ANNUAL REPORT on the results of the activities of JSC “AIES” for 2024

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ABOUT THE REPORT

This Annual Report (hereinafter referred to as the Report) of Almaty Electric Stations JSC (hereinafter referred to as the Company or AlES JSC) reflects significant facts about the Company's activities for 2024. The Report provides all concerned parties with an overview of the Company's performance and achievements from 1 January 2024 to 31 December 2024.

This Report contains information on the Company's economic activities, sustainable development and financial and operating results. The information and quantitative data are presented for the period of 2024 and in a three-year comparison.

The Company's annual report was first published in 2013 based on the results of its activities for 2012. The Company prepares reports on an annual basis.

The preparation of annual reports plays an important role in increasing the Company's information transparency. The report is a means of communication with the Sole Shareholder and all interested parties.

In preparing and forming the annual report, the Company relied on the recommendations of the Corporate Governance Code, as well as certain principles of international disclosure standards.

For matters relating to the information contained in this Report, please contact the Company's Corporate Development and Risk Management Department at: 7 Dostyk Ave., Almaty, 050002. Contact telephone number: +7 (727) 254-03-31; e-mail: kancel@ales.kz

ADDRESS BY THE CHAIRMAN OF THE BOARD

DEAR SHAREHOLDERS, INVESTORS AND PARTNERS!

The year 2024 has become a year of remarkable transformations, technological progress and the very first practical step in the implementation of new generation energy projects for AlES JSC.

We are witnessing steady growth in AlES JSC's key indicators – an increase in the production and marketing of electricity and heat, improved operational efficiency and growth in financial results.

The Board of Directors pays particular attention to the modernization of production facilities, technological upgrades, the implementation of environmentally friendly solutions, production safety and the improvement of social and living conditions (with priority given to living quarters).

Major infrastructure projects – the modernization of CHPP-2, the reconstruction of CHPP-3 and the development of hydroelectric power generation – are already in the active implementation phase. These initiatives form a long-term platform for sustainable and environmentally responsible growth.

Our task within the framework of sustainable development is to reduce our negative impact on the environment and reduce emissions, which is one of the strategic directions of our activities.

By complying with the standards and principles of the Corporate Governance Code, AlES JSC ensures long-term and sustainable development and protects the interests of its sole shareholder, investors and partners.

The high qualifications and experience of AlES JSC employees represent the key to the further successful development of our company and the solution of complex technical problems. I would like to express our gratitude to the AlES JSC team for their successful results in 2024, their professional work and their commitment to the common cause. I am confident that the tasks set by the state will be carried out by the team clearly and effectively, enabling us to ensure sustainable development in the long term.

CHAIRMAN
OF THE BOARD OF DIRECTORS **RUSLAN TURGAMBAYEV**

ADDRESS BY THE CHAIRMAN OF THE BOARD

DEAR LADIES AND GENTLEMEN!

For AlES JSC, 2024 has become a year of overcoming challenges, moving forward and taking the first steps in implementing major new-generation energy projects. Behind this lies the hard work and creativity of thousands of professionals whose experience, discipline and dedication form the basis of our success.

In the reporting year, the plan for electricity generation was fulfilled. The volume of electricity amounted to 5,196 million kWh. The heat energy needs of the residents of Almaty and the Almaty region were fully met, with the plan being fulfilled by 105%. Heat supply amounted to 5,776 thousand Gcal. The volume of chemically purified water production amounted to 30.8 million tons, which is 1% higher than the planned volume. AlES JSC ensured uninterrupted supply of electricity and heat to the residents of Almaty and the Almaty agglomeration.

The financial result for the reporting period was a profit of KZT 19,043 million, which significantly exceeds the planned figure of KZT 7,664 million. The main factors that contributed to the improvement in financial results were: an increase in electricity revenues due to increased inflow to the Kapshagai Reservoir and a reduction in costs due to lower expenses for fuel, repairs, purchase of inventory and other services.

A year of major investment steps

1. **Modernization of Almaty CHPP-2.**

This is the birth of a new energy platform. Together with the EBRD and ADB, we attracted international financing, signed an EPC contract with POWERCHINA SEPCO1 and moved on to the active implementation phase. Construction and installation work has begun, and large-scale preparatory work has been carried out. TPP-2 will become the hallmark of Almaty's new energy sector – environmentally friendly, efficient and automated.

2. **Reconstruction of Almaty CHPP-3.**

A contract has been signed with a consortium of Kazakhstani contractors. Construction and installation work will begin in the third quarter of 2024. This project is aimed not only at restoring the plant's capacity, but also at improving its safety and efficiency.

Along with our flagship projects, in 2024 we continued to work on projects that are shaping the technological foundation of tomorrow: these include the reconstruction of the B. Orazbayev Almaty TPP-1 with the creation of a new combined cycle gas turbine plant, the large-scale modernization of the Sh. Chokin

ADDRESS BY THE CHAIRMAN OF THE BOARD

Kapshagai HPP with a future counter-regulating station on the Ili River, and the renovation of the HPP Cascade.

Safe production

Behind every production process there is a person. We are constantly strengthening prevention measures, updating control standards, and continuously training and improving the technical equipment of occupational safety services. We are introducing new forms of behavioral risk analysis and focusing on a culture of personal responsibility for every manager, every foreman, and every employee.

Safety culture is not a formality. It is the company's internal code, where care, attention and strictness are three inseparable components.

AlES JSC continues to develop programs to improve the qualifications, motivation and support of its employees. We are improving living conditions, implementing housing programs and actively working with the trade union. In the context of the energy transition, it is important that behind every machine there is a person who is confident about the future.

BOARD CHAIRMAN **YERIK MASHIROV**

INFORMATION ABOUT THE COMPANY

GENERAL INFORMATION

JSC AlES is an energy-producing organization engaged in the production of heat and electricity in Almaty city and Almaty region, providing electricity and heat to the population, as well as industrial and agricultural enterprises.

The Company is included in the Republican section of the State Register of Natural Monopolies (it is a natural monopoly for the production of thermal energy) and holds a dominant position in electricity supply in the Almaty region and Almaty city.

The sole shareholder of the Company is Samruk-Energy JSC – 100% of shares. The organizational structure of the Company includes 8 production divisions:

- CHPP-1 n.a.B.Orazbayev – production of electric and thermal energy
- CHPP-2 n.a.A.Zhakutov– production of electric and thermal energy
- CHPP-3– production of electric and thermal energy
- Kapshagai HPP named after Sh.Chokin – electric energy production
- Cascade of hydroelectric powe rplants–production of electric energy
- WesternThermalComplex (WTC) – production of thermal energy
- Production and Repair Company Energoremont (PRC) – repair of the Company'sequipment
- Fuel Reception and UnloadingCenter(FRUC)– reception and unloadingof fuel for the Company's energysources

In accordance with the Charter, the Company carries out the following types of activities:

- power generation by thermal power plants
- electricity generation by hydroelectric power plants
- thermal power generation by thermal power plants
- production of thermal energy by independent boiler houses
- ensuring the readiness of electric power for load bearing, regulation and redundancy of electric power
- sale of electricity to the consumer
- water collection, treatment and distributio
- railway operation
- wholesale trade in scrap and waste of ferrous and non-ferrous metals
- wholesale of other non-metallic waste and non-metallic scrap

The Company, within the group of companies of Samruk-Energy JSC, has successfully implemented the corporate management system in compliance with the requirements of the following international standards: ISO 9001 “Quality Management Systems”; ISO 45001 “Health and Safety Management System”; ISO 50001 “Energy Management System"; ISO 14001 "Environmental Management Systems"; ISO 37001 "Anti-corruption Management Systems".

The corporate management system is oriented to the concept of sustainable development and is implemented for efficient and transparent management of the activities of the Samruk-Energy JSC Groups.

The Company has no affiliated or subsidiary organizations.

For more detailed information please see the Company's corporate website: www.ales.kz

ADDRESS BY THE CHAIRMAN OF THE BOARD

COMPANY'S HISTORY

JSC AlES was established based on the decision of KMG-Energo JSC dated 26 May 2006 and registered with the justice authorities on 1 June 2006.

As part of the reform program of Almaty Power Consolidated JSC, carried out in accordance with the Laws of the Republic of Kazakhstan "On Electricity" and "On Natural Monopolies", in order to separate the functions of production, transportation and sale of electricity and heat. On January 10, 2007, JSC AlES and Almaty Power Consolidated JSC signed an agreement on the purchase of propertycomplexesprovidingacompletetechnologicalcycleforthepro- ductionofelectricandther- mal energy, representing a complex of buildings and structures – CHPP-1 (now CHPP-1 n.a. B.Orazbayev), CHPP-2 (now CHPP-2 named after A.Zhakutov), CHPP-3, Western Heat Complex (WTC), Kapshagai HPP (now Kapshagai HPP named after Sh.Chokin), Cascade of HPP, Production and Repair Company "Energoremont" (PRC) and Fuel Reception and Unloading Centre (FRUC).

CHPP-1 named after B.Orazbayev

The design and construction of the Alma-Ata TPP (now CHPP-1 n.a. B.Orazbayev) began in 1931. On October 25, 1935, the first unit was put under industrial load. Main equipment: six BKZ-160-100 gas-fired steam boilers, fuel oil was used as kindling fuel; two PT-60-90 turbine units with steam production and heating selections, one R-25-90 turbine unit; seven PTVM– 100 hot water boilers, the main fuel is natural gas, reserve fuel – fuel oil. The equipment was put into operation from 1960 to 1996.

CHPP-2 named after A.Zhakutov

The construction of the Alma-Ata HPP-2 began in 1974. In 1980-1983, three steam boilers of the BKZ type were put into operation-420-140- 7C and three steam turbines of the PT- 80/100-130/13 type. The 2nd stage of construction was carried out in 1985 - 1989. The main equipment is eight steam boilers BKZ–420-140 and PK-100, powered by coal from the Ekibastuz coal basin, fuel oil was used as kindling fuel; three PT-80-130 turbine units with steam production and heating selections, one R-50-130 turbine unit and two T-110-130 turbine units with heating selections and boiler unit No. 8, the commissioning of which allowed to increase the thermal capacity of the station by 20%, provided the load of the Alatau district, Industrial zone, Universiade 2017 facilities and "Affordable Housing 2020".The equipment was put into operation from 1980 to 2016..

CHPP-3

The construction project of the first stage of the Alma-Ata TPP (now CHPP–3) with a capacity of 100 thousand kWh was approved by the decision of the Alma-Ata Council of National Economy on December 9, 1957. The year of the beginning of construction is 1959. Main equipment: six steam boilers BKZ-160-100, powered by coal from the Ekibastuz coal basin, fuel oil is used as kindling fuel; three turbine units T-41-90 with steam heating, one turbine unit K-50-90. The equipment was put into operation from 1960 to 1967..

ADDRESS BY THE CHAIRMAN OF THE BOARD

Western Thermal Complex(WTC)

-The beginning of the Western Thermal Complex was laid on 26 November 1963, when two hot-water boilers were installed and put into operation, in 1964 - 1967 another hot-water boiler and five steam boilers were put into operation. The WTC includes: Western district boiler house, South-Western district boiler house, New-Western district boiler house. The main fuel is natural gas, the reserve fuel is fuel oil. At the present moment the ZTK includes the following main equipment: two steam boilers; two hot-water boilers PTVM-50; six hot- water boilers PTVM-100; four hot-water boilers KVGM-100. The equipment was put into operation from 1963 to 2015.

Kapshagai HPP named after Sh.Chokin

The design of the Kapshagai HPP was carried out by the Kazakh branch of the All-Union Design and Survey Institute "Gidroproekt" named after S.Ya. Zhuk in 1959, with the completion of the project in 1961 – 1964. In 1965, by order of the Council of Ministers of the Kazakh SSR No. 266-R dated February 25, 1965, the directorate of the Kapchagai HPP under construction was established, and construction began. In 1980, the construction of the Kapchagai HPP was completed and the state commission signed an acceptance certificate. Currently, the main equipment of the HPP is four hydraulic units PL2-50/642-V- 650. The equipment was put into operation from 1970 to 1971.

Cascade hydroelectric power plants

The design and preparatory work for the construction of a Cascade of hydroelectric power plants on the Bolshaya Almatinka river was started by the Leningrad Branch of theGidroproekt Institute in 1942, and from April 1943 the construction of the first power plants began directly. The cascade of hydroelectric power plants consists of 9 power plants, which are cascaded in the Great Almaty Gorge for 25 km from the Great Almaty Lake to the water intake facilities of the "Almaty Su organization. At the moment, the HPP Cascade includes the following main equipment: three F. Ansaldo hydroelectric units (Italy) installed at HPP-1;three KVG179x16,4-1 hydroelectric units installed at HPP-2; one RO638-VM-100 hydroelectric unit installed at HPP-5; three F.Laffel (USA) hydroelectric units installed at HPP - 6,7,8; one ROF700 hydroelectric unit installed at HPP-9,10,11. The equipment was put into operation from 1943 to 1963.

Production and repair company"Energoremont"(PRC)

The main production units of the PRC are based on the territory of CHP-1,2,3, WTC. The company provides repair services for the main and auxiliary equipment of all thermal energy sources of JSC AlES.

Fue lReception and Unloading Center (FRUC)

The main production units of FRUC are based on the territory of CHP-1,2,3. FRUC provides services for receiving, processing and unloading wagons with fuel and other goods arriving by rail to the enterprises of CHP-1,2,3, thereby ensuring uninterrupted unloading of fuel at these stations, as well as repairs and maintenance of railway tracks of CHP-1,2,3

ADDRESS BY THE CHAIRMAN OF THE BOARD

MISSION, VISION, STRATEGIC GOALS

MISSION

Ensuring reliable energy supply for sustainable economic development in Kazakhstan

Ensuring reliable energy supply for sustainable economic growth through innovative development and the application of environmentally friendly solutions by increasing shareholder returns

In cooperation with leading foreign energy companies and guided by the principles of sustainable development, meet the growing demand for energy resources from the economy and population of Kazakhstan

Ensure reliable energy supply, creating value for shareholders through innovative development and new construction, guided by the principles of sustainable development

To meet the economy's need for energy resources. To ensure a balance of interests between owners, consumers and employees in the long term. To promote the country's integration into the global community

To provide a reliable, sustainable and affordable energy supply, improving the country's welfare and economic development

To ensure the growth and prosperity of the people and the economy through the sustainable development of the energy sector, the introduction of new technologies and the development of human resources

Ensure prosperity and economic growth through reliable electricity supplies. Adhering to the principles of environmental friendliness, sustainable and high-tech development

Ensure the energy security of the country's economy, increasing shareholder value through innovative and sustainable development, and building the best partnerships

VISION

A leader in innovative energy development based on digital technologies and AI, ensuring the country's economic growth

An integrated holding company that effectively manages a diversified portfolio of assets. Builds and restores capacity

A leader in the country's electric power industry, generating clean energy guided by principles of caring for people and the environment, a reliable business partner

A high-tech energy holding company with a high level of social and environmental responsibility

A highly efficient energy company with high standards of environmental (economic), social and corporate governance

1. A reliable partner 2. A responsible employer 3. A leader in digitalisation and the implementation of modern technologies 4. An effective manager

An efficient, high-tech energy company with high environmental responsibility, a leader in Kazakhstan's energy sector

A competitive strategic energy holding company with a high level of social and environmental responsibility

A highly efficient strategic energy holding company with a high level of social responsibility

An effective high-tech strategic holding company

STRATEGIC GOALS

1. Reconstruction and modernisation of existing generating facilities and construction of new ones

2. Implementation of ESG principles

3. Increase in net asset value

KEY EVENTS OF ALMATY POWER STATIONS JSC IN 2024

Start of the renovation campaign	**1Q**

End of the 2024-2025 heating season	**2Q**
Signing of supplementary agreement №1 to the Agreement on the purchase of services to maintain electrical power readiness during the construction of newly commissioned generating units with maneuverable generation mode №10-01-DP/ AT-01 dated 17 March 2023 between AlES JSC and the Accounting and Financial Centre for Renewable Energy Sources LLP. (Minutes of the Board of Directors meeting № 05/24 dated 30 May 2024)	**3Q**
The development of design and estimate documentation for stage P has been completed. The design and estimate documentation for stage P has been uploaded to the Gosekspertiza portal for a comprehensive interdepartmental review of the design and estimate documentation for stage P of the Almaty CHPP-3 Reconstruction project.	**3Q**
On 20 September 2024, the Investment Attraction Council, chaired by First Deputy Prime Minister R.V. Sklyar, approved the issue that, pending a positive conclusion from the State Expertise Agency on the design and estimate documentation and environmental permits for the project, including for the construction period, the Akim of the Almaty Region should ensure the receipt of notifications on the start of construction and installation works from AlES JSC, taking into account the provision by AlES JSC of a letter of intent to provide a comprehensive non-departmental expert review of the project (Minutes of 20 September 2024).	**3Q**
Public hearings were held on the environmental protection section for the period of construction and installation works. The Ministry of Ecology and Natural Resources of the Republic of Kazakhstan issued an environmental permit for the impact on the construction and installation works of Almaty CHPP-3.	**4Q**
Obtaining a certificate of readiness of energy-producing and energy-transmitting organizations to operate in the autumn-winter conditions of 2024-2025.	**4Q**
Completion of the renovation campaign	**4Q**
Start of the 2024-2025 heating season.	**4Q**

ADDRESS BY THE CHAIRMAN OF THE BOARD

MARKET OVERVIEW AND THE COMPANY'S POSITION IN THE MAKET. CURRENT SITUATION ANALYSIS

The Unified Electric Power System (UES) of the Republic of Kazakhstan is a set of electric power stations, power transmission lines and substations that ensure reliable and high-quality power supply to consumers of the Republic of Kazakhstan.

The main directions of the state policy in the field of electric power industry are developed and determined by the Government of the Republic of Kazakhstan.

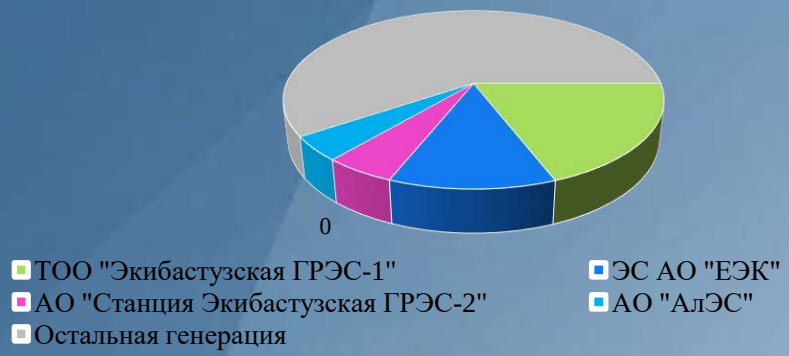
The Ministry of Energy of the Republic of Kazakhstan is the state authorized body in charge of the electricity sector.

Supervision and control in the field of electric power industry is carried out by the authorized body in the field of state energy supervision and control.

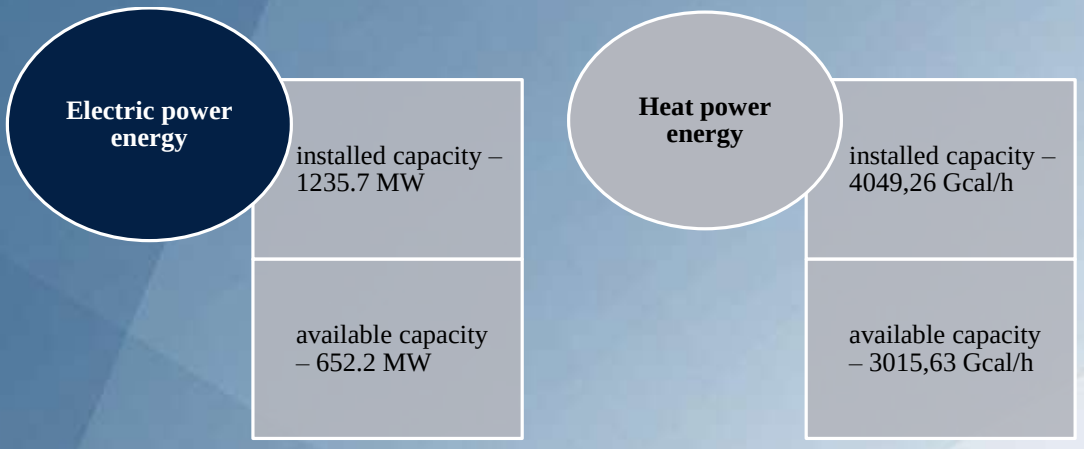
The electric power industry of the Republic of Kazakhstan includes the following sectors:

- ✓ Electricity generation;
- ✓ Transmission of electrical energy;
- ✓ Electricity supply;
- ✓ Electricity consumption;
- ✓ Other activities in the electric power industry.

Share of electricity generated by AlES JSC on the wholesale electricity market of the Republic of Kazakhstan



The total capacity of AlES JSC power plants as of 31 December 2024 is:



ELECTRICITY MARKET

On 1 July 2023, amendments to the Law on Electric Power Industry came into force, regulating the mechanism of the wholesale electricity market with the introduction of a single electricity purchaser model and a real-time balancing electricity market.

The system operator, regional power grid companies and other organisations that own power grids shall ensure access to the electricity market for all participants in accordance with the procedure established by the state body responsible for regulating natural monopolies.

Relationships arising in the production, transmission and consumption of electricity on the electricity market shall be governed by relevant contracts.

The wholesale electricity and capacity market in Kazakhstan consists of the wholesale electricity market, the balancing electricity market, the electricity capacity market and the market for system and ancillary services.

The wholesale electricity market operates on the basis of the purchase and sale of planned volumes of electricity included in the daily electricity production and consumption schedule approved by the system operator.

Centralized electricity trading involves the purchase and sale of electricity between energy-producing organizations and a single purchaser, as well as between a single purchaser and digital miners in an electronic trading system.

The real-time balancing market for electricity operates for the purpose of physical and subsequent financial settlement of hourly imbalances arising during the operating day between the actual and planned volumes of electricity approved by the System Operator in the daily electricity production and consumption schedule.

The market for system and ancillary services operates on the basis of both the purchase of ancillary services from wholesale electricity market participants and the provision of system services by the system operator to wholesale electricity market participants to ensure the reliability of the operation of the Unified Energy System of the Republic of Kazakhstan and the quality of electricity as established by national standards.

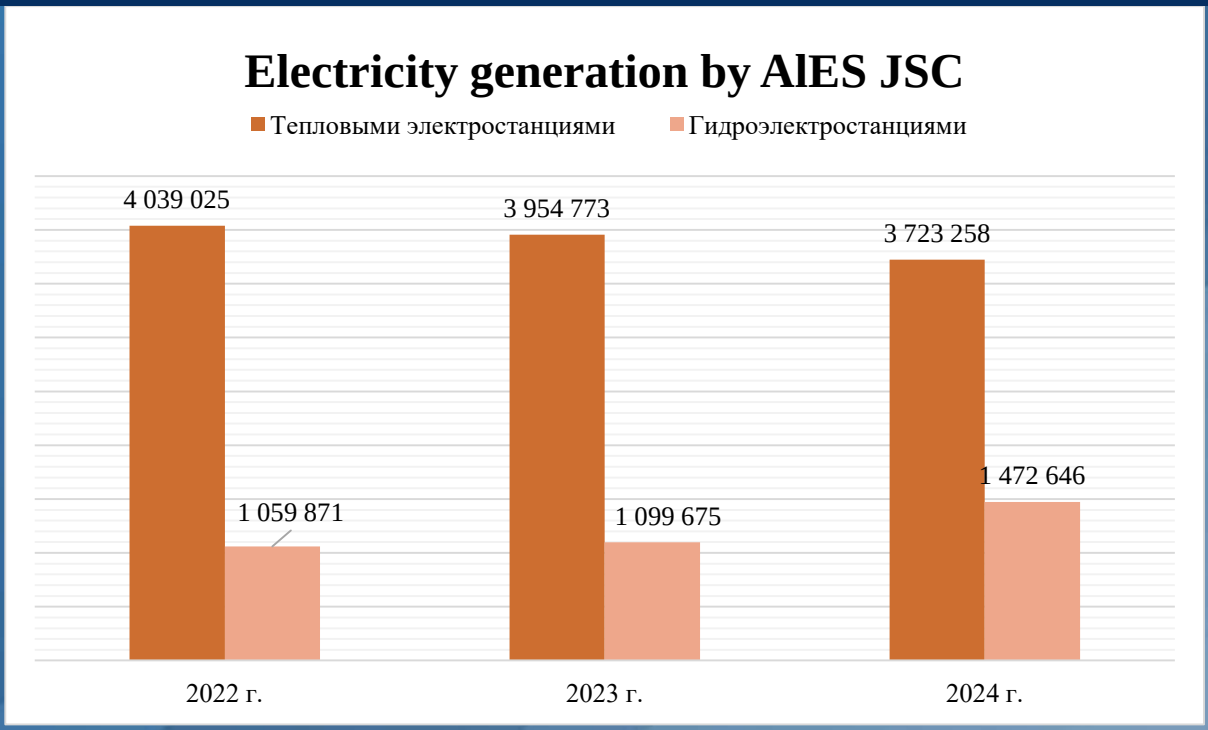
The electricity capacity market has been operating since 1 January 2019 with the aim of attracting investment for the commissioning of new electricity capacity in a volume sufficient to meet the demand for electricity and maintain the amount of electricity capacity in the EES of the Republic of Kazakhstan, determined on the basis of the forecast balance of electricity capacity.

The products manufactured by AlES JSC in the form of electrical energy are sold through the networks of regional power grid companies and power transmission organizations in the Almaty region.

In accordance with the amendments made to the Law on Electric Power Industry, from 1 July 2023, AlES JSC will sell its entire planned volume of electricity only to the single purchaser, RFTS for Renewable Energy Sources LLP.

Sales volumes of electricity produced by AlES JSC:

Consumers	**ths.kWh**	**Share, %**	**ths.kWh**	**Share, %**	**ths.kWh**	**Share, %**
	2022		**2023**		**2024**	
Almaty EnergoSbyt LLP	3 283 434	72	1 786 826	39,4		
Alatau Zharyk Company JSC	1 054 693	23	508 474	11		
Other consumers	252 625	5	136 487	3		
United purchaser			2 098 431	46,4	4 602 595	100
Overall:	4 590 752	100	4 530 218	100	4 602 595	100



Electricity generation in 2024 increased by 2.8% (141.5 million kWh) compared to 2023, with the following actual deviations in electricity generation from the planned figures:

- ✓ a 23.7% decrease in generation at CHPP-1 (101.8 million kWh) due to emergency repairs to the T-6 block transformer;
- ✓ a 2.1% decrease in generation at CHPP-2 (53.5 million kWh) due to unscheduled and emergency repairs of main equipment;
- ✓ The 8.0% decrease in output at CHPP-3 (76.3 million kWh) was due to unscheduled and emergency repairs of key equipment.
- ✓ an increase in output at the Kapshagai HPP by 37.7% (350.3 million kWh) due to an increase in water flow from the Kapshagai reservoir to the lower reach by order of the Balkhash-Alakol Basin Inspectorate;
- ✓ increase in output at the Cascade HPP by 13.4% (22.7 million kWh) due to increased inflow from the Big Almaty Lake.

HEAT ENERGY MARKET

AlES JSC is registered in the Republican section of the State Register of Natural Monopolies under the activity type 'Heat Energy Production'.

The thermal energy produced by AlES JSC is intended for the domestic market in Almaty.

The thermal energy produced was sold to the following consumers:

Consumers	ths. Gcal	share, %	ths. Gcal	share, %	ths. Gcal	share, %
Almaty Heat Networks LLP (Almaty)	2022		2023		2024	
	5 118,2	98	5 415,8	98	5 624,2	98
Other consumers	98,7	2	102,1	2	99,6	2
Total:	5 216,9	100	5 518,0	100	5 723,8	100

Heat supply in Almaty is provided from the following sources:

Name	ths. Gcal	share, %	ths. Gcal	share, %	ths. Gcal	share, %
	2022		2023		2024	
Almaty Electric Stations JSC	5 216,9	70	5 518,0	69	5 723,8	68,2
Almaty teplokommunenergo LLP	2 281,1	30	2 499,5	31	2 673,7	31,8
Total:	7 498,0	100	8 017,5	100	8 397,5	100

ANALYSING THE EXTERNAL AND INTERNAL ENVIRONMENT

ENVIRONMENTAL ANALYSIS

ECONOMIC ENVIRONMENT

The electricity sector plays an important role in the socio-economic sphere of Kazakhstan and has been identified as one of the priority sectors of the economy.

Reliable and efficient functioning of the industry, stable supply of electricity and heat to consumers aretheba-sisforthedevelopmentofthecountry'seconomyandanintegralfactorinensuringcivilised living conditions for the population.

Currently, 45-50% of the physical supply of electricity in Almaty and Almaty region is generated by power sources of JSC AlES, the rest of the electricity is supplied from other sources of the Republic of Kazakhstan.

The purchaser of the Company's planned volume of electricity sales is the Unified Purchaser of Electricity - Settlement and Financial Centre for Support of Renewable Energy Sources LLP of the Ministry of Energy of the Republic of Kazakhstan.

The main purchaser of the Company's heat energy is the heat supply company Almaty Heat Net- works LLP.

TECHNOLOGICAL ENVIRONMENT

The electric power industry is a capital-intensive and knowledge-intensive sector, which makes it highlydemanding-fortheprocessofdevelopingandimplementinginvestmentprojects. Further efficiency of the Company's operations will depend on the degree of success of Modernization of the existing equipment and introduction of energy efficient technologies in production.

ECOLOGICAL ENVIRONMENT

Transition to environmentally safe and sustainable development is currently becoming one of the priority directions of Kazakhstan's development strategy. The environmental policy of the Republic of Kazakhstan is developing in these directions and aims at environmental protection and rational use of natural resources.

Improvement of the country's environmental policy leads to stricter legislation, including in terms of emission standards and liability for non-compliance. Emissions into the atmosphere are limited by maximum permissible norms, exceeding which is punishable by penalties. The number of quotas for greenhouse gas emissions for each energy producing organization is determined by the National Plan.

LEGAL ENVIRONMENT

Legal regulation of the Company's activities is mainly established by the antimonopoly legislation of the Republic of Kazakhstan and legislation in the field of electric power industry.

Legislation in the field of electric power industry leaves uncertainties in the mechanism of setting marginal tariffs for electric power and for services on maintaining the availability of electric capacity, which is one of the main sources of financial risks of the Company. Uncertainties in the mechanism of setting marginal prices for electric power are related to the growth of prices for coal, water, transport services, spare parts of power equipment and so on.

Regulation of the activities of natural monopolies is carried out by an authorized body in the field of natural monopolies, whose powers include, inter alia, determination of the list and amount of reimbursable costs in the implementation of the regulated service.

INTERNAL ENVIRONMENT ANALYSIS

A unified and effective corporate culture aligned with the values of each employee, contributing to the growth of human potential and dynamic sustainable business development.

One of the conditions for success is organizational flexibility and optimality of this process for current and future business objectives, as well as effective formalization of the distribution of duties, powers and responsibilities in the regulations on structural units and job descriptions of employees.

HR

EmployeesarethemainvalueandthemainresourceoftheCompany.Thelevelof theirprofession- alismandsafetydirectlyaffectstheperformanceresults.TheCompanyattractsprofessionalcandi- dates in an open and transparent manner, develops programs to develop employee professionalism, provides access to employee training in accordance with the principle of meritocracy, and ensures safe working conditions.

COMMUNICATION

The Company has a system of interaction and data exchange between managers and subordinates, as well as between colleagues. This helps to create an internal corporate culture, increase engagement, inform and support employees in various conditions.

COORDINATION

All major processes in the Company are controlled by the Chairman of the Management Board, who oversees the organization of correct and efficient work in the Company. Within subdivisions, control is exercised by their heads, who manage the processes. All major issues of organizational and production character are solved by the Management Board of the Company, the Board of Directors and the Sole Shareholder, the opinion of each independent structural subdivision is taken into account, thus ensuring consistency of actions.

MANAGEMENT DECISION-MAKING

Management decision-making in the Company is carried out with the direct participation of all independent structural subdivisions concerned. A general idea is put forward, the general direction of development is determined, and its further development is carried out by specialists. At the same time, they interact with almost all structural subdivisions that have an interest in this decision.

When making a decision, the brainstorming method is also used: employees are given tasks in advance, the necessary information is given, meeting dates are determined; then the participants of the meeting express their ideas, and no idea is immediately discarded, but the most acceptable solution is considered and selected.

The appropriateness of the ideas put forward and the success of decisions made are influenced by the degree to which employees are informed about the state of affairs in the Company.

SWOT-ANALYSIS

As a result of analyzing the external and internal environment, the Company's strengths and weak- nesses as well as existing opportunities and threats have been identified and are presented below:

Strengths

Dominant position in heat and electricity production in Almaty and the Almaty region.

Guaranteed stable market for heat energy sales.

Implementation of investment projects to reduce environmental impact by cutting emissions and waste disposal volumes.

Key processes are regulated.

Weaknesses

High degree of physical and moral wear and tear of equipment

Lack of cash to finance necessary investment projects

Lack of unprofitable assets

The presence of non-automated production processes.

Opportunities

Opportunity to develop generating capacities.

Increase in demand for heat energy.

Enhancement of the enterprise's efficiency with implementation of the Projects under the Transformation Program.

Угрозы

- Чрезмерное ужесточение экологических требований.
- Rise in prices for coal, gas, water, TMOs (goods/materials/equipment)
- Changes in legislation (increased export duties, higher taxes, etc.)
- Maintaining the country's policy of tariff containment
- Growth of overdue accounts receivable.

The Kazakhstani electricity market has growth potential and the Company's position in the market is well suited to realizing this potential and increasing shareholder value. The Company will need to implement a long-term strategy focused on value growth by modernizing equipment and improving profitability.

FINANCIAL AND ECONOMIC INDICATORS

The Company's 2023 financial statements as at 31 December 2023 have been audited by Price water house Coopers LLP ("PwC"), independent auditors. The statements are available on the Company's corporate website and can be accessed via the following link:

https://ales.kz/images/2024/img/%D0%90%D1%83%D0%B4%D0%B8%D1%82%D0%BE%D1%80.pdf

"PwC" provides audit, tax and consulting services aimed at increasing the value of clients 'businesses. "PwC is a leading firm providing services to multinational oil and gas and power companies. The integration of products and resources into a single, industry-focused practice enables us to deliver the highest quality services and add value to our clients' operations.

FINANCIAL PERFORMANCE

This section contains the main indicators of financial and economic activity and their analysis, allowing to identify and assess the main trends and significant changes in the results of activity and financial position of JSC AlES.

MAJOR FINANCIAL RESULTS

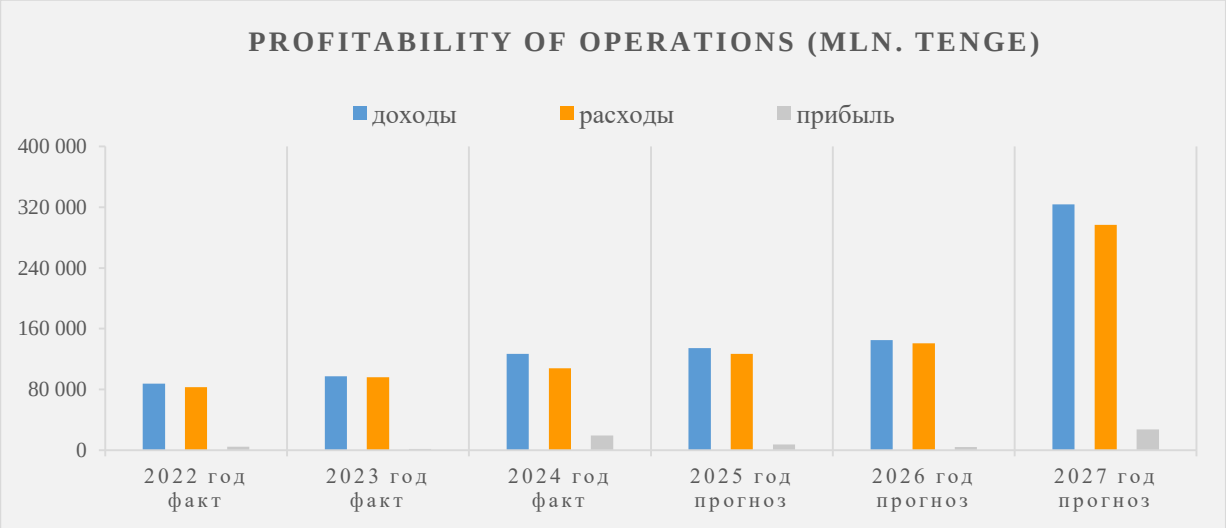
Indicators, mln tenge	2022 actual	2023 actual	2024 actual	2024 by 2023, in %	2025 Forecast	2026 Forecast	2027 Forecast
Revenue	86 220	96 721	125 675	130%	133 983	144 606	323 434
Cost of production	(77 195)	(89 560)	(96 785)	108%	(118 046)	(128 144)	(193 095)
Gross profit	9 025	7 161	28 890	403%	15 937	16 462	130 340
General and administrative expenses	(2 657)	(2 479)	(3 154)	127%	(3 931)	(4 158)	(4 360)
Other operating	1 020	413	591	143%			
income	(220)	(313)	(440)	141%			
Other operating	-	(17)	(1)	6%	(468)	(82)	(345)
expenses	7 168	4 765	25 886	543%	11 537	12 222	125 635
Impairment loss	136	217	414	191%	245	310	374
Operating profit	(1 853)	(3 279)	(2 323)	71%	(2 587)	(7 463)	(92 046)
Financial income	5 451	1 703	23 977	1 408%	9 196	5 069	33 963
Financial expenses	(1 144)	(382)	(4 934)	1 292%	(1 839)	(1 014)	(6 793)
Profit/loss (-)	4 307	1 321	19 043	1 442%	7 357	4 055	27 170

Based on the results of AlES JSC's activities for 2024, a profit of 19,043 million tenge was received. Compared to the same period, profit in 2024 increased by 17,722 million tenge. The improvement in financial results is due to an increase in electricity and heat tariffs by 29% and 23%, respectively, as well as an increase in electricity generation at the Sh. Chokin due to an increase in water releases under the regime established by the Balkhash-Alakol Basin Inspectorate. An additional contribution was made by the increase in the output of the Cascade HPP due to the growth of inflow in the Bolshaya Almatinka River basin.

FORECAST FOR THE UPCOMING PERIOD:

The forecast of financial and economic indicators was based on the Forecast of Social and Economic Development of the Republic of Kazakhstan for 2025-2029.

According to the forecast, the planned profit will amount to: 7,357 million tenge in 2025, 4,055 million tenge in 2026, and 27,170 million tenge in 2027. The uneven dynamics of the financial result according to the forecast for 2025-2027 is due to the simultaneous growth of revenues, due to an increase in tariffs, and an increase in expenses related to price increases, an increase in depreciation charges and the expansion of the social package for the Company's employees. The significant growth in profit in 2027 is explained by the planned commissioning of facilities under the projects 'Modernization of Almaty CHPP-2 JSC AlES with minimization of environmental impact' and 'Reconstruction of CHPP-3 (construction of a combined cycle power plant with a capacity of at least 450 MW)".



2.1 INCOME

INCOME STRUCTURE

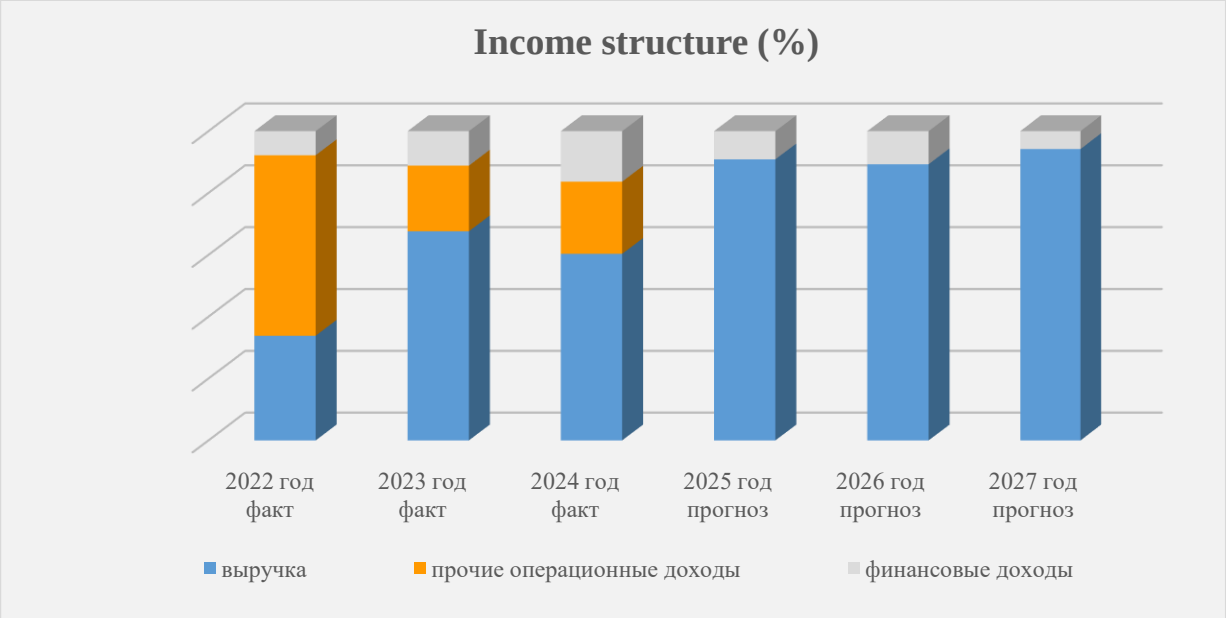
Indicators, mln tenge	2022 actual	2023 actual	2024 actual	2024 by 2023, in %	2025 forecast	2026 forecast	2027 forecast
Revenues	87 376	97 351	126 680	130%	134 228	144 916	323 809
Revenue	86 220	96 721	125 675	130%	133 983	144 606	323 434
Other operating income	1 020	413	591	143%			
Finance income	136	217	414	191%	245	310	374

In 2024, the total revenue of AlES JSC amounted to KZT 126,680 million, which is KZT 29,329 million, or 30%, higher than in 2023. The increase in revenue was due to higher electricity and heat tariffs. As in previous years, the bulk of revenue came from product sales, which amounted to 125,675 million tenge, or 99.2% of the total.

The increase in other operating income in 2024 compared to 2023 is due to a positive exchange rate difference arising from settlements in euros (EUR) and Chinese yuan (CNY) with POWERCHINA SEPCO1

Electric Power Construction Co on the project “Modernization of Almaty CHPP-2 JSC AlES” with minimization of environmental impact.

The increase in financial income is related to the receipt of interest on current bank deposits.



Revenues from electricity generation in 2024 amounted to 75%, compared to 74% in 2023. The share of revenues from heat production and chemically purified water sales in the structure of revenues from core activities in 2024 amounted to 24% and 1%, respectively. There were no significant changes in the revenue structure in 2024.

FORECAST FOR THE UPCOMING PERIOD:

Revenue growth in 2025–2027 is due to the projected increase in tariffs and sales volumes associated with the planned commissioning of facilities under the projects ‘Modernisation of Almaty TPP-2 JSC “AlES” with minimisation of environmental impact’ and ‘Reconstruction of TPP-3 (construction of a combined cycle power plant with a capacity of at least 450 MW)’.

Changes in the structure of AlES JSC's revenue in the period 2025-2027 are insignificant and are related to the implementation of investment projects to modernise the Almaty TPPs. In particular, the share of income from electricity generation in the company's total revenue is projected to be in the range of 73%–79%, from heat generation – 26%–20%, and from chemically purified water production – within 1%–2%.

The growth in financial income in the specified period is due to the implementation of a housing programme that provides for rental with subsequent purchase for the Company's employees.

2.2 EXPENSES

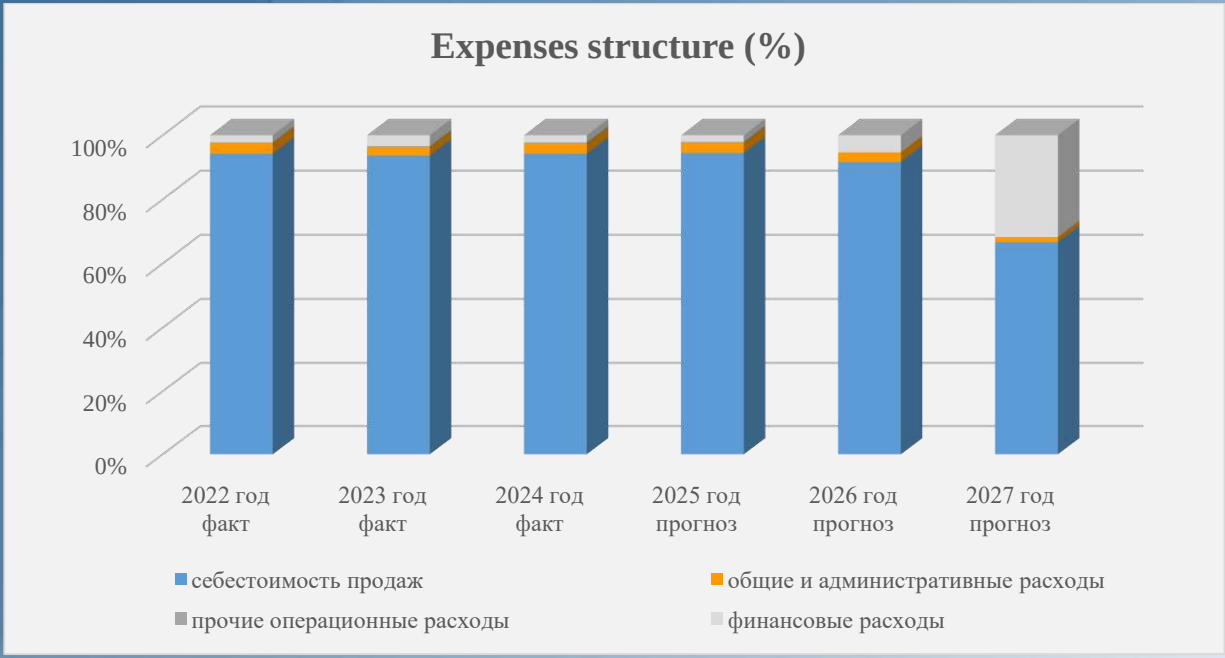
Indicators, mln tenge	2022 actual	2023 actual	2024 actual	2024 by 2023, in %	2025 forecast	2026 forecast	2027 forecast
Expenses, including	(81 925)	(95 648)	(102 703)	107%	(125032)	(139847)	(289846)
cost of sales	(77 195)	(89 560)	(96 785)	108%	(118046)	(128144)	(193095)
general and administrative expenses	(2 657)	(2 479)	(3 154)	127%	(3 931)	(4 158)	(4 360)

other operating expenses	(220)	(313)	(440)	141%			
financial expenses	(1 853)	(3 279)	(2 323)	71%	(2 587)	(7 463)	(92 046)
impairment loss		(17)	(1)	6%	(468)	(82)	(345)

AlES JSC's expenses in 2024 amounted to KZT 102,703 million, which is 7% higher than in 2023. The reason for the increase in costs in the reporting year compared to the previous year is the growth in production costs as a result of the rise in the cost of purchased TRUs, as well as an increase in the cost of purchasing electricity on the balancing electricity market to partially replace the capacity lost due to emergencies in connection with the introduction of the balancing electricity market in the second half of 2023.

FORECAST FOR THE UPCOMING PERIOD:

The Company's expenditure forecast has been prepared taking into account the Forecast of Socio-Economic Development of the Republic of Kazakhstan for 2025-2029 and reflects the trend of cost growth due to the expected increase in the cost of goods, services and works. The Company's financial expenses for 2024-2026 are forecast based on the Company's planned need for financing its operating activities and investment programme, and also take into account the accrual of provisions for the decommissioning of stations and ash dumps in accordance with IFRS.



The share of production costs in total costs in 2024 was 94%, which is at the level of 2023.

According to forecasts, the main share in the cost structure in 2025-2026 will be production costs in the range of 94% - 92%. A significant change in the cost structure in 2027 is associated with the planned commissioning of equipment for the projects 'Modernisation of Almaty CHPP-2 JSC AlES with minimisation of environmental impact' and 'Reconstruction of TPP-3 (construction of a combined cycle power plant with a capacity of at least 450 MW)' in December 2026. After the facilities are commissioned, financing costs that were previously capitalised during the construction period will be recognised as current expenses in accordance with IFRS requirements. These changes are due to the schedule for raising loans to implement

the investment campaign to modernise the Company's power plants. General and administrative expenses are expected to be at the same level as this year, around 3%-2%.

LIQUIDITY AND FINANCIAL STABILITY INDICATORS

Indicators, mln tenge	2022 actual	2023 actual	2024 actual	2024 by 2023, in %	2025 fore-cast	2026 forecast	2027 forecast
Financial result: (=) Net profit (-) Loss	4 307	1 321	19 043	1 442%	7 357	4 055	27170
Profit before depreciation, interest and income tax	16 506	18 720	39 226	210%	30933	35673	167931
Debt/EBITDA	0,95	0,61	1,69	278%	14,32	22,71	4,99
Interest coverage	4,64	3,08	72,38	2 349%	9,08	79,99	0,94
Financial leverage ratio	0,29	0,09	0,44	509%	2,69	4,79	4,27
Current liquidity	1,04	1,04	0,62	59%	1,18	0,28	0,32

The debt/EBITDA ratio for 2024 was 1.69. The negative trend in this indicator compared to the previous period (2023: 0.61) is due to an increase in borrowed funds planned to be raised for the implementation of projects to modernize the Company's stations. For the same reason, a rapid increase in the ratio is forecast for 2025-2026 (2025: 14.32; 2026: 22.71). The improvement in the indicator in 2027 is explained by an increase in revenue due to growth in output, as well as the receipt of revenue at an individual tariff for electrical power at CHPP-2 and CHPP-3 from 1 January 2027. This is due to the planned commissioning of equipment under the projects 'Modernisation of Almaty CHPP-2 JSC "AlES" with minimization of environmental impact' and 'Reconstruction of CHPP-3 (construction of a combined cycle gas turbine with a capacity of at least 450 MW)' in December 2026.

The interest coverage ratio for 2024 is 72.38. The improvement in the ratio compared to the same period in 2023 (2023: 3.08) is due to an increase in profit. The uneven dynamics of the indicator in subsequent years (2025: 9.08; 2026: 79.99; 2027: 0.94) is influenced by the growth in operating profit due to an increase in the volume of electricity generated at CHPP-2 named after A. Zhakutov and CHPP-3, as well as an increase in financing costs associated with the implementation of investment projects to convert Almaty CHPPs to gas and the exclusion of subsequent financial expenses from capitalisation in current expenses for the period, in accordance with IFRS requirements.

The financial leverage ratio (debt/equity) in 2024 was 0.44, demonstrating a deterioration compared to the same period last year (2023: 0.09), which is mainly due to an increase in the level of borrowed funds. Growth is forecast for subsequent periods (2025-2027), which is also associated with the expected increase in current liabilities in connection with the implementation of investment projects to convert Almaty CHPs to gas.

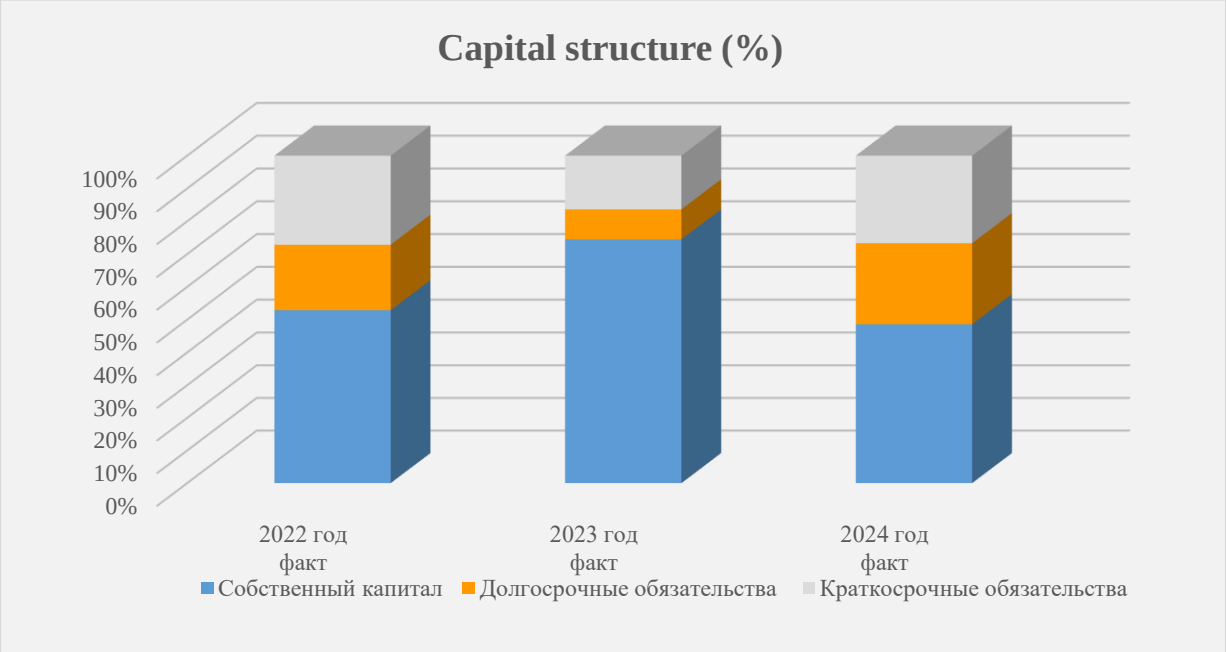
Current liquidity for 2024 was 0.62. In 2023, the ratio was 1.04. The deterioration in the indicator is due to an increase in the Company's current liabilities. In the subsequent years 2025-2027, uneven dynamics are forecast (2025: 1.18; 2026: 0.28; 2027: 0.32), as the debt burden increases due to the implementation of investment projects (Reconstruction of CHPP-3 (construction of a combined cycle power plant with a capaci-

ty of at least 450 MW), Modernisation of Almaty CHPP-2 JSC 'AlES' with minimisation of environmental impact).

STRUCTURE OF EQUITY AND BORROWED CAPITAL

Equity in 2024 amounted to KZT 151,278 million (in 2023: KZT 132,276 million), the increase being due to the receipt of profits. The Company's liabilities in 2024 amounted to KZT 159,987 million (in 2023: KZT 45,295 million), an increase caused by the need to raise borrowed funds for investment projects.

Indicators, mln tenge	2022	2023	2024	2024 by 2023
Share capital and issue premium	34 062	109 960	109 960	100%
Other capital	-919	-827	-868	105%
Retained earnings	21 822	23 143	42 186	182%
Total equity	**54 965**	**132 276**	**151 278**	**114%**
Long-term liabilities	20 769	16 231	76 916	474%
including loans	3 735	240	56 227	23 428%
Short-term liabilities	28 223	29 064	83 071	286%
including loans	11 721	10 878	9 712	89%
Total liabilities	**48 992**	**45 295**	**159 987**	**353%**
Total:	**103 957**	**177 571**	**311 265**	**175%**



FINANCIAL AND ECONOMIC INDICATORS

SHARE CAPITAL STRUCTURE AND SECURITIES

Share capital – 78,875 million tenge. Additional paid-in capital – 31,085 million tenge. Total – 109,960 million tenge.

Type of shares – ordinary, including the number of authorized shares – 18,700,160, issued shares – 7,657,770, including 2,950,160 at a price of 10,300 tenge per share, 294,000 shares at a price of 12,500 tenge per share, including 2,194,510 shares at a price of 17,021 tenge per share, and 2,219,100 shares at a price of 17,370 tenge per share. The number of unplaced shares is 11,042,390.

The sole shareholder of AlES JSC is Samruk-Energy JSC.

In 2024, dividends on the Company's ordinary shares for 2023 were not paid.

The minutes of the meeting of the Management Board of Samruk-Energo JSC No. 11 dated 17 April 2025 contain a decision not to pay dividends on the Company's ordinary shares for 2024 and to make these funds available to the Company for the implementation of major investment projects.

ASSET STRUCTURE

The uneven dynamics of changes in long-term assets are related to the implementation of the investment program and the corresponding change in the carrying amount of fixed assets. The increase in accounts receivable and cash led to growth in current assets by 2023.

Indicators, mln tenge	**2022**	**2023**	**2024**	**2024 by 2023**
Long-term assets	74 529	147 325	260 176	177%
Short-term assets	29 428	30 246	51 089	169%
Total:	**103 957**	**177 571**	**311 265**	**176%**

ESG. SUSTAINABLE DEVELOPMENT

ESG.SUSTAINABLEDEVELOPMENT

JSC AlES strives to build an effective management system in the field of sustainable development. The Company's activity is based on the consistency of environmental (Environmental) , social (Social) and management (Governance) principles with the balance of interests of all stakeholders.

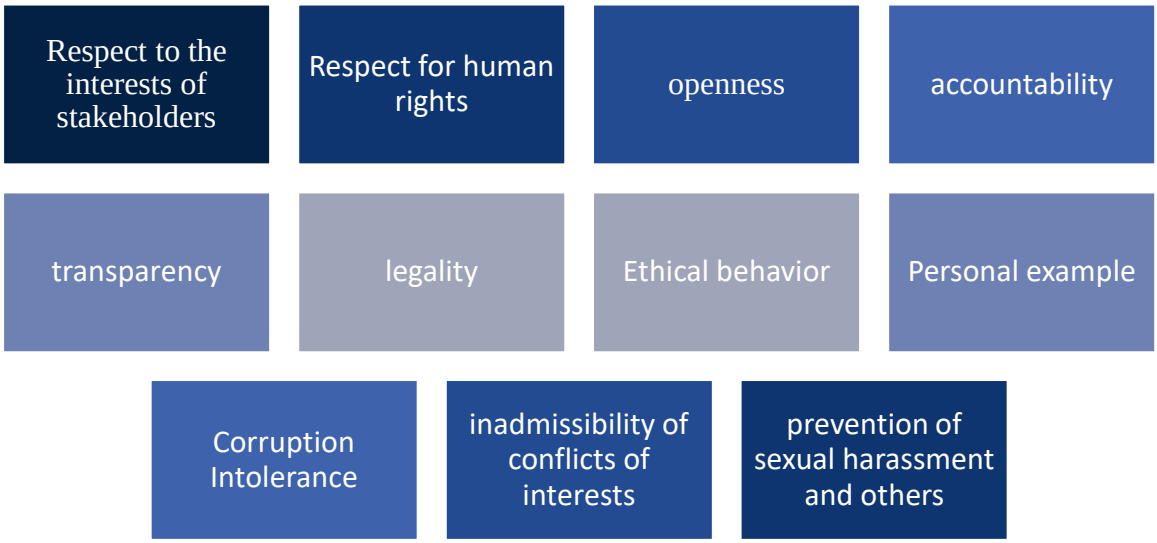
Priorities are as in the field of ESG

- Environmental aspect (Environmental)
  - Minimising the impact on biological and physical natural systems;
  - Optimal utilisation of limited resources;
  - Energy efficiency;
  - Creating environmentally acceptable products, minimizing, recycling and destroying waste

- Social aspect (Social)
  - Ensuring labour safety and preserving the health of personnel;
  - Staff training and development;
  - Fair remuneration and respect for workers' rights;
  - Implementation of social programs for personnel, creation of new jobs, sponsorship and charity.

- Corporate governance (Governance) aspect
  - Safeguarding the interests of shareholders and investors;
  - Increasing the efficiency of processes;
  - Increased investment in the creation and development of more advanced technologies;
  - Increasing labour productivity.

Principles in the field of sustainable development:



The Company conducted an analysis of the internal and external environment through the economic, environmental and social components of sustainable development. Based on this, in order to determine the list of stakeholders and their degree of influence, a Stakeholder Map was developed and approved by the Company's Board of Directors in

ESG. SUSTAINABLE DEVELOPMENT

2018 (Stakeholder Map) was developed and approved by the Company's Board of Directors in 2018 to determine the list of stakeholders and their degree of influence.

In 2024, the Company also monitored initiatives in the field of sustainable development. Based on this, changes were made to the Company's Sustainable Development Initiative Plan for 2022-2024. The Plan includes the following:

- ✓ sustainable development initiatives;
- ✓ measurable and achievable goals and deadlines for their achievement;
- ✓ persons responsible for implementing the Plan.

The results of the Plan's implementation are reviewed annually by the Company's Board of Directors as part of the Report on the Implementation of the Sustainable Development Initiatives Plan. Of the 29 measures planned for 2024, 20 have been implemented and 9 have not been implemented. In percentage terms, the Initiatives Plan has been implemented by 69.3%.

ESG. SUSTAINABLE DEVELOPMENT

The 2024 report on the implementation of the AlES JSC Sustainable Development Initiative Plan for 2022-2024 was considered by the decision of the Company's Board of Directors dated 29 April 2025 (Minutes No. 03/25).

№	Activities	Efficiency /Form of Completion	unit	SP, responsible for providing information	Target value 2024	Source of information	Actual value 2024	Execution status
Initiative1: Company's contribution to the country's economy								
1	Company's share in the electricity market in the Republic of Kazakhstan	Company's share in the electricity market in the Republic of Kazakhstan	%	MD, TD	5,0%	Information on the company's share in the electricity market in RK in the reporting period, approved by the Deputy Chairman of the Management Board-Chief Engineer of JSC AlES.	4,4%	**Not executed**
2	Improving economic performance	EBITDA for the reporting period	ths.KZT	ED	26 348 359	EBITDA	39 194 204	**Executed**
3	Providing loan financing for the projects 'Modernization of Almaty CHPP-2 with minimization of environmental impact' and 'Reconstruction of Almaty CHPP-3 on the basis of PGU with an increase in the station's capacity to 450 MW'.	unit	Ensuring effective performance	Economic performance		Letters from financial institutions indicating final indicative proposals	-	**Executed**
4	Ensuring socially responsible procurement	%	Increased productivity	Economic performance	100%	Download from the website zakup.sk.kz (information on the number of concluded contracts with OIN) Procurement plan for the reporting year	100%	**Executed**

5	Investment management	%	Increase in net asset value	Economic performance	100%	Action plan for the implementation of priority projects approved by the Management Board of Samruk-Energy JSC	65%	**Not executed**
Initiative 2: Decent pay and compensation								
6	Conducting annual indexation of employees' salaries	%	Increased productivity	Presence in the markets	166%	**Numerator**: Staff schedule of JSC AlES, approved by the decision of the Management Board of Samruk- Energy JSC: **Denominator**: MHP, annually established in the Law of the RK "On the Republican Budget"	166%	**Executed**
Initiative 3:Energy Efficiency								
7	Energy intensity	t.u.t./mln. KZT	Increased productivity	Energy	29,8	Energy consumption calculation	18,4	**Executed**
8	Energy consumption for own needs by energy producing organizations of Samruk-Energy JSC	%	Increased productivity	Energy	13,6%	Approved Development Plan for 2022-2026	12,6%	**Executed**
9	Implementation of energy saving measures	mln. KZT	Increased productivity	Energy	161,5	Monthly electricity reports	164,8	**Executed**
Initiative 4: Efficient use of materials, energy and water								
10	Reusable and recyclable water	%	Net carbon footprint reduction	Water and wastewater	96,7%	Reporting form 2-TP vodkhoz	96,0%	**Not executed**

11	Ensuring waste utilization	%	Net carbon footprint reduction	Wastewater and waste	100%	Annual report on waste inventory for the reporting period	100%	**Executed**
Initiative 5: Compliance with environmental obligations								
12	Reduction of greenhouse gas emissions	kg/kWh	EPD	Emissions	Coal - 0,985; Gas – 0,620	Calculation of specific greenhouse gas emission factor achieved as a result of emission reduction initiatives for the reporting period signed by the Head of EPD of JSC AlES	Coal CHPP-2 - 0,99 CHPP-3 – 1,338. Gas CHPP-1 - 0,193.	**Not executed**
13	Reduction of pollutant emissions into the atmosphere	kg/kWh	EPD	Emissions	8,900	Calculation of specific emission factor of hazardous substances into the atmospheric air per 1 kWh of production for the reporting period signed by the Head of EPD of JSC AlES	8,81%	**Executed**
Initiative 6: Human Rights and Equal Opportunities								
14	Increasing the number of women in the workforce	%	Increased productivity	Non-discrimination	20%	Information on the number of women during the reporting period, signed by the Head of Human Resources of AlES JSC	20%	**Executed**
15	Ensuring an optimal number of women in management positions	%	Increased productivity	Non-discrimination	12,5%	Information on the number of women during the reporting period, signed by the Head of Human Resources of AlES JSC	17%	**Executed**
16	Increasing the number of women in the talent pool	%	Increased productivity	Non-discrimination	26%	Order of the Chairman of the Management Board of AlES JSC on the approval of the strategic personnel reserve of	20%	**Not executed**

						AlES JSC		
17	Reducing the number of labor law violations	pcs.	Increased productivity	Human rights assessment	0	Information on labor disputes at AlES JSC for the reporting period	0	**Executed**
Initiative7: Countering all forms of corruption								
18	Preventing cases of corruption	pcs.	Increase in net asset value	Countering of corruption	0	Report of the Anti-Corruption Unit for the reporting period	0	**Executed**
19	Ensuring implementation of the Plan to minimize corruption risks identified by risk analysis results	%	Increase in net asset value	Countering of corruption	100%	Report of the Compliance Officer for the reporting period		**Executed**
20	Reduction of cases of ethics violations, corruption, etc.	pcs.	Increase in net asset value	Countering of corruption	0	Report on the implementation of the Plan to minimise corruption risks identified as a result of risk analysis for the reporting year	0	**Executed**
Initiative 8: Health and safety								

21	Ensuring implementation of the Action Plan for occupational health and safety and environmental protection at AlES JSC		%	Increased productivity	Health and safety	100%	Report on occupational health and safety, industrial injuries and environmental protection at AlES JSC for the 1st, 2nd, 3rd and 4th quarters of the reporting year (to be considered by the Board of Directors of AlES JSC)	100%	**Executed**
22	Reducing the level of occupational injuries	LTIFR	Increased productivity	Increased productivity	Health and safety	Report on occupational health and safety, industrial injuries and environmental protection at AlES JSC for the 1st, 2nd, 3rd and 4th quarters of the reporting year (to be considered by the Board of Directors of AlES JSC)	Report on occupational health and safety, industrial injuries and environmental protection at AlES JSC for the 1st, 2nd, 3rd and 4th quarters of the reporting year (to be considered by the Board of Directors of AlES JSC)	0,38	**Not executed**
23		FIFR	Increased productivity	Increased productivity	Health and safety	Report on occupational health and safety, industrial injuries and environmental protection at AlES JSC for the 1st, 2nd, 3rd and 4th	Report on occupational health and safety, industrial injuries and environmental protection at AlES JSC for the 1st, 2nd, 3rd and 4th quarters of the reporting year (to be considered by the Board of Directors of AlES JSC)	0,191	**Not executed**

						quarters of the reporting year (to be considered by the Board of Directors of AlES JSC)			
24		LDR	coef.	Increased productivity	Health and safety	200		146,42	**Executed**
Initiative 9: Attractiveness of the employer									
25	Ensuring the annual SAMRUK RESEARCH SERVICES index survey is conducted		%	Increased productivity	General information	78%	Results of the study for the reporting period provided by the Social Interaction and Communications Centre of Samruk-Kazyna JSC	65%	**Not executed**
26	Ensuring the annual AUP welfare index survey is conducted		%	Increased productivity	General information	85%	Results of the study for the reporting period provided by the Social Interaction and Communications Centre of Samruk-Kazyna JSC	43%	**Not executed**

27	Ensuring the implementation of the AlES JSC Action Plan to improve social stability	%	Increased productivity	General information	100%	Report on the implementation of the Action Plan to improve the social stability and staff engagement index, approved by the Chairman of the Management Board of AlES JSC	100%	**Executed**
28	Ensuring the planned level of staff turnover	%	Increased productivity	Employment	Less than 14%	Report on staff turnover at AlES JSC for the reporting period, signed by the Head of HR at AlES JSC	12,5%	**Executed**
Initiative 10: Effective stakeholder engagement								
29	Effective engagement with local communities in the implementation of new projects	-	Increase in net asset value	Local community	at least once a year	Report on the implementation of the Stakeholder Engagement Plan for projects during the reporting period (PU); Report on the implementation of the Stakeholder Communication Plan for the reporting period (UKRiR); Minutes of public hearings (UOOS)	Meeting of the Board of Directors of AlES JSC Minutes No. 02/25 dated 31 March 2025	**Executed**

INVESTMENT ACTIVITIES

The investment activities of AlES JSC are aimed at the reconstruction, modernisation and construction of new production facilities to ensure uninterrupted power supply, meet the demand for electricity and heat, and reduce the negative impact of production activities on the environment in Almaty and the Almaty region.

In 2024, the Company implemented a number of measures aimed at reconstructing and maintaining the operational condition of production assets and other fixed assets directly involved in the production process, in particular:

Work has begun on the project 'Modernization of Almaty CHPP-2 JSC "AlES" with minimization of environmental impact'.

Work has begun on the project 'Construction of a combined cycle gas turbine with a capacity of at least 450 MW at the CHPP-3 site'.

Work has been completed on the reconstruction of the combined ash removal system at CHPP-2

(stage 7)

Work is underway to install an automated emission monitoring system (AEMS) on the chimneys of CHPP-2

Major repairs are underway on the roof of the turbine department building of the main CHPP-2 building

Reconstruction of the ash dump of CHPP-3, stage 5, has been completed

The development of design and estimate documentation for the project 'Reconstruction of the Almaty CHPP-2 – ZTC heat pipeline' has been completed

Work on the implementation of an automated emission monitoring system (AEMS) on the chimneys of the ZTK has been completed

The development of design and estimate documentation for the modernization of the information and communication infrastructure of the head office has been completed

Total investments in development in 2024 amounted to KZT 105,440.8 million excluding VAT, including KZT 87,793.9 million for the implementation of investment projects, 16,859.8 million tenge for maintaining production assets and other fixed assets directly involved in the production process in working order, and 786.9 million tenge for maintaining administrative assets in working order.

Project: Modernization of Almaty CHPP-2 with minimization of environmental impact

The following activities were carried out in 2024:

In March 2024, the construction of the gas pipeline to CHPP-2 was completed.

In April 2024, DS № 2 to the EPC contract was signed.

In April 2024, an updated APZ (Architectural Planning Assignment) was received.

In May, forest pathology survey work was completed.

On 17 July, a positive conclusion was received on the working project ‘Construction of a retaining wall at CHPP-2, Almaty’.

On 31 July, a notification was received from the Almaty City Urban Planning Control Department on the start of construction and installation works for the ‘Construction of a retaining wall at TPP-2 of AlES JSC in Almaty’.

On 28 August, a positive conclusion was received on the working project ‘Construction of pumping stations for storm and domestic wastewater at TPP-2 of AlES JSC in Almaty’.

On 20 September, a meeting of the Council for Attracting Investments of the Republic of Kazakhstan was held, chaired by First Deputy Prime Minister of the Republic of Kazakhstan R.V. Sklyar, regarding ensuring the start of construction and installation works before receiving a positive conclusion from RSE Gosekspertiza on the project design documentation.

On 20 September, the STU for the foundations was received from KazNIISA JSC.

On 27 September, Gosekspertiza RSE issued a positive conclusion on the revised TEO No. 02-0161/24.

22 October – updated technical conditions for gas supply with clarification of the connection point and gas supply volumes.

24 October – a package of materials for obtaining an individual tariff for capacity was sent to and accepted by the Market Council.

30 October – as part of the first tranche of ADB financing, a visit by representatives of the ADB with a technical consultant was organised.

5 November – Environmental impact assessment received for Category I facilities under the Almaty TPP-2 Modernisation Project.

25 November – Public hearings held on the EIA (stage ‘P’).

26 November – meetings between representatives of the EBRD, ADB and BRK with TPP-2 staff on the implementation of ESAP requirements.

27 November – meeting with KTG-A on gas supply issues; Additional Agreement No. 3 signed with the EBRD (advance payment increased from 10% to 17%).

15 December – shipment of gas turbine generator from the port of Charleston (USA).

30 December – shipment of main gas turbine equipment and air cleaning device from the port of Hamburg (Germany).

31 December – Investment Agreement No. 52 signed for the period 2024–2038 for the modernisation, reconstruction and construction of gas-fired generating units.

Almaty CHPP-3 Reconstruction Project

Project objective:

Reconstruction of Almaty CHPP-3 with conversion to gas and construction of CCGT to compensate for the shortage of maneuverable capacity in the southern zone of Kazakhstan, reduce environmental impact and replace equipment that has reached the end of its service life.

Implementation in 2024:

In February, the EPC contractor signed a contract for the supply of gas turbines and generators (GTU).

In June - a contract for the supply of steam turbines and generators.

In July - an agreement for the supply of heat recovery boilers.

In August, the development of design and estimate documentation for the "P" stage was completed.

In September, the Investment Attraction Council, chaired by First Deputy Prime Minister Sklyar R.V., approved the possibility of starting construction and installation work before receiving the conclusion of the State Expertise RSE, subject to the provision of a letter of intent on a comprehensive examination.

In November, the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan issued an environmental impact permit for category I facilities.

In December, the AE94.2 generator rotor was successfully tested at the Ansaldo Energia plant (Genoa, Italy).

Also in December, pumping stations were supplied for industrial, rain and household wastewater.

Reconstruction of the combined ash and slag removal system CHPP -2 (stage 7)

Contract No. 778031/2023/1 was concluded with KURE GRUP LLP in 30.03.2023. Works completion date - 31.12.2024

The main scope of work for the development, transportation and laying of the ZShO was completed in 2024.

Minutes of technical meeting dated 19.12.2024 the work completion date was extended to 01.06.2025 for the completion of the preservation of section No. 1 of the DGPS and the shelter of sites No. 2 and No. 3 of the PPPSH.

Installation of an automated emission monitoring system (AFM) on chimneys CHPP -2

18.01.2024 Contract No. 918821/2024/1 was concluded with Infratech LLP for "Work on monitoring/implementation of automated control/monitoring/monitoring/accounting/dispatching systems for the object" Modernization (reconstruction) of chimneys CHPP-2 named after A. Zhakutov of AlES JSC, with

the introduction of an automated emission monitoring system (ACM). " Works completion period - till 17.06.2024. (152 calendar days).

SIC main equipment was delivered on 09.12.2024.

20.01.2025, supplementary agreement No. 918821/2025/1-1, the contract was extended until 31.03.2025.

The following works are completed:

• Installation of main equipment, container units, compressors and air supply system

• laying of power and control cable;

• Assembly of cabinets and associated equipment.

Commissioning is currently underway.

Overhaul of the roof of the turbine compartment of the main building CHPP-2

19.09.2024 received the Minutes of the meeting of the Commission for the Prevention and Elimination of Emergency Situations dated 09.09.2024.

The city akimat made a decision to carry out emergency recovery work on the overhaul of the roof of the main building of the A. Zhakutov CHPP -2.

24.09.24 the package of documents for procurement procedures to identify a potential contractor for emergency recovery work on the roof of the main building of the A. Zhakutov CHPP-2 was agreed with Samruk-Energo JSC in accordance with the design solutions.

27.09.2024 contract No. 1033160/2024/1 “Overhaul of non-residential buildings/structures/premises (Construction and Installation Works (CIW)” was concluded

“Overhaul of the roof of the main building"). Contracting organization AsiaSpetsEnergoMontazh LLP. With the deadline of 31.12.2026.

Work Execution Schedule (MS), Method Statement (MS) approved. Work is carried out in accordance with the project and contract.

Reconstruction of ash disposal area CHPP -3 stage 5

30.01.2024 contract No. 934642/2024/1 “Work on preparation/formation/clearing of land/land for subsequent work” was concluded

(Reconstruction and expansion of ash disposal area CHPP-3, 5th stage. CIW performance). Подрядчик: ТОО«BuildConstructiongroup».

The main scope of work for the development, transportation and laying of the ZShO was completed in 2024.

Development of design and estimate documentation “Reconstruction of the heat main of the Almaty CHPP-2 – ZTC”

As part of the implementation of the Roadmap “Reconstruction of the heating main from CHPP-2 to the Western heating complex” in the city of Almaty, approved by the First Deputy Prime Minister - Minister of the Republic of Kazakhstan Sklyar R.V., dated 07.06.2023. The following activities have been completed:

- Adjustment of the feasibility study “Reconstruction with complete relocation of the Heating Main CHPP -2 - ZTC" received a positive conclusion of the RSE “Gosexpertiza” dated 20.10.2023 №02-0151/23.

- Development of design and estimate documentation “Reconstruction with complete re-laying of the CHPP-2-ZTK heating main" received a positive conclusion of the RSE “Gosexpertiza" dated 28.12.2023 №02-0206/23.

The estimated cost of CIW is 52.728 billion tenge with VAT. Implementation period 2024-2030

- 09.02.2024 Akimat of the city of Almaty in accordance with the Rules for lending for the construction, reconstruction and modernization of heat, water supply and sanitation systems, approved by Order of the Minister of National Economy of the Republic of Kazakhstan dated July 2, 2015. No. 495 (hereinafter - the Rules) sent a budget application to the Ministry of Industry and Construction (hereinafter - MPiS) of the Republic of Kazakhstan (budget program administrator) with a full package of technical documentation attached.

- 16.05.2024 according to clause 54 of the Rules, a positive conclusion was received on the possibility of issuing a budget loan from the Kazakh Center for Modernization and Development of Housing and Communal Services JSC, from which it is an agent of the Committee for Construction, Housing and Communal Services of the Ministry of Finance and Social Development of the Republic of Kazakhstan.

- Based on the conclusion of the agent's attorney, the Working Group (advisory body on the development of recommendations for the provision of a budget loan) determined the feasibility of budget lending to the project.

- The budget application submitted by the Akimat of Almaty to the MPiS of the Republic of Kazakhstan, according to the procedure, was sent to the MPiS of the Republic of Kazakhstan to the Ministry of Finance to make an adjustment to the budget of 2024-2026.

- The Ministry of Finance, by letter dated 26.07.2024 No. ZT-2024-04626891, reported that as part of the formation of the draft republican budget for 2024-2026, the application for the implementation of the project “Reconstruction of the heating main from CHPP-2 to the Western Thermal Complex" was not submitted, the issue of financing the project will be considered in the manner prescribed by law when making a budget application by the authorized body.

- Heating main reconstruction project with 2024-2026 budget adjustment left by the Treasury Department without consideration.

- For the formation of the Republic of Belarus for the planning period of 2025-2027, the Akimat of the city of Almaty with a cover letter dated 05.01.2025 No. 2-41/4-I signed by the Deputy Akim of the city

of Almaty, a budget application was sent to the MPiS of the Republic of Kazakhstan for inclusion in the Republic of Belarus for the planning period of 2025-2027. of the project "Reconstruction with full re-laying of the heating main CHPP-2 - ZTC AlES JSC.

- Akimat of Almaty city by letter No. 2-41/214-I dated 10.02.2025 sent to the Ministry of Energy a budget application "Reconstruction with the complete re-laying of the TPP-2-ZTK heating main" for submission to the Ministry of Finance for the planned formation of the Republic of Belarus in 2025-2027.

- In connection with the transfer of heat supply systems to the Ministry of Energy and the transfer of project financing competencies, 19.02.2025 The package of documents for the project “Reconstruction with the complete relocation of the CHPP-2-ZTK heating main” was transferred from the Ministry of Industry and Construction to the Ministry of Energy for further work.

- As part of the consideration of alternative sources of financing, a letter dated February 23, 2025 was sent to DKREM in Almaty. No. 08/3-395 on the readiness for the implementation of the project “Reconstruction with the full relocation of the heating main of CHPP -2-ZTK" through the National project for the modernization of the energy and communal sectors, with the search for funding for 2025-2030.

Implementation of Automated Emission Monitoring System (ACM) on FTC chimneys

11.01.2023 contract No. 785909/2023/1 was concluded for the implementation of the project “Installation of an automated emission monitoring system on the pipes of the ZTK JSC AlES.”

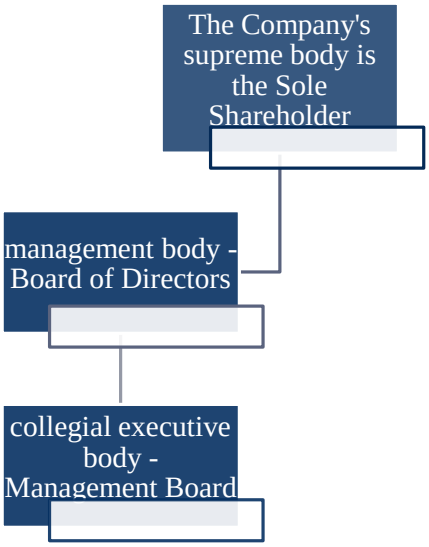
Consortium consisting of ECOSERVICE-S LLP and INFRATECH LLP. Installation of main equipment, container blocks, compressors and air supply system, installation of power and control cables, assembly of cabinets and related equipment are completed. Data is transmitted. The facility was adopted in December 2024.

Development of design and estimate documentation for modernization of the information and communication infrastructure of the head office

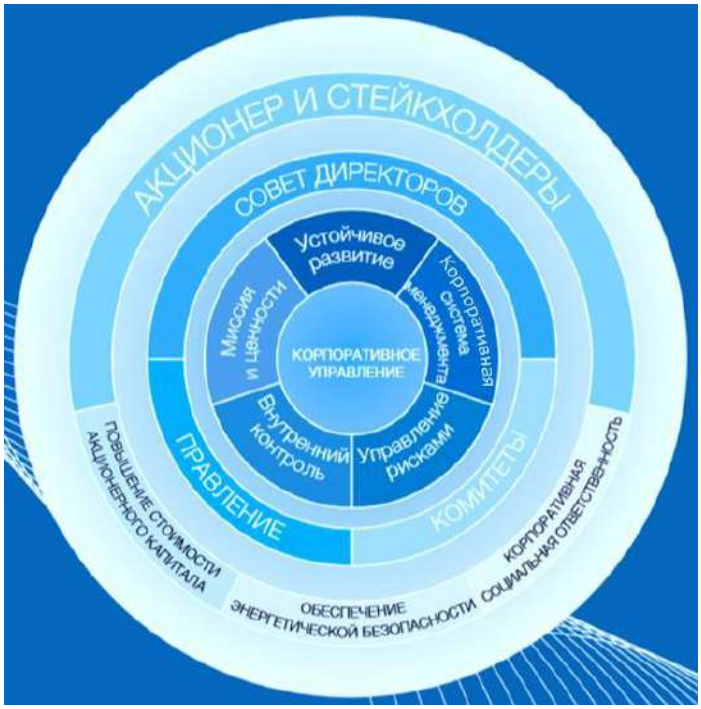
05.10.2023 contract No. 893122/2023/1 was concluded for the development of the design and estimate documentation "Modernization of the information and communication infrastructure for CHPP-1, CHPP-2 (PRP, CPVT as part of CHPP-2), ZTC and the Head Office of AlES JSC.” Contractor SIGNAL ENGINEERING LLP. Positive expert opinions were received № NUREX-0089/24 dated 31.12.2024, No. NUREX-0090/24 dated 31.12.2024, No. NUREX-0091/24 dated 31.12.2024.

CORPORATE GOVERNANCE

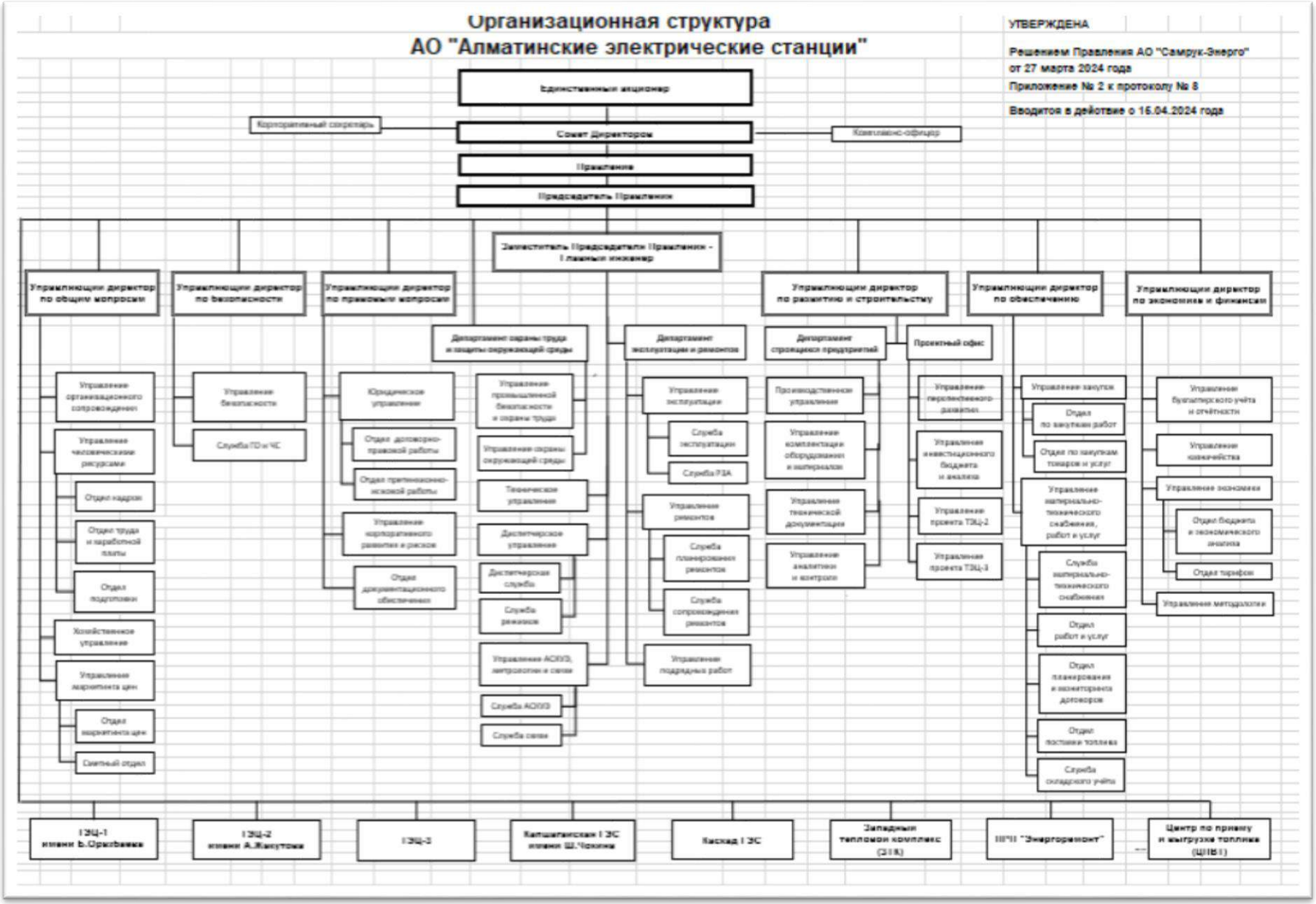
In accordance with the Company's Charter and the legislation of the Republic of Kazakhstan, the Company's management structure consists of the following management bodies:



The Company considers the corporate governance system as a tool for observing the interests of the Sole Shareholder of the Company, building a balanced system of relations with all stakeholders and improving the efficiency of its activities.



ESG. SUSTAINABLE DEVELOPMENT
ASPECT G. CORPORATE GOVERNANCE



BOARD OF DIRECTORS

The Board of Directors is a management body of the Company, carries out general management of the Company's activities, except for the issues referred by the Law of the Republic of Kazakhstan “On Joint Stock Companies" and (or) the Charter of the Company to the exclusive competence of the Sole Shareholder and the executive body.

Resolutions of the Board of Directors shall be adopted in the order determined by the Company's Charter, the Code of Corporate Governance of Samruk-Energy JSC, the Regulations on the Company's Board of Directors and other internal documents of the Company.

The Board of Directors shall be responsible to the Sole Shareholder for general management of the Company's activities.

The Board of Directors of the Company consists of 6 (six) members, 3 (three) of which are Independent Directors. Members of the Board of Directors of the Company are elected by the decision of the Sole Shareholder.

COMPOSITION OF THE COMPANY'S BOARD OF DIRECTORS AS OF DECEMBER 31, 2024

RUSLAN ELUBAYEVICH TURGAMBAYEV
Chairman of the Board of Directors

Date of birth: 30 April 1974
Citizenship: Republic of Kazakhstan
Date of election to the Board of Directors: 20.02.2023 (Minutes of the Board of Directors of Samruk-Energy JSC #03/23).

Education:
Almaty Institute of Power Engineering and Communications, specialty "IndustrialHeatPowerEngineering",graduationyear-1998.Central Asian Innovation University, speciality "Management and management", graduation year - 2021.
Experience in the last 5 years:
2013-2019workedinBasisElectroMontazhLLPasTechnicalDirector;
2019-2021 worked in the State Institution "Department of Energy and Housing and Communal Services of Turkestan region" as Deputy Head, Head;
01.2022-11.2022 worked in "Purolite LTD" (UK, Representative Office in RK and Central Asia, Azerbaijan and Armenia) as a key account representative;
11.2022-presentManagingDirectorforProductionofSamruk-EnergyJSC.
He is also a member of the Management Board of Samruk-Energy JSC, Chairmanof the Board of Directors of JSC AlES and AZhK JSC, a member of the Board of Directors of Eki-

ANSAR AYDAROV
Member of the Board of Directors

Dateofbirth:24April1986
Citizenship: Republic of Kazakhstan
Date of election to the Board of Directors: 28.08.2023(Minutes of the Board of Directors of Samruk-Energy JSC#11/23).

Education:
Al-Farabi Kazakh National University, graduation year-2008.
Specialty-"International Relations"; Eurasian Law Academy named after D.Kunayev.
Eurasian Law Academy, graduation year 2012.
Specialty - "Jurisprudence";
Humanitarian - Technical Academy, graduation year 2013. Speciality - "Economics and Business".
Experience in the last 5 years:
2013 - 2019. Energy of Semirechye LLP Managing Director.
From June 2020 to the present time holds the position of the Head of the Project Office of Samruk-Energy JSC;
He is also Chairman of the Supervisory Board of Ereymentau Wind Power LLP and a member of the Supervisory Board of Ekibastuz

MASHAROV YERIK KANYSHBEKOVICH
Member of the Board of Directors

Dateofbirth:10March1988
Citizenship: Republic of Kazakhstan
Date of election to the Board of Directors: 28.07.2023 (Minutes of the Board of Directors of Samruk-Energy JSC No. 10/23)

Education:
Kazakh Economic University named after T.Ryskulov, graduation year - 2010 (Bachelor's degree)
Specialty: Finance.
Kazakh Economic University named after T.Ryskulov, graduation year - 2011 (Master of Economics and Business) Specialty: Finance.
Kokshe Academy, graduation year 2013.
Speciality: Jurisprudence
Experience in the last 5 years:
From 03.2018 to 03.2019-Managing Director of Demeu Business Group LLP.
From 04.2019 to 12.2020. - Advisor to the Chairman of the Management Board on Support and Commerce of Moynak HPP JSC;
From 04.2021 to 06.2022-Advisor to the Chairman of the Management Board of Samruk-Energy JSC;
From 12.2021to 06.2023 – Coordinator of Insight

bastuz SDPP-2 Station JSC and a member of the Supervisory Board of Ekibastuz SDPP-1 LLP. Number and share of shares owned by affiliated companies-none.	SDPP-1 LLP.	consult LLP; Since 03 July 2023 - to date - Chairman of the Management Board of JSC AlES; Number and share of shares owned by affiliated companies-none.

DULKAIROVMARATTURGANBEKOVICH
MemberoftheBoardofDirec-tors(independentdirector)

Dateofbirth:4June1947.
Citizenship: RepublicofKazakhstan
DateofelectiontotheBoardofDirec-tors:17.04.2023(MinutesoftheBoard of Direc-tors of Samruk-Energy JSC #05/23).

Education: Graduated from Magnitogorsk Mining and Metallurgical Insti-tute of the Russian Federation, qualification of power engineer, Magnito-gorskIndustrialTechnicalCollegeoftheRus-sianFederation,qualificationof metallurgical technician;
Experienceinthelast5years:
From2015tillpresent-GeneralDirectoroftheUnionofPowerEngi-neersof the Republic of Kazakhstan.
ItdoesnotholdanysharesintheCompany,supplie rsorcompetitors.

MUSABEKOVRASUL-BEKAKHYLBEKOVICHMUSABEKOV
MemberoftheBoardofDirec-tors(independentdirector)

Dateofbirth:27October1958.
Citizenship: RepublicofKazakhstan
DateoffirstelectiontotheBoardofDirec-tors:30.03.2018r.(Minutesof the Board of Directors of Samruk-Energy JSC No. 02/18).
Date of election to the current Board of Di-rectors of JSC AlES - 08.04.2021.(MinutesoftheBoardofDirectorso fSamruk-EnergyJSC#04/21).

Highereduca-tion,graduatedfromKazakhChemicalTechno logicalIn-stitute,MechanicalFaculty,Shymkent(Machi nesandapparatusesofchemical produc-tions), Almaty Power Engineering Institute, ThermalPower Engineering Faculty, Almaty (Thermal Power Plants, ThermalPowerEn-gineer).

MURAYEVMURATKULSEITKULO-VICH
MemberoftheBoardofDirec-tors(independentdirector)

Dateofbirth:03May1966
Citizenship-Republicof**Kazakhstan**
DateofelectiontotheBoardofDirec-tors:25.12.2023(MinutesoftheBoard of Directors of Samruk-Energy JSC No. 18/23 dated25.12.2023).

Education-higher**education**:
AlmatyPowerEngineeringInstitute-FacultyofThermalPowerEngi-neering, speciality thermal power plants, grad-uation year - 1990.
Experienceinthelast5years:
2018-2019.JSCEkibastuzSDPP-2Station,DeputyChairmanoftheManag ement Board for Production and Maintenance.
2019-2022.AngrenCHPPJSC,RepublicofUz bekistan,GeneralDi-rector.

KAMALOV ALMASBI NIZAMADDINOVICH
Member of the Board of Directors, shareholder representative

Date of birth: April 07, 1989
Citizenship - Republic of Kazakhstan
Date of election to the Board of Directors: 15.03.2024 (Minutes of Samruk-Energo JSC Board of Directors No. 03/24).

Education - higher:
Kazakhstan Institute of Management, Economics and Forecasting, Almaty, year of completion 2010
Specialty - "Management/Marketing, Bachelor of Business Administrative and Accounting."
Kazakhstan Institute of Management, Economics and Forecasting, Almaty, year of completion 2010
Specialty - "Management/Marketing, Bachelor of Business Administrative and Accounting."
Experience in the last 5 years:

	D.inTechnicalSciences,AssociateProfessorof Energy. **Experienceinthelast5years:** Since 2009 till present - Almaty Institute of Power Engineering andCommunica-tions,HeadoftheDepartment"IndustrialHeatP owerEn-gineering". ItdoesnotholdanysharesintheCompany,supplie rsorcompetitors.	SinceJu-ly2022tillpresentEnergoinvestAtyrauL LP,CommercialDi-rector. ItdoesnotownanysharesofJSCAIES,sup pliersorcompetitors.	2017 - 2021 Samruk-Energo JSC Head of the Economic Analysis Department of the Strategy and Economic Analysis Department. 2021 - 2023 Samruk-Energo JSC Director of the Strategy and Economic Analysis Department; Since September 2023, currently Managing Director for Economics and Finance of Samruk-Energy JSC; The number and share of shares owned by affiliated companies - none.

CRITERIA FOR SELECTION OF BOARD MEMBERS

In accordance with the Charter and the Regulations on the Board of Directors of the Company, members of the Board of Directors are elected by decision of the Sole Shareholder. An individual who is not a shareholder of the Company and is not proposed (not recommended) for election to the Board of Directors as a representative of the Shareholder may be elected a member of the Board of Directors. The number of such persons shall not exceed fifty percent of the Board of Directors.

Members of the Management Board of the Company other than the Chairman of the Management Board of the Company may not be elected to the Board of Directors. The Chairman of the Management Board may not be elected as the Chairman of the Board of Directors.

The number of members of the Company's Board of Directors shall be determined by a decision of the Sole Shareholder.

Note: detailed information on the procedure for electing members of the Company's Board of Directors, as well as their key functions, can be found in the Regulations on the Board of Directors posted on the Company's corporate website: www.ales.kz.

NUMBER OF BOARD MEETINGS (FOR 2024)

The work plan of the Board of Directors of the Company for 2024 provided for the consideration of 40 issues, while ensuring an even distribution of the number of issues planned for consideration during the year. The work plan of the Company's Board of Directors for 2024 was 100% fulfilled, 9 in-person and 3 absentee meetings were held, and the quorum was observed in all meetings.
In addition, during 2024, the Board of Directors of the Company considered unscheduled issues (43 issues) that are within the exclusive competence of the Board of Directors of the Company.

BOARD MEETINGS ATTENDANCE:

Meetings of the Company's Board of Directors were held in full in 80% of cases. In other cases, written opinions of members of the Board of Directors who did not participate in the meetings were presented.

KEY ISSUES CONSIDERED BY THE BOARD OF DIRECTORS IN 2024

- Additional agreements signed between JSC ALES and Asian Development Bank, JSC Halyk Bank of Kazakhstan, DONGFANG ELECTRIC INTERNATIONAL CORPORATION&POWERCHINA SEPCO1 ELECTRIC POWER CONSTRUCTION CO., LTD&POWERCHINA HEBEI consortium ELECTRIC POWER ENGINEERING CO., LTD, Settlement and Financial Center for Renewable Energy Support LLP, Almaty Heating Networks LLP
- Pledge agreement concluded with Halyk Bank of Kazakhstan JSC
- The registration of the Liquidity Management Program of AlES JSC in the Samruk-Energo JSC group of companies at the Astana International Exchange site was approved.
- Internal regulatory documents were approved: the Code of Conduct of AlES JSC in a new edition, the Risk Management Policy of AlES JSC in a new edition, the Plan for minimizing corruption risks of AlES JSC for 2024-2025
- Appointment of Ombudsman of AlES JSC, Corporate Secretary of AlES JSC, election of Senior Independent Director
- The quantitative composition of the Nomination and Remuneration Committee of the Board of Directors of AlES JSC was determined,
- On amending the "Regulation on Remuneration of Employees of AlES JSC."
- On taking into account the quarterly Reports on the state of labor protection in JSC AlES;
- Review of quarterly reports on risk management with description and analysis of key risks, as well as information on implementation of plans and risk minimization programs of AlES JSC;

- On consideration of Reports on the results of the work of the Ombudsman of AlES JSC for 2024, as well as on compliance with the Code of Conduct in the Company;
- On consideration of the Report on the implementation of the Plan of Initiatives in the Field of Sustainable Development of AlES JSC for 2024;
- On consideration of Reports on results of financial and economic activities and Report on achievement of target values of key performance indicators of AlES JSC for 2024 (quarterly).
- On consideration of the Report on compliance/non-compliance of JSC ALEC with the principles and provisions of the Corporate Governance Code/and on the reasons for non-compliance with each of them at the end of 2023;
- Review of quarterly Reports on the performance of the compliance officer of JSC AlES;
- Review of audit reports based on audit results;
- On consideration of quarterly Reports on efficiency of implemented investment projects of AlES JSC;
- Approval of the Risk Register, Risk Map, Action Plan for Minimizing Key Risks, Tolerance Levels in Relation to Key Risks, Key Risk Indicators of AlES JSC for 2025;
- Approval of the general risk appetite of AlES JSC for 2025;
- Approval of the Work Plan of the Board of Directors of AlES JSC for 2025.

BOARD COMMITTEES

The Company's Board of Directors shall have the following Committees:

In 2024, 4 meetings of the Nomination and Remuneration Committee of the Board of Directors of AlES JSC (hereinafter referred to as the Committee) were held. 5 questions were made, of which 4 planned questions.

The form of the Committee meetings was in the form of video conferencing, 100% of the Committee members participated in each meeting.

The following issues were brought before the Committee:

1. On consideration of the Report on the results of the work of the Ombudsman of AlES JSC for 2023, as well as the Report on compliance by employees with the Code of Conduct.

2. Provision of recommendations to the Board of Directors of AlES JSC on the consideration of the report on the assessment of the performance of the Board of Directors, its Committees, as well as the Chairman, members of the Board of Directors and Corporate Secretary of AlES JSC for 2024.

3. On the provision of a recommendation to the Board of Directors of AlES JSC on the approval of an individual development plan for members of the Board of Directors and the Corporate Secretary of AlES JSC for 2024.

4. On provision of recommendations on performance assessment of the Board of Directors of JSC ALEC and assessment of the Corporate Secretary's performance based on the results of work for 2023.

5. On approval of the Work Plan of the Nomination and Remuneration Committee.

GOVERNMENT. REPORT ON THE ACTIVITIES OF THE MANAGEMENT BOARD FOR 2024

ORGANISATION OF THE BOARD'S ACTIVITIES

The Company's day-to-day operations are managed by a collegial executive body in the form of the Management Board headed by the Chairman of the Management Board.

The organization of work of the Management Board of the Company, the procedure for convening and holding its meetings, the procedure for adopting and executing decisions are determined by Regulations on the Management Board of the Company approved by the decision of the Board of Directors of the Company dated 29 September 2021 (Minutes No. 09/21).

The main principles of the Management Board activity are maximum observance of the Sole Shareholder's interests, fulfillment of tasks and instructions of the Company's Board of Directors, honesty, integrity, reasonableness, prudence, and regularity.

The activity of the Management Board is fully accountable to the Sole Shareholder and the Board of Directors of the Company.

The Management Board of the Company holds regular meetings in person.

ESG.SUSTAINABLE DEVELOPMENT

ASPECT G.COMPANY BOARD

COMPOSITION OF THE COMPANY'S BOARD OF DIRECTORS AS OF DECEMBER 31, 2024

MASHAROV YERIK KANYSHBEKOVICH
Chairman of the Management Board, Member of the Board of Directors
Born10March1988.
Education: Kazakh Economic University named after T. Ryskulov, (Bachelor's degree). Specialty: Finance.
Kazakh Economic University named after T.Ryskulov, (Master of Economics and Business).
Specialty - Finance.
Kokshe Academy.
Specialty: Jurisprudence. Experience in the last 3 years:
From April 2021 to June 2022. - Advisor to the Chair-man of the Management Board of Samruk-Energy JSC;
From December 2021 to June 2023 –

KALIYEV BAUYRZHAN BOLATOVICH
Deputy Chairman of the Management Board for Production - Chief Engineer, Member of the Management Board
Born November 11, 1982
Education: Alma-Ata Institute of Energy and Communications.
Specialty "Heat and Power Engineer."
Experience in the last 3 years:
Since April 2019 until November 2023 - Chief TETs-2 Engineer of AlES JSC;
From November 2023 until June 2024 - TETs-3 Director of AlES JSC;

Since June 2024 Currently, Deputy Chairman of the Management Board for Production - Chief Engineer of AlES JSC.

ARGINBAYEVA ASEL AMANTAEVNA
Managing Director for Economics and Finance, Member of the Management Board
Born March 24, 1975
Education: Kazakh State Academy of Management. Specialty: Finance and Credit, Banking.
Experience in the last 3 years:
Since November 2017 31 December 2019 - Deputy Chairman of the Management Board for Economics and Finance of JSC AlES;
Since January 2020 to the present day - Managing Director for Economics and Finance of AlES JSC.

Coordinator of Insight consult LLP; Since 03 July 2023 till present - Chairman of the Management Board of JSC AlES.		

ESG.SUSTAINABLE DEVELOPMENT

ASPECT G.COMPANY BOARD

AKTYMBAYEVERASYLKAIRATULY
Managing Director for Security, Member of the Management Board
Born09March1991.
Education: Al-Farabi Kazakh National University.
Specialty: Accounting and audit.
Kazakh Economic University named after T. Ryskulov.
Specialty: Accounting and audit.
Turan University.
Specialty - jurisprudence. The Kazakh National Technical University named after K. K. Gubkin. K. Satpayev.
Specialty: Oil and gas business.
Experience in the last 3 years:
From April 2019 to January 2023 - Deputy Director, Director of Procurement Organization Department of NC Qazaq Gaz JSC;
SinceMay2023tillpresent-ManagingDirector for Support of JSC AlES

ISABAYEVNURZHANSHAGANBEKOVICH
Managing Director for Legal Affairs, Member of the Management Board
Born17May1980.
Higher education - Academy of the Ministry of Internal Affairs of the Republic of Kazakhstan.
Specialty: Jurisprudence.
State Enterprise "Semipalatinsk Financial and Economic College named after R.Baiseitov". Specialty: Finance.
JSC "Almaty University of Power Engineering and Communications named after G. Daukeev".
Specialty: Thermal Power Engineering. Experience in the last 3 years:
2016-2022r.-ManagingDirectorforLegalAffairs-Member of the Management Board of JSC AlES;
2022-2023.-Head of Legal Support Service, Head of Human Resources Department (part-time) In-sight Consult LLP ;

	From August 2023 till present - Managing Director for Legal Affairs JSC AlES

ESG.SUSTAINABLE DEVELOPMENT

ASPECT G.COMPANY BOARD

CHANGES IN THE COMPANY'S MANAGEMENT BOARD

In accordance with the decision of the Sole Shareholder of the Company, (Minutes of the meeting of the Management Board of Samruk-Energo JSC No. 7 dated 15.03.2024):

The Management Board of JSC AlES is composed of six (6) members:

• Yerik Kanyshbekovich Mashirov, Chairman of the Management Board of JSC AlES;

• Gaziy Zhumabaevich Ismukhambetov - Deputy Chairman of the Management Board - Chief Engineer of JSC AlES;

• Assel Amantaevna Arginbaeva - Managing Director for Economics and Finance, JSC AlES;

• Sagidulla Dauren - Managing Director for Development and Construction of AlES JSC;

• Yerasyl Kairatovich Aktymbaev - Managing Director for Security of AlES JSC;

• Nurzhan Shaganbekovich Isabayev - Managing Director for Legal Affairs of JSC AlES;

In accordance with the decision of the Sole Shareholder of the Company, (Minutes of the meeting of the Management Board of Samruk-Energo JSC No. 18 dated 13.06.2024):

• Appointed to the position of Deputy Chairman of the Management Board - Chief Engineer of AlES JSC Kaliev Bauyrzhan Bolatovich on June 13, 2024.

• The powers of Gaziy Zhumabaevich, member of the Management Board of AlES JSC Ismukhambetov, were terminated ahead of schedule from June 13, 2024.

18.07.2024 by agreement of the parties, the employment contract with Sagidulla Dauren, Member of the Management Board, Managing Director for Development and Construction of AlES JSC, was terminated.

CRITERIA FOR SELECTION OF MANAGEMENT BOARD MEMBERS

Members of the Management Board shall be elected by decision of the Sole Shareholder of the Company.

The number of members of the Management Board of the Company shall be determined by the Regulations on the Management Board of the Company approved by the decision of the Board of Directors of the Company dated October 21, 2024 (Minutes No. 32) and shall consist of at least five (5) members.

Candidates to the Management Board shall have relevant work experience, positive reputation, knowledge, qualifications and positive achievements in the business and (or) industry environment necessary to fulfill their duties and organize the effective work of the Management Board in the interests of the Sole Shareholder and the Company.

NUMBER OF BOARD MEETINGS (IN 2024)

In 2024, the Company's Management Board held 30 meetings. All meetings were held in person. During the meetings, more than 90 issues were considered.

Including preliminary approval of issues submitted for consideration and approval by the Company's Board of Directors and consideration of the following main issues:

Approved "Goals of AlES JSC in the field of KSM for 2024," "Rules for assessing the activities and remuneration of heads of structural divisions of the Head Office of AlES JSC," Rules for the sale of property of AlES JSC, "Guidelines for emergency situations and response to them within the framework of environmental management in AlES JSC.

- On reviewing the results of analysis of all previously acquired information systems/modules (IS) in JSC "Ales."

- Review of information on the share of domestic value in goods, works and services purchased in 2023.

- Payment of annual membership fees to industry non-profit organizations and associations.

- On providing financial assistance to flood-affected regions on behalf of JSC AlES."

- On approval of deciphering of AlES JSC electric power generation costs for 2024

- On consideration of the Report for 2023 on the execution of the Plan of communications with the stakeholders of AlES JSC, Plans of interaction with stakeholders on investment projects of AlES JSC.

- Approval of the preliminary amount of the draft adjusted feasibility study for the project "Modernization of the Almaty TETs-2 with minimizing the impact on the environment" with an increase in the estimated cost of construction, for the purpose of passing a comprehensive non-departmental examination.

- On joining the National Confederation of Employers "Paryz" and paying the entrance fee.

- Approval of the results of the feasibility study "Modernization of the Almaty CHPP -2 with minimizing the impact on the environment for the department CHPP -2

JSC AlES. Adjustment."

- Approval of the project of design and estimate documentation with preliminary estimated cost of construction under the project "Modernization of the Almaty CHPP-2 with minimization of environmental impact."

- On the approval of the tariff and tariff estimate for the regulated service for the provision of access roads for the passage of rolling stock, provided that there is no competitive access road, taking into account the application of the indexing method.

- On the approval of the tariff and tariff estimate for regulated services for the supply of water through trunk pipelines to secondary water users at the Cascade HPP facility, taking into account the use of the indexation method.

-On approval of the tariff and tariff estimate of AlES JSC for the production of dematerialized water.

- Approval of inventory results for inventories, fixed assets, intangible assets and construction in progress.

MAIN RISK FACTORS AND RISK MANAGEMENT SYSTEM

The Company recognizes the importance of the risk management process as a key component of the corporate governance system aimed at timely identification and management of potential risks that may adversely affect the Company's financial stability and reputation.

The objective of the Company's risk management is to provide reasonable assurance of the strategic and operational stability of the business.

Risk management in the Company takes place in the context of certain goals and objectives set for the Company, which are derived from the approved strategies and development plan. The Board of Directors plays a key role in supervising the functioning of the risk management system in the Company.

The Company ensures that all participants of the risk management process are constantly informed about existing risks and measures taken to minimize them through risk reports describing and analyzing key risks.

STRUCTUREOFTHERISKMANAGEMENT SYSTEM

In accordance with the Risk Management Policy, the Company identifies strategic, operational and financial risks.

KEY RISKS AFFECTING THE IMPLEMENTATION OF THE BUSINESS STRATEGY

	Significantrisks	**Riskfactors(causesofrisk)**	Riskmanagementactivities
		STRATEGICRISKS	
1	Risk of damage to health and life of employees in thecourseoffulfilmentof their duties, industrial accidents	**Externalriskfactors:** natural disasters (earthquakes, fires, floods, robberies,accidents,epidemics)thatcannotbe foreseen;poor-qualityinstallationandmainte- nance of equipment by contracted contractors **Internal risk factors:** lack of knowledge of employees in the field of HSE compliance (ignorance or lack of practical experience);untimelyprovisionofpersonalprotectiveequipment,designdeficienciesofequipment,mechanisms,tools,guardingorsafetydevices, or their absence.	1. ConductingHSEknowledgechecksof personnel. 2. ConductingHSEbriefingsforpersonnel. 3. Checking compliance of the HSE regime with regulatory requirements: availability of relevant orders, instructions, lists, certifications, etc. 4. Organisation of comprehensive and unannouncedinspectionsofworkplaces for compliance with HSE requirements. 5. Provisionofpersonnelandworkplaces withprotectiveequipment,medicalkits. 6. Compulsoryinsuranceofanemployee against accidents in the performance of labour (official) duties
2	Decreaseinthevolumeof electricity production.	**Externalriskfactors:** decreaseinfuelsupplies,decreaseinhydroresources reserves **Internalriskfactors:**reducedfuelreserves; accidents; poor quality of equipment repair; high depreciation of fixed assets	1. Proper planning of production volumes. 2. Fulfilment of electricity generation plans. 3. Timelyanalysisoffactorsinfluencing thefailuretofulfiltheplansforelectric- ity generation. 4. Carryingoutrepairsinduetime. 5. Modernization and reconstruction of equipment.
	FINANCIALRISKS		

3	Lack of liquidity to carry outoperating,investment, financial activities	**External risk factors:** deterioration of the financialandeconomicsituationintheRepublic; weakeningofthenationalcurrency;decreasein revenues from electricity and heat sales; un- timely-paymentofconsumersforelectricityand heat; seasonality **Internalriskfactors:** errorsin cashflowplanning;inefficientcashflowmanagement; growth of receivables and/or payables; lack of control by top managers	1. Attractionoflong-termandshort-term financing. 2. Timelycontrolofpaymenttermsofinvoices issued to debtors. 3. Conductinggapanalysis 4. Extension of existing loans, reduction of interest rates.
4	Failure to obtain a marginal tariff for electricity at an economically justified level	**ExternalRiskFactors:** Implementation of state policy to curb the growth of tariffs. **Internalriskfactors:** FailuretotimelysubmitanAppendixforadjustment of the marginal electricity tariff to the authorised body. Non-compliance of supporting documents submitted to the authorised body withtherequirementsofthelegislationinthe Field ofelectricpowerindustry.	Submission of an Appendix for adjustment of the approved tariff to the Authorised Body

8	Not receiving a tariff for heat energy production services at an economically reasonable level	External risk factors:	1. Introduction of appropriate amendments to the current legislation.
9	Increase in prices for purchased equipment, raw materials, fuel, materials and services, including infrastructure services (increase in tariffs for railway transport, communications and telecommunications, water supply, services, etc.)	Implementation of state policy in areas of natural monopoly to curb the growth of tariffs for the population. In the event of the occurrence of cases provided for in paragraph 1 of Article 22 of the Law of the Republic of Kazakhstan "On Natural Monopolies" (increase in the cost of strategic goods, tariffs for its transportation, change in tax rates, etc.), the inability to change the tariff before its expiration is not more than once a year.	2. Implementation of a balanced financial policy and tariff setting policy.
10	Risk of violation of external lenders' covenants		1. monitoring the market for the supply of goods, raw materials and services to select the best price.
	OPERATIONAL RISKS		
11	Failure to meet equipment repair deadlines.	**Внутренние факторы:** Несвоевременное обеспечение производственными ресурсами. Несвоевременное финансирование. Несвоевременный закуп материалов, оборудования и услуг. Некачественное выполнение работ подрядчиками. Несоблюдение мер по защите и профилактике не распространения вирусных/инфекционных заболеваний работниками; Отсутствие/несвоевременное введение ограничительных мер, направленных на недопущение распространение вирусных инфекций; Человеческий фактор.	1. Запланированные договора для своевременной доставки ТМЦ. 2. Заключение контрактов с добросовестными подрядчиками. 3. Своевременная оплата. 4. Соблюдение графика проведения тендеров. 5. Своевременное заключение договоров. 6. Своевременная подготовка по тех. спецификации. 7. Составление и соблюдение графика ремонтов
12	Power industry accidents and catastrophes (Technological equipment failures)	**Внешний риск фактор:** природные стихийные бедствия; технологические нарушения во внешних электрических и тепловых сетях; умысел третьих лиц, в том числе террористические нападения. **Внутренние риск факторы:** умысел работников; низкие квалификационные требования к охранной организации; отсутствующий или несоответствующий пропускной и внутриобъектный режим; несоблюдение режима эксплуатации производственного оборудования, Ухудшение технического состояния оборудования, Несвоевременное/неполное проведение планово-предупредительных работ, Несоблюдение персоналом правил технической эксплуатации, ошибочные действия персонала	1.Своевременное проведение плановых ремонтов и тех. обслуживания оборудования. 2.Проведение квалификационных проверок знаний персонала. 3.Проведение периодических инструктажей. 4.Повышение квалификации персонала. 5.Проведение противоаварийных тренировок. 6.Организация комплексных и внезапных проверок рабочих мест. 7.Проведение анализа причин технологического отказа оборудования.
13	Fuel overrun for heat and power generation	**Внутренние факторы:** Износ оборудования, используемого в данном процессе. Низкая квалификация сотрудников. Изменение объемов и условий выработки электрической и тепловой энергии. Невыполнение планов по ремонту оборудования.	1. Своевременное и качественное проведение плановых ремонтов. 2. Повышение квалификации персонала. 3. Соблюдение производственной дисциплины. 4. Эксплуатация оборудования в строгом соответствии с режимными картами.

14	Risk of poor-quality insurance protection	**Внешние риск факторы:** Дефолт страховой и перестраховочной организации; снижение рейтинга страховых компаний**.** **Внутренние риск факторы:** Страхование в компаниях с низким рейтингом; ненадлежащее оформление страхового случая; заключение договора о страховании с неоднозначными условиями	1. Своевременное заключение договоров страхования: экологическое страхование, страхование транспортных средств, страхование гражданско-правовой ответственности владельцев объектов, деятельность которых связано с опасностью причинения вреда 3-им лицам, страхование сотрудников от несчастных случаев. 2. своевременное предоставление информации страховой компании о наступлении страхового случая 3. контроль исполнения обязательств по страховым выплатам 4. проведение мероприятий по соблюдению страхового законодательства 5. Согласие кредиторов при выборе страховой компании
15	Environmental risk	**Внешние риск факторы:** Изменение требований Экологического Кодекса РК в сторону ужесточения: установка АСМ на источниках выбросов до 01.01.2024 года, получение комплексных экологических разрешений, с нормированием эмиссий в г/сек, мг/м3, т/год, изменение нормативной базы в сфере экологического регулирования, процедуры проведения ОВОС и сроков предоставления документации по выбросам ПГ, обязательство по внедрению НДТ, введение справочников НДТ, установление нормативов согласно разработанным справочникам, декарбонизация промышленного сектора, снижение объёма выдаваемых квот на выбросы парниковых газов, ужесточение удельных коэффициентов (бенчмарков), ограниченное количество дополнительных квот, выдаваемых на бесплатной основе, отсутствие свободных квот на углеродном рынке. Реализация водных и климатических рисков **Внутренние факторы:** не соблюдение требований по установке АСМ на источниках выбросов, искажение передаваемых данных системой АСМ, превышение допустимых выбросов и сбросов, удельных нормативов эмиссий; не своевременное оформление разрешительных документов в области охраны окружающей среды; ввод в эксплуатацию новых источников выбросов загрязняющих веществ, износ оборудования, использование непроектного топлива, увеличение количество аварийных ситуаций на основном оборудовании, увеличение объемов производства электро- и теплоэнергии, форс-мажорные обстоятельства природного и техногенного характера, не соблюдение норм Экологической политики и национального плана распределения квот на выбросы парниковых газов.	1. Закуп качественного топливного сырья в соответствии с критериями входного контроля, проведение плановых ремонтов основного и вспомогательного оборудования. 2. Проведение природоохранных мероприятий и установка АСМ, интеграция передаваемых данных с уполномоченным органом. 3. Мониторинг выполнения природоохранных мероприятий. 4. Своевременное заключение договоров на разработку проектной документации и вывоз опасных отходов производства и потребления. 5.Своевременная разработка и согласование проектной документации. 6. Своевременное получение разрешений на воздействие в окружающую среду. 7. Мониторинг обновления экологического законодательства

5	Failure to obtain a tariff for heat generation services at an economically justified level	**ExternalRiskFactors:** Implementationofthestatepolicyinthespheres ofnaturalmonopolytorestrainthegrowthoftariffs for the population. In case of occurrence of cases stipulated by paragraph 1 of Article 22 of the Law of RK "On Natural Monopolies" (increase in the cost of strategic goods, tariffs for itstransportation, changesintaxrates, etc.), the lackofpossibilitytochangethetariffbeforethe expiration of its validity not more than once a year. **Internalriskfactors:** Failure to timely submit an Appendix for tariff increasefortheregulatedheatgenerationservice totheauthorisedbody.Non-complianceofsupporting documents submitted to the authorised bodywiththerequirementsofthelegislationin thesphereofnaturalmonopolies.	1. Introductionofappropriateamendments to the current legislation. 2. implementation of a balanced financial and tariff policy.
	OPERATIONALRISKS		
6	Failure to meet equipment repair deadlines.	**Internal factors:** Failure to provide production resources in a timely manner. Untimelyfunding. Failuretoprocurematerials,equipmentandservices in a timely manner. Poorperformanceofworkbycontractors. Non-compliance with measures to protect and prevent employees from not spreading viral/infectious diseases; Lack of/untimely introduction of restrictive measuresaimedatpreventingthespreadofviral infections; Human factor.	1. Scheduledcontractsfortimelydelivery of inventory items. 2. Contractingwithbonafidecontractors. 3. Timelypayment. 4. Adherencetothetenderschedule. 5. Timelyconclusionofcontracts. 6. Timelypreparationaccordingto technical specification. 7. Drawingupandadheringtotherepair schedule
7	Accidents and disasters in the power generation industry (Technological failures of equipment)	**External Risk Factor:** natural disasters; technological disturbances in external electric and heat networks; intent of third parties, including terrorist attacks. **Internal risk factors:** intent of employees; low qualification requirementsforthesecurityorganisation;absentorinadequate access and intra-service regime; noncompliance with the operating mode of production equipment, Deterioration of the technical condition of equipment, Untimely/incomplete scheduledpreventivemaintenance,Non-compliianceofpersonnelwiththerulesoftechnicalop- eration, erroneous actions of personnel	1. Timely performance of scheduled repairs and maintenance of equipment. 2. Conducting qualification tests of personnel knowledge. 3. Conductingperiodicbriefings. 4. Staffdevelopment. 5. Conductingemergencydrills. 6. Organisationofcomprehensiveand unannounced workplace inspections. 7. Conducting analyses of the causes of technological failure of equipment.

INHERENT RISK MAP

5	**60-O- AIES**	**1-C-AIES; 10-C- AIES; 15-Ф- AIES; 11-C- AIES; 65-Ф- AIES**		**58-O- AIES**	**8-C- AIES; 24/4-Ф- AIES**
4			**30-C- AIES; 31-C- AIES**	**24/3-Ф- AIES**	**55-C- AIES; 56-C- AIES**

3	18-Ф- AlES; 4-C- AlES	28-O- AlES; 53-II- AlES	64-O- AlES; 66-O- AlES		3-C- AlES
2	29-C- AlES	51-II- AlES; 52-II- AlES; 59-O- AlES		61-O- AlES	38-O- AlES; 63-O- AlES
1	26-O- AlES; 48-II- AlES	27-O- AlES; 68-II- AlES	17-Ф- AlES; 32-O- AlES; 49-II- AlES	67-O- AlES	
	1	2	3	4	5

POSSIBILITY

As a result of 2024, the number of technological violations in relation to the same indicator in 2023 decreased by 5 (3.4%) (140 - in 2024 and 145 - in 2023).

Implemented risk - 24/3-F-AlES - "Not receiving a tariff for heat energy production services at an economically reasonable level"

In accordance with subparagraph 1) of paragraph 1 of Article 22 of the Law of the Republic of Kazakhstan "On Natural Monopolies" (hereinafter referred to as the Law), it is envisaged to change the approved tariffs of natural monopolies before the expiration of their validity periods based on a change in the type and cost of strategic goods and (or) tariffs (prices) subject to state regulation for the transportation of strategic goods (for AlES JSC (coal, gas, fuel oil and diesel fuel). This provision of the Law does not allow to take into account in the approved tariff the increase in the cost of services not subject to state regulation, but directly related to the transportation of strategic goods.

The inability to include in the tariff the costs of transporting fuel at the required level, as well as as as a result of measures taken by authorized bodies aimed at reducing inflationary processes and social tension, lead to losses of AlES JSC from a regulated type of thermal energy production.

The lost income from thermal energy production in 2024 is 2300 million tenge, including 1400 million tenge from the cost of fuel transportation uncovered by the tariff.

Risk not implemented - 24/4-F-AlES - "Not receiving the maximum tariff for electric energy at an economically reasonable level"

In accordance with the order of the Minister of Energy of the Republic of Kazakhstan dated December 28, 2023 No. 479 "On Amending the Order of the Minister of Energy of the Republic of Kazakhstan dated December 14, 2018 No. 514" On Approval of Marginal Tariffs for Electric Energy "for AlES JSC since 01.01.2024, the marginal tariff for electric energy was approved in the amount of 17.82 tenge/kWh. The increase to the previous one was 27%. Expenses are taken in full, except for the cost of purchasing energy in the balancing market of energy for partial replacement of emergency-retired capacity.

In accordance with the current legislation, AlES JSC in August - September 2024 sent information on the projected increase in the main costs of electric energy production with the application of supporting documents to the adjustment of the marginal tariff for electric energy for 2025. The required level of economically feasible marginal tariff for electric energy for 2025 amounted to 19.71 tenge/kWh.

The impact of the risk of reducing the volume of electric energy production (55-S-AlES) due to the overfulfillment of the production plan by 7.4% and the risk of reducing the volume of thermal energy production (56-S-AlES) due to the overfulfillment of the production plan from the beginning of the year by 4% was reduced.

Additional income from electricity production activities in 2024 amounted to 8,430.2 million tenge:

- by increasing the volume of KZT8,365.3 m.;

- due to the change in the tariff for the purchase and sale of electrical energy at the BDT tariff, an increase in income by 64.9 million tenge.

Additional income from thermal energy production activities in 2024 amounted to 1,335.9 million tenge:

- due to volume increase - KZT1,017.9 m,

- by changing the tariff - 318 million tenge.

Total capital investments for 2024 were spent in the amount of 70,285.2 million tenge with a plan of 110,423.7 million tenge, execution amounted to 64%. Deviation from the plan is due to the following reasons:

1. The deviation from the plan is due to the late delivery date of the main analytical equipment SICK (actual delivery in 09.12.2024) and commissioning work on the introduction of an automated emission monitoring system (AFM) on TETs-2 chimneys has not been completed.

2. deviation from the repair plan leading to an increase in the cost of fixed assets is associated with organizational and technical delays, postponement of repair work, revision of estimates and savings.

3. The underperformance of fixed assets is associated with the late conclusion of contracts and the lack of supply of inventory, as well as with the postponement of the implementation of the automated warehouse accounting system to 2025.

In 2024, the current liquidity ratio was 1.14 with a regulatory value of at least 1, which indicates that there is no risk of lack of liquidity in the reporting period.

58-O-AlES "Environmental Risk"

The damage from the environmental risk realized in 2024 amounted to 4.8 million tenge.

8-S-AlES "Risk of Damage to the Health and Life of Employees in the Process of Performing Official Duties, Accidents at Work" (Injuries to Production Personnel) ":

In 2024, there were two accidents related to labor activity, including one with a fatal outcome. The act of a special investigation in this case is currently being appealed by AlES JSC due to disagreement with the conclusions set forth in it..

By the end of 2024, the repair plan was 100% completed.

The amount of damage in 2024 amounted to 6.86 million tenge (4.8 million tenge - fines for violation of environmental legislation and 2.06 million tenge - Payments of temporary disability due to an accident) with an approved risk appetite for 2024 in the amount of 1,392 million tenge. Thus, the amount of damage does not exceed the approved risk appetite.

KEY CHANGES IN 2024 (MITIGATION OF KEY RISKS)

RISK	MAJOR CHANGES	Implemented risk management measures
Industrial accidents resulting in damage to the health and life of employees in the course of their duties (injuries to production personnel)	Increase in impact	Taking measures in accordance with the Work Plan of the HSE Department.
Reduction in electricity production.	Decrease in impact	
	Unchanged	Execution of electric power generation plan.
Lack of liquidity for operating, investment and financing activities	Decrease in impact	
Not getting the electricity tariff cap at an economically feasible level	Unchanged	Achievement of current liquidity ratio 1.14 at the established indicator level of at least 1.
Not receiving a tariff for heat energy production services at an economically reasonable level	Unchanged	
	Decrease in impact	The limit tariff for electricity in the amount of 17.82 tenge/kWh was received, the increase to the previous one was 27%
Failure to meet equipment repair deadlines.	Unchanged	
Power industry accidents and catastro-	Unchanged	Timely submission of an application for adjust-

phes (Technological equipment failures)		ment of the maximum tariff to the authorized body.
Reputational risk	Decrease in impact	Execution of risk management action plan.
Investment project risks	Unchanged	
Reduction of heat energy production.	Unchanged	Taking action in accordance with the Risk Management Action Plan
Increase in prices for purchased equipment, raw materials, fuel, materials and services, including infrastructure services (increase in tariffs for railway transport, communications and telecommunications, water supply, services, etc.)	Unchanged	
Risk of violation of external lenders' covenants	Unchanged	Execution of risk management action plan.
Fuel overrun for heat and power generation	Unchanged	Taking action in accordance with the Risk Management Action Plan

JSC AlES regularly analyzes key risks. The Board of Directors of the Company has established the Company's risk appetite in quantitative and qualitative terms, including restrictions on the main activities. Compliance with the Company's risk appetite is monitored on a quarterly basis. The Company annually generates and submits for consideration and approval to the Board of Directors - Risk Register, Risk Map, Key Risk Indicators (KPI) and Key Risk Management Action Plan. In 2025, JSC AlES identified and assessed 36 risks inherent in the Company, updated threshold values of efficiency, risk owners updated risk factors and measures to reduce them. According to the results of the revaluation, 19 risks fell into the key zone of the Company's Risk Map for 2025 (in 2024 - 15 key risks).

Combating corruption

In accordance with the Law of the Republic of Kazakhstan "On Combating Corruption," in the subjects of the quasi-public sector, structural units are determined that perform the functions of anti-corruption compliance services, the main task of which is to ensure compliance with the relevant organization and its employees of the legislation of the Republic of Kazakhstan on combating corruption.

In this regard, since 2021, a full-time unit of the Compliance Officer has been formed at AlES JSC with accountability to the Board of Directors of AlES JSC.

The purpose of the Compliance Officer's activities is to develop and implement the Compliance Program, determine the anti-corruption policy, as well as monitor the implementation of anti-corruption measures, including the assessment of corruption risks in AlES JSC.

In order to implement compliance tasks, the following GNIs were put into operation and implemented at JSC AlES: Corporate Standard for Compliance Functions in Portfolio Companies of JSC Samruk-Kazyna, Initiative Information Policy of JSC Samruk-Energo, Anti-Fraud and Corruption Policy of JSC Samruk-Energo, Settlement Policy corporate conflicts and conflicts of interest of Samruk-Energo JSC. No significant compliance risks were identified in the reporting period.

In 2024, the template of Contracts with counterparties includes a condition for familiarization with the Anti-Corruption Policy of Samruk-Energo JSC (hereinafter referred to as the Policy). 525 counterparties are familiar with the Policy.

There is also a single Hotline, which is a channel for informing about alleged violations of the law and/or the Code of Conduct, cases of fraud, corruption, unauthorized disclosure of confidential and insider information (the Hotline's contacts are indicated on the corporate website of AlES JSC). In addition, in the office and production departments of AlES JSC, in accessible places for viewing, there are corresponding banners with hotline contacts.

In 2024, the Compliance Service received 6 requests through the Hotline. These appeals were considered on time, the facts were not confirmed.

Cases of discrimination in 2024 are also not registered.

On a quarterly and annual basis, the Compliance Officer reports on his activities to the Board of Directors of AlES JSC.

NATURE CONSERVATION. WATER MANAGEMENT

Production activity of AlES JSC is focused on minimizing the impact on the environment, rational use of natural resources and conservation of biodiversity.

AlES JSC recognizes responsibility to the interested public for the rational use of natural resources and the preservation of a favorable environment and guarantees the rational use of natural resources, consistent reduction of environmental impact through the introduction of new affordable, low-waste, environmentally friendly technologies, equipment, materials, the implementation of measures to adapt to climate change and eliminate possible damage to the environment.

AlES JSC follows the principles of sustainable development, which means a balanced and socially acceptable combination of economic growth and the preservation of a favorable environment for future generations.

Environmental Management Aspects Management

The Environmental Management System (hereinafter referred to as EMS) is a part of the corporate management system. The purpose of implementation and functioning of the EMS is to ensure compliance with the

requirements in the field of environmental protection by the production departments of AlES JSC as a result of their activities, as well as contractors and subcontractors performing work and providing services in the territory of production departments.

AlES JSC continuously improves the EMS and directs all efforts to reduce the negative environmental impact associated, among other things, with emissions of greenhouse gases into the atmosphere, emissions and discharges of pollutants, with the management of production and consumption waste, and industrial waste.

JSC AlES defines the directions of environmental policy implementation as an integral part of the EMS:

- ✓ ensuring compliance with the requirements of the current environmental legislation of the Republic of Kazakhstan and corporate standards in the field of environmental protection;

  continuous improvement of the environmental management system and ensuring its sustainable functioning;

  technological re-equipment and gradual decommissioning of obsolete equipment, introduction of the best available technologies, improvement of production processes;
- ✓ reduction of production and environmental waste generation, safe handling, implementation of industrial waste recycling projects;
- ✓ assessment of the impact of the planned activities of its production departments on the environment, health of personnel and the population based on a comparison of alternative options;;
- ✓ involvement of personnel in the implementation of measures to ensure environmental safety, the development of the environmental culture of the organization's employees by informing each employee of the environmental aspects of activities and their impact on the environment.

JSC AlES identified significant environmental aspects, on the basis of which environmental risks were assessed and environmental goals were established, environmental protection programs were developed and implemented.

Relevant significant environmental aspects for AlES JSC are: air emissions from the main equipment, when burning fuel in boiler units and auxiliary equipment, when supporting the main process of generating electric and thermal energy, as well as in the implementation of projects for the modernization and reconstruction of coal plants, discharge of wastewater into surface sources, disposal of ash and slag waste and temporary storage of production and consumption waste on the territory of production departments, harmful physical impacts and other environmental aspects that indirectly affect the main process of electric energy production.

Environmental aspects shall be reviewed and updated in the following cases:

1) changes in the legislation of the Republic of Kazakhstan in the field of environmental protection;

2) changes in the methodology for identifying environmental aspects and determining their significance;

3) changes in technological processes, when new sources of impact appear.

The top management of AlES JSC ensures the availability of human, technological, financial resources necessary for the development, implementation, functioning and improvement of the environmental management system in accordance with the legislative requirements of the Republic of Kazakhstan in the field of environmental protection.

According to the EMS, environmental protection is carried out by:

- ✓ development and implementation of action plans aimed at environmental protection;
- ✓ of compulsory environmental insurance when conducting activities for the production of products, carrying out construction and installation and repair works;
- ✓ of industrial environmental control and monitoring of emissions, waste, etc.;
- ✓ of preventive maintenance.

In 2024, AlES JSC conducted quarterly internal audits of EMS in order to monitor compliance with regulatory legal acts of the Republic of Kazakhstan and regulatory and technical documents in the field of environmental protection, environmental monitoring, identification of environmental aspects and risk assessment, elimination of inconsistencies identified during previous audits, as well as the implementation of environmental protection measures.

Based on the results of the internal audit, corrective and preventive measures were developed to eliminate inconsistencies, which were fully implemented.

Industrial environmental control and monitoring

JSC "AlES" on a quarterly basis implements industrial environmental control programs developed in accordance with the requirements of the Environmental Code of the Republic of Kazakhstan and are designed to perform the following tasks:

- ✓ obtaining operational information on the impact of the main and production processes on the environment;
- ✓ implementation of corrective and preventive actions and prompt response to emergency situations;
- ✓ informing stakeholders (local population, state regulatory authorities, partner companies) about the environmental activities of the enterprise and measures taken to reduce the environmental impact.

As part of environmental control, observations are made of emissions into the environment - emissions into the air, discharges into water bodies, volumes of accumulation and disposal of waste, and the quality of environmental components - atmospheric air, surface and groundwater, soil at the border of sanitary protection zones of production enterprises.

In 2024, automated emission monitoring systems (hereinafter, AFM) were installed at stationary emission sources of CHPP -1, CHPP -2, and ZTC, allowing online monitoring of compliance with emission standards. From November 21, 2024, averaged data from the AFM system are transmitted every 20 minutes to the National Environmental Data Bank of the Republic of Kazakhstan and are monitored by the authorized body in the field of environmental protection, according to CHPP-2 data transfer is planned for the 2 half of 2025.

In 2024, a quarterly specialized organization carried out industrial environmental monitoring, as well as on an ongoing basis, laboratories of CHPP-1, CHPP-2, CHPP-3, and ZTC carried out industrial environmental monitoring, systematic monitoring of the radiation background within the territory of departments and in production premises, as a result of which no excess of the level of environmental pollution was noted.

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The activities of the production departments of AlES JSC are strictly regulated by the existing permits for emissions into the environment, in which the volume of permissible emissions is set in quantitative terms. JSC "AlES" pays constant attention to the attraction and implementation of investment projects in the field of environmental protection, the possibilities of using new technologies and techniques are being considered, the resolutions adopted by the Government of the Republic of Kazakhstan regarding the solution of environmental problems are being implemented.

Greenhouse gas emissions

For the transparent implementation of environmental activities in 2024, AlES JSC at CHPP -1, CHPP -2, CHPP -3, ZTC conducted an inventory of greenhouse gas emissions for the period of the National Plan for the distribution of quotas for greenhouse gas emissions for 2022-2025 (hereinafter - NP). According to NP for AlES JSC for 2024, 6,094.365 thousand tons were issued. In fact, in 2024, the volume of greenhouse gas emissions, as a whole for the Company, amounted to 5,619.0 thousand tons, of which: by the CHPP -1 named after B. Obabayev 447.5 thousand tons; according to the CHPP -2 named after A. Zhakutov, 3,717.3 thousand tons, according to the CHPP-3 - 1,225.9 thousand tons, according to the ZTC - 228.3 thousand tons.

Greenhouse gas emissions in 2021-2024 (Coverage 1)

Greenhouse gas emissions by type	**Units of measurement**	**2021**	**2022**	**2023**	**2024**
SO2	tons of SO2	5 868 940	5 675 899	5 787 876	5 619 013
SN4	tons of CO2eq.	1 406,1	1 200,2	1 389,9	1 345,876
N2O	tons of CO2eq.	15 339,7	14 692,6	12 929,6	12 535,0
Specific greenhouse gas emissions relative to income	million tons of CO2-eq/million tenge	0,00007	0,00007	0,00006	0,00004

The expected surplus of quotas relative to NP carbon quotas will be 493.3 thousand tons. In 2024, due to measures to save energy and improve energy efficiency, the volume of greenhouse gas emissions in general was reduced by 17.6 thousand tons.

The volumes of greenhouse gas emissions for 2024 were verified by the validation and verification body ECOSERVICE-S LLP, the report on the inventory of greenhouse gases was sent to the authorized body in the field of environmental protection on time and adopted without comment.

According to the Environmental Management Action Plan in the Samruk-Energy group of companies, AlES JSC determined the amount of emissions of greenhouse gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3).

Greenhousegasemissionsby type	Unitsofmeasurement	2023	2024
HFC	tonnes	116,2	133,9
PFU	tonnes	absent	absent
SF_6	tonnes	absent	absent
NF_3	tonnes	absent	absent

As part of Scope 2, emissions from the production of purchased and consumed electricity, steam, heat or cooling are quantified. Since AlES JSC does not acquire electric and thermal energy, the volume of greenhouse gas emissions is not calculated by steam.

Carbon intensity of generation

As part of Coverage 1, the carbon intensity of generation in 2024 was calculated in comparison with the previous periods of 2021-2023. The volume of greenhouse gas emissions directly depends on the volume of burned fuel, fuel characteristics

№	Indicator	UOM	2021	2022	2023	2024
1	Emissions of SO2	tons	5 868 940	5 675 899	5 787 877	5 619 013
2	Electric power generation	MWh	4 009 084	4 039 025	3 954 773	3 723 258
3	Heat generation	Gcal	5 825 875	5 550 462	5 851 848	6 083 619
4	Specific SO2 emissions for electric power generation	tCO2/MWh	1,014	0,988	1,001	1,002
5	Specific SO2 emissions for heat generation	tCO2/Gcal	0,310	0,304	0,312	0,310

Выбросы загрязняющих веществ

Pollutant emissions

AlES JSC has undertaken obligations to reduce emissions of pollutants into the air during the production of products by production departments. To reduce emissions in 2024, the following environmental protection measures were implemented:

- works were carried out to maintain the degree of cleaning of ash traps;

- repair and replacement of air heater cubes;

- repair of burners of boiler units, emulsifiers;

- measures were taken to improve efficiency;

- elimination of violations in the process cycle at boiler units;

- mode adjustment works were performed on boiler units, aspiration units TETs-1, 2, 3.

Also, in 2024, AlES JSC continued to work on the implementation of projects for the modernization and reconstruction of Almaty TETs-2 and TETs-3. After the implementation of the projects, the reduction will be achieved through the use of natural gas in efficient gas turbine plants that ensure emissions of harmful substances into the atmosphere at the level of the requirements of the Republic of Kazakhstan for the introduction of the best available technologies.

The actual volume of emissions as a whole for AlES JSC in 2024 decreased by 3% compared to 2023 and amounted to 47.503 thousand tons, with a permitted volume of 56.153 thousand tons. For equalization in 2023, it amounted to 48.861 thousand tons, with a permitted volume of 57.065 thousand tons, in 2022 it amounted to 48.038 thousand tons, with a permitted volume of 59.891 thousand tons.

Pollutant emissions in 2021-2024, thousand tons

Pollutant emissions	2021	2022	2023	2024
NOx	11,216	11,078	11,286	10,963
SOx	26,250	25,557	25,820	25,086
Particulate matter	8,457	8,212	8,614	8,349
CO	3,152	3,115	3,095	3,019
Volatile organic compounds (VOCs)	0,023	0,032	0,035	0,050
Other gaseous	0,032	0,044	0,011	0,036
Total	**49,130**	**48,038**	**48,861**	**47,503**
Persistent organic pollutants (POPs)	нет	нет	нет	нет
Hazardous Air Pollutants	49,130	48,038	48,861	47,503
Specific emissions g/kWh	8,76	8,63	8,74	8,81
Specific emissions of harmful substances relative to income	0,00062	0,00056	0,00051	0,00038

CHPP-1

Emissions of pollutants into the atmosphere in 2024 amounted to 836.039 tons (including salvo emissions), with a permitted 1,436.466 tons. Gross emissions of pollutants into the atmosphere in the reporting year decreased by 68.524 tons (-8%), this is due to a decrease in electricity generation by 24% in 2024 compared to 2023..

Indicator	2021	2022	2023	2024
Air emissions, tons	797,5	803,6	904,6	836,0

CHPP-2

Emissions of pollutants into the atmosphere in 2024 amounted to 36,188.0808 tons (including volley emissions), with permitted 39,3999.0521 tons, ash and slag waste - 1,313,879 tons, with permitted 1,313,879 tons. Gross emissions of pollutants into the atmosphere in the reporting year decreased by 722 tons (-2%), which is due to a decrease in electricity generation in 2024 by 2.1% compared to 2023..

Indicator	2021	2022	2023	2024
Air emissions, tons	35 898,687	35 037,990	36 909,985	36 188,08 1

CHPP-3

Air pollutant emissions from the TETs-3 department in 2024 amounted to 10,253.2733 tons (including salvo emissions), with a permitted 14,017.8505 tons, ash and slag waste - 318,240 tons, with a permitted 487,800 tons. Gross emissions of pollutants into the atmosphere in the reporting year decreased by 521 tons (-5%), which is due to a decrease in electricity generation by 8% in 2024 compared to 2023..

Indicator	2021	2022	2023	2024
Air emissions, tons	12 246,356	11 944,728	10 774,274	10 253,273

ZTC

Emissions of pollutants into the atmosphere from the ZTK in 2024 amounted to 216.304 tons, with the permitted 1,264.24 tons. Gross emissions of pollutants into the atmosphere in the reporting year decreased by 47 tons (-18%), which is due to a decrease in the concentration of nitrogen oxides by 50 mg/nm3 in 2024 compared to 2023..

Indicator	2021	2022	2023	2024
Air emissions, tons	178,589	243,012	262,968	216,304

Kapshagai HPP

Emissions of pollutants into the atmosphere from the Kapshagai HPP in 2024 amounted to 1.258 tons, with a permitted 1.258 tons, discharges of pollutants into surface waters from the Kapshagai HPP in 2023 - 1.5564 tons, with a permitted 3.485 tons. The volume of discharges increased by 0.03437 tons, which is due to an increase in the volume of discharge of standard treated domestic wastewater (outlet No. 3) at the Kapshagai hydroelectric station..

Indicator	2021	2022	2023	2024
Air emissions, tons	1,258	1,432	1,258	1,258
Water resouses emissions, tons	1,526	1,535	1,522	1,556

Cascade HPP

Emissions of pollutants into the atmosphere from the Cascade of hydroelectric power stations in 2024 amounted to 1.699 tons and did not exceed the emission limit of 2.679 tons

Indicator	2021	2022	2023	2024
Air emissions, tons	1,617	1,542	1,576	1,699

PRP Energoremont

Emissions of pollutants into the atmosphere from PRP "Energoremont" in 2024 amounted to 5.9819 tons. The limit on gross emissions of pollutants into the atmosphere was not exceeded in the reporting year..

Indicator	2021	2022	2023	2024
Air emissions, tons	5,949	5,984	5,981	5,9819

Водные ресурсы

Water resources

The main source of water supply for the departments of AlES JSC CHPP -1, CHPP -2 and ZTK is the MCP at the Almaty Su PCV of the Almaty Energy and Water Supply Department (hereinafter, Almaty Su).

To partially replace the raw water supplied by the CHPP -1 for process needs and TETs-2 for the treatment of demineralized water, wells of their own water intake are operated, and service water is taken for TETs-2 on the basis of a contract.

Domestic and drinking and industrial and technical water supply CHPP -3 organized at the expense of departmental water intake from artesian wells. The CHPP-3 water intake consists of one single production well and five water intake pads, each of which consists of two production wells. The depth of development wells is from 200 to 300 m. In 2024, 11 wells were in operation.

For the HPP Cascade, the source of water supply for the needs of the electric power industry is the Big Almaty Lake and the river basin. Big Almaty. Domestic and drinking water supply for the Cascade of hydroelectric power stations is carried out on the basis of an agreement.

For the generation of electricity and for the technological needs of the Kapshagai hydroelectric station, water is taken from the Kapshagai reservoir, for household needs - from the underground wells of the Nikolaev underground water deposit.

Calculation of water consumption and water disposal by departments of JSC AlES CHPP -1, CHPP -2, CHPP -3 and ZTK is carried out in accordance with the Individual current balance standards of water consumption and water disposal, agreed by the Water Resources Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. The volumes of water intake from surface sources of Kapshagai HPP, Cascade of HPP, own water intake of CHPP -1, CHPP -2 and CHPP -3 are determined by the conditions of permission for special water use.

Below, the tables show data on water consumption and water use in 2021-2024.

Analysis of water consumption and water use by AlES JSC sources, in m3.

Indicators	CHPP-1		CHPP -2		CHPP-3		ZTC		Kapshagai HPP		Cascade HPP	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Water resouses	ГКП на ПХВ "Алматы Су" Собственный водозабор Алма-Атинского МПВ		ГКП наПХВ"Алматы Су" Собственный водозабор Боралдайского МПВ		Собственный водозабор Покровское МПВ		ГКП на ПХВ "Алматы Су"		Капшагайское водохранилище Скважины собственного водозабора		ТОО "Bauyr LTD Company" ГКП на ПХВ"Алматы Су"	

Raw water produced, total	5 959 125	6 097 567	33 926 768	33 343 439	4 484 550	5 645 610	39 419	34 309	6 893 994	7 402 692	715	594
Flow rate	5 959 125	6 097 567	33 926 768	33 343 439	4 484 550	5 645 610	39 419	34 309	6 893 994	7 402 692	715	594
Heating network makeup	5 043 888	5 201 086	24 585 430	25 285 479	173 937	159 840	-	-	-	-	-	-
Transferred to other consumers without using	5 038 950	5 196 077	24 546 667	25 112 013	152 454	138 002	-	-	-	-	-	-
Production needs	-	-	- 1 795	127 844	-	-	-	-	-	-	-	-
Own needs of hot water sup-ply system	4 715	4 473	37 018	42 187	7 746	7 746	-	-	-	-	-	-
Transferred to other consumers	223	536	3 540	3 435	13 737	14 092	-	-	-	-	-	-
Demineralized water	182 990	184 679	905 574	969 488	279 684	335 093	22 657	23 161	-	-	-	-
Boiler make-up	182 990	184 679	718 608	752 492	279 684	335 093	22 657	23 161	-	-	-	-
Condensate non-return	-	-	6 971	6 971	-	-	83	70	-	-	-	-
Demineralizatio n plant auxiliaries	-	-	179 995	210 025	-	-	-	-	-	-	-	-
Process water	694 836	673 944	8 404 230	7 052 535	4 018 396	5 138 353	2 544	2 626	6 849 640	7 357 009	-	-
Losses irretrievable	-	-	-	-	-	-	4 419	1 420	39 096	40 332	-	-
Domestic and potable water	37 411	37 858	31 533	35 937	12 533	12 324	9 798	7 102	5 258	5 351	715	594
Transferred to other consumers	80	133	428	521	-	-	2 572	1 904	-	-	-	-
Sewerage	351 705	342 727	68 551	78 124	18 224	23 095	26 567	22 460	-	-	715	594
Own sewerage system	351 595	342 169	67 942	77 256	18 224	23 095	23 322	19 854			715	594

Analysis of water consumption and water use by AlES JSC sources, in m3

Indicators	CHPP-1		CHPP -2		CHPP-3		ZTC		Kapshagai HPP		Cascade HPP	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Water supply sources	ГКП на ПХВ "Алматы Су" Собственный водозабор Алма-Атинского МПВ		ГКП наПХВ"Алматы Су" Собственный водозабор Боралдайского МПВ		Собственный водозабор Покровское МПВ		ГКП на ПХВ "Алматы Су"		Капшагайское водохранилище Скважины собственного водозабора		ТОО "Bauyr LTD Company" ГКП на ПХВ"Алматы Су"	
Raw water produced, total	6 715 791	5 990 376	33 241 179	36 015 423	4 961 400	5 235 050	42 330	45 196	7 462 429	9 556 800	426	633
Flow rate	6 715 791	5 990 376	33 241 179	36 015 423	4 961 400	5 235 050	42 330	45 196	7 462 429	9 556 800	426	633
Heating network makeup	5 768 279	5 010 910	24 577 015	25 648 861	178 484	218 414	-	-	-	-	-	-

Transferred to other consumers without using	5 763 120	5 005 839	24 340 386	25 593 772	147 725	190 267	-	-	-	-	-	-
Production needs	-	-	192 192	15 321	-	-	-	-	-	-	-	-
Own needs of hot water supply system	4 935	4 557	42 692	36 389	7 746	7 746	-	-	-	-	-	-
Transferred to other consumers	224	514	1 745	3 379	23 013	20 401	-	-	-	-	-	-
Demineralized water	191 000	192 864	1 105 423	1 127 588	371 221	395 745	24 861	28 706	-	-	-	-
Boiler make-up	191 000	192 864	791 939	715 997	371 221	395 745	24 861	28 706	-	-	-	-
Condensate non-return	-	-	6 971	6 837	-	-	120	166	-	-	-	-
Own needs	-	-	306 513	404 754	-	-	-	-	-	-	-	-
Process water	719 222	751 189	7 522 374	9 207 974	4 396 179	4 599 969	3 509	4 264	7 417 958	9 508 987	-	-
Losses irretrievable	-	-	-	-	-	-	4 864	3 721	39 183	42 413	-	-
Domestic and potable water	37 291	35 412	36 367	31 000	15 516	20 922	9 096	8 505	5 288	5 400	426	633
Transferred to other consumers	293	237	1 091	1 258	-	-	2 143	2 100	-	-	-	-
Sewerage	361 039	220 861	79 059	67 389	22 656	15 601	26 821	24 774	-	-	426	645
Own sewerage system	360 581	220 390	77 547	65 541	22 656	15 601	24 146	22 217			426	645

The change in the actual water balance by departments of AlES JSC mainly depends on the volume of product supply and the actual operating conditions of the equipment (the number of starts, shutdowns of boiler units, the mode of filling the ash disposal area with water, repair work on pipelines, etc.). The source water consumption in the departments of AlES JSC CHPP-1, CHPP-2, CHPP-3, Cascade HPP, Kapshagai HPP, ZTK for 2024 amounted to 56.8 million tons.

Absolute water consumption in 2024 increased compared to 2023, due to an increase in the inflow of the Kapshagai reservoir (high water year), as well as an increase in its own water consumption of CHPP-2 (filling of section No. 2 of ash dump No. 1).

The table shows the data on the volume of water taken in 2021-2024.

Sourses	UOM	2021	2022	2023	2024
Surface sources	тыс.м³	10 677 932	11 310 032	11 878 750	16 148 572
Underground sources	тыс.м³	5 379	6 527	5 704	5 908
Urban water supply systems	тыс.м³	39 038	38 469	39 031	41 108
Water of third-party organizations "Main channel "Aksai-Karagalinsky"	тыс.м³	0	132	233	277

В таблице приведены данные по общий объем сбросов в разбивке по принимающим объектам в 2021-2024 гг.

Sourses	UOM	2021	2022	2023	2024
Surface sources	тыс.м³	10 677 932	11 310 032	11 878 750	16 148 572
Transferred to other parties for cleaning	тыс.м³	468	469	492	332
Total volume of discharges	тыс.м³	10 678 399	11 310 502	11 879 243	16 148 904
Not HPP	тыс.м³	468	469	492	332
HYDROELECTRIC POWER STATION	тыс.м³	10 677 932	11 310 032	11 878 750	16 148 572

The table provides data on water use by type of operations in 2021-2024.

Sourses	UOM	2021	2022	2023	2024
Production needs	тыс.м³	21 408	21 919	21 999	25 881
Household and drinking	тыс.м³	99	101	106	104
Transferred to third parties	тыс.м³	10 671 043	11 302 635	11 871 293	16 139 021
	тыс.м³	29 756	30 464	30 276	30 814
Transferred to third parties	тыс.м³	44	42	44	46
Total	**тыс.м³**	**10 722 349**	**11 355 161**	**11 923 718**	**16 195 866**

The table shows the data on the volumes of recycled and reused water in 2021-2024.

Sourses	UOM	2021	2022	2023	2024
Volume of reused water (after treatment)	тыс.м³	3 505	3 801	4 929	5 269
Cooling water volume	тыс.м³	425 381	423 378	406 488	384 999

To reduce the consumption of fresh water at thermal power plants, there are two water supply systems: circulating and repeated, at ZTK - circulating. Types of circulating water supply systems:

- service water supply (main building equipment cooling), losses are compensated by fresh water;
- hydraulic ash removal system, losses are compensated by process drains and rain drains.

Water consumption in the recycling and recycling water supply systems in the departments of AlES in 2024 amounted to 390,268.1 thousand m3, including the recycling water supply system - 384,999.1 thousand m3; repeated water supply system - 5,269.0 thousand m3.

At the Kapshagai HPP, standard-clean (without treatment) and standard-treated (in the runoff biological treatment system) wastewater is discharged into natural water bodies. There are no discharges of polluted wastewater into surface water bodies.

Volume of discharges into water bodies in 2021-2024

Production department	UOM	2022	2022	2023	2024
Kapshagai HPP	tons	1,526	1,53467	1,52203	1,55640

The volume of discharge of standard treated water in 2024 increased by 0.03437 tons, which is due to an increase in the volume of discharge of standard treated water of domestic wastewater (outlet No. 3) at the Kapshagai HPP.

During 2024, a set of technological measures was carried out aimed at preventing clogging, pollution and depletion of water resources, namely:

- at the CHPP-1, repair of pumping equipment at treatment facilities was carried out to ensure the standard quality of wastewater, repair of pumping equipment in the boiler, turbine and chemical workshops;

- at the CHPP-2, work was carried out to reduce water losses during the transportation of ash and slag materials, repair of the recycling system for production purposes (cooling towers, bagger);

- at the CHPP-3, measures were taken to reduce water losses.

In order to implement the industrial environmental control system, monitoring of the quality of groundwater and surface water was carried out on an ongoing basis at the industrial site, as well as along the rivers and at the ash disposal area of the stations, on an ongoing basis at the Kapshagayskaya HPP, monitoring of pollutant discharges into surface water bodies was carried out. Sampling was carried out at the places and at the intervals specified in the IEC program.

Production and consumption waste

The main approach to the management of production and consumption waste (solid and liquid) of the production departments of AlES JSC includes the prevention of exceeding the terms of their accumulation and violation of requirements for places of their temporary accumulation, before transferring them to specialized organizations that carry out their disposal. For this, accounting has been introduced for the volume and timing of waste generation, as well as the volume of their disposal. These indicators are fulfilled annually.

Production and consumption waste in the territories of production departments of AlES JSC is temporarily stored in compliance with the requirements of environmental and sanitary legislation of the Republic of Kazakhstan and removed by specialized organizations for disposal on the basis of concluded contracts. Waste such as scrap metal and used oils are reused at the production departments themselves during repair work and for lubrication of auxiliary equipment parts.

The following types of waste are generated in the process of production activities of the production departments of AlES JSC:

- by sources of education: industrial, industrial and household;

- hazard level: hazardous and non-hazardous;

- by aggregate state: solid, liquid, paste-like;

- by names - used oils; metal; non-ferrous metal scrap (scrap of copper, bronze, brass, aluminum); construction and repair waste; scrap glass; wood waste, used oil, fuel and air filters, used rubber products (including worn tires and rubber products), used mercury-containing lamps, used batteries, unusable electronic equipment (office equipment, monitors, plastic products, communication equipment, household appliances, radio equipment, cartridges), oily rags, oily sludge, oily soil/sand/crushed stone contaminated with oil products, waste of paints and varnishes, used Rashig rings, waste paper, mixed municipal waste (MSW), ash and slag waste.

The characteristics and methods of waste management are given below.

1. used oils (turbine, engine, transmission, industrial, transformer)

Formed after the expiration of the service life and due to a decrease in quality parameters.

Turbine oils are formed after use for lubrication of equipment and when draining from turbines during overhaul.

Transformer oils are formed during routine repairs of transformers and circuit breakers, when adding oil to equipment, during drain operations.

Motor and transmission oils are formed after the expiration of the service life and due to a decrease in quality parameters when used in transport.

Waste is characterized as fire hazardous, non-explosive.

Aggregate state - liquid, solution.

Composition of used oils: mineral oil - 91.2%, water - 4.543%, mechanical impurities - 2.3%, other - 1.957%.

Used oils that are not suitable for further use are drained into closed sealed metal containers with trays installed in specially designated places. Spent oils as they accumulate, but no later than six months later, are transferred for disposal in accordance with the concluded agreement with Vita Prom LLP.

2. ferrous scrap

Metal waste is generated from construction, repair and metalworking works. Metal waste includes shavings and scrap of ferrous metals, cutting of welding electrodes, particle of ferrous metals.

Waste is characterized as non-fire hazardous and non-explosive. There are no toxic components.

Aggregate state - solid, metal chips, scrap and pieces of metals.

Composition: metallic iron - 98%, other - 2%.

Metal waste is temporarily stored in a specially designated place at the temporary waste storage warehouse (SVHO) and, as it accumulates, but no later than six months from the date of formation, is removed by a specialized enterprise of Steel QZ LLP under a contract.

3. Scrap of non-ferrous metals (scrap of copper, bronze, brass, aluminum).

Formed during tool processing of metals, repair of instrumentation devices, vehicles. Scrap of non-ferrous metals in the form of scrap copper, bronze, aluminum, brass are formed from construction, repair and metalworking works.

Waste is characterized as non-fire hazardous and non-explosive. There are no toxic components.

Aggregate state - solid, scrap, fragments, pieces of non-ferrous metal.

Composition: brass-70, bronze-30%.

They are temporarily stored in a specially designated place at the temporary waste storage warehouse (SVHO) and, as they accumulate, but no later than six months from the date of formation, are exported by a specialized enterprise Steel QZ LLP.

4. Construction and repair waste

Formed in the process of repair and construction work. Capital and current repairs, depending on their volume, are carried out and planned for the future on their own and with the involvement of contractors.

The construction waste includes the remains of plaster, fragments of concrete, brick, removed tiles, dust, soil, sand, etc.

Waste is characterized as fire hazardous, non-explosive. Not toxic.

Aggregate state - solid, fragments, breakage, pieces, dust of concrete, cement mortar, broken tiles, bricks, plaster, etc.

Composition: sand, soil-60%, cement-35%, inorganic dust-2% silicate-containing dust-3%.

Construction waste generated during repairs shall be stored at the temporary waste storage facility. As it accumulates, but no later than six months from the date of formation, it is exported by the specialized enterprise IP "Akhmetov" under the contract.

5. Scrap glass (scrap glass)

Unsuitable for direct use products or parts of glass products that have lost their operational value, as well as products with irreparable flaws, broken household and industrial glass. Formed after repair and construction of premises, assembled into a separate metal container.

Waste is characterized as non-fire hazardous, non-explosive. Not toxic.

The state of aggregation is solid.

In terms of chemical composition, 98.8-99.9% consists of SiO2

They are stored at the temporary waste storage warehouse (SVHO) in a specially designated place in separate containers and, as they accumulate, but no later than six months from the date of formation, are exported by a specialized enterprise under an agreement with Marshal-EcoLand LLP.

6. wood waste

The formation occurs in the carpentry area as a result of the processing of wood used in the repair, construction and household work.

Waste is characterized as fire hazardous, non-explosive. Not toxic.

Aggregate state - solid, wood chips, sawdust.

The composition of wood waste: wood-98.9%, other-1.1%.

Wood waste is temporarily stored in a specially designated place at the temporary waste storage warehouse (SVHO) and, as it accumulates, but no later than six months after its formation, is removed by a specialized enterprise under an agreement with IE Akhmetov.

7. Used oil, fuel and air filters

They are formed during oil change, during oil cleaning during engine operation.

Waste is characterized as fire hazardous, non-explosive.

Aggregate state - solid, cardboard filters impregnated with oil.

Composition of spent filters: cellulose-38.7%, mineral oil-10%, iron oxide-25%, aluminum oxide-17.3%, mechanical impurities-9%.

Spent filters are temporarily stored in a specially designated place at the temporary waste storage warehouse (SVHO) in a closed metal container as they accumulate, but no later than six months after the formation, they are removed by a specialized enterprise UtilIndustry LLP.

8. Used rubber products (including worn tires and rubber products)

Formed during the operation of equipment and technological equipment.

Waste is characterized as fire hazardous, non-explosive. Not toxic.

Aggregate state - solid, pieces of rubber.

Composition: synthetic rubber-96%, iron oxide, metal-3%, textile cord -1%.

Used tires and other used rubber products are temporarily stored in a specially designated place at the temporary waste storage warehouse (SVHO) and, as they accumulate, but no later than six months from the date of formation, are exported under an agreement with UtilIndustry LLP.

9. Used mercury-containing lamps

Formed as a result of the development of their resource. Fluorescent lamps LB-40 (SL40/38-735), LB-80, DRL-250, 400, 700 are used to illuminate production, office premises and the territory of the enterprise.

Waste is characterized as non-fire hazardous and non-explosive. Toxic.

State of aggregation– - solid, mercury-containing unassembled equipment and devices.

Composition: mercury-4.2%, glass-90%, phosphor-2.2%, others-3.6%.

In case of mechanical destruction of mercury-containing lamps, collect their fragments in a tightly closed glass container, pack them in sealed polyethylene bags, transfer them to a temporary waste storage and accumulation warehouse, where they are placed in sealed metal waste and compacted with shock absorbers. Neutralize the released mercury by immediately treating the contaminated surface with a 20%iron chloride solution. After complete drying, wash the treated surface with soapy water. Treat surfaces contaminated with mercury with 1%KMnO4 solution acidified with HCl.

Before transferring them for demercurization, they are placed on racks in a temporary storage place in their original cardboard packaging. As they accumulate, but no later than six months from the date of formation, they are transferred under an agreement with a specialized enterprise UtilIndustry LLP for demercurization.

10. Used batteries

Formed as a result of the development of their resource, temporarily stored in a specially equipped place in the warehouse. Batteries are used for vehicles and stationary batteries of various types are also used at the station for emergency and uninterruptible power supply.

Waste is characterized as non-fire hazardous and non-explosive. Toxic. Aggregate state - solid, unassembled equipment, plastic cubes with lead plates inside, filled with electrolyte.

Composition: lead-52.3%, water-9.8%, other-37.9%.

Spent batteries are temporarily stored in a specially designated place in a warehouse (SVHO) as they accumulate, but no later than six months from the date of formation, they are exported by a specialized enterprise, Steel QZ LLP, under a contract. The contractor providing waste disposal services in 2023 will be identified according to procurement procedures.

11. Unusable electronic equipment (office equipment, monitors, plastic products, communication equipment, household appliances, radio equipment, cartridges).

They are unusable electronic equipment (office equipment, monitors, communication equipment, household appliances, radio equipment, cartridges. Temporarily stored in a designated place in the warehouse.

Waste is characterized as non-fire hazardous, non-explosive. Non-toxic. Aggregate state - solid, unassembled equipment and devices. Composition: polystyrene-67%, copper-0.08%, aluminum oxide-9.3%, soot-1.62%, iron oxide-22%.

Waste is stored in a specially designated place with a hard surface as it accumulates, but no later than six months from the date of formation, it is removed under an agreement with UtilIndustry LLP.

12. Oiled rags

Formed as a result of maintenance of technological equipment (wiping mechanisms, parts, machines and machines), assembled in special metal sealed containers in the workshops.

These wastes are characterized as fire hazardous, non-explosive.

Aggregate state - solid, pieces, trimmings, fabrics impregnated with oily products.

Composition of oily rags: rags-56%, oil-30.6%, paraffins-8.5%, resinous substances-4.9%.

Oily rags are temporarily stored in a temporary waste storage warehouse (SVHO), in closed metal boxes as they accumulate, but no later than six months from the date of formation, are exported by a specialized enterprise UtilIndustry LLP under an agreement.

13. Oily sludge

Formed as a result of periodic stripping of fuel oil tanks and tanks. Oily sludge is temporarily stored in strictly designated places, in sealed metal boxes and, as it accumulates, is exported by a specialized enterprise on the basis of a contract. Temporarily stored in sealed metal boxes.

Waste is characterized as fire hazardous, non-explosive.

Aggregate state - paste-like, sludge.

Composition: petroleum products-80, water-20%.

Oily sludge (oil sludge during tank cleaning) is temporarily stored in strictly designated places, in sealed metal boxes as it accumulates, but no later than six months after the formation, it is exported by a specialized enterprise UtilIndustry LLP under an agreement.

14. Oiled soil/sand/crushed stone contaminated with petroleum products

Oily soil is formed as a result of spills of oil products in case of equipment malfunction, during refueling and operation of vehicles. Oily soil/sand/crushed stone is temporarily stored in strictly designated places, in sealed metal boxes on a hard coating and, as it accumulates, is removed by a specialized enterprise on the basis of a contract. Temporarily stored in sealed metal boxes.

Waste is characterized as fire hazardous, non-explosive.

The state of aggregation is solid.

Composition: petroleum products - 30%, sand, soil - 35%, soil - 35%.

Oily sludge oil sludge during tank cleaning) is temporarily stored in strictly designated places, in sealed metal boxes as it accumulates, but no later than six months from the date of formation, is exported by the specialized enterprise UtilIndustry LLP under the contract.

15. Waste paints and varnishes

Formed during repair and installation of equipment, vehicles, repair and construction of buildings and structures. Temporarily stored in sealed metal containers.

The state of aggregation is solid, in solid form they are not toxic (since organic solvents have evaporated), they are not explosive, they are chemically inactive. Remain after painting.

Composition: tin - 94-99%, paint - 5-1%.

They are containers made of enamel, varnishes with paint residues on the walls.

Waste is stored in specially designated places at the temporary waste storage warehouse (SVHO), in hard-coated containers as it accumulates, but no later than six months from the date of formation, and is removed by the specialized enterprise IP Akhmetov under the contract.

16. Raschig spent rings

Formed after wear in decarbonator tanks. Prior to removal, Rashig ring waste is collected at the temporary waste storage site.

The aggregate state is solid, not explosive, chemically inactive.

Silicon oxide + Aluminium oxide - 90%, iron oxide - 1.5%, titanium oxide - 2%, calcium oxide + magnesium oxide - 1%, potassium oxide + sodium oxide - 4%.

Spent Rashig rings are temporarily stored in specially designated paved areas, but no later than six months from the date of formation and are exported by a specialized enterprise under a contract.

17. Waste paper

Formed as a result of the use of all types of paper and cardboard suitable for further use as fibrous raw materials. Waste is characterized as fire hazardous and non-explosive. There are no toxic components.

Aggregate state - hard, paper sheets and trimmings.

Composition: cellulose 15%, wood pulp 85%.

Waste paper is temporarily stored in a specially designated place and, as it accumulates, is exported by a specialized enterprise under an agreement with Paper of Kazakhstan LLP.

18. Mixed municipal waste (MSW)

Formed as a result of business activities. Collected in special containers with lids. The containers are mounted on designated hard-coated areas.

Mixed municipal waste is represented by packaging materials, paper, household waste, estimates from office premises, production premises and adjacent territories, etc. Include food waste.

Waste is characterized as fire hazardous, non-explosive. Non-toxic.

The composition of mixed municipal waste: cellulose-33.7%, organic matter-30.7%, cotton-8.5%, polymer materials-5%, glass-5.6%, metal, rubber, wood, estimates, etc. - 16.5%.

The state of aggregation is solid (trimming, breakage, debris, dust, lumps, pieces).

Mixed municipal waste is temporarily stored in specially designated places in containers equipped with hard covers and, as it accumulates, is removed under an agreement with the specialized enterprise Marshal-EcoLand LLP and IP Akhmetov.

19. Ash and slag waste

On the site of the Combined Ash and Slag Removal System there are two-section DGPS and PSE, which are part of the main facilities of the Combined Ash and Slag Waste Storage System.

Ash and slag materials are formed during the combustion of fuel in power boilers.

Storage of ash and slag waste is carried out as follows: first, the ash and slag material is hydraulically supplied to the DGPS according to the existing scheme, consisting of sections No. 1 and No. 2, then alternately, in accordance with the regulations established in the project, ash and slag materials after their drainage, drying to the established consistency and preparing for export, after bringing them to the required condition by humidification, are defined as ash and slag waste and removed from the sections for disposal in the PSSH.

JSC "AlES" has undertaken obligations to reduce the volume of storage of dry ash and slag waste. To fulfill obligations in 2024, a memorandum was concluded with Vulban construction materials limited LLP, SICHUAN JIUJIANGLONG STEEL STRUCTURE ENGINEERING CO., LTD LLP with the aim of implementing a project for the construction and operation of a plant for the production of building mixtures and aerated concrete blocks. According to the project, the volume of processed dry ash and slag waste will be about 300,000 tons per year. The implementation of this measure will reduce the area of the dump of dry storage, respectively, significantly reduce the burden on the environment and human health.

Radioactive waste

During the activities of the production departments of AlES JSC, no radioactive waste is generated.

The volume of generated waste in 2021-2024

Wastes type	UOM	2022	2022	2023	2024
Hazardous waste	tons	19,00	19,0	32,0	46,0
Non-hazardous waste	tons	1 258 990	1 267 892	1 320 881	1 260 154
Total	tons	1 259 009	1 267 911	1 320 913	1 260 200
Specific emissions of harmful substances relative to income	млн. тонн/млн тенге	0,000016	0,000015	0,000014	0,000010

Environmental protection measures

AlES JSC has completed all planned environmental measures, of which:

To protect atmospheric air: work was carried out to maintain the degree of cleaning of ash traps, repair and replacement of cubes of air heaters, repair of burners of boiler units, emulsifiers, anti-corrosion work was carried out, metal structures, pipes, worn-out heating surfaces were replaced, measures were introduced to increase efficiency, violations were eliminated in the technological cycle at boiler units, regime adjustment work at boiler units, aspiration units CHPP-1, CHPP-2, CHPP -3. Emissions were monitored and the impact at the border of the sanitary protection zone of all production departments was monitored.

For the protection and rational use of water resources: repair of pumping equipment in the boiler house, turbine, chemical shops, treatment facilities of the CHPP -1 was carried out, measures were taken to inventory and reduce water losses during the transportation of ash and slag waste to the CHPP -2 and CHPP -3, repair of the recycling system for production purposes to the CHPP -2, sanitary and microbiological studies of water samples were carried out at the Kapshagai HPP.

On protection of land resources, rational use of subsoil, flora and fauna: work was carried out to replace worn-out pipelines to prevent the spill of ash and slag waste and pulp, work was carried out on landscaping the territories of departments, on the restoration of degraded territories on the CHPP -2 and CHPP -3, by laying a protective layer along the top of the pile of loam, strengthening the slopes by sowing grass, arrangement of embankment from loam on the CHPP -2, works on soil preparation for arrangement of parterre and ordinary lawns, with sowing herbs and watering grass crops with water on the CHPP -3. Construction and arrangement of a temporary storage site for production and consumption waste at the ZTK was carried out.

On the management of production and consumption waste, radiation, biological and chemical safety: work was carried out on the reconstruction and expansion of ash disposal at the CHPP -2, work to prevent dusting of the combined ash and slag removal system CHPP -1, 2, 3, solid household waste, mercury-containing lamps and other hazardous waste of the departments of CHPP -1, CHPP -2, CHPP -3, ZTK, Kapshagayskaya HPP, Cascade HPP, PRP "Energoremont."

Total investments for environmental protection in 2022 amounted to 1.126 billion tenge, in 2023 amounted to 3.918 billion tenge, in 2024 amounted to 2.123 billion tenge.

Investments in environmental protection in 2022-2024, million tenge

Item of expenditure	2022	2023	2024
On atmospheric air protection	646,2	2 050,0	1 317,4
On protection and rational use of water resources	157,4	161,9	221,0
On protection of land resources, rational use of subsoil, flora and fauna	42,9	28,0	149,5
On production and consumption waste management, radiation, biological and chemical safety	199,9	1 678,1	435,1
Total	**1 126,0**	**3 918,0**	**2 122,9**

The implementation of all environmental protection measures made it possible to reduce the burden on the **environment and comply with environmental quality standards.**

Payment for negative environmental impact

In accordance with Article 573 of the Tax Code of the Republic of Kazakhstan, AlES JSC pays for negative environmental impact (emissions and discharges of pollutants carried out on the basis of the relevant environmental permit and environmental impact declaration in accordance with the environmental legislation of the Republic of Kazakhstan). In 2024, the fee for negative environmental impact amounted to 1,098.5 million tenge.

Payment for negative impact on the environment in 2022-2024, million tenge

Payments	2022	2023	2024
Payment for air pollutant emissions	755,7	864,1	896,4
Payment for emissions from fuels and lubricants	1,879	2,114	2,271
Charges for pollutant discharges	0,004	0,002	0,002
Payment for waste disposal in the natural environment	67,6	204,4	198,9
Total	**825,1**	**1 070,6**	**1 098,5**

Campaigns and initiatives

In 2024, environmental actions were carried out: "Paper landing" - for the collection and delivery of waste paper, 4.4 tons of unusable paper and cardboard were handed over for processing, and "Battery - second life" - an action for the delivery of used household batteries, 94 kilograms of household batteries were handed over. For the

period from 2021 to 2024, employees of AlES JSC collected and handed over for disposal 278.1 kg of batteries and 43.0 tons of waste paper.

In 2024, the following actions were held: ecological company "Almaty - bizd iң orta қ ү yumiz" (cleaning the Prokhodnaya river), exit action "#Birge - taza taular" (garbage collection in the Butakovsky gorge), "Taza Қ azakstan: an impassable action on the Prokhodnaya river" (cleaning the Prokhodnaya river), November 11-15, 2024 Environmental Challenge: "Be in the eco-trend!" (rejection of plastic bags and leather bags in favor of eco-bags), with the participation of all responsible ecologists of production departments and head office.

During the period from 2021 to 2024, employees of AlES JSC collected more than 200 garbage bags with a volume of 160 liters.

Inspections of regulatory authorities

In 2024, the Department of Ecology in the city of Almaty during an unscheduled inspection for CHPP-1 and TETs-2 revealed:

- CHPP-1 violation of the environmental legislation of the Republic of Kazakhstan, namely, pollution of the land with hazardous chemicals that did not cause environmental damage (fuel oil leakage due to damage to the gasket on the flange connection of the fuel oil heater at CHPP-1), which is a violation of the requirements of Articles 238 and 4 of Article 186 of the EC of the Republic of Kazakhstan;

- no automated system for monitoring emissions into the environment has been installed at the CHPP-2 CHPP-2 on the main stationary sources of emissions, which is a violation of the requirements of Article 418 of the EC of the Republic of Kazakhstan.

The volume of penalties amounted to 2,584,400 tenge. Penalties paid in full. Violations were eliminated in due time and corrective measures were taken in full.

In 2023, the Departments of Ecology in the city of Almaty and the Almaty region did not conduct scheduled and unscheduled inspections with visits to the territory of production departments, no penalties were imposed. The Department of Ecology in the Almaty region conducted 1 inspection in the form of preventive control without visiting the subject. Based on the results of the inspection, 1 comment was made regarding the absence of permits from the contractor disposing of waste from the territory of the TETs-3 department. The remark was eliminated. Permits were requested from the contractor and transferred to the Department of Ecology in the Almaty region. Based on the results of consideration of the submitted documents, the comment was removed.

In 2022, the Department of Ecology in the Almaty region on the territory of the TETs-3 established the mixing of hazardous waste with non-hazardous waste and there are no labeling indicating the name on the packages. The Department of Ecology in the city of Almaty revealed: on the territory of the TETs-1, overspending (deviation) from the design documentation of the MPE and the SEER Conclusion on the MPE of the annual gas consumption by boilers was established and the territory was littered with dead wood, scrap metal, separate waste collection was not carried out; on the territory of the TETs-2 it was established that there is no hydraulic spraying system in the TTTs (the place of transfer during the transportation and preparation of solid fuel) and the territory of the industrial site (on the north side) is littered with solid household and industrial waste, as well as the accumulation of construction waste and scrap metal in an unknown place; on the territory of the ZTK, an overrun (deviation) from the design documentation of the MPE and the SEER Conclusion on the MPE of the annual gas flow rate for boilers are established.

In 2021, the Departments of Ecology in Almaty and the Almaty Region filed claims for payment of environmental damage to the environment, the administrative court imposed a penalty on the facts of identified violations of environmental legislation regarding the failure to eliminate previously issued orders, as well as

violations committed by a contractor performing work on a combined system of ash and slag removal TETs-2. The amounts of damage were paid on time, reports with the application of payment orders were sent to the Department of Ecology in Almaty. All penalties, in full, were reissued to the contractor who committed the violation.

Based on the results of inspections, corrective measures were developed, namely, the conduct of internal inspections of compliance with environmental legislation (measurements at emission sources, waste storage systems, etc.), assessment of the functioning of the environmental management system, implementation of environmental protection measures, assessment of the effect of the implementation of energy and fuel saving programs, annual training of employees responsible for environmental protection, participation in trainings, seminars in the authorized body, internal corporate training on changes in the environmental legislation of the Republic of Kazakhstan

Climate risks

AlES JSC is responsible for climate change issues and takes real measures aimed at reducing greenhouse gas emissions, consistently reducing the carbon footprint of its products.

Reduction of greenhouse gas emissions is determined by the Environmental Policy of AlES JSC. In 2024, measures were taken to minimize the negative impact of climate change on production activities. Measures were developed and carried out in accordance with energy saving and energy efficiency programs, which made it possible to reduce greenhouse gas emissions by 17.6 thousand tons.

To implement climate policy in 2024, actual and potential climate risks (including physical and transitional) were identified and assessed. The table shows the classification of climatic risks

1. Actual climate risks:

Risk type	Climate risk	Description of impact
Physical	Rise in maximum temperature in Almaty and Almaty region - summer peak temperatures	Reduced production capacity (reduced production output/non-fulfillment of production plans), impact on personnel working outdoors and indoors with natural ventilation
Physical	Increased humidity (winter), increased precipitation, ice formation	Corrosion impact on main and auxiliary equipment, electrical diagrams, instruments, automation, power lines break, scouring of buildings and structures
Physical	Drought, decrease in rainfall during certain periods, groundwater depletion	Shortage of surface and underground water for ash disposal area cooling and filling systems,
Physical	Potential impact of activities on the ichthyofauna of the Ili River and the Kapshagai reservoir	Reduction of the water level in the Ili River and in the Big Almaty Lake for the possibility of generating electricity from hydroelectric power plants
transitional	National Carbon Regulation and Greenhouse Gas Emission Quotas from Operations	The need to install fish protection devices costs for stocking rivers

2. Potential climate risks :

Risk type	Climate risk	Description of impact
Physical	Increased frequency and intensity of earthquakes	Damage to property and infrastructure, failures of reliability and stability of electricity and heat supply, lack of stable water and fuel supply
transitional	Increased operating expenses due to changes in GHG regulation legisla-	Additional costs for the purchase of an additional volume of quotas to comply with environmental legislation

	tion	requirements for offsetting regulatory emissions of greenhouse gases, tightening legal and regulatory frameworks regarding greenhouse gas emissions and climate responsibility of the country as a whole. The risk of tariff growth in case of inclusion of the costs of purchasing greenhouse gas emission allowances, and, accordingly, social tension
transitional	Negative judgments in litigation or arbitration related to violation of environmental laws	Risks of fines and/or financial compensation for identified violations. Costs of legal action
transitional	Costs of moving to low-emission technologies such as wind and solar farms	
transitional	Stakeholder concern to reduce emissions and therefore environmental impact	The costs of adapting/implementing new technologies and processes (transition from coal to gas), energy producing companies may face the risk of increased costs for the transition to low-carbon technologies.

To implement the policy to minimize climate risks, in 2024, projects were launched to modernize and reconstruct Almaty CHPP-2 and CHPP-3, with the installation of CCGTs that burn natural gas.

Efficient use of natural resources and energy

AlES JSC seeks to carefully use natural and energy resources and increase the energy efficiency of its activities. To achieve strategic commitments for 2024, an Action Plan for energy saving and energy efficiency improvement was developed by the departments of CHPP-1, CHPP-2, CHPP-3, ZTC AlES JSC. This Plan sets goals for saving natural resources (water, natural gas and coal) and energy for 2024. At the end of 2024, the following measures were taken:

Energy savings

№	Name of the measure	Actual investments for 2024 (including VAT), tenge	Actual effect of savings from implementation of measures	
			Energy Resource Name	in kind
1	Replacement of brass tubes during repair of the network water heater OB-1 TA st. № 10 CHPP-1	28 190 400	Heat energy, Gcal	1 750
2	Chemical washing of brass tubes during repair of the network water heater OB-1 TA st. № 9 CHPP-1	0	Heat energy, Gcal	1 550
3	Reduction of diameter of impellers of smoke exhausters of boiler units st. № 10, 12, 13 CHPP-1	0	Electricity, kWh	1 256 235
4	Change in the operation scheme of the internal main control room of the bagger pump station 1 of lifting CHPP-1	0	Electricity, kWh	794 000
5	Taking 20 auxiliary transformers out of operation and standby for the period of plant shutdown CHPP-1	0	Electricity, kWh	155 000

6	Restoration of heat insulation in the areas of on-site pipelines of the ZTC	2 867 200	Heat energy, Gcal	1 523
7	Elimination of steam and hot water leaks through non-tight shut-off and control valves of closed-circuit valves	170 240	Heat energy, Gcal	40
8	Power transformer shutdown of Kapshagai HPP standby generator	0	Electricity, kWh	413 406
	TOTAL	**31 227 840**		

According to the results of 2024, 4,863 Gcal of heat energy, 2,618,641 kWh of electricity were saved.

Preserving the natural resources. Water.

№	Name of the measure	Actual investments for 2024 (including VAT), tenge	Actual effect of savings from implementation of measures	
			Energy Resource Name	
1	Water reuse and water conservation CHPP-1	0	Water, m^3	19 000
2	Replacement of valves and elimination of water leaks on the CHPP-3	2 800 000	Water, m^3	55 020
3	Elimination of steam and hot water leaks through non-tight shut-off and control valves of closed-circuit valves	170 240	Water, m^3	500
4	Rational use of cold water in the PRP office	0	Water, m^3	17
	TOTAL	**2 970 240**		**74 537**

According to the results of 2024, 74,537 m^3 of water was saved.

Saving natural resources. Gas

№	Name of the measure	Actual investments for 2024 (including VAT), tenge	Actual effect of savings from implementation of measures	
			Energy Resource Name	
1	Replacement of BP-1 cubes during medium repair of boiler st. No. 13 CHPP-1	55 496 000	Natural gas, m^3	497 028
2	Performance of mode adjustment of equipment CHPP-1	0	Natural gas, m^3	591 760
3	Restoration of heat insulation in the pipeline sections of CHPP-2-ZTC	1 344 000	Natural gas, m^3	510 000

	TOTAL	**56 840 000**		**1 598 788**

According to the results of 2024, 1,598,788 m3 of natural gas was saved.

Saving natural resources. Coal.

№	Name of the measure	Actual investments for 2024 (including VAT), tenge	Actual effect of savings from implementation of measures	
			Energy Resource Name	
1	Replacement of VZP cubes of the 1st stage of boiler № 2 CHPP-2	197 547 840	Coal, ton	2 091
2	Replacement of VZP cubes of the 1st stage of boiler № 5 CHPP-2	210 807 520	Coal, ton	2 502
3	Replacement of VZP cubes of the 1st stage of boiler № 6 CHPP-2	479 655 901	Coal, ton	2 450
4	Replacement of brass tubes of turbine condenser № 2 CHPP-2	386 198 123	Coal, ton	1 840
5	Replacement of ceiling superheater on boiler № 1 CHPP-3	35 082 880	Coal, ton	8,5
6	Replacement of VZP cubes of tier 2 on boiler № 5 CHPP-3	220 020 640	Coal, ton	8
7	Replacement of ceiling superheater on boiler № 5 CHPP-3	35 393 120	Coal, ton	5
8	Boiler insulation restoration CHPP-3	5 779 200	Coal, ton	0,8
	TOTAL	**1 570 484 861**		**8 905**

According to the results of 2024, 8,905 tons of coal were saved.

The total costs of measures to save natural and energy resources in 2024 amounted to 1.8 billion tenge

Biodiversity Management

AlES JSC is aware of the importance of the problem of preserving flora and fauna, in connection with which it has undertaken obligations to contribute to the preservation of biological equilibrium, as well as obligations to compensate for possible damage to the environment. All projects for the reconstruction and modernization of its production departments of AlES JSC are planned taking into account the need to prevent negative impact on the ecosystem, and during the implementation of projects minimizes the risks of negative impact on natural objects. In 2024, there was no significant direct or indirect impact of the activities of the production departments of AlES JSC on vulnerable ecosystems and biodiversity, since TETs-1, TETs-2, TETs-3, ZTK, PRP "Energoremont" are located in urbanized areas, in the industrial zone, the activities of Cascade HPPs and Kapshagayskaya HPPs do not have a

significant impact on the natural environment, since it produces products using water, which, after the completion of the process, is returned to water bodies with normatively clean water.

To reduce the burden on biodiversity in 2024, measures were taken to green the territory and sanitary protection zones of production departments.

Production department	Quantuty, pcs	Type	Planting territory
CHPP-1	8	Landscaping: Apple tree seedlings	Territory of CHPP-1
CHPP-2	17 340	Compensating fit:	Spring planting - 6112 pcs. trees on the territory of the FEZ PIT Alatau.
CHPP-3	3 800	coniferous - 2 pcs.; deciduous - 1722 pcs.; shrubs - 10 pcs.	Autumn plantings - 11,228 pcs. trees within a radius of 1 kilometer from the territory of the CHPP-2. Otegen batyr village from Bat-talkhanov street to Ar-man microdistrict
ZTC	20	Compensating fit: apple tree - 20 pcs.	ZTC territory

To preserve biodiversity, in 2024, AlES JSC on a quarterly basis carried out industrial and environmental control over emissions into the environment - emissions into the air, discharges into water bodies, volumes of accumulation and disposal of waste, and over the quality of environmental components - atmospheric air, surface and groundwater, soil on the territories and border of sanitary protection zones of production enterprises.

In 2025, it is planned to carry out landscaping of the territories of sanitary protection zones of production departments and measures to stain the Kapshagai reservoir, with the involvement of the interested public and state bodies in the field of environmental protection.

Compliance by suppliers and contractors with social and environmental regulations and legal requirements

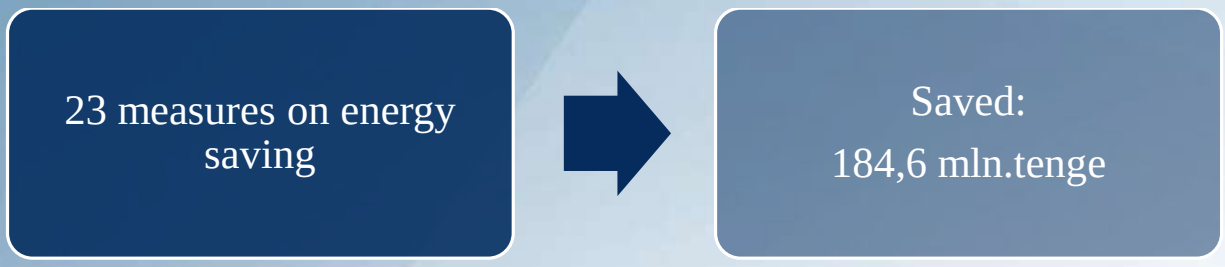
In 2024, as part of measures to monitor suppliers and contractors' compliance with social and environmental standards, as well as legal requirements, counterparties were surveyed. The purpose of the survey is to assess the level of compliance by counterparties with environmental protection standards, labor legislation, labor protection and social responsibility.

The questionnaires are posted on the Company's corporate website in the Procurement section.

The results of the survey were analyzed and will be taken into account in further interaction with suppliers and contractors.

ESG.SUSTAINABLE DEVELOPMENT
ASPECT E. NATURE CONSERVATION

ENERGY SAVING AND ENERGY EFFICIENCY



In 2024, 23 measures were taken to save energy and improve energy efficiency, taking into account additional measures. The actual effect in monetary terms amounted to 184.6mn. tenge with VAT.

Indicators of AlES JSC	2021	2022	2023
Energy intensity, in current prices, t.u./mln. tg	26,9	24,8	18,4
Energy intensity in 2014 t.u./mln. tg	39,2	40,0	38,1
Gross volume of marketable products in 2014 prices, million tenge	59 269,6	59 194,7	60 491,7
Gross volume of marketable products in current prices, million tenge	86 219,8	95 596,6	125 485,0
Annual consumption of all types of fuel and energy resources, t.u.	2 323 066,2	2 368 713,2	2 306 267,4

The main factors affecting the amount of energy intensity are: a decrease in electricity generation by hydroelectric power plants due to a decrease in the inflow of the Ili River and the Big Almaty Lake; increase of TETs-2 and TETs-3 power generation to compensate reduction of power generation by hydroelectric power plants in order to provide consumers of Almaty city and Almaty region.

HR POLICY

By the decision of the sole shareholder of the Company dated July 28, 2023, the Personnel Policy of Samruk-Energo JSC for 2023-2031 was approved.

One of the main objectives of the Company's HR policy is to ensure maximum added value from investments in personnel through the further development of the HR management system, which ensures the Company's current and prospective need for personnel in the required quantity and quality to maintain and increase the Company's competitiveness, contributes to the construction of effective business processes and a flexible organizational system, creates conditions for the maximum development and manifestation of professional and personal competencies of employees, ensures a high priority for leadership development in key positions, promotes the development of a high employer brand, attracts and retains the best personnel in the labor market, ensures the introduction of the best HR practices in the functional areas of personnel management, improves operational efficiency through optimization and automation of personnel management processes, development of competencies in analysis, expertise and data management.

Indicator name	2022	2023	2024
Average headcount, people	3 024	3 011	2 971
Labor costs (PHY), ths.	15 774 268	17 449 287	20 380 946
Average monthly salary, tng.	430 353	480 646	567 123
Percentage of employees trained during the year	91%	103%	103,6%
Training expenses for 1 employee, tons	34 405	35 347	44 477
Percentage of personnel development expenses from payroll	0,74%	0,63%	0,67%
Number of employees who terminated labor relations, people	261	347	384
at the employee's initiative	258	341	373
due to the employee's fault	3	6	11
Staff turnover, %	8	11	12,5

The specificity of the electric power industry, according to the Rules for working with personnel in energy organizations of the Republic of Kazakhstan, requires constant continuous training and retraining of personnel for admission to work and maintaining a high level of professionalism, providing production departments with highly qualified personnel. Personnel development is one of the most important areas of personnel management activities. The main goal of the personnel professional training system is to achieve and maintain the required level of qualification of personnel capable of ensuring safe, reliable and efficient operation of the Company.
In the Company, the personnel training department coordinates personnel training, as well as conducts professional training, retraining, advanced training of workers in the main energy professions, advanced training courses for workers operating hazardous production facilities, in accordance with Article 79 of the Law of the Republic of Kazakhstan "On Civil Protection." The Company actively cooperates with former employees with significant professional experience and a high level of qualifications after their retirement. These specialists continue to participate in professional activities as teachers and mentors, transferring their experience to new generations of employees and contributing to the preservation and development of corporate competencies. Thus, the Society promotes adaptation to the end of a professional career and provides opportunities for active participation in the professional community after retirement. Such targeted training allows training in specialized exclusive programs that take into account the specifics and needs of production, increases the professionalism of employees and the competitiveness of the company.

PERSONNEL DEVELOPMENT, PERSONNEL DEVELOPMENT

The HR policy is aimed at strengthening and maintaining the Company's human resources potential and creating conditions for the full development of personnel. AlES JSC creates all conditions for professional and personal development and growth, constant improvement of the level of corporate and managerial competencies of its employees.

Professional training:	**2022**		**2023**		**2024**	
	persons	Mln.tenge	persons	Mln.tenge	persons	Mln.tenge
Workers	1958	29,2	2379	24,1	2458	44.8
Engineers and specialists	853	65,9	716	82,8	620	90.2
Students (training of employees at the university and college)	20	2,3	15	2,5	8	1.9
Total:	2831	97,4	3095	109,4	3078	136,9

In 2024, personnel were trained in the following main areas:

Specialized personnel training:	**Professional and personnel training:**
• Improvement of occupational safety culture; • Project management in accordance with IPMA requirements. Preparation for certification (level D, C); • Modular training within the framework of "IR School"; • Clarification of the new Environmental Code; • Special mediation course; • International IOSH, NEBOSH occupational safety and health certification; • Introduction of anti-corruption management systems for compliance with the requirements of ISO 37001:2016. 22301:2020 - Business Continuity Management System Specifications.	• • Occupational safety and health training; • • Industrial safety training; • • Training at the PRP Energoremont welding site (training of gas cutters and welders, promotion, annual recertification); • • "ROSPA (International Certificate) Safe Driving" • • Training of operating personnel in the main working specialties; • • On-the-job technical training of personnel.

• "ESG, sustainability and circular economy: from fundamentals to application practices."	

Cooperation with educational institutions:

- in accordance with the agreement on passing industrial practice with elements of dual training with the Almaty University of Energy and Communications NJSC in 2024, 16 students were trained in two working specialties: a boiler equipment driver, a turbine equipment driver;

- in 2024, 112 students of the Almaty University of Energy and Communications passed the practice, during the practical training, students studied general information about the station, studied the main and auxiliary workshops of production departments;

- an excursion was organized for 64 students of the Almaty State College of Energy and Electronic Technologies in production departments;

- in 2024, excursions were held in the production departments of students of the Kazakh-German University (17 people), the Al-Farabi Kazakh National University (29 people), the Eurasian College of Technology (15 people), teachers of geography and physics of Dosty κ LLP (25 people), students of the Nazarbayev Intellectual School of Physics and Mathematics and KSU Gymnasium No. 2 named after Sh.Ualikhanov (34

people).

DEVELOPMENT AND CAREER DEVELOPMENT

In order to preserve and develop competitive, promising, highly professional and involved employees, the Company forms and approves the composition of a single personnel reserve on an annual basis. The selection and appointment procedure from the talent pool is based on the principles of objectivity, voluntariness, efficiency, transparency and fairness.

On December 20, 2024, an online meeting of the personnel reserve of AlES JSC with members of the Board of Directors took place. Regular dialogue is not only a tradition since 2014, but also a key moment in the exchange of ideas, experience and strategic vision. Members of the Board of Directors noted that it is also necessary to continue constant work on training and developing personnel in the workplace, retaining internal talents and attracting highly professional personnel (talent management, development of internal competencies). In the near future, large-scale unique projects will be implemented, each leader should be involved in the implementation of these projects. There may be various difficulties on the way to modernize our stations, professionalism and initiative are required from everyone. In 2024, out of 251 reservists, 24 employees in the personnel reserve advanced.

In 2024, internships were held to exchange experience between the production departments of AlES JSC, and 98 people from the personnel reserve were trained in the main areas:

Training for the development of managerial competencies on the following topics:	**Professional training:**
• Leadership and organizational behavior • Effective management skills • Leadership 4D. Team efficiency • IR School Modular Training	• • At the university and college; • • Project management in accordance with IPMA requirements; • • Certification and advanced training of employees of the financial and economic block; • • Microsoft Excel • • Training of conciliation committee members • • Strategy Session "Creating a Culture of Occupational Safety and Zero Tolerance of Workplace Deaths"

In 2024, 1 employee took part in modular training within the framework of the "IR School" implemented by the private institution "Samruk Business Academy" (1 person. HR employee);

We strive to create a working culture in which everyone feels supported, regardless of their ethnicity, age, language, education, origin, etc. In order to support initiatives in the development of an inclusive workforce, the company employs 26 people with disabilities. The company supports the activities of a youth organization, veterans of power engineers, a women's club. Thus, the company reaffirms its commitment to the principles of providing equal opportunities.

SOCIAL INITIATIVES REPORT 2024

Social initiatives mean the development of local infrastructure, improvement of the region, actions, subbotniks, assistance to the poor, veterans, etc.).

№	Social program name
1	Payment of one-time incentives to pensioners of AlES JSC for holidays:
2	- for the public holiday "International Women's Day" 481 women;
3	- to the state holiday "Victory Day" to 22 pensioners (home front workers, veterans of military operations on the territory of other states and veterans equated in benefits to veterans of the Great Patriotic War);
4	- for the professional holiday "Energy Day" 1,237 pensioners.
5	Financial assistance to pensioners in connection with a difficult financial situation (for treatment, in emergency situations, etc.): 20 cases
6	Material assistance for funeral services to relatives of deceased workers and pensioners: 39 cases
7	247 trips were issued for summer holidays for children and grandchildren of workers and pensioners in the health camp "Edelweiss" with compensation of 50% of the cost of trips at the expense of the company
10	A drawing competition was held, in which 157 children of employees took part
11	Participation in the Spartakiad organized by Samruk-Kazyna JSC.
12	Children's gifts were purchased for 3200 children of employees.
13	A children's Christmas tree was organized and held for the children of employees.
14	Held corporate events Energy Day, etc.
15	The youth organization "Zharkyn Bolasha қ" JSC "AlES" held charity events:
16	- in February, TETs-3 workers visited an orphanage and a nursing home and presented gifts: books, toys, hygiene products, stationery, etc.
17	- in April, with the beginning of the month of Ramazan, the youth of AlES JSC launched a campaign to raise funds for charitable purposes. Power engineers organized an auyzashar dinner for 43 kids from Perzent, and raised funds in the amount of 670 thousand tenge (this money allowed them to hold an auyzashar and donate a washing machine).
18	- in December, 107 special children from the Zharyn Zhandar center were presented with gift sets.
19	The following actions were held: ecological company "Almaty - bizd iң orta қ ү yumiz" (cleaning the Prokhodnaya river), exit action "#Birge - taza taular" (garbage collection in the Butakovsky gorge), "Taza Қ azakstan: an impassable action on the Prokhodnaya river" (cleaning the Prokhodnaya river), from 11 to 15 November 2024 Environmental Challenge: "Be in the eco-trend!" (rejection of plastic bags and leather bags in favor of eco-bags), with the participation of all responsible ecologists of production departments and head

	office.

The outgoing year was full of significant events:

- Meetings of the Chairman of the Board of JSC "AlES" Yerik Mashirov with representatives of the youth organization "Zharkyn Bolashak" become systemic. What is natural: in order to solve pressing issues of production and the team, it is important to formulate them, discuss with all parties, and jointly develop solution algorithms. Therefore, if the first meeting of young people with the head of the company was more informational, then this time a business conversation took place about what tasks need to be solved to improve the work of the enterprise and increase the social protection of employees.

- The children from the Nazarbayev Intellectual School of Chemical and Biological Direction visited the CHPP-1 named after B.Orazbayev In early March 2024, students of NIS KBN received a unique opportunity to immerse themselves in the world of energy. The tour took place according to all safety rules. At first, everyone was instructed by the station's Occupational Safety and Health Service. Then the head of the production and technical department Aibek Shayakhmetov conducted an excursion. He spoke in detail about the operation of the station, the production of electrical energy and heat, water purification processes and the roles of various specialists..

- Topical issues of the social agenda were discussed at the traditional annual reporting meetings at AlES JSC.

The meetings were held on March 11 to 13, 2024 in all production departments of the company. ALEC management presented a report on the results of work in 2023 in the field of corporate social responsibility, which is in line with the ESG policy. Questions of interest to the company's employees were also answered.

- National costume: preserving the warmth, spirit and strength of the clan, nation and the whole country.

In all production departments of the company, this day, as well as throughout the country, was dedicated to the national costume.

- With the beginning of the month of Ramazan, the youth of AlES JSC launched a campaign to raise funds for charitable purposes. Almaty power engineers have many social addresses where they are expected. But their visits, gifts and communication brought special joy to the pupils of the Muslim orphanage "Perzent.".

• The next meeting of the Women's Club of AlES JSC was held at the end of March at the CHPP-1 named after B.Orazbayev. The first issue on the agenda was a discussion of the results of work over the past period and plans for the current one.

It is no coincidence that the gender aspect today dominates the global agenda of ESG, its Governance category - corporate governance.

It was with this goal - to unite the company's employees to strengthen the role of women and expand their opportunities in production - that the Women's Club was created in 2022 at AlES JSC. The club brought together about 600 employees of the company..

- In honor of the 79th anniversary of the Great Victory, special attention was paid to 11 home front workers, and 23 soldiers to internationalists and persons who took part in eliminating the consequences of the Chernobyl disaster.

• JSC AlES held an annual Review - a competition for the best organization of work on labor protection among the production departments of JSC AlES, timed to coincide with World Labor Protection Day.

The winner of the competition was recognized by the CHPP-2 Occupational Safety and Health Service named after A. Zhakutov, they were awarded the Cup for the best organization of work on labor protection.

The second place went to the CHPP-3 Occupational Safety and Health Service. And the third place was taken by the Occupational Safety and Health Service of the Cascade of Hydroelectric Power Plants. All winners are encouraged by certificates of honor and cash prizes, in accordance with the Collective Agreement of AlES JSC.

- Nearly three hundred athletes from eight production departments and the head office of AlES JSC took part in the company's annual Spartakiad. It is carried out with the aim of forming a single AlES team to participate in the qualifying stage of Samruk-Energo JSC.

• On June 5, the company's environmentalists held another waste collection campaign in the Butakovsky Gorge "#Birge - Taza Taular."

June 5 in Kazakhstan, as well as throughout the world, marks the International Day for Environmental Protection (Ecologist Day).

- В рамках общенациональной программы «Таза Казахстан» 15 работников АО «АлЭС» приняли участие в экологическом челлендже, организованном АО «Самрук-Казына».

• As part of the celebration of International Children's Day on June 1, the Local Trade Union Energia announced a competition for children's drawings among the children of employees of AlES JSC. The competition brought together 157 participants from eight production departments and the company's head office, giving children the opportunity to show their creativity and win valuable prizes.

- ».

Where does the light come from in the light bulb, how the current runs through the wires, parents are engaged in power plants... The answers to these and many other questions were able to get the guys who

rested in July in the high-altitude camp "Edelweiss," owned by JSC "AlES." All the guys are from family power engineers, and some from large dynasties, numbering up to a hundred years of professional experience.

- A large group of marathon runners from AlES JSC traditionally took part in the Almaty Marathon and traditionally showed a high sports class.

- Eight teams of power engineers took part in the KVN Young Energy festival of the Samruk-Energo group of companies. The competition of the most cheerful and resourceful representatives of the central office and subsidiaries of the group revealed the winner. The Toki in Shock team of AlES JSC has risen to the pedestal of humor and resourcefulness.

- Team building of power engineers: "trip" to childhood. On October 10, 2024, AlES JSC and AZhK non-trivially celebrated the World Day of Action for Decent Work.

• Seventy young employees of JSC "AlES" took part in the V Youth Forum organized by the youth organization "Zharkyn Bolasha қ" of the company. It was devoted to the topic "Effective Communications," and the main task of the New Year's meeting was to further expand the opportunities for self-realization of young power engineers.

• The youth organization "Zharkyn Bolasha қ" JSC "AlES" held a New Year's charity event.

As part of this action, fundraising was organized, and thanks to the generous support of our colleagues, 715 thousand tenge was collected! These funds were used to purchase gift sets for 107 special children from the Zharyn Zhandar center.

Local communities

JSC "Ales" pays great attention to social activities, which is one of the important components of corporate social responsibility of business. Every year, the Company improves its approach to managing relations with local communities.

Sponsorship activities of the Group of Companies JSC "NWF "Samruk-Kazyna," of which the Company is a part, is carried out by the Samruk-Kazyna Trust Social Projects Development Fund, which implements socially significant projects.

The company supports non-profit organizations in preparing and submitting applications to the Samruk-Kazyna Trust Corporate Fund to receive social assistance and implement socially significant projects. In 2024, AlES JSC sent information to the akimats of the regions of presence in order to identify the urgent social needs of the population. Despite the assistance provided, in the reporting period there were no appeals on social projects from non-profit organizations.

REMUNERATION AND GROWTH

Remuneration of the Company's employees is carried out in accordance with the "Regulation on Remuneration of Employees of AlES JSC," approved by the decision of the Board of Directors of the Company dated June 3, 2022 (Minutes No. 05/22) and which is an integral part of the Collective Agreement of AlES JSC for 2022 - 2025 (Appendix No. 4).

The Company applies two main forms of remuneration - piecework and time.

Piecework is used to pay for the personnel of the Department of PRP Energoremont, which directly provides repair and maintenance of the main and auxiliary power equipment ≈ 770 people.

The time form is used for remuneration of all other categories of the Company's personnel ≈ 2,200 people.

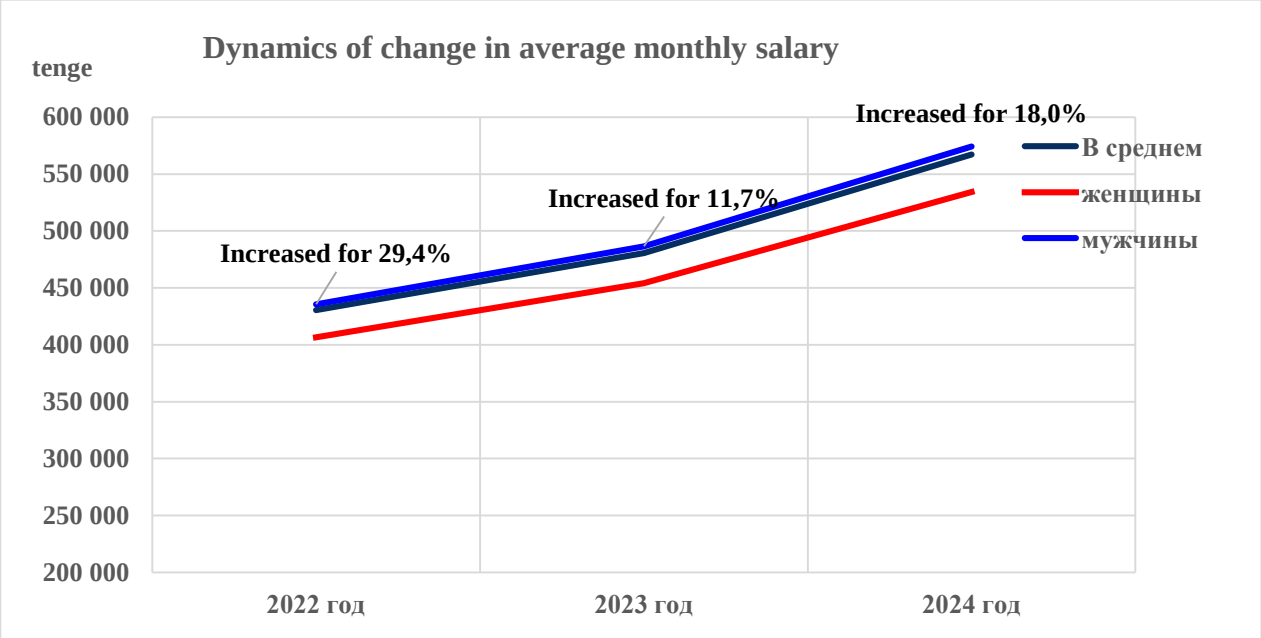
On the basis of the Regulation on Remuneration of Employees in the Company, every year from January 1 of each year, monthly tariff rates (official salaries) are indexed by the inflation rate (taken into account as the average value of its corridor determined in the "Forecast of socio-economic development of the Republic of Kazakhstan" for the corresponding calendar year.

From January 1, 2024, the Company indexed monthly tariff rates (official salaries) in the amount of 7%. Since April 15, 2024, on the basis of the decision of the Board of Samruk-Energo JSC (protocol No. 8 of 27.03.2024), an additional indexation of monthly tariff rates (official salaries) in the amount of 8% was carried out. Thus, the total level of indexation of the main salary of employees in 2024 amounted to 15.56%.

At the same time, the minimum tariff rate (constant part of the salary) of the 2nd category worker (there are no 1st category workers in the Company), established in the Staffing Table of AlES JSC from April 15, 2024, amounted to 141,200 tenge, which is 166.1% higher than the minimum wage established by the Law of the Republic of Kazakhstan "On the republican budget" for 2024 - 85,000 tenge.

Change in average monthly salary, tenge
including the average gender pay gap in the workforce -
average remuneration of men/women, taking into account operational (production) employees
(according to the statistical "Labor Reports" in the form of 1-T)

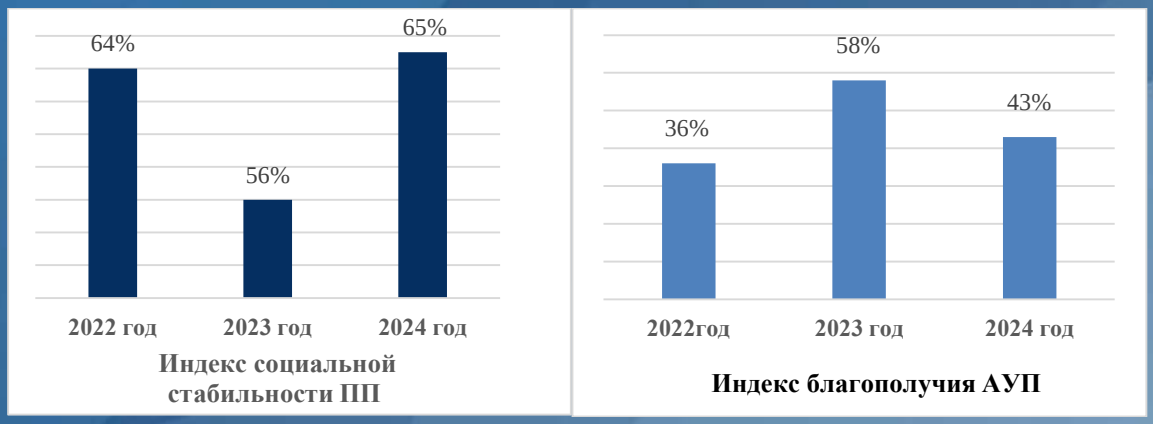
Indicators name	2022	2023	2024
Average monthly salary - total, incl.	**430 353**	**480 646**	**567 123**
women	406 692	454 149	534 281
men	435 614	486 450	574 123
Administrative personnel - total, including:	**636 485**	**730 928**	**894 931**
women	513 652	626 262	708 871
men	953 119	955 847	1 267 052
Production personnel - total, including:	**418 762**	**467 708**	**550 790**
women	378 103	414 641	495 936
men	426 026	477 345	560 564



SOCIAL SUPPORT AND FINANCIAL ASSISTANCE

Financial assistance type
In connection with the birth of a child
In connection with the anniversary of the employee (50 and 60 years), depending on the continuous work experience in the electric power industry
For rehabilitation (when the employee leaves for labor leave)
Due to the death of an employee
In connection with the death of close relatives of employees:
- - spouse (s), children, parents,
- siblings, grandchildren

PERSONNEL ENGAGEMENT INDICES



The Center for Social Interaction and Communications of Samruk-Kazyna JSC presents the results of a study to determine the Social Stability Index and the Well-being Index of AlES JSC for 2024.

The total number of employees who took part in the survey was 445 people.

Based on the results of the survey:

	Social stability index of production personnel	Index of well-being of administrative and managerial personnel
2024	65%	43%
2023	56%	58%
2022	64%	36%

Based on the results of the study, an Action Plan was developed to improve the level of social stability and well-being of the personnel of AlES JSC for 2025

The Plan reflects activities in the following key areas of activity: "Remuneration and motivation of labor," "Training and development of personnel," "Health, labor and safety."

OMBUDSMAN. CONFLICT MANAGEMENT

In 2024, AlES JSC received 20 official appeals from the Company's employees to the Ombudsman. All appeals were considered, measures were taken.

In November-December 2024, employees (including senior management) were tested for knowledge and understanding of the basic principles of the Code of Conduct. The Ombudsman prepared questions for testing, an electronic testing program was created in Kazakh and Russian. Testing was carried out by computer, in all production departments and in the head office of AlES JSC, in accordance with the approved schedules. If desired, employees were tested in Kazakh. Test results were documented in protocols.

In the reporting period, inspections of compliance with the Code of Conduct were carried out in production departments and at the head office, visits were made to production departments in order to view the boxes of appeals to the Ombudsman and accept appeals from employees at workplaces.

JSC AlES has a Code of Conduct, which was approved by the decision of the Board of Directors of the Company dated March 19, 2024 (Minutes No. 20/24). There is a manual for studying the Code of Conduct sent to all structural divisions of the Company. The manual is published in Kazakh and Russian.

The Code of Conduct is an internal document of the Company, binding on all its employees, including executives. Each employee is personally responsible for compliance with the Code as part of his/her conduct. If questions arise regarding the application and observance of the principles, rules and standards set forth in the Code, as well as on the facts of violations of the Code, employees contact their immediate supervisor or the Ombudsman. Information on the Ombudsman is available in all structural divisions and on the official website of the Company.

OCCUPATIONAL INJURY AND DISEASE RATE

Indicators	2022	2023	2024
Total hours worked	5114,9 тыс.час	5198,6тыс.час	5226,2тыс. час
Total number of injuries	0	1	2
Occupational injury rate (OIR)	0	0,1924	0,382
Total number of occupational diseases	0	0	0
Occupational Disease Rate (ODR)	0	0	0
Total number of days lost	0	64	93
Lost days ratio (efficiency)	0	0,101	0,146
Total number of missed days	40 956	34 963	26 977
Total days worked	624 749	634 508	635 166
Absence rate (AR)	0,066	0,055	0,042
Number of fatal accidents	0	0	1

In 2024, two labor-related accidents occurred in the production departments of AlES JSC (PRP ER, CHPP-3).

Note: more detailed information can be found on the corporate Internet resource of the Company: www.ales.kz, section - Sustainable development - Occupational health and safety.

MEASURES TAKEN TO PREVENT ACCIDENTS AT WORK

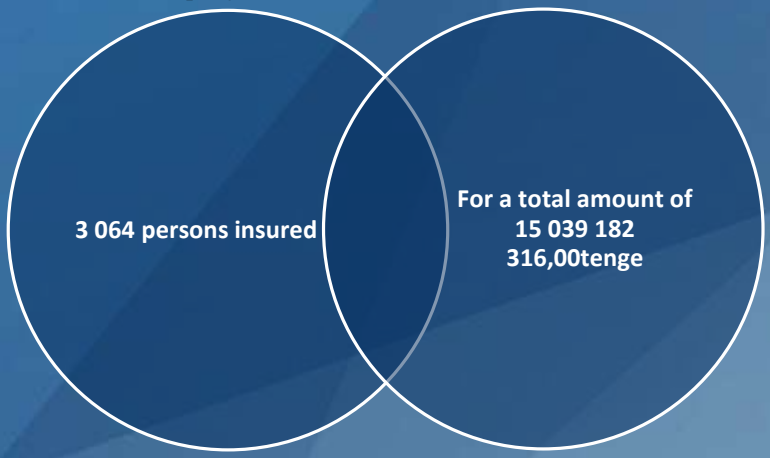
The Company takes all measures to prevent any risks at workplaces and in technological processes by carrying out prevention, replacing production equipment and technological processes with safer ones. It conducts training and training of workers in occupational safety and health, creates the necessary sanitary and hygienic conditions for employees, ensures the issuance and washing of special clothes, special shoes, supplies preventive treatment products, detergents and disinfectants, a medical kit, and special milk.

Personnel are fully provided with individual and collective means of protection. Workplaces are equipped with electrical protective equipment.

In production departments and at the Head Office, a mandatory medical examination of personnel systematically exposed to harmful, hazardous and adverse production factors was carried out.

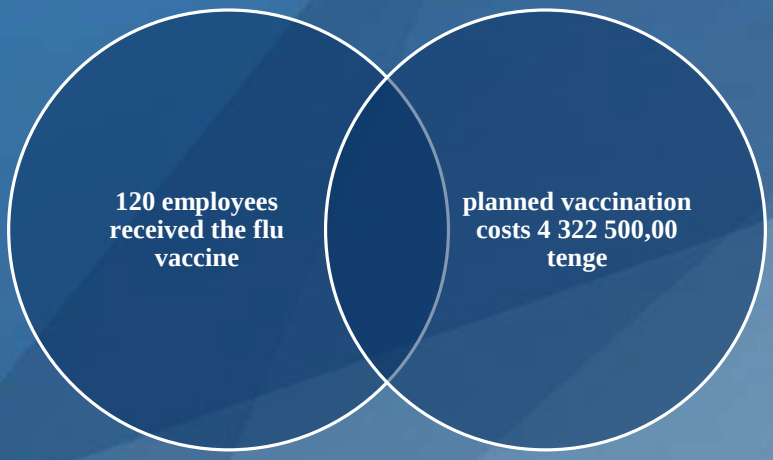
In accordance with the Law of the Republic of Kazakhstan "On compulsory insurance of civil liability of the employer for causing harm to life and health to an employee in the performance of his labor (official) duties," all personnel are insured in the amount of 3064 people, whose life and health may be harmed. Of these, 2,904 people are production personnel, 160 people are administrative and managerial

personnel of the Company. The insured amount is 15 039 182 316,00 tenge.



According to the results of certification of workplaces, 1,962 employees of departments working in adverse working conditions receive milk. The cost of providing milk amounted to 68,983,120.95 tenge.

In November 2024, 120 employees of the Company were vaccinated in order to prevent influenza. Vaccination was carried out by the medical organization Kausar Plus LLP free of charge.



2024, in order to automate and improve the pre-shift and post-shift medical examination process, the Medical Hardware and Software Complex for organizing and conducting medical pre-shift and post-shift medical examinations in the amount of 12,870,000.00 tenge was purchased for the production department of the CHPP-1.

Note: more detailed information can be found on the corporate Internet resource of the Company: www.ales.kz, section - Sustainable development - Occupational health and safety.

"SAFE PRODUCTION" INFORMATION SYSTEM

The SKE.01.01.P project "Implementation of a new model for integrated security management" is being implemented from 2021. It is aimed at changing the consciousness and mentality of employees, compliance with safety rules at work, timely informing management of violations and applying a risk-based approach to occupational safety management. The main goals of the project are to improve the safety culture, involve personnel in labor protection issues, reduce injuries and improve the assessment of the effectiveness of the labor protection management system.

In 2024, the personnel training department of AlES JSC conducted training in the course "Improving the safety culture." A total of 2,637 employees were trained. Also, since 2021, the SKE.01.02.P program "Safe Production" has been introduced, aimed at automating safety processes at production facilities, reducing injuries and increasing the efficiency of incident response.

During the year, employees conducted explanatory work on the use of the Safe Production information system, including making entries in the BPMS system about events and defects, as well as monitoring training and conducting leadership behavioral safety audits (LPAB). 3509 LPABs were carried out in the departments of AlES JSC, which were based on observing the actions of employees in the performance of production tasks and subsequent conversation with the auditor. Based on the results of the audits, 435 measures were developed, which were fully implemented.

ПРИЛОЖЕНИЯ

ANNEX 1. Abbreviations used

JSC - Joint Stock Company

RES- Renewable energy sources

WTO - World Trade Organization

SDPP - State district power plant

HPP - Hydraulic power plant

SDOs - Subsidiaries and associates

UES- Unified Electric Power System

CMS- Corporate Management System of Samruk-Energy JSC Group of Companies

Kapshagai HPP - Kapshagai HPP named after Sh.Chokin

KPIs- Key performance indicators, indicators (indicators) characterizing the level of the Company's performance, allowing to assess the performance of the Company as a whole, as well as that of its executives.

Company - Almaty Electric Stations Joint Stock Company.

IFRIC - International Integrated Reporting Standard

Risk-Exposure to uncertainty associated with events or actions that may affect the achievement of goals and objectives

RK- Republic of Kazakhstan

Strategy-Development Strategy of Samruk-Energy JSC for 2022-2031 approved on 29 October 2021 by the decision of the Board of Directors of Samruk-Energy JSC

Structural subdivisions of the Company - Subdivisions of the Company responsible for a certain type of activity and reflected in the organizational structure of the Company (departments, services)

LLP- Limited Liability Partnership

CHPP - Heat and Power Plant

Fund- Joint Stock Company "Sovereign Wealth Fund" Samruk-Kazyna"

EBITDA - Revenue from operating activities

EBITDA/Margin – The company's profitability before interest, taxes and amortization

ISO- International Organization for Standardization (International Organization for Standardization)

SWOT - Analysis of positive and negative influence of external and internal environment factors

UOM - Units of measurement

Gcal - Gigacalorie

kV-Kilovolt

kWh-Kilowatt per hour

km - kilometre

m-metre

m3-metrecubic

ПРИЛОЖЕНИЯ

MW - Megawatt mln. - mln.
ths.-ths.