and rational use of resources. This allowed saving more than KZT 1.2 billion.



Participation of Samruk-Energy JSC employees in the VI International Energy Saving Forum

On 8 November 2024, on the eve of the International Energy Saving Day, employees of Samruk-Energy JSC took an active part in the VI International Energy Saving Forum held in Astana. The Forum became an important platform for discussing key issues in the field of energy saving and energy efficiency at the level of both the public sector and business.

The event touched upon issues related to the development of energy saving policy in Kazakhstan, as well as exchange of experience and best practices between representatives of government agencies, business, non-governmental organisations and the expert community.

Special attention at the forum was paid to the issues of decarbonisation of industry, introduction of automation and digitalisation technologies, as well as standardisation of energy saving in the country. Participation in such an event allowed Samruk-Energy JSC to keep abreast of modern trends and initiatives in the field of sustainable development, as well as to strengthen its role in promoting effective practices of energy saving and energy efficiency improvement.

In 2024, energy efficiency initiatives in Samruk-Energy JSC resulted in savings of

258,229 thousand tonnes of fuel equivalent

In 2024, the total energy consumption is 195,026 thousand GJ, a decrease of 2.5 per cent compared to 2023 (200,194 thousand GJ).

Implementation of measures to improve energy efficiency in the Samruk-Energy JSC Group of companies made it possible to reduce energy consumption up to 9,192 thousand GJ (for details, see Appendix Resource Consumption and Energy Efficiency).

Key energy indicators, thousand GJ

Energy reduction	2022	2023	2024	Δ 2024/2023, %
Amount of energy savings	14,271	10,043	9,291	8.4

The most impactful energy efficiency measures:

- Increasing the capacity of power units.
- Increase of operation time of power units with power supply from IV turbine extraction.
- Cleaning of heat-exchange surfaces of turbine condenser.
- Conducting equipment set-up.
- Sealing of the boiler gas ducts furnace.
- Replacement of heat insulation of heat network pipelines..

Due to the implemented measures aimed at energy efficiency, electricity consumption for own needs of Samruk-Energy JSC's EPO was 5.41% against the plan of 5.67%.

Energy availability

GRI 3-3

Kazakhstan has highly developed energy systems that provide a stable electricity supply for both the population and industry. The energy industry is regulated by the Ministry of Energy of the Republic of Kazakhstan, which also oversees the utilisation of renewable energy sources. The Natural Monopolies Regulation Committee of the Ministry of National Economy oversees the regulation of electricity and heat transmission services, and the Ministry of Industry and Infrastructural Development oversees the coal industry.

According to the Ministry of Energy of the Republic of Kazakhstan, more than 99% of the country's population has access to electricity. In rural areas, programmes are being implemented to modernise power grids and improve the quality of electricity supply, which helps to reduce the urban-rural gap.

In the Samruk-Energy Group of companies, all generating companies sell electricity through the Unified Purchaser. This process is centrally controlled by a legal entity with state participation, which ensures efficient purchase and sale of electricity.

Our subsidiaries, such as AlmatyEnergoSbyt LLP, are responsible for electricity sales, while Bogatyr Coal LLP is responsible for coal sales. In turn, Alatau Zharyk Company JSC provides technical conditions for connection to the electricity grid.

The Group of companies regularly monitors power supply reliability indicators, such as energy losses and technical violations, as well as reliability coefficients (SAIFI, SAIDI). The Company has an annual tendency to reduce grid losses.

Network losses at AzhK JSC, %

Name	2020	2021	2022	2023	2024
Regulatory losses	14.4	12.9	12.8	12.8	12.7
Actual losses	12.6	11.9	11.4	10.9	10.7

Electricity losses in the networks of AZhK JSC are calculated as the ratio of total actual losses to the volume of electricity received into the AZhK JSC network.

Taking into account the annual growth of consumers, AZhK JSC has a tendency to improve the indicators of outages (SAIFI) and duration of outages per consumer per calendar year (SAIDI). Reliability indicators have improved due to the implementation of measures aimed at reducing the number of outages and their duration.

Number of outages and duration of outages:

- **SAIFI** in 2024 is 2.61, which is below the normative indicator (3.7).
- **SAIDI** in 2024 was 3.19 hours, which is also compliant with regulations.

For more details see the Appendix AZhK JSC Supply Reliability Indicators Report 2017-2024, SAIDI, SAIFI.

Access to services and improvement of customer service

For the convenience of customers, Alatau Zharyk Company JSC provides access to basic services through its website. On the website it is possible to obtain technical conditions for connection, familiarise yourself with disconnection schedules and tariffs, as well as submit applications for connection to the power grid. In addition, at AZhK JSC, the service Issuance of technical conditions has been fully converted to electronic format and is provided through the IS TU Module. The information system allows to submit an application for technical specifications online, track the status of the submitted application, and receive the prepared technical specifications in the form of a digital copy in pdf format. Preparation and issuance of acts of delineation of balance and operational responsibility of the parties are carried out in accordance with the Rules for the Use of Electricity. Formation and issuance of balance separation acts was carried out via IS TU Module.

AlmatyEnergoSbyt LLP offers differentiated tariffs for various categories of consumers, including benefits for pensioners and disabled people. Details are available at the link: https://esalmaty.kz/en/home-tariffs/20191030-111247.

Bogatyr Coal LLP, in turn, actively participates in social support by providing coal for social facilities and charitable organisations. In 2024, more than 160 thousand tonnes of coal were shipped for social needs and charitable purposes. For more information, please visit: https://www.bogatyr.kz/en/.

Initiatives to improve the quality of production processes aimed at resource saving

Samruk-Energy JSC actively introduces innovations to improve energy efficiency and reduce environmental impact.

During the implementation of rationalisation proposals, special attention was paid to energy efficiency. The main objective was to reduce energy consumption without compromising the quality of production processes.

The measures implemented have made it possible to:

- reduce the consumption of resources;
- reduce energy losses by optimising process modes;
- introduce automated systems for control and metering of energy resources.

The most significant of these include optimising losses of chemically desalinated water, improving locomotive maintenance and speeding up equipment cleaning at thermal power plants.

In 2024, 54 rationalisation proposals were approved with an economic effect of

594 million KZT

- Improving energy efficiency of equipment, engineering systems and production processes.
- Reduction of energy costs.
- Improving the economic efficiency of production activities.
- Reduction of greenhouse gas emissions.
- Minimising the negative impact on the environment.
- Introduction of modern energy efficient technologies and equipment.
- Transition to energy efficient solutions (LED lighting, automated control systems, etc.).
- Awareness raising and training of staff and the public.
- Advocating responsible and sustainable consumption of resources.
- Strengthening resilience to potential energy crises and external risks.

Plans for 2025 and the medium term

- It is planned to update the Energy Saving and Energy Efficiency Improvement Programme taking into account modern challenges and sustainable development priorities, in the following key areas:
  - Optimisation of the use of electricity, heat, coal and other resources.
- It is planned to implement 65 measures aimed at energy saving and energy efficiency improvement, with an expected economic effect of more than KZT 1 billion.
- Energy audits are planned at AES Shulbinsk HPP LLP, Bogatyr Coal LLP and Moynak HPP JSC to identify opportunities to improve energy efficiency.

Environmental benchmarking

Environmental benchmarking is a tool for assessing and managing the environmental efficiency of Samruk-Energy JSC by comparing its own indicators with the results of leading companies in the industry. This approach promotes the introduction of the best international practices in the field of environmental management and sustainable development. The current analysis uses publicly available data for 2021–2023. After the publication of environmental indicators for 2024, the benchmarking will be updated and its results will be posted on the Company's official website.

The following indicators are defined for benchmarking:

- utilisation of fresh water for technological and domestic needs;
- direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions.

To determine the environmental trend, the largest companies in the energy industry in Kazakhstan and the world were analysed, namely:

- Enel;
- ERG;
- RusHydro PJSC.

Production figures

Company	2021		2022		2023	
	Electricity generation, billion kWh	Installed capacity, GW	Electricity generation, billion kWh	Installed capacity, GW	Electricity generation, billion kWh	Installed capacity, GW
Samruk-Energy JSC	35.61	6.215	35.88	6.275	35.33	6.275
ERG	19.91	3.387	19.23	3.387	19.16	3.387
Enel	222.6	87.1	227.8	8.6	207.33	81.4
RusHydro PJSC	143.8	38.2	135.7	38.4	140.9	38.5

Greenhouse gas emissions (Scope 1,2)[48,49]

Company	2021		2022		2023	
	Direct GHG emissions, million tonnes CO_2eq (Scope 1)	Indirect GHG emissions, million tonnes CO_2eq (Scope 2)	Direct GHG emissions, million tonnes CO_2eq (Scope 1)	Indirect GHG emissions, million tonnes CO_2eq (Scope 2)	Direct GHG emissions, million tonnes CO_2eq (Scope 1)	Indirect GHG emissions, million tonnes CO_2eq (Scope 2)
Samruk-Energy JSC	40.3	0.015	32.99	0.013	33.010	0.011
ERG[50]	30.2	0.13	29.7	0.1	29.3	0.1
Enel	51.6	9.9	53.1	8.92	34.5	7.79
RusHydro PJSC	30.58	-	30.88	-	32.05	-

[48] RusHydro PJSC does not disclose Scope 2.

[49] Enel and RusHydro PJSC are engaged in energy production based on the operation of hydroelectric power plants that minimise greenhouse gas emissions.

[50] ERG has mining and processing facilities in addition to energy production facilities, Scope 1 includes all types of production facilities.



Fresh water withdrawal, million m³

Company	2021	2022	2023
Samruk-Energy JSC	211.247	230.694	222.398
ERG	2,069	1,989	1,947
Enel	73.1	76.0	55.0
RusHydro PJSC	672.96	686.76	708.6

Specific indicators

Company	2021		2022		2023	
	m³/ thousand kWh	tonnes CO_2eq/ thousand kWh	m³/ thousand kWh	tonnes CO_2eq/ thousand kWh	m³/ thousand kWh	tonnes CO_2eq/ thousand kWh
Samruk-Energy JSC	5,93	1,13	6,43	0,92	6,29	0,93
ERG	103,92	1,52	103,43	1,55	101,62	1,53
Enel	0,33	0,28	0,33	0,27	0,27	0,20
RusHydro PJSC	4,68	0,21	5,06	0,23	5,03	0,23

The companies differ in terms of installed capacity and the volume of electricity generated, so the comparative analysis of specific indicators of greenhouse gas emissions and fresh water intake is tentative.

According to the obtained results, Samruk-Energy JSC has the following tendency:

- specific GHG emissions in 2023 remained at the level of 2022 without significant changes, similarly to ERG and RusHydro PJSC. At the same time, Enel demonstrates an annual decrease of the indicator: by 3.6% in 2022 and by 25.9% in 2023;
- the average specific water withdrawal for 2021–2023 was 6.22 m³/thousand kWh, which:
  - 20 times higher compared to Enel (0.31 m³/thousand kWh);
  - is 26.4% higher than that of RusHydro PJSC (4.92 m³/thousand kWh);
  - 16.6 times lower than ERG (103 m³/thousand kWh).

Based on the results of the analysis, Samruk-Energy JSC confirms its commitment to the sustainable development course. We will continue systematic work on carbon footprint reduction, introduction of modern technologies and solutions aimed at reducing greenhouse gas emissions. Modernisation of main and auxiliary equipment remains an important priority, which will improve resource efficiency and reduce water intake for technological needs of our subsidiaries.

5

CORPORATE GOVERNANCE

250 Corporate governance system
261 Governing bodies
290 Remuneration
292 Securities
294 Risk management and internal control
301 Information security
304 Business ethics and anti-corruption activities

Corporate governance system

A responsible approach to doing business is our priority. We build our work on the basis of a transparent and efficient corporate governance system that complies with industry standards and best international practices. Its continuous improvement allows us to take into account the interests of all stakeholders and contribute to the sustainable development of the entire Group of companies of Samruk-Energy JSC.

The main goal of effective corporate governance is to create conditions for making balanced and well-founded decisions. Samruk-Energy JSC achieves high performance of due to the established corporate governance processes at all levels that ensures transparency, control, clear distribution of powers and timely response to risks.

Corporate structure and distribution of responsibilities

GRI 2-9

The Company has reached a mature level of corporate governance as reflected in a clear governance structure and allocation of roles and responsibilities. The Board of Directors provides strategic guidance, oversees the activities of the Executive Body and protects the interests of shareholders. The Company's management effectively manages operations, maintaining high standards of business ethics and transparency. The Charter clearly defines and enshrines competence of the bodies and decision-making procedures.

The corporate governance system ensures that:

- adherence to the hierarchy of issues and decision-making procedures;
- clear delineation of authority and responsibility between 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 the legislation, Corporate Governance Code and internal documents of Samruk-Energy JSC and its subsidiaries and affiliates.



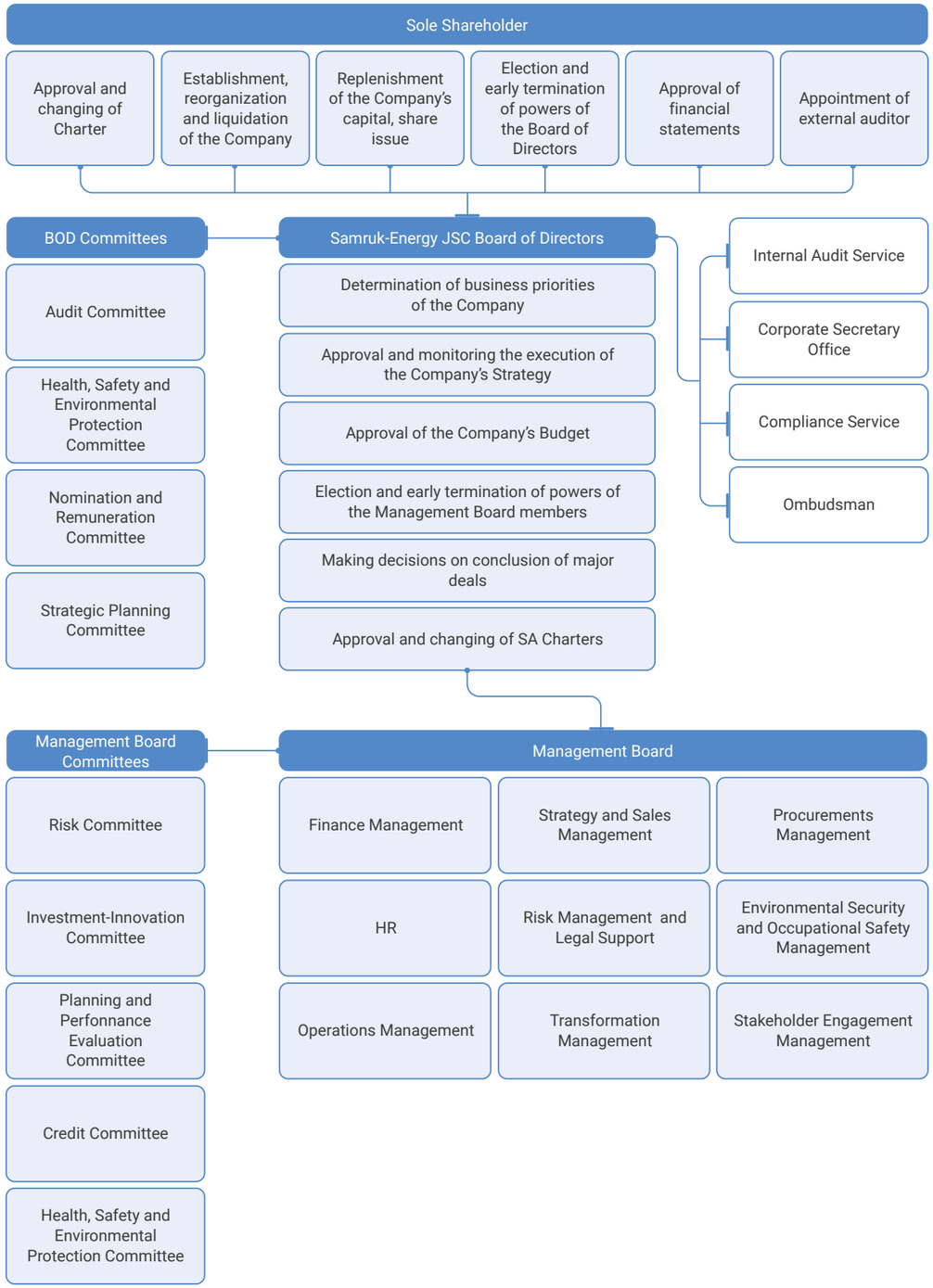
Zhaparkhanov Nurlan Altynkhanovich

Managing Director for Legal Support and Asset Management of “Samruk-Energy” JSC, member of the Management Board

We strive to ensure that corporate governance within the Company not only aligns with best practices but also reflects our core values – transparency, accountability, and sustainability.

That is why we have placed a strong focus on promoting gender balance. The Company has set a goal to achieve at least 30% female representation on the Boards of Directors and Executive Bodies across the Samruk-Energy JSC Group. This is our contribution to building an inclusive, equitable, and progressive corporate environment.

Corporate governance structure



Samruk-Energy JSC and its subsidiaries and affiliates have approved regulations on management bodies, executive bodies, structural subdivisions and job descriptions for respective positions. Compliance with the provisions of these documents ensures systematic and consistent corporate governance processes.

The Company's fundamental internal documents in the area of corporate governance are:

- Corporate Governance Code of Samruk-Energy JSC;
- Asset Management Policy of Samruk-Energy JSC;
- Regulations on interaction with subsidiaries and affiliates of Samruk-Energy JSC;
- Roadmap for improvement of the sustainability management system for 2024.

Samruk-Energy JSC key corporate governance policies

Document	Effective date of the latest version
Charter of Samruk-Energy JSC	26.01.2023
Corporate Governance Code	10.11.2023
Code of Behaviour	22.05.2019
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	07.06.2021
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	25.09.2024

We are guided by the principles of transparency, accountability, responsibility and fairness. All decisions are made taking into account the interests of stakeholders and the long-term sustainability of the Company. We have developed a policy to prevent conflicts of interest and ensure the independence of the Board of Directors.

The Company adheres to international information disclosure standards, providing shareholders and stakeholders with timely, reliable and complete information. Annual reports and non-financial statements are prepared in accordance with the GRI Standards and ESG reporting frameworks (more details in the section About the Report).

Training and development in the field of corporate governance

In 2024, Samruk-Energy JSC continued systematic work on training and development of employees in the field of corporate governance, sustainable development and risk management. Educational events were held with participation of external experts and international organisations which made it possible to ensure a high level of personnel training.

We paid special attention to sustainability issues. In September 2024, an online meeting was held for portfolio companies on the topic of annual reporting with a review of best practices. In December 2024, we held a discussion session dedicated to the global context of sustainable development, national challenges and contribution of the Samruk-Energy JSC Group of companies based on the results of 2024 and oriented towards the tasks of 2025.

One of the key areas was training on climate change issues. In November of the reporting period, we organised a corporate seminar on climate risks for the energy sector. In December 2024, McKinsey held a training session for members of the Board of Directors and top management on climate change and energy development prospects.

As part of strengthening the corporate culture and values, training sessions on professionalism, effective communication, conflict management, and negotiation skills using the Harvard methodology were held during the reporting period. These activities were aimed at developing personal and professional competences of employees.

Additionally, in November 2024, the Compliance Service organised a training seminar on the formation of anti-corruption culture in the Company. This emphasises Samruk-Energy JSC's aspiration to comply with ethical standards and principles of fair business conduct.



Corporate governance in the Samruk-Energy JSC Group of companies

In 2024, Samruk-Energy JSC approved the Asset Management Policy aimed at increasing efficiency and transparency in the management of subsidiaries and affiliated organisations.

The Group implementes asset management on the basis of the Development Strategy. This includes coordination of activities of subsidiaries to achieve common strategic goals, contributes to the efficiency and competitiveness of each company within the Group.

The main objective is to ensure the strategic alignment of the Group's companies, their financial stability and operational efficiency. Special attention is paid to the implementation of modern corporate governance standards, risk management, development of internal control, integration of ESG principles as well as promotion of innovations and human capital development.

The key objective of asset management is to strengthen the country's energy security and improve the efficiency of production facilities through infrastructure modernisation, optimisation of the asset structure, sustainable development and risk minimisation. The policy also aims to strengthen engagement with shareholders, investors and partners in the interests of long-term sustainable growth.

Principles of the Group's management

- Balance: Ensuring a balance between management carried out by Samruk-Energy JSC in the Group and granting independence in making operational decisions to companies to carry out their activities.
- Transparency and accountability: Ensuring openness in decision-making and accountability to shareholders and stakeholders.
- Efficiency and effectiveness: Continuous improving operational efficiency and achievement of strategic goals.
- Independence and objectivity: Forming Boards of Directors with participation of qualified independent directors, shareholder representatives for objective control and decision-making.
- Integration of ESG factors: Implementing environmental, social responsibility and corporate governance standards in the Group's operations.

Samruk-Energy JSC forms a unified policy for the Group of companies and approves methodological guidelines and corporate standards for subsidiaries and affiliates. Such directions include issues of human resources management, information technologies, investments, risks, as well as planning, economics, finance and corporate governance.

Objectives of the asset management system:

- Adhering the hierarchy of issues and decision-making procedures;
- Timely decision-making by corporate bodies of the Samruk-Energy JSC Group of companies;
- Improving process manageability for the bodies of subsidiaries and affiliates;
- Increasing the rating of compliance of the level of corporate governance of subsidiaries and affiliates with the best international practices.

Priority management tools for subsidiaries and affiliated organisations of Samruk-Energy JSC:

- Improving the level of corporate governance of subsidiaries and affiliates by forming professional Boards of Directors/Supervisory Boards, ensuring the performance of the Boards of Directors/Supervisory Boards and managers of subsidiaries and affiliates;
- Ensuring effective management of subsidiaries and affiliates by defining strategic goals (KPIs) of subsidiaries and affiliates, monitoring and assessing the efficiency of the implementation of the Development Strategy and Development Plan of subsidiaries and affiliates;
- Forming unified policies, corporate standards and methodological recommendations to ensure unified approaches to key issues in the Samruk-Energy JSC Group of companies, promotion of best management practices and current activities in subsidiaries and affiliates;
- Providing support and expertise to subsidiaries and affiliates in compliance with the applicable corporate governance principles and within the Company's competences to implement policies, standards and methodological recommendations, build competences, improve performance and/or resolve problematic issues of subsidiaries and affiliates;
- Promoting interests of the Company's Group and individual subsidiaries and affiliates to achieve the Company's strategic goals, increase the value of the investment portfolio of the Samruk-Energy JSC Group of companies on such issues as interaction with state authorities, antimonopoly regulation, tariff policy, attraction of investors, etc.;
- Searching and implementing business synergy to achieve synergy effect at the level of the Samruk-Energy JSC Group of companies by searching for and offering opportunities for cooperation between subsidiaries and affiliates, for example, through complementary activities, creation of service factories, common service centres, in order to optimise costs, introduction of new functional standards, etc.

Key management mechanisms of the Samruk-Energy JSC Group:

1 Corporate governance and control
- Forming Boards of Directors with the participation of independent experts.
- Clear allocating powers between shareholders, Boards of Directors and Executive Bodies.
- Regular evaluating the performance of the Boards of Directors and management.

2 Financial and investment control
- Approving and monitoring budgets and financial plans.
- Optimising capital structure and investment decisions in line with long-term objectives.
- Monitoring Dividend Policy to ensure a balanced distribution of profits.

3 Risk management and internal control system
- Functioning of the internal audit and risk management system.
- Ensuring compliance with legislation, ESG standards and anti-corruption requirements.
- Applying mechanisms to prevent and respond to key risks, including cyber threats.

4 Asset management and M&A transactions
- Selling assets under the Comprehensive Privatisation Plans.
- Optimising the portfolio by withdrawing non-core and inefficient assets.

5 Integration of ESG principles and sustainable development
- Incorporating ESG criteria into management and operational processes.
- Ensuring disclosure of non-financial information in accordance with international standards (GRI, TCFD).
- Monitoring compliance with environmental and social standards in the activities of subsidiaries and affiliates.

6 Human capital development and continuity
- Implementing management development and training programmes.
- Forming professional boards of directors with diversity in mind.
- Promoting the corporate culture based on ethics and innovation.

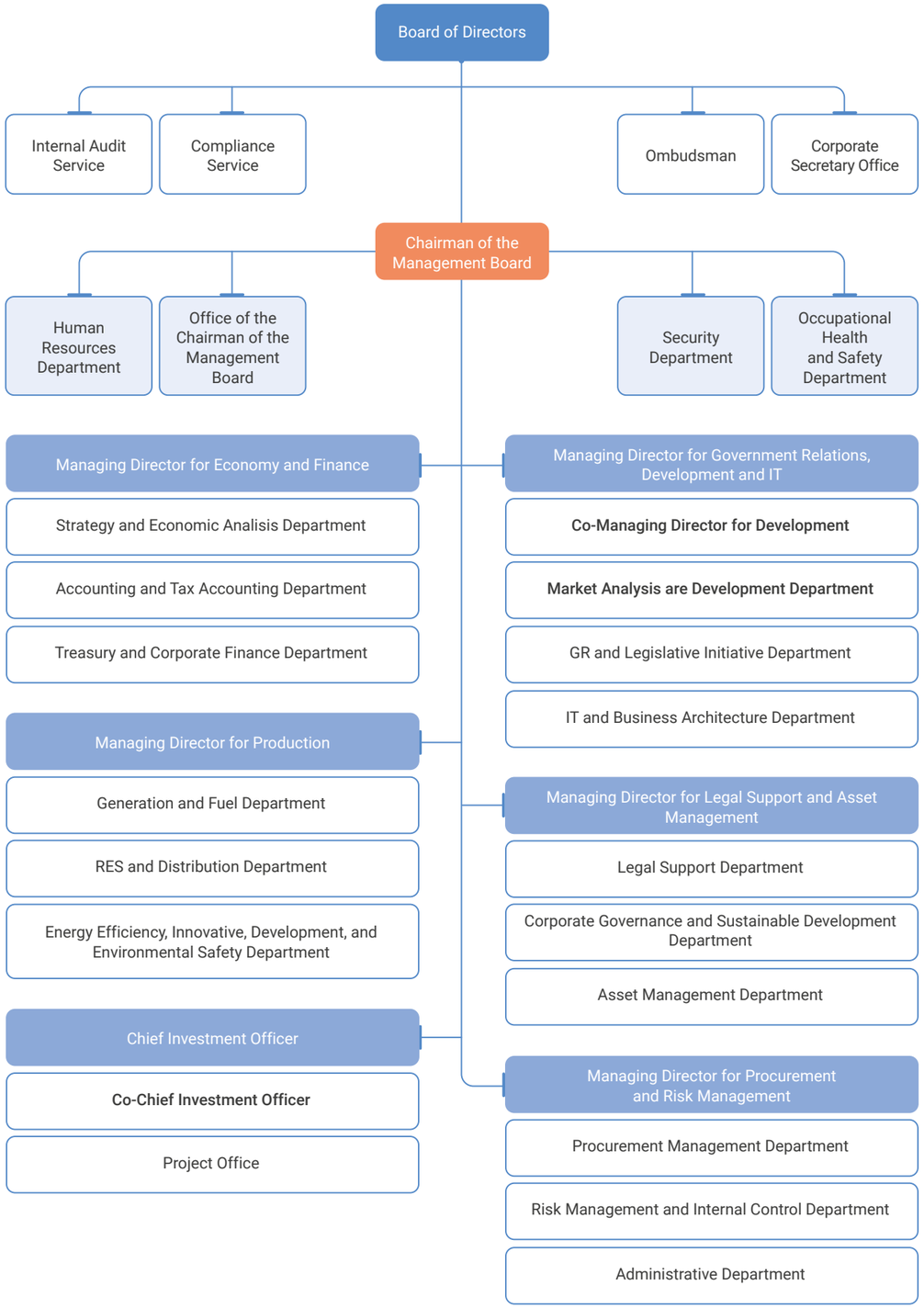
7 Digitalisation and increased operational efficiency
- Introducing digital solutions and business process automation.
- Using analytics and AI tools to improve efficiency and strategic planning.
- Improving energy efficiency and introducing innovative technologies.

8 Stakeholder engagement
- Having an ongoing dialogue with shareholders, investors and government agencies.
- Developing partnerships and attracting investment through transparent governance.
- Implementing a communication strategy that promotes trust and openness.

9 Monitoring and auditing
- Conducting regular internal and external audits on the condition of assets and procedures.
- Assessing compliance with financial reporting standards and environmental requirements.

Organisational structure of Samruk-Energy JSC

GRI 2-6



The Board of Directors approved the current organisational structure and headcount of Samruk-Energy JSC by its decision dated 27 August 2024 that comprises of 174 staff units.

Within the framework of updating the structure aimed at implementation of Bogatyr Coal LLP's key projects, strengthening monitoring of industry trends, attracting investors, as well as improving industrial safety and reducing injuries, the previously approved structure was amended:

- the position of Co-Managing Director for Development was introduced;
- the staff of the Occupational Health and Safety Department was increased by 5 units.

Improving the efficiency of the corporate governance system

In accordance with the diagnostics of the corporate governance system conducted in 2021 by Samruk-Kazyna JSC according to the approved methodology in the organisations in which Samruk-Kazyna JSC owns directly or indirectly more than 50% of voting shares, the corporate governance rating of Samruk-Energy JSC was set at BB level ("average" maturity level). Key aspects of corporate governance were analysed:

- Effectiveness of the Board of Directors and the Executive Body;
- Risk management;
- Internal control and audit;
- Sustainable development, shareholders' rights;
- Transparency.

In accordance with the Development Strategy, we focuse on improving the efficiency of corporate governance through the prism of the sustainable development concept and ESG principles, covering such areas as health and safety, environmental protection, energy efficiency, anti-corruption and anti-fraud.

To ensure a management approach that takes into account the social and environmental impact of activities on people and the environment, in 2024, we approved the Roadmap for the improvement of the sustainable development management system of Samruk-Energy JSC for 2024. It includes measures aimed at improving our activities in environmental and social aspects as well as in corporate governance issues formed basing on the results of independent diagnostics of the Company's corporate governance and the results of ESG processes assessment by leading international rating agencies.

The 2024 Roadmap for the Improvement of Sustainability Management System envisages the implementation of 106 actions aimed at developing areas requiring, among other things, the improvement and development of corporate governance practices.

In 2024, the implementation of the Roadmap for improving the sustainable development management system was

98%

By the decision of the Management Board of Samruk-Kazyna JSC dated 10 November 2023, Samruk-Energy JSC approved a new version of the Corporate Governance Code.

In order to apply unified standards, the updated Corporate Governance Code in a new edition for the Samruk-Energy JSC's Group of companies was approved by the decision of the Management Board of Samruk-Energy JSC dated 15 December 2023.

The Corporate Governance Code is available at: https://www.samruk-energy.kz/images/Corporate_documents/KKU_2024_eng.pdf

Corporate Governance System Policy of Samruk-Energy JSC

To manage our operations effectively and transparently, we have implemented a corporate management system centred on the concept of sustainable development.

The key document of Samruk-Energy JSC in this area is the Corporate Governance System Policy (more details on the website of Samruk-Energy JSC – https://www.samruk-energy.kz/images/Corporate_documents/Politika_KSM_08_2024_en.pdf)

To ensure an objective assessment of the current state of the corporate management system as well as to increase the level of interaction, ensure implementation of audit principles and form the necessary knowledge base, we use the cross-functional audit approach which implies audits within Samruk-Energy JSC by both specialists of subsidiaries and affiliates and the corporate centre.

In 2024, the external surveillance audit successfully confirmed the compliance of the corporate management system with the requirements of international standards ISO 9001, ISO 14001, ISO 45001, ISO 50001 and ISO 37001.

The certification was carried out in accordance with the procedures of MS Certification Services, an international conformity assurance body, with the involvement of international class auditors and covered the Company's following assets (production sites): Ekibastuz GRES-1 LLP named after B. Nurzhanov, Ekibastuz GRES-2 Station JSC, Almaty Electric Stations JSC, Moynak HPP JSC, Samruk Green Energy LLP, Alatau Zharyk Company JSC, AlmatyEnergoSbyt LLP, Shardara HPP JSC, First Wind Power Plant LLP, as well as the corporate centre of Samruk-Energy JSC.

Based on the results of the certification audit, positive aspects of the development and functioning of the Company's corporate management system were noted, in particular:

- A high degree of management focus on achieving the Company's goals;
- Organising and conducting cross-functional corporate audits of the management system in dependent organisations;
- Good level of exchange of documented information electronically in the Company's operations;
- Application of information systems for planning and process control;
- Support for the development of the corporate management system by affiliated organisations;
- Amending the current legislation to establish requirements aimed at protecting the interests of all energy market participants.

Compliance with the Corporate Governance Code

In the reporting period, the Company was guided by the Corporate Governance Code approved by the decision of the Management Board of Samruk-Kazyna JSC dated 10 November 2023 (Minutes No. 54/23), (hereinafter referred to as the Code).

The Company has carried out self-assessment and analysed the actual compliance of current operations.

The results of the self-assessment show that in 2024 the Company ensured compliance with the main principles and provisions of the Code. At the end of 2024, 117 out of 120 provisions of the Code were in compliance, 3 provisions were in partial compliance.

Thus, the following paragraphs have been determined to be partially compliant with the provisions of the Code:

1

Clause 64 of Chapter 5, Effectiveness of the Board of Directors and the Executive Body

According to the Regulations, diversity in terms of experience, personal characteristics and gender composition should be ensured in the composition of the Board of Directors. The recommended level of female representation on the Board of Directors is at least 30% of the total number of members.

In 2024, the composition of the Company's Board of Directors met the requirements for diversity of skills, knowledge and competences, but did not provide the necessary gender balance.

It should be noted that on 13 March 2025, by the decision of the Management Board of Samruk-Kazyna JSC (Minutes No. 10/25), independent director Atamkulova G.T. was elected to the Board of Directors of the Company. Thus, the representation of women in the Board of Directors in 2025 is 14%.

2

Clause 65 of Chapter 5, Effectiveness of the Board of Directors and the Executive Body

The clause stipulates that the Board of Directors should have a sufficient number of independent directors to ensure independence of decisions and fair treatment of all shareholders. The recommended level of representation of independent directors is up to 50% of the total number of members of the Board of Directors.

In the composition of the Board of Directors in place in 2024, three out of seven members were independent directors, which accounts for 43% of the total and does not fully meet the recommended level.

3

Clause 91 of Chapter 5, Effectiveness of the Board of Directors and the Executive Body

According to this clause, the Nomination and Remuneration Committee should be chaired by the Chairman of the Board of Directors. In 2024, this function was performed by V.D. Ogay, Senior Independent Director and member of the Board of Directors, which is a deviation from this provision.



The Company's plans to improve its corporate governance system

In 2025, Samruk-Energy JSC will focus on strengthening corporate governance taking into account climate challenges, integrating ESG principles and increasing transparency. The main areas include:

1. **Climate risk management.** We plan to conduct a scenario analysis of achieving carbon neutrality with assessment of physical and transient climate risks, analyse financial implications, develop a methodology for risk assessment by sector (coal, CHHP, HPP, RES) and disclose information in accordance with TCFD recommendations.

2. **Development of ESG approaches.** To improve sustainability and transparency, the Company plans to obtain an international ESG rating, as well as to review and update internal policies and management practices in accordance with ESG criteria. Work will continue on the implementation of ESG principles, including updating information on official resources.

3. **Participation in CDP and climate rating.** The Company will participate in the CDP disclosure and will work to improve the quality of reporting for the climate rating.

4. **Integrated Report.** The development of the Integrated Annual Report will continue, including information on sustainable development in accordance with GRI, ISSB, TCFD and international best practices, including LSE and IFCA standards.

5. **Independent verification of reporting.** We plan Independent verification of the key indicators of the Integrated Report.

6. **Personnel training and development.** In 2025, training events will be held for top management and employees on corporate governance and ESG factors in the energy sector.

7. **Updating of corporate documents.** We plan to approve a new version of the Corporate Governance Code and bring internal regulatory documents in line with its provisions.

8. **Development in subsidiary organisations.** The subsidiaries will continue to integrate corporate governance principles: the existing documents and processes were audited, recommendations for their improvement were made, and measures to implement them were implemented.



Governing bodies

Shareholder of Samruk-Energy JSC

100% of shares of Samruk-Energy JSC belong to the Sole Shareholder of Samruk-Kazyna JSC (detailed information about Samruk-Kazyna JSC can be found at this link http://www.sk.kz).

Relations of Samruk-Energy JSC with the Sole Shareholder based on honesty, accountability, responsibility and transparency, and consist in ensuring protection of and respect for its rights and legitimate interests.

The Sole Shareholder ensures the Company's management by establishing priority tasks and strategic directions of activity. The activity, exclusive competences, rights and obligations of the Sole Shareholder are regulated by the Charter. We strive to honour the interests of the Sole Shareholder by ensuring the growth of long-term value and sustainable development of the business.

The rights of the Sole Shareholder shall be exercised in accordance with the Law of the Republic of Kazakhstan On Joint Stock Companies and the Charter of Samruk-Energy JSC. The rights of shareholders include, but not limited to:

- Timely receiving information sufficient for decision making in accordance with the procedure established by the legislation of the Republic of Kazakhstan, the Charter and internal documents of the Company on information disclosure;
- Voting on matters within its competence;
- Participating in determining the number of members, term of office of the Board of Directors, election of its members and termination of their powers, as well as determining the amount and terms of remuneration payment;
- Receiving dividends based on a clear and transparent dividend policy.

In the reporting period, the Sole Shareholder considered key issues:

- On approval of annual financial statements of Samruk-Energy JSC for 2023, the procedure for distribution of net income of Samruk-Energy JSC for 2022 and the amount of dividends per one ordinary share of Samruk-Energy JSC; information on appeals of the Sole Shareholder of Samruk-Energy JSC against actions of Samruk-Energy JSC and its officials and results of their consideration for 2023 was also considered;
- Determination of the audit company auditing the financial statements of Samruk-Energy JSC for 2025–2029 and determination of the amount of payment for its services.

Board of Directors of Samruk-Energy JSC

GRI 2-9

The Board of Directors ensures the Company's strategic guidance and long-term performance by making balanced decisions taking into account the interests of all stakeholders based on the principles of sustainable development. The Company strives to ensure that the Board of Directors and the Executive Body interact in a spirit of co-operation, acting in the best interests of the Company and making decisions based on the principles of sustainable development and fair treatment of the Sole Shareholder.

The Board of Directors has the necessary powers to manage the Company and oversee the activities of the Executive Body. In accordance with the Charter, it focuses on key issues:

- Defining a strategy for the development and integration of ESG targets;
- Setting and monitoring key performance indicators;
- Organising and supervising the risk management and internal control system;
- Approving and controlling implementation of major investment and strategic projects;
- Selecting, rewarding and evaluating the performance of the Company's management;
- Corporate governance and ethics;
- Complying with the norms of the Corporate Governance Code and the Company's internal standards.

Members of the Board of Directors shall adhere to the following principles in their activities:

- Act within the limits of its authority in accordance with the Company's Charter.
- Devote sufficient time to meetings and preparation for them. Participate in a maximum of four boards of directors and chair maximum of two of them (subject to the approval of the Board of Directors).
- Contribute to the long-term value and sustainable development of the Company, taking into account the impact of decisions on society, the environment, reputation and stakeholders.
- Adhere to high standards of business ethics and be an example to employees.
- Avoid conflicts of interest and do not participate in discussions where personal interest may affect objectivity.
- Act reasonably and prudently, constantly improving their qualifications in corporate governance, finance, risk, and sustainable development as well as visiting key facilities and interacting with staff.

In 2024, the Company's Board of Directors consisted of seven members, including three independent directors – A. Kashkinbekov, A. Zhubaev, V. Ogay, with significant experience in finance, accounting, audit, engineering, strategic management, energy including green energy development, ESG.

The current composition of the Board of Directors of Samruk-Energy JSC is balanced in terms of industry experience, skills, international relations and independence, but does not ensure diversity in terms of gender.

In 2025, the share of women on the Board reached

14%

and the Company continues to strive to further increase their representation on the governing body

Members of the Board of Directors do not own shares of the Company (interests in the Company), affiliated companies, and do not own shares of the Company's suppliers and competitors.

Nomination and re-election policy

GRI 2-9, 2-10

The procedure for the operation and competence of the Board of Directors, the rights and obligations of its members are determined by the Company's Charter and the Regulations on the Board of Directors. The process of formation, search and selection of candidates is carried out until the full term of office of the entire Board of Directors and the powers of individual members expire.

The Sole Shareholder elects members of the Board of Directors on the basis of clear and transparent procedures, taking into account the competences, skills, achievements, business reputation, professional experience of candidates, characteristics and gender composition. When re-electing individual members of the Board of Directors or the full Board of Directors for a new term, their contribution to the effectiveness of the Company`s Board of Directors is taken into account.

When selecting candidates to the Board of Directors, the following shall be taken into account:

- Experience in a management position;
- Experience as a member of the Board of Directors;
- Work experience;
- Education, international certificates;
- Availability of competences by areas and industries;
- Business reputation;
- Absence of conflict of interest.

Independent directors are elected to the Board of Directors. An independent director is a person who has sufficient professionalism and autonomy to make independent and objective decisions free from the influence of individual shareholders, the Executive Body and other stakeholders.

When electing an independent director, the following circumstances that may prejudice the independence of the independent director shall be additionally taken into account:

- Employment with the Samruk-Energy JSC or the Group within the last three years;
- The existence or recent completion of a material business relationship with the Company;
- Receipt of additional remuneration, participation in an option programme or corporate pension scheme;
- Membership on other boards of directors, creating a potential conflict of interest;
- Major Shareholder Representation;
- More than nine years on the Board of Directors.

The Sole Shareholder or the Nomination and Remuneration Committee may initiate the election or renewal of members.

The members of the Board of Directors shall be elected from among:

- Individual shareholders;
- Persons proposed/recommended for election to the Board of Directors as representatives of shareholders' interests;
- Independent candidates.

Independent directors chair key committees (audit, nomination and remuneration) and are obliged to notify in a timely manner about possible loss of independence. If there are circumstances affecting the independence of a member of the Board of Directors, the Chairman of the Board of Directors shall immediately bring this information to the attention of the Sole Shareholder to make an appropriate decision. According to the results of 2024, the Company's Independent Directors fully met the independence criteria.

In companies where Samruk-Kazyna JSC owns all voting shares, there are peculiarities with regard to the process of election of the Board of Directors members:

- The Chairman of the Board of Directors shall be 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 shall elect a senior independent director from among the independent directors;

- The search and selection of candidates to the Board of Directors is carried out by the Fund together with the Chairman of the Board of Directors and the Chairman of the Nomination and Remuneration Committee of the Company's Board of Directors.

Members of the Board of Directors are elected for a term of up to three years and may be re-elected for a further term of up to three years, subject to satisfactory performance. Any period of election to the Board of Directors for more than six consecutive years (two three-year terms) is subject to special consideration, taking into account the need for qualitative renewal of the Board of Directors. The term of office of the Board of Directors members coincides with the term of office 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. In exceptional cases, election for more than nine years is allowed. 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 ESG principles

GRI 2-12

The Board of Directors implements the policy in the field of sustainable development and reviews the ESG main documents. The Board of Directors approved the Sustainable Development Guidelines, which is the main document in this area and aims at systematising sustainable development processes across the Samruk-Energy JSC Group of companies. The Company's Board of Directors also approved the Sustainable Development Initiatives Plan, which defines key performance indicators for all ESG aspects and corresponds to the Company's Development Strategy. The Board of Directors approved the Roadmap for improvement of the sustainable development management system of Samruk-Energy JSC for 2024 that includes measures aimed at improving activities and promoting ESG principles in the Company.

Evaluation of the Board of Directors' performance

GRI 2-18

The effectiveness of the Board of Directors, its Committees and members is assessed annually as part of the approved process. The evaluation is carried out by self-assessment or with the involvement of an independent consultant (at least once every three years).

The assessment aims at improving the professionalism of the Board of Directors and is taken into account during the re-election or early termination of office of its members. The main objective is to improve the quality of work of the Board and its committees that contributes to the growth of long-term value and sustainable development of the Company.

Assessment Objectives:

- Analysis of the effectiveness of the Board, its Committees, Chairman, Members and Corporate Secretary.
- Identification of strengths and weaknesses against international standards.
- Identification of areas for improvement.
- Optimisation of the Board's composition, taking into account the required experience and competencies.

In 2024, in accordance with the best international corporate governance practices, the Company conducted a self-assessment of the Board of Directors' performance based on the 2023 results. The self-assessment was carried out by the Company's interested structural divisions based on the Methodology for Assessing the Performance of the Board of Directors and its Committees approved by the Company's Board of Directors, developed on the basis of the Corporate Governance Diagnostic Methodology as well as leading practices in the field of corporate governance.

According to the methodology, the evaluation technology includes a questionnaire survey of all members of the Board of Directors and Board Committees. The result of the assessment of the Board of Directors' performance identified areas for further development of corporate governance practices. Based on the results of the assessment, we developed the Plan of practical measures to eliminate weaknesses in order to improve the performance of the Board of Directors and corporate governance of the Company as a whole.

Members of the Board of Directors who participated in the evaluation:

- Kazutin Nikolay Yuryevich – Chairman of the Board of Directors, representative of the Sole Shareholder.
- Ogay Alexey Vladimirovich – member of the Board of Directors, representative of the Sole Shareholder. Member of the Nomination and Remuneration Committee.
- Moldabaev Kanysh Tanirbergenovich – member of the Board of Directors, representative of the Sole Shareholder. Member of the Strategic Planning Committee, member of the Health, Safety and Environmental Protection Committee.
- Ogay Valery Dmitrievich – Senior Independent Director, Chairman of the Health, Safety and Environment Committee, Chairman of the Nomination and Remuneration Committee, member of the Audit Committee.
- Kashkinbekov Arman Kairberlievich – Independent Director, Chairman of the Strategic Committee, member of the Audit Committee, Health, Safety and Environment Committee.
- Zhubaev Armanbay Saparbayevich – Independent Director, Chairman of the Audit Committee, member of the Nomination and Remuneration Committee, Strategic Planning Committee.
- Maksutov Kairat Berikovich – member of the Board of Directors, Chairman of the Management Board of the Company.

The Board of Directors meets the key performance criteria. The overall rating is 6 (AA) out of 7 (AAA).

- Estimate by component and target: 6.9 (6.7 in 2023).
- Estimate by section: 98% (95.8% in 2023).

In 2025, an independent evaluation of the Board's performance is planned for 2024.

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. According to the results of 2024, there were no such cases.

Induction programme

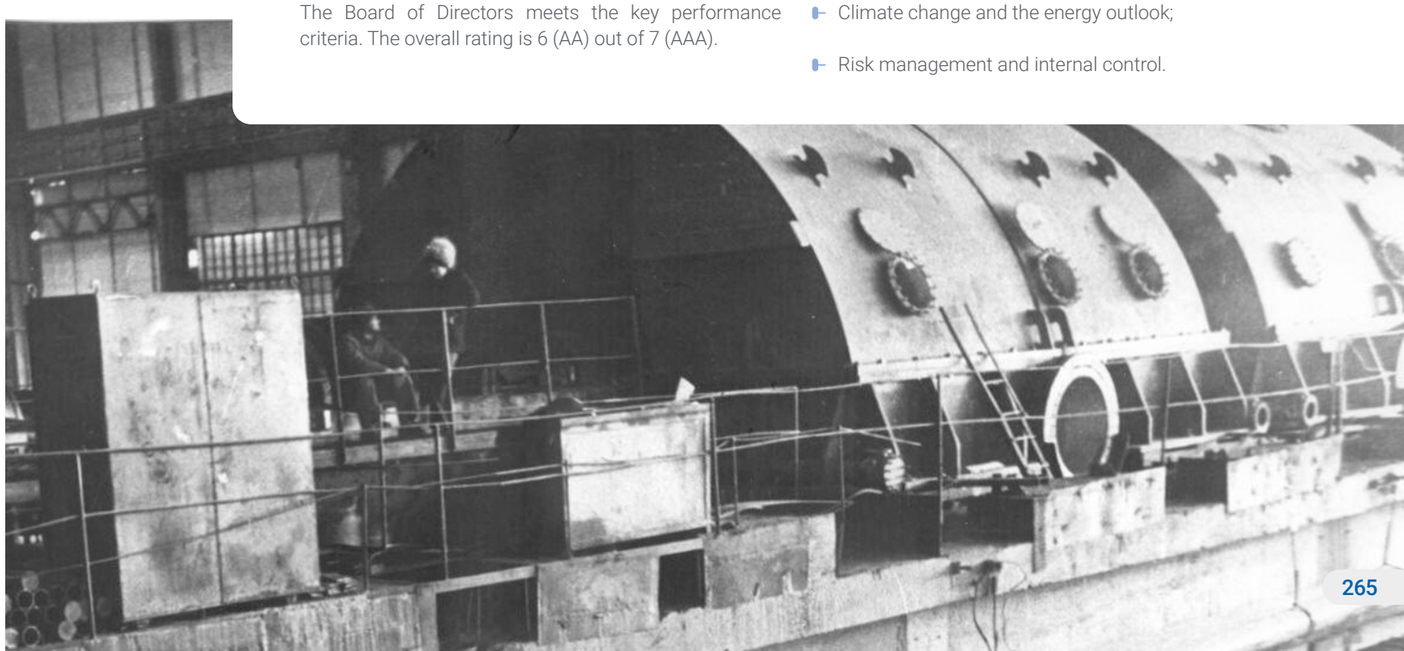
Since 2016, the Company has had an Induction Programme for new members of the Board of Directors implemented by the Corporate Secretary. As part of the programme, new Board members are familiarised with their rights and responsibilities, key aspects of the Company's operations, and key documents, including those relating to the greatest risks.

Training and development of members of the Boards of Directors

GRI 2-17

To raise awareness of the highest corporate governance body on sustainable development and corporate governance issues, we held seminars in the reporting period:

- Climate change and the energy outlook;
- Risk management and internal control.



Composition of the Board of Directors as of 31.12.2024.

GRI 2-9, 405-1, GRI 12: Coal Sector: 12.19.6

Kazutin Nikolay Yurevich

Chairman of the Board of Directors, Representative of the Sole Shareholder.

Ogay Alexey Vladimirovich

the Board of Directors member, Representative of the Sole Shareholder, member of the Nomination and Remuneration Committee.

Moldabayev Kanysh Tanirbergenovich

the Board of Directors member, Representative of the Sole Shareholder, member of the Strategic Planning Committee, member of the Health, Safety and Environmental Protection Committee.

Ogay Valery Dmitrievich

Senior Independent Director, Chairman of the Health, Safety and Environmental Protection Committee, Chairman of the Nomination and Remuneration Committee, member of the Audit Committee.

Kashkinbekov Arman Kairberlievich

Senior Independent Director, Chairman of the Strategic Planning Committee, member of the Audit Committee, Chairman of the Health, Safety and Environmental Protection Committee.

Jubaev Armanbay Saparbaevich

Independent Director, Chairman of the Audit Committee, member of the Nomination and Remuneration Committee, member of the Strategic Planning Committee.

Maxutov Kairat Berikovich

The Board of Directors member, Chairman of the Management Board.

Changes in the composition of the Board of Directors as of the date of the Report publication

On March 13, 2025, by the decision of the Management Board of Samruk-Kazyna JSC (Minutes No. 10/25), the powers of Independent Director Valeriy D. Ogay were terminated, and Gulnaz Turekhanovna Atamkulova was appointed as the new Independent Director and member of the Board of Directors. Gulnaz T. Atamkulova is an expert in the field of securities management and investment projects, which is particularly relevant to the Company's large-scale investment activities.

Total number of members of the Board of Directors

7

Independent members of the Board of Directors

3

30–50 years old

57%

50+

43%

Men

100%





Kazutin Nikolay Yuryevich

Position

Chairman of the Board of Directors of Samruk Energy JSC, Representative of the Sole Shareholder

Expert in strategic and corporate governance, economics, finance, law and audit.

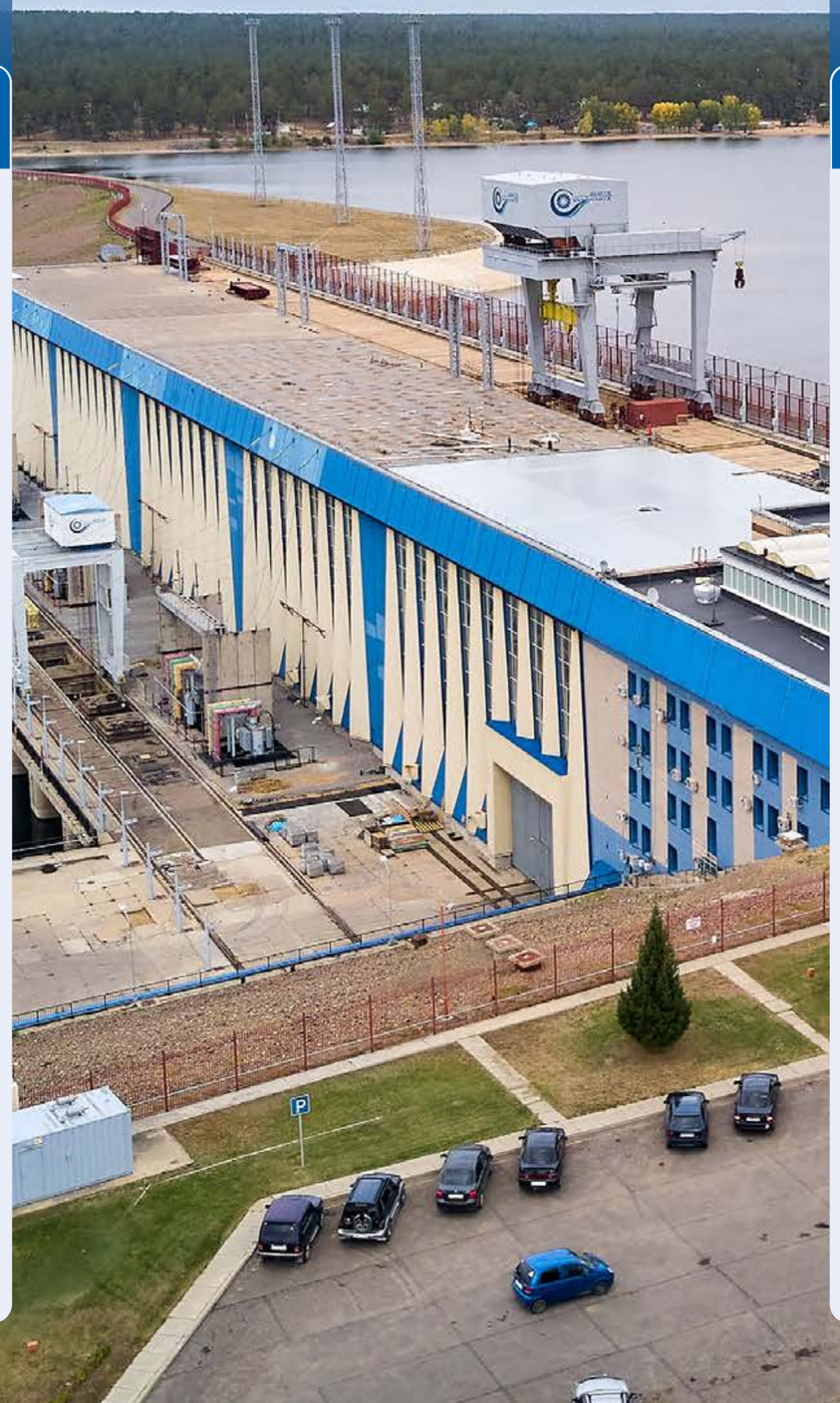
- **Citizenship:** Republic of Kazakhstan
- **Date of birth:** 28 November 1982
- **Date of first election:** 18 February 2022
- **Term of office:** until 23 June 2025

Educational background

Turar Ryskulov Kazakh Economic University university, majoring in accounting and audit

Professional experience

- 2023 – Managing Director for Legal Support, Security and Risks, Samruk-Kazyna JSC
- 2020 – Deputy Chairman of the State Revenue Committee, Ministry of Finance of the Republic of Kazakhstan
- 2018–2019 – Head of Internal Audit Service, East Kazakhstan Regional Energy Company JSC
- 2016–2018 – Advisor to the Chairman of the Management Board, Kokshetau Mineral Waters JSC
- 2006–2016 – Senior Department Manager, PriceWaterhouseCoopers Tax & Advisory LLP
- 2005–2006 – Financial analyst, Kazinterpolis Insurance Broker LLP
- 2003–2005 – Financial Analyst, Amanat Insurance JSC
- 2001–2003 – Insurance and branch accounting specialist, Industrial Insurance Group JSC





Maksutov Kairat Berikovich

Position

Member of the Board of Directors, Chairman of the Management Board

Expert in energy, strategic planning, corporate governance, finance, market development and law.

- **Citizenship:** Republic of Kazakhstan
- **Date of birth:** 16 May 1970
- **Date of first election:** 19 June 2023
- **Term of office:** until 23 June 2025

Educational background

- 1991 – Karaganda Co-operative Institute of Kazpotrebsoyuz
- 2019 – Almaty University of Power Engineering and Telecommunications

Professional experience

- 2018–2023 – Executive positions in commercial entities
- 2016–2018 – Managing Director for Economics and Finance, Samruk-Energy JSC
- 2013–2016 – Deputy Chairman of the Management Board, Samruk-Energy JSC
- 2012–2013 – Managing Director for Corporate Governance, Samruk-Energy JSC
- 2009–2013 – Deputy Chairman of the Management Board for Finance and Economics, Samruk-Energy JSC
- 2008–2009 – Managing Director, Eurasian Holding Company
- 2004–2008 – Vice-President for Economics, Gefest Mining and Industrial Holding
- 1999–2004 – Director of Karaganda Branch, Alfa-Bank JSC SB
- 1997–1999 – Deputy Akim of Karazhal city



Ogay Aleksey Vladimirovich

Position

Member of the Board of Directors, Representative of the Sole Shareholder

Expert in corporate governance, strategy, commercial management, investments, mergers and acquisitions.

- **Citizenship:** Republic of Kazakhstan
- **Date of birth:** 1 December 1970
- **Date of election:** 24 August 2023
- **Term of office:** until 23 June 2025

Participation in committees

Member of the Nomination and Remuneration Committee

Educational background

Almaty Institute of Power Engineering

Professional experience

- From 08.2023 to date – Director of Energy and Mining Assets Department, Samruk-Kazyna JSC
- 2020–2023 – Director of Reorganisation and Realisation of Assets Department, Samruk-Energy JSC
- 2016–2018 – Managing Director for Business Transformation, Samruk-Energy JSC
- 2015–2016 – CDO, Deputy Chairman of the Management Board, Samruk-Energy JSC
- 2014–2015 – Deputy Chief Director for Asset Management, Samruk-Kazyna JSC
- 2011–2014 – Director for Power Assets Management, Samruk-Kazyna JSC
- 2008–2011 – Chief Expert of the PowerAssets Directorate, Samruk-Kazyna JSC
- 2006–2008 – Chief Expert, KEGOC Group, Samruk Holding JSC
- 1998–2006 – Head of Economic Analysis Department, KEGOC



Moldabaev Kanysh Tanirbergenovich

Position	Member of the Board of Directors, Representative of the Sole Shareholder
	Expert in energy, strategic planning, corporate governance and finance. - **Citizenship:** Republic of Kazakhstan - **Date of birth:** 23 October 1963 - **Date of first election:** 1 August 2023 - **Term of office:** until 23 June 2025 - **Contract:** 01.08.2023–23.06.2025
Participation in committees	- Member of the Strategic Planning Committee - Member of the Committee on Safety, Occupational Health and Environmental Protection
Educational background	- 2016–2020 – Doctor of Business Administration (DBA), Russian Presidential Academy of National Economy and Public Administration - 2003–2004 – Public Service Manager, Academy of Public Administration under the President of the Republic of Kazakhstan - 1999–2002 – Economist-Lawyer, Karaganda State Technical University - 1981–1987 – Electrical Engineer, Pavlodar Industrial Institute - International certification: IPMA Level B
Professional experience	- 2021–2023 – Chairman of the Management Board of KEGOC JSC - 2021 – Director of Energy and Mining Assets Directorate of Samruk-Kazyna JSC - 2019–2021 – Head of Energy Sector of Samruk-Kazyna JSC - 2018–2019 – Deputy General Director of Kazakhstan Nuclear Power Plants JSC - 2017–2018 – Managing Director for Development and Sales, Member of the Management Board of Samruk-Energy JSC - 2016–2017 – Managing Director for Strategy and Sales, Member of the Management Board of Samruk-Energy JSC - 2015–2016 – First Deputy Chairman of the Management Board of Samruk-Energy JSC - 2014–2015 – Deputy Chairman of the Management Board of Samruk-Energy JSC - 2012–2014 – Managing Director for Development of Samruk-Energy JSC - 2012 – Director of the Innovation and Technology Policy and Development Department of Samruk-Energy JSC - 2011–2012 – Director for Industrial Assets Management of Samruk-Kazyna JSC - 2009–2011 – Director of KEGOC's NPG Development Department - 2007–2009 – Director of the Northern MES branch of KEGOC JSC - 2004–2007 – Head of the Electric Power Industry Department of the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan - 2003–2004 – Trainee of the Academy of Public Administration under the President of the Republic of Kazakhstan (training of top-level civil servants) - 1999–2003 – Deputy Akim of Bayanaul district, Pavlodar region - 1997–1999 – President of Bayanaul District Electric Networks JSC - 1996–1997 – Head of Bayanaul District Electric Networks JSC - 1989–1996 – Chief Engineer of Bayanaul District Electric Networks JSC - 1988–1989 – Dispatcher of Bayanaul District Electric Networks JSC - 1987–1988 – Master of Grids Bayanaul District Electric Networks JSC - 1987 – Electrician of Bayanaul District Electric Networks JSC



Kashkinbekov Arman Kairberlievich

Position	Senior Independent Director of the Board of Directors of Samruk-Energy JSC
	Expert in business and economic management, energy, strategic planning. - **Citizenship:** Republic of Kazakhstan - **Date of birth:** 25 March 1977 - **Date of election:** 27 May 2022 - **Term of office:** until 23 June 2025
Participation in committees	- Chairman of the Strategic Planning Committee - Member of the Audit Committee - Member of the Committee on Safety, Occupational Health and Environmental Protection
Educational background	- Kazakhstan-Japan Development Centre, Strategic Management Programme - Norwegian Petroleum Directorate, majoring in Petroleum Policy and Management - Vanderbilt University (USA), Master's degree in Economics (Bolashak programme) - Karaganda State University
Professional experience	- Since 2022 – 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, United Nations Development Programme - 2019–2020 – Deputy Chairman of the Management Board of the Science Found - 2018–2019 – Deputy Chairman of the Management Board of the International Centre for Green Technologies and Investment Projects - 2016–2017 – Vice-President of Enzen - Since 2015 – Honoured CEO and member of the Board of Directors of the Kazakhstan Renewable Energy Association - 2012–2014 – General Director of Rolls-Royce Energy Kazakhstan - 2009–2012 – Member of the Management Board, Director for Government and Public Relations of ArcelorMittal Temirtau - 2008–2009 – Director for International Cooperation of NWF Samruk-Kazyna - 2007–2008 – Executive Director of KAZENERGY - 2006–2007 – President of Kazinvest - 2005–2006 – Director of Business Development, Government and Public Relations, ConocoPhillips - 2004–2005 – Director of the Foreign Investors Council under the President of the Republic of Kazakhstan - 2000–2004 – Chief Manager of KazMunayGas NC / Kazakhoil - 1999–2000 – Media Analyst, OWEN Business School (Vanderbilt University) - 1998–1999 – Research Fellow at the Public Policy Institute (Vanderbilt University)
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 Atameken NCE - Since 2021 – Independent member of the Board of Directors of NAO Centre for Support of Civic Initiatives - Since 2017 – Independent member of the Board of Directors of SHHPP-3 JSC / ERG - 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



Zhubaev Armanbay Saparbayevich

Position

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 election:** 6 October 2022
- **Term of office:** until 23 June 2025
- **Contract period:** 06.10.2022–23.06.2025

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, specialising in Business Administration (BSBA)
- University of Oxford, UK, Master of Science in Comparative Social Policy (MSc Comparative Social Policy)
- University of California Berkeley, USA, MBA degree
- Certified Financial Analyst (CFA)

Professional experience

- From 2020 till present – Founder of the consulting company StrategyLab LLP
- 2006–2008 – Marketing Specialist, SAP, USA
- 2009–2010 – Consultant, McKinsey, Russia
- 2010–2012 – Polymetal, Kazakhstan
- 2012–2013 – Senior Manager, KPMG, Kazakhstan
- 2013–2020 – Senior Manager, Director, PwC, Kazakhstan

Participation in the Boards of Directors

From 2022 till present – Independent Director of Kazakhtelecom JSC



Atamkulova Gulnaz Turekhanovna

Position

Independent Director of the Board of Directors of Samruk-Energy JSC

An expert in securities management and investment projects, as well as in the field of sustainable development.

- **Citizenship:** Republic of Kazakhstan
- **Date of birth:** 9 September 1968
- **Date of election:** 28 June 2025
- **Term of office:** until 23 June 2025
- **Contract period:** 24.06.2025–23.06.2028

Participation in committees

- Member of the Nomination and Remuneration Committee
- Member of the Audit Committee

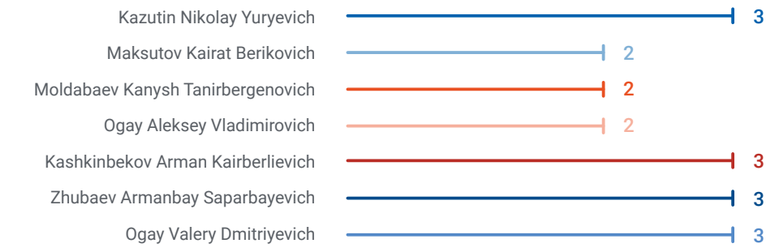
Educational background

- 1986–1991 – S.M. Kirov Kazakh State University Specialty – "Philosophy", qualification – Philosopher, Lecturer
- 1996–1998 – Eurasian market Institute at T. Ryskulov Kazakh State University Specialty – "Finance and credit", qualification – Economist
- 2013 – London School of Business and Finance, LSBF
- 2012–2014 – Kazakh Humanitarian Legal University, Master of Business Administration (MBA)
- 2016–2021 – Russian Academy of National Economy and Public Administration, RANEPA, GSCG, Doctor of Business Administration (DBA)

Professional experience

- 2020 – Director of the Private Company Ellington City Tourism Ltd.
- 2019 – Deputy Chairman of the Management Board, Advisor Non-profit International green technologies and investment projects center JSC
- 2018 – Provost for science and innovations, Financial Academy JSC
- 2017–2018 – Deputy Chairman of the Management Board, KazAgro National Management Holding JSC
- 2015–2017 – Chairman of the Management Board, Agrarian Credit Corporation JSC
- 2013–2015 – First Deputy Chairman of the Management Board adviser to the Chairman of the Management Board KazAgroFinance JSC
- 2007–2012 – Chairman of the Management Board, Fund for Financial Support of Agriculture JSC
- 2004–2007 – Regional representative, Centrasia Trade – Offshore supply & Service
- 2001–2004 – Director General, Registrator LLP
- 1995–2001 – Head of the Stock Department of the Securities and Investment Projects Division of Eurasian Bank CJSC

Length of service of members of the Board of Directors in its composition



Matrix of competences of the Board of Directors

Required knowledge	Ogay V.D.	Kashkinbekov A.K.	Zhubaev A.S.	Moldabaev K.T.	Ogay A.V.	Kazutin N.Yu.	Maksutov K.B.
Professional skills							
Strategic planning		+		+	+	+	+
Audit, risk management, internal audit, control	+		+			+	+
Environmental, Social, and Corporate Governance, ESG	+	+		+			+
Finance and economics			+			+	+
Human resources management and remuneration	+		+	+	+		
Project management	+	+	+	+	+		
Occupational health and safety in the industry	+	+		+	+	+	+
Energy/Renewable energy sector	+	+		+	+		+
Experience							
Applicable industry experience (energy sector)	+				+		
Experience in a management position (CEO, CEO-1)		+	+				+
Work experience in the field of activity		+	+	+			+
Experience as a member of the Board of Directors	+	+	+	+	+	+	+
Education							
PhD/MBA/other master's degree	+	+		+	+	+	+
CFA/CPA/other similar degree			+				
CIA/other similar degree			+				

Activities of the Board of Directors

The Board of Directors meets in accordance with the working plan as approved before the calendar year and including the list of issues under consideration and the schedule of meetings. The Board of Directors considers and decides on issues of an important and strategic nature only at meetings in praesentia. Materials for meetings of the Board of Directors are provided for in advance – at least seven calendar days prior to the meeting, and on the more important and strategic issues not less than 15 working days prior to their consideration.

Attendance of meetings by members of the Board of Directors was

100%

In 2024, the Company's Board of Directors held

19 meetings:

11 meetings in praesentia

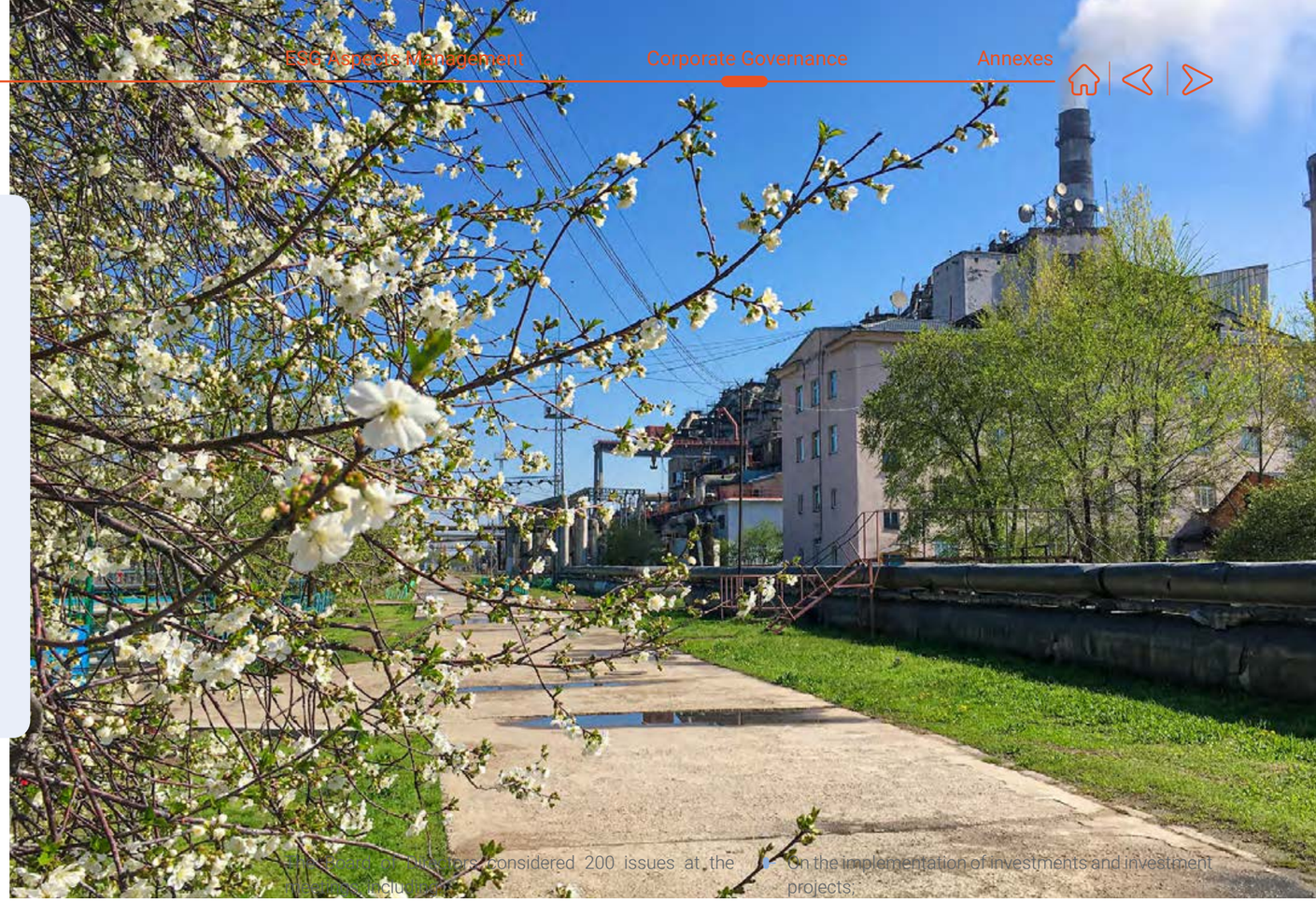
8 meetings in absentia

Statistics on attendance of the Board of Directors members at meetings of the Board of Directors and Committees in 2024

NAME	Board of Directors	Nomination and Remuneration Committee	Audit Committee	Strategic Planning Committee	Committee on Safety, Occupational Health and Environmental Protection
Kazutin N.Yu.	100%	-	-	-	-
Moldabaev K.T.	100%	-	-	100%	100%
Ogay A.V.	100%	100%	-	-	-
Ogay V.D.	100%	100%	100%	-	100%
Kashkinbekov A.K.	100%	-	100%	100%	100%
Zhubaev A.S.	100%	100%	100%	100%	-
Maksutov K.B.	100%	-	-	-	-

Statistics of the Board of Directors' activities in 2024

Indicator	Board of Directors	Nomination and Remuneration Committee	Audit Committee	Strategic Planning Committee	Committee on Safety, Occupational Health and Environmental Protection
Execution of the annual Work Plan (%)	100%	100%	100%	100%	100%
Number of face-to-face/part-time meetings (pcs.)	12/7	10/0	10/0	7/0	4/0
Average duration of meetings (hours/minute)	50	50	34	33	22
Average number of items on the agen-da (pcs.)	9	7	6	4	2
Average duration of discussions of agenda items (min.)	5	7	6	7	9



[illegible] considered 200 issues at the [illegible]

- Approval of registration of the Liquidity Management Programme for the Company's Group on the Astana International Exchange.
- Report on verification of the results of execution of the Company's Transformation Programme.
- Granting consent to a member of the Board of Directors to serve as an independent member of the Supervisory Board.
- Approval of the Scheme of official salaries of employees reporting to the Company's Board of Directors.
- Some issues of Forum Muider B.V.
- Approval of the Succession Programme for key positions of CEO-1 for 2024.
- Approval of the Company's Development Strategy for 2024–2033.

As part of the quarterly reporting in 2024, the Board of Directors heard reports:

- On the implementation of investments and investment projects;
- On work in the field of occupational health and safety, occupational injuries and environmental protection;
- On the execution of the action plan for the development strategy implementation.

The Board of Directors also reviewed reports:

- On stakeholder engagement and feedback mechanism;
- On compliance/non-compliance with the principles and provisions of the Corporate Governance Code;
- On the implementation of the activities of the Sustainable Development Initiatives Plan;
- On ensurance of information security (cyber security), as well as to analysis and assessment of the adequacy of the Company's internal controls in terms of protecting and maintaining IT systems and infrastructures.

In 2025, the Board of Directors will focus on strategic issues, in particular on the reduction of corporate issues of an administrative and operational nature.

Committees of the Board of Directors of Samruk-Energy JSC

GRI 2-9

The Board of Directors delegates powers to its Committees for fulfilling certain tasks, efficient functioning and due attention to in-depth examination and high-quality study of issues and decisions made. The Committees act in accordance with the Regulations on the Committee.

The current Committees under the Board of Directors are responsible for preparing recommendations in the economic, environmental and social spheres:

- Audit Committee;
- Nomination and Remuneration Committee;
- Strategic Planning Committee;
- Health, Safety and Environment Committee.

The Board of Directors makes decisions on these aspects taking into account the principles of sustainable development and based on an in-depth study of the recommendations developed by the Committees.

In the reporting period, there were no changes in the functions of the existing Committees under the Board of Directors or the Management Board, and no new Committees were created.

Audit Committee

The Committee aims its activity to assist the Board of Directors in profound study of issues on effective system of control over the Company's financial and economic operation. This includes the control over the completeness and reliability of financial statements, the reliability and efficiency of internal control and risk management systems, execution of corporate governance documents, independence of external and internal audit, as well as compliance with the laws of the Republic of Kazakhstan.

Committee Composition:

- Zhubaev Armanbay Saparbayevich – Independent Director, Chairman of the Committee;
- Kashkinbekov Arman Kairberlievich – Independent Director, member of the Committee;
- Ogay Valeriy Dmitrievich – Independent Director, member of the Committee.

In 2024, the Audit Committee held

8 meetings in presentia

and considered

58 issues

The main ones include the work of the Internal Audit Service, the Compliance Service and the Risk Management and Internal Control Department.

Attendance of voting members was

100%

Also in the reporting period, the Committee met with the external auditors and the Executive Body on the preparation of the financial statements.

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.

Committee Composition:

- Ogay Valeriy Dmitrievich – Independent Director, Chairman of the Committee;
- Zhubaev Armanbay Saparbayevich – Independent Director, member of the Committee;
- Ogay Aleksey Vladimirovich – Committee member, Representative of the Sole Shareholder.



In 2024, the Nomination and Remuneration Committee held

12 meetings in presentia

and considered

78 issues

The main ones include:

- Provision of recommendations to the Board of Directors on election of members of Supervisory Boards/Boards of Directors for the Samruk-Energy JSC Group of companies;
- Approval of job descriptions for the positions of 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 Security and Risks, Chief Investment Officer;
- Consideration of the individual development plans of the Chairman and members of the Company's Management Board for 2024;
- Consideration of Actual values of key performance indicators of the Management Board members, Head of the Internal Audit Service and Corporate Secretary of Samruk-Energy JSC, as well as motivational KPIs of these persons;
- Consideration of the Rules of Labour Remuneration and Bonus Payment for Executive Employees, Employees of Internal Audit, Compliance, Corporate Secretary and Ombudsman of Samruk-Energy JSC in the new edition.

Attendance of voting members was

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.

Committee Composition:

- Kashkinbekov Arman Kairberlievich – Independent Director, Chairman of the Committee;
- Zhubaev Armanbay Saparbayevich – Committee member, Independent Director;
- Moldabaev Kanysh Tanirbergenovich – member of the Committee, Representative of the Sole Shareholder.

In 2024, the Strategic Planning Committee held

11 meetings in presentia

and considered

71 issues

Among the main ones are the Quarterly Reports:

- On preliminary consideration of the Development Strategy of Samruk-Energy JSC for 2024–2033.
- On preliminary consideration of the Company's Development Plan (business plan) for 2025–2029.
- On consideration of the Action Plan for the implementation of the Company's Development Strategy for 2024–2033.
- On the execution of the Company's Development Plan.
- On preliminary approval of the Materiality Matrix of Samruk-Energy JSC.
- On investment development and investment projects.
- On providing recommendations to the Board of Directors of Samruk-Energy JSC on the issue of approval of the Company's Energy Transition Programme until 2060 in a new version.
- On the preliminary consideration of the revised Sustainable Development Guidelines.
- On the provision of recommendations on the issue of approval of the Report on the results of execution of the Transformation Programme of Samruk-Energy JSC for 2015–2022, taking into account data verification.

Attendance of voting members was

100%

Health, Safety and Environmental Protection Committee

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.

In 2024, the Health, Safety and Environmental Protection Committee held

5 meetings in presentia

and considered

17 issues

Committee Composition:

- 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.

Key issues reviewed included the following Quarterly Reports:

- On the 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 issues;
- On the action plan to achieve zero injuries for 2024;
- On the action plan for the management of environmental issues for 2024.
- On imposing disciplinary sanctions for accidents occurred in 2024.
- On consideration of the Environmental Safety Programme of the Group of companies of Samruk-Energy JSC.

Attendance of voting members was

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 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). 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 Management Board ensures prompt and efficient solution of the Company's daily tasks, as well as the implementation of the strategy and development plan.

The Board ensures:

- Operation in accordance 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.

Composition of the Management Board

GRI 2-9, 405-1, GRI 12: Coal Sector: 12.19.6

The Management Board of Samruk-Energy JSC consists of seven members. The share of top managers hired from the local community in 2024 was 100 per cent.

Age

30–50 years old 57%

50+ 43%

Gender composition

Men 86%

Women 14%



Maksutov Kairat Berikovich

Chairman of the Management Board

Citizenship: Republic of Kazakhstan

Date of birth: 16 May 1970

Responsibilities:

Responsible for operations, strategy implementation, energy production, equity growth, project management, productivity improvement and human capital development. He is personally responsible for anti-corruption measures, fulfilment of compliance instructions and compliance with the anti-corruption management system.



Turgambayev Ruslan Elubaevich

Managing Director on Production

Citizenship: Republic of Kazakhstan

Date of birth: 30 April 1974

Responsibilities:

Responsible for implementation of development plans, control of production, capital construction, repairs and investment programmes. Supervises energy saving, energy efficiency and environmental safety. Supervises the introduction of innovative technologies and capital construction project management. Personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.



Kamalov Almasbi Nizamaddinovich

Managing Director for Economics and Finance

Citizenship: Republic of Kazakhstan

Date of birth: 7 April 1989

Responsibilities:

Responsible for financial stability, economic and tariff policy, investment activities, tax analysis and strategic planning. Ensures reliable reporting, control of strategy implementation and efficiency of investment decisions. Personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.



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, corporate governance and legal support for the Company and subsidiaries and affiliates. Controls the implementation of the target asset structure, legal support of investment projects and efficient use of financial resources. He is personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.



Aydarov Ansar Aydaruly

Chief Investment Officer

Citizenship: Republic of Kazakhstan

Date of birth: 24 April 1986

Responsibilities:

Manages the analysis and evaluation of investment projects, attraction of investments and financing, as well as optimisation and reorganisation of assets in the energy sector. He is personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.

THE FULL CV OF EACH BOARD MEMBER IS AVAILABLE AT: WWW.SAMRUK-ENERGY.KZ



Ivchenko Yelena Dmitrievna

Managing Director for GR, Development and IT

Citizenship: Republic of Kazakhstan

Date of birth: 09 April 1975

Responsibilities:

Supervises the realisation of electricity and coal volumes, development of new markets and improvement of the energy market model. Responsible for digitalisation, automation of business processes and implementation of IT solutions. Liaises with the shareholder, state authorities and develops proposals to improve legislation. Personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.



Baltabaev Askar Kuatbaevich

Managing Director for Support and Risks

Citizenship: Republic of Kazakhstan

Date of birth: 16 September 1979

Responsibilities:

Responsible for risk management, internal controls, business continuity, procurement, marketing and administration. Monitors the efficient use of funds and profitability improvement. Personally responsible for anti-corruption measures, fulfilment of compliance instructions and mitigation of compliance risks.

The Management Board performance

The Executive Body holds face-to-face meetings and discusses issues related to the implementation of the development plan, decisions of the Sole Shareholder, the Board of Directors and operational activities. Special attention is paid to occupational safety issues.

During the reporting period, the Management Board limited the number of meetings in absentia.

In 2024, the Management Board held 41 meetings and considered 326 issues. In particular, the issues discussed included the implementation of the Development Strategy, Decisions of the Sole Shareholder, the Board of Directors and operational activities.

The Management Board paid special attention to occupational health and safety, information security (cyber security), as well as analysing and assessing the adequacy of the Company's internal controls in terms of protecting and maintaining IT systems and infrastructures.

The Policy on Non-Discrimination in Samruk-Energy JSC and the Energy Transition Programme of Samruk-Energy JSC until 2060 were approved.

Internal regulatory documents of subsidiaries and affiliates, total number of personnel, organisational structure, staffing table and salary schemes for employees of the Samruk-Energy Group of companies of Samruk-Energy JSC were also approved. Issues on investment projects of subsidiaries and affiliates, on changing the size of subsidiaries and affiliates' authorised capitals and amending subsidiaries and affiliates' charters were considered. Positions for voting by representatives of Samruk-Energy JSC in the bodies of subsidiaries and affiliates were determined, etc.

Committees of the Management Board

GRI 2-9

For more in-depth and qualitative consideration of issues, the Management Board has established standing committees. The activities of the committees under the Management Board contribute to a deep and thorough consideration of issues within the competence of the Management Board and improve the quality of decisions made. The final decision on issues considered by the Committees is made by the Management Board. All Committees are accountable to the Company's Management Board and act within the competence granted to them by the Management Board. The functions, powers, composition and process of organising the activities of the Committees are regulated in the respective regulations and approved by the Management Board.

Risk Committee

Assists the Management Board in making decisions in the area of risk management and internal control of the Company, prepares recommendations and proposals for organising and maintaining an effective risk management and internal control system, ensuring their operation and development of processes designed to identify, measure, monitor and control risks, and is also engaged in preparing proposals to control the coordination of work in these areas.

Committee Composition:

- The Committee is chaired by the Managing Director for Procurement and Risk;
- Committee members – Managing Director for GR, Development and IT, Managing Director for Economics and Finance, Managing Director for Production, Managing Director for Legal Support and Asset Management, Chief Investment Officer, Director of the Risk Management and Internal Control Department, Head of Internal Audit (non-voting), Compliance Officer of the Compliance Service (non-voting).

In 2024, the Risk Committee met

5 times in presentia

and considered

9 issues

Key issues:

- Preliminary approval of the Risk Management Report (with description and analysis of key risks, as well as information on implementation of plans and programmes for risk minimization of Samruk-Energy JSC for Q4 2023, Q1, Q2, and Q3 2024);
- Preliminary approval of the consolidated Risk Register, consolidated Risk Map, Key Risk Management Action Plan with determination of tolerance levels for each key risk, Passports of key risk indicators of Samruk-Energy JSC for 2025;
- Consideration of the Report on execution of the Department's Work Plan for 2024 and approval of the Department's Work Plan for 2025;
- Consideration of the Report on execution of the Risk Committee's Work Plan for 2024 and approval of the Risk Committee's Work Plan for 2025.

The attendance rate of the Committee members was

94%

Planning and Performance Evaluation Committee

The purpose of the Committee is to improve the performance efficiency of the Samruk-Energy JSC Group of companies, including optimisation of their asset and cost structure, monitoring of KPIs, review of Development Plans, financial statements.

Committee Composition:

- Chairman of the Committee – Managing Director for Economics and Finance;
- Deputy Chairman of the Committee – Managing Director for GR, Development and IT;
- Committee members – Managing Director for Production and Asset Management, Managing Director for Security and Risks, Head of Procurement Management Department, Chief Auditor of the Internal Audit Service (non-voting).

In 2024, the Planning and Performance Evaluation Committee held

55 meetings in presentia

and considered

107 issues

Among the main ones: approval of the Corporate Centre and subsidiaries and affiliates budget adjustment within the approved annual budget figures for the first calendar year, as well as consideration of reports on the implementation of the subsidiaries and affiliates Development Plan for the 2023 and 2024 and the draft subsidiaries and affiliates Development Plan for 2024–2028.

The attendance of the Committee members was

100%

Investment and Innovation Council

The Council contributes to increasing the efficiency of investment and innovation activities in the Group of companies of Samruk-Energy JSC. To ensure achievement of its main objective, the Council performs the following functions by considering and (or) making recommendations for the authorised bodies of the Company and subsidiaries and affiliates on investment and innovation activities, on implementation of certain stages of pre-investment and investment project stages, determination of new, perspective business directions of the Company and subsidiaries and affiliates development, acquisition and alienation of shares (participation interests) of other legal entities by the Company.

Composition of the Council:

- The Chairman of the Council is the Chairman of the Management Board;
- Deputy Chairman of the Council – Managing Director of Operations;
- Members of the Council – Managing Director for GR, Development and IT, Managing Director for Economics and Finance, Managing Director for Legal Support and Asset Management, Managing Director for Procurement and Risks, Chief Investment Officer, Head of Compliance Service (non-voting expert), Chief Auditor of Internal Audit Service of Samruk-Energy JSC (non-voting expert).

In 2024, the Investment and Innovation Council met

7 times in presentia

and considered

15 issues

Among the main ones: On some issues of the Construction of coal-fired thermal power centre (TPP) in Kokshetau city project, On some issues of the Construction of the First Hydro accumulating station in Kazakhstan project.

Investment and Innovation Council member attendance was

90%

Credit Committee

The main tasks of the Credit Committee are to ensure timely and quality decision-making on issues related to attraction, provision of credits (loans), financial assistance and issuance of guarantees, minimisation of risks, with development of recommendations on effective management of the structure of assets and liabilities of Samruk-Energy JSC.

Committee Composition:

- Chairman of the Committee – Managing Director for Economics and Finance;
- Committee members – Managing Director for Production, Managing Director for Procurement and Risks, Director of Treasury and Corporate Finance Department, Director of Risk Management and Internal Control, Chief Investment Officer;
- Independent expert – Head of the Compliance Service.

In 2024, the Credit Committee met

17 **times in presentia**

and considered

18 **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 attendance rate of the Committee members was

86%

Health, Safety and Environmental Protection Committee

The Committee's purpose is to ensure that the Company's health and safety issues are effectively addressed by providing appropriate guidance on how to assess the effectiveness of policies and systems for identifying and managing health and safety risks. Analysing all fatal accidents and serious incidents and the actions taken as a result of such accidents and incidents. Reviewing the results of any independent health and safety audits, reviewing any strategies and action plans developed in response to issues raised and, where possible, making recommendations to the Board in relation to these issues.

Committee Composition:

- The Chairman of the Committee is the Chairman of the Management Board;
- Deputy Chairman of the Committee – Director of the Labour Protection Department;
- Committee members – 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 Occupational Health Department.

In 2024, the Health, Safety and Environmental Protection Committee met

7 **times in presentia**

and considered

8 **issues**

Among the main reports considered were: on work in the field of labour safety and health and industrial injuries, the Plan for achieving zero injuries in the Samruk-Energy JSC Group of companies for 2025, the Regulations on Prevention and Improvement of Health of Employees of the Company's Group of companies, the Regulations on the Club of Voluntary Association of Employees of Samruk-Energy JSC on issues of industrial safety, as well as the annual report on the Committee's work.

The attendance of the Committee members was

100%

Conflict of interest

GRI 2-9

To create an effective system for managing conflicts of interest and to establish behavior requirements for employees, which minimise the risks of decision-making influenced by personal interests and relationships within the Company, several measures are implemented.

We implemented Policy for the resolution of corporate conflicts and conflict 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 for the resolution of corporate conflicts and conflict of interest, the members of the Board of Directors had no conflict of interest in 2024. 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 decision-making. The members of the Board of Directors did not discuss and make such decisions.



Internal and external audit

Samruk-Energy JSC 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 on the work of the Internal Audit Service on the website of Samruk-Energy JSC https://www.samruk-energy.kz/en/company/corporate-governance/corporate-governance-main-en/internal-audit).

The Service's mission is to provide the necessary assistance to the Board of Directors and the Executive Body in fulfilling their duties to achieve the strategic goals of the Company and its subsidiaries and affiliates.

The main purpose of the Service is to provide the Board of Directors with independent and objective guarantees and advice aimed at improving risk management, internal control and corporate governance systems in the Samruk-Energy JSC and its subsidiaries and affiliates.

The main tasks of the Service are:

- assessing and promoting the improvement of the internal control system;
- assessing and contributing to the improvement of the risk management system;
- assessing the risk of committing fraud and the effectiveness of fraud risk management in the Group of companies;
- assessing and promoting the improvement of the corporate governance system in the Group of companies;
- assessing reliability, completeness, objectivity of the accounting system and reliability of financial statements;
- assessing fulfilment of the requirements of the legislation of the Republic of Kazakhstan, requirements of Samruk-Kazyna JSC's regulatory documents, as applicable to the Company (compliance control) and its subsidiaries and affiliates;
- assessing the rationality and efficiency of resource use in the Group of companies, as well as the methods (methods) used to ensure the safety of assets in the Group of companies;
- methodologically supporting for the internal audit service and audit commissions of the Company's subsidiaries and affiliates.



Kasymbekov Bekzhan
Head of IAS

An effective internal audit functions not merely as a control mechanism, but as a strategic instrument for strengthening the Company's resilience and enhancing its transparency. The primary objective of the internal audit function is to provide the Board of Directors and the Shareholder with independent and objective assurance that the Company is governed in a transparent, accountable manner and in the best interests of all stakeholders.

Adherence to such ethical standards is a key driver of genuine corporate sustainability and aligns the Company with leading international best practices.

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.

Main areas of inspections of the reporting period:

- Audit of financial and economic activities;
- Assessment of the extent to which management's KPIs have been achieved;
- Audit of portfolio companies' interaction with trade union organisations;
- Audit of the organisation and effectiveness of the compliance function;
- Evaluation of the health and safety process;
- IT Audit;
- Evaluation of procurement processes.

In 2024, the Internal Audit Service performed

24 audits,

including unscheduled audits and audits in accordance with the Annual Audit Plan. As part of the audit reports, the Internal Audit Service provided

293 recommendations:

37 of A category,

74 of B category, and

184 of C category

All audit assignments were performed in accordance with the International Standards for the Professional Practice of Internal Auditing and contain opinions, findings and recommendations aimed at taking corrective/preventive actions to improve risk management, internal control and corporate governance systems.

The Service's performance is assessed annually to ensure compliance of the Service's activities with the Standards and compliance of internal auditors' activities with the Code of Ethics, as well as to identify opportunities for improvement of the Service's activities.

We conduct an independent external evaluation of the Service every five years in accordance with the International Professional Standards for Internal Auditing.

The Board of Directors of Samruk-Energy JSC annually assesses the efficiency of the Service's activity.

At the end of 2024

the Board of Directors assessed the Internal Audit Service's performance to be "EFFICIENT"

External audit

Since 2012, the Company's external auditor has been PricewaterhouseCoopers (hereinafter referred to as PwC).

Cost of audit services provided by PwC's external auditor in 2024 (excluding VAT), KZT million

	2024
Group of companies of Samruk-Energy JSC	256.39
Including the Head Office of Samruk-Energy JSC	84.45

Fee paid to the audit firm in 2024 for audit services (including VAT), KZT million

	2024
Group of companies of Samruk-Energy JSC	274.37
Including the Head Office of Samruk-Energy JSC	92.1

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 their duties as a member of the Board of Directors of Samruk-Energy JSC.

The Company indemnifies An Independent Director for expenses (travel, accommodation, daily allowance) related to attending meetings of the Samruk-Energy JSC Board of Directors and its Committees held outside their permanent residence.

Remuneration to Independent Directors for 2024 amounted to KZT

47,281,000

As of 31 December 2024, there are four Independent 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;
- simplicity and transparency of the principles for determining remuneration;
- 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 KPIs.

Remuneration of key management personnel represents salaries, bonuses and other short-term employee benefits.

In 2024, remuneration of key management personnel totalled KZT

337,311,000

As at 31 December 2024, the key management personnel of the Company is seven persons

Amount of remuneration, '000 KZT

Indicator	2023	2024
Key management personnel	358.801	337.311
Independent Directors – members of the Board of Directors (expenses)	41.686	47.281
Independent Directors – members of the Board of Directors (obligation)	12.017	8.667



Securities

Share capital

Based on the results of the Company's performance, as of 31 December 2024, the number of announced securities is 8,602,187, which makes 6,952,267 of the placed ones.

As at 31 December 2024, 6,952,267 ordinary shares in issue were fully paid in the amount of KZT 507,435,225 thousand (31 December 2023: 6,311,967 shares in the amount of KZT 443,567,998 thousand). Each ordinary share is entitled to one vote. The Company has no preference shares. The number of authorised shares equals 8,602,187 (31 December 2023: 8,602,187 shares). As at 31 December 2024, Samruk-Kazyna JSC is a 100% shareholder of the Company (2023: 100%).

The par value of one ordinary share as at 31 December 2024 was KZT

10,000

Basic earnings per share are calculated as the ratio of profit attributable to shareholders of the Samruk-Energy JSC Group of companies to the weighted average number of ordinary shares outstanding during the year.

Samruk-Energy Group of companies JSC has no dilutive potential ordinary shares, therefore, diluted earnings per share coincides with basic earnings per share.

Earnings per share, thousand KZT

Indicator	2024	2023
Profit for the year attributable to equity holders of the Group (in KZT thousands)	112,507,839	56,734,968
Weighted average number of ordinary shares outstanding, units	6,736,618	5,849,608
Earnings per share attributable to shareholders Groups of Companies of Samruk-Energy JSC (rounded to a KZT)	16,701	9,699

In accordance with the decision of the Exchange Council of Kazakhstan Stock Exchange JSC (KASE) dated 4 October 2010, the consolidated financial statements should contain data on book value per share (common and preferred) as at the reporting date, calculated in accordance with the rules approved by the KASE.

As at 31 December 2024 this indicator calculated by the Group's management based on the consolidated financial statements amounted to KZT 110,361 (31 December 2023: KZT 109,006).

Book value per share, thousand KZT

Indicator	2022	2023	2024
Total assets	**965,846,026**	**1,147,518,441**	**1,414,286,399**
Less: intangible assets	(3,726,203)	(3,873,844)	(5,545,328)
Minus: total liabilities	(432,732,405)	(455,602,222)	(641,483,819)
Net assets for ordinary shares	529,387,418	688,042,375	767,257,252
Number of ordinary shares as of 31 December	5,632,537	6,311,967	6,952,267
Book value per share, KZT	**93,987**	**109,006**	**110,361**

Dividend Policy

Our Dividend Policy is based on the principles of respecting the interests of the Sole Shareholder, increasing long-term value, transparency of the mechanism for determining the amount of dividends and ensuring the financial stability of the Company.

Dividends are calculated based on the amount of the Company's net income as shown in the annual audited financial statements prepared in accordance with the requirements of the accounting and financial reporting legislation of the Republic of Kazakhstan and International Financial Reporting Standards.

In order to make a decision on dividend payment, the Board of Directors submits for consideration of the Sole Shareholder proposals on distribution of the Organisation's net income for the expired financial year and the amount of dividend for the year per one ordinary share.

Dividends shall be paid within the term established by the decision of the Sole Shareholder.

Dividend payout, thousand KZT

Period	Amount
2024 (based on 2023 results)	24,815,868
2023 (based on 2022 results)	2,041,000
2022 (based on 2021 results)	2,041,000

Risk management and internal control

GRI 2-9, 2-12, 2-13, 2-16

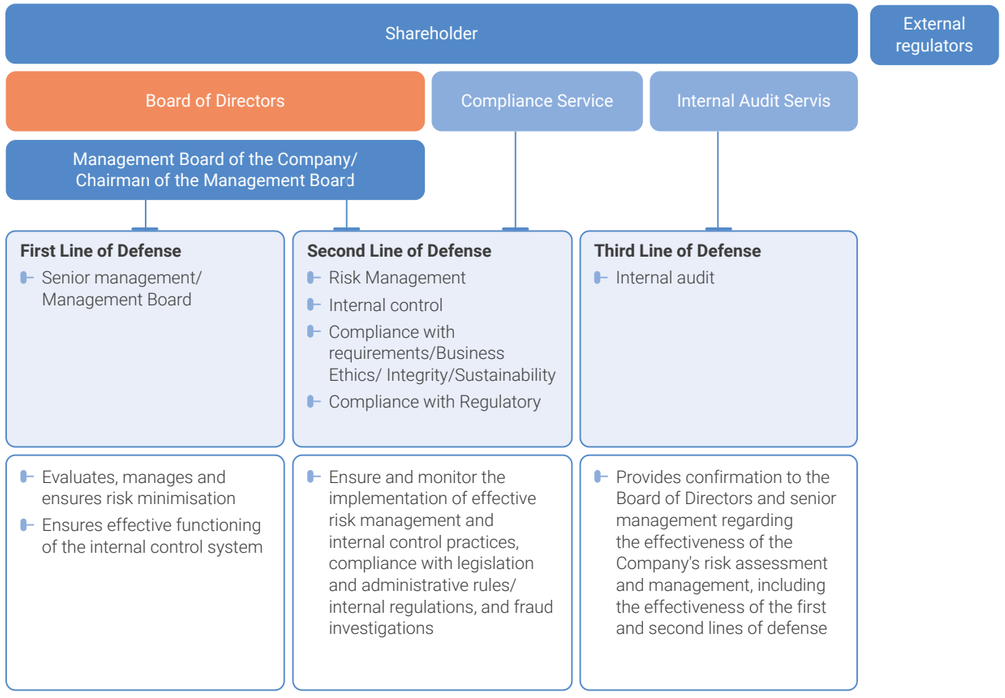
As part of the sustainable development strategy of Samruk-Energy JSC, effective risk management is an important element, enabling the Company to achieve its strategic goals and minimize potential threats. Risk management covers all aspects of the Company's activities, including environmental, social and economic components, as well as specific risks related to labour protection, corporate governance and legal aspects.

The Company adheres to international standards, including the COSO standard and the Three Lines of Defence model, which ensures a comprehensive approach to risk management. The risk management system is aimed at timely identification, assessment, management, monitoring and control of corporate risks. This process enables management to make risk-based decisions, adequately assessing their impact on the business in the short and long term. Modern risk analysis and management tools are used for effective control, which allows optimising business processes and making informed management decisions.

The main internal corporate documents reflecting the key principles and components of the risk management system and the functional responsibilities of risk management subjects include:

- Risk Management Policy in Samruk-Energy JSC
- Rules for identification and assessment of Samruk-Energy JSC risks
- Regulations on the Internal Control System of Samruk-Energy JSC

Risk management and internal control system



The Risk Register and Risk Map for 2024 include 33 risks (detailed description on pp. 56–61). In 2024, as part of the implementation of the Roadmap for Improving the Sustainable Development Management System, an expanded identification and assessment of sustainable development risks was carried out. Special attention was paid to environmental, physical and transient climate risks, which were included in the consolidated Risk Register for 2025, namely:

Name of key risk	Description of possible consequences of the risk realisation
Climatic physical risks	Direct physical damage to the asset Deterioration of operating conditions Increased frequency of service Deterioration of working conditions of employees Business interruptions Floods and inundation of the territory Relief change Snow drifts, ice, icing
Climate Transition Risks	Increase in tax rates for environmental emissions and increase in the Company's costs Declining climate ratings and loss of credibility Changes in project implementation timeframes and/or project cost increases Possibility of non-compliance with technology Threat to energy security Potential non-compliance with carbon intensity levels as energy consumption grows Possible insufficiency of RES resources Social tensions Increase in costs due to changes in exchange rates
Environmental Risks	Increasing the rates of payment for pollutant emissions Fines for violations of environmental and/or water legislation requirements Negative impacts on fish populations and biodiversity Degradation of catchment areas

For each of these risks, measures have been developed to manage them, taking into account possible consequences. The risk management system makes it possible to minimise the negative impact on the Company and guarantee high results at all management levels.

Internal control system and business continuity management

The organisation of the internal control system ensures control over core and auxiliary business processes, as well as effective response to risks. The system is oriented towards promptly informing management of significant deficiencies and areas for improvement, which contributes to increasing the transparency and sustainability of the Company's processes. Importantly, the Company's business continuity management system complies with international standards and provides for regular monitoring and testing of business continuity and recovery plans.

In 2025, the Risk Management and Internal Control department will continue to improve the system, with a focus on supporting subsidiaries and affiliates to enhance their risk resilience and ensure comprehensive continuity management.

Risk appetite and risk monitoring

The Board of Directors has set the Company's risk appetite, which includes restrictions on key activities. This allows for effective risk management and timely risk mitigation measures. The Company's risk appetite is regularly monitored and updated quarterly to reflect changes in the external environment and business realities.

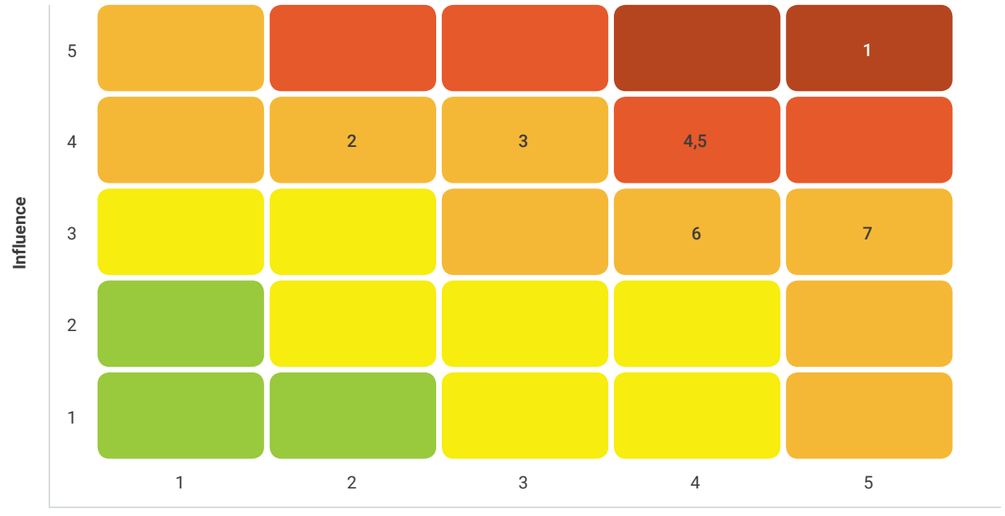
Risk management action plan

We annually develop and submit to the Board of Directors for review and approval – Risk Register, Risk Map, Key Risk Indicators (KRIs) and Key Risk Management Action Plan.

As a result of the risk identification work carried out by the Samruk-Energy JSC Group of companies in 2024, 33 risks inherent to the Company's activity were identified and assessed, KPI thresholds were updated, risk factors and mitigation measures were updated by risk owners.

Based on the reassessment results, seven risks were included in the key zone of the Risk Map of Samruk-Energy JSC companies for 2024 (9 key risks in 2023).

Risk map of the Samruk-Energy JSC Group of companies for 2024 (Key risks)



1. Risk of damage to health and life of employees in the course of fulfilment of their duties, industrial accidents
2. Risk of accidents and disasters at work
3. Climate risks
4. Risks of ongoing/prospective investment projects and investment programmes of subsidiaries and affiliates
5. Risk of asset impairment
6. Credit risk of counterparty banks
7. Interest rate risk

Risks of Samruk-Energy JSC and risk management measures

Description of possible consequences of the risk realisation	Major changes	Implemented risk management measures
Risk of damage to health and life of employees in the course of fulfilment of their duties, industrial accidents		
• Harm to the health and life of production personnel; • Litigation, payment of compensation; • Decrease in the reputation of Samruk-Energy JSC and subsidiaries and affiliates; • Fines for violation of the requirements of the legislation of the Republic of Kazakhstan.	No change	• Control over fulfilment in subsidiaries and affiliates of measures developed under the Action Plan for achieving zero injuries in the Samruk-Energy JSC Group of companies. • Timely provision of employees with personal protective equipment. • Carrying out scheduled and unscheduled on-site inspections of subsidiaries and affiliates for compliance with regulatory legal acts and internal documents in the field of occupational health and safety. • Control of employee training in the field of occupational health and safety, testing of knowledge of technical operation rules, safety techniques. • Participation in accident investigations (when accidents occur and inclusion in the commission order). • Control over the implementation of measures specified in accident investigation reports in the subsidiaries and affiliates that caused the accident, as well as the development of measures to prevent accidents in other subsidiaries and affiliates.
Risk of accidents and disasters at work		
• Injuries and fatalities at work; • Environmental damage; • Accidents, Failures of I and II degree according to the Rules for investigation and accounting of technological failures. Technological failures of production equipment (emergency and unscheduled repairs of the generating unit); • Under-supply of electric and heat energy; • Unscheduled repairs of equipment; • Occurrence of unforeseen expenses; • Downtime of the equipment; • Losses due to compensation for emergency decommissioned capacity at an electricity price higher than the selling price; • Lack of electric capacity reserves in the energy system of Kazakhstan.	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 risks		
• Physical damage to production assets; • Increasing tax rates for greenhouse gas emissions; • Fines for violations of legislative restrictions; • Disruptions in the supply chain of electricity, coal; • Increase in the cost and duration of investment projects; • Interruptions in production; • Flooding and inundation of territory; • Negative impacts on fish populations and biodiversity; • Degradation of watershed areas.	No change	• Monitoring compliance with environmental and water legislation and deadlines for submitting emission permit applications and reporting to state regulatory authorities. • Monitoring of greenhouse gas emission quota limit utilisation, adjustment. • Compulsory environmental insurance. • Monitoring the implementation of international standards of environmental management. • Monitoring of budget execution under the item of environmental protection.

Description of possible consequences of the risk realisation	Major changes	Implemented risk management measures
Risks of ongoing/prospective investment projects and investment programmes of subsidiaries and affiliates		
• Economic inefficiency, including of newly introduced technologies; • Increase in the cost of implemented projects; • Increasing the timeframe for project implementation; • Failure to fulfil the strategic targets for the growth of installed and available capacity and production volumes; • Failure to achieve the planned effect; • Decrease in the long-term value of assets; • Refusal of co-investors/partners to participate in joint projects being implemented; • Negative impact on the Company's reputation; • Technological failure of equipment; • Failure to implement economically viable projects; • Failure to achieve project targets, reduction of the investment efficiency indicator; • Failure to realise the planned funds for the investment projects being implemented.	No change	• Submission of materials to the Board of Directors of the Company on investment utilisation under investment projects of Samruk-Energy JSC. • Quarterly report on the implementation of the Development Plan in terms of investments. • Continuous monitoring and adjustment of action plans for prospective projects.
Risk of asset impairment		
• Loss due to impairment; • Decrease in asset value; • Decrease in the investment attractiveness of assets.	No change	• 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 subsidiaries and affiliates' reports.
Credit risk of counterparty banks		
• Loss of temporarily free cash placed in second-tier banks; • Loss of temporarily free cash invested in corporate securities; • Decrease in liquidity.	Decrease in impact	• Improvement of the situation due to the positive dynamics of reduction of problem claims over the past three years. • Monitoring of compliance with limits on counterparty banks, as well as regular assessment of the stability of second-tier banks.
Interest rate risk		
• Increase in debt capital servicing costs; • Decrease in the amount of profit; • Decrease in temporarily free cash, • Increase in the payback period of investment contributions; • Non-fulfillment of contractual obligations to the creditor.	No change	• There is a trend of gradual decline in two main indicators (the base interest rate of the National Bank of Kazakhstan and the inflation rate are stable), which provides grounds for reviewing the risk for mitigation in future periods.





Ivchenko Yelena Dmitrievna

Managing Director for GR, Development and IT

Digitalisation constitutes a strategic imperative for the Company, shaped by evolving market demands and the expectations of our partners and employees.

To date, we have successfully transitioned a number of critical processes — including payments, archiving, and compliance — into digital formats. This transformation has significantly improved the transparency, efficiency, and controllability of our business operations.

These efforts mark only the beginning. Looking ahead, our focus will include the automation of production data, the implementation of intelligent monitoring systems, and the integration of artificial intelligence technologies to support forecasting and decision-making.

Digital transformation remains one of the Company's principal strategic priorities, and we are committed to advancing this agenda in a structured, consistent, and forward-looking manner.

Information security

GRI 3-3

In accordance with the Information Security Policy of Samruk-Energy JSC, the Company aims to build an information protection system that complies with the international standard ST RK ISO 27001 "Information Technologies. Methods and means of ensuring security. Information security management systems". To realise this goal, internal regulatory documents were developed and approved, and the following key measures are being implemented:

- Development and updating of the information security management system (ISMS);
- Identification of information security risks and identification of information asset owners;
- Information security risk assessment and processing;
- Coordinate the development and implementation of control activities;
- Execution of information security measures;
- Information security risk monitoring and reporting;
- Continuous improvement of the information security management system.

Responsibility for ensuring information security in the Company is assigned to the Security Department, which is an independent structural subdivision and is directly subordinated to the Chairman of the Management Board of Samruk-Energy JSC. In its information security activities, the unit performs the following key functions:

- Development of regulatory and administrative documentation and information security requirements;
- Ensuring interaction between business units on information security issues;
- Monitoring compliance with information security requirements;
- Monitoring of information security activities of subsidiary and affiliates;
- Interaction with state authorities on the Company's information security issues;
- Coordination of information security risk management activities;
- Interaction with the Information Security Operations Centre.

There are three main areas of consideration in the Company's IS assurance process:

- Information Security Management;
- Technical provision of information security;
- Controlling and responding to information security incidents.

Information security management

As part of the information security management process, the Company has developed a number of documents that regulate work in this area:

- Information Security Policy of Samruk-Energy JSC;
- Rules for ensuring information security of information systems in Samruk-Energy JSC;
- Instruction on ensuring safety of confidential information in Samruk-Energy JSC.

Technical support of information security

The function of information security technical support is performed by the Security Department together with the specialists of Energy Solutions Centre LLP. Technical support means a set of measures aimed at protecting the Company's information assets using modern software and hardware.

Key activities carried out within the function:

- Providing anti-virus protection for the corporate network and branches using specialised anti-malware software;
- Creation of a demilitarised zone (DMZ) to increase the level of information security of the corporate network and resources with access to the Internet. The DMZ is implemented on the basis of a software and hardware complex of Firewall packet filters (firewalls), which provides additional packet filtering at the distribution level;
- Control software for monitoring sent and received e-mails. The system allows blocking spam senders in the perimeter of Samruk-Energy JSC, analysing e-mails for malware and preventing leakage of confidential information outside the corporate network.

Controlling and responding to information security incidents

The function of controlling and responding to information security incidents is performed by employees of the Security Department together with specialists of Energy Solutions Centre LLP. All incidents are registered and processed in the Information Security Operations Centre (ISOC) using the IS software and hardware complex.

Key activities include:

- Centralised collection, storage and analysis of security event logs;
- Real-time incident detection;
- Prioritisation of incidents;
- Oversee the incident remediation process and adherence to response times;
- Creation of compliance reports.

The results of monitoring and incident response are documented in the following reports:

- Monthly analytical report containing analysis of the state of information security infrastructure of Samruk-Energy JSC under the contract with Information Security Operations Center;
- Quarterly report on information security risks for the Board of Directors of Samruk-Energy Information Security Operations Center;
- Annual report on ensuring information security (cyber security), as well as analysis and assessment of sufficiency of Samruk-Energy JSC's internal controls for the Audit Committee and the Board of Directors.

During the reporting period, work was carried out to raise awareness of the information security management system. An annual work plan is approved, within the framework of which training materials, such as memos, screensavers and videos, are developed for all employees of the Company. A mailing list of information security innovations, requirements and preventive measures is also organised. Every year, all employees of the Company take an online test for knowledge of information security norms, which confirms their competence in this area.

At the time of recruitment, all new employees undergo an Adaptation Course, which includes information security training. In 2024, this training was provided to all newly hired employees, ensuring high awareness and compliance with information security standards from the very beginning of their employment with the Company.



GRI 418-1

During the reporting period, the Company did not record any substantiated complaints about breach of confidentiality, leakage, theft or loss of customer data

Information Security Operations Centre

Samruk-Energy JSC is connected to the Information Security Operations Centre (hereinafter referred to as the ISOC), which monitors all information security events in 24/7 mode. The ISOC is provided under a contract with QazCloud LLP, which provides the following services:

- Round-the-clock monitoring of information security events recorded by information security event monitoring and management systems, as well as external perimeter defence systems;
- Round-the-clock monitoring of information security events occurring on server equipment and network devices (hereinafter referred to as the Monitoring Zone);
- Identification of information security incidents that occur in the Monitoring Area;
- Records of identified incidents, as well as incident response methods and recommendations for remediation;
- Provide expertise in the incident response process;
- Conducting investigations of information security incidents;
- Three-level ISOC support line consisting of a team effort to provide IS monitoring, including a Red team and a Blue team. The Blue team protects the infrastructure by monitoring events around the clock and responding to cyber threats. The Red team, in turn, professionally identifies infrastructure vulnerabilities;
- Protection of web applications and WEB traffic;
- Protection from DDOS attacks;
- Weekly information security digest;
- Audit (penetration test), including external penetration testing and vulnerability identification.

Business ethics and anti-corruption activities

Samruk-Energy JSC adheres to high standards of business ethics and principles of fair business conduct, realising its responsibility to shareholders, partners and society. We believe that compliance with the norms of corporate ethics and effective anti-corruption measures, both within the Company and at all stages of the value chain, are essential conditions for sustainable development and strengthening of trust in the Company.

Management approach

GRI 2-23, 3-3, GRI 12: Coal Sector: 12.20.1

The principles and standards of Samruk-Energy JSC in the field of business ethics are based on best international practices, international standards, and the requirements of Kazakhstan legislation. The Company does not tolerate any forms of corruption and actively works to prevent them, as well as to avoid conflicts of interest. Business ethics rules apply to relations with both colleagues and business partners of Samruk-Energy JSC.

Key corporate documents regulating ethics and anti-corruption issues:

- Code of Conduct of Samruk-Energy JSC
- Anti-Corruption Policy of Samruk-Energy JSC (updated in 2024)
- Rules for verification of reliability of counterparties of Samruk-Energy JSC (approved in 2024)
- Policy of proactive informing of Samruk-Energy JSC
- Policy for the resolution of corporate conflicts and conflict of interest of Samruk-Energy JSC
- Compliance Risk Management Policy of Samruk-Energy JSC

Code of Conduct

GRI 2-26

The Code of Conduct sets out the values, basic principles and standards of behaviour that will guide us in protecting the interests of all stakeholders. The Code of Conduct is aimed at developing corporate culture and strengthening the Company's reputation as an open and honest market participant. The Code of Conduct defines standards of behaviour for all employees and members of management, regardless of the level of their position.

In 2023, the Company carried out a comprehensive update of the Code, bringing it in line with international ESG standards and best practices. The updated document pays special attention to respecting human rights, preventing conflicts of interest and protecting whistleblowers. The Code defines the roles of the Company's Board of Directors, Compliance Service, Ombudsman, and Executive Body in managing and implementing the Code of Conduct. The update also touched upon issues related to political activity, competition and antitrust legislation, lobbying and money laundering, green procurement principles, management of confidential and insider information, regulated the Company's approach to competition and antitrust legislation, and introduced norms on non-retaliation and protection of employees who report violations of the Code of Conduct in good faith.

The Code of Conduct is available at: https://www.samruk-energy.kz/images/documents/2024/kodeks_pov_se_ru.pdf

Corporate Values:

- Mentorship
- Reliability
- Fairness
- Professionalism

The Code of Conduct applies to all employees, officers and directors of the Company. Subsidiaries and affiliated organisations of the Group shall comply with the Code in accordance with their compliance risks. Business partners and suppliers are recommended to follow the provisions of the Code or similar compliance policies.

Members of the Board of Directors monitor compliance with the Code of Conduct. The Compliance Service and the Ombudsman provide reports to the Audit Committee on compliance with the Code of Conduct and identified ethical violations. Members of the Board of Directors periodically review and update the Code of Conduct and resolve corporate conflicts within their competence.

For questions regarding clarification of the Code requirements and ethical issues, as well as for reporting violations, corruption, and other unlawful actions, employees of Samruk-Energy JSC, business partners, and stakeholders may contact:

- The Compliance Services
- The Head
- The Ombudsman
- To the Internal Audit Service
- To the Corporate Secretary's Office
- By phone or email to the trust line, hotline (information published on the website and in the office)
- Through the complaints and suggestions mailbox in the Company office

At the end of 2024, there were no violations of the Code of Conduct norms by members of the Board of Directors and the Executive Body.

Principles of anti-corruption

- Zero tolerance for manifestations of corruption
- Commitment of top management and setting the "tone from the top"
- Employee engagement
- Inevitability of liability
- Legality
- Transparency
- Proportionality of procedures for preventing and combating corruption
- Effectiveness of anti-corruption procedures
- Monitoring and control
- Prevention conflicts of interest
- Due diligence
- Leadership and coordination

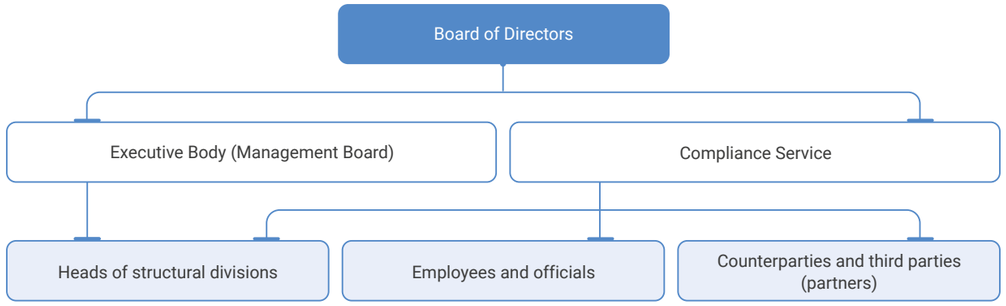
Anti-corruption Policy

In 2024, the Anti-Corruption Policy of Samruk-Energy JSC was updated and approved[51], which defines the main provisions of the Anti-corruption Policy of the Company and subsidiaries and affiliates. The Anti-corruption Policy of Samruk-Energy JSC was developed in accordance with the legislation of the Republic of Kazakhstan, the Company's Code of Conduct and internal regulations. It establishes the basic principles of anti-corruption and organisational measures to prevent corruption violations.

Governance structure

GRI 2-24

Samruk-Energy JSC has an anti-corruption management system aimed at ensuring compliance with anti-corruption standards and mitigating corruption risks in its activities.



[51] The Anti-Corruption Policy of Samruk-Energy JSC was approved by the decision of the Board of Directors of Samruk-Energy JSC dated 25 September 2024 (Minutes No.13/24).

Body	Responsibility
Board of Directors	Approves the Anti-corruption Policy and strategy. Oversees the implementation and effectiveness of the compliance system. Receives regular reports from Compliance Services. Ensures independence and adequacy of resources for the Compliance Service.
Management Board	Implements and maintains an anti-corruption system. Forms a corporate culture of zero tolerance to corrup-tion. Provides resources and conditions for the implementation of the Anti-corruption Policy. Ensures protection guarantees for whistleblowers and operation of the hotline.
Compliance Service	Develops and monitors the implementation of the Anti-corruption Policy. Conducts internal audits and corruption risk assessments. Conducts anti-corruption monitoring and analyses the effectiveness of measures. Organises training employee training and awareness. Manages the whistleblowing mechanism (hotline).
Heads of structural divisions	Implement anti-corruption procedures at the division level. Monitor compliance with the policy and identify corruption risks. Ensures policy requirements are enforced among employees.
Employees and officials	Comply with anti-corruption regulations and conflict of interest disclosure. Annually confirm commitment to the policy. Use feedback mechanisms when violations are identified.
Counterparties and third parties	Undergo anti-corruption due diligence. Fulfil anti-corruption obligations set out in contracts. Adhere to the principles of ethical business conduct.



Zhogibayev Zhaksylyk

Head of the Compliance Service

In 2025, the Compliance Service will focus on mitigating corruption risks, fostering an anti-corruption culture, and strengthening employee accountability.

Key priorities include continuous monitoring, analysis, audits, the elimination of corruption risk factors, and the reinforcement of internal control mechanisms.

Compliance

Samruk-Energy JSC has the Compliance Service, an independent subdivision subordinated to the Board of Directors both organisationally and functionally. Assessment of the Compliance Service's performance is carried out by the Board of Directors on the basis of quarterly reports. In order to comply with anti-corruption laws, the organisational structures of the Group's subsidiaries and affiliates include compliance officers who report to the Board of Directors or the Supervisory Board of subsidiaries and affiliates.

In 2024

amendments and additions were made to the Corporate Standard on the Compliance Function of the Samruk-Kazyna JSC Group of companies[52]. Samruk-Energy JSC and its subsidiaries and affiliates strictly follow the provisions of this Corporate Standard

[52] Decision of the Management Board of Samruk-Kazyna JSC dated 26 December 2024 (Minutes No.67/27).



In the reporting period, we focused on detailed elaboration of a number of aspects and implemented the following activities:

- A Corruption Minimisation Plan for 2024–2025 has been developed and approved, including information on sources and situations of potential compliance risks;
- Rules for verification of reliability of counterparties of Samruk-Energy JSC were developed and approved;
- The Anti-Corruption Policy of Samruk-Energy JSC was updated in a new version;
- Internal analyses of corruption risks in subsidiaries and affiliates were carried out with recommendations;
- More than 290 training sessions were conducted for employees and top management;
- A system for recording internal investigations and compliance checks based on the BPMS information system was implemented;
- More than 66 appeals were examined, of which 6 were confirmed and 6 partially confirmed.

Monitoring and Assessment of Corruption Risks

Management of the Company and subsidiaries and affiliates on a periodic basis initiates monitoring, analysis and assessment of corruption risks in accordance with the legislation of the Republic of Kazakhstan.

The purpose of this work is to identify and minimise corruption risks in specific processes and activities of the Samruk-Energy JSC Group of companies, in which the likelihood of corruption offenses is highest.

Number and share of subsidiaries and affiliates that have undergone corruption risk assessments

Organisation	2024	
	pcs.	%
Samruk-Energy JSC Group of companies	9	50

Subsidiaries and affiliates with identified significant corruption risks

Organisation	2024
Samruk-Energy JSC Group of companies	0

Anti-corruption measures

GRI 205-1, 205-3, GRI 12: Coal Sector: 12.20.2, 12.20.4

In order to prevent corruption facts, the following anti-corruption measures are implemented in the Samruk-Energy JSC Group of companies:

- Internal analysis of corruption risks
- Measures to enhance anti-corruption culture
- Adoption of anti-corruption restrictions
- Prevention of conflicts of interest
- Counterparty due diligence practices
- Operation of the hotline
- Other measures in accordance with the legislation of the Republic of Kazakhstan and internal regulatory documents

In November 2024, Samruk-Energy JSC successfully passed an external supervisory audit for compliance with the requirements of ISO 37001 "Anti-bribery management systems. Requirements with guidance for use"

According to the results of 2024, no confirmed cases of corruption were recorded in the Samruk-Energy JSC Group of companies

Training and awareness

GRI 2-24, 205-2, GRI 12: Coal Sector: 12.20.3

To foster an anti-corruption culture and zero tolerance to any form of bribery and corruption, regular training events are organised for personnel to explain the requirements of compliance policies and anti-corruption legislation.

In 2024, as part of anti-corruption work, seminars were organised for employees of the Company and subsidiaries and affiliates, including meetings with representatives of authorised bodies to explain changes in anti-corruption legislation.

During the reporting period, more than 290 training events were held in the Group of companies of Samruk-Energy JSC, where anti-corruption measures, changes in legislation, internal regulatory documents and hotline operation procedures were discussed.

12,247 employees

of Samruk-Energy JSC were familiarised with the requirements of the Anti-Corruption Policy, industry regulations and internal documents



Awareness about the Anti-corruption Policy of Samruk-Energy JSC

Indicator	2022		2023		2024	
	person	%	person	%	person	%
Management Board	12	100%	65	100%	29	100%
Personnel	17,650	100%	11,541	100%	12,247	100%
Business partners	159	100%	8,420	100%	9,235	100%

Number of employees trained in anti-corruption

Indicator	2022		2023		2024[53]	
	person	%	person	%	person	%
Management Board	12	100%	65	100	29	100%
Personnel	17,650	100%	11,541	100%	12,247	100%

[53] No anti-corruption trainings were conducted among business partners in 2024.



Feedback mechanism and whistleblower protection

GRI 2-26

Samruk-Energy JSC has the following stakeholder feedback tools in place to guarantee protection from retaliation and prosecution for anyone who reports in good faith:

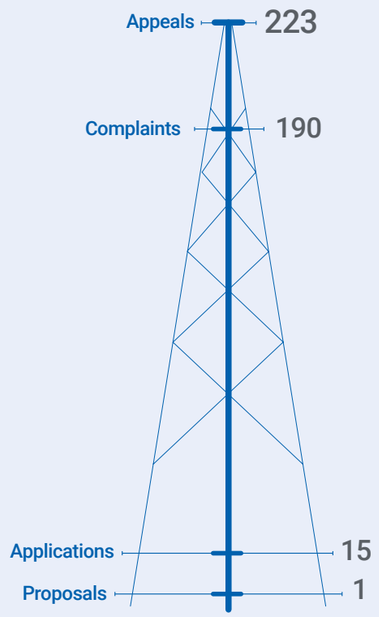
24/7 hotline	https://www.samruk-energy.kz/en/navigation-and-support/hotline **Mailing address:** mail@sk-hotline.kz **Phone:** 8 800 080 47 47
Feedback form on the corporate website	https://www.samruk-energy.kz/en/navigation-and-support/feedback-all
Feedback form for persons related to implemented investment projects, where local communities, con-tractor employees, or persons related to the project can express their opinions	https://www.samruk-energy.kz/en/navigation-and-support/feedback-all/feedback-other
Feedback for shareholders and investors. Investor questionnaire	https://www.samruk-energy.kz/en/shareholders-and-investors/feedback-for-shareholders-and-investors
Inquiries on arising issues with contact details on the website	https://www.samruk-energy.kz/en/company/contact-information
Ombudsman	**E-mail:** akylov@samruk-energy.kz **Phone:** 8 (7172) 55-30-15, +7-701-788-8416
Chairman's Blog	https://www.samruk-energy.kz/en/navigation-and-support/chairmans-blog

The Company has a Unified Database of complaints and appeals for the Group of companies. The Company annually monitors interaction with stakeholders through all feedback channels and analyses all received appeals (complaints and suggestions) for the Samruk-Energy JSC Group of companies. The results of analyses of received appeals and complaints are brought to the attention of the Company's Board of Directors on an annual basis.

The results of the analysis contribute to the following objectives:

- involvement of managers of the relevant level in solving the issues and problems raised, taking into account proposals for improving work;
- analysing and taking preventative measures to address the concerns of external stakeholders, the public and individual citizens;
- strengthening the Company's reputation and preserving its credibility as a socially responsible energy holding;
- realisation of the Shareholder's rights to receive information on the activities of Samruk-Energy JSC.

Statistics on appeals and complaints by category



Statistics on appeals and complaints

Source	Quantity		
	2022	2023	2024
Hotline (incl. personal appeals to compliance officers)	91	95	100
Office of Samruk-Energy JSC, of which:	9,457	9,339	9,999
from State authorities	335	315	1,096
from Shareholder	758	802	793
Inquiries, including subsidiaries' offices	101	112	35
E-otinish			92
Web portal https://zakup.sk.kz/			47
Security Service	4	0 (11)[54]	1 (6)
Feedback form on the website	6	0	0
Ombudsmen and trade unions	90	41	30 (33)[55]
Courts and supervisory authorities	4	4	20
Written appeals to the head (incl. Head's Blog by companies	12	4	13
Conciliation commissions	36	34	91
TOTAL	**344**	**290**	**429**

Statistics on the subject of appeals



The largest number of appeals is related to questions on procurement procedures, wages, remunerations and other payments, cancellation of disciplinary sanctions and recalculation of the SRVP.

Applicants were interested in issues related to the cancellation of orders for disciplinary action, organisation of work, violations of occupational safety and labour legislation. Appeals related to unethical behaviour and abuse of authority were also recorded.

Appropriate measures are taken for confirmed facts of non-compliance/violations. Confidentiality and anonymity of references is guaranteed.

[54] The appeals and complaints handled by the Security Department came from various sources of feedback. The number of inquiries and complaints handled by the Security Department is given in brackets.

[55] Data including Hotline.

Hotline operation

GRI 2-26

The Hotline is one of the key mechanisms of interaction of Samruk-Energy JSC with both internal and external stakeholders. All stakeholders can report actual and alleged violations of legislation, regulatory requirements and internal documents on ethics and compliance to the Hotline.

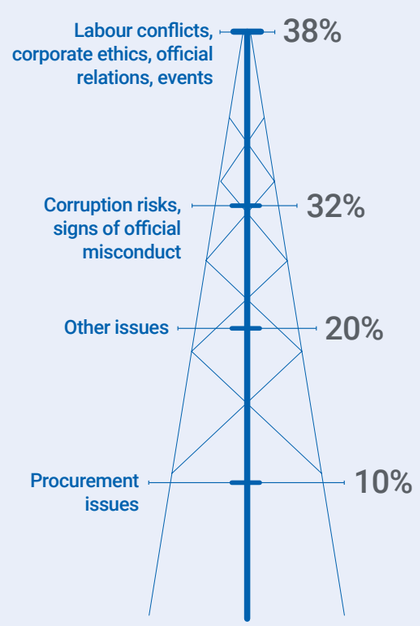
Annually, the Compliance Service conducts explanatory events and training sessions for employees of the Company and subsidiaries to raise awareness of the Hotline's operation. Information about the Hotline is placed in publicly accessible places in the territory of all companies of Samruk-Energy JSC Group.

In accordance with international standards and to protect the interests of whistleblowers, the Hotline is administered by an independent company. All appeals received through the Hotline are registered and forwarded to the Compliance Service, which ensures that they are dealt with in a professional and confidential manner.

In 2024, 100 appeals were received via the Hotline.

Confidentiality and anonymity of appeals are guaranteed. All appeals are checked and answered.

Specifics of applications to the Hotline





Ombudsman

GRI 2-26

In order to protect the rights of employees, the Company has an Ombudsman position to assist in preventing/ resolving corporate conflicts, conflicts of interest and reports of unlawful actions, as well as to help establish and develop corporate values and culture, high standards of professional behaviour and business ethics in the Company. The Ombudsman is an independent senior manager reporting only to the Board of Directors.

By the decision of the Board of Directors, Akylov Nariman Beketovich was appointed Ombudsman of Samruk-Energy JSC and seven subsidiary and affiliates from 1 April 2021.

The main tasks of the Ombudsman::

- Resolution of labour disputes and social issues of employees;
- Monitoring compliance with business ethics;
- Promoting the Company's image;
- Conflict prevention and resolution;
- Ensuring an open dialogue between management and employees;
- Making proposals to improve corporate policies and procedures;
- Informing the Board of Directors about systemic problems and proposals for their solution.

The Ombudsman activities are based on the principles of:

- Independence;
- Transparency;
- Impartiality;
- Objectivity;
- Honesty;
- Integrity;
- Informality;
- Confidentiality.



Akylov Nariman Beketovich
The Ombudsman of «Samruk-Energy» JSC

In 2024, employees most frequently raised concerns related to fair remuneration, bonus allocation, and career advancement opportunities.

There were also reported cases involving conflicts with management, disagreements with disciplinary actions, and a perceived lack of transparency in appointments to vacant positions.

Appeals to the Ombudsman and response measures

GRI 2-26, 406-1, GRI 12: Coal Sector: 12.19.8

The Ombudsman is obliged to guarantee the anonymity of employees and officials who report violations of the Code of Business Ethics, the legislation of the Republic of Kazakhstan, and the Company's internal documents.



Violations in the area of social and labor issues can be reported by contacting the Ombudsman directly:

+7 (7172) 55-30-15

+7 (701) 788-84-16 (WhatsApp)

akylov@samruk-energy.kz,
ombudsman@samruk-energy.kz

In 2024, the Ombudsman received 33 formal appeals through various communication channels (group electronic document management, Nysan hotline, e-otynish, mobile phone, WhatsApp messenger, email, written and oral appeals).

Main topics of appeals:

- labour legislation issues;
- complaints about unlawful actions of management;
- team conflicts;
- unlawful dismissal;
- unfair punishment and deprivation of bonuses;
- dissatisfaction with remuneration and bonuses.

Additionally, more than 150 people sought advice by phone.

The Ombudsman considered all applications, provided advice and recommendations, ensured confidentiality and anonymity, and provided moral and psychological support. In a number of cases, personal meetings were held with employees and recommendations were given to managers.

There are no confirmed cases of discrimination based on nationality, gender, race or religion. All employee rights are respected, eliminating the possibility of a hostile or humiliating atmosphere.

Ombudsman's work in subsidiaries and affiliates

In 2024, the Ombudsman visited all of the Company's subsidiaries and affiliates. The visit included:

- presentation of the Ombudsman's Progress Report for 2023;
- consideration of the most frequent appeals and ways of their pre-trial settlement;
- Discussion of the topic "Harassment at work: how to avoid it" in three subsidiaries and affiliates.

In order to prevent and resolve potential conflicts and resolve problematic issues, an informational and explanatory conversation was held with employees of subsidiaries and affiliates aimed at a common understanding and resolution of social and labour disputes, problems and conflicts, and direct work was carried out to explain the Company's internal regulatory documents and procedures. The Ombudsman held a personal reception (including confidential) with those who wished to do so. Clarifications and recommendations were given on all issues.

In direct communication with the top and middle management staff of subsidiaries and affiliates, the principle of Listening middle management – systematic interaction with the team, fixing and solving problems – is communicated on a regular basis. Thanks to this principle, many social, sanitation, hygiene and seasonal issues have been resolved.

Anonymous employee survey

The Ombudsman regularly conducts surveys of head office and subsidiary employees to identify systemic problems and assess the atmosphere in the team. Main survey topics:

- Psychological climate in the department;
- Ability to make decisions independently and use an innovative approach;
- Collective relationships;
- Trust in the Company's management and strategic development;
- Satisfaction with wages, bonuses and social package;
- Awareness of complaints and grievance mechanisms.

All received proposals and identified problems are under consideration of the Ombudsman and, if necessary, are submitted for discussion with the management of subsidiaries and affiliates and the Management Board of Samruk-Energy JSC.

Professional development

In April 2024, the Ombudsman of Samruk-Energy JSC completed training under the mediator preparation program, and upon completion and passing the exams, was awarded the qualification Professional Mediator, with inclusion in the Register of Mediators of the Republican Public Association ICPR International Human Rights Centre.

In September 2024, the Ombudsman of Samruk-Energy JSC, as part of the meeting of the Ombudsmens' Council of Samruk-Kazyna JSC, underwent training on Due diligence in the observance of human rights.

The knowledge and skills acquired during the training have a positive impact on the Ombudsman's work in reviewing appeals and finding solutions for peaceful resolution of disputes and conflict situations.

Interaction and communication

The Ombudsman of Samruk-Energy JSC actively participates in meetings of the Ombudsmens' Council of Samruk-Kazyna JSC portfolio companies, where current issues are discussed, experience is exchanged, and solutions are developed.

Thus, in 2024, the Ombudsmens' Council was held in the cities of Astana, Almaty, Shymkent, Zharkent, Konaev, Shchuchinsk and Aktau with visits and familiarisation with the enterprises of NAC Kazatomprom JSC, Samruk-Energy JSC, Kazakhstan Temir Zholy JSC, KazMunayGas JSC, Kazakhtelecom JSC, KEGOC JSC, Kazpost JSC and EmbaMunayGas JSC.

In June 2024, the Ombudsmens' Council was held at the site of Samruk-Energy JSC. All Council participants visited the facilities of AIES JSC (Kapchagay HPP) and Samruk-Green Energy LLP, thereby directly familiarising themselves with the full cycle of generation (production) of electric energy from water and the solar energy.

The Ombudsman of Samruk-Energy JSC carries out constant interaction with trade union and public organisations of Kazakhstan, in particular in 2024:

- Working meetings were held with the management of Bogatyr Coal LLP and 4 trade unions to discuss the principles of the Ombudsman's work and solve problematic issues.
- Meeting with the Ombudsman of AIES JSC and the Chairman of the NGO Local Trade Union Energy – discussion of the work results and terms of the collective agreement.
- Meeting with the NGO Local Energy Workers' Union to minimise strike risks and develop a Joint Action Algorithm.
- Meeting with representatives of the Amanat party on legislative initiatives in the energy sector.

On December 18, 2024, the Ombudsman of Samruk-Energy JSC was appointed Chairman of the Party Control Commission of Nura District (Astana).

New Ombudsmen were appointed in Alatau Zharyk Company JSC and Almaty Electric Stations JSC. The Ombudsman of Samruk-Energy JSC provided training on handling complaints and observance of employees' rights, provides continuous support and participates in conflict resolution.

As part of external communications, the Company works with representatives of local executive bodies (Akimat), where the Company's facilities are located, 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.



6 ANNEXES

318 About the report
328 Key performance indicators 2022–2024
348 GRI index
368 Independent auditor's report
373 UNCTAD index
376 TCFD index
377 Key corporate documents
379 Major financial events of Samruk-Energy JSC in 2024
380 Glossary

About the report

General information

This Integrated Annual Report of Samruk-Energy JSC for 2024 (Report) is the 18th to disclose information on financial and economic, operating 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 affiliated organisations 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 Integrated Annual Report of the Company for 2023, the Report has undergone changes in relation to certain indicators, as well as in terms of disclosure of additional indicators (detailed explanations are provided in the text of the Report).

The financial indicators are expressed in the national currency of the Republic of Kazakhstan – tenge and correspond to the audited consolidated financial statements (in accordance with IFRS standards).

The report comprehensively reflects:

- implementation of the Development Strategy of Samruk-Energy JSC;
- management approaches to managing the Company;
- significant financial, economic and production plans and results for the main types of activities;
- results in the field of labour safety, environmental protection;
- contribution to the development of the territory of operation, implementation of social policy and other aspects of sustainable development.

In the Report, the terms "Samruk-Energy JSC", "Samruk-Energy JSC Group of companies", "Company" in various forms mean Samruk-Energy JSC and its subsidiaries.

Standards and regulatory requirements

The Report discloses key data in accordance with the requirements of the legislation of the Republic of Kazakhstan, internal requirements and regulations of the Company, and international corporate governance practices. The following documents were taken into account when drafting the Report:

- Law of the Republic of Kazakhstan On Joint Stock Companies No. 415-II dated 13 May 2003;
- Rules of information disclosure by the issuer, Requirements to the content of information to be disclosed by the issuer, as well as the terms of information disclosure by the issuer on the internet resource of the financial statements depository, approved by the Resolution of the Board of the National Bank of the Republic of Kazakhstan No. 189 dated 27 August 2018;
- Regulatory requirements of Kazakhstan Stock Exchange (KASE), Astana International Exchange (AIX);
- International Integrated Reporting Standard (<IR> International Framework);
- The Global Reporting Initiative Standards (GRI Standards), as well as GRI 12: Coal Sector;
- AA1000SES Stakeholder Engagement Standard;
- 10 principles of the UN Global Compact (UN Global Compact);
- UN Sustainable Development Goals 2030;
- Guidelines for social responsibility ISO 26000:2010.

Recommendations of the Financial Stability Board's TCFD (The Task Force on Climate-related Financial Disclosures) Working Group on Climate-related Financial Disclosures (partial disclosure).

Samruk-Energy JSC endeavours to develop reporting in terms of applicable standards, disclosing GRI industry indicators and taking into account 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 listed.

Information perimeter

GRI 2-3

The boundaries of the Report correspond to the annual reporting cycle of the Company. The previous Report was published in June 2024. Electronic versions of reports for previous years are available on the Company's official website. The current Report reflects the activities of Samruk-Energy JSC for the period from 1 January 2024 to 31 December 2024.

For the purposes of internal control and risk management of the Company in relation to the financial reporting process, by decision of the Management Board of Samruk-Energy JSC dated March 16, 2020 (Minutes No.5), the Risk and Control Matrices for Accounting and Financial Reporting Processes of Samruk-Energy JSC were approved.

This matrix reflects the map of accounting and financial reporting processes at all levels of the Holding (SACs, Samruk-Energy JSC's subsidiaries and affiliates, Samruk-Energy JSC's JV, and the Fund) and includes 5 stages:

- Formalisation of the financial reporting process;
- Reconciliation of intercompany and related party transactions;
- Collection of data for the preparation of consolidated financial statements;
- Preparation of consolidated financial statements;
- Approval of the consolidated financial statements.

In general, the document includes matrices for the following processes:

- Preparation of financial statements;
- Purchases and settlements with creditors;
- Accounting of PPE and NMA;
- Treasury Accounting;
- Dividend Accounting;
- Financial Aid Accounting;
- Tax Accounting;
- Accounting for employee benefits;
- Accounting for travelling expenses;
- Investments;
- Loans received;
- Inventory.

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 Samruk-Energy JSC'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 are beyond the boundaries of the reporting period but directly related to it, as well as mid-term plans of the Samruk-Energy JSC Group of companies. The Report discloses information on the most significant results of activities of Samruk-Energy JSC and Subsidiaries and affiliates. When collecting data, all quantitative and qualitative data of the entire Samruk-Energy Group of companies of Samruk-Energy JSC, which may have a significant impact on making an informed decision regarding one or another material issue, event or decision, were taken into account and disclosed. The Company systematically develops the system of work with sustainable development indicators and strives to fully align the perimeter of non-financial information disclosure with financial data disclosure in the nearest future.

Reporting Boundaries

GRI 2-2

Essential topic	Indicator	Samruk-Energy JSC	Ekibastuz GRES-1 LLP	Station Ekibastuzskaya GRES-2 JSC	Almaty Electric Stations JSC	Alatau Zharyk Company JSC	AlmatyEnergoSbyt LLP	AES Ust Kamenogorsk HPP LLP	AES Shulbinsk HPP LLP	JSC Moynak HPP	JSC Shardara HPP	Samruk-Green Energy LLP	First Wind Power Plant LLP	Bogatyr Coal LLP	Energy of Semirechye LLP	Qazaq Green Power PLC	Bukhtarminskaya HPP JSC	Ereymentau Wind Power LLP	Branch of Energy Solutions Centre LLP DPC	Energy Solutions Centre LLP (Ekibastuz CHPP)	Kokshetau TPP LLP	Kazhydrotechenergo LLP
GRI 2-7	Employees	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
GRI 2-8	Workers who are not employees	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
GRI 2-27	Compliance with laws and regulations	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+
GRI 2-30	Collective bargaining agreements	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
GRI 201-1	Direct economic value generated and distributed	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+
GRI 201-4	Financial assistance received from government	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+
GRI 203-1	Infrastructure investments and services supported	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+					
GRI 203-2	Significant indirect economic impacts	+	+		+	+	+	+	+	+	+		+				+					
GRI 204-1	Proportion of spending on local suppliers	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+
GRI 205-2	Communication and training about anti-corruption policies and procedures	+	+	+	+	+	+			+												
GRI 205-3	Confirmed incidents of corruption and actions taken	+	+	+	+	+	+			+												
GRI 302-1	Energy consumption within the organisation		+	+	+	+		+	+	+	+			+								
GRI 302-3	Energy intensity		+	+	+	+		+	+	+	+			+								
GRI 302-4	Reduction of energy consumption		+	+	+	+		+	+		+			+								
GRI 303-3	Water withdrawal		+	+	+	+		+	+	+	+			+								
GRI 303-4	Water discharge		+	+	+	+		+	+	+	+			+								
GRI 303-5	Water consumption		+	+	+	+		+	+	+	+			+								
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		+	+	+	+		+	+	+	+	+	+	+								
GRI 304-2	Significant impacts of activities, products and services on biodiversity		+	+	+	+		+	+	+	+	+	+	+								
GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		+	+	+	+		+	+	+	+	+	+	+								

Essential topic	Indicator	Samruk-Energy JSC	Ekibastuz GRES-1 LLP	Station Ekibastuzskaya GRES-2 JSC	Almaty Electric Stations JSC	Alatau Zharyk Company JSC	AlmatyEnergoSbyt LLP	AES Ust Kamenogorsk HPP LLP	AES Shulbinsk HPP LLP	JSC Moynak HPP	JSC Shardara HPP	Samruk-Green Energy LLP	First Wind Power Plant LLP	Bogatyr Coal LLP	Energy of Semirechye LLP	Qazaq Green Power PLC	Bukhtarminskaya HPP JSC	Ereymentau Wind Power LLP	Branch of Energy Solutions Centre LLP DPC	Energy Solutions Centre LLP (Ekibastuz CHPP)	Kokshetau TPP LLP	Kazhydrotechenergo LLP
GRI 305-1	Direct (Scope 1) GHG emissions		+	+	+									+								
GRI 305-2	Energy indirect (Scope 2) GHG emissions													+								
GRI 305-4	GHG emissions intensity		+	+	+									+								
GRI 305-5	Reduction of GHG emissions				+																	
GRI 305-7	Nitrogen oxides (NOx), Sulfur oxides (SOx), and other significant air emissions		+	+	+									+								
GRI 306-1	Waste generation and significant waste-related impacts		+	+	+									+								
GRI 306-2	Management of significant waste-related impacts		+	+	+									+								
GRI 306-3	Waste generated		+	+	+									+								
GRI 401-1	New employee hires and employee turnover	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	
GRI 401-3	Parental leave	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	
GRI 403-8	Workers covered by an occupational health and safety management system		+	+	+	+	+	+	+	+	+	+	+	+						+		
GRI 403-9	Work-related injuries		+	+	+	+	+	+	+	+	+	+	+	+						+		
GRI 404-1	Average hours of training per year per employee	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	
GRI 404-3	Percentage of employees receiving regular performance and career development reviews	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	
GRI 405-1	Diversity of governance bodies and employees	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
GRI 406-1	Incidents of discrimination and corrective actions taken	+	+				+			+			+				+		+	+		
GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	+	+	+	+	+	+			+	+								+			

For the purpose of a unified approach in the preparation of the Report on the Results of Financial and Economic Activities by the Group of companies of Samruk-Energy JSC, the equity method is applied in consolidation. In addition, in accordance with the current accounting policy, fixed and intangible assets are recognised at historical cost, i.e. without revaluation. Subsidiaries are included in the consolidated financial statements using the acquisition method of accounting. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest.

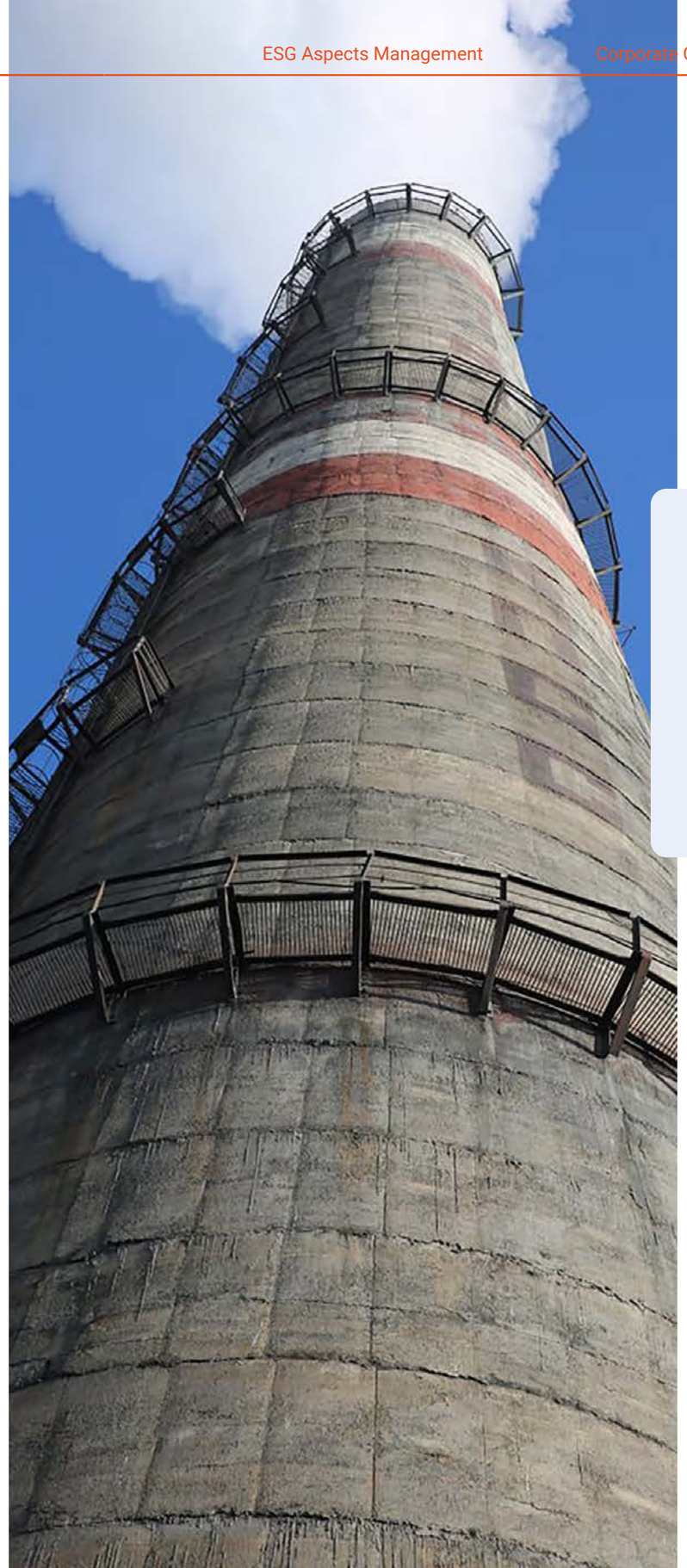
Based on the above, when using the equity method in the consolidated balance sheet, the turnovers of such large companies as Ekibastuzskaya GRES-2 Station JSC, ForumMuiderB.V. Coal Assets Company, in which Samruk-Energy JSC has a 50% ownership interest, are excluded. When forming the consolidated financial result of Samruk-Energy JSC, the share of profit on these companies is reflected in the article "share of profit/loss of equity accounted organisations and impairment of investment".

For independently verified indicators, data consolidation was performed by operational control (GRI 2-7, 2-8, 2-27, 2-30, 201-1, 201-4, 203-1, 203-2, 204-1, 205-1, 205-2, 205-3, 302-1, 302-3, 302-4, 303-3, 303-4, 303-5, 304-1, 304-2, 304-4, 305-1, 305-2, 305-4, 305-5, 305-7, 306-1, 306-2, 306-3, 401-1, 401-2, 401-3, 403-8, 403-9, 404-1, 404-3, 405-1, 406-1, 418-1).

Principles of quality assurance

The quality of the Report is ensured by applying the key principles of the GRI Standards:

Principles	Description
Context of Sustainable Development	The Report presents information on the Company's contribution in the context of economic, environmental and social aspects. Information on the degree of contribution of Samruk-Energy JSC to 17 Sustainable Development Goals by 2024.
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, to reflect significant impact of the Company on the economy, environment and society.
Comparability	The report contains information in the dynamics over several years, which allows stakeholders to gain insight into all the indicators that are important to them.
Clarity	The report is written in the most accessible language possible, in an understandable manner to a wide audience, and also contains a glossary.
Reliability	All information for the Report has been provided by the Company's relevant divisions and checked for accuracy. The text of the Report contains references to data sources.
Accuracy	Information on all material topics is presented in detail and allows stakeholders to assess the Company's performance. All data is officially recognised by the Samruk-Energy JSC, are confirmed by internal and public documents.
Timeliness	The report presents information for the 2024 calendar year, published in 2025.



Feedback

Samruk-Energy JSC is interested in receiving feedback for further improvement of the Integrated Annual Report and quality disclosure of information for stakeholders. The Company will be grateful for filling in 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 opinion on the 2024 Report and ask questions regarding the Report by contacting the contacts below.

Madina Bekaidarova Aysarieva,

Director of the Department “Corporate Governance and Sustainable Development”

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Independent assurance

GRI 2-5

Samruk-Energy JSC ensures transparency and independent assurance of disclosed information. In the reporting year, external assurance was performed by PricewaterhouseCoopers in respect of financial information included in the Integrated Annual Report for 2024 and in respect of selected non-financial information.

PricewaterhouseCoopers has audited the financial statements prepared in accordance with applicable law and International Financial Reporting Standards (IFRS) as adopted in the UK and issued by the IASB.

In addition, PwC has provided assurance on a sample of non-financial information published in accordance with GRI Standards.

Statements regarding the future

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 the information set out in this section.

This Report has been prepared on the basis of information available to Samruk-Energy JSC as of 31 December 2024, 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 the Company's intentions, beliefs or current expectations regarding the Company's performance and implementation of its development strategy. By their nature, such forward-looking statements are characterised by risks and uncertainties because they relate to events and depend on circumstances that may not occur in the future.

Terms such as "anticipate", "believe", "expect", "forecast", "intend", "plan", "project", "consider", "could", along with other similar or analogous expressions or used in the negative generally identify forward-looking statements. These assumptions involve risks and uncertainties that may or may not be 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 representations or warranties that actual results, scope, or performance of its activities, or the industry in which the Company operates, will correspond to the results, scope, or performance explicitly or implicitly expressed in any forward-looking statements contained in this Report or elsewhere.

Samruk-Energy JSC shall not be liable for any losses that may arise to any person due to such person's reliance on forward-looking statements. Except as expressly provided by applicable law, the Company assumes no obligation to disseminate or publish any updates or revisions to forward-looking statements to reflect any changes in expectations or new information, or subsequent events, conditions or circumstances.

Disclosure Benchmarking

As part of preparation of the Annual Report for 2024, Samruk-Energy JSC conducted a benchmark analysis of non-financial information disclosure practices of leading international and regional energy companies. The purpose of the analysis was to identify best practices, relevant approaches to identifying material topics, and application of GRI standards and other international frameworks, including TCFD, SASB and the UN Sustainable Development Goals.

The companies selected as reference companies were:

- Enel (Italy) is one of the largest energy companies in Europe;
- RusHydro (Russia) is a leader in renewable generation in the CIS region;
- Iberdrola (Spain) is an international company focused on ESG and energy transition.

Indicator	Samruk-Energy JSC	Enel	RusHydro	Iberdrola
Standards used	- International Integrated Reporting Standard (<IR> International Framework) - International Standard on Sustainability Reporting (GRI Standards, including GRI 12: Coal Sector) - Stakeholder Engagement Standard (AA1000SES) - 10 principles of the UN Global Compact (UN Global Compact) - UN Sustainable Development Goals 2030 - Guidelines for social responsibility (ISO 26000:2010)	- GRI Standards - SASB - TCFD - European taxonomy - Accountability AA1000 Stakeholder Engagement Standard	- GRI Standards - Guidelines for Key Indicators for Corporate Reporting on Contribution to UN 2030 Sustainable Development Goals UNCTAD - AA1000 Stakeholders Engagement Standard (AA1000SES)	- GRI Standards - SASB - TCFD - AccounAbility Principles 2018 - UN Global Compact - International Integrated Reporting Framework - World Economic Forum Report
Number of GRI indicators disclosed	- GRI 200 – 14 - GRI 300 – 20 - GRI 400 – 24	- GRI 200 – 14 - GRI 300 – 28 - GRI 400 – 34	- GRI 200 – 10 - GRI 300 – 20 - GRI 400 – 20	- GRI 200 – 18 - GRI 300 – 11 - GRI 400 – 25
Significant topics	- Climate change - Energy transition to sustainable sources - Energy availability - Water resources management - Air quality - Sustainable waste management - Biodiversity - Management, development and motivation of employees - Safety and health in the workplace - Diversity, equality and inclusion - Contribution to economic performance - Sustainable supply chain - Compliance with legislation and anti-corruption - Public policy	- Climate change and greenhouse gas emissions - Energy transition and decarbonisation - Renewable energy - Energy efficiency - Water management - Waste and the circular economy - Biological diversity - Cybersecurity - Occupational health and safety - Human rights - Equality and inclusion - Human resources development - Suppliers and sustainable procurement - Anti-corruption practices - Corporate governance - Electrification of consumption - Innovation and digitalisation - Stakeholder engagement - Quality of customer service - Social impact and community - Tax transparency - Financial sustainability and sustainable investment - ESG integration into management - Electricity grid risks and infrastructure resilience	- Development of energy systems (modernisation, construction) - Ensuring security of power facilities - Implementation of import substitution projects - Renewable energy and contribution to the low-carbon economy - Ensuring decent working conditions - Occupational health and safety - Science and innovation - Quality of customer service - Training, education and career development - Water use and spillway - Biological diversity - Energy efficiency - Waste and pollution management - Countering corruption	- Combating climate change - Energy transition - Biological diversity - Sustainable Resource Utilisation and the Circular Economy - Defence of human rights - Gender and social equality - Quality and safety of services - Responsible supply chain management - Innovation and digitalisation - Cybersecurity and data protection - Infrastructure reliability and resilience - Social impact and community outreach - ESG financing and tax transparency - Effective corporate governance and ethics

The obtained results were taken into account when forming the structure and content of the report of Samruk-Energy JSC, which made it possible to ensure compliance with international standards, as well as to increase the relevance of information for internal and external stakeholders.

Key performance indicators 2022–2024

Social indicators

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

Number of employees, persons

Indicator	2022	2023	2024
Average headcount	17,471	17,639	18,731
Headcount as at 31 December of the reporting year[56]	17,650	17,892	18,907
Men	13,053	13,273	14,015
Women	4,597	4,619	4,892

Total number of employees by category, age and gender, persons

Indicator	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
ADMINISTRATIVE AND MANAGERIAL PERSONNEL	426	925	1,351	423	887	1,310	460	967	1,427
Under 30 years	63	131	194	61	115	176	58	124	182
including managers under 30 years (from the level of heads of structural units and above)	1	-	1	-	1	1	3	0	3
From 30 to 50 years	269	641	910	265	605	870	306	668	974
50+	94	153	247	97	167	264	96	175	271
Production Personnel	**12,627**	**3,672**	**16,299**	**12,850**	**3,732**	**16,582**	**13,555**	**3,925**	**17,480**
Under 30 years	2,112	448	2,560	1,961	386	2,347	2,157	415	2,572
including managers under 30 years (from the level of heads of structural units and above)	3	1	4	-	-	-	24	2	26
From 30 to 50 years	6,631	2,063	8,694	6,913	2,147	9,060	7,539	2,233	9,772
50+	3,884	1,161	5,045	3,976	1,199	5,175	3,859	1,277	5,136

Total number of employees by age and gender, persons

Indicator	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Under 30 years	2,175	579	2,754	2,022	501	2,523	2,215	539	2,754
including managers under 30 years (from the level of heads of structural units and above)	4	1	5	-	1	1	27	2	33
From 30 to 50 years	6,900	2,704	9,604	7,178	2,752	9,930	7,845	2,901	10,746
50+	3,978	1,314	5,292	4,073	1,366	5,439	3,955	1,452	5,407

[56] Due to inclusion of new Subsidiaries and affiliates into the PC perimeter: Kokshetau TPP, Ekibastuz TPP, Shulbinsk HPP, Ust-Kamenogorsk HPP.

Number of permanent and temporary employees by gender and region, persons

Indicator	2023		2024	
	men	women	men	women
Centre				
Number of permanent employees	-	-	-	-
Number of temporary employees	-	-	-	-
East				
Number of permanent employees	2	6	241	84
Number of temporary employees	-	-	1	2
North				
Number of permanent employees	7,270	2,429	7,690	2,717
Number of temporary employees	57	153	29	109
South				
Number of permanent employees	5,880	1,876	5,981	1,864
Number of temporary employees	64	155	73	116
Total				
Number of permanent employees	13,152	4,311	13,912	4,665
Number of temporary employees	121	308	103	227

Number of full-time and part-time employees by gender and region, persons, 2024

Indicator	men	women
Centre		
Number of full-time employees	-	-
Number of part-time employees	-	-
East		
Number of full-time employees	241	86
Number of part-time employees	1	-
North		
Number of full-time employees	7,716	2,826
Number of part-time employees	5	-
South		
Number of full-time employees	6,043	1,970
Number of part-time employees	9	10
Total		
Number of full-time employees	14,000	4,882
Number of part-time employees	15	10

Number of freelance workers, persons, 2024

GRI 2-8

Indicator	Outstaffing	Civil law contract	Total
Headcount	0	496	496

Number of hired employees by gender and region, persons

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

Region	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Almaty	642	207	849	677	218	895	702	157	859
Astana	53	24	77	66	33	99	55	28	83
North Kazakhstan	1,058	456	1,514	1,180	367	1,547	1,541	718	2,259
Southern Kazakhstan	8	1	9	200	77	277	270	63	333
Eastern Kazakhstan	-	-	-	-	-	-	24	22	46
Central Kazakhstan	-	-	-	-	-	-	-	-	-
Western Kazakhstan	-	-	-	-	-	-	-	-	-
Total	**1,761**	**688**	**2,449**	**2,123**	**695**	**2,818**	**2,592**	**988**	**3,580**

Number of hired employees by gender and age, persons

Indicator	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Under 30 years	679	206	885	790	207	997	903	233	1,136
30 to 50 years old	872	353	1,225	1,052	327	1,379	1,337	533	1,870
50+	210	129	339	281	161	442	352	222	574

Number of employees with whom labour contracts were terminated by gender and region, persons

Region	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Centre	-	-	-	-	-	-	-	-	-
East	-	-	-	2	-	2	22	22	44
North	1,060	415	1,475	1,066	422	1,488	1,210	504	1,714
South	679	218	897	841	219	1,060	859	271	1,130
West	-	-	-	-	-	-	-	-	-
Total	**1,739**	**633**	**2,372**	**1,909**	**641**	**2,550**	**2,091**	**797**	**2,888**

Number of employees with whom labour contracts were terminated by gender and age, persons

Indicator	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Up to 30 years old	457	134	591	449	127	576	495	141	636
30 to 50 years old	777	312	1,089	894	312	1,206	894	387	1,281
50+	505	187	692	566	202	768	702	269	971

Staff turnover in Samruk-Energy JSC with breakdown by gender and region, %

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

Region	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Almaty	0.05%	0.05%	0.05%	0.05%	0.04%	0.05 %	4%	4%	4%
Astana	0%	0%	0%	0%	0.01%	0%	0%	0%	0%
North Kazakhstan	0.08%	0.09%	0.08%	0.08%	0.08%	0.08%	8%	10%	9%
Southern Kazakhstan	0%	0%	0%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Eastern Kazakhstan	0%	0%	0%	0%	0%	0%	0%	0%	0%
Central Kazakhstan	0%	0%	0%	0%	0%	0%	0%	0%	0%
Western Kazakhstan	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total	**0.13%**	**0.14%**	**0.13%**	**0.14%**	**0.14%**	**0.14%**	**14%**	**16%**	**15%**

Staff turnover in Samruk-Energy JSC by gender and age, %

Indicator	2022			2023			2024		
	men	women	total	men	women	total	men	women	total
Up to 30 years old	0.04%	0.03%	0.03%	0.03%	0.03%	0.03%	4%	3%	3%
30 to 50 years old	0.06%	0.07%	0.06%	0.07%	0.07%	0.07%	6%	8%	7%
50+	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	4%	5%	5%

Key indicators on parental leave by gender, persons

GRI 401-3, GRI 12: Coal Sector: 12.15.4, 12.19.4

Indicator	2022	2023	2024
Number of employees entitled to maternity or childcare leave (according to the Labour Code of the Republic of Kazakhstan)	17,650	17,892	18,907
Men	13,053	13,273	14,015
Women	4,597	4,619	4,892
Number of employees who took maternity and parental leave	329	354	345
Men	29	16	26
Women	300	338	319
Number of employees who returned to work at the end of maternity/ paternity leave	144	132	149
Men	10	11	12
Women	134	121	137
Number of employees who returned to work in the previous year at the end of maternity/paternity leave and were still working after 12 months	189	134	138
Men	11	7	14
Women	178	127	124

Indicator	2022	2023	2024
Number of employees who were expected to return to work at the end of maternity/paternity leave in the reporting year[57]	47	54	128
Men	2	6	12
Women	45	48	116
Return rate, %	3	2	1
Men	5	2	1
Women	3	3	1
Retention rate, %	1	1	1
Men	1	1	1
Women	1	1	1

Average hours of training per year per staff member by gender and category, 2024

GRI 404-1, GRI 12: Coal Sector: 12.15.6

Indicator	Administrative and managerial personnel			Production Personnel			Total		Total
	men	women	total	men	women	total	men	women	
Total number of training hours, hour	22	48	71	759,814	179,798	939,612	782,451	228,643	**1,011,094**
Average number of training hours per employee per year	49.21	50.51	50.09	56.05	45.8	53.75	55.82	46.73	**53.47**

Employee training expenses per year, KZT million

Indicator	2022	2023	2024
Employee training costs per year	305	440	570

Assessment of performance and career development of Samruk-Energy JSC employees by gender and category

GRI 404-3

Indicator	2022	2023	2024
Number of employees who have received regular performance and career development assessments (performance appraisals):	1,073	782	1,186
Administrative and managerial personnel	627	403	572
Men	241	133	209
Women	386	270	363
Production Personnel	446	379	614
Men	244	174	421
Women	202	205	193
Share of employees receiving regular performance and career development reviews, %	0.06%	4%	6.27%
Administrative and managerial personnel	0.46%	0.31%	40.08%
Men	0.57%	0.31%	45.43%
Women	0.42%	0.30%	37.53%
Production Personnel	0.03%	0.02%	3.51%
Men	0.02%	0.01%	3.10%
Women	0.06%	0.05%	4.91%

[57] The indicator takes into account employees who returned and those with whom contracts were terminated, excluding employees who extended maternity/paternity leave in the reporting year.

Ratio of salary of the best-paid employee to the others

GRI 2-21

Indicator		2022	2023	2024
Increase in average annual remuneration of the Company's employees	%	10	20	15
Ratio of total annual remuneration of the Company's highest paid employee to the average annual remuneration of other employees	ratio	285	285	285

Ratio of standard entry-level wages of women and men to the national level, KZT

GRI 202-1, GRI 12: Coal Sector: 12.19.2

Indicator	2023		2024	
	Men	Women	Men	Women
Employee's salary of the Company's entry-level	257,000	248,000	279,837	276,080
Minimum wage in Country	70,000	70,000	85,000	85,000
Ratio, %	367.1	354.3	329	325

Number of employees with disabilities by category, gender and region, persons, 2024

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

Region	Administrative and managerial personnel			Production Personnel			Total		Total
	men	women	total	men	women	total	men	women	
Centre	-	-	-	-	-	-	-	-	**-**
East	-	1	1	1	2	3	1	3	**4**
North	3	5	8	67	20	87	70	25	**95**
South	3	2	5	87	15	102	90	17	**107**
Total	**6**	**8**	**14**	**155**	**37**	**192**	**161**	**45**	**206**

Members of the Management Board by age and gender, persons

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

Indicator	2022			2023			2024		total
	men	women	total	men	women	total	men	women	
Up to 30 years old	-	-	-	-	-	-	-	-	**-**
30 to 50 years old	3	1	4	3	1	4	19	3	**22**
50+	1	-	1	1	-	1	7	0	**7**
Total	**4**	**1**	**5**	**4**	**1**	**5**	**26**	**3**	**29**

Occupational health and safety

Number and share of employees covered by the occupational health and safety management system by category

GRI 403-8, GRI 12: Coal Sector: 12.14.9

Indicator	2022		2023		2024	
	people	%	people	%	people	%
Number of people and percentage of total headcount in the Company covered by the Company's occupational health and safety management system:[58]						
Full-time employees	17,650	100%	17,892	100%	18,907	100%
Freelance workers (outsourced, contractor workers and interns)	465	100%	474	100%	496	100%
Number of people and percentage of the total number of people in the Company covered by the Company's occupational health and safety management system that has passed the internal audit procedure (production control system)[58]:						
Full-time employees	17,650	100%	17,892	100%	18,907	100%
Freelance workers (outsourced, contractor workers and interns)	465	100%	474	100%	496	100%
Number and percentage of all employees and workers who are not employees, but whose work and/or workplace is controlled by the organisation, who are covered by such a system that has been verified or certified by an external party						
Full-time employees	16,761	100%	16,749	100%	13,584	100%
Freelance workers (outsourced, contractor workers and interns)	584	100%	429	100%	416	100%

Occupational injury rate among regular employees of Samruk-Energy JSC

GRI 403-9, GRI 12: Coal Sector: 12.14.10

Indicator	2022	2023	2024
Total number of fatal accidents	4	2	3
Frequency rate of fatal accidents	0.13	0.07	0.09
Total number of occupational injuries with severe consequences (excluding fatalities)	4	5	10
Frequency rate of high-consequence occupational injuries (excluding fatalities)	0.13	0.16	0.31
Total number of people injured in labour-related accidents (including fatalities)	10	10	32
Lost Time Injury Frequency Rate (LTIF)	0.34	0.33	0.99
Total man-hours worked	29,804, 062	30,711,861	32,470,550

Occupational injury rate among the contracting organisations of Samruk-Energy JSC

Indicator	2022	2023	2024
Number of fatalities among contractor employees in work-related accidents	0	1	1
Number of injured (excluding fatalities) contractor employees in work-related accidents	1	1	2

[58] Due to the increase in the scope of work and number of contractors, as well as the inclusion of the Eastern HPPs and Ekibazstuz CHPP in the perimeter.

Health promotion and occupational diseases among Samruk-Energy JSC employees

GRI 403-10, GRI 12: Coal Sector:12.14.11

Indicator	2022	2023	2024
Number of non-work-related fatalities due to health deterioration	1	7	3
Number of employees on the D register	605	858	738
Number of registered occupational diseases	0	0	0
Number of employees who have undergone medical examination in accordance with the legislation of the Republic of Kazakhstan	14,911	14,878	15,228

Number of road accidents

Indicator	2022	2023	2024
Number of all road accidents, units	0	0	1
Number of kilometres travelled by the Company's vehicles, units	16,734,956	13,534,698	17,440,458
Road traffic accident rate	0	0	0.057

Financing of HSE measures, KZT billion

Indicator	2022	2023	2024
The amount of money spent to ensure requirements in the field of industrial safety, including in the areas of:	**2.53**	**2.99**	**4.65**
Occupational health and safety	1.78	2.16	0.02
Fire safety	0.11	0.11	0.11
Industrial safety	0.02	0.04	0.04
Training	0.09	0.07	0.08
Other	0.53	0.62	1.22

Training of employees in the field of industrial safety, persons

GRI 403-5, GRI 12: Coal Sector: 12.14.6

Training	2022	2023	2024
Number of employees trained within the framework of the RK legislation requirements, including:	**12,089**	**12,449**	**23,874**
– Occupational health and safety	1,687	1,825	4,058
– Fire safety[59]	4,224	3,458	9,664
– Industrial safety	6,031	5,459	5,232
– Other	135	1,904	4,920
Number of employees trained beyond the requirements of the RK legislation	192	1,444	12,350
Number of specialists trained under the NEBOSH program	8	13	15
Number of specialists trained under the IOSH program	4	102	55
Number of employees trained in first aid (paramedic) at the workplace	145	213	410
Number of specialists trained in the "Defensive Driving" course[60]	10	11	117

[59] The deadline for periodic training is approaching.

[60] In accordance with the implementation of measures of the Action Plan of Samruk-Kazyna JSC on industrial safety.

Environmental indicators

Expenditures on environmental protection, KZT million

Object of expenditure	2022	2023	2024
Waste management and environmental damage remediation	5.220	19.794	11.460
Protection and rehabilitation of land, surface and ground waters, wastewater treatment	0.452	0.463	4.350
Protection of atmospheric air and mitigation of climate change	1.365	3.050	2.398
Landscaping and greening	0.058	0.115	0.224
Staff training and professional development	0.002	0.002	0.002
Development of documents	0.011	0.019	0.062
Other activities in the field of protection Environment (water and air analyses)	0.008	0.009	0.019
Total	**7.117**	**23.452**	**18.516**

Payments for emissions (tax) and mandatory payments in the field of environmental protection, KZT billion

Indicator	2022	2023	2024
Payment for emissions of pollutants into the atmospheric air	6.197	6.992	7.739
Payment for the use of water bodies (water tax)	0.127	0.093	0.189
Payment for discharges of pollutants	0.010	0.011	0.011
Payment for waste disposal in the natural environment	1.265	1.470	1.542
Total	**7.599**	**8.566**	**9.480**

Fines for violation of environmental legislation, KZT million

GRI 2-27

Indicator	2022	2023	2024
Amount of fines charged	32,090.575	2.260	5.538
Amount of fines paid	20,322	4.604	5.538
Cases of non-financial sanctions, number	-	1	-

Total volume of water withdrawn by Samruk-Energy JSC, thousand m³

GRI 303-3, GRI 12: Coal Sector: 12.7.4

Indicator	2022	2023	2024	Regions water-stressed
Surface sources[61]	63,472,445	63,638,303	80,138,803	no
Groundwater sources	6,527	5,704	5,907.5	no
Urban water supply systems	39,369	39,916	41,760.9	no

[61] Increase in hydropower generation by 27% in 2024 compared to 2023.

Indicator	2022	2023	2024	Regions water-stressed
Formation water	-	-	-	no
Waters of third-party organisations Aksai-Karagalinsky Main Canal (AIES JSC)	132	233	277.5	no
The sea	-	-	-	no
Municipal and other water supply systems	-	-	-	no
Drainage/mine and quarry water	2,351	2,003	2,010.3	no
Total volume of water withdrawn by the Company[62]	63,520,823.63	63,686,158.80	80,188,759.2	no
Fuel generation, coal mining and distribution companies	211,247	230,694	222,398	no
HYDROPOWER PLANT	63,309,576.63	63,455,464.8	79,966,361	no

Total volume of water withdrawal with breakdown into fresh and other water, thousand m³

Indicator	2022	2023	2024	Regions water-stressed
Fresh water	63,518,473	63,684,156	80,186,748.9	no
Other water	2,351	2,003	2,010.3	no
Total	**63,520,823.63**	**63,686,158.80**	**80,188,759.2**	**no**

Total volume of discharges by receiving facilities, thousand m³

GRI 303-4, GRI 12: Coal Sector: 12.7.5

Indicator	2022	2023	2024
Surface water[63]	63,309,506	63,455,394	79,966,299.0
Groundwater (pumping)	-	-	-
Artificial water bodies (evaporation ponds, storage ponds and filtration fields)	2,289	1,923	1,922.6
Transferred to other parties for clearance	609	630	458,0
Ash dump	74,688	73,299	74,711.5
Central sewerage system	-	-	-
Total discharges for the Company:[63]	**63,387,091.89**	**63,531,246.37**	**80,043,391.10**
Fuel generation, coal mining and distribution companies	77,585.7	75,852.1	77,092.1
HPP[63]	63,309,506.2	63,455,394.3	79,966,299.0

Total water discharge volume with breakdown into fresh and other water, thousand m³

Indicator	2022	2023	2024	Regions water-stressed
Fresh water	63,384,965	63,529,467	80,041,590.7	no
Other water	2,127	1,780	1,800.4	no
Total	**63,387,092**	**63,531,246**	**80,043,391.1**	**no**

[62] Total volume of water withdrawal for 2022–2023 is recalculated taking into account the data of AES Ust Kamenogorsk HPP LLP and AES Shulbinsk HPP LLP.

[63] Electricity generation by HPPs is expected to increase by 27% in 2024 compared to 2023.

Water use by type of operations, thousand m³

Indicator	2022	2023	2024
Production needs	63,391,725	63,557,239	80,063,149.3
Drinking water	1,069	1,102	990.5
Transferred without use, including	-	-	-
Transferred to third parties	122,455	122,241	119,240
Transferred to the structure of the Fund	-	-	-
Others	5,575	5,576	5,379.3
Total[64]	**63,520,824**	**63,686,159**	**80,188,759**

Volume of irrecoverable water consumption by Samruk-Energy JSC, thousand m³

GRI 303-5, GRI 12: Coal Sector: 12.7.6

Indicator	2022	2023	2024	Regions water-stressed
Total water consumption	133,732	154,912	145,368	no

Total volume of reusable and recycled water, thousand m³

Indicator	2022	2023	2024
Volume of reused water (after treatment)	7,327	8,328	8,900.6
Volume of recycled water	3,527,190	3,490,881	3,540,825.8

Volume of water extracted in the process of production activities, thousand m³

Indicator	2022	2023	2024
Volume of produced associated formation water	-	-	-
Drainage/mine and quarry water	2,351	2,003	2,010.3

Resource consumption and energy efficiency, thousand GJ

GRI 302-1, GRI 12: Coal Sector: 12.1.2

Indicator	2022	2023	2024
Resource consumption	340,079	339,604	352,022
Total energy consumption, incl.	15,153	15,171	16,237
Electricity, incl:	**12,331**	**12,444**	**12,847**
HYDROPOWER PLANT	38	48	53
Amount of purchased energy	10,900	9,303	5,256
Purchased electricity, incl:	**10,782**	**9,201**	**5,129**
RES	5,826	4,231	-
HPPs from RES	295	197	-

[64] Increase in hydropower generation by 27% in 2024 compared to 2023.

Indicator	2022	2023	2024
Own power generation, incl:	**129,183**	**127,187**	**143,181**
Electricity generation by energy-intensive subsidiaries and affiliates	127,681	125,802	141,100
RES	1,503	1,996	2,081.2
Electricity sales total	**127,534**	**124,916**	**137,181**
Heat energy consumption total, incl:	**2,823**	**2,727**	**3,390**
Purchased heat energy	118	102,4	127
Own production of heat energy	23,039	26,807	28,265
Heat energy sales	**22,632**	**23,798**	**25,070**
Coal	**326,562**	**325,818**	**337,534**
Gas, including:	**11,024**	**10,842**	**11,382**
natural gas	11,023	10,841	11,381
LNG (LPG)	0.7	0.68	0.56
Liquid fuels, including:	**1,530**	**1,661**	**1,907**
petrol	156	155	175
diesel fuel	1,374	1,506	1,732
Boiler fuels, including:	**963**	**1,283**	**1,199**
fuel oil	963	1,283	1,199

Energy capacity

GRI 302-3

Indicator	Unit of measurement	2023	2024
Electricity generation	thousand GJ/ thousand MWh	0.00961	0.00885
Heat production	thousand GJ/ thousand Gcal	53.05	52.14

Energy efficiency, KZT million

2022	2023	2024
1,873.2	3,562.5	2,755.9

Reduction of energy consumption, thousand GJ[65]

GRI 302-4

Indicator	2022	2023	2024
Petrol	-	0.30	0.29
Diesel fuel	-	0.34	0.16
Fuel oil	7	34.45	-
Coal	14,155	9,928	9,187
Natural gas	35	20.43	54
Electricity	47	36.15	35
Heat energy	28	23.49	14

[65] The Company accounts for the reduction of energy consumption through technical measures in accordance with the established methodology for assessing their impact.

AZhK JSC Electricity Supply Reliability Indicators Report 2017–2024, SAIDI, SAIFI

Indicator	2022	2023	2024
Number of customer outages in the power supply system Sa(i)	2,539,847	3,165,368	2,577,065
Duration of shutdown, t, hour	4,452.26	6,397.75	4,827.47
Total duration of power interruption, t, hour (Ca(i)xt)	3,192,020.85	3,239,976.24	3,149,424.2
Total number of consumers in the power supply system Cs	952,991	952,739	987,610
Average number of deviations per consumer (SAIFI)	2.67	3.32	2.61
Average duration of disconnection per consumer.t, hour (SAIDI)	3.35	3.4	3.19

IUCN Red List species and national list of protected species occurring in the areas of the organisation's operations, by type of risk

GRI 304-4, GRI 12: Coal Sector: 12.5.5

Type of risk	Type of animal
Critically endangered	-
Endangered	steppe eagle
Vulnerable	imperial eagle
Near threatened	-
Least concern	-

Total weight of waste by type, tonnes

GRI 306-3, GRI 12: Coal Sector: 12.6.4

Types of waste	2022	2023	2024
Hazardous waste	647	1,732	534
Non-hazardous waste	89,928,280	98,496,364	108,784,366
Zoloshlak	7,129,158	8,853,230	8,781,174
Overburden rocks	82,783,567	89,620,982	99,979,093
Others	15,555	22,152	24,099
Total	89,928,927	98,498,095	108,784,900

Total volume of wastes of Samruk-Energy JSC enterprises directed for recovery, tonnes

GRI 306-4, GRI 12: Coal Sector: 12.6.5

Indicator	2022		2023		2024	
	In the company	Outside the company	In the company	Outside the company	In the company	Outside the company
Total volume of recovered waste	**12,856.78**	**22,951.87**	**9,663.65**	**28,223.13**	**9,843.86**	**25,945.88**
Total volume of hazardous waste recovered, incl.	**87.58**	**211.53**	**49.71**	**1,097.81**	**48.45**	**592.44**
reused	87.58	-	49.71	-	48.42	-
revised	-	14.96	-	125.75	-	136.93
utilised	-	4.87	-	32.84	0.03	65.43
other ways	-	191.69	-	939.22	-	390.07
Total volume of non-hazardous waste recovered, incl.	**12,769.19**	**2,740.34**	**9,613.94**	**27,125.32**	**9,795.41**	**25,353.44**
reused	12,769.19	-	9,613.94	-	9,795.41	1.00
revised	-	14,057.29	-	12.13	-	4.63
utilised	-	4,770.63	-	1,885.95	-	3,570.08
other ways	-	3,912.42	-	25,227.25	-	21,777.74

Total volume of wastes of Samruk-Energy JSC enterprises sent for utilisation, tonnes

GRI 306-5, GRI 12: Coal Sector: 12.6.6

Indicator	2022		2023		2024	
	In the company	Outside the company	In the company	Outside the company	In the company	Outside the company
Total volume of waste sent for disposal	**90,267,675**	**2,223.91**	**97,975,466**	**2,805.30**	**109,421,294**	**2,978.37**
Total volume of hazardous waste sent for destruction	**-**	**60.54**	**1.34**	**88.80**	**-**	**88.02**
Combustion (with energy recovery)	-	-	-	-	-	-
Combustion (without energy recovery)	-	43.15	1.11	80.64	-	74.02
Other ways	-	17.39	0.24	8.16	-	14.00
Total volume of non-hazardous waste sent for destruction, incl.	**-**	**3,632.60**	**-**	**4,328.92**	**-**	**4,930.81**
Combustion (with energy recovery)	-	-	-	-	-	-
Combustion (without energy recovery)	-	1.74	-	14.92	-	22.85
Other ways	-	3,630.86	-	4,314.00	-	4,907.96

Volume of direct (scope 1) greenhouse gas emissions by GHG type and activity segment, million tonnes CO2-eq.[66,67]

GRI 305-1, GRI 12: Coal Sector: 12.1.5

Indicator	2022	2023	2024
By type of GHG:			
Carbon dioxide (CO_2)	31.978243	31.877469	30.883547
Methane (CH_4)	0.940988	1.065127	1.058713
Nitrous oxide (N_2O)	0.074182	0.066980	0.064326
By business segment:			
Electricity generation	29.82	29.60	28.95
Heat production	1.75	1.88	1.95
Coal mining	1.42	1.53	1.11
Total direct emissions (Scope 1) of greenhouse gases	**32.993413**	**33.009576**	**32.006586**

[66] According to Article 283 of the EC RK (National contribution of the Republic of Kazakhstan to the global response to climate change), the Republic of Kazakhstan aims to ensure that by 31 December 2030 the carbon balance of the Republic of Kazakhstan is reduced by at least 15% from the level of the carbon balance of 1990. For Samruk-Energy JSC, according to the "Energy Transition Programme of Samruk-Energy JSC until 2060", the base year for Scope 1 is 2021, for Scope 2 – 2022.

[67] Calculation methodologies: 1) Approved by the Order of the Minister of Ecology and Natural Resources of the RK from 17 January 2023 No.9 "Methodologies for calculating emissions and absorption of greenhouse gases"; 2) Approved by the Order of the Acting Minister of Ecology, Geology and Natural Resources of the RK from 19 July 2021 No.260 List of benchmarks in regulated sectors of the economy; 3) GHG Protocol Scope 2 Guidance.

GRI 305-2, GRI 12: Coal Sector: 12.1.6

Volume of indirect (Scope 2) greenhouse gas emissions by energy type and activity segment, million tonnes CO2-eq.

Indicator	2022	2023	2024
by type of energy:			
Purchased electricity	0.001527	0.001415	0.001515
Purchased heat energy	0.011807	0.009928	0.012368
by business segment:			
Coal mining	0.013334	0.011343	0.013883
Total indirect emissions (Scope 2) of greenhouse gases	**0.013334**	**0.011343**	**0.013883**

Intensity of greenhouse gas emissions

GRI 305-4, GRI 12: Coal Sector: 12.1.8

Indicator	Unit	2023	2023	2024
Total direct emissions (Scope 1) of greenhouse gases	million tonnes CO_2-eq	32.993	33.010	32.007
Total indirect emissions (Scope 2) of greenhouse gases	million tonnes CO_2-eq	0.013334	0.011343	0.013883
Amount of revenue	KZT million	381,465.00	444,959.63	573,489.84
Specific consumption for Scope 1	tCO_2-eq/KZT	0.000086	0.000074	0.000056
Specific consumption for Scope 2	tCO_2-eq/KZT	0.000000035	0.000000025	0.000000024

Greenhouse gas emission reductions, tonnes CO_2-eq

GRI 305-5, GRI 12: Coal Sector: 12.2.3

Indicator	2022	2023	2024
Reduction of Scope 1 emissions (direct)	7,556	413,738	17,587
Reduction of Scope 2 emissions (indirect)	-	-	-
Total GHG emission reductions	**7,556**	**413,738**	**17,587**

Volume of pollutant emissions, tonnes[68]

GRI 305-7, GRI 12: Coal Sector: 12.4.2

Contaminants	2022	2023	2024
Nitrogen oxides (NOx)	80,147.348	77,745.593	75,446.900
Sulphur dioxide (SOx)	223,331.130	221,132.549	214,202.600
Persistent organic pollutants (POPs)	-	-	-
Volatile organic compounds (VOCs)	313.382	274.489	168.595
Hazardous air pollutants (HAP)	-	-	-
Carbon monoxide (CO)	6,217.230	6,520.516	6,426.460
Particulate matter (PM)	48,063.653	49,234.931	49,109.156
Others	6.326	14.193	19.300
Total	**358,079.069**	**354,922.271**	**345,373.010**

[68] The Company classifies all pollutant emissions as hazardous air pollutants (HAPs).

Investment Indicators

Implementation of the Investment Program of Samruk-Energy JSC in 2024, million tenge (excluding VAT)

GRI 203-1

Subsidiaries	2022 actual	2023 actual	2024 actual	2025 forecast
TOTAL	**100,580**	**132,146**	**229,787**	**360,587**
Investment projects, including:	**58,372**	**80,393**	**136,375**	**193,275**
Restoration of Unit No.1 with installation of new electrostatic precipitators*	32,681	71,113	38,540	-
Modernization of Unit No.3 at Ekibastuz GRES-1 LLP	-	-	679	-
Expansion and reconstruction of SDPP-2 Plant JSC with installation of Unit No.3	10,209	121	373	17,611
Development of a feasibility study (FS) for the construction of Unit No. 4 at Ekibastuz ESDPP-2 Plant JSC	-	-	145	19
Transition to cyclic-flow technology (CFT) for coal mining, transportation, blending, and loading at the Bogatyr open-pit mine of the Ekibastuz coal field	7,896	5,373	1,426	-
Construction of Kokozek Substation	354	-	2,433	-
Construction of Turksib Substation	-	-	521	945
Reconstruction of Substation 220/110/10 kV No. 7 (AHBK)	2	-	-	1,620
Reconstruction of power grids	-	1,928	3,930	-
Modernization of CHP-2 with minimized environmental impact, including feasibility study development and expertise review*	560	1,683	63,244	105,731
Expansion of CHP-1 with construction of a combined-cycle gas turbine (CCGT) unit with a capacity of 200–250 MW	271	3	-	-
Reconstruction of Almaty CHP-3 using CCGT technology, increasing station capacity to 450 MW*	334	123	24,550	52,699
Construction of a wind power station in the Shelek Corridor, with a capacity of 60 MW and potential expansion to 300 MW	4,944	49	2	-
Construction of 50 MW Ereymentau Wind Power Plant	1,065	-	-	-
Expansion of the existing Ereymentau-1 Wind Power Station (45 MW) with two additional wind turbines of 2.5 MW each	56	0.06	-	-
Development of a pre-feasibility study (Pre-FS) for the Semey Hydropower Plant	-	-	364	-
Construction of a coal-fired thermal power station in Kokshetau	-	-	-	4,106
Construction of a coal-fired thermal power station in Semey	-	-	-	3,260
Construction of a coal-fired thermal power station in Ust-Kamenogorsk	-	-	-	3,152
Implementation of renewable energy projects with a total capacity of 1 GW (Altyn Dala)	-	-	13	2,065
Other projects	2	-	155	2,066
Maintenance of operational assets	**41,052**	**49,555**	**89,715**	**152,403**
Bogatyr Coal LLP (50%)	7,995	6,824	7,785	12,851
Ekibastuz SDPP-2 Plant JSC (50%)	1,985	2,483	6,022	3,316
Ekibastuz GRES-1 LLP	9,859	12,957	28,738	60,644
Alatau Zharyk Company JSC	11,289	14,173	22,924	35,565
Almaty Electric Stations JSC	9,563	11,947	16,860	24,134
Moynak HPP JSC	103	574	1,145	1,458
Shardara HPP JSC	54	22	130	261
Branch of Alatau Zharyk Company JSC – Energosbyt	85	77	87	90
Samruk-Green Energy LLP	22	21	27	132
First Wind Power Plant LLP	96	476	767	1,165
Ereymentau Wind Power LLP	-	-	-	-
Energiya Semirechya LLP (25%)		0.3	4	-
Energy Solutions Center LLP	-	-	-	6,476
Shulbinsk HPP	-	-	3,509	5,001
Ust-Kamenogorsk HPP	-	-	1,717	1,310
Maintenance of administrative assets	**1,157**	**2,198**	**2,967**	**12,107**
Others	**-**	**-**	**731**	**2,803**

* Significant investment projects included within the scope of GRI 203-1.

Production figures

Key production indicators

Indicator	Unit	2022	2023	2024
Energy				
Electricity production volume, incl.	billion kWh	35.88	35.33	39.77
coal-fuelled	billion kWh	33.09	32.52	31.99
HYDROPOWER PLANT	billion kWh	2.55	2.42	7.07
WES	billion kWh	0.239	0.379	0.381
SES	billion kWh	0.005	0.005	0.005
Length of overhead and cable lines (0.4-220 kV transmission lines)	kilometres	25,262.77	30,240.39	30,722
Volume of coal production	million tonnes	42.47	42.93	42.68
Volume of heat production	thousand Gcal	5,502.50	6,402.00	6,751.08*

* In accordance with the reporting boundaries for GRI 302-3, excluding Energy Solutions Center LLP (Ekibastuz CHP).

Production efficiency metrics (by Producer)

Name of a subsidiary	2022 Actual	2023 Actual	2024 Actual	% against 2023 actual	2025 Forecast
Electricity production volumes, mln.kWh					
Ekibastuz GRES-1 LLP	23,048	22,870	22,544	99%	24,565
Ekibastuz SDPP-2 Plant JSC	6,002	5,659	6,045	107%	6,000
Almaty Electric Stations JSC	5,099	5,054	5,196	103%	5,148
Moynak HPP JSC	973	832	1,071	129%	857
Shardara HPP JSC	518	529	583	110%	500
AES Ust Kamenogorsk HPP LLP	-	-	1,891	-	1,721
AES Shulbinsk HPP LLP	-	-	2,057	-	1,743
Energia Semirechya LLP	19.78	21.52	21.01	98%	20.06
First Wind Power Plant LLP	136	143	137	96%	152
Energia Semirechya LLP	88	221	227	103%	214
Total	**35,884**	**35,330**	**39,772**	**113%**	**40,919**
Electricity sale volume, mln.kWh					
Ekibastuz GRES-1 LLP	23,102	22,796	21,619	95%	23,413
Ekibastuz SDPP-2 Plant JSC	5,938	5,532	5,823	105%	5,661
export	473	577		0%	
Almaty Electric Stations JSC	4,591	4,530	4,596	101%	4,373
Moynak HPP JSC	1,014	912	1,183	130%	892
Shardara HPP JSC	540	549	584	106%	496
AES Ust Kamenogorsk HPP LLP	-	-	1,883	-	1,712
AES Shulbinsk HPP LLP	-	-	2,035	-	1,717
Samruk-Green Energy LLP	19.53	21.23	23.84	112%	24.56
First Wind Power Plant LLP	135	142	137	96%	151
Energia Semirechya LLP	86	216	223	103%	208
Total	**35,426**	**34,699**	**38,106**	**110%**	**38,648**
CAPACITY sales volumes, MW					
Ekibastuz GRES-1 LLP	2,024	1,330	1,830	138%	2,601
Including capacity volume under individual tariff					477
Ekibastuz SDPP-2 Plant JSC	779	647	899	139%	877
Almaty Electric Stations JSC	859	808	834	103%	850
Including capacity volume under individual tariff	70	70	70	100%	-
Moynak HPP JSC	289	292	289	99%	298
Shardara HPP JSC	61	61	61	100%	61
AES Ust Kamenogorsk HPP LLP			329		330
AES Shulbinsk HPP LLP			576		576
Total	**4,013**	**3,138**	**4,818**	**154%**	**5,593**
Heat production volumes, thousand Gcal					
Almaty Electric Stations JSC	5,282	5,582	5,776	103%	5,503
Ekibastuz SDPP-2 Plant JSC	78	70	76	109%	76
Ekibastuz GRES-1 LLP	143	124	136	109%	292
Energy Solutions Center LLP (Ekibastuz CHP)			672	-	1,459
Total	**5,502**	**5,776**	**6,660**	**115%**	**7,329**
Electricity transmission volumes, mln.kWh					
Alatau Zharyk Company JSC	8,154	8,686	9,259	107%	9,189
Total	**8,154**	**8,686**	**9,259**	**107%**	**9,189**
Electricity sales volumes, mln.kWh					
Alatau Zharyk Company JSC Branch – Energosbyt	6,847	7 086	8,736	123%	8,848
Total	**6,847**	**7,086**	**8,736**	**123%**	**8,848**
Coal sales volumes, mln.tons	**42.41**	**42.49**	**43.00**	**101%**	**45.00**

Management indicators

GRI 205-2, GRI 12: Coal Sector: 12.20.3

Number of employees familiarised with anti-corruption policies and procedures by category and region

Indicator	2022		2023		2024	
	person	%	person	%	person	%
Management Board	**12**	**100**	**65**	**100**	**29**	**100**
South	-	-	25	38.4	17	41.4
Centre	-	-	0	0	0	0
East	-	-	12	18.4	0	0
North	12	100	28	43.2	12	58.6
Personnel	**17,650**	**100**	**11,541**	**100**	**12,247**	**100**
South (Administrative and managerial staff)	7,856	44.5	133	1.15	362	2
South (Production Personnel)	-	-	7,808	67.65	7,638	61
Centre (Administrative and managerial staff)	258	1.45	0	0	0	0
Centre (Production Personnel)	-	-	0	0	0	0
Vostok (Administrative and managerial personnel)	10	0.05	12	0.1	83	1
Vostok (Production Personnel)	-	-	316	2.74	245	2
North (Administrative and managerial staff)	9,518	54	75	0.65	470	3
North (Production Personnel)	-	-	3,197	27.7	3,919	31

Indicator	2022		2023		2024	
	person	%	person	%	person	%
Business partners	**159**	**100**	**8,420**	**100**	**9,235**	**100**
South	-	-	3,085	36.6	3,162	34
Centre	-	-	0	0	0	0
East	-	-	44	0.5	83	1
North	159	100	5,291	62.9	5,990	65

Number of employees who have undergone anti-corruption training[69]

Indicator	2022		2023		2024	
	person	%	person	%	person	%
Management Board	**12**	**100**	**65**	**100**	**29**	**100**
South	-	-	25	38.4	17	41.4
Centre	-	-	0	0	0	0
East	-	-	12	18.4	0	0
North	12	100	28	43.2	12	58.6
Personnel	**17,650**	**100**	**11,541**	**100**	**12,247**	**100**
South (Administrative and managerial staff)	7 856	44.5	794	1.15	362	2
South (Production Personnel)	-	-	7,808	67.65	7,638	61
Centre (Administrative and managerial staff)	258	1.45	0	0	0	0
Centre (Production Personnel)	-	-	0	0	0	0
Vostok (Administrative and management personnel)	10	0.05	12	0.12	83	1
Vostok (Production Personnel)	-	-	316	2.74	245	2
North (Administrative and managerial staff)	9,518	54	75	0.65	470	3
North (Production Personnel)	-	-	3,197	27.7	3,919	31

Number of confirmed cases of corruption and measures taken, in units

GRI 205-3, GRI 12: Coal Sector: 12.20.4

Indicator	2022	2023	2024
Total number of confirmed cases of corruption	0	0	0
Total number of cases of dismissal or disciplinary action for corruption	0	0	0
Total number of confirmed cases of non-renewal or termination of contracts with business partners due to violations related to corruption	0	0	0
Number of public legal cases regarding corruption brought against the organisation or its employees during the reporting period	0	0	0

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

GRI 204-1, GRI 12: Coal Sector: 12.8.6

Indicator	2022	2023	2024
Number of suppliers, total, units	2,137	2,360	2,859
Total amount of purchases, KZT billion	263	239	350

[69] In 2024, no anti-corruption trainings were conducted among business partners; familiarisation was carried out in the form of terms and conditions in contracts.

Indicator	2022	2023	2024
Number of local suppliers, total, units	2,090	2,308	2,808
Amount of local purchases, KZT billion	258	232	330
%, by number	98%	98%	98%
%, by amount	98%	97%	94%

Sum of concluded contracts for the Group of companies of Samruk-Energy JSC with suppliers

Indicator	2022		2023		2024	
	KZT billion	%	KZT billion	%	KZT billion	%
Procurement conducted by single-source method[70]	72	27%	128	54%	229	65%
Procurements made by means of request for quotation method	9	4%	11	4%	11	3%
Procurements made by open tender method	74	28%	99	41%	110	31%
Procurement through competitive negotiations[71]	64	24%	0	0%	0	0%
Purchases within the framework of intra-holding co-operation[71]	42	16%	0	0%	0	0%

Justified complaints about breaches of client confidentiality and loss of client data, units

GRI 418-1

Indicator	2022	2023	2024
Total number of substantiated complaints received regarding breaches of client confidentiality, by category, of which:	0	0	0
Number of complaints received from external parties and substantiated by the organisation	0	0	0
Number of complaints received from regulatory authorities	0	0	0
Total number of detected leaks, thefts or losses of customer data	0	0	0

Compliance with laws and regulations in 2024

GRI 2-27

Indicator	Unit.	2022	2023	2024
Total number of cases of non-compliance with laws and regulations acts, including:	**unit**	**69**	**40**	**28**
penalty cases	unit	60	40	28
cases of non-monetary sanctions	unit	9	0	0
Total number of cases of non-compliance with laws and regulations whose fines have been paid	**unit**	**60**	**40**	**31**
charged in the reporting year	unit	24	40	28
charged in previous reporting periods	unit	36	0	3
Total fines, non-compliance with laws and regulations[72]	**thousand KZT**	**934,475**	**60,287**	**582,514**
charged in the reporting year[73]	thousand KZT	297,069	60,287	289,726
charged in previous reporting periods	thousand KZT	637,406	0	292,788

[70] Increase of procurement by single source method is connected with increase of perimeter of subsidiaries and affiliates (AES Ust Kamenogorsk HPP LLP, AES Shulbinsk HPP LLP, ESC (Ekibastuz CHPP) LLP, Kokshetau CHPP LLP), implementation of projects for which procurement is carried out by single source method on the basis of subparagraph 13) of paragraph 1.

[71] From the beginning of 2022, the methods of procurement through competitive negotiations and within the framework of intra-holding co-operation are excluded from the Fund's Procedure.

[72] In connection with the payment of a penalty to EGRES-1 as a result of a tax audit for previous years.

[73] In connection with the presentation of GRES-2 administrative penalty in the amount of KZT 263,421,275 applied to SEGRES-2 JSC under Part 3 of Article 278 of the Administrative Code of the Republic of Kazakhstan for the period of 2021 in connection with the revealed violation of paragraph 1 of Art. Article 305 of the Tax Code of the Republic of Kazakhstan, namely the excess of the amount of actually accrued CIT over the amount of advance payments in 2021 in the amount of more than 20% during the tax period as a result of the inspection of the Prosecutor's Office of Pavlodar region and received notification from the Tax Department of Ekibastuz.

GRI index

Statement of use	Samruk-Energy JSC has reported in accordance with the GRI Standards for the period from 01 January 2024 to 31 December 2024
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI industry standard(s)	GRI 12: Coal Sector

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
GRI 2: The organisation and its reporting practices					
2-1	Organisational details	SECTION 1. SAMRUK-ENERGY TODAY Company portrait Geography of assets			
2-2	Entities included in the organisation's sustainability reporting	ANNEXES About the Report			
2-3	Reporting period, frequency and contact point	ANNEXES About the Report			
2-4	Restatements of information	ANNEXES About the Report In case of revision of previous years' data or other changes in reporting, comments about it are left in the appropriate place in the report.			
2-5	External assurance	ANNEXES About the Report			
GRI 2: Company's activities and employees					
2-6	Activities, value chain and other business relationships	SECTION 1. SAMRUK-ENERGY TODAY Company portrait Structure of the Group of companies of Samruk-Energy JSC SECTION 3. PERFORMANCE INDICATORS Sustainable supply chain and procurement policies SECTION 5. CORPORATE GOVERNANCE Corporate governance system			
2-7	Employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024 The Company does not keep records on non-guaranteed hours of work of employees by gender and region			
2-8	Workers who are not employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024	2-8c.		
GRI 2: Governance					
2-9	Governance structure and composition	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation SECTION 5. CORPORATE GOVERNANCE Corporate governance system Governing bodies			
2-10	Nomination and selection of the highest governance body	SECTION 5. CORPORATE GOVERNANCE Governing bodies			
2-11	Chair of the highest governance body	The 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 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation SECTION 5. CORPORATE GOVERNANCE Governing bodies			
2-13	Delegation of responsibility for managing impacts	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation The Company has Committees under the Board of Directors and the Management Board established to scrutinise issues in depth and to develop recommendations on environmental, economic, social and governance issues (see the Corporate Governance section for more details). In addition, in accordance with the organisational structure, the Company has positions responsible for managing environmental, economic and social issues. There is also a structural subdivision, the Corporate Governance and Sustainable Development Department.			
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 area of sustainable development are considered by the Committees of the Board of Directors as part of their day-to-day activities.			
2-15	Conflicts of interest	SECTION 5. CORPORATE GOVERNANCE Governing bodies			
2-16	Communication of critical concerns	SECTION 5. CORPORATE GOVERNANCE Governing bodies			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
2-17	Collective knowledge of the highest governance body	SECTION 5. CORPORATE GOVERNANCE Governing bodies			
2-18	Evaluation of the performance of the highest governance body	SECTION 5. CORPORATE GOVERNANCE Governing bodies			
2-19	Remuneration policies	SECTION 5. CORPORATE GOVERNANCE Remuneration			
2-20	Process to determine remuneration			Not applicable	The amount of remuneration is determined by the decision of the Sole participant.
2-21	Annual total compensation ratio	ANNEXES Key Performance Indicators 2022–2024			
GRI 2: Strategy, policies and practices					
2-22	Statement on sustainable development strategy	MESSAGE OF THE CHAIRMAN OF THE BOARD OF DIRECTORS			
2-23	Policy commitments	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities			
2-24	Embedding policy commitments	SECTION 4. ESG ASPECTS MANAGEMENT Managing sustainable development Respect for human rights Contribution to climate change mitigation SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities			
2-25	Processes to remediate negative impacts	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
2-26	Mechanisms for seeking advice and raising concerns	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities			
2-27	Compliance with laws and regulations	ANNEXES Key Performance Indicators 2022–2024			
2-28	Membership associations	SECTION 4. ESG ASPECTS MANAGEMENT Stakeholder Engagement			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
2-29	Approach to stakeholder engagement	SECTION 4. ESG ASPECTS MANAGEMENT Stakeholder Engagement			
2-30	Collective bargaining agreements	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
GRI 3: Material Topics					
3-1	Process to determine material topics	SECTION 4. ESG ASPECTS MANAGEMENT Managing sustainable development			
3-2	List of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Managing sustainable development			
GRI 201: Economic Performance					
201-1	Direct economic value generated and distributed	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			The Company has significant influence only in the Republic of Kazakhstan.
201-2	Financial implications and other risks and opportunities due to climate change	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation			
201-4	Financial assistance received from government	During the reporting period, the Company did not receive any financial assistance from the government.			
GRI 202: Market Presence					
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024			
202-2	Proportion of senior management hired from the local community	The percentage of senior management hired from the local community at significant locations of operation is 100% by the end of 2024.			
GRI 203: Indirect Economic Impacts					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			
203-1	Infrastructure investments and services supported	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
203-2	Significant indirect economic impacts	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic			
GRI 204: Procurement Practices					
3-3	Management of material topics	SECTION 3. PERFORMANCE INDICATORS Sustainable supply chain and procurement policies			
204-1	Proportion of spending on local suppliers	SECTION 3. PERFORMANCE INDICATORS Sustainable supply chain and procurement policies ANNEXES Key Performance Indicators 2022–2024			
GRI 205: Anti-corruption					
3-3	Management of material topics	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities			
205-1	Operations assessed for risks related to corruption	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities			
205-2	Communication and training about anti-corruption policies and procedures	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities ANNEXES Key Performance Indicators 2022–2024			
205-3	Confirmed incidents of corruption and actions taken	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities ANNEXES Key Performance Indicators 2022–2024			
GRI 206: Anti-competitive Behaviour					
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 behaviour, anti-trust and monopoly practices.			
GRI 207: Tax					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			
207-1	Approach to taxation	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			
207-3	Stakeholder engagement and management of concerns related to tax	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			
GRI 302: Energy					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
302-1	Energy consumption within the organisation	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			
302-3	Energy intensity	ANNEXES Key Performance Indicators 2022–2024			
302-4	Reduction of energy consumption	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024 Generating enterprises of Samruk-Energy JSC, produce both electric and thermal energy. Steam is used for propulsion (as a driving force) in steam turbines. A steam turbine is a piece of equipment that is necessary for electricity generation, i.e. it generates steam in its own boilers in order to produce electrical energy (a commodity that is sold/released). Generating enterprises of Samruk-Energy JSC sell steam energy to third-party consumers in the form of heated network water for their heating and hot water supply. 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 Samruk-Energy JSC's generating enterprises. The Company does not consume or sell cooling energy to third parties.			
GRI 303: Water					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet			
303-1	Interaction with water as a shared resource	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation			
303-2	Management of water discharge-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet			
303-3	Water withdrawl	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024			The Company does not abstract water in water scarce regions and does not have facilities in the coastal zone of the oceans.

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
303-4	Water discharge	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024			The Company does not discharge in water scarce regions and does not have facilities in the coastal oceans.
303-5	Water consumption	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024			The Company does not consume water in regions with water shortages Changes in water storage are not measured.
GRI 304: Biodiversity					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for 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 ASPECTS MANAGEMENT Caring for our planet			
304-2	Significant impacts of activities, products, and services on biodiversity	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation According to available data, the Company's current operations do not have a significant impact on the biodiversity of the regions where the Group's facilities are located Samruk-Energy JSC.			
304-3	Habitats protected or restored	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation			
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024			
GRI 305: Emissions					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation			
305-1	Direct (Scope 1) GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024 Data calculated using the approach specified in the GHG Protocol Guidelines and direct emissions of greenhouse gases. GHG emissions were calculated according to the methodology for calculating GHG emissions from boilers of thermal power plants, power centres and boiler houses, and the methodology for calculating GHG emissions from coal mining by open and closed methods, approved by the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan (Methodologies are available for review on the official website of the Ministry) ecology and natural resources of the Republic of Kazakhstan https://www.gov.kz/memleket/entities/ecogeo?lang=en.			
305-2	Energy indirect (Scope 2) GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			
305-4	GHG emissions intensity	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			
305-5	Reduction of GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			
GRI 306: Waste					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet			
306-1	Waste generation and significant waste-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet			
306-2	Management of significant waste-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet			
306-3	Waste generated	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024			
306-4	Waste diverted from disposal	ANNEXES Key Performance Indicators 2022–2024			
306-5	Waste directed to disposal	ANNEXES Key Performance Indicators 2022–2024			
GRI 401: Employment					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
401-1	New employee hires and employee turnover	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024			
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital The Company endeavours to provide social security for its employees, and contractors do not have the same benefits as the Company's employees.			
401-3	Parental leave	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
Labour/Management Relations					
402-1	Minimum notice periods regarding operational changes	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
GRI 403: Occupational Health and Safety					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
403-1	Occupational health and safety management system	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
403-2	Hazard identification, risk assessment and incident investigation	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
403-3	Occupational health services	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
403-4	Worker participation, consultation and communication on occupational health and safety	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions			
403-5	Worker training on occupational health and safety	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024			
403-6	Promotion of worker health	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital Creation of safe working conditions			
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	The approaches used by the Company to prevent and mitigate significant adverse health and safety impacts directly related to the Company's operations and products are governed by the Integrated Management System.			
403-8	Workers covered by an occupational health and safety management system	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
403-9	Work-related injuries	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024 Information on man-hours accounting and LTIFR calculation, calculation of fatality rates due to occupational injuries, occupational injuries with severe consequences (excluding fatalities) is not maintained for contractor organisations.			
403-10	Work-related ill health	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024			
GRI 404: Training and Education					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
404-1	Average hours of training per year per employee	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024			
404-3	Percentage of employees receiving regular performance and career development reviews	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024			
GRI 405: Diversity and Equal Opportunity					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
405-1	Diversity of governance bodies and employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital SECTION 5. CORPORATE GOVERNANCE Governing bodies ANNEXES Key Performance Indicators 2022–2024			
405-2	Ratio of basic salary and remuneration of women to men	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
GRI 406: Non-discrimination					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital			
406-1	Incidents of discrimination and corrective actions taken	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities No cases of discrimination on any grounds were registered in the Company during the reporting period.			
GRI 407: Freedom of Association and Collective Bargaining					
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	During the reporting period, the Company did not identify any vendors with the right The right to freedom of association and col-of a lecture negotiation could be in jeopardy.			
GRI 408: Child Labour					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights			
408-1	Operations and suppliers at significant risk for incidents of child labour	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights			
GRI 409: Forced or Compulsory Labor					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights			

Indicator	Disclosure	Section/Comments	Reasons for non-disclosure		
			Requirement(s) not disclosed	Reason	Explanation
GRI 413: Local Communities					
3-3	Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development			
413-1	Operations with local community engagement, impact assessments, and development programs	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-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 were identified during the reporting period.			
GRI 414: Supplier Social Assessment					
414-1	New suppliers that were screened using social criteria	100 per cent of new suppliers were screened according to social criteria.			
GRI 415: Public Policy					
415-1	Political contributions	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights			
GRI 418: Customer Privacy					
3-3	Management of material topics	SECTION 5. CORPORATE GOVERNANCE Information Security			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	SECTION 5. CORPORATE GOVERNANCE Information Security ANNEXES Key Performance Indicators 2022–2024			

GRI 12: Coal Sector	№	Indicator	Section
Topic 12.1 GHG emissions	12.1.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation
	12.1.2	302-1 Energy consumption within the organisation	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
	12.1.4	302-3 Energy intensity	ANNEXES Key Performance Indicators 2022–2024
	12.1.5	305-1 Direct (Scope 1) GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
	12.1.6	305-2 Energy indirect (Scope 2) GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
	12.1.8	305-4 GHG emissions intensity	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
Theme 12.2 Climate adaptation, resilience, and transition	12.2.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation
	12.2.2	201-2 Financial implications and other risks and opportunities due to climate change	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation
	12.2.3	305-5 Reduction of GHG emissions	SECTION 4. ESG ASPECTS MANAGEMENT Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
Topic 12.3 Closure and rehabilitation	12.3.2	402-1 Minimum notice periods regarding operational changes	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital
Topic 12.4 Air emissions	12.4.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.4.2	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024

GRI 12: Coal Sector	№	Indicator	Section
Topic 12.5 Biodiversity	12.5.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for 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 ASPECTS MANAGEMENT Caring for our planet
	12.5.3	304-2 Significant impacts of activities, products and services on biodiversity	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation According to available data, the Company's current operations do not have a significant impact on the biodiversity of the regions where the Group's facilities are located Samruk-Energy JSC.
	12.5.4	304-3 Habitats protected or restored	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation
	12.5.5	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024
Topic 12.6 Waste	12.6.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.6.2	306-1 Waste generation and significant waste-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.6.3	306-2 Management of significant waste-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.6.4	306-3 Waste generated	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation ANNEXES Key Performance Indicators 2022–2024
	12.6.5	306-4 Waste diverted from disposal	ANNEXES Key Performance Indicators 2022–2024
	12.6.6	306-5 Waste directed to disposal	ANNEXES Key Performance Indicators 2022–2024
Topic 12.7 Water and effluents	12.7.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.7.2	303-1 Interactions with water as a shared resource	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet Contribution to climate change mitigation
	12.7.3	303-2 Management of water discharge-related impacts	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet
	12.7.4	303-3 Water withdrawal	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024
	12.7.5	303-4 Water discharge	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024
	12.7.6	303-5 Water consumption	SECTION 4. ESG ASPECTS MANAGEMENT Caring for our planet ANNEXES Key Performance Indicators 2022–2024
Topic 12.8 Economic impacts	12.8.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.8.2	201-1 Direct economic value generated and distributed	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.8.3	202-2 Proportion of senior management hired from the local community	The percentage of senior management hired from the local community at significant locations of operation is 100% by the end of 2024.
	12.8.4	203-1 Infrastructure investments and services supported	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development ANNEXES Key Performance Indicators 2022–2024
	12.8.5	203-2 Significant indirect economic impacts	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.8.6	204-1 Proportion of spending on local suppliers	SECTION 3. PERFORMANCE INDICATORS Sustainable supply chain and procurement policies ANNEXES Key Performance Indicators 2022–2024
Topic 12.9 Local communities	12.9.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.9.2	413-1 Operations with local community engagement, impact assessments, and development programs	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-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 were identified during the reporting period.

GRI 12: Coal Sector	№	Indicator	Section
Topic 12.14 Occupational health and safety	12.14.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions
	12.14.2	403-1 Occupational health and safety management system	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions
	12.14.3	403-2 Hazard identification, risk assessment, and incident investigation	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions
	12.14.4	403-3 Occupational health services	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions
	12.14.5	403-4 Worker participation, consultation, and communication on occupational health and safety	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions
	12.14.6	403-5 Worker training on occupational health and safety	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024
	12.14.7	403-6 Promotion of worker health	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital Creation of safe working conditions
	12.14.8	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	The approaches used by the Company to prevent and mitigate significant adverse health and safety impacts directly related to the Company's operations and products are governed by the Integrated Management System.
	12.14.9	403-8 Workers covered by an occupational health and safety management system	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024
	12.14.10	403-9 Work-related injuries	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024
	12.14.11	403-10 Work-related ill health	SECTION 4. ESG ASPECTS MANAGEMENT Creation of safe working conditions ANNEXES Key Performance Indicators 2022–2024
Topic 12.15 Employment practices	12.15.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital
	12.15.2	401-1 New employee hires and employee turnover	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.15.3	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital The Company endeavours to provide social security for its employees, and contractors do not have the same benefits as the Company's employees.
	12.15.4	401-3 Parental leave	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.15.5	402-1 Minimum notice periods regarding operational changes	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital
	12.15.6	404-1 Average hours of training per year per employee	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.15.8	414-1 New suppliers that were screened using social criteria	100 per cent of new suppliers were screened according to social criteria.
Theme 12.16 Child labour	12.16.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights
	12.16.2	408-1 Operations and suppliers at significant risk for incidents of child labour	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights
	12.16.3	414-1 New suppliers that were screened using social criteria	100 per cent of new suppliers were screened according to social criteria.
Topic 12.17 Forced labour and modern slavery	12.17.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights
	12.17.2	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights
	12.17.3	414-1 New suppliers that were screened using social criteria	100 per cent of new suppliers were screened according to social criteria.
Topic 12.18 Freedom association and collective bargaining	12.18.2	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	During the reporting period, the Company did not identify any suppliers where the right to freedom of association and collective bargaining may have in jeopardy.

GRI 12: Coal Sector	№	Indicator	Section
Theme 12.19 Non-discrimination and equal opportunity	12.19.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital
	12.19.2	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.19.4	401-3 Parental leave	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.19.5	404-1 Average hours of training per year per employee	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital ANNEXES Key Performance Indicators 2022–2024
	12.19.6	405-1 Diversity of governance bodies and employees	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital SECTION 5. CORPORATE GOVERNANCE Governing bodies ANNEXES Key Performance Indicators 2022–2024
	12.19.7	405-2 Ratio of basic salary and remuneration of women to men	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital
	12.19.8	406-1 Incidents of discrimination and corrective actions taken	SECTION 4. ESG ASPECTS MANAGEMENT Investments in human capital SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities No cases of discrimination on any grounds were registered in the Company during the reporting period.
Topic 12.20 Anti-Corruption	12.20.1	3-3 Management of material topics	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities
	12.20.2	205-1 Operations assessed for risks related to corruption	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities
	12.20.3	205-2 Communication and training about anti-corruption policies and procedures	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities ANNEXES Key Performance Indicators 2022–2024
	12.20.4	205-3 Confirmed incidents of corruption and actions taken	SECTION 5. CORPORATE GOVERNANCE Business ethics and anti-corruption activities ANNEXES Key Performance Indicators 2022–2024

GRI 12: Coal Sector	№	Indicator	Section
Topic 12.21 Payments to governments	12.21.1	3-3 Management of material topics	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.21.2	201-1 Direct economic value generated and distributed	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.21.3	201-4 Financial assistance received from government	During the reporting period, the Company did not receive any financial of government assistance.
	12.21.4	207-1 Approach to tax	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
	12.21.6	207-3 Stakeholder engagement and management of concerns related to tax	SECTION 4. ESG ASPECTS MANAGEMENT Promoting socio-economic development
Theme 12.22 Public Policy Disclosures	12.22.2	415-1 Political contributions	SECTION 4. ESG ASPECTS MANAGEMENT Respect for human rights

Independent auditor's report

Independent practitioner's limited assurance report

To the Board of Directors of "Samruk Energy" JSC

Limited assurance conclusion

We have conducted a limited assurance engagement on the selected sustainability information of "Samruk Energy" JSC and its selected subsidiaries (hereinafter – the "Company") that is disclosed in the section 112-363 of the Annual Report and is summarized in the Appendix 1 to this report (hereinafter – the "Selected sustainability information" and the "Annual Report" respectively) as at 31 December 2024 and for the year then ended.

The Selected sustainability information represents information related to the Company and its selected subsidiaries according to GRI 2-2 "Information perimeter" of the Annual Report.

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 sustainability information is not prepared, in all material respects, in accordance with the GRI Sustainability Reporting Standards published by the Global Reporting Initiative (GRI) (hereinafter – the "GRI Standards").

Basis for the conclusion

We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance engagements other than audits or reviews of historical financial information* ("ISAE 3000 (Revised)"), issued by the International Auditing and Assurance Standards Board.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. Our responsibilities under this standard are further described in the Practitioner's responsibilities section of our report.

Our independence and quality management

We have complied 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 (IESBA Code), which is found on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies 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.

Responsibilities of the management of the Company

The management of the Company is responsible for:

- The preparation of the Selected sustainability information in accordance with GRI Standards;
- Designing, implementing and maintaining such internal control as management of the Company determines is necessary to enable the preparation of the Selected sustainability information, in accordance with GRI Standards, that is free from material misstatement, whether due to fraud or error; and
- The selection and application of appropriate sustainability reporting methods and making assumptions and estimates that are reasonable in the circumstances.

The Board of Directors are responsible for overseeing the Company's sustainability reporting process.

Inherent limitations in preparing the Selected sustainability information

Under the GRI Standards 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 of the Company as described in the Annual Report, and for which the Company is solely responsible.

Practitioner's responsibilities

Our responsibility is to plan and perform the assurance engagement to obtain limited assurance about whether the Selected sustainability information is free from material misstatement, whether due to fraud or error, and to issue a limited assurance report that includes our conclusion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence decisions of users taken on the basis of the Selected sustainability information.

As part of a limited assurance engagement in accordance with ISAE 3000 (Revised) we exercise professional judgement and maintain professional skepticism throughout the engagement. We also:

- Determine the suitability in the circumstances of the Company's use of GRI Standards as the basis for the preparation of the Selected sustainability information.
- Perform risk assessment procedures, including obtaining an understanding of internal control relevant to the engagement, to identify where material misstatements are likely to arise, whether due to fraud or error, but not for the purpose of providing a conclusion on the effectiveness of the Company's internal control.
- Design and perform procedures responsive to where material misstatements are likely to arise in the Selected sustainability information. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Summary of the work performed

A limited assurance engagement involves performing procedures to obtain evidence about the Selected sustainability information. The procedures 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.

PricewaterhouseCoopers Tax and Advisory LLP
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The nature, timing and extent of procedures selected depend on professional judgement, including the identification of where material misstatements are likely to arise in the Selected sustainability information, whether due to fraud or error.

In conducting our limited assurance engagement, we:

- Obtained an understanding of the Company's reporting processes relevant to the preparation of its Selected sustainability information;
- Performed inquiries of relevant personnel on the Selected sustainability information;
- Conducted limited substantive testing on a sample basis on a Selected sustainability information to verify that the data have been properly calculated, recorded, compared and disclosed.

Restriction on distribution and use

Our report 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 sustainability performance and activities and in responding to their governance responsibilities by obtaining an independent limited assurance report in connection with the Selected sustainability information. The Selected sustainability information therefore may not be suitable, and is not to be used, for any other purpose.

We permit this report to be disclosed in the Annual Report, which will be published on the Company's website.

The maintenance and integrity of the Company's website is the responsibility of Management of the Company; 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 sustainability information when presented on the Company's website.

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than 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 Tax & Advisory LLP

5 June 2025
Astana, Kazakhstan

Appendix 1 to the Independent practitioner's limited assurance report dated 5 June 2025

The Selected sustainability information for the year ended 31 December 2024 and for the year then ended disclosed in Section 112-363 pages of the Annual Report and prepared in accordance with the GRI Standards and subject to limited assurance procedures are set out below:

GRI Standard	Reported Performance (Selected sustainability information)
2-7	Employees
2-8	Workers who are not employees
2-27	Compliance with laws and regulations
2-30	Collective agreements
201-1	Direct economic value created and distributed
201-4	Financial assistance received from the government
203-1	Development and impact of investments in infrastructure and services provided
203-2	Significant indirect economic impacts
204-1	Ratio of purchasing from local suppliers
205-2	Information and training on anti-corruption policies and procedures
205-3	Confirmed cases of corruption and measures taken
302-1	Energy consumption within the Company
302-3	Energy intensity
302-4	Reducing energy consumption
303-3	Water withdrawal
303-4	Water discharge
303-5	Water consumption
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
304-2	Significant impacts of activities, products and services on biodiversity
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations
305-1	Direct greenhouse gas emissions (Scope 1)
305-2	Energy indirect greenhouse gas emissions (Scope 2)
305-4	Greenhouse gas emission intensity
305-5	Reduction of GHG emissions
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
306-1	Waste generation and significant waste-related impacts

306-2	Management of significant waste-related impacts
306-3	Waste generated
401-1	New employee hires and employee turnover
401-2	Benefits provided to full-time employees that are not provided to temporary or parttime employees
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
405-1	Diversity of governance bodies and employees
406-1	Incidents of discrimination and corrective actions taken
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data

UNCTAD index

	Area	Indicators	Performance indicators
A Economic area			
A.1	Revenue and/or (net) value added	A.1.1: revenue	573,490 KZT million
		A.1.2: value added	88,153 KZT million
		A.1.3: net value added	29,055 KZT million
A.2	Payments to the Government	A.2.1: taxes and other payments to the Government	93,424 KZT million
A.3	New investments/ expenditure	A.3.1: green investments	14.4 KZT billion
		A.3.2: community investments	347 KZT million
		A.3.3: total expenditures on research and development	-
A.4	Total cost of local supplier/procurement programmes	A.4.1: percentage of local procurement	98%
B Environmental area			
B.1	Rational use of water resources	B.1.1: water recycling and reuse	- 8,260 megalitres – volume of reused water; - 3,541,091 megalitres – volume of recycled water.
		B.1.2: water use efficiency	The total volume of water withdrawn was 80,188,759.2 thousand m
		B.1.3: water stress	Water withdrawal in 2024: - groundwater – 5,907.5 megalitres; - surface water – 80,138,803 megalitres; - Municipal and other water supply systems – 41,760.9 megalitres; - Drainage/mine and quarry water – 2,010.3 megalitres.
B.2	Waste management	B.2.1: reduction of waste generation	In 2024, the total amount of waste generated by the Company was 108,784,900 tonnes.
		B.2.2: waste reused, remanufactured and recycled	Total volume of recovered waste - In the Company – 9,843.86; - Outside the Company – 25,945.88.
		B.2.3: hazardous waste	534 tonnes
B.3	Greenhouse gas emissions	B.3.1: greenhouse gas emissions (Scope 1)	32.007 million tonnes CO_2-eq.
		B.3.2: greenhouse gas emissions (Scope 2)	0.014 million tonnes CO_2-eq.

	Area	Indicators	Performance indicators
B.4	Chemicals, including pesticides and ozone-depleting substances	B.4.1: Chemicals, including pesticides and ozone-depleting substances	▸ NOx – 75,446,900 tonnes; ▸ SOx – 214,202,600 tonnes; ▸ Particulate matter – 49,109.156 tonnes; ▸ CO – 6,426,460 tonnes; ▸ Volatile organic compounds (VOCs) – 168.595 tonnes; ▸ Other gaseous substances - 19,300 tonnes; ▸ Persistent organic pollutants (POPs) – 0.
B.5	Energy consumption	B.5.1: renewable energy	As of 1 January 2025, the installed capacity of the country's operated RES facilities exceeded 3,032 MW, providing 6.4% of the total electricity in the country. In the reporting period, there was an increase in electricity generation using solar and wind power plants, as well as small HPPs. Overall, in 2024, RES facilities (SES, WES, BGS, small HPPs) generated 7.5 billion kWh of electricity, which is 12.5% more than in 2023.
		B.5.2: energy efficiency	Total energy consumption – 195,156 thousand GJ.
C Social area			
C.1	Gender equality	C.1.1: proportion of women in managerial positions	Number of women in decision-making positions In 2024, the number of 495 people. The share of women in the composition of Executive Bodies and the BOD/NS of the Samruk-Energy JSC Group in 2024 was 20%. Women's representation in the Company's Board of Directors in 2025 is 14%.
C.2	Human capital	C.2.1: average hours of training per year per employee	The average number of hours spent on training per employee was 53 man/hour.
		C.2.2: expenditure on employee training per year per employee	KZT 30,430
		C.2.3: employee wages and benefits as a proportion of revenue, with breakdown by employment type and gender	Salary of an entry-level employee of the Company: ▸ Men – KZT 279,837; ▸ Women – KZT 276,080.
C.3	Employee health and safety	C.3.1: expenditures on employee health and safety as a proportion of revenue	The amount of money spent to ensure industrial safety requirements in 2024 was KZT 4.648 billion.
		C.3.2: frequency/incident rates of occupational injuries	Number of registered accidents related to labour activity – 12.
C.4	Coverage by collective agreements	C.4.1: percentage of employees covered by collective agreements	94% of the Company's employees are covered by Collective Bargaining Agreements.
D Institutional area			
D.1	Corporate governance disclosure	D.1.1: number of board meetings and attendance rate	In 2024, the Company's Board of Directors held 19 meetings, including 11 in-person meetings and 8 meetings in absentia. Attendance of meetings by members of the Board of Directors was 100%.
		D.1.2: number and percentage of women board members	0% at the end of 2024 and 14% in March 2025.
		D.1.3: Board members by age range	▸ 0-50 years – 57%; ▸ 50 years and over – 43%.
		D.1.4: number of meetings of audit committees and attendance rate	In 2024, the Committee held 8 in-person meetings at which 58 issues were considered. The main issues included the work of the Internal Audit Service, Compliance Service and Risk Management and Internal Control Department. The attendance of the Committee members with voting rights was 100%.
		D.1.5: total compensation and compensation per member of the board of directors and management	Remuneration of Independent Directors for 2024 totalled KZT 55,948,000. Remuneration of key management personnel for 2024 totalled KZT 337,311,000.
D.2	Anti-corruption practices	D.2.1: amount of fines paid or payable in accordance with the convictions	The total number of cases of non-compliance with legislation and regulations is 31. In all cases fines totalling KZT 913,051,000 were imposed. There were no cases where non-monetary sanctions were applied.
		D.2.2: average hours of training on anti-corruption issues per year per employee	During the reporting period, more than 290 training events were held in the Group of companies of Samruk-Energy JSC, where anti-corruption measures were discussed. A total of 12,247 personnel representatives and 71 members of the Management Board and the Board of Directors were trained. Average number of training hours per employee – 53.47 hours.

TCFD index

Indicator	Sections of the Report
Governance	
a. Describe the Board's oversight of climate-related risks and opportunities	Board of Directors, p. 227
b. Describe management's role in assessing and managing climate-related risks and opportunities.	Role of the Executive Body, p. 227
Strategy	
a. Describe the climate-related risks and opportunities that the organisation has identified over the short, medium and long term.	Samruk-Energy JSC Energy Transition Programme until 2060, p 228
b. Describe the impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning.	Samruk-Energy JSC Energy Transition Programme until 2060, p. 228 Climate risks and opportunities, p. 233
c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Samruk-Energy JSC Energy Transition Programme until 2060, p. 228 Climate Change Strategy, p. 232
Risk management	
a. Describe the organisation's processes for identifying and assessing climate-related risks.	Climate risks and opportunities, p. 233 Risk Management, p. 234
b. Describe the organisation's processes for managing climate-related risks.	Risk management activities, p. 235
c. Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	Risk Management, p. 234
Metrics and targets	
a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Results of climate change mitigation activities, p. 237
b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Greenhouse gas emissions, p. 240
c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Results of climate change mitigation activities, p. 237

Key corporate documents

Essential topic	Key documents	References
Climate change and the environment		
Sustainable development	Sustainability Guide of Samruk-Energy JSC	https://www.samruk-energy.kz/images/documents/Sustainability_Guide_se_en.pdf
	Samruk-Energy Energy Transition Programme until 2060	https://www.samruk-energy.kz/images/documents/2025/programa_energoperehoda_2060_en.pdf
	Politics on climatic corporate governance of Samruk-Energy JSC	Available from internal sources
Water resources management Air quality Sustainable waste management	Corporate governance system policy of the Samruk-Energy JSC Group of companies (in the field of quality management, health and labour safety, environmental protection, energy efficiency, information security, corruption and fraud prevention)	https://www.samruk-energy.kz/images/Corporate_documents/Politika_KSM_08_2024_en.pdf
Caring for people		
Management, development and motivation of employees	Personnel Policy of Samruk-Energy JSC for 2023–2031	https://www.samruk-energy.kz/images/documents/kadr_politika_final_en.pdf
	Code of Conduct of Samruk-Energy JSC	https://www.samruk-energy.kz/images/documents/2025/kodeks_poved_2025_en.pdf
	Policy on engagement with local communities of Samruk-Energy JSC Group of companies	Available from internal sources
Safety and health in the workplace	- SE-ST-02/01Enterprise Standard "Motivation of Personnel to Safe Behaviour" - Enterprise Standard "Golden Rules of Safety" - SE-ST-04-02 Assessment of the HSE Management System - Instruction on safety and labour protection for employees of Samruk-Energy JSC - HSE Risk Assessment Enterprise Standard - SE-ST-06-02 Incident Reporting and Investigation - Instructions for the use of the Safe Production information system - Conducting a Leadership Behavioural Safety Audit Enterprise Standard	Available from internal sources
	SE-PL-03/01 Regulations on Health, Safety and Environmental Protection Committee	https://www.samruk-energy.kz/images/corp.documents/2022/hse_2022_en.docx

Essential topic	Key documents	References
Diversity, equality and inclusion	Human Rights Policy of Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/2023/politika_prava_chel_en.pdf
	Non-Discrimination Policy in Samruk-Energy JSC	https://www.samruk-energy.kz/images/corp.documents/2023/politika_nedopu_diskriminacii_en.pdf
Good governance and integrity		
Contribution to economic performance	Policy of Samruk-Energy JSC in the field of Green Financing	https://www.samruk-energy.kz/images/Corporate_documents/Green_Financing_Policy_EN_1.pdf
	Development Strategy of Samruk-Energy JSC for 2024–2033	https://www.samruk-energy.kz/images/Strategiya_Razvitiya_Samruk-Energo_na_2024-2033_Eng.pdf
	Management report of Samruk-Energy JSC on operations results for 2024 (M&A report)	https://www.samruk-energy.kz/images/documents/2025/rez_deyatelnosti_SE_2024_en.pdf
	Internal Control System Regulations	https://www.samruk-energy.kz/images/Corporate_documents/26.docx
	Rules for assessment and identification of Samruk-Energy JSC risks	https://www.samruk-energy.kz/images/Corporate_documents/25.docx
	Risk Management Policy of Samruk-Energy JSC	https://www.samruk-energy.kz/images/Corporate_documents/24.docx
Sustainable supply chain	Procedure for procurement by the National Welfare Fund Samruk-Kazyna JSC and legal entities, 50% or more of voting shares (participatory interest) of which are directly or indirectly owned by Samruk-Kazyna JSC on the right of ownership or trust management.	www.zakup.sk.kz
Compliance with legislation and anti-corruption	Anti-fraud and Corruption Policy in Samruk-Energy JSC	https://www.samruk-energy.kz/images/AAINTRO/2.pdf
	Compliance Risk Management Policy of Samruk-Energy JSC	Available from internal sources
	Policy for the resolution of corporate conflicts and conflict of interest in Samruk-Energy JSC	https://www.samruk-energy.kz/images/documents/politika_konflict_en.pdf
	Policy of proactive informing of Samruk-Energy JSC	https://www.samruk-energy.kz/images/documents/politika_inform_se_en.pdf
	Corporate Governance Code	https://www.samruk-energy.kz/images/documents/2025/KKU_2025_en.pdf

Major financial events of Samruk-Energy JSC in 2024

16 February
Entered into a pre-listing agreement with the MFCA Exchange for a liquidity management programme, which will enable Samruk-Energy JSC Group to issue bonds on AIX on a prompt timetable and with favourable fees.

May-June
The Samruk-Energy Group of companies launched physical cache pooling through gradual inclusion of subsidiaries and affiliates, which made it possible to improve the efficiency of the Group's cash management, increase financial income and optimise banking costs.

02 July
The first selection from the EBRD under the AIES JSC project for gasification of CHPP-2 for the amount of KZT 21 billion was implemented. The project is aimed at improving the environmental situation and increasing the efficiency of the CHPP. A subsequent EBRD disbursement of KZT 22.9 billion was made on 2 December.

18 July
A loan agreement was concluded between GRES-1 LLP and Halyk Bank of Kazakhstan JSC to finance the reconstruction of GRES-1 for the amount of KZT 79 billion, the disbursed amount in 2024 was KZT 39.3 billion. The modernisation of fuel supply was carried out to improve the operation of the plant.

24 July
Samruk-Energy JSC paid dividends in favour of the Sole Shareholder for 2023 in the amount of KZT 20.6 billion. This amount became a record for the group.

25 July
By the decision of the Management Board it was approved to increase the authorised capital of Kokshetau TPP LLP by means of additional contributions made by the participants: Samruk-Energy JSC KZT 4,137 million and Samruk-Kazyna JSC KZT 4,137 million. The capital increase will allow to improve the company's financial performance and develop infrastructure.

30 July
The Liquidity Management Programme bond programme was registered with AIX with a limit of KZT 250 billion. The programme will provide for more prompt issuance of bonds for the Group's subsidiaries.

19 September
Part of the GRES-1 loan under the "Rehabilitation of Unit 1" project was refinanced through the issue of long-term bonds in the amount of KZT 34.7 billion, which allowed optimising interest expenses.

27 September
Between Halyk Bank of Kazakhstan JSC and JSC SEGRES-2 concluded a loan agreement in the amount of KZT 5.5 billion to finance the projects "Replacement of the GZU pipeline" and "Acquisition of a set of flanging impellers RND (4.5 stages)".

14 October
International rating agency Fitch Ratings affirmed credit ratings of Samruk-Energy JSC at BB+ level, the forecast is "Stable".

20 December
The first selection from ADB under the AIES JSC project for gasification of CHPP-2 for the amount of KZT 15 billion was implemented.

31 December
Amid rising tariffs and improved operational efficiency, the Samruk-Energy JSC Group achieved a record level of financial income in 2024 – KZT 9.6 billion, significantly exceeding the figures of previous years. Compared to 2023, income increased by 1.3 times (from KZT 7.3 billion), by 3.5 times compared to 2022 (KZT 2.75 billion), and by 3.7 times compared to 2021 (KZT 2.6 billion).

Glossary

AIX – Astana International Exchange, a stock exchange for investments in Kazakhstan and Central Asia, formed as part of the development of the Astana International Financial Centre. AIX's mission is to develop reliable and liquid capital markets in Central Asia and beyond by providing innovative products and services for businesses and investors.

ECOJER Association – Kazakhstan Association of Regional Environmental Initiative "ECOJER".

CAPEX – Capital expenditure.

CDP – Carbon Disclosure Project (an international non-profit organisation that helps companies and government agencies disclose their environmental impact.

CCS – Carbon capture and storage.

EBITDA (Earnings before interest, taxes, depreciation and amortisation) – earnings before depreciation, interest and CIT, as well as the share of profit/loss of equity accounted entities.

EPC – Engineering, Procrurement and Construction

EPC contract is a contract between a client and a contractor who takes responsibility for the design, procurement, construction of a facility and its commissioning.

FCA – Free career (carrier's delivery terms).

FCF – Free Cash Flow.

HSE – Health, Security and Environment.

IEA – The International Energy Agency.

IFC – the International Finance Corporation.

I-REC – International Renewable Energy Certificate, a market-based instrument certifing that electricity has been generated by renewable energy sources.

JDA – Supplier of Goods and Services.

LTIFR – Lost Time Injury Frequency Rate.

MASDAR – Arab company engaged in research in the field of future energy.

NAV – Net Assets Value.

PPA – Power Purchase Agreement.

PESTEL analysis is a methodology used to examine the impact of various external factors on a project. These factors include political (P), economic (E), social (S), technological (T), environmental (E) and legal (L).

ROACE – Return on Average Capital Employed.

SCADA – Supervisory Control and Data Acquisition.

SLB – Sustainability Linked Bonds.

SRA – Slot reservation agreement.

Samruk-Kazyna JSC is a Kazakhstan investment holding company established in 2008 to increase the national welfare of Kazakhstan and modernise its economy. The sole shareholder is the Government of Kazakhstan.

APCS is an automated process control system designed to monitor and control the operating modes of the equipment of the automation object.

ASCUE – Automated System of Electricity Control and Metering.

The balance of electric power of an energy system is a system of quantitative indicators reflecting the correlation between the volume of electricity generated within a power system and the total volume of its utilization, which includes consumption, own-use needs, losses in the electrical networks, as well as electricity flows between the given power system and other power systems.

Benchmarking is benchmarking as a process to identify, understand, and adapt current good practices to improve organisation'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 are renewable energy sources, relatively constant or cyclical flows of energy derived from natural sources that are replenished at a rate higher than the rate of consumption. Renewable energy sources include: solar (SES) and wind power plants (WPP), small hydropower plants, biogas plants.

The World Bank is an international financial organisation established to provide financial and technical assistance to developing countries.

Wind farm – a wind farm, one or more wind turbines assembled in one or more locations and connected to a single grid. Large wind farms can consist of 100 or more wind turbines. Sometimes wind farms are called wind parks (wind farms).

GTP – Gas turbine plant.

GRES is a state district power plant/condensing power plant (CPP), a thermal power plant producing mainly electric power using local energy resource (peat, brown coal, etc.) and calculating preferential power supply to a particular energy district.

HPP – hydroelectric power plant, a power plant that uses the movement of water masses in channelised watercourses and tidal movements as a source of energy.

Monetary conditions/monetary policy (MPC) – government policy, a set of measures aimed at managing aggregate demand through money market conditions (short-term interest rate, nominal exchange rate or the level of current liquidity of the banking sector) to achieve a combination of end goals, which may include price stability, maintaining a stable exchange rate, financial stability and promoting balanced economic growth.

Subsidiaries and affiliates are subsidiaries and dependent organisations of the Group of companies of Samruk-Energy JSC.

EDB is the Eurasian Development Bank, an international financial institution that invests in Eurasia and promotes the strengthening and expansion of economic ties and comprehensive development of its member countries: Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan. The EDB's authorised capital is USD 7 billion. The main share of the EDB's portfolio is occupied by projects with integration effect in the areas of transport infrastructure, digital systems, green energy, agriculture, industry and mechanical engineering. The Bank's activities are guided by the UN Sustainable Development Goals and ESG principles.

EBRD – European Bank for Reconstruction and Development, an investment vehicle created to support private and business market economies and democracy in 34 countries from Central Europe to Central Asia.

UES RK – Unified Electric Power System of the Republic of Kazakhstan, a set of electric power stations, power lines and substations ensuring reliable and quality power supply to consumers of the Republic of Kazakhstan.

KASE – Kazakhstan Stock Exchange, a stock exchange headquartered in Almaty and ranked second among the CIS exchanges in terms of stock market capitalisation.

IFCA – International Financial Centre Astana, established on the initiative of the First President of the Republic of Kazakhstan Yelbasy Nursultan Nazarbayev. The purpose of the IFCA is to form a leading financial services centre of international level to facilitate and attract investments into the country's economy, create an attractive environment for investment in financial services, develop the securities market of the Republic of Kazakhstan and ensure its integration with international capital markets.

R&D – Research and development.

DSW – Design and survey works.

Operating profit represents income from operations less cost of sales, costs of sales and services, general and administrative expenses.

Available capacity is the installed capacity of a generating unit (power plant) minus its capacity limitations.

ROI (return on investment) is a strategic efficiency/return on investment/performance indicator that demonstrates the effectiveness of investments both for large budgets and for small expenditures to cover current needs.

Capacity market – capacity is a special commodity, the purchase of which gives a wholesale market participant the right to demand from capacity sellers to maintain generating equipment in a state of readiness to generate electricity.

PDS – Power Delivery System.

OHSMS is an occupational health and safety management system in an organisation/enterprise that ensures safety and health protection of all employees to prevent accidents and occupational diseases at work.

SPP – solar power plant, an engineering structure that converts solar radiation into electrical energy. The methods of converting solar energy are different and depend on the design of the power plant.

Feasibility study – a feasibility study of a project, a document that provides information on the feasibility/impracticality of creating a product or service, as well as analysing the costs and results of the project.

Installed capacity is the total nominal electrical capacity of electrical machines of the same type. The term is used to estimate the generated or consumed power of electrical systems of both individual organisations and enterprises, industries, and geographical regions as a whole. The nominal power can be either the nominal active power, expressed in watts, or the nominal total power, expressed in volt-amperes. In the power industry, the installed capacity of an electrical installation is also referred to as the highest active electrical power with which the electrical installation can operate for a long time without overload in accordance with the technical documentation for the equipment.

CPT is a cyclic-flow technology of coal mining and transportation at which the organisation of production is carried out in a single technological flow of the mining enterprise some processes are carried out in cyclic, others – in continuous modes.

SAMRUK ENERGY

Annual Report

2024

