CAEPCO
Central-Asian
Electric Power Corporation

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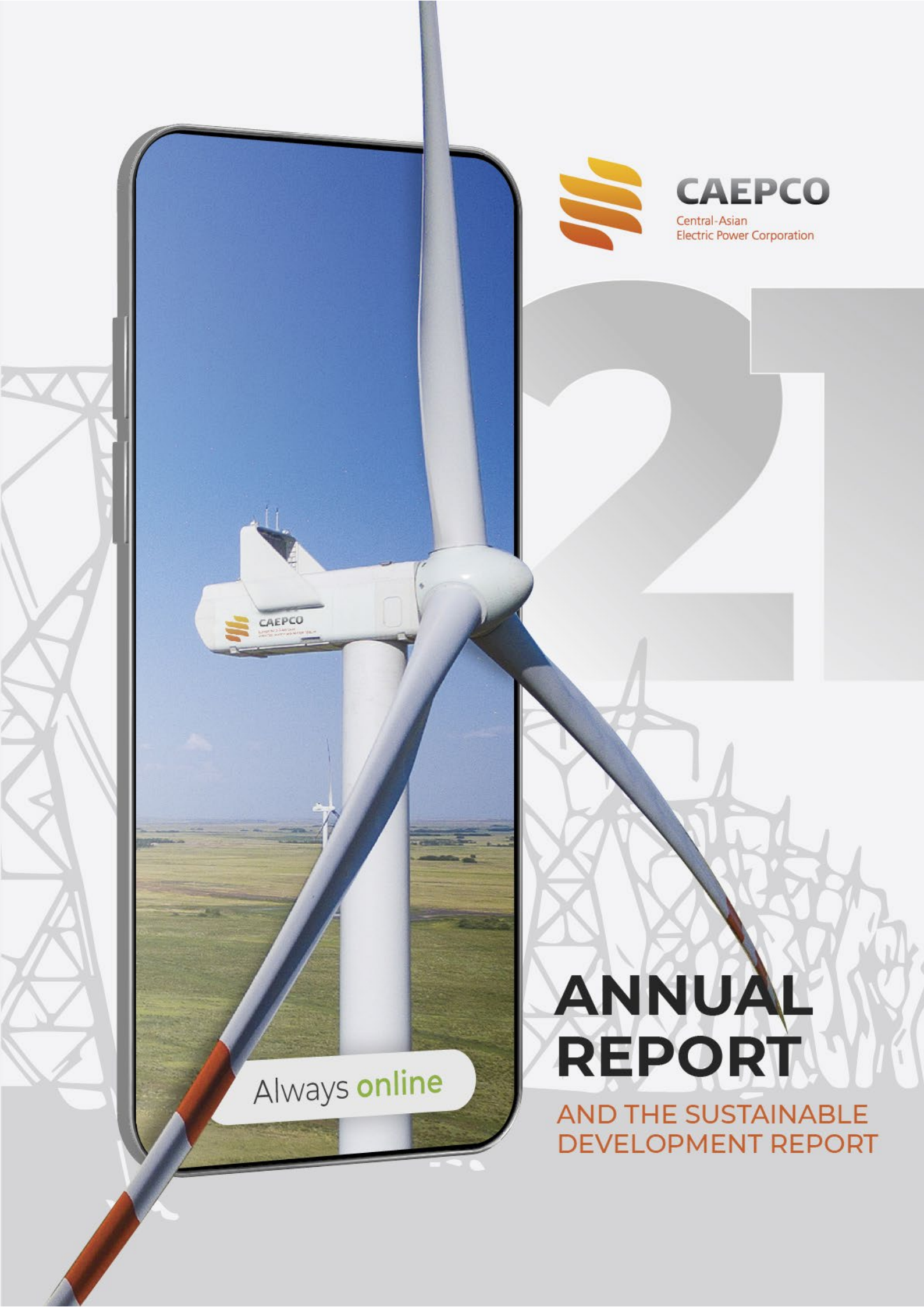


ANNUAL REPORT

AND THE SUSTAINABLE DEVELOPMENT REPORT

Management letters

About the Corporation

Corporate governance

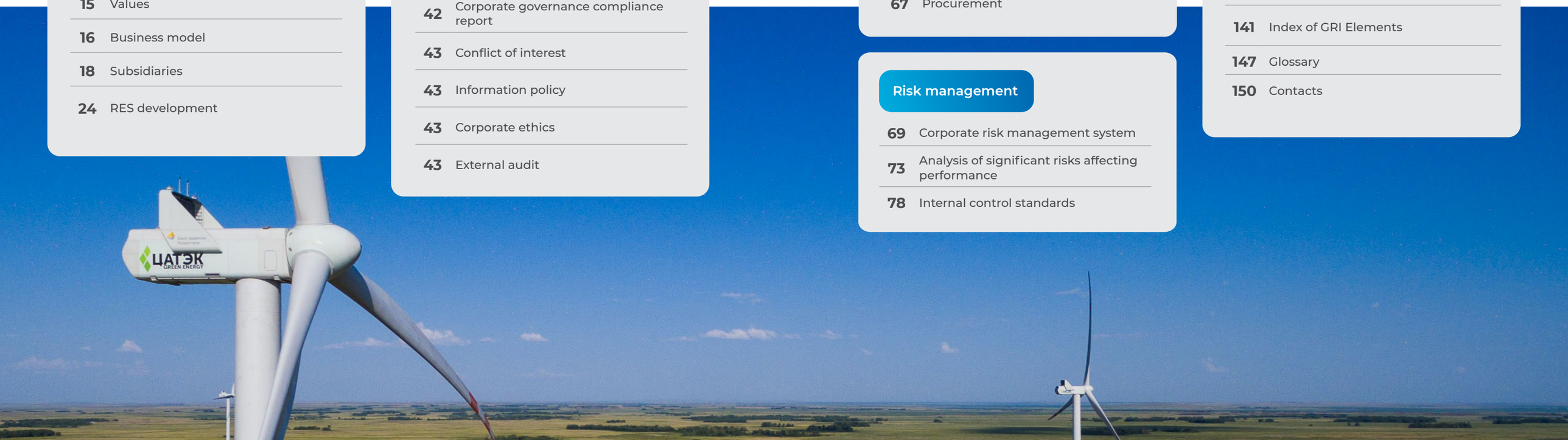
Market analysis

Performance results and development prospects overview

Risk management

Sustainable development

About the report



Alexander Klebanov

Chairman of the Board of Directors of CAEPCO JSC

“CAEPCO JSC strives for diversification”

#Management

What results has the Corporation achieved during the reporting period?

In its activities, the Company continued to pay special attention to implementation of investment programs. The enterprises within the Holding annually implement programs for the reconstruction, modernisation and construction of power facilities.

For 14 years, we have upgraded 64% of our generating capacities, which has increased energy security in the regions of our presence.

What were the changes in the Company during the pandemic?

First of all, the CAEPCO’s power engineers promptly adapted to the changed conditions so that the consequences of the pandemic would not affect the production process. We have fully implemented all the measures that affect the reliability of energy supply, also during the heating season.

Expressly, it is worth noting the activities aimed at changing the key performance indicators of business processes to achieve the goals facing the Corporation. And, of course, the development of corporate culture and management model. **We learned how to work online** and made a number of decisions that were aimed at ensuring the safe work of our employees. Despite the difficulties born by the pandemic, CAEPCO provided consumers with high-quality and reliable energy supply throughout the regions of our presence and promptly implemented all the necessary technological transformations in the energy complex.

What strategically significant goals for the Corporation could you highlight?

In 2021, CAECPO JSC consistently worked to achieve its goals for implementation of investment programs as part of the renewal of fixed assets. I am glad to note that, despite the shocks that have hit the world economy, the Holding has fully implemented its plans in this area.

CAEPCO is working to optimise emissions from heat and power generation, and also continues to explore opportunities for generating power not only from traditional heat and power plants, but also using low-carbon and renewable energy sources (RES). The Corporation's subsidiaries have the Energy Saving and Efficiency Program for 2015-2025. **In 2021, thanks to implementation of the measures of this program, we achieved a reduction in greenhouse gas emissions by 67.3 thousand tons of CO2.** For me, as for the Chairman of the Board of Directors, it is extremely important that the Corporation continues to look for additional opportunities to achieve net carbon neutrality in 2050 perspective.

#Interview

Alexander Klebanov
always online

Subsidiaries of the Corporation achieved a reduction in greenhouse gas emissions by 67.3 thousand tons of CO2. For me, as for the Chairman of the Board of Directors, it is extremely important that the Corporation continues to look for additional opportunities to achieve net carbon neutrality in 2050 perspective.

Diversification is one of the key trends in a rapidly changing economy. What projects is the Company implementing in this direction?

Today, CAEPCO JSC is actively developing both traditional coal and renewable, i.e., **wind power generation.**

In 2021, we completed a deal to buy out CAPEC Green Energy LLP: this company built a wind farm in the Akmola region with a total capacity of 100 MW. In the future, we also intend to actively apply innovations, improve the environmental parameters of the stations and develop RES.

Bagdat Oral

Chairman of the Management Board of CAEPCO JSC

"The Holding's priority is to increase production efficiency and improve environmental indicators"

#Management

What are the main achievements of 2021 that you could highlight?

The Holding's team worked very efficiently and reliably, which created conditions for achieving most of the targets for improving production efficiency and optimising costs.

Subsidiaries provided reliable energy supply in the regions of their presence: **Akmola, Pavlodar and North Kazakhstan regions.**

The volume of electric power generated during the reporting period was **6,521 million kWh**. A total of **24.7 billion tenge** was allocated for implementation of the investment program in 2021. The energy facilities constructed and reconstructed during the reporting period contribute to improving the reliability of energy supply and unlocking the investment potential within the Holding's territories of operation. For example, in the Akmola region, a closed-type substation Garden Village was put into operation, which has become one of the most modern in the region in terms of equipment. The new 110/10 kV Garden Village substation is powered by 110 kV Airport-Severnaya overhead line and 110 kV Dostyk-Severnaya overhead line, and is located on the route of the south-western bypass of Nur-Sultan. The project for the construction of a new chimney at Pavlodar CHP-3 has entered the active phase. The project has been under development since 2018.

What changes did the Holding's structure undergo during the reporting period?

In 2021, we completed the acquisition of control over CAPEC Green Energy LLP, the largest wind farm in the Akmola region. **The installed electric capacity of the Group's stations has increased to 1,318 MW.** The wind farm operates consistently without interruptions, confirming the correctness of the Company's commitment to the best technologies and practices in implementing investment projects.

What measures have been implemented to improve the efficiency of the Holding's activities?

Improving efficiency and investment attractiveness are our top priorities for the near future. In 2021, the Holding optimised its operating and capital expenditures, which allowed it to maintain financial stability.

The transition was made to the Methodology developed by the Ministry of Energy of the Republic of Kazakhstan (with the active participation of CAEPCO JSC) for determining the rate of profit taken into account when approving marginal tariffs for electric power. The level of fixed profit was determined in accordance with the method of return on invested capital (RAB-regulation), which allows stimulating investment in the development of the electric power industry and improving the efficiency of cost management.

One of the most important strategic goals of the Company for 2022 and beyond remains **the implementation of organisational and technological measures to eliminate excess losses, as well as reduce actual losses.**

Given the challenges of the pandemic, how was work organised in the area of occupational health and safety?

CAEPCO continues to work on improving the production culture, occupational health and safety. In 2021, it was managed to reduce the total number of accidents by 30% compared to 2020 and by 60% compared to 2016. No fatal cases were recorded.

In 2021, the management of CAEPCO JSC and its subsidiaries took all necessary measures for the safety of personnel and uninterrupted supply of heat and electric power to the population. To prevent the incidence and spread of infection, various measures were carried out. The main task during the pandemic was to develop universal immunity through vaccination. **The number of vaccinated personnel was 90% of the total number.**

Summing up the results of the company's work for 2021, I would like to thank the team and partners for their professional behaviour, high responsibility and commitment to make every effort for the benefit of the Holding and the country.

What are the Holding's priority goals for the next 5 years?

The Holding will continue to work on reducing the wear and tear of basic power equipment, as well as electric and heat networks, improving production safety, and introducing digital solutions. There is a set of tasks and measures that are necessary for implementation in accordance with the requirements of the new Environmental Code of the Republic of Kazakhstan at the Holding's generation facilities with an in-depth assessment of economic and technical approaches. We will continue to actively participate in legislative innovations regulating the energy sector within the existing working groups. By far the most important tasks facing the Group of Companies in the foreseeable future continue to be ensuring uninterrupted and high-quality energy supply to consumers, **applying a constructive and systematic approach to the development of energy infrastructure, improving the quality of corporate governance.**

SEVKAZENERGO JSC
group of companies

PAVLODARENERGO JSC
group of companies

Generation

Transportation

Sales of heat and electric power

The share capital structure of CAEPCO JSC for 2021 is as follows:

Alexander Klebanov — 47.10% Sergey Kan — 47.10%.

Baiterek NMH JSC funds

KIF ENERGY S.A.R.L. — 4.35 %, Baiterek Venture Fund JSC — 1.45 %.

AKMOLA ELECTRIC DISTRIBUTION COMPANY JSC
group of companies

Transportation

Sales of electric power

Regions of activity

CAEPCO assets are represented in three northern regions of the country: Akmola, Pavlodar and North Kazakhstan regions

About the Corporation

Summary

Name

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY

Abbreviated name: CAEPCO JSC

Information on state registration

CAEPCO JSC was registered on 8 August 2008 by the Department of Justice of Almaty, with the registration number 93550-1910-JSC, Series-B certificate, No. 0336963.
The issue of shares of CAEPCO JSC was registered on 10 October 2008 by the Agency of the Republic of Kazakhstan for Regulation and Supervision of the Financial Market and Institutions No. A5695, Series C certificate, No. 0002550. The system of registers of shareholders of CAEPCO JSC is maintained by the Central Securities Depository JSC.

CAEPCO
Central-Asian Electric Power Corporation

SEVKAZENERGO

PAVLODARENERGO

E/D/C

Incorporation

CAEPCO JSC was incorporated in August 2008

Incorporation

As at the Holding incorporation, it combined SEVKAZENERGO JSC and PAVLODARENERGO JSC. Central-Asian Power Energy Company JSC was the only founder of CAEPCO JSC.
In 2014, CAEPCO JSC consolidated 100% stock in Akmola Electric Distribution Company JSC.
In 2021, CAPEC Green Energy LLP joined the Group with the Astana EXPO-2017 wind farm project. Today, the Holding structure includes such large energy facilities as PAVLODARENERGO JSC, SEVKAZENERGO JSC,
AEDC JSC, as well as Astana-ERC LLP (42.25 %) and Pavlodar Vodokanal Severny LLP (80 %).

In 2019

shareholders of the Holding were represented by CAPEC JSC with 62.12% share, the European Bank for Reconstruction and Development (EBRD) with 24.99% share and Islamic Infrastructure Fund (Kaz Holdings Coöperatief U.A., Amsterdam) with 12.89% share. The shareholders of the EBRD and Kaz Holdings made a planned withdrawal from CAEPCO JSC in 2018.

In 2015

Baiterek Holding became CAEPCO JSC's shareholder through its subsidiary funds, i.e. KIF ENERGY S.A.R.L, Baiterek Venture Fund JSC, CITIC KAZYNA Investment Fund CKIF ENERGY S.A.R.L.

KEY EVENTS OF THE YEAR, INCLUDING SOCIAL PROJECTS

January

Subsidiaries of the CAEPCO holding, i.e., PAVLODARENERGO JSC and SEVKAZENERGO JSC, were included in the list of the largest taxpayers of Kazakhstan compiled by the LS news agency. The list of 343 companies in Kazakhstan was selected based on data from the State Revenue Committee as of 15 January 2021. PAVLODARENERGO JSC is on the 180th place (3.6 billion tenge in 2020), and SEVKAZENERGO JSC is on the 200th place (3.0 billion tenge in 2020).

February

Pavlodar CHP-2 celebrated its 60th anniversary

March

Bagdat Oral was elected as the new Chairman of the Management Board of CAEPCO JSC at a meeting of the Board of Directors on 9 March 2021. Bagdat Oral replaced Sergey Kan, who continued to participate in the strategic management of the Corporation as a member of the Board of Directors and a shareholder of CAEPCO JSC.

On 1 March, AEDC JSC celebrated its 20th anniversary

Sergey Li was appointed as the new Deputy Chairman of the Management Board for Economics and Finance by the decision of the Board of Directors of CAEPCO JSC.

IQanat High School of Burabay students visited PAVLODARENERGO JSC as part of the PROFENERGY program aimed at supporting young professionals and attracting graduates to key professions of enterprises, developing and improving the educational level of staff.

April

On the World Day for Safety and Health at Work, celebrated annually on 28 April, an expanded meeting was held at CAEPCO JSC under the chairmanship of Deputy Chairman of the Management Board of CAEPCO JSC for production. L. Yanushko. The meeting was held online with the heads of subsidiaries and structural units of CAEPCO JSC.

May

The employees of the CHP-2 of SEVKAZENERGO JSC and Petropavlovsk Heat Networks LLP were awarded with appreciation letters of State Labour Inspectorate Administration of the akimat of North Kazakhstan region for their contribution to the development of the occupational health and safety system.

June

Bagdat Oral, Chairman of the Management Board of CAEPCO JSC, spoke at the first ECOJER International Congress “Shape a Sustainable Future”. In his speech, Mr. Oral highlighted the main achievements of the holding in sustainable development, and mentioned the issues of fulfilling obligations to reduce emissions by power companies.

July

Igor Ilyin was appointed the new Commercial Deputy Chairman of the Management Board by the Board of Directors of CAEPCO JSC.

August

As part of the investment program of 2021, AEDC JSC purchased 12 brigade off-highway vehicles for the transportation of personnel.

September

Ekibastuzteploenergo LLP successfully passed the second supervisory audit of the integrated Management System for compliance with the requirements of the international standards ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and the recertification audit of the Energy Management System for compliance with the requirements of the international standard ISO 5001:2018.

October

On 15 October, the annual competition of student works for the application of a nominal scholarship of PAVLODARENERGO JSC was held. This event is held within the PROFENERGY program. In 2021, presentation of papers and their discussion were held online.

557 long-service employees of AEDC JSC received congratulations and monetary rewards on the occasion of the International Day for the Elderly.

November

The Garden Village substation has been put into operation. The cost of the project implemented by AEDC JSC amounted to 2,661.337 million tenge (excluding VAT). The substation is equipped with modern equipment that meets all the safety requirements and quality standards of power supply to consumers. 2 power transformers with a capacity of 40 MVA each are installed at the Garden Village substation. The power facility built in Akmola region will improve the quality of power supply to consumers in Nur-Sultan and Kosshy cities, create conditions for expanding the region's infrastructure.

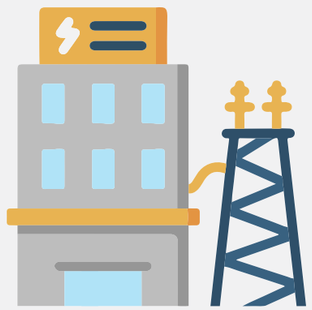
December

CAEPCO JSC was included in the rating of the 50 largest private companies by Forbes Kazakhstan. In the rating, the Corporation is on the 11th place.

The following subsidiaries of the Holding celebrated their anniversaries in December: **Ekibastuzteploenergo LLP is 65 years old and Petropavlovsk CHP-2 is 60 years old**. The Group of Companies also held a celebration of power engineers in honour of the professional holiday and the 30th anniversary of Kazakhstan's Independence.

For the first time since the outbreak of the pandemic in December, the Pavlodar Chess House hosted a chess and draughts tournament among employees of enterprises dedicated to the 30th anniversary of Independence of the Republic of Kazakhstan and the Day of the Power Engineer. The tournament was held in compliance with the necessary quarantine standards.

PERFOMANCE INDICATORS



Power generation

	2019	2020	2021
Electric power (mln kWh)	7,033	7,035	6,521
Heat power (thousand Gcal)	6,371	6,203	6,566

Pavlodarenergo electricity generation for 2021 amounted to **3,818 mln kWh**

Energy supply to consumers
(product release)

	2019	2020	2021
Electric power (mln kWh)	7,645	7,590	6,623
Heat power (thousand Gcal)	11,972	11,987	9,967

Sevkazenergo electricity generation for 2021 amounted to **2,703 mln kWh**

Assets

	2019	2020	2021
Current assets, billion tenge	30,114	47,541	47,337
Non-current assets, billion tenge	289,097	327,469	452,907

Investment volume
(bln tenge)

2019	2020	2021
14.4	16.4	14.1

Finance

Sales volume	Comprehensive income for the year	EBITDA margin	EBITDA
139,734 mln tenge	4,536 mln tenge	31,7 %	44 310 mln tenge

Rating

CAEPCO JSC was included in the rating of 50 largest private companies according to Forbes Kazakhstan. In the rating, the Corporation is on the 11th place.

The holding was included in the Rating of the 50 best companies for disclosure of information in the area of sustainable development, presented by PwC Kazakhstan.

Forbes KAZAKHSTAN

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Nur-Sultan, Kazakhstan

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Nur-Sultan, Kazakhstan

#Mission

— **Improving the quality of life of consumers**

— **Creating conditions for the economic development of the regions of operation**

— **Rendering high-quality energy supply services to the population, industry and social infrastructure facilities**

caepco_21
#our_future #families_support
#development #Zhana_Kazakhstan!

Fact

The Corporation implements this **mission** by building its activities in accordance with **international standards of production**, ecology, health care and the social sphere.

#Vision

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JSC is a leader among private energy companies in Kazakhstan. The Corporation operates in the most challenging climate conditions in the north of the country. The Corporation successfully uses the advantages of the holding structure by combining dynamism and flexibility of its business units (companies within the Group) with stability and reliability of centralised management on the Group level.

Employees of the Corporation are a team of professionals who are striving for higher goals. The Corporation's relations with its customers and suppliers are based on the principles of respect and mutual responsibility.

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Nur-Sultan, Kazakhstan

#Values

— **Respect for employees' personal rights and interests, customer requirements and cooperation conditions set by our partners and society.**

— **Objectiveness suggesting remuneration depending on the results achieved and providing equal rights for professional growth.**

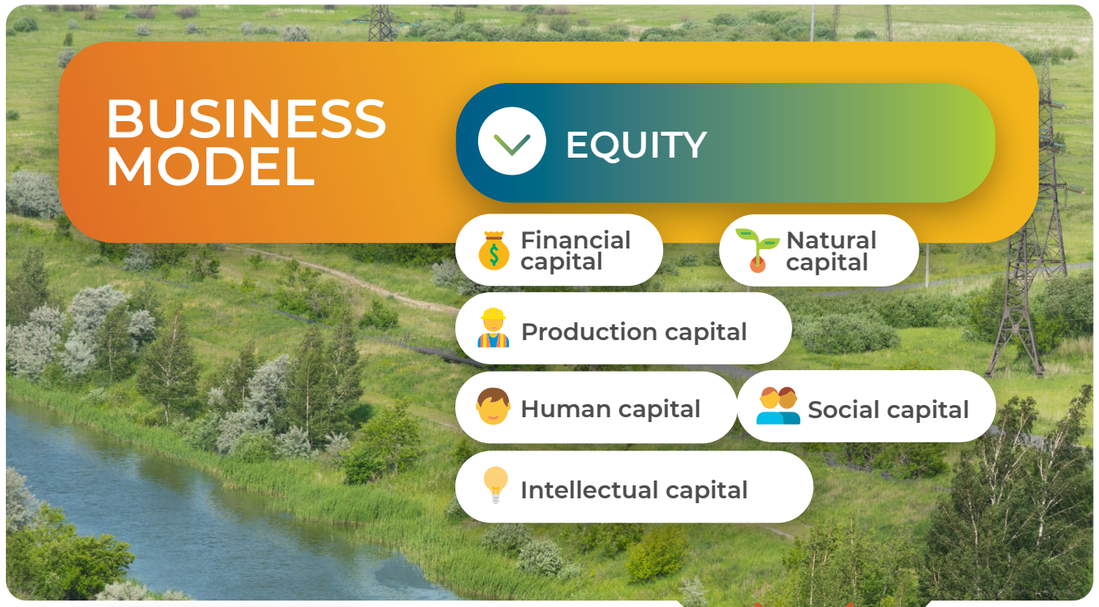
— **Integrity in relations and providing information necessary for our work.**

— **Effectiveness as a sustainable achievement of the maximum possible results in everything we do.**

— **Courage to resist what is unacceptable, and to assume responsibility for the consequences of decisions taken.**

— **Care expressed in attempts to protect people against any harm or threat to health and environment.**

— **Trust in employees allowing to delegate authority and impose responsibility for decisions and ways to implement them.**



BUSINESS MODEL

EQUITY

- Financial capital
- Natural capital
- Production capital
- Human capital
- Social capital
- Intellectual capital

ACTIVITIES

Principal activities

Heat and electric power generation shall mean combined generation of heat and electric power at 4 CHPs of the Holding, as well as electricity generation based on renewable energy sources

Transportation and distribution of heat and electric power shall mean transmission of energy from places of generation to the places of consumption carried out through heat and electric power networks, which include converters, power lines and switching gears

Sales of heat and electric power shall mean activities for the sale of heat and electric power to consumers

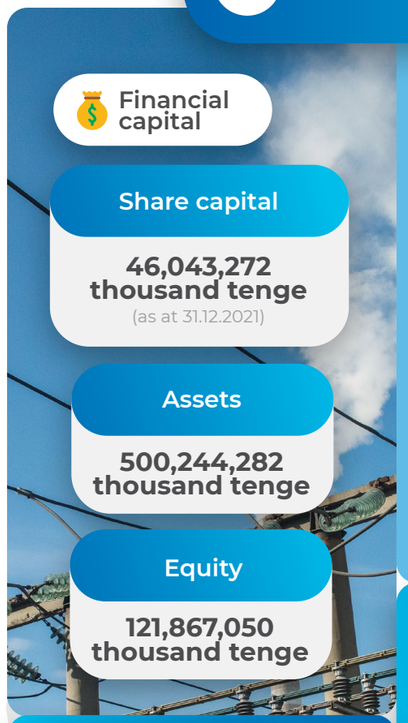
Investment activities

Power equipment modernisation

Heat networks and electric grids reconstruction

Process automation

VALUE CREATED



Financial capital

Share capital

46,043,272 thousand tenge
(as at 31.12.2021)

Assets

500,244,282 thousand tenge

Equity

121,867,050 thousand tenge

Production capital

Installed electric power

1,318 MW

Installed heat capacity

2,981 Gcal-hr

4 CHP

984.18 km of heat networks

48,533 thousand km of electric power networks

3 sales companies

Natural capital

As part of its production activities, the Corporation uses various types of fuel (fuel oil and coal), water resources and electricity, as well as the resources of the air basin

Social capital

implemented systems Ellipse, Mobility, ASCAEE, ASCAHE, THESIS automated system for control over the process of technological connection to electricity networks, billing, boiler and turbine generator automated control system, Infopro

Intellectual capital

The Corporation promotes development in the regions of its operation and makes a significant contribution to the social and economic development of the regions being a major employer and an important link in the industrial sector

Human capital

17.5 % staff turnover

810 persons employee pool

31.5 % university graduate

9,536 for employees

40 % share of employees in trade unions

The program for supporting young specialists within PROFENERGY project

SUBSIDIARIES

CAEPCO JSC Group of Companies includes SEVKAZENERGO JSC, PAVLODARENERGO JSC, Akmola Electric Distribution Company (AEDC JSC), Astana-ERC LLP (42.25%) and Pavlodar Vodokanal Severny LLP (80%).

CAEPCO JSC assets are represented in the northern regions of the country: Akmola, Pavlodar and North Kazakhstan regions, as well as in Nur-Sultan, Pavlodar, Petropavlovsk and Ekibastuz.

CAEPCO
Central-Asian Electric Power Corporation

100 %	PAVLODARENERGO JSC, SEVKAZENERGO JSC, Akmola EDC JSC
80 %	Pavlodar Vodokanal Severny LLP
42,25 %	Astana-ERC LLP

	Installed electric power, MW	Installed heat capacity, Gcal-hr
Pavlodar CHP-3	555	1,154
Pavlodar CHP-2	110	332
Ekibastuz CHP	12	782
Petropavlovsk CHP-2	541	713
CAPEC Green Energy	100	—
CAEPCO	1,318	2,981

Number of substations by type

Substation type	220 kW	110 kW	35 kW	6-10 kW
Pavlodar EDC JSC	4	74	102	3,544
North-Kazakhstan EDC JSC	–	37	121	2,204
Akmola EDC JSC	2	52	193	3,299
CAPEC Green Energy LLP	1	–	–	–

PTL length, km

PTL type	220 kW	110 kW	35 kW	6-10 kW	0.4 kW
Pavlodar EDC JSC	13.7	2,798.3	2,398.5	5,702.2	4,364.3
North-Kazakhstan EDC JSC	84.8	1,327.1	2,849.4	4,414.1	4,382.4
Akmola EDC JSC	–	2,507.1	5,176.1	7,115.0	5,400.3
CAPEC Green Energy LLP	15.6	–	86.4	–	–

Heat network length

Pavlodar Heat Networks LLP	411.45
Ekibastuzteploenergo LLP Ekibastuz Heat Networks PC	342.30
Petropavlovsk Heat Networks LLP	230.43
CAEPCO	**984.18**

Number of consumers by regions

Region	Electric power	Heat power
Pavlodar region	230,466	218,123
North-Kazakhstan region	164,367	75,450
Akmola region	126,817	–
CAEPCO	**521,650**	**293,573**

PAVLODARENERGO JSC

Chief Executive Officer: V.V. Lesin

Legal address:

27 Krivenko Str., Pavlodar

PAVLODARENERGO JSC is a vertically integrated company that includes generating, transporting and marketing units operating in the Pavlodar region, in Pavlodar city, and in the Akmola region.

PAVLODARENERGO JSC comprises of:

- Pavlodar CHP-2;
- Pavlodar CHP-3;
- Ekibastuzteploenergo LLP (Ekibastuz CHP and Ekibastuz heat network);
- Pavlodar Heat Networks LLP (heat networks of Pavlodar city);
- Pavlodar Electric Distribution Company JSC;
- Pavlodarenergosbyt LLP;
- CAPEC Green Energy LLP

Electric power generated by PAVLODARENERGO JSC is supplied to the markets of Pavlodar, Karaganda and Akmola regions

#Opportunities

SEVKAZENERGO JSC

Chief Executive Officer: O.V. Perfilov

Legal address: 66 Zhumabayev Str., Petropavlovsk

SEVKAZENERGO JSC is a vertically integrated company that includes generating, transporting and marketing units of the North Kazakhstan region and Petropavlovsk city.

SEVKAZENERGO JSC comprises of:

- Petropavlovsk CHP-2;
- North-Kazakhstan Electric Distribution Company JSC;
- Petropavlovsk Heat Networks LLP;
- Sevkazenergosbyt LLP.

Electric power generated by SEVKAZENERGO JSC is supplied to the markets of the northern, central, eastern, and southern regions of Kazakhstan.

The development strategy of the Corporation establishes the main directions for its business growth, management projects and technology.

AKMOLA ELECTRIC DISTRIBUTION COMPANY JSC

Chief Executive Officer: A.V. Pavlov

Legal address:

8 Tsiolkovsky Str., Nur-Sultan

AEDC JSC ("Akmola EDC") is an electric grid company that transmits and distributes electric power to consumers in the Akmola region and Nur-Sultan.

AEDC JSC comprises of:

— AEDC-Energosbyt LLP

AEDC-Energosbyt, a subsidiary, purchases electric power to supply consumers of the Akmola region. AEDC JSC consists of 2 branches of inter-district electric networks and 14 district electric networks.

AEDC JSC serves **0.4 kV-110 kV** electric networks located in **14** administrative districts of the Akmola region

#Opportunities

INDUSTRY POSITION

— The Holding enjoys a monopolistic position in the regions where it operates on the market of heat production and distribution and electric power distribution.

— A differentiated portfolio of consumers and stable demand among various types of customers.

— A vertically integrated company is a full cycle of providing heat and electric power from production to distribution and sales to the final consumer.

— A diversified electric power holding that develops both traditional coal and renewable energy.

— Acquired experience from equity participation with international and Kazakh shareholders.

— Focus on introduction of advanced technological solutions and a progressive development policy of the Corporation.

— Existing reliable communications with partners and divisions of the Corporation.

Over the years of implementation of a large-scale program for the renewal and reconstruction of production assets, CAEPCO JSC has invested 253.2 billion tenge, which is one of the best indicators among the electric power companies of Kazakhstan

Strategy

The development strategy of the Corporation establishes the main directions for its business growth, management projects and technology. Building a vertically integrated private power company rendering its consumers consistent and reliable services through synergy of generation, distribution, transmission and guaranteed sales of both electric power and heat is the strategic goal for CAEPCO JSC

Fulfilment of tasks under the development strategy

The strategy provides for implementation of measures in four strategic areas.

Targeted market expansion with guaranteed sales and low risk:

— expansion of the geography of operations for the Corporation's enterprises;

— implementation of growth projects to enter new markets for energy generation and transmission.

Improving production efficiency through improving the technical level of production and updating fixed production assets and infrastructure:

— reconstruction and modernisation of equipment of power generating facilities through investment programs, reducing the risks of accidents and eliminating downtime;

— minimisation of specific consumption for production of a unit of heat and electric power;

— reduction of excess losses during transportation of heat and electric power;

— introduction of energy-saving and energy-efficient technologies in the production and transmission of energy;

— building an effective environmental risk management system.

Implementation of promising projects through the balanced development of innovative directions; promotion of green technology development.

Implementation of the best management standards through continuous training of personnel in new effective technologies in the production sector and enterprise management:

— establishing service centers on a single IT platform;

— transition to a single billing system;

— maintaining up-to-date certification for compliance with the requirements of international standards in the area of ecology, personnel health protection, industrial safety;

— carrying out measures to reduce occupational injuries;

— continuous training for improving the professional level of employees.

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Nur-Sultan, Kazakhstan

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Nur-Sultan, Kazakhstan

Over the years of implementation of a large-scale program for the renewal and reconstruction of production assets, CAEPCO JSC **has invested 253.2 billion tenge**, which is one of the best indicators among the electric power companies of Kazakhstan

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#investments #program #Zhana_Kazakhstan!

RES DEVELOPMENT

CAPEC Green Energy LLP

CAEPCO JSC supports the development of a green economy. The development strategy of the group of companies provides for increasing the share of green energy in the asset structure. In 2020, a subsidiary of CAEPCO JSC concluded agreements for the phased purchase and sale of a share in CAPEC Green Energy LLP.

ABOUT THE COMPANY

CAPEC Green Energy LLP (Green Energy) was established on 23 July 2014. The company implements investment projects in the area of renewable energy sources. In the period from 2018 to 2020, the Company successfully implemented the project for Construction of a wind power plant Astana EXPO-2017 with a capacity of 100 MW, for wind energy conversion.

Main goal:

development of the energy sector of the Republic of Kazakhstan through the introduction of advanced technologies aimed at producing clean energy and strengthening the country's energy security.

Primary resources and capabilities of the company (success factors):

— highly qualified management personnel and workers;

— successful international and local experience in implementing renewable energy projects;

— accumulated hands-on knowledge of regulatory legal acts, laws and rules for the support and development of RES.

Full information is available on the company's website:

cge.kz

Company location:
Legal and actual address: room 2, 2 Dostyk Str.,

Yesil district, Nur-Sultan, 010000, Republic of Kazakhstan

SAAD Business Center, 8th floor

Facility's location:
Astana EXPO-2017 wind farm with a capacity of 100 MW

Date of commissioning:
1 WF software package – 26.08.2019, 2 WF software packages – 26.11.2020

Director: Ye. B. Saryev

ASTANA EXPO-2017 WIND FARM

Within the framework of the Concept of transition to a green economy approved by the President of the Republic of Kazakhstan and increasing electricity generation through renewable energy sources (RES), the Company implemented the project for Construction of the Astana EXPO-2017 wind power plant with a capacity of 100 MW for wind energy conversion (the Project).

The main goal of the Project is to develop the **energy sector of the Republic of Kazakhstan through the introduction of advanced technologies aimed at producing clean energy** and strengthening the country's energy security

#Fact

The project provides for the placement of 29 wind turbines designed to operate in extremely low temperature conditions, manufactured by VESTAS, one of the world's leading wind power companies. The total capacity of the two launch complexes is 100 MW:

— The first start-up complex with a capacity of 50 MW was successfully put into operation on 26 August 2019. Each of the 15 wind turbines of the Project's first launch complex has a tower height of 84 meters and a rotor diameter of 112 meters. The nominal capacity of each wind turbine is 3.45 MW;

— implementation of the second start-up complex with a capacity of 50 MW was completed on 26 November 2020. As part of the second launch complex, 14 wind turbines with a capacity of 3.45 MW each, a tower height of 80 meters and a rotor diameter of 117 meters were installed.

Project implementation results:

- Supply of environmentally friendly electric energy to consumers
- Ensuring the annual energy consumption of more than 10,000 families
- Creation of more than 300 jobs at the construction stage and training of more than 20 local specialists in wind farm operation
- Savings of more than 79,000 thousand tons of conventional fuel per year
- Reduce greenhouse gas emissions by 230,000 tons per year, which exceeds the emissions of more than 113,000 cars

Financial indicators for 2021

	2020	2021
Revenue from sales	11,684,443	21,891,519
EBITDA	9,921,182	19,642,105
EBITDA margin	84.91 %	89.72 %

Tariff for the purchase of electric energy	2020	2021
tenge net of VAT/ kWh	59.70	63.87
tenge including VAT/ kWh	66.86	71.53

Results of production activities

Year	SCADA power generation (million kWh)	Commercial output (million kWh)
2020	202.410	196.868
2021	350.636	342.751

Production parameters of the 100 MW Astana EXPO-2017 wind farm

Date of commissioning:
1 WF software package – 26.08.2019,
2 WF software packages – 26.11.2020

Main production characteristics

Type of generating equipment	Length/ quantity
V-112 wind-driven power-plant (Single wind turbine capacity of 3.3 MW with power mode up to 3.45 MW)	15 units
V-117 wind-driven power-plant (Single wind turbine capacity of 3.45 MW with the possibility of limiting the power to 3.3 MW)	14 units
Substations	
220/35/10 kV substation (with two power transformers of 80 MVA each)	1 unit
Power lines	
220 kV overhead line	15.59 km
35 kV cable line	86.4 km

CORPORATE GOVERNANCE

About corporate governance

The corporate governance system of the Holding is based on the recognised basic principles of transparency, fairness, accountability and responsibility.

Understanding the importance of effective and responsible corporate governance, CAEPCO JSC consistently follows high standards based on international principles and best international practices. The Corporation strives for continuous improvement of the corporate governance system and builds its activities taking into account the interests of all parties, in particular investors, shareholders and employees.

GENERAL MEETING OF SHAREHOLDERS

The supreme governing body of the Corporation is the General Meeting of Shareholders. The main way for shareholders to exercise their rights recorded in the Corporation's Charter is to participate in the annual meeting of shareholders and in extraordinary meetings at the initiative of the Board of Directors or a major shareholder.

The shareholders of the Corporation are entitled to:

— submit proposals to the agenda of the annual General Meeting;

— nominate candidates to the Board of Directors and Committees;

— convene meetings of the Board of Directors;

— other rights stipulated by the current legislation.

PERFORMANCE OF THE GENERAL MEETING OF SHAREHOLDERS

In 2021, one annual and four extraordinary General Meetings of Shareholders were held, where the following issues were reviewed:

— approval of the financial statements of CAEPCO JSC;

— determining the order of allocation of net income of CAEPCO JSC;

— considering issues on appeals of shareholders to the actions of CAEPCO JSC;

— designating the audit firm for the audit of the financial statements of CAEPCO JSC and its subsidiaries;

— election of new members of the Board of Directors of CAEPCO JSC;

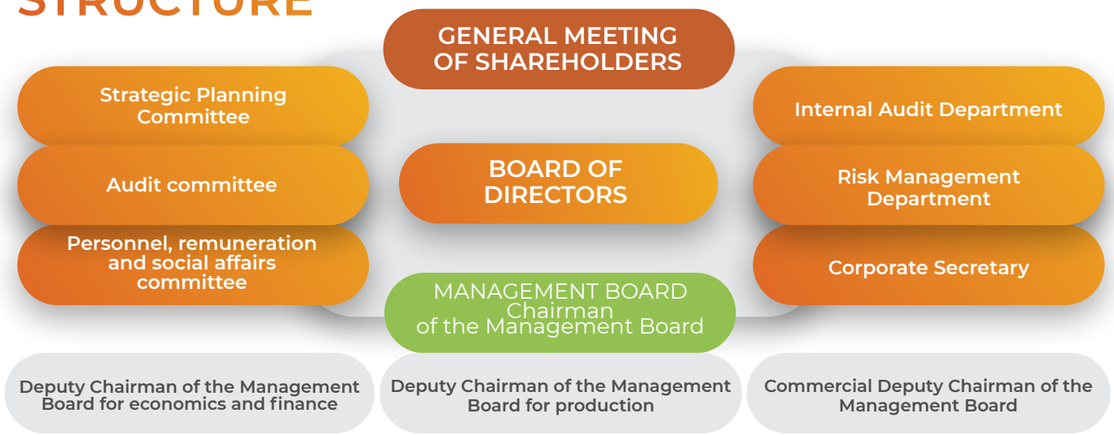
— determining the amount and conditions of remuneration payment to the newly elected members of the Board of Directors of CAEPCO JSC;

— approval of the new version of the Regulations on the Board of Directors of CAEPCO JSC;

— approval of the new version of the CAEPCO Corporate Governance Code;

— other matters.

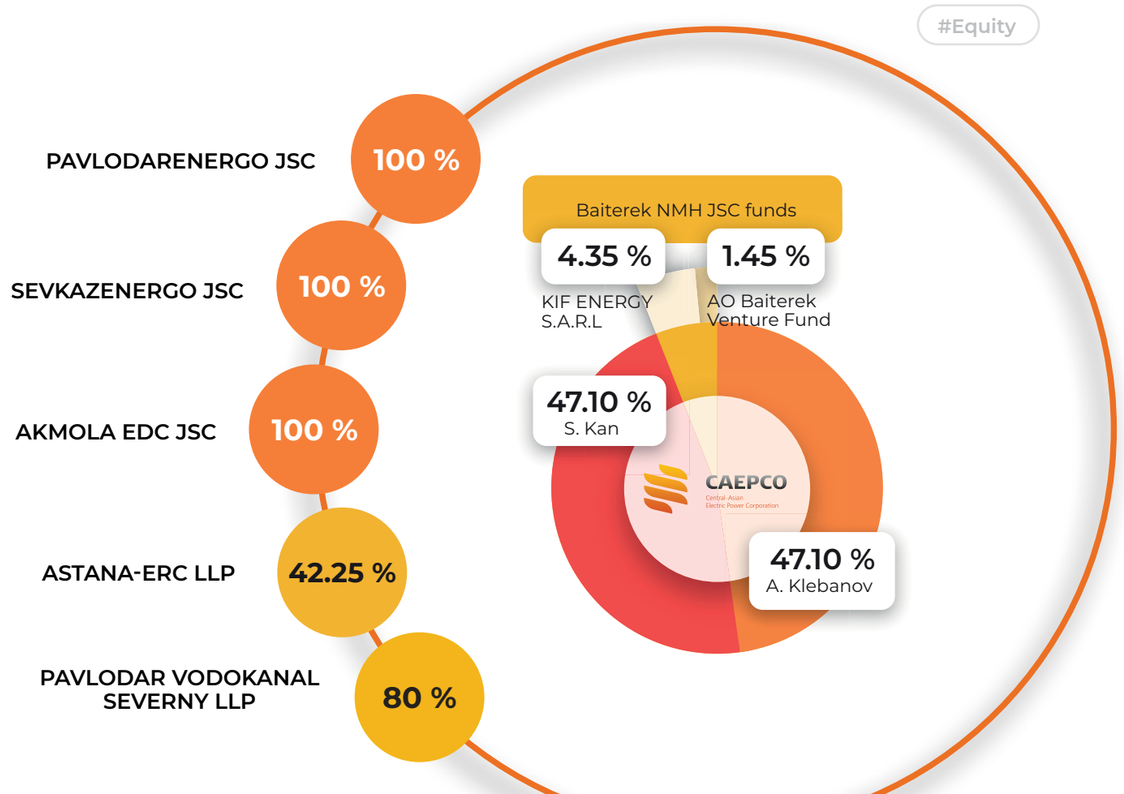
ORGANISATIONAL STRUCTURE



SHARE CAPITAL STRUCTURE

Shareholders of CAEPCO JSC are represented by Alexander Ya. Klebanov (47.10 %), Sergey V. Kan (47.10%) and funds established with the participation of Baiterek NMH JSC with the total share of 5.80 %: KIF ENERGY S.a.r.l. – 4.35 %, Baiterek Venture Fund JSC — 1.45 %.

As at 31 December 2021, share capital of CAEPCO JSC is **46,043,272 thousand tenge**



BOARD OF DIRECTORS

In order to increase the transparency of the Corporation's activities, the Board of Directors comprises of three independent directors who are not affiliated with the Corporation. The independence of the members of the Board of Directors of the Corporation is determined in accordance with the requirements of the Law of the Republic of Kazakhstan "On Joint-Stock Companies".

Independent members of the Board of Directors of CAEPCO JSC meet the following criteria:

— they are not affiliated with CAEPCO JSC and were not affiliated with CAEPCO JSC for three years prior to their election to the Board of Directors;

— they are not affiliated in relation to the affiliated persons of CAEPCO JSC;

— they are not subordinated to officials of CAEPCO JSC or entities of persons affiliated with CAEPCO JSC and were not subordinated to such persons for three years prior to their election to the Board of Directors;

— they are not government employees;

— they are not representatives of the shareholders at the meetings of the bodies of CAEPCO JSC and were not such representatives for three years prior to their election to the Board of Directors;

— they do not participate in the audit of CAEPCO JSC as auditors working for an audit firm, and did not participate in such an audit for three years prior to their election to the Board of Directors.

The Board of Directors is headed by the Chairman, who convenes meetings of the Board of Directors and prepares their agenda based on suggestions received from the members and committees of the Board of Directors and the executive body.

The General Meeting of CAEPCO JSC shareholders decides on the remuneration payable to the Board of Directors and the executive body. The total amount of remuneration paid to the Board of Directors in 2021 is 55.2 million tenge, the total amount of payments to the executive body in 2021 is 81.8 million tenge.

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Nur-Sultan, Kazakhstan

The Board of Directors of the Corporation **determines strategic objectives**, supports the necessary mechanisms for monitoring activities, including ongoing monitoring and evaluation of the Holding's performance

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#Board_of_Directors

The activities of the Board of Directors are governed by the following principles:

— peer-review decision making with thorough discussion of issues using reliable and complete information on the Corporation's activities in accordance with the highest business standards;

— inadmissibility of restrictions on the legitimate interests and rights of shareholders to participate in the management of the Corporation, receive dividends, reports and information on the Corporation;

— ensuring a balance of interests of shareholders of the Corporation and maximum objectivity of decisions made by the Board of Directors in the best interests of shareholders;

— providing the Corporation's shareholders with reliable and timely information.

SELECTION AND APPOINTMENT

The members of the Board of Directors of CAEPCO JSC are elected by the decision of the General Meeting of shareholders of the Corporation. According to the provisions of the Charter, the Board of Directors of CAEPCO JSC must consist of at least six persons, of which at least one third of the members of the Board of Directors must be represented by independent directors..

Only an individual can be a member of the Board of Directors of CAEPCO JSC and be elected from among:

— individual shareholders;

— persons proposed for election to the Board of Directors representing the interests of shareholders;

— individuals who are not shareholders of the company and have not been proposed for election to the Board of Directors representing the interests of shareholders.

The Chairman of the Management Board of CAEPCO JSC may also be elected as a member of the Board of Directors, but may not be elected Chairman of the Board of Directors.

The Chairman of the Board of Directors of CAEPCO JSC is elected from among its members by a majority vote of the total number of members of the Board of Directors by open voting.

The term of office of the members of the Board of Directors is established by the General Meeting of shareholders of CAEPCO JSC. The term of office of the Board of Directors expires at the time of the General Meeting of shareholders, at which a new Board of Directors is elected. Persons elected to the Board of Directors may be re-elected an unlimited number of times.

INFORMATION ON DIVIDENDS

The Corporation's policy regarding the accrual, the procedure for declaring, the amount, form and timing of payment of dividends is defined in the Corporation's Charter and the Regulations on the Dividend Policy of CAEPCO JSC.

The main principles of the Corporation's dividend policy are as follows:

— balance of interests of the Corporation and its shareholders in determining the amount of dividend payments;

— increasing the investment attractiveness, financial stability, capitalisation and liquidity of the Corporation;

— ensuring market return on invested capital.

The Corporation intends to allocate a certain portion of its net profit to pay dividends in the amount that allows th Corporation to keep enough funds for further development. The decision to pay dividends is made by the annual General Meeting of shareholders upon the recommendation of the Board of Directors. If there are unforeseen negative circumstances for the Corporation, the Board of Directors is obliged to recommend to the General Meeting of shareholders not to make a decision to pay (declare) dividends.

In 2021, the annual General Meeting of shareholders made a decision on the absence of payment of dividends to the shareholders of CAEPCO JSC for the 2020 financial year.

Term of service on the Board of Directors of CAEPCO JSC as of May 2022:

10-13 years – 3 persons
2-5 years – 3 persons
less than a year – 2 persons

COMPOSITION OF THE BOARD OF DIRECTORS
(as of May 2022)

1 ALEXANDER KLEBANOV (born in 1963)

Chairman of the Board of Directors

Chairman of the Board of Directors of CAEPCO JSC, Chairman of the Board of Directors and shareholder of CAPEC JSC.

20.08.2007
Chairman of the Board of Directors of CAPEC JSC;

16.03.2009
Chairman of the Board of Directors of CAPEC JSC;

17.03.2022
re-elected a member of the Board of Directors of CAEPCO JSC (member of the Board of Directors since 2008).

2 BAGDAT ORAL (born in 1986)

Member of the Board of Directors

03.2014–06.2014
Head of the Prospective Development Department of Samruk-Green Energy LLP;

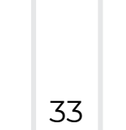
06.2014–07.2018
Director of CAPEC Green Energy LLP";

07.2018–4.03.2021
Deputy Chairman of the Management Board for Energy Sales and Tariff Policy of CAEPCO JSC;

17.03.2022
re-elected a member of the Board of Directors of CAEPCO JSC (member of the Board of Directors since 2021);

05.03.2021
Until now — Chairman of the Management Board of CAEPCO JSC

31.03.2021
Until now — Chairman of the Supervisory Board of CAPEC Green Energy LLP



3 ALEXANDER NIGAY (born in 1984)

Member of the Board of Directors

03.08.2015
until now – Director of strategic development for Kazakhstan pipe systems;

26.07.2016
until now - Director of strategic development for Mineral Product LLP;

09.2020–30.06.2021
Commercial Deputy Chairman of the Management Board of CAEPCO JSC;

17.03.2022
re-elected a member of the Board of Directors of CAEPCO JSC (member of the Board of Directors since 2021).

4 ELDAR TABANOV (born in 1968)

Member of the Board of Directors, Independent Director

- **04.01.2013**
  Member of the Board of Directors, Independent Director of CAPEC JSC;
- **01.01.2014–13.06.2017**
  Member of the Board of Directors, Independent Director of North-Kazakhstan Electric Distribution Company JSC;
- **09.09.2015–16.11.2016**
  Deputy Chairman of the Management Board of Astana SEC NC JSC;
- **13.10.2016**
  a member of the Board of Directors, Independent Director of Pavlodar Electric Distribution Company JSC;
- **29.09.2017**
  Director of City Box LLP;
- **15.01.2018**
  Member of the Board of Directors, Independent Director of PAVLODARENERGO JSC;
- **15.01.2018**
  a member of the Board of Directors, Independent Director of Akmola Electric Distribution Company JSC;
- **15.01.2018**
  Member of the Board of Directors, Independent Director of SEVKAZENERGO JSC
- **17.03.2022**
  re-elected a member of the Board of Directors of CAEPCO JSC (member of the Board of Directors since 2017).

5 ZHANDAR KUTBAY (born in 1985)

Member of the Board of Directors

- **01.12.2015–01.09.2019**
  Deputy Chairman of the Management Board of Almex-Baiterek Fund LLP;
- **01.09.2017–01.08.2019**
  Deputy Chairman of the Management Board of Baiterek Venture Fund JSC;
- **01.08.2018**
  Chairman of the Management Board of Baiterek Venture Fund JSC;
- **17.03.2022**
  re-elected a member of the Board of Directors of CAEPCO JSC (member of the Board of Directors since 2018).

6 FRANZ-JOSEPH KAISER (born in 1949)

Member of the Board of Directors, Independent Director

Not affiliated with CAEPCO JSC and was not affiliated with CAEPCO JSC three years prior his election

- **17.11.1975–30.06.2009**
  Price Waterhouse Coopers (PWC) Partner;
- **2005–30.06.2009**
  PWC Partner for RAO UES of Russia project;
- **17.03.2022**
  re-elected a member of the Board of Directors, Independent Director of CAEPCO JSC (member of the Board of Directors since 2009).

7 MANFRED-JOSEPH KEHR (born in 1947)

Member of the Board of Directors, Independent Director

Not affiliated with CAEPCO JSC and was not affiliated with CAEPCO JSC three years prior his election

- **2003–2009**
  Vice President of RWE Power International;
- **2008–2010**
  Managing Director, Senior Advisor of RWE Power International;
- **25.02.2011**
  Chairman of the Board of Directors of Rhein Ruhr Power;
- **17.03.2022**
  re-elected a member of the Board of Directors, Independent Director of CAEPCO JSC (member of the Board of Directors since 2011).

8 TAN LEVIN (born in 1968)

Member of the Board of Directors, Independent Director

- **01.2015–12.2015**
  Project Finance and Corporate Development Manager at SUNEDISON ENERGY HOLDINGS (SINGAPORE) PTE. LTD.;
- **03.2016–03.2019**
  Vice President for infrastructure investments of CAPITAL ADVISORS PARTNERS ASIA PTE. LTD.;
- **03.2019**
  until now — Director for infrastructure investments of CAPITAL ADVISORS PARTNERS ASIA PTE. LTD.;
- **05.2019**
  until now — Investment Director of THE ROHATYN GROUP.
- **17.03.2022**
  elected as a member of the Board of Directors, Independent Director of CAEPCO JSC.

According to the Regulation on the Board of Directors, a report on the work of the Board of Directors and the executive body, including full information on issues on which decisions are made by the Board of Directors or the executive body, shall be submitted to the annual General Meeting of shareholders along with the approval of the Company's annual financial statements.

In 2021, no activities of the Board of Directors were evaluated

Activities of the Board of Directors

	2019	2020	2021
meetings in presentia	6	2	9
meetings in absentia	7	14	9

In 2021, the Board of Directors held 18 meetings. The Board of Directors focused on the following key issues:

— review of monthly and quarterly management reports;

— monitoring the implementation of the consolidated business plan of CAEPCO JSC for 2020;

— approval of the consolidated business plan (budget) of CAEPCO JSC for 2021;

— approval of the annual consolidated financial statements of PAVLODARENERGO JSC, SEVKAZENERGO JSC and Akmola Electric Distribution Company JSC and the annual financial statements for 2020;

— determining the order of distribution of net income of subsidiaries for 2020, as well as designating the audit firm for conducting an audit of the financial statements for 2021;

— preliminary approval of the annual consolidated financial statements of CAEPCO JSC for 2020;

— determining the procedure for allocation of CAEPCO's net income for 2020 and the amount of dividends per ordinary share of CAEPCO JSC;

— preliminary selection of an audit firm for the audit of CAEPCO's consolidated financial statements for 2021;

— review of reports on activities of the Internal Audit Department and the Risk Management Department of CAEPCO JSC;

— approval of a number of internal regulatory documents;

— other.

In 2021, major transactions were made, information about which is posted on the websites of the Financial Statements Depository and the Kazakhstan Stock Exchange.

07.07.2021

Conclusion of Supplementary Agreement No. 4 to the loan agreement dated 27 November 2018 between Central-Asian Power Energy Company JSC, CAEPCO JSC, PAVLODARENERGO JSC, North Kazakhstan Electric Grid Company JSC, Akmola Electric Grid Company JSC and SEVKAZENERGO JSC, Astana-energosbyt LLP and VTB Bank (Europe) SE, VTB Bank SB JSC (Kazakhstan), VTB Bank (PJSC).

13.08.2021

Conclusion of a credit line agreement between Halyk Bank of Kazakhstan JSC, PAVLODARENERGO JSC, SEVKAZENERGO JSC, Akmola Electric Distribution Company JSC, Pavlodar Electric Distribution Company JSC and CAEPCO JSC.

24.12.2021

Conclusion of Supplementary Agreement No. 5 to the loan agreement dated 27 November 2018 between Central-Asian Power Energy Company JSC, CAEPCO JSC, PAVLODARENERGO JSC, North Kazakhstan Electric Grid Company JSC, Akmola Electric Grid Company JSC and SEVKAZENERGO JSC, Astana-energosbyt LLP and VTB Bank (Europe) SE, VTB Bank SB JSC (Kazakhstan), VTB Bank (PJSC).

PERFORMANCE OF THE COMMITTEES OF THE BOARD OF DIRECTORS

There are three committees under the Board of Directors of CAEPCO JSC (as of June 2022)

STRATEGIC COMMITTEE

The core functions of the committee are as follows:

— review and evaluation of the priority areas of activity of CAEPCO JSC, its development strategy;

— review and evaluation of the concepts, policies, programs, development plans of CAEPCO JSC and the results of their implementation;

— review and evaluation of financial and economic indicators of CAEPCO JSC activities;

— review and evaluation of CAEPCO JSC budget and the results of its implementation;

— bringing to the attention of the Board of Directors of CAEPCO JSC recommendations on any issues that, in the opinion of the Committee, require action on its part;

— assistance to the Board of Directors on improving the frameworks for planning and developing the Corporation's activities.

M. Kehr
Chairman
S.V. Kan
B.Ye. Oral
L.L. Yanushko
A.D. Nigay

In 2021, there were no meetings of the Strategic Committee.

AUDIT COMMITTEE

The core functions of the committee are as follows:

— assisting the Board of Directors in the effective implementation of its regulatory and supervisory functions in terms of control over financial reporting and internal control, as well as control over availability and functioning of an adequate risk management system and internal control system in the company;

— improving and strengthening of internal audit, as well as risk management systems and internal control systems;

— bringing to the attention of the Board of Directors recommendations on any issues requiring action on its part.

F. Kaiser
Chairman
M. Kehr
B.Ye. Oral
A.D. Nigay
L. Tan

In 2021, four Committee meetings were held.

The Committee assists the Board of Directors in the effective implementation of its regulatory and supervisory functions, improvement and strengthening of internal audit, as well as risk management systems. The Committee considered issues related to the work of the external auditor Deloitte LLP, approval of the annual consolidated financial statements of CAEPCO JSC for the year ended 31 December 2020, and the activities of the departments reporting to the Board of Directors – the Internal Audit Department and the Risk Management Department.

PERSONNEL, REMUNERATION AND SOCIAL AFFAIRS COMMITTEE

The core functions of the committee are as follows:

— development of a unified personnel policy for CAEPCO JSC and its subsidiaries, including issues of payment of additional remuneration, compensation and social benefits to employees;

— development of an effective corporate governance system and implementation of its principles.

L. Tan
Chairman
S.V. Li
A. Zhumabekova
N.V. Konstantinova

In 2021, one Committee meeting was held.

The Committee assists the Board of Directors in building an effective corporate governance system, in particular, the report on personnel management indicators in CAEPCO JSC Group of Companies for 2020 and dynamics for 2018 and 2019 was reviewed.

In 2021, twenty meetings of the Management Board were held, at which a number of decisions were made on the Holding's operational activities, including an increase in wages **to CAEPCO JSC**

#Solutions

Remuneration policy

The amount of remuneration to the executive body is determined by the decision of the Board of Directors of CAEPCO JSC.

The framework for determining the amount of remuneration to members of the Management Board meets the following requirements:

— remuneration consists of constant and variable parts;

— the variable part of remuneration depends on the key performance indicators of the member, is linked to the level of qualification and personal contribution to the performance of the Corporation for a certain period; the variable part is aimed at stimulating a member of the Management Board to achieve a high quality of work;

— social support, guarantees and compensation payments to a member of the Management Board are carried out in accordance with the legislation, internal documents of the Corporation and the labour agreement.

EXECUTIVE BODY

The collegial executive body was established on 1 September 2020 from employees holding senior positions in the Corporation. The collegial executive body is represented by the Management Board headed by the Chairman of the Management Board, which manages the current activities of the Corporation and implements the strategy determined by the Board of Directors and shareholders. The Management Board is guided by the principles of action in the best interests of shareholders, integrity, diligence, prudence and vigilance.

Full name	Position	Education	Professional experience
Bagdat Oral	Chairman of the Management Board of CAEPCO JSC	**October 2009 – December 2011** Albert Ludwigs University of Freiburg Master of Science (Renewable Energy Sources Management)	**March 2021 — until now** Chairman of the Management Board of CAEPCO JSC Chairman of the Supervisory Board of CAPEC Green Energy LLP
		September 2004 – June 2008 Almaty University of Power Engineering and Telecommunications Bachelor of Heat Power Engineering (Thermal Stations)	**July 2018 March 2021** Deputy Chairman of the Management Board for Energy Sales and Tariff Policy of CAEPCO JSC **June 2014 July 2018** Director of CAPEC Green Energy JSC
Leonid Yanushko	Deputy Chairman of the Management Board of CAEPCO JSC on production	**1972–1977** Odessa Polytechnic University, awardee of Order of the Red Banner of Labour	**January 2021 until now** Deputy Chairman of the Management Board of CAEPCO JSC on production **November 2017 November 2018** Advisor of CAEPCO JSC **2012–2015** General Director of Trest Sredazenergomontazh JSC

Full name	Position	Education	Professional experience
Igor Ilyin	Commercial Deputy Chairman of the Management Board of CAEPCO JSC	Kazakh-British Technical University (Automation and Control)	**June 2021 until now** Commercial Deputy Chairman of the Management Board of CAEPCO JSC
			April 2021 May 2021 Managing Director for Development of Samruk-Energy JSC
			October 2020 March 2021 Head of Samruk-Energo JSC Trading House
Sergey Li	Deputy Chairman of the Management Board of CAEPCO JSC for economics and finance	Swiss Business School, MBA	**March 2021 until now** CAEPCO JSC, Deputy Chairman of the Management Board of CAEPCO JSC for economics and finance
		Durham University, United Kingdom, Bachelor of Business Economics	**January 2020 March 2021** Co-Managing Director for Economics and Finance of Samruk-Energy JSC
		St. Andrew's College, United Kingdom, A-Level Program	**March 2016 January 2020** Director of the Treasury and Corporate Finance Department for Samruk-Energy JSC

INTERNAL CONTROL AND AUDIT

In order to improve business processes and the efficiency of decisions made, the Corporation has established internal control mechanisms, which is systematic for CAEPCO JSC, integrated into strategic and operational management at all levels and covers all departments in the exercise of their functions.

Internal audit department operates in CAEPCO JSC and internal audit units function in subsidiaries

#Fact

The independence and objectivity of the activities of the Internal Audit Department and units (hereinafter referred to as the “IAD”, “IAU”) are ensured by subordination and accountability to the Board of Directors of Companies. The Audit Committees under the Board of Directors of CAEPCO JSC and its subsidiaries supervise the activities of the IAD/IAU.

The activities of the IAD/IAU are carried out in accordance with the current legislation of the Republic of Kazakhstan, the Code of Ethics and internal regulatory documents of internal audit. The main policies and procedures regulating the activities of IAD/IAU are the Regulations on IAD/IAU, the Internal Audit Policy and the Rules for Conducting Internal Audit.

IAD carries out its work in accordance with the annual work plan approved by the Board of Directors. IAD submits reports on the work performed by the Department to the Board of Directors of CAEPCO JSC.

In 2021, the effectiveness of the internal control system of business processes in subsidiaries was evaluated:

- Investment activity management, investment program planning processes;
- Repair and maintenance management;
- Tariff generation and tariff estimates;
- Procurement management, contracts and settlements with creditors.

Also, monitoring over implementation of recommendations of the IAD and the external auditor, and a selective stock taking of property, plant and equipment and inventory were carried out.

Internal auditors adhere to the following principles in their work: integrity, objectivity, confidentiality, professional competence.

The Corporation has a functioning internal control system that provides sufficient confidence in the effectiveness of control in operating activities, compliance with laws and regulations.

ANTI-CORRUPTION MANAGEMENT

CAEPCO JSC group of companies has an Anti-Corruption and Fraud Policy approved by the Board of Directors, which is the fundamental internal regulatory document of the Holding and its subsidiaries in this area. The Policy, among other things, determines modelling of a single ethical standard by the top management of the Group for rejection of corruption in all its forms and manifestations.

The main principles of the Policy are represented by maintaining a high level of corporate governance, intolerance to corruption and fraud, proper risk assessment, minimising conflicts of interest based on an effective distribution of powers and responsibilities by building a transparent organisational structure.

Important elements of strengthening this area are represented by creation and implementation of an effective strategy that ensures anti-corruption and fraud, as well as prompt response to emerging events of this nature. The Group develops an appropriate corporate culture and a negative attitude to all manifestations of corruption and fraud.

The Policy highlights the methods and procedures used to counter fraud and corruption, in particular, to identify and assess such facts, conduct official investigations, and bring to justice for all identified cases of illegal actions. CAEPCO JSC group of companies has developed and operating feedback channels (hotline, telephone and mail services) for legal entities and individuals (including employees of the Group) to contact and report on the upcoming or known facts of corruption and fraudulent actions.

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Work aimed at increasing the transparency of activities is performed on an ongoing basis. In order to inform the business partners of the group of companies about the existing requirements and principles of the Anti-Corruption and Fraud Policy, the approved standard templates of contracts concluded by the Company and its subsidiaries for the purchase of goods, works and services include certain sections that also reflect communication channels in the event of corruption.

In accordance with internal procedures, all newly hired employees are required to familiarise themselves with the requirements of the Anti-Corruption and Fraud Policy and sign a written confirmation of compliance with these requirements.

No facts of corruption and fraud were identified during 2021.

CORPORATE GOVERNANCE COMPLIANCE REPORT

In 2021, the corporate governance practice of the Corporation fully complied with the provisions of the Corporate Governance Code developed in accordance with the requirements of the legislation of the Republic of Kazakhstan On Joint-Stock Companies. The document takes into account the existing international experience

in the area of corporate governance, and recommendations on the application of corporate governance principles by Kazakh joint-stock companies.

The principles of the Corporate Governance Code are aimed at developing and introducing norms and traditions of corporate behaviour that meet international standards and contribute to creating a positive image of the Corporation in the eyes of its shareholders, customers and employees into the daily practice of the Corporation's activities to achieve the fullest exercising of shareholders' rights and increase their awareness of the Corporation's activities, as well as to control and reduce risks, maintain sustainable growth of the Corporation's financial indicators and the successful implementation of its statutory activities.

In 2021, all the fundamental principles of the Corporate Governance Code were respected.

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The main principles of the Corporate Governance Code are as follows:

— Justice
— Accountability
— Responsibility
— Transparency
— Environmental protection and social responsibility
— Effectiveness
— Control

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#principles #Corporate_governance

CONFLICT OF INTERESTS

The conflict of interests is regulated by the Code of Business Conduct (paragraph 11), which prescribes the responsibility of employees for abuse of official position, the activities of employees internally or

Minimising Conflicts of Interest is one of the main principles regarding fraud and corruption in the Anti-Corruption and Fraud Policy. This principle declares that the Corporation reduces the conflict of interests on the basis of an effective distribution of powers and responsibilities through the development of a transparent organisational structure.

The activities of the members of the Board of Directors are regulated by the relevant Regulation. Avoidance of conflicts of interest among members of the Board of Directors is prescribed in the clause on the Rights and Obligations of members of the Board of Directors.

INFORMATION POLICY

The information policy of CAEPCO JSC is a set of actions, measures and regulations that allow to manage the process of distributing corporate information, the perception of a single vision of the Corporation among the target audience.

The main objectives of information disclosure are as follows:

— Timely provision of information on all material issues related to the Corporation in order to comply with the legal rights of shareholders, investors, as well as other interested parties in providing information required for making an informed decision or performing other actions that may affect the financial and economic activities of the Corporation, as well as other information that contributes to the most complete understanding of the activities of the Corporation.
— Ensuring the availability of public information about the Corporation for all interested parties.
— Increasing the level of openness and trust in relations between the Corporation and shareholders, potential investors, market participants, government agencies and other interested parties.
— Improving the corporate governance of CAEPCO JSC;
— Creating a positive image of the Corporation.

CORPORATE ETHICS

The Corporation has a Code of Business Conduct approved by the Board of Directors in 2020.

The document combines the standards of international practice of regulating business relations in four areas:

— Business and professional ethics
— Organisational ethics
— Corporate governance
— Social responsibility of the company

All employees of the Corporation adhere to the standards and provisions of the Code of Business Conduct promoting the achievement of the following operating results:

— Reducing the number of compromise decisions and promoting independent judgement
— Enhancing corporate culture as well as the overall image of the Corporation and its perception by public
— Improving the efficiency of the corporate governance, risk management and crisis management process
— Promoting efficient interaction with stakeholders
— Allowing to avoid litigations.

Control over observance of business ethics in the Corporation is carried out by the management through organisation of activities in accordance with the prescribed ethical principles and norms.

The established standards and regulations of the Code are shared by all employees of the Corporation.

EXTERNAL AUDIT

Deloitte LLP is the audit firm that conducts an external audit of the financial statements of CAEPCO JSC group. The contract with the company for rendering of audit services is concluded until 2022.

MARKET ANALYSIS

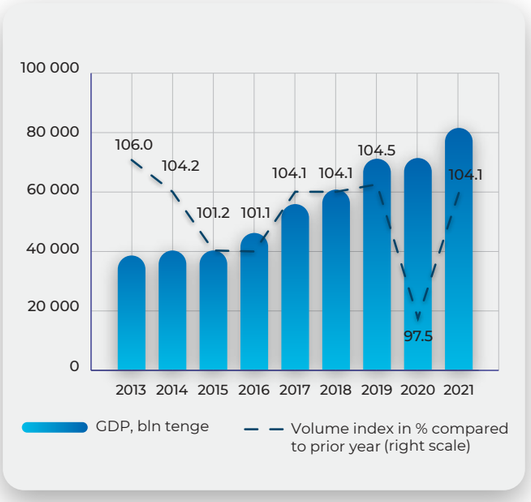
ECONOMIC REVIEW

Gross domestic product

According to preliminary data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, the GDP of the Republic of Kazakhstan increased by 4.1% in 2021, while the economy contracted by 2.5% in the prior year. After a tough year of a global pandemic and quarantine, in 2021 the economy again reached a growth path. The main contribution to the growth was made by the production of services (which showed an increase by 4.0%), especially significant growth was in wholesale and retail trade (by 9.2%), information and communication (by 14.6%). The production of goods increased by 3.6%, primarily due to the growth of the manufacturing industry.

Gross domestic product dynamics

Source: The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan



Industry

In 2021, the volume of industrial production increased by 3.8%. An increase in production volumes was recorded in 15 regions of the republic, with a decrease in only two regions (in West Kazakhstan and Mangistau regions).

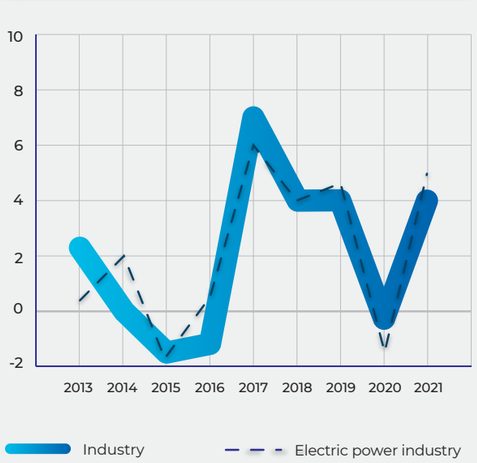
In 2021, increase in the mining industry and quarry development was 1.7%. Poor growth was observed in the production of crude oil (0.3%) and coal (0.8%). Stronger growth was recorded in the production of metallurgical ores (4.2%) and rendering of services in the mining industry (4.3%).

The situation in the manufacturing industry was more dynamic, where production increased by 5.5%. For example, in the production of finished metal products, except for machinery and equipment, the growth was 18.2 %, and in mechanical engineering it was 20.4 %.

The supply of electricity, gas, steam, hot water and air-conditioned air grew by 4.8 %, mainly due to a 5.7% increase in the production and distribution of gaseous fuels through pipelines. In the production, transmission and distribution of electricity, the increase was 5.2 %.

The dynamics of production in the industry in general and in the electric power industry, %

Source: The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan

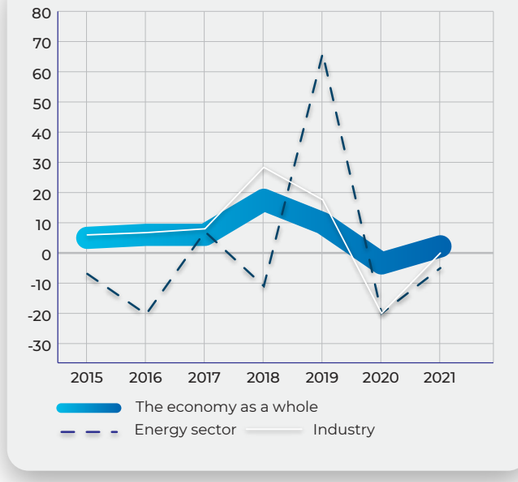


Investments

Fixed asset investment grew by 3.5 % in 2021, following a 3.4% decline a year earlier. At that, the increase in investment in industry was 0.7 %. In the energy sector, investment declined by 4.9 %, compared to more than 20.0% a year earlier.

Fixed capital investments dynamics, in %

Source: The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan



Inflation

Inflation in 2021 was 8.4 %: the highest level over the last five years. Prices for food products increased by 9.9%, non-food products — by 8.5 %, and paid services — by 6.5 %.

At that, the cost of housing services increased by 9.2%. In particular, electricity prices increased by 9.3%, while heat prices continued to decline – in 2021, the decline was 2.8 %.

Fixed capital investments dynamics, in %

Source: The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan

Forecast

According to the forecast of the Ministry of National Economy, announced in April this year, the growth of the economy of Kazakhstan will be 2.1 % (3.9 % in the previous forecast). The deterioration of the forecast is related to the geopolitical situation in the region and the deterioration of global GDP prospects.

In its May forecast, the Eurasian Development Bank expects Kazakhstan's economy to grow by 2.5 % in 2022 (compared to 4 % in its February forecast).

Energy sector overview

In 2021, Kazakhstan experienced a sharp increase in electricity production and consumption. This was due to the restoration of production in the most energy-intensive industries, such as metallurgical industry, mechanical engineering, and oil refining. Crypto currency mining also contributed to the surge in electricity consumption.

In the development of the electric power industry in Kazakhstan, there is a noticeable trend towards the transition to renewable energy sources, which requires significant changes in the energy system.

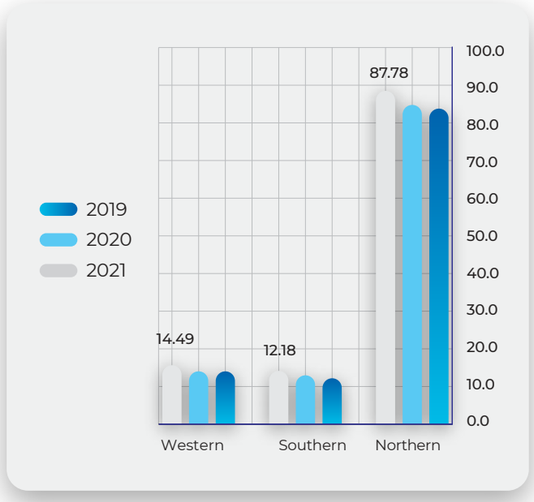
Production

According to the system operator KEGOC, Kazakhstan produced 114.45 billion kWh of electricity in 2021, which is 5.8% higher than in 2020, and is the second largest increase over the last ten years. In particular, a significant increase was observed in the largest region in terms of generation, Pavlodar, by 12.5 %. Growth by more than 10 % was also recorded in Atyrau, Zhambyl, Kyzylorda and Turkestan regions. At that, in the Karaganda region (the second largest generation), a decrease of 3.7% was observed.

All three EPS of the Republic of Kazakhstan showed a significant increase in generation. The Northern Zone accounted for 77.0 % of total electric power generation in Kazakhstan in 2021. Growth by 2020 was 5.7 % or 4.75 billion kWh. The Western Zone accounted for 13.0 % of the generation, while the growth there reached 7.4 % and in absolute terms amounted to 1.0 billion kWh. Electric power generation in the Southern zone increased by 5.3% or by 0.61 billion kWh in the preceding year.

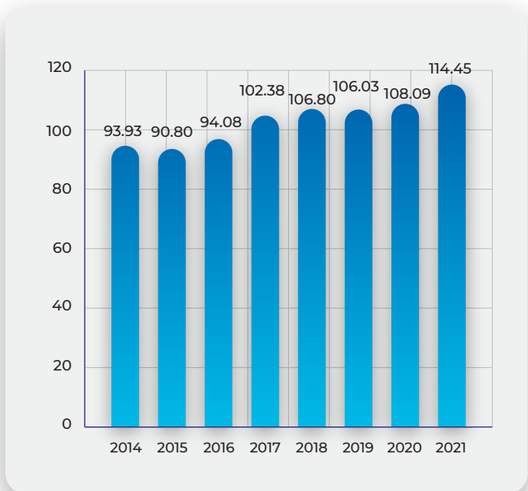
Electric power production by zones, billion kWh

Source: KEGOC



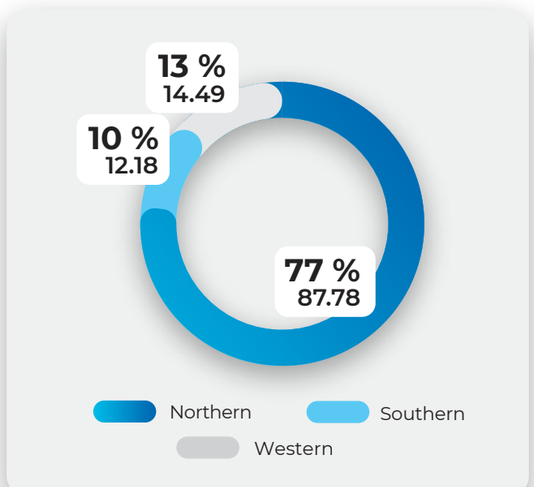
Electric power generation in the Republic of Kazakhstan, billion kWh

Source: KEGOC



Electrical power generation by zones in 2021, billion kWh and share

Source: KEGOC



79.7% of electric power in 2021 was generated by thermal power plants. Generation growth was 5.0 %, compared to 1.0 % growth a year earlier. A significant increase, by 12.0 %, was observed at GTPPs, which ultimately accounted for 9.4 % of generation.

The output of plants using renewable energy sources (SPS, WPS and BGU) increased by 45.0 % in 2021 (after doubling for two consecutive years). In the total structure of electric power generation, their share was 3.0 %, compared to 2.2 % in 2020.

Electric power consumption by zones, billion kWh
(Source: KEGOC)

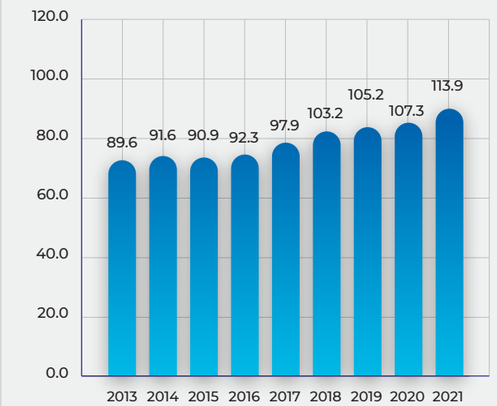
	2019	2020	2021	Change	Weight in 2021
TPP	85.96	86.66	91.16	5 %	79.7 %
GTPP	9.98	9.53	10.70	12 %	9.4 %
HEPP	8.98	9.55	9.18	-4 %	8.0 %
PPS, WPS and BGP	1.11	2.35	3.40	45 %	3.0 %

Consumption

Electric power consumption in 2021 increased by 6.1 %, the highest growth rates in recent years. A significant increase in consumption was observed in all three zones. The largest increase in consumption was recorded in the Southern Zone by 9.0 %, followed by the Western Zone (an increase by 7.0%), and then the Northern Zone, where growth reached 5.0 %. At that, the Northern Zone accounted for about 65.0% of electric power consumption.

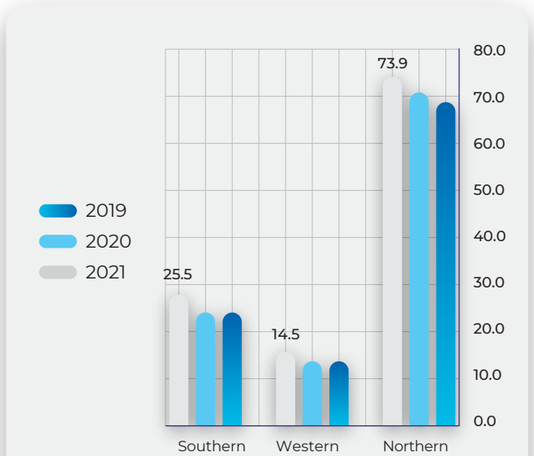
Electric power consumption in the Republic of Kazakhstan, billion kWh

Source: KEGOC



Electric power consumption by zones, billion kWh

Source: KEGOC



Net power flow

Net power export in 2021 amounted to 556.9 million kWh. Export to the Russian Federation was 1,326.6 million kWh, and import from the Russian Federation was 1,788.32 million kWh. Export to the Central Asian unified power grid was 1,323.83 million kWh, and import was 305.21 million kWh.

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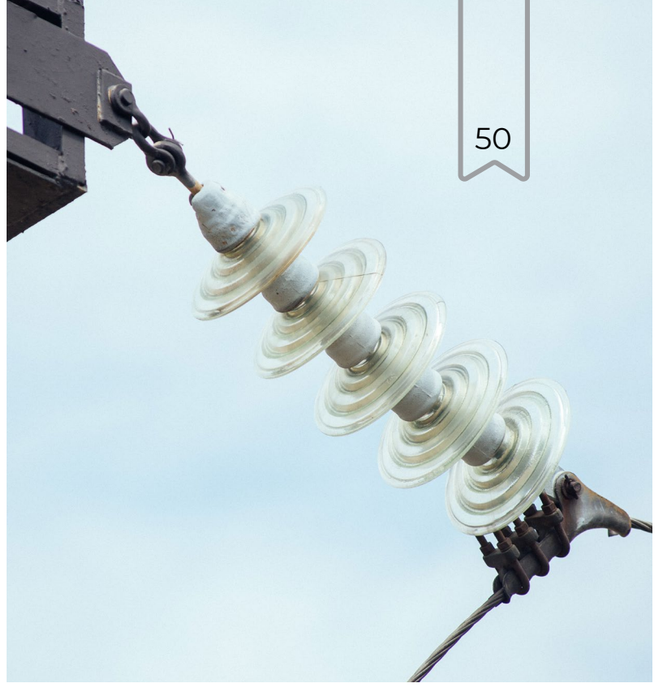
Capacities

According to KEGOC data, 190 electric power stations produce electricity in Kazakhstan. As of 1 January 2022, their total installed capacity is 23,959.3 MW, and their available capacity is 20,200.5 MW.

Installed capacity growth in 2021 totalled 412.3 MW and was primarily driven by plants using renewable energy sources. For solar power plants, the growth in installed capacity reached 149.0 MW (up to 1,034.3 MW), for wind power plants, the growth was 148.0 MW, and the installed capacity reached 659.5 MW. The installed capacity of hydroelectric power plants increased by 76.6 MW over the year and reached 2,806.2 MW. For TPPs, the growth was 38.7 MW, while the installed capacity reached 19,458.2 MW, which is 81 % of the total installed capacity of the EPS of Kazakhstan.



Installed and available capacity of power plants in Kazakhstan, MW
(as of 1 January 2021-2022)

Power plants	Installed capacity			Available capacity		
	2021	2022	Δ, MW	2021	2022	Δ, MW
Total	**23,547.1**	**23,959.3**	**412.3**	**20,039.1**	**20,200.5**	**161.4**
TPP	19,419.5	19,458.2	38.7	17,456.1	17,454.4	1.7
SPS	885.3	1,034.3	149.0	641.6	834.3	192.7
WPP	511.6	659.5	148.0	311.6	376.8	65.2
HEPP	2,729.6	2,806.2	76.6	1,628.7	1,534.0	94.7
BGP	1.1	1.1	–	1.1	1.1	–

Source: Samruk-Energy JSC

Renewable energy sources

Within the framework of the Paris Agreement, Kazakhstan has set a course for the transition to a green economy. In particular, the country has committed to achieving carbon neutrality by 2060. A significant part of this transition will be the strengthening of the role of renewable energy sources in the electric power sector. And today, the desire of industry regulators to support renewable energy is noticeable.

In 2021, the end-to-end premium for supporting the use of renewable energy sources began to be applied.

As a result, the selling price of traditional stations is divided into two components:

— the maximum tariff for electric power, which takes into account the costs of producing electric power and the rate of profit determined according to the methodology established by the authorised body;

— surcharges for supporting the use of renewable energy sources.

Last year, it was decided to exempt from payment for electricity transmission only renewable energy facilities that sell electricity in FSC LLP (previously, all renewable energy facilities were exempt). At that, contracts for the purchase of electric power produced by renewable energy facilities have been extended from 15 to 20 years, which should increase their attractiveness to investors.

Market analysis

Existing privileges for renewable energy stations include:

— guaranteed connection to electric networks;

— guaranteed purchase of electric power;

— incentives for thermal power generation facilities that use renewable energy sources;

— indexation of fixed tariffs for renewable energy facilities based on inflation and the foreign currency exchange rate;

— indexation of auction prices of objects using renewable energy sources.

Further changes in the legislation will be aimed, in particular, at supporting the development of hydroelectric power plants, renewable energy projects using the electricity storage system, and the development of small-scale renewable energy sources.

Industry development forecast

According to the forecast of the Ministry of Energy of the Republic of Kazakhstan, electricity consumption is expected to reach 115.1 billion kWh in 2022. Growth by about 5% by 2021. Production is projected to reach 115.1 billion kWh, which means approximately maintaining the level of 2021. The surplus is expected to reach 4.6 billion kWh.

Forecast balance of electric power of the EPS of the Republic of Kazakhstan, billion kWh

Indicator	2022	2023	2024	2025	2026	2027	2028
Electric power consumption	119.7	123.2	125.8	129.7	131.9	134.5	136.9
Electric power generation	115.1	117.3	121.8	125.9	131.5	131.5	131.7
Existing stations	110.5	107.1	107.4	106.2	105.8	105.9	106.1
Planned	4.6	10.2	14.3	19.7	25.6	25.6	25.6
including RES	2.0	3.9	4.4	4.5	4.5	4.5	4.5
Deficit	4.6	5.9	4.0	3.9	0.5	3.0	5.2

Source: Ministry of Energy of the Republic of Kazakhstan

PERFORMANCE RESULTS AND DEVELOPMENT PROSPECTS OVERVIEW

About the operating results

A key aspect of the strategic development of CAEPCO JSC is to increase production efficiency, in particular through the renewal of fixed assets. The Corporation has implemented an investment program designed for 2009-2021.

CAEPCO JSC constantly carries out a set of measures to reduce the losses of heat and electric power during its transportation, as well as to improve the reliability of supplying consumers with these types of energy. In 2021, within the framework of the investment program, a number of large-scale measures for modernisation of equipment aimed at increasing generation, reducing losses during the transmission of electric power and heat and improving the environmental parameters of activities were continued.

In 2021, the Corporation planned to allocate 23.0 billion tenge for implementation of the investment program activities. In fact, 24.7 billion tenge was allocated, which is due to an increase in costs for several activities of Petropavlovsk CHP-2 and Pavlodar CHP-3.

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Fact

In 2021, the Corporation allocated funds in the amount of **24.7 billion tenge** for the implementation of the investment program

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#SDGs #responsible_consumption

INVESTMENT ACTIVITIES FOR HEAT AND ELECTRIC POWER GENERATION

In 2021, the Corporation planned to increase electric power generation by 4.0% relative to 2020, up to 7,315 million kWh, and to increase the supply of heat by 3.9% relative to 2020, up to 6,447 thousand Gcal, which was due to the planned increase in the volume of heat for consumers of PAVLODARENERGO JSC and SEVKAZENERGO JSC.

In fact, production decreased as compared to 2020 and amounted to 6,521 million kWh, which is due to a decrease in electric power generation by the SEVKAZENERGO division by 629 million kWh, or 18.9 %. Increase in the supply of heat amounted to 5.8% compared to 2020, up to 6,566 thousand Gcal, which is due to a lower average outdoor temperature in the heating months of 2021 than in 2020 (-5.7 oC and -2.5 oC, respectively) and an increase in the volume of heat consumption by the unit of SEVKAZENERGO JSC by 10.8%.

	2017	2018	2019	2020	2021
Electric power generation mln kWh	7,300.009	7,025.651	7,032.736	7,035.177	6,521.047
Heat power supply thousand Gcal	6,142.382	6,874.167	6,371.408	6,203.155	6,565.602

Pavlodar CHP-3
PAVLODARENERGO JSC

the largest power generating asset of CAEPCO JSC

- The station is one of the most modern in Kazakhstan. Automated process control system covers 83% of the main equipment
- Installed electric power is 555 MW
- 90.1 % of updated generating equipment

2021

The reconstruction of the condenser of the turbine generator No. 6 of the Pavlodar CHP-3 was carried out. The event is aimed at eliminating violations of water-chemistry conditions of the plant, carrying the nominal electrical load of the turbine generator, reducing the temperature pressure in the condenser, increasing efficiency.

Works on implementation of the project for construction of the ash dump of the 3rd phase are completed. This is one of the measures to ensure continuous production run of the plant, which will allow dumping ash and slag for 10.5 years.

Pavlodar CHP-2 of
PAVLODARENERGO JSC

the third largest power generating asset of CAEPCO JSC provides electricity to industrial enterprises of the city, local service facilities, as well as households

- The station is one of the best in Kazakhstan in terms of using installed electric capacity during the heating period, which is about 93%.
- **Installed electric power is 110 MW**

2021

Implementation of measures to increase the 2nd phase of the ash dump has been completed to ensure continuous production run of the plant, which will allow dumping ash and slag for 5.1 years.

Reconstruction of the air heater cubes of the boiler unit No. 2 of Pavlodar CHP-2 was performed.

Ekibastuz CHP of
PAVLODARENERGO JSC

the fourth largest power generating asset of CAEPCO JSC

- The ECHP is the only source of heat supply in Ekibastuz. The station is the oldest enterprise of the Corporation
- Installed electric power is 12 MW

2021

Due to the reorganisation of the structure of Ekibastuzteploenergo LLP, with the addition of a new type of activity, heat supply, the investment program activities were postponed to 2022.

Petropavlovsk CHP-2 of
SEVKAZENERGO JSC

the largest power generating asset of CAEPCO JSC

- PCHP-2 provides electricity to industrial enterprises of the city, local service facilities, and households. **The station is one of the most modern in Kazakhstan**: since 2009, the generating equipment of the station has been updated by 49.7 %. Automated process control system covers 42% of the main equipment.
- **Installed electric power is 541 MW**

2021

Transformer No. 2 was replaced on 30 November 2022 and put into operation.

Reconstruction of the equipment of the boiler, turbine, electric, fuel and transport workshops was carried out.

Transmission of electric power

In 2021, as part of investment programs, work was performed on construction, reconstruction and technical re-equipment of 0.4-10 kV electric networks for 76.16 km:

— North Kazakhstan EDC JSC – 10.78 km of self-supporting insulated wire;

— Akmola EDC JSC – 49.98 km, including 49.42 km of self-supporting insulated wire;

— Pavlodar EDC JSC – 15.4 km;

Construction and reconstruction of 35-110 kV overhead lines in the amount of 50,353 km were completed:

— Akmola EDC JSC – 37.293 km, Pavlodar EDC JSC - 8.76 km, North Kazakhstan EDC JSC – 4.3 km;

Reconstruction of 16 substations of 10-220 kV was carried out, including 3 substations for North Kazakhstan EDC JSC, 2 substations for Pavlodar EDC JSC, and 11 substations for Akmola EDC JSC.

Pavlodar EDC JSC

— works on the construction, reconstruction and technical re-equipment of 0.4-10 kV electric networks in the amount of 15.4 km were completed, working projects were developed for the reconstruction and construction of 0.4 kV overhead and cable power lines with a length of 16.6 km;

— construction of a new 35 kV overhead power supply line L-62 Voskresenka 2-Trofimovka has been completed to replace the existing 21.7 km length with commissioning in Q1 2021;

— construction of a new 35 kV overhead power supply line L-52 Fedorovka 1.2-Lvovka was carried out to replace the existing length of 18.73 km with the planned commissioning in the 2nd quarter of 2022;

— 895 meters of the automated system of technical electricity metering were installed, 907 meters were purchased for installation in 1-2 quarters of 2022;

— four modular transformer substations with dry-insulated power transformers and vacuum switches have been installed in Pavlodar. These substations are equipped with modern security and fire alarm;

— installation of a new distribution substation No. 11 in Pavlodar;

— installation of a complete switchgear for the reconstruction of 10 kV overhead lines in Pavlodar with the installation of two 10 kV RU– 10 kV substation 110/10kV Zavodskaya;

— two telemechanical cabinets were replaced as part of the reconstruction of the 220/35/10 kV Kalkaman substation;

— construction of the 110/10kV Severnaya Gorodskaya substation was carried out with the installation of two 40 MVA power transformers with planned commissioning in the 4th quarter of 2022;

— installation of security and fire alarm systems in the Western electric power enterprise (Aksu);

— construction and installation works were completed for the installation of 5 sets of equipment for the radio relay link system Vostochnoye electric power enterprise - Zarya substation - Yamyshevo substation – Chernoe substation – Lebyazhinsky power distribution zone;

— reconstruction of 5 units of buildings and constructions was carried out;

— design and estimate documentation was drafted for the construction of a training center in Michurino village;

— technological equipment, special mechanisms and other fixed assets were purchased in the amount of 383 units.

North Kazakhstan EDC JSC

— measures were taken to reconstruct the 0.4 kV overhead power line in Bulaevo, Zhumabayev district, with a length of 10.78 km using self-supporting insulated wire technology;

— 16 MVA power transformers were replaced for 25 MVA transformers at 110/10 kV substation No. 3 in Petropavlovsk;

— modernisation of the PSP system of 110 kV overhead lines of 110/35/10 kV Liteynaya substation was completed;

— 40 oil-filled waterproofed transformers of 10/0. 4 kV were purchased;

— A 10 kV switchgear was purchased for modular building for the reconstruction of a 10 kV closed switchgear at the 35/10 kV Ozernaya substation in the Kyzylzhar district of the North Kazakhstan region;

— construction of the 110 kV Novomikhailovka-Liteynaya overhead line with a length of 4.3 km was completed;

— special vehicles were purchased in the form of UAZ trucks, MTZ tractors and forestry mulcher.

Akmola EDC JSC

— technical modernisation of 11 substations of 35 kV and above has been completed;

— construction of the 1st stage of the 110 kV Makinsk-Nikolskaya overhead line – 37.293 km;

— technical modernisation of 10/0.4 kV networks was carried out,aimed at improving the reliability of power supply to distribution networks, replacement of bare AC-35.50 wire with self-supporting insulated wire SIP-3 – 6,232 km; bare A-35 wire with self-supporting insulated wire SIP-4 - 43.19 km; old KTP-10/0. 4 kV with new KTPN-10/0,4 kV – 26 units; reclosers were installed on 10 kV overhead line supports in the amount of 4 units;

— installation of metering devices at substations in the amount of 511 launch bases, as well as equipping devices and equipment of ASCAE facilities;

— major repairs were made to 9 buildings and structures in the Yerementau, Zharkainsk and Atbasar power distribution zones, the administrative building of AEDC JSC in Nur-Sultan;

— the fleet of special equipment and vehicles in the amount of 27 units was updated, major repairs of 7 units of special equipment were carried out;

— the metrology unit laboratory has been upgraded. State-of-the-art equipment was purchased and installed: an installation for checking voltage transformers at the installation site, a three-phase automatic calibration unit NEVA-Test 6303I for 6 seats.

Transmission of heat

The main activities of heating networks are aimed at restoring and modernising district heating networks in Pavlodar, Ekibastuz and Petropavlovsk in order to increase the reliability of heat supply, energy efficiency, and reduce heat losses.

When performing work, a pre-insulated pipeline is used, which compares favourably with a traditional pipeline with high thermal insulation indicators, an increased service life of equipment reliability and a longer service life up to the standard value of 25 years.

Pavlodar

In 2021, as part of the approved Investment Program of Pavlodar Heat Networks LLP, the following activities were carried out:

1) work continued on Reconstruction of pumping station No. 3 with the installation of a central heat supply station in Lesozavod microdistrict in Pavlodar". Reconstruction of the pumping station NS-3 with re-equipment in the central heat supply station is necessary to improve the hydraulic regime for consumers in the areas of Lesozavod and Radiozavod;

2) the Automated system of commercial electric energy metering and telemetry systems measure was completed, the system was put into commercial operation;

3) for carrying out current and capital repairs, special equipment was purchased in the amount of 5 units, including a truck-mounted tractor based on KAMAZ, an on-board semi-trailer, a tractor Belarus, a tractor trailer (2 units), and a backhoe loader.

A high level of wear of heating networks (84.05 %) results in a significant number of technological failures. Heat losses increased by 1.5 % compared to 2020

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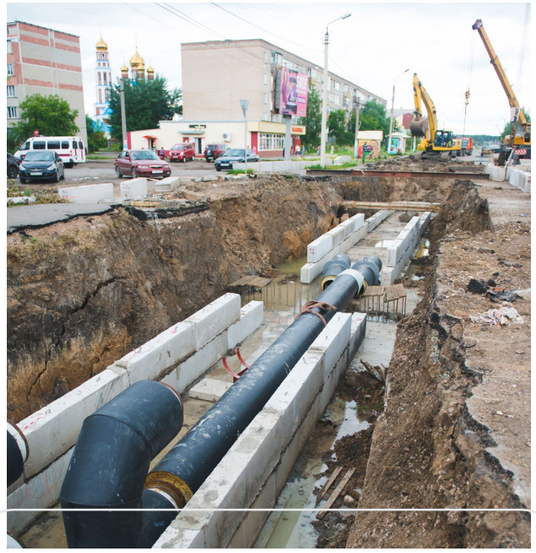
Nur-Sultan, Kazakhstan



Fact

In 2021, the construction and reconstruction of thermal pipelines with the use of preinsulated pipes of **1.128 km** was completed:

Pavlodar – 0.220 km

Petropavlovsk – 0.908 km

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#construction #operating_results_review #reconstruction

Petropavlovsk

Petropavlovsk Heat Networks LLP conducted a comprehensive non-departmental examination of the working project Reconstruction of the heating main No. 3 2Du500 mm on Satpayev Str. from TK-6-19 to TK-3-15g in Petropavlovsk, North Kazakhstan region (construction and installation work will begin in 2022), computer equipment, a PBX kit and a thermal imager were purchased.

A high level of wear of heating networks (72.16 %) results in a significant number of technological failures: 141 failures in 2020 and 270 failures in 2021. Heat losses decreased by 1.5 % compared to 2020.

A high level of wear of Ekibastuz heating networks (85.98 %) results in a significant number of technological failures: 166 failures in 2020 and 187 failures in 2021. Heat losses increased insignificantly by 0.4 % compared to 2020.

Automatic heat flow controllers, industrial controllers and modems are installed at heat-transmitting enterprises of the Corporation to connect mechanisms and control and measuring devices with the dispatching unit. All the equipment of heat points is introduced into a single network, which allows dispatchers to quickly control hydraulic and temperature conditions, and specialists to make decisions faster in emergency situations.

In addition, the Corporation applies advanced technologies to detect sources of heat energy losses: thermovision inspection devices for monitoring and diagnostics of main pipelines, ultrasonic flaw detectors.

Plans for the reconstruction and modernisation of equipment for 2022

In 2022, within the framework of the investment program, a number of measures for modernisation of equipment aimed at increasing generation, reducing losses during the transmission of electric power and heat and improving the environmental parameters of activities were planned to be continued.

In 2022, the Corporation intends to allocate 19.8 billion tenge for implementation of the investment program activities.

In 2022, the Corporation plans to generate electric power at the level of 5,654.2 million kWh, and supply heat up to 6,208.7 thousand Gcal.

In 2022, all CHPs of CAEPCO JSC subsidiaries will implement measures to install an automated system for monitoring emissions to the environment in accordance with the requirements of the new Environmental Code.

At CHP-3 of PAVLODARENERGO JSC, it is planned to continue work on the construction of chimney No. 2 in order to remove the draft restrictions of existing boilers operating on chimney No. 1, and the possibility of connecting boilers of stations No. 5, 6 and prospective boilers of stations No. 7, 8 to the pipe.

It is planned to reconstruct boiler unit No. 14 at Ekibastuz CHP.

In 2022, it is planned to perform works on buildings and structures, major repairs of boiler units No. 4,5,6,7,8,9,12, turbine units No. 5,7, and the second stage of damming section No. 3 of ash dump No. 2 at Petropavlovsk CHP-2 of SEVKAZENERGO JSC.

In 2022, it is planned to build and reconstruct main heat pipelines using pre-insulated pipes of 1.117 km, including 0.24 km in Pavlodar, and 0.877 km in Petropavlovsk. In Pavlodar, it is planned to complete construction and installation works within the framework of the event Reconstruction of pumping station No. 3 with the installation of a central heat supply station in Lesozavod microdistrict in Pavlodar and put the facility into operation.

In 2022, as part of EDC investment programs, it is РЭК planned to perform:

- construction, reconstruction and technical re-equipment of 0.4-10 kV electric networks of 127.214 km, including 48.54 km for NK EDC JSC, 46.674 km for AEDC JSC, 32 km for PEDC JSC;

- construction and reconstruction of 35-110 kV overhead lines of 51.99 km, including 30 km for NK EDC JSC, 11.02 km for AEDC JSC construction, 9.97 km for PEDC JSC;

- reconstruction of 12 substations of 35 kV and more, including 1 substation for NK EDC JSC, 10 substations for AEDC JSC, 1 substation for PEDC JSC.

Plans for the reconstruction and modernisation of equipment for 2023-2025

In 2023-2025, the following main activities are planned to be implemented at the CHP within the framework of investment programs:

Pavlodar CHP-3

— replacement of clarifiers No. 1,2,3;

— installation of the automated process control system at the boiler unit No. 6.

Petropavlovsk CHP-2

— construction of chimney No. 1;

— reconstruction of boiler station No. 2;

— major repairs of boiler station No. 3 with replacement of the drum;

— major repairs of boiler station No. 1 with replacement of the drum;

— reconstruction of thermal generating unit station No. 3;

— reconstruction of thermal generating unit station No. 6;

— construction of ash dump No. 4.

ECHP of Ekibastuzteploenergo LLP

— reconstruction of section No. 2 of the ash dump in the bed of Lake Tuz;

— implementation of an automated system for monitoring environmental emissions;

— reconstruction of the ECHP drinking water supply scheme and conversion of the 6,000 m3 potable water supply tank to technical water;

— reconstruction of the raw water scheme with the replacement of boilers 1, 2;

— reconstruction of boilers KVTK-100-150 of substations No. 11, 12, 13, 14;

— reconstruction of the production building of the main building of the ECHP boiler and turbine shop;

— reconstruction of the gas flues of the hot water boiler house and the boiler turbine shop of the ECHP

In 2023-2025, the following main activities are planned to be implemented at the heating networks within the framework of investment programs:

Pavlodar Heat Networks LLP

1. Start of construction and installation works on Reconstruction of the TM-20 heat main line from the territory fence (fence wall) of the CHP of Aluminum of Kazakhstan JSC to NP-6 in Pavlodar with a total length of 7 km using pre-insulated pipes and increasing the diameter from DN 920 mm to DN 1020 mm to improve heat supply and opportunities to connect new consumers in the southern part of Pavlodar, as well as reduce physical wear and heat losses of the reconstructed site;

2. Development and implementation of a set of technical measures for organising the protection of heat and mechanical equipment from exceeding the nominal pressure of the coolant;

3. Reconstruction of the power supply system of the central heat supply station and booster pumping plant in Pavlodar;

4. Purchase of special equipment for carrying out current and major repairs of heating networks.

Petropavlovsk Heat Networks LLP plans to reconstruct the main pipelines with a length of 3,455 km, including:

— completion of the reconstruction of the heating main No. 3 2 DN 500 mm on Satpayev Str. from TC-6-19 to TK-3-15g with a length of 1.149 km;

— reconstruction of heating main No. 6 2 DN 400-2 DN 500 mm on Ruzheynikova Str. from UN-6-10-from to TK-6-14 with a length of 1.680 km;

— reconstruction of the section of heating main No. 62 DN 500 mm on K. Kenshinbayev str., Koshukov Str. from UN-6-14 to TK-6-21 with a length of 0.626 km.

Ekibastuz heat networks of Ekibastuzteploenergo LLP:

— reconstruction of off-site heating networks to Central heating points;

— reconstruction of TM-VIII from Pavilion 3 to TK-4A;

— reconstruction of TM-XII from TK-4A to NO 41 A.

In 2023-2025, the following main activities are planned to be implemented at the electric power networks within the framework of investment programs:

PEDC

— reconstruction of 110/110 kV Leninskaya substation;

— reconstruction of 110/10 kV Tsentralnyagorodskaya substation;

— reconstruction of equipment for 110 kV cells and PSP at 220/110 kV Promyshlennaya substation;

— construction of 35 kV overhead power transmission line No. 63 Olgino-Timiryazevo with a total length of 29.0 km;

— construction, reconstruction and technical re-equipment of 0.4–10 kV electrical networks with a length of 80.6 km with the development of design and estimate documentation;

— reconstruction of buildings and structures in the amount of 97 units;

— construction of a training center in Michurino;

— installation of security and fire alarm systems – 11 sets;

— installation of radio relay communication - 5 sets, trunking communication - 10 sets;

— installation of fiber-optic cable – 231.6 km;

— installation of 3,119 automated technical accounting counters with the development of design and estimate documentation;

— purchase of technological equipment, special mechanisms and other fixed assets in the amount of 909 units.

North-Kazakhstan EDC

— reconstruction of the 35 kV ORU at the 110/35/10 kV Pokrovka substation;

— replacement of 6.3 MVA 35/10 kV substation Rabochy Poselok with 10 MVA;

— reconstruction of cable lines in Petropavlovsk;

— reconstruction of 0.4 kV overhead lines in North Kazakhstan region;

— reconstruction of the 110 kV ORU at 110/10 kV substation No. 10 in Petropavlovsk;

— implementation of ASCAE;

— reconstruction of equipment for transformer substations, EPTS 10/0.4 kV.

AEDC

— technical modernisation of substations of 35 kV and above;

— construction of overhead lines of 35 kV and above;

— technical modernisation of 0.4–10 kV networks;

— major repairs of power equipment and power lines.

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PROCESS AUTOMATION

ASCAE

In 2020, the “Concept of organisation of automated control over distribution of electric power” was approved, as part of which priorities for the standardisation of business processes and automation of technical accounting of the ASAE was started.

ASAE was installed as part of the 2021 Investment Program at 61 substations of 35 kV and above, including:

— Pavlodar EDC JSC – 8 substations;

— Akmola EDC JSC – 53 substations.

BILLING

During 2021, the following works were performed:

— payment acceptance for legal entities has been implemented using the Kaspi Bank application;

— the issue of a cash register receipt was implemented in accordance with the requirements of subparagraph 2 of paragraph 6 of Article 166 of the Tax Code of the Republic of Kazakhstan;

— in accordance with the requirements of State Credit Bureau JSC, the billing system has implemented the functionality of unloading accounts receivable from consumers in the context of services provided;

— uploading of analytical reporting forms with transfer to the data storage to optimise the performance of the billing system.

THESIS DOCUMENT AND TASK MANAGEMENT SYSTEM

During 2021, the following works were performed:

– **works have been initiated to update the system release in order to:**

– improve productivity and administration;

– implement a mobile app;

– implement the possibility of using an electronic digital signature;

– completion of “Front Office/ Records Keeping” module;

– **automation of financial processes;**

– **mutual settlements with counterparties;**

– coordination of contracts with counterparties;

– integration of data on counterparties with 1C Manufacturing Enterprise Management.

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Measure

In 2021, a comprehensive modernisation and automation of production, accounting and related information systems was carried out at CAEPCO JSC. **All projects are aimed at improving labour productivity, transparency of activities and economic efficiency.**

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#SDGs #industrialisation

Process automation plans **for 2022**

— Implementation of the THESIS update to the current release, development of automation of personnel processes and information security processes

— Installation of ASCAE at 126 substations of 35 kV and above, more than 500 transformer substations of 6-10 / 0.4 kV

— Implementation of works on SMS notifications to consumers about accounts receivable

— Implementation of works on receiving electric and heat power readings via a Chat-bot system (WhatsApp and Telegram)

ACTIVITIES OF POWER SUPPLY ORGANISATIONS

Sale of electric and heat power displays stable growth in natural and monetary units in a comparative analysis by 2020

	2020		2021		Percentage of growth	
	volume (thousand kWh/ thousand Gcal)	**sales** (thousand tenge, VAT inclusive)	**volume** (thousand kWh/ thousand Gcal)	**sales** (thousand tenge, VAT inclusive)	**volume** (thousand kWh/ thousand Gcal)	**sales** (thousand tenge, VAT inclusive)
Sale of electric power:	**2,891,081**	**47,868,546**	**3,017,172**	**60,459,653**	**4**	**26**
Pavlodarenergosbyt LLP	1,293,190	18,778,305	1,314,648	23,574,352	2	26
Sevkazenergosbyt LLP	816,026	12,909,367	868,600	17,142,801	6	33
AEDC-Energosbyt LLP	781,865	16,180,873	833,924	19,742,500	7	22
Sale of heat:	**4,627**	**20,937,325**	**5,011**	**24,518,077**	**8**	**17**
Pavlodarenergosbyt LLP	3,364	13,836,881	3,585	15,345,154	7	11
Sevkazenergosbyt LLP	1,263	7,100,444	1,426	9,172,923	13	29

Improving the quality of customer service. Improving the operational model of working with consumers. Self-service features

The main tasks of energy supply organisations are to meet the needs of the population, improve the level of customer service and meet the mandatory requirements of the international quality system standards.

In order to improve customer service and improve the quality of customer service, the following measures were implemented in 2021:

— *training and testing of staff knowledge aimed at improving the level of knowledge and training of employees of full-time and part-time public service centers; in the course of training, a number of issues were worked out in accordance with the training and topic plan, together with representatives of energy transmission organisations;*

— *surveys in the form of user questionnaires in service centers and sales sites with the aim of analysis of the level of customer satisfaction with the organisation's services offered;*

— *to improve the security of the personal account of AEDC-Energosbyt LLP, additional works were carried out to close the vulnerability from XSS – a type of attack on web systems, which consists in injecting malicious code into the page loaded by the web system and interacting this code with the web server of intruders; from the injection of SQL code - one of the common methods of hacking websites and programs that work with databases, based on the introduction of arbitrary SQL code into the query, additional verification is introduced when the consumer is authorised in the personal account, the ability to change the password by the consumer in the personal account;*

— *early notification of household consumers about the existing debt; the existing system of automatic calling in Pavlodarenergosbyt LLP has been expanded to all localities in the region (communication has been transferred to an intercity channel), and the option of addressing the amount of debt has been implemented;*

— *saving and continuing to use the created channels of interactive remote customer service after the quarantine is over.*

The organised work of the contact center allows you to quickly serve all calls received from consumers to a multi-channel phone both in automatic mode and through a conversation with the operator.

The Contact Center's work includes servicing incoming customer calls on all energy supply issues, including taking readings on hot water and electric energy metering devices, providing comprehensive information on charges made for services provided, on existing debt, documentation processing, as well as on planned and emergency power outages.

Self-service capabilities of consumers are implemented through the Personal Account services posted on the official websites of enterprises.

Analysis of incoming calls and users of the Personal Account service

Name of energy sales organisation	Number of consumers as of 01.01.2022		Number of calls received in 2021	Number of users of the Personal Account service as of 01.01.2022.
	electric power	heat power		
Pavlodarenergosbyt LLP	230,466	218,123	316,445	2,616
Sevkazenergosbyt LLP	164,367	75,450	315,481	9,755
AEDCEnergosbyt LLP	126,817		305,000	1,500
Total	**521 650**	**293 573**	**936 926**	**13 871**

Reviewing and analysing incoming complaints and suggestions from consumers increases the transparency of the Company's energy sales businesses and serves as an important feedback mechanism that helps improve the overall impact of the work.

The procedure for reviewing complaints and suggestions from consumers provides for the following main stages within a clearly defined time frame for working with consumers:

1. receiving a complaint / suggestion;
2. evaluation of the complaint / suggestion, registration and appointment of responsible persons;
3. investigation, resolution and communication;
4. preparing and sending a response to the consumer.
5. closing the complaint.
6. follow-up actions (monitoring, analysis).

In order to respond as effectively as possible to complaints and complaints from consumers, the following methods of accounting and further control are provided:

— through the Contact Center (conversations with operators are recorded, Voice Mail functions);

— by registering complaints and suggestions from individuals and legal entities in the Thesis Documents and Task Management System and in the books of comments and suggestions in Service centers;

— the Feedback section on the official corporate website as measures to improve the complaint handling mechanisms, where complaints from consumers are accepted for consideration;

— through the Personal Account service.

Analysis of work with accounts receivable (thousand tenge including VAT)

Name of energy sales organisation		Pavlodarenergosbyt LLP	Sevkazenergosbyt LLP	AEDC-Energosbyt LLP	Total
Accounts receivable as of 01.01.2022	general	5,770,512	3,134,465	1,580,135	**10,485,113**
	more than 1 month	1,551,303	611,439	192,422	**2,355,165**
Number of issued warnings about accounts receivable		691,625	103,277	210,030	**1,004,932**
Number of shutdowns made		44,361	1,962	4,930	**51,253**
Executive endorsements issued		1,066,902	57,574	14,717	**1,139,193**
Initiation of enforcement proceedings		1,104,715	159,817	24,003	**1,288,535**

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Measures applied to reduce accounts receivable:

— timely delivery of notifications of accounts receivable;

— automatic notification of debt;

— performing debt analysis by market segment;

— joint disconnections of debtors by personnel of power supply organisations and transmission organisations, including on weekends;

— execution of an agreement with consumers on payment of arrears in installments;

— sending information on debts to the regional akim, city akims, heads of large enterprises, budget organisations, and energy system enterprises about employee debts;

— conducting claim work.

For the convenience of consumers, payment terminals are installed at payment acceptance points, through which it is possible to independently pay for energy supply services, as well as services of third-party organisations in cash. In addition, consumer payments are made through mobile banking applications and existing payment systems.

Operation of a single payment center

Unified Settlement Centers (ERC) operate on the basis of the Company's energy supply organisations. ERC is a system complex that combines service and utility services of a number of service providers in one payment document. In 2021, more than 50 contracts were signed with municipal enterprises of cities and districts in the regions where they operate. The ERC includes more than 200 organisations serving condominium facilities and other service providers.

ERC functions:

— making accruals;

— creating, printing, and delivering invoices;

— payment acceptance;

— advice on the current debt through the contact center, service center, personal account.

In 2021, representatives of Sevkazenergosbyt LLP created the ERC page on Instagram erc.petropavlovsk_sko. Publications reflect a wide variety of topics: Unified Payment Document breakdown; working hours; the Q&A section; how to lift an attachment of an apartment, etc. Working with Instagram opens up new opportunities for interaction between consumers and the Company, as well as increases the transparency of the ERC. In 2022, it is planned to consider the possibility of introducing an online consultant on the ERC website.

Activity plans **for 2022**

— Improvement of payment discipline and reduction of accounts receivable

— Improvement of customer service, also by expanding IT projects (chatbot, mobile applications, bulk SMS)

— Increase the volume of energy sales due to the introduction of new residential complexes and the expansion of the number of industrial and other energy consumption facilities

— Expansion of the Unified Settlement Center by attracting and including other utility and other service providers in the Unified Payment Document

PROCUREMENT

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Fact

Timely and complete satisfaction of the needs for goods, works, services, as well as the most efficient use of financial resources are the main priorities of CAEPCO group of companies in procurement

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#SDGs #efficient_institutions

Following the results of the reporting period, the following tasks were completed:

— in 2021, a 100% transition to e-procurement was made;

— the annual procurement plan was executed for 98%;

— procurement reports have been converted to online format (MS Power BI).

In the reporting year, 3,495 contracts worth over 65 billion tenge were concluded. The share of contracts with residents is 97.02 %.

Following the results of the reporting period, the following tasks were completed:

— the annual procurement plan was executed;

— online reporting forms for deliveries and payments were introduced;

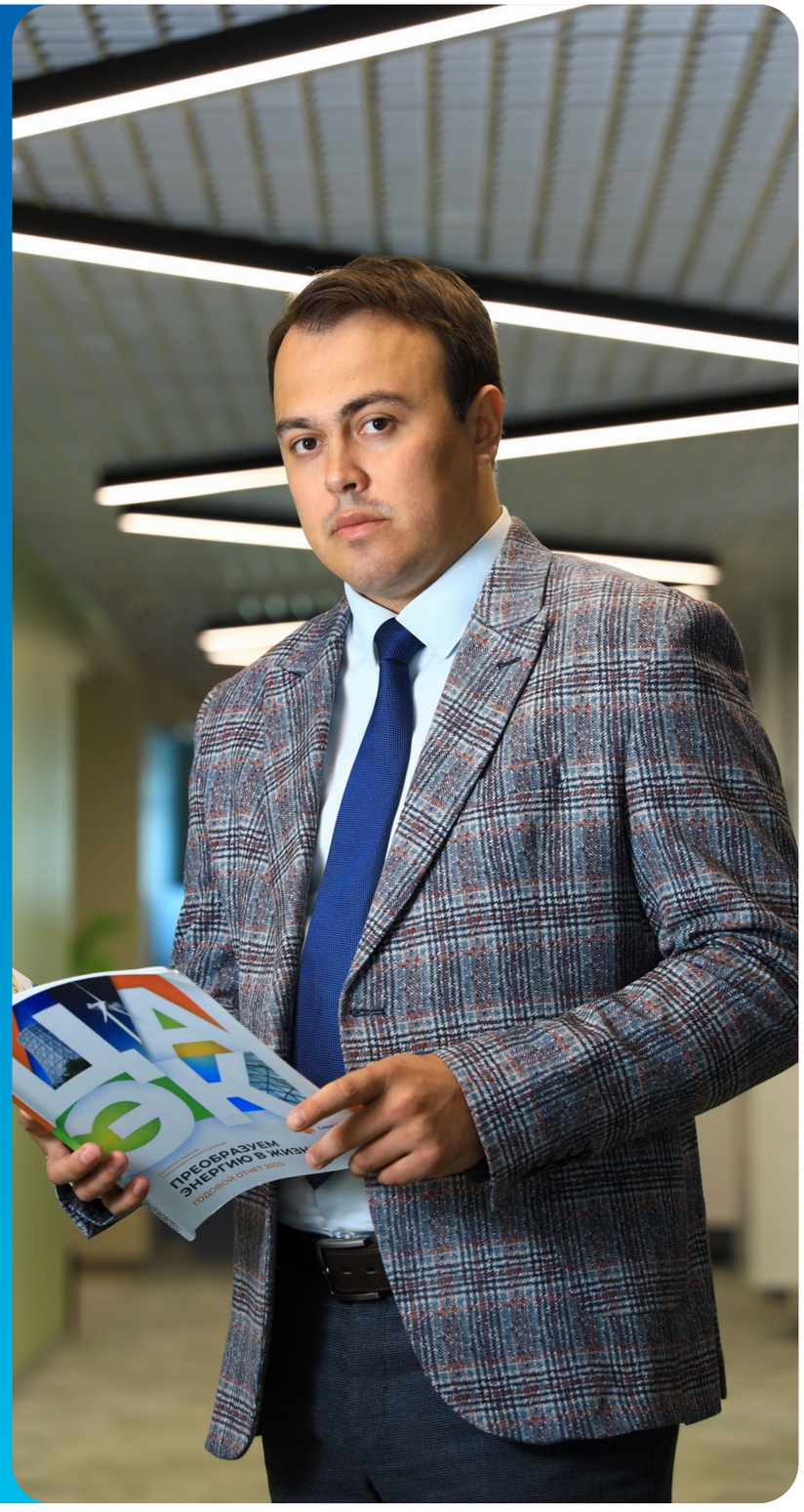
— the updated Policies and Procedures for procurement were approved.

Procurement plans **for 2022:**

— automation of the procurement process of CAEPCO Group of Companies by 90 %;

— increase the efficiency, control and transparency of procurement activities within the supply chain.

RISK MANAGEMENT



CAEPCO's Risk Management Policy

Risk management contributes to achieving the set goals and improving performance indicators, including in terms of human health and safety, environmental protection, compliance with regulatory requirements for performance

CORPORATE RISK MANAGEMENT SYSTEM

CAEPCO JSC group of companies has a functioning corporate risk management system (RMS).

The Risk Management Policy approved and implemented by CAEPCO JSC establishes the Group's attitude to risks, general principles of development and functioning of the RMS, its goals and objectives, the main approaches to the organisation, implementation and control of risk management processes.

The main objectives of the Group in the area of risk management are represented by timely identification, assessment and reduction of the negative impact of risks that pose a threat to the effective implementation of economic activities and the reputation of the Group, health of employees, the environment, the property interests of shareholders and investors, as well as the implementation of favourable opportunities to ensure sustainable continuous operation and development, reasonable confidence in achieving the strategic and operational goals set for the Group

To determine the level of risk impact on the Group's activities, the level of risk materiality is determined by expert assessment of the probability and consequences of risk, as well as by quantitative assessment using mathematical methods for calculating the probability and consequences of risk.

STAGE 1
Identification of risks

The process of identifying risks and including them in the corporate Risk Register for further assessment and management. Assigning of risk owners.

STAGE 2
Risk analysis and assessment

The process of determining the significance of the risk impact on the Group's production, financial and economic indicators.

STAGE 3
Risk management

The process of identifying, evaluating and selecting the most effective method of achieving the set goals by maximising positive and minimising negative events affecting the Group's activities.

STAGE 4
Risk monitoring

The process aimed at monitoring the Risk Management Action Plan (regularity, timeliness and quality of execution of measures).

Риск-менеджмент

Main RMS participants

Audit committee

Preliminary review and approval:

- internal audit reports on RMS efficiency;
- acceptable risk level (risk appetite);
- risk register;
- list of risk owners;
- risk management reports;
- internal RMS documents.

Timely informing of the Board of Directors about risks and preparing proposals for improving RMS

BOARD OF DIRECTORS

- Defining the strategy for RMS development
- Goal-setting, approval of principles and approaches to RMS organisation
- Making decisions on critical risk management
- **Approval:**
  - acceptable risk level for shareholders (risk appetite);
  - risk management performance indicators;
  - risk register
- Assigning of risk owners
- Review and approval of key risk management reports
- Approval of internal RMS documents

Internal Audit Department

functional subordination to the Audit Committee

- Independent evaluation of the efficiency and monitoring of the current condition of RMS and ICS
- Recommendations for improving RMS and ICS efficiency improvement
- Informing the Executive Body and the Board of Directors about the status of RMS and ICS based on the results of the conducted audits

Risk Management Department

functional subordination to the Audit Committee

- Coordination of actions of all RMS participants
- Coordination and methodological support of risk management processes
- Critical risk analysis and aggregation of information about key risks
- Organisation of the risk identification and assessment process (development/ updating of the Corporate Risk Register and the Critical Risk Register)
- Collection and analysis of information on implementation of RMS measures
- Monitoring and analysis of Key Risk Indicators
- Providing all stakeholders (Executive Body, Audit Committee, Board of Directors) with information about risks

Management Board

— Ensuring functioning of RMS, including:

- adoption and approval of the necessary decisions on RMS functioning;
- resolution of cross-functional risk management tasks (performed by several structural divisions).

Risk owners

- Timely identification and assessment of risks
- Making proposals on risk management methods.
- Timely development and organisation of implementation of risk management measures
- Risk monitoring

Performers of control procedures and risk management measures

- Assistance to the risk owner in the development of risk management measures
- Execution of control procedures for timely mitigation of risks
- Timely and full implementation of risk management measures.

Regulatory risks

- Investment risks
- Project risks
- Reputational risks
- Political risks
- Market risks
- Management risks
- Credit risks
- Technological risks

Legal risks

- Law violation
- Corruption risk and fraud
- Property risks
- Collection risks
- Regulatory risks
- Environmental risks
- Human resources risks
- Tax risks

Technological risks

- Procurement and supply
- Information technologies and information security
- Emergency situations
- Human resources risks
- Environmental risks
- Interaction with counterparties
- Commercial risks
- Professional risks
- Fuel risks
- Reputational risks
- Social risks
- Regulatory risks
- Management risks

Financial risks

- Price risks
- Management risks
- Credit risks
- Liquidity risks
- Interest rate risks
- Foreign currency risks

Allocation of responsibility between the participants of the RMS and the nature of their interaction is regulated by internal regulatory documents approved by the Board of Directors of the Company

Information/Reporting in long-term power market under RMS

In 2021, the Company continued introducing and improving a risk-based approach to business management. Coordination and methodological support for the functioning and improvement of the RMS and ICS is carried out by the Risk Management Department, which solves the following tasks:

— coordination of risk management and internal control processes;

— development of methodological and internal regulatory documents in the area of ensuring internal control and risk management processes;

— organisation of training of employees of the Group of Companies in internal control and risk management;

— analysis of the corporate Risk Register and the Risk Map of CAEPCO group of companies and development of proposals for responding and reallocating resources in relation to the management of relevant risks;

— formation of consolidated risk management reports;

— implementation of operating control over the processes of internal control and risk management of the divisions of the Group of Companies in accordance with the established procedure.

During the year, the Risk Management Department carried out works in accordance with the work plan approved by the Board of Directors for the year:

— updating of the corporate Risk Register and Risk Map of CAEPCO JSC and its subsidiaries and analysis of critical risks;

— conducting training in the area of risk management and internal control system for key employees of divisions and senior employees of CAEPCO Group;

— identification and assessment of risks, analysis and testing of the efficiency of the ICS organisation in business processes:

- "Transport support of the enterprise",
- "Procurement management for goods, works and services",
- "Inventory management and warehousing",
- "Technical maintenance and repair management".

In order to increase the level of maturity of risk management in the group of companies in 2021, training was conducted for key employees of departments and managers. During training, attention is paid to explaining the basic principles and approaches to risk management in order to apply a risk-based approach to making managerial and operational decisions.

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Fact

CAEPCO JSC group of companies strives to meet the standards and best risk management practices, increases the risk management culture and continuously improves risk management processes.

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#processes #risk_management

Increase in the significance of risk

Reducing the significance of risk

No changes
(or the dynamics are insignificant)

Analysis of key risks that have a significant impact on the activities and response measures

The name of the key risk and the dynamics of the significance of the risk for the year	Risk description and key risk factors	Risk management approach	Change
Area: strategic risks			
Untimely replacement of generating and grid equipment, buildings and structures that are retired by their service life	The significance of the risk is due to the high level of physical and moral wear and tear of the main and auxiliary equipment of the Group's generating enterprises (CHP), as well as equipment of electric and heat networks, which may result in a reduction in the volume of electric power generation/transmission, and the inability to provide consumers with sufficient heat power. **KEY RISK FACTORS:** **1.** Actual wear and depletion of the resource of the main generating/ network equipment, buildings and structures; **2.** Unsatisfactory growth rates of reconstruction, modernisation and new construction; **3.** Inefficient model of investment financing of energy enterprises; **4.** Limited own financial resources; **5.** The inability to attract significant credit resources within the framework of the current structure of the industry and the model of regulating tariffs for heat and electric power; **6.** Adoption of unfavourable tariff decisions regarding the production, transmission and distribution of electric and heat power by the authorised body.	**Within the framework of managing this risk, the Holding carries out the following activities:** **1.** Inclusion of reconstruction/ new construction measures in investment programs for timely replacement of disposed equipment; **2.** Determining job priority on reconstruction/new construction, taking into account the significance of equipment for reliable supply of consumers with heat and electric power in sufficient volume; **3.** Attraction of additional sources of financing for implementation of reconstruction/new construction works to replace the disposed equipment; **4.** Conclusion of investment agreements (as part of the electric power market) with the authorised body for the modernisation and reconstruction of equipment.	▲

Analysis of key risks that have a significant impact on the activities and response measures

The name of the key risk and the dynamics of the significance of the risk for the year	Risk description and key risk factors	Risk management approach	Change
Area: operating risks			
Lack of qualified production and technical personnel	The Holding's activities largely depend on key qualified employees, and the lack of a sufficient number of qualified personnel, in particular in the production and technical area, leads to risks associated with a shortage of personnel. Competition in Kazakhstan and the near abroad in the area of personnel is increasing due to the limited number and simultaneous growth of demand for qualified specialists in the labour market. In 2021, according to expert estimates, the risk of a shortage of qualified production and technical personnel migrated to the area of catastrophic risks. **KEY RISK FACTORS:** **1.** Actual wear and depletion of the resource of the main generating/ network equipment, buildings and structures; **2.** Unsatisfactory growth rates of reconstruction, modernisation and new construction; **3.** Inefficient model of investment financing of energy enterprises; **4.** Limited own financial resources; **5.** The inability to attract significant credit resources within the framework of the current structure of the industry and the model of regulating tariffs for heat and electric power; **6.** Adoption of unfavourable tariff decisions regarding the production, transmission and distribution of electric and heat power by the authorised body.	**As part of the management of these risks, a set of measures is carried out:** **1.** Increase of the wage fund in the tariff estimates of the Group of Companies while protecting tariffs for the next period; **2.** Optimisation of management and production processes, staffing levels in order to identify the reserves of the wage fund with the subsequent distribution and allocation of the released funds to increase wages, primarily to crucial and key production personnel; **3.** Continuing of implementing PROFENERGY project in the following areas; **4.** External succession pipeline through attracting students, graduates of higher and secondary specialised educational institutions; **5.** Improving the educational level of employees; **6.** Development of the mentoring practice **7.** Material and non-material incentives for qualified employees..	

Analysis of key risks that have a significant impact on the activities and response measures

The name of the key risk and the dynamics of the significance of the risk for the year	Risk description and key risk factors	Risk management approach	Change
Loss of qualified / key personnel	According to the results of 2021, in comparison with 2020, there is an increase in the staff turnover rate for the Group of Companies as a whole. Therefore, according to expert estimates, the risk has migrated to the zone of catastrophic risks.		
Excess heat energy losses	Based on the results of 2021 in comparison with 2020 in heat transfer systems At the Group's enterprises, there is a slight decrease in the level of excess heat losses. Meanwhile, this risk is significant for the Holding and remains subject to constant monitoring. **KEY RISK FACTORS:** **1.** High level of wear of heating networks; **2.** Technological violations and accidents on heating mains; **3.** Irrational mode of operation of heating networks (to ensure hydraulic and temperature conditions at heating unit of end users); **4.** Lack of metering devices on the heating networks of domestic consumers; **5.** Non-compliance of the heat consumption rate of the housing stock with the actual heat consumption (multi-storey residential buildings); **6.** Unpaid losses of heat power on abandoned/ consumer heating networks; **7.** Joint laying of heat power pipelines by cold water supply pipelines.	**Within the framework of risk minimisation, a set of measures aimed at reducing excess losses is implemented on an ongoing basis:** **1.** Restoration of the destroyed / missing thermal insulation of pipelines; **2.** Performing annual capital and current repairs of heating networks; **3.** Reconstruction of heating networks with the use of pre-insulated pipelines (foamed polyurethane technology); **4.** Installation of design throttling devices on elevator heating units of consumers; **5.** Identification and suppression of the facts of unauthorised consumption of heat power; **6.** Interaction with authorised state bodies in order to increase the rate of heat consumption of the housing stock to the level of actual heat consumption.	

Analysis of key risks that have a significant impact on the activities and response measures

The name of the key risk and the dynamics of the significance of the risk for the year	Risk description and key risk factors	Risk management approach	Change
Technological violations in the operation of equipment (accidents, failures of 1st and 2d degrees)	In 2021, the risk of technological disruptions is classified as a critical risk of the Holding. Physical and moral obsolescence of generating and network equipment inevitably leads to the occurrence of emergency failures. **The consequences of emergency failures are:** — reduction of electricity generation volumes; — non-delivery of the volume (non-fulfilment of obligations) under the contract for maintaining the availability of electric capacity; — decrease in the quality of heat supply to consumers. **KEY RISK FACTORS:** **1.** high wear and depletion of the main generating/ network equipment resource; **2.** limited financial resources, as a result — low growth rates of reconstruction and modernisation of equipment, insufficient repair programs. Despite a slight decrease in the share of overdue accounts receivable (over 3 months) in the total amount of accounts receivable by the end of 2021, the risk is significant and relevant for the Holding and is under constant control.	**As part of the management of this risk, a set of measures is carried out by the Holding:** **1.** Performing a complex of maintenance and repair works for equipment, buildings and structures; **2.** Inclusion of reconstruction/ modernisation/ new construction measures in investment programs for timely replacement of worn-out equipment; **3.** Determining job priority on repair/reconstruction/new construction, taking into account the significance of equipment for reliable supply of consumers with heat and electric power in sufficient volume.	▲

Analysis of key risks that have a significant impact on the activities and response measures

The name of the key risk and the dynamics of the significance of the risk for the year	Risk description and key risk factors	Risk management approach	Change
Area: financial risks			
Increase in overdue accounts receivable in the retail market of electric and heat power	Despite a slight decrease in the share of overdue accounts receivable (over 3 months) in the total amount of accounts receivable by the end of 2021, the risk is significant and relevant for the Holding and is under constant control. **KEY RISK FACTORS:** **1.** Non-compliance with the terms of contracts regarding the implementation of timely and full payment for energy supply services by consumers of heat and electric power due to — low payment discipline; — deterioration of key macroeconomic indicators; **2.** Imperfection of the legislative framework regarding the possibility of carrying out transactions for the purchase and sale of residential real estate without paying off debts for energy supply services; **3.** Untimely renegotiation of energy supply contracts when changing the homeowner;	**As part of the management of this risk, the Group's energy marketing organisations carry out a set of measures on an ongoing basis:** — consumers are notified about the amount due; — the power supply is stopped in case of late payment for energy supply services; — debt repayment schedules are drawn up in installments; — claim work is being carried out to recover debts and penalties from non-paying consumers for late payment of services rendered; — the property of debtors is seized; — defaulters are visited with the presence of enforcement agents for estate inventory and seizure of property; — information about amounts due by employees for utilities is sent to the address of enterprises; — debtors' departure from the Republic of Kazakhstan is restricted; — collection is carried out through the debtor's source of financing (deduction from wages and pension contributions); — the method of collection is changed, on the basis of which the debtor's property (apartment or vehicle) is evaluated for sale at auction For debts with a low probability of recovery, reserves for doubtful debts are created in the accounting of the Group's energy sales organisations.	◀▶

INTERNAL CONTROL STANDARDS

CAEPCO Group of Companies has implemented an internal control system (ICS), which is a set of policies, processes, procedures, standards of conduct and actions combined into a single continuous process. The ICS is part of the management process of the group of companies carried out by the Board of Directors, the Management Board, all executive bodies of subsidiaries, control bodies and employees.

The management at all levels of management creates an effective control environment by:

— forming an understanding of the need for and implementation of internal control procedures among the employees of the group of companies;

— maintaining a high level of corporate culture and demonstrating the principles of integrity and competence;

— improving the professionalism and competence of employees of the group of companies;

— ensuring effective interaction of structural divisions and employees;

— ensuring effective distribution of powers and responsibilities;

— formation of fraud prevention mechanisms;

— organisation of the activities of internal control bodies.

The ICS is aimed at ensuring the achievement of the goals of the group of companies and minimising risks in its operational and investment activities, the reliability of all types of reporting, compliance with the requirements of legislative acts and internal corporate requirements. The Company strives to ensure that all its activities are adequately controlled in order to reduce risks. Control procedures are implemented at all levels of management.

The group of companies has **three levels** of internal control system:

Operational

It is applied to the main business goals of the group of companies, including productivity, profitability, and resource safety.

Financial

Referring to the preparation of reliable published financial statements, including interim, condensed financial statements, as well as certain data extracted from these reports (for example, income data), published openly.

Compliance control

It is associated with ensuring compliance with the laws and regulations governing the activities of the organisation

The Risk Management Department's plan for 2022 for the development of RMS and ICS:

— Updating of the risk register and risk map of CAEPCO JSC and its subsidiaries and analysis of critical risks;

— Conducting training in risk management and internal control system for key employees of divisions and senior employees of the CAEPCO group;

— Identification and assessment of risks, analysis and testing of the effectiveness of the ICS organisation in business processes of operating and financial activities.

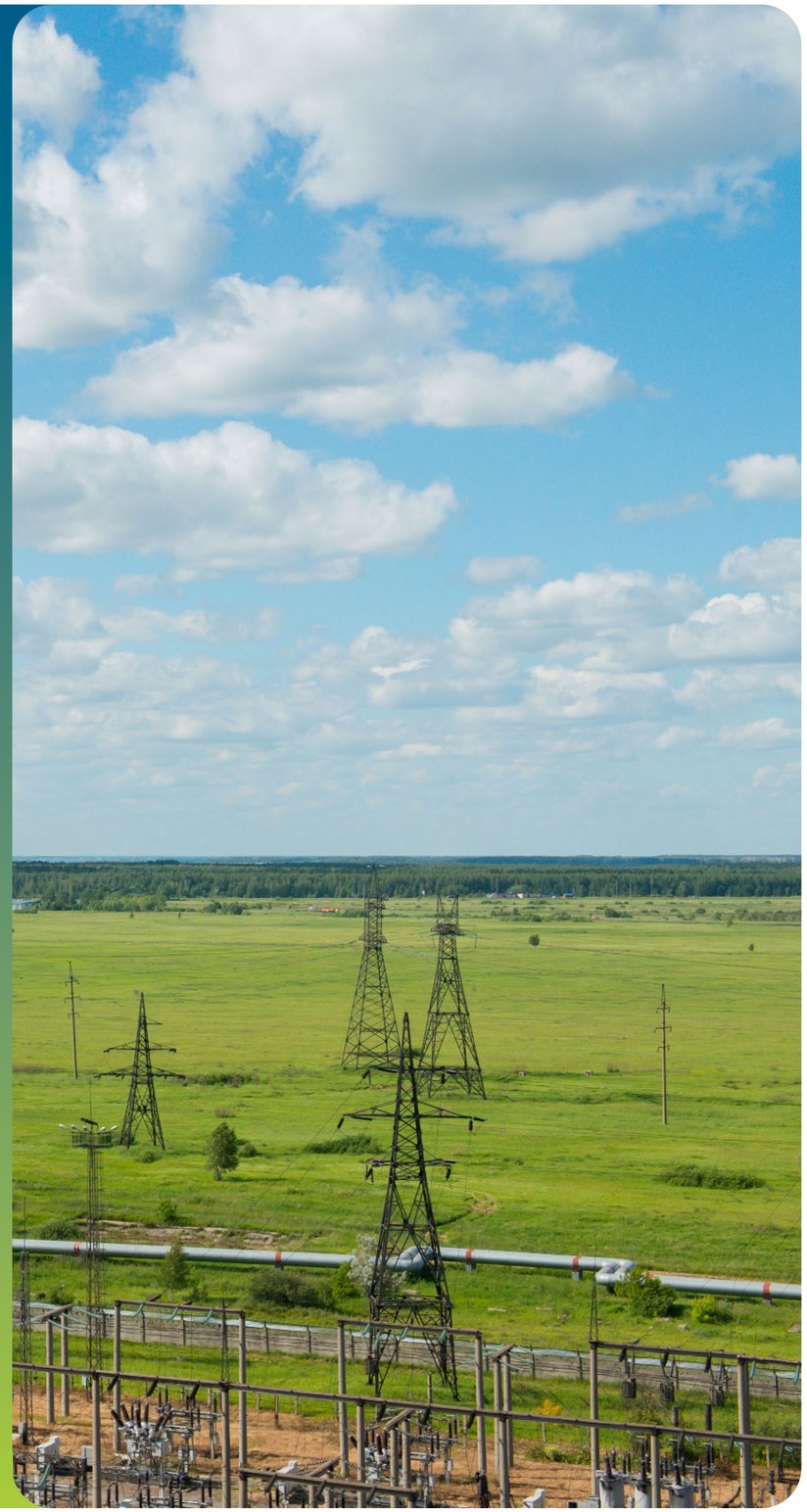
— Development and integration of the system of Key Performance Indicators (KPIs) of business processes and the system of Key Risk Indicators (KRI);

— Conducting an assessment of corruption risks in order to identify areas of activity, business processes of the Group of Companies, during the implementation of which there is a possibility of employees committing corruption and fraudulent actions;

— Organisation of work to improve the approaches and principles of process management of the Group of Companies;

— Updating of internal regulatory documents in risk management and internal control.

SUSTAINABLE DEVELOPMENT



CAEPCO JSC continues to steadily observe the Sustainable Development Goals, they are fundamental in the activities of the enterprises of the group of companies. Thanks to a well-established system of interaction with stakeholders, the Corporation is aware of their opinions, interests and wishes. Based on the high social significance of its activities, in order to minimise risks, CAEPCO JSC implements a set of measures aimed at expanding and improving the effectiveness of interaction with all interested parties.

About sustainable development

caepco_21
Nur-Sultan, Kazakhstan

Fact

Performance indicators

Social, environmental and economic aspects of the Company's activities are disclosed in accordance with **the requirements of the GRI international standards**

caepco_21
#SDGs #clean_energy #sustainable_cities
#climate_change #partnership

Interaction with stakeholders

CAEPCO JSC considers interaction with all interested parties as an integral part of its daily work, fully realising its corporate responsibility and commitment to the principles of information openness. The Corporation has identified a range of stakeholders in its decisions and activities to understand its impact and how to respond. The basis for identifying and selecting stakeholders is an assessment of the impact on the current activities and strategic development, as well as the established practice of the Corporation's interaction with stakeholders.

Areas of interest	Form of interaction	Actions
Shareholders		
— Implementation of strategic objectives; — economic profit/ performance; — corporate governance rating; — funds for development and receiving dividends; — net asset value; — implementation of social programs; — transparency of business processes.	— General Meetings of Shareholders; — decisions of the Board of Directors; — corporate website; — annual report; — discussions, business meetings.	18 meetings of the Board of Directors were held. Work was performed to improve all forms of corporate governance.
Employees		
— Human resources and social policy; — terms of the collective agreement; — compliance with the labour legislation of the Republic of Kazakhstan; — motivation for retaining and attracting highly qualified employees.	— Management decisions; — orders and instructions; — production, operational and other meetings; — reports on current activities; — oral negotiations; — industrial safety and labour protection briefings; — internal corporate communication channels; — surveys and questionnaires; — official accounts in social networks.	The provisions of Collective Agreements were observed in PAVLODARENERGO, SEVKAZENERGO and AEDC. Employees were provided with social assistance and support in the group of companies. A competition "The best in the profession" was held in the subsidiaries. Implementation of activities within the framework of the corporate project PROFENERGY continued. The most distinguished employees of the subsidiaries were awarded industry and corporate awards and awarded professional titles.

Areas of interest	Form of interaction	Actions
Public authorities and regulatory authorities		
— Getting timely and reliable information; — assistance to the development of the electric power industry in the Republic of Kazakhstan; — ensuring reliable and uninterrupted supply; — increase in tax revenues to local budgets; — timely and high-quality implementation of social projects; — increase / saving of jobs; — compliance with the legislation of the Republic of Kazakhstan in the area of industrial safety.	— Reporting on the results of the financial and economic activities of the Corporation; — providing information at the request of state bodies in various areas of the Corporation's activities; — development of proposals on amendments to laws and regulations of the Republic of Kazakhstan; — memoranda of cooperation between local executive bodies and the Corporation in order to support and develop the social sphere of the regions; — discussions, business meetings.	In 2021, daily monitoring of blogs of akims of the regions of operation was carried out. Answers have been provided to all citizens' appeals concerning the activities of the Holding's enterprises. Information about planned and emergency shutdowns of electric and heat power was posted on corporate websites on a permanent basis, the terms of repair work, testing of heating networks were indicated. The heads of the subsidiaries (or appointed responsible persons) participated in the meetings of the headquarters for the preparation of the housing stock for the heating season together with state and regulatory authorities.
Local communities (Consumers)		
— Market share/ market presence; — ensuring reliable and uninterrupted electricity and heat supply; — marketing communications; — emissions into the environment.	— Informing and feedback system with consumers; — public hearings, meetings; — annual report; — signing of memoranda and agreements on partnership and cooperation; — official accounts in social networks.	PAVLODARENERGO Group of Companies accepted and processed 501,599 consumer complaints. SEVKAZENERGO enterprises received and processed 320,703 requests from consumers. AEDC received 47 requests from consumers. Calls and electronic requests included questions, requests, suggestions, transmission of meter readings to the contact center, and more.

Areas of interest	Form of interaction	Actions
Educational institutions		
— Promoting the development of branch science and education; — training of promising personnel and ensuring the continuity of generations; — providing charitable and sponsorship assistance.	— Cooperation with universities in the regions of operation; — participation in the work of examination commissions, qualification commissions, in the process of accreditation of educational programs; — **events:** competition of scientific ideas.	In 2021, a competition of scientific papers for a nominal corporate scholarship in Pavlodarenergo and Sevkazenergo was organised and held. Based on the results of the competition, 24 students were awarded a nominal corporate scholarship. 216 students undertook a paid internship and signed an agreement on further employment at the Corporation's enterprises after getting a degree.
Associations of legal entities		
— Exchange of information and formation of a common position in the electric power industry — Formation and development of the regulatory framework in the electric power industry — Government initiatives and activities aimed at improving business	— Meetings, conferences, seminars — Consideration and approval of amendments to regulatory legal acts; — Proposals for initiating amendments to the current legislation regulating the Corporation's activities.	In 2021, significant work was done with the industry associations KEA, KAZENERGY, and Atameken NCE to develop proposals for reforming the current legislation.
Non-governmental organisations (NGOs)		
— Getting information about the Corporation's development prospects; — reducing the negative impact on the environment; — providing charitable and sponsorship assistance; — public hearings.	— Conducting public hearings; — informing about current activities; — letters (appeals) addressed to the Corporation.	**In 2021, the group of companies held 27 public hearings on the environment, rendering of services, approval of tariff estimates, and reports on activities:** In Pavlodarenergo - 13 public hearings, in Sevkazenergo - 10 public hearings, in AEDC – 4 public hearings.

Areas of interest	Form of interaction	Actions
Mass media		
— Transparency of business processes; — ensuring prompt access to information about the Corporation's activities on the following topics: – production safety; – modernisation of production; – financial indicators; – implementation of joint projects; – prospects for the development of the Corporation, the industry.	— Press tours, media briefings, press conferences; — press releases; — responses to information requests; — media monitoring.	In 2021, 7,092 mentions of the activities of CAEPCO group of companies in the media and social networks were published and aired. The Holding's PR service issued 24 corporate publications.
Suppliers, contractors		
— Creating a transparent competitive environment; — using the market pricing mechanism; — stability and reliability of mutually beneficial cooperation; — guarantee of fulfillment of obligations under contracts..	— Feedback system, holding of meetings, negotiations; — signing of agreements and memoranda, agreements on strategic cooperation; — tenders; — meetings with contractors and clients.	In 2021, announcements about tenders and their results will be posted on the corporate websites of the group of companies and in the media.
Trade unions		
— Compliance by the employer with the established obligations in relation to employees; — protection of the rights and interests of employees; — creating decent working conditions; — providing opportunities for professional and personal growth; — social guarantees.	— Discussion and approval of the collective agreement; — meetings of trade union members with the management.	Work was carried out to create conditions for the implementation of the activities of the trade union – cooperation with the trade union organisation on the principles of mutual interests, equality in accordance with the legislative acts of the Republic of Kazakhstan and the terms of the Collective Agreement.

PUBLIC HEARINGS FOR 2021

April

— Annual report on the activities of PAVLODARENERGO JSC for 2020 on rendering of services for the production of heat power to consumers in Pavlodar;

— annual report on the activities of Pavlodarenergosbyt LLP for heat energy supply services in Ekibastuz for 2020;

— report on the activities of Pavlodar Heat Networks LLP on the transmission and distribution of heat power to consumers and other stakeholders for 2020;

— annual report on the activities of Pavlodarenergosbyt LLP for heat energy supply services in Pavlodar for 2020;

— annual report on the activities of Ekibastuzugol LLP for 2020 in rendering services for the production, transmission and distribution of heat power to consumers in Ekibastuz;

— annual report on implementation of the approved tariff estimate, implementation of the approved investment program of Pavlodar Electric Distribution Company JSC for rendering of services for the transmission and distribution of electric power for 2020;

— holding public hearings on the draft consideration of applications for approval of the tariff and tariff estimate for the electric power supply service of Sevkazenergosbyt LLP;

— report on the fulfilment of investment obligations of Petropavlovsk CHP-2 for 2020;

— report on the activities and performance of investment obligations of North Kazakhstan EDC JSC for 2020;

— report on the activities and performance of investment obligations of Petropavlovsk Heat Networks LLP for 2020;

— report on the activities and performance of investment obligations of Sevkazenergosbyt LLP for 2020;

— the report on implementation of the approved tariff estimates and the annual report on the activities of AEDC JSC for 2020;

— public hearings to review the information of AEDC-Energosbyt LLP on the upcoming increase in the maximum price level for electric power.

July

— report on the activities of PAVLODARENERGO JSC for the first half of 2021 on rendering of services for the production of heat power to consumers (CHP-3, CHP-2) in Pavlodar;

— report on the activities of Pavlodar Heat Networks LLP on the transmission and distribution of heat power to consumers and other stakeholders for the first half of 2021;

— report on the activities of Pavlodarenergosbyt LLP for heat supply services in Ekibastuz for the first half of 2021;

— report on the activities of Pavlodarenergosbyt LLP for heat supply services in Pavlodar for the first half of 2021;

— annual report on the activities of Ekibastuzteploenergo LLP for the 1st half of 2021 for rendering of services for the production, transmission and distribution of heat power to consumers in Ekibastuz;

— report on the activities of Pavlodar Electric Distribution Company JSC, PAVLODARENERGO JSC, for rendering of services for the transmission and distribution of electric power through networks and implementation of the investment program for the first half of 2021;

— report on the results of the first half of 2021 on the activities and implementation of the investment program of Petropavlovsk CHP-2 of SEVKAZENERGO JSC for the provision of regulated services;

— report on the results of the first half of 2021 on the activities and implementation of the investment program of North Kazakhstan EDC JSC for the provision of regulated services for the transmission and distribution of electric power;

— report on the results of the first half of 2021 on the activities and implementation of the investment program of Petropavlovsk Heat Networks LLP for the provision of regulated services for the transmission and distribution of heat power;

— report on the results of the first half of 2021 on the activities and implementation of the investment program of Sevkazenergosbyt LLP for the provision of regulated heat supply services;

— holding public hearings on the draft consideration of applications for approval of the tariff and tariff estimate for the electric power supply service of Sevkazenergosbyt LLP;

— report on the activities of AEDC JSC for the first half of 2021 in rendering of electric power transmission and distribution services;

— public hearings to review the information of AEDC-Energosbyt LLP on the upcoming increase in the maximum price level for electric power.

December

— public hearings of Ekibastuzteploenergo LLP on consideration of the application for the tariff for production, transmission, distribution and supply of heat power for 2022

Information about holding public hearings was posted in the mass media of Pavlodar, Ekibastuz, Petropavlovsk and Akmola region, as well as on the official accounts of companies.

May 12.05.2021

— public hearings on price changes for retail sale of electric power by Pavlodarenergosbyt LLP

August 17.08.2021

— public hearings on price changes for retail sale of electric power by Pavlodarenergosbyt LLP

December 20.12.2021

— public hearings on price changes for retail sale of electric power by Pavlodarenergosbyt LLP

WORKING WITH THE MEDIA AND THE PUBLIC

The key objectives of information and PR support for CAEPCO's activities in 2021 were as follows:

— informing about the implementation of investment programs and the construction of new energy facilities, as well as the preparation for the heating season;

— promotion of the social responsibility of the Holding;

— informing shareholders and other interested parties about the results of the activities of CAEPCO JSC and its subsidiaries;

— increasing knowledge of the energy industry among the media and the general public, increasing the prestige of the power engineer profession.

In 2021, the Holding's enterprises organised 14 press tours, published 8,398 mentions in the media and social networks about the activities of the CAEPCO Group of Companies

#Measures

including
CAEPCO JSC – 200,
PAVLODARENERGO JSC – 5,231,
SEVKAZENERGO JSC – 1,661,
AEDC JSC – 1,486.
The Holding's PR service issued 24 corporate publications.

During the year, information and explanatory work was carried out for interested parties. To provide objective information about CAEPCO's activities, we used such tools as sending out press releases, posting information on the corporate website and in social networks, SMM tools, press tours to CAEPCO's facilities in the regions, prompt responses to requests, organising public hearings, round tables, and other measures.

HUMAN RESOURCES AND SOCIAL POLICY

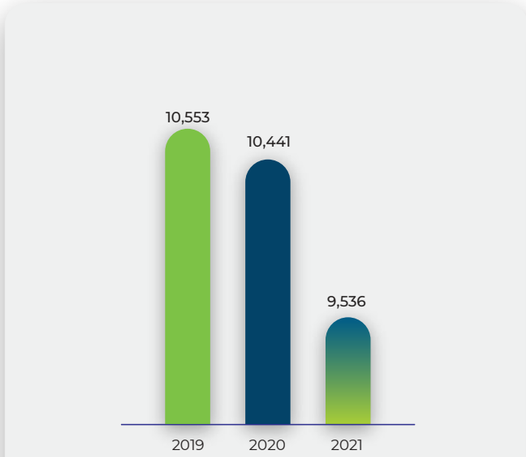
Personnel management policy

The personnel management policy of CAEPCO JSC corresponds to the strategic development goals of the Corporation in terms of developing an energy company with an effective corporate governance system with constant work to create opportunities for realising the potential of employees. The Corporation strengthens its personnel management policy by attracting professional employees of various levels, creating conditions for retaining highly professional employees, continuous professional training and staff development, providing opportunities for professional growth of proactive young employees, creating an employee pool and talent management.

Structure and headcount

As of 31 December 2021, the Corporation's payroll number of employees was 9,536, which is 9.5% lower than in 2020. The change in the number of employees occurred due to the exclusion of ASTANAENERGOSBYT LLP from the Corporation and the acquisition of a 51% interest in CAPEC Green Energy LLP by PAVLODARENERGO JSC.

Dynamics in change in headcount, persons.



Distribution of the headcount by enterprises of CAEPCO JSC at the end of 2021

Company name	Number of employees, persons
CAEPCO JSC	88
PAVLODARENERGO group of companies	4 689
SEVKAZENERGO group of companies	2 385
AEDC group of companies	2 374
Total	**9 536**

Sustainable development

Staff structure by category and gender

The structure of the Corporation's personnel, due to the peculiarities of its activities, is characterised by a high proportion of male employees, i.e. 61.5%. The production personnel mainly consists of the Workers category, where men make up 73.1%.

Staff structure by category and gender

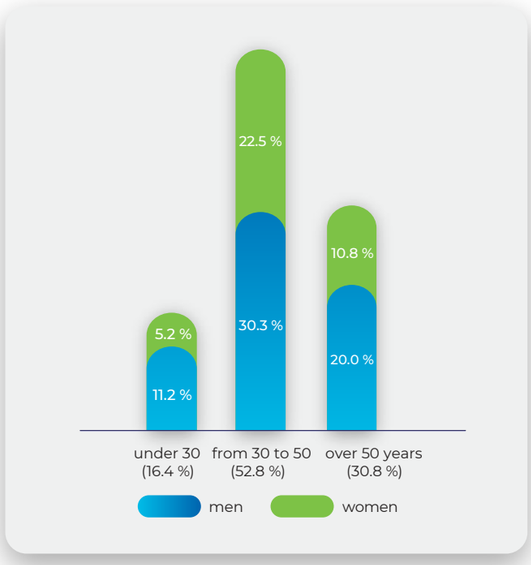
Personnel category	Total		of them:			
			men		women	
	persons	%	persons	%	persons	%
Headcount	**9,536**	**100**	**5,861**	**61.5**	**3,675**	**38.5**
Management	1,491	15.7	1,107	74.2	384	25.8
Professional employees/ white collar employees	2,873	30.1	972	33.8	1,901	66.2
Blue collar employees	5,172	54.2	3,782	73.1	1,390	26.9

Personnel structure by age

At the end of 2021, the main share of the personnel comprised of the most experienced workers aged 30-50 (52.8%), which is 1.5% more than in 2020. The share of personnel under 30 (16.4%) is 3.3% less than in 2020. The share of personnel over 50 (30.8%) increased by 1.8% compared to 2020. Taking into account these indicators, the Corporation's enterprises carry out activities aimed at attracting young specialists and developing mentoring to ensure continuity and transfer of professional knowledge and skills, and gradual rejuvenation of personnel to achieve an optimal combination of young proactive workers and experienced, highly professional employees.

The average age across the Holding is 41

Age composition of personnel

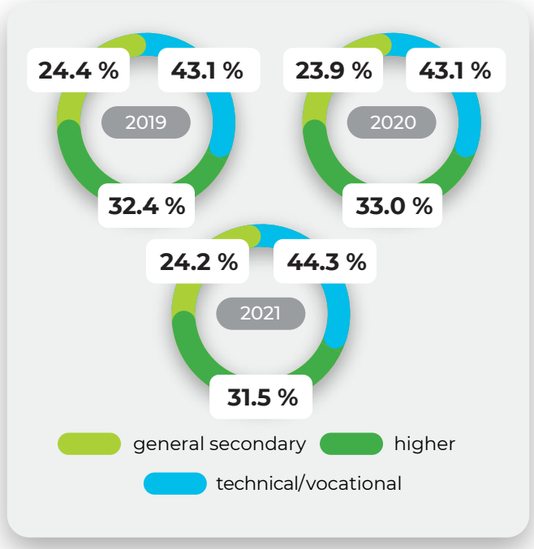


Personnel structure by education

At the end of 2021, the share of employees with higher education decreased by 1.5% compared to 2020, and the share of employees with technical/ vocational education increased by 1.2 %. The share of employees with general secondary education increased slightly compared to 2020. Every year, the Group's enterprises hold events aimed at motivating employees to improve their level of education, including as part of the implementation of activities under the corporate program PROFENERGY.

Every year, about 250 employees of the Corporation study at universities and colleges, including industry-specific disciplines. Regardless of participation in the events of PROFENERGY, enterprises provide support to students and graduates of an educational institution. In 2021, 109 employees defended their theses, including 78 employees in the profile specific for the enterprise.

Dynamics of the level of education



The total number of employees by type of employment

At the end of 2021, the share of employees attracted under an employment agreement totalled 99.9%. To perform certain types of work or seasonal work, enterprises attract part-time employees, the share of which totalled 0.1% of the total workforce. Part-time employment totalled 1.8% of the number of employees of the group of companies.

The total number of employees by type of employment

Indicator	Value (persons)	including	
		men	women
Headcount at the end of the reporting period (full-time)			
by agreement term:	9,536	6,312	4,129
Working under an agreement for an unspecified term	7,438	4,627	2,811
Working under a fixed-term agreement	2,098	1,234	864
by type of employment:	9,536	5,861	3,675
Full-time employees	9,368	5,760	3,608
Part-time employees	168	101	67
Supervised workers (part-time)	**10**	**0**	**10**
Total headcount	**9,546**		

Employees hired in 2021

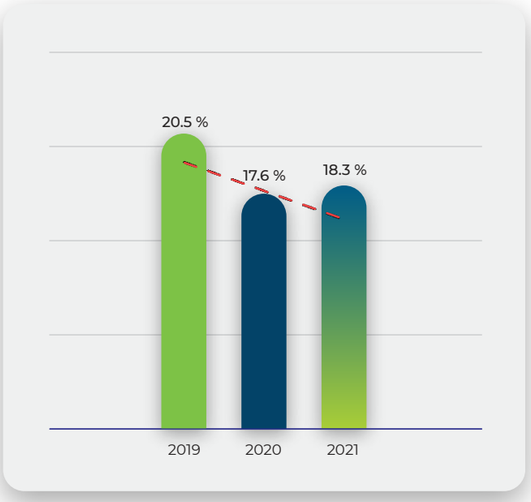
In the reporting period, 1,785 employees were hired, which amounted to 18.3% of the average number of employees in the Corporation.

Staff structure by category and gender

Indicator	Total		of them:			
			men		women	
	persons	%	persons	%	persons	%
Hired, of them:	**1,785**	**100**	**1,049**	**58.8**	**736**	**41.2**
under 30	616	38.0	429	69.6	187	30.4
from 30 to 50	841	45.1	426	50.7	415	49.3
over 50 years	328	16.9	194	59.1	134	40.9

The 0.7% increase in the turnover rate for hiring of personnel compared to 2020 is due to an increase in the reception of personnel after the lifting of restrictive quarantine measures (the COVID-19 pandemic).

Hiring turnover rate



Staff turnover

At the end of 2021, the Corporation's staff turnover rate increased by 2.6% compared to 2020.

The main reasons for personnel leaving the Holding remain:

— pay dissatisfaction;

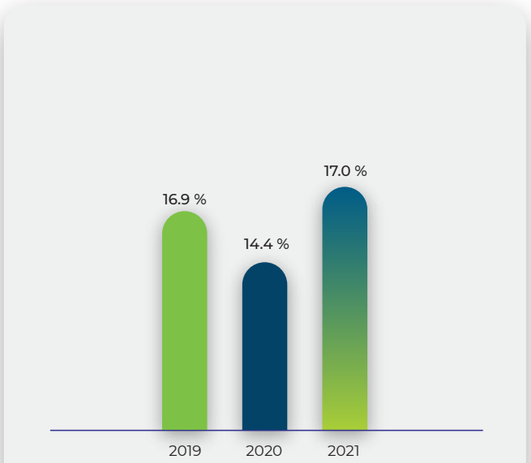
— migration of personnel within Kazakhstan (urban/rural settlements);

— family circumstances, caring for young children/ grandchildren, sick or elderly family members.

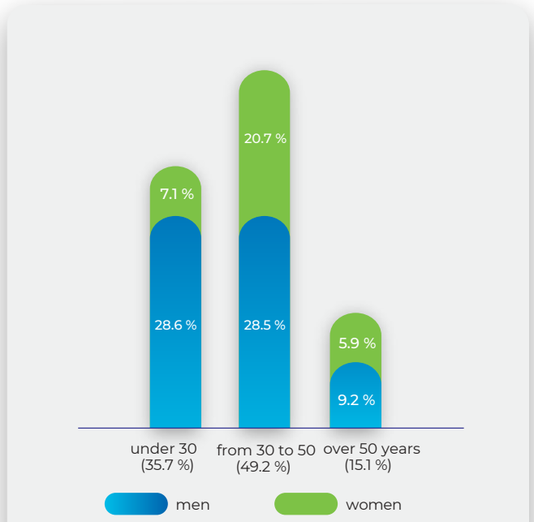
Number of people who left as part of staff turnover in 2021, broken down by age in the context of men and women

In 2021, 2179 labour agreements with employees of the Corporation were terminated, which is 5.0% more than in 2020. The increase in staff resignation was affected by the lifting of restrictions on COVID-19 quarantine. As part of turnover, 1,660 people have quit, of which the main share is among employees at the most productive age for professional work, i.e. 30-50 (49.2%).

Turnover rate



Number of dismissed employees as part of staff turnover by age and gender



In order to reduce the turnover rate, implementation of the following activities continued in 2021:

— identification of the reserves of the wage fund and allocation of the released funds for increasing wages;

— improving mentoring processes and the support system for young professionals;

— material and non-material incentives for qualified employees;

— improving conditions and social guarantees in accordance with collective agreements.

STAFF TRAINING AND DEVELOPMENT

The training and development system in the Corporation provides for the following areas:

— mandatory, prescribed training in the rules of safety, fire safety, and maintenance;

— versatility training;

— advanced training for the development of professional and managerial competencies.

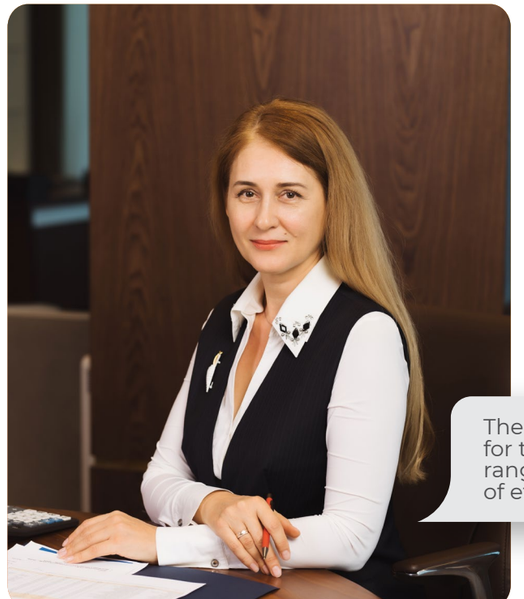
In order to increase the efficiency of activities and create safe working conditions at the Corporation's enterprises, training is conducted in a corporate format and according to individual development plans, remote forms of training are being introduced. We practice training in our own training centers for corporate programs, as well as in third-party training centers.

In 2021, 7,198 people were trained, which is 75.5% of the total number of employees. The number of employees trained at the Corporation's training centers in 2021 amounted to 3,540 people (49.2% of the total number of those trained). The total number of students trained in 2021 is higher than in 2019-2020, due to the established frequency of training and more distance learning (online) during the quarantine period.

The main direction is primary and periodic training on the rules of safety, fire safety, and maintenance:

in 2021, 4,624 people were trained (64.2 % of all trained personnel). In order to expand the professional profile of the Corporation's employees and prepare them for secondary professions, 1,427 employees (19.8% of all trained employees) were trained in 2021.

Professional development in 2021 was organised for 1,088 employees (15.1% of the total number of trained employees).



The training is designed to prepare staff for the appropriate solution of a wider range of tasks and ensure a high level of efficiency in operations.

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Fact

In November 2021, employees of CAPEC Green Energy LLP were trained in the safety standard for operating wind turbines in the Global Wind Organisation, an organisation founded in 2009 by the world's largest manufacturers of wind turbines. The main goal of the GWO is to create a safe working environment in the wind turbine industry and establish common international standards for safety training and emergency response.

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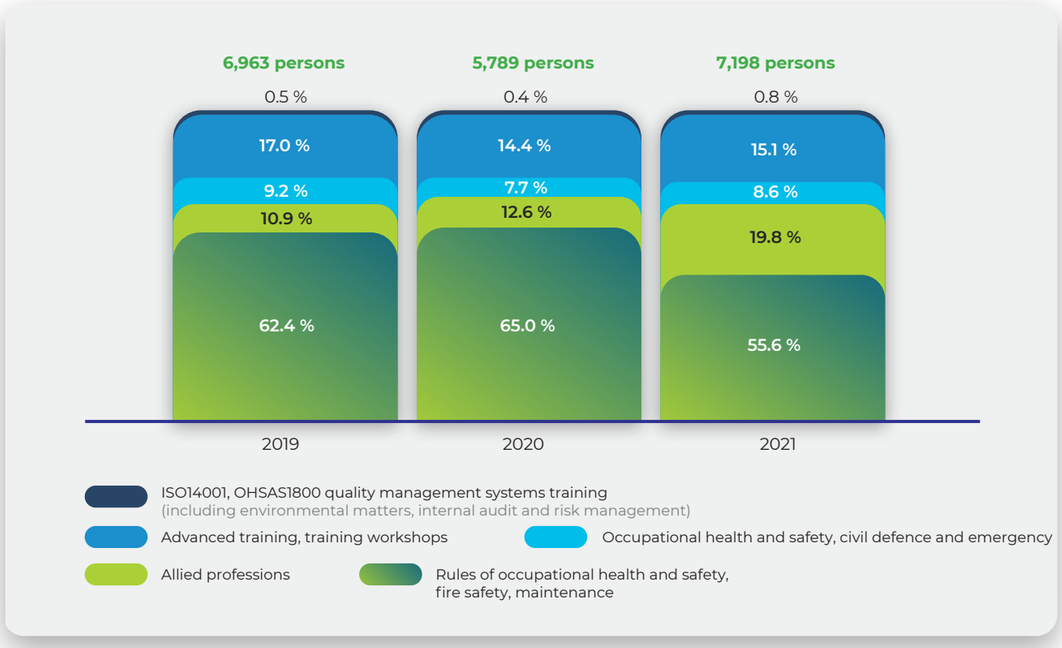
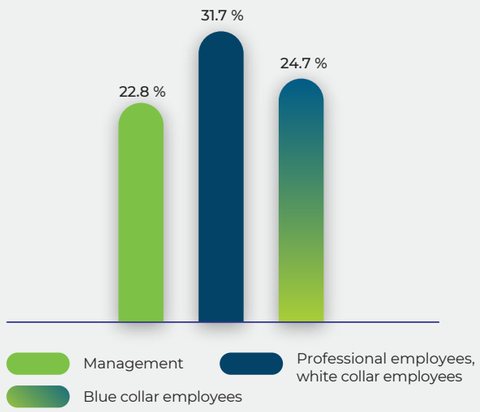
#SDGs #quality_education



Average number of training hours per employee



The average number of hours of training per male employee is 24.2 hours, female - 28.4 hours. Training for employees of production units in accordance with their positions and professions, regulatory requirements and corporate components in training programs, features of training programs prevails in the Corporation.

In 2021, in order to determine the current level of training and identify areas for further development, 241 employees of the Corporation's financial services were evaluated. Based on the results of the assessment, the commission made recommendations on further planning for the development of employee competencies.

In November 2021, employees of Green Energy were trained in the safety standard for operating wind turbines in the Global Wind Organisation, an organisation founded in 2009 by the world's largest manufacturers of wind turbines. The main goal of the GWO is to create a safe working environment in the wind turbine industry and establish common international standards for safety training and emergency response.

Employee pool

To ensure the necessary reserve for holding managerial positions at different levels, in 2021, employee pool of senior, middle and lower management levels for 810 managers was formed in the subsidiaries of CAEPCO JSC.

Development of employee pool is carried out on the basis of individual programs of professional and organisational and managerial training of succession candidates, including training, also in in-house training centers, advanced training, internship, mentoring, performing managerial functions, temporary relocation of an employee. During 2021, 167 people from among the employees who are in the employee pool were transferred to senior positions.

Every year, work is carried out to form an external employee pool, including from among graduates of educational institutions.

335 young specialists work at the Corporation's enterprises, which is 3.5% of the total number of employees. In 2021, 88 young employees were hired, including 16 persons in the positions of lead specialists. At that, the number of persons hired with vocational education and training is 53 persons, with university degree – 35 persons.

4 QUALITY EDUCATION

Implementation of the PROFENERGY project in PAVLODARENERGO JSC

ATTRACTING YOUNG SPECIALISTS AND STAFF DEVELOPMENT

Since 2016, the PROFENERGY project has been implemented in the subsidiaries of CAEPCO JSC to support young specialists and improve the educational level of staff. The program is aimed at attracting graduates of educational institutions to key / crucial professions of enterprises and promotion of the energy profession, personnel development and improvement of the educational level of personnel, retention of key employees. The Corporation's enterprises cooperate with 15 universities and colleges in the regions of their operations.

Regular work is carried out to inform about the contents and conditions of the Program, meetings with students and tours to production facilities are held, employees of enterprises participate in the examination boards and the state attestation commission for final exams and the defence of graduation works.

During implementation of the program, 2,798 students took part in the events, including:

- 216 students undertook a paid internship and signed an agreement on further employment at the Corporation's enterprises after getting a degree;
- 2,442 students completed unpaid industrial placement and pre-graduation internship;
- 116 students were employed during the summer holidays;
- Based on the results of the competition of scientific papers, 24 students were awarded a nominal corporate scholarship.

To raise the interest of graduates of educational institutions to work at the Corporation's enterprises, the Program is constantly being improved, the conditions are adjusted with due account for students' needs, the capabilities of enterprises and the peculiarities of the labour market in the regions of operations.

The Program also provides for activities that encourage employees to receive industry-specific education.

In the period from 2016 to 2021, more than 1140 employees took advantage of the available opportunity:

- 720 employees were granted paid study leave;
- 239 employees were paid bonuses for successful completion of educational institutions;
- 152 employees were provided with an interest-free loan to pay for training;
- the Corporation paid for training of 2 employees.

As part of the PROFENERGY project, a mentoring project is being developed. The purpose of the project is to transfer professional knowledge and skills to students, as well as fast and effective adaptation of young specialists. For 6 years, a pool of mentors has been formed from among highly qualified employees of subsidiaries of CAEPCO JSC, including those of retirement and preretirement age. More than 500 employees are appointed as mentors every year.

Motivation and remuneration of personnel

The group of companies has a unified system of remuneration and incentives for employees. The salary level is set in accordance with the unified tariff grid, which is a grading system of remuneration for all categories of employees, regardless of their gender identity.

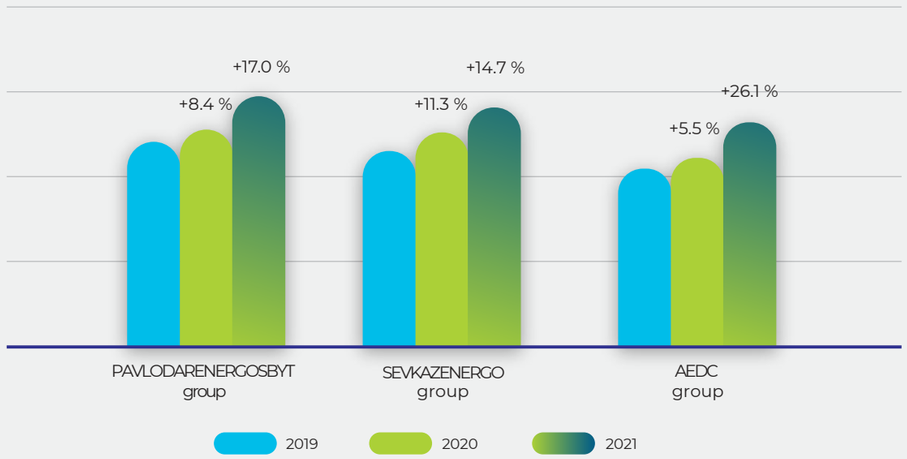
Incentives and remuneration in the Corporation are aimed at improving the efficiency and effectiveness of each employee's work. Every year, the enterprises of CAEPCO JSC make a differentiated increase in wages within the approved budgets and tariff estimates, taking into account the importance and significance of the personnel and the contribution to the results of work.

During 2021, the salary indexation was performed in the group of companies with an emphasis on production and working personnel (from 5 to 19% increase). On average, the Corporation's salary level increased by 17%.

Intangible incentives

Every year, events are held at the Holding's enterprises, where the most distinguished, honoured employees, as well as long-service employees of enterprises are honoured. In 2021, 330 employees and long-service employees of enterprises were put in for awarding for strong performance and contributing to the development of the energy industry in the Republic of Kazakhstan, including 120 persons with state, departmental and industry awards, and 163 employees with corporate awards of CAEPCO JSC and enterprises. On the occasion of the celebration of the 100th anniversary of the State Commission for Electrification of Russia (GOELRO) plan, 3 employees were awarded with memorial badges.

Growth rate of average income in the context of subsidiaries of CAEPCO JSC



Employee-management relations

In relations with employees, the Corporation complies with all the requirements of labour legislation and the Code of Business Ethics, respects personal freedom and human rights, provides everyone with equal opportunities and does not allow discrimination in labour, as well as does not use child labour in any of its businesses.

The minimum period for notifying employees of significant changes in the Corporation's activities is made in accordance with the legislation of the Republic of Kazakhstan and in accordance with internal regulatory documents.

The minimum period for notifying employees upon termination of employment relations due to a reduction in force is one month in accordance with the Labour Code of the Republic of Kazakhstan.

Labour disputes at the Corporation's enterprises are resolved in accordance with the current legislation, as well as within the framework of Collective Agreements and the provisions on the grievance committee for individual labour disputes with the participation of representatives of the employer and employee. The procedure for applying and receiving feedback on labour disputes is determined by the internal regulatory document of the enterprise which is presented to employees during employment.

The composition of the grievance committee is approved by the organisational and administrative document for enterprises.

In the event of a labour dispute, before applying to the grievance committee, an employee has the right to apply:

1) to the head of the human resources department,
2) to the chairman of the trade union/employee representative,
3) to the chief executive officer of the enterprise.

In 2021, three cases of employees applying to the grievance committee for the settlement of a labour dispute were established. All appeals were reviewed and settled. Discrimination of employees on any basis and cases of violation of the rights of employees were not revealed.

INTERACTION WITH TRADE UNIONS

Trade unions operate at the Corporation's enterprises, and labour relations with employees are regulated by collective agreements.
In SEVKAZENERGO group of enterprises, a single collective agreement was concluded for 2021-2024, at the enterprises of AEDC group – for 2019-2021, in PAVLODARENERGO group of enterprises - for 2020-2025.

Collective agreements regulate measures of social responsibility for employees and their families, regardless of their membership in a trade union.

As part of social partnership, with the participation of enterprises and trade unions, the following events are held annually:

- sports and recreational activities;
- organisation of leisure and recreation, mass cultural events;
- sponsorship of anniversaries and holidays;
- charitable support.

The principles of the collective agreement **are represented by economic feasibility, sufficiency, joint responsibility and transparency**

#Fact

Name	2019	2020	2021
Number of employees participating in a trade union, persons	5 196	4 699	3 862
Share of the total headcount, %	49	45	40

In the dynamics of the past years, a decrease in the share of employees who are members of a trade union is observed at all enterprises of the Corporation, which is due to a decrease in the number of employees in the Corporation and the influence of global processes of individualisation of social and labour relations.

SOCIAL SUPPORT, GUARANTEES AND COMPENSATORY PAYMENTS

The social policy of CAEPCO JSC is determined jointly with employees and their representatives, i.e. trade unions, and is provided at the expense of the financial capabilities of the Corporation's subsidiaries.

Objectives	Social package
Incentives for personnel for long-term work	Additional professional pension contributions in the amount of 5%; award for professional competitions; remuneration on the occasion of anniversaries and holidays.
Effective compensation and preferential system	Compensation of housing maintenance and utilities expenses, dormitory discounts, residential lease; motor transport services for transportation of workers to and from work; coal supply at cost to employees living in houses with stove heating; compensation of vouchers to camps for children under 15; New Year's gifts for children of employees.
Support for staff performance and health	Insurance against accidents and diseases at work; mandatory medical insurance; reimbursement of costs for health resort preventive treatment.

Objectives	Social package
Social support for employees	Financial aid for the birth of a child; financial aid for funeral services; financial aid to large and low-income families; paid study leave; retirement benefits; the company's long-service employees support program; other aid.
Sports and recreational activities	Reimbursement of expenses for meals to participants of sports competitions; reimbursement of expenses for holding cultural events and collective recreation.

Social assistance due to maternity or paternity

Company name	Number of employees who have issued maternity leave / childcare leave during a year			Number of employees on maternity leave / childcare leave at the year-end	Number of employees who returned from maternity leave / childcare leave during the year
	women	men	total		
CAEPCO JSC	1	0	1	6	0
PAVLODARENERGO group of companies	84	3	87	201	65
SEVKAZENERGO group of companies	30	1	31	76	20
AEDC group of companies	37	0	37	41	31
Total	152	4	156	324	116

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The Corporation regularly provides social support to veterans and former employees of enterprises who have reached retirement age. As part of the Collective Agreement, financial assistance is provided, leisure time is organised for holidays, etc.

CAEPCO JSC is an active participant in social projects aimed at supporting the population in the regions of its presence. In Petropavlovsk, there are two dormitories and a kindergarten Alakay for employees of enterprises and residents of the city.

Plans for 2022

In 2022, implementation of the personnel management policy aimed at attracting and developing the professional staff of the Corporation will continue. As part of this direction, it is planned:

1. To further develop the PROFENERGY project in the following areas:
— a system for supporting young professionals and improving the educational level of personnel;
— mentoring project development;
— key personnel development program;
— crucial professions program.
2. Improvement of key performance indicators for achieving the strategic and operational goals of the Corporation.
3. Implementation of programs to improve the living conditions of employees of key and crucial professions.
4. Further automation of HR processes related to personnel development– adaptation, evaluation, training, etc.
5. Implementation of ENBEKENERGY project to attract personnel from the manpower-surplus regions of the Republic of Kazakhstan and labour management at the enterprises of the group of companies.
6. Improvement of the system of corporate training, training and retraining of personnel amid shortage of the labour market, improvement of qualitative indicators of training, introduction of a system for monitoring the effectiveness of training results.

RUS

Video with the address of the Chairman of the Management Board on Occupational Health and Safety

KAZ

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

2021

OCCUPATIONAL HEALTH AND SAFETY

Strategic goals in occupational health and safety and carried out activities

The main principle in all types of activities of the group of companies is the priority of the life and health of employees in relation to the results of production activities. The personnel of the group of companies is the main resource in creation of a high production culture.

The main goal of CAEPCO JSC and its subsidiaries in the area of occupational health and safety was and remains 0 incidents – this means 0 accidents at work, 0 occupational diseases, 0 harm to anyone as a result of our activities.

In 2021, **it was managed to reduce the total number of accidents** by 30% compared to 2020 and by 60% compared to 2016. No fatal cases were recorded

#Results

In 2021, the Company's enterprises continued to implement the activities of the CAEPCO corporate plan for occupational health and safety for 2020-2021 approved in 2020 (hereinafter referred to as the Plan). According to the Plan, the implementation of the following activities continued in 2021:

1. practical implementation of video recorders in electric grid companies (EDC) for recording the team's admission to work, instructing the team, preparing workplaces;

2. Traditionally, in order to promote safe work and increase the conscious attitude of employees to the safety of the labour process, events dedicated to the World Day of Occupational Health and Safety were held in all branches of the Company

— safety months, during which audits, preventive conversations and meetings on occupational health and safety with personnel were conducted;

— contests of children's drawings and crafts on the topic: My parents work safely;

— the best and most committed employees who have worked for a year without violations are identified and rewarded with memorable souvenirs (diplomas) and certificates.

3. Implementation of integrated automation of all aspects of occupational safety (Safety walk), which allows to consolidate and automate activities in occupational health and safety in the following areas: audits, incident management, occupational health and safety risks, occupational health and safety training, contractor management (control of contractors' access to facilities and detection of violations of the contractor's security requirements);

4. A mutual audit was conducted at the enterprises of subsidiaries PAVLODARENERGO JSC and SEVKAZENERGO JSC, aimed at preventing injuries, as well as incidents and accidents during the operation of power and technological equipment; application of best practices identified during the mutual audit made it possible to improve the overall situation and labour protection indicators.

In addition, the Company's subsidiaries have completed the following activities:

1) at the generation facilities of PAVLODARENERGO JSC and EKIBASTUZTEPLOENERGO LLP, according to the schedules of capital and current repairs, maintenance sites, protective fences, and ash sluiceways are brought into compliance with the requirements of occupational health and safety;

2) a sanitary and epidemiological audit was conducted in the structural divisions of PAVLODARENERGO JSC for compliance with the requirements of sanitary and epidemiological standards. Auditor's report No. 957 and certificate of passing the sanitary and epidemiological audit were obtained;;

3) external audits were carried out by TÜV Rheinland Kazakhstan LLP for compliance of the enterprises with the ISO 45001 standard. Based on the results, all enterprises successfully implemented the transition to the new standard;

4) EKIBASTUZTEPLOENERGO LLP partially reconstructed the roof of the KVTK water heating building;

5) repair of shower and household premises of the Southern Grid district (block site No. 2) of Pavlodar Heat Networks LLP and major repairs of the roof at the central heating points of central heat supply station 32, central heat supply station 34 was carried out;

6) to control carbon monoxide in the air of the working area, 3 gas analysers Hobbit-T were purchased for Pavlodar Heat Networks LLP;

7) the health center of Pavlodar Heat Networks LLP is provided with mobile quartz lamps;

8) at PCHP-2 of SEVKAZENERGO JSC, video cameras are installed around the perimeter and in the premises for the possibility of monitoring compliance with the speed limit by motor transport, compliance by employees with the rules on safety and labour protection, fire safety;

9) SEVKAZENERGO JSC has made and demonstrated a video clip for the introductory briefing;

10) During the year, production tests of samples of personal protective equipment (workwear and safety shoes) were carried out, as well as relevant documents (acts, protocols) were drawn up based on the results of these tests;

11) electric grid companies have provided electrical personnel with sets of special clothing made of heat-resistant fabrics with protection against thermal risks and electric arcing.

Actual costs under Labour protection in 2021 amounted to about 1.84 billion tenge. Financial resources have been invested in providing the Corporation's employees with the necessary personal protective equipment, including electrical protective equipment, special food, medicines, vaccination, staff training, in the purchase of information posters, publications of regulatory and technical documents and signs on occupational health and safety, in the purchase of fire extinguishing equipment, as well as the implementation of measures for additional lighting of workplaces, repair of ventilation and air conditioning systems, repair of buildings and structures, and others.

CAEPCO's Occupational health and safety Policy is published on the website www.caepco.kz

OCCUPATIONAL HEALTH AND SAFETY COUNCILS

Each subsidiary has established councils on occupational health and safety. The Council is headed by a chairman from among the employees of the enterprise. The council consists of representatives of the employer, representatives of the trade union organisation, including technical labour inspectors.

The Occupational Health And Safety Council performs the following functions:

— studies the causes of industrial injuries and occupational diseases, analyses the effectiveness of measures taken on labour conditions and protection, information and analytical materials on the actual state of labour protection in the organisation;

— analyses the results of workplace certification in terms of working conditions, participates in the preparation of structural divisions and the organisation as a whole to bring permanent jobs at production facilities in line with labour protection requirements;

— considers proposals to eliminate identified violations in the area of occupational health and safety, create safe working conditions in the organisation, develop programs, recommendations, decisions and others aimed at preserving the life and health of employees in the course of their work;

— provides assistance in conducting timely and high-quality training of employees on labour protection, as well as checks of knowledge in the area of occupational health and safety, regular training and improving the knowledge of employees, trade union activists and employees on issues of legislation in the area of labour protection;

— makes proposals for introducing more advanced technologies and new equipment into production in order to create safe working conditions and eliminate heavy physical work;

— informs employees of the organisation about the measures taken to improve labour conditions and safety, prevent industrial injuries, occupational diseases, current standards for providing certified special clothing, special shoes and other personal protective equipment, and the correctness of their use;

— participates in the consideration of issues related to the financing of labour protection measures in the organisation, mandatory social insurance against industrial accidents and occupational diseases; monitoring the expenditure of the organisation's funds aimed at improving labour protection conditions.

Health and safety technical inspectors

Technical labour protection inspectors work in each subsidiary. In their activities, technical labour protection inspectors interact with the heads of departments, the labour safety and health service, the operation inspection, the inspection for supervision of industrial safety facilities, as well as with state labour inspectors, state supervision and control.

The main functions of occupational health and safety technical inspectors are:

— protection of the rights and interests of employees;

— participate in the development and submission of proposals to the Labour protection of the collective agreement, as well as in comprehensive target programs and plans of priority measures to improve labour protection developed by the bodies;

— monitoring compliance with labour protection requirements at workplaces;

— representation of the interests of trade union members in state, public organisations, courts of various instances when reviewing labour disputes related to the application of the Labour Code in terms of labour protection.

COVID-19

In 2021, the management of CAEPCO JSC and its subsidiaries took all necessary measures for the safety of personnel and uninterrupted supply of heat and electricity to the population. To prevent the incidence and spread of infection, various measures were carried out. The main task during the pandemic was to develop universal immunity through vaccination.

The number of vaccinated personnel was 8,271, or 90% of the total headcount The remaining employees either had a permanent or temporary medical exemption, or had been ill with COVID-19 less than three months ago.

#Fact

Employees of sales companies (operators, supervisors) who directly work with a large flow of people were among the first to be vaccinated. About 95% of the personnel of PAVLODARENERGOSBYT LLP and SEVKAZENERGOSBYT LLP were vaccinated.

— In the management company of CAEPCO JSC, the share of staff who received vaccinations was 93 %.

In the context of CAEPCO JSC subsidiaries, the situation regarding staff vaccination is as follows:

— PAVLODARENERGO JSC – 85 %;

— SEVKAZENERGO JSC – 95 %;

— AEDC JSC – 90%.

High vaccination rates at the enterprises of CAEPCO JSC were achieved due to the following measures:

— personnel and occupational health and safety specialists conduct continuous explanatory work with the staff;

— organisation of vaccination directly in the medical centers of enterprises;

— providing vaccinated people with additional vacation days;

— explanations about vaccination via social networks, industry newspapers, and videos;

— placement of posters about the benefits of vaccination in workshops and on information stands.

TYPES AND LEVEL OF OCCUPATIONAL INJURIES

In the reporting year, 5 accidents were registered at the Corporation's enterprises, including 1 with a mild outcome and 4 with a severe one. Every year, the Company conducts a detailed analysis of industrial injuries, including statistics on the severity and number of injuries in CAEPCO JSC and its subsidiaries, data on the accident frequency coefficient, the dynamics of injury indicators, diagrams of the distribution of the number of accidents by the time of their occurrence during the day, the distribution of the number of accidents by the age of the victims, the distribution of the number of accidents by the length of work of the victims, the causes of accidents, a classifier by types of accidents that resulted in the accident, comparison of the level of injuries by companies with a similar field of activity, etc. The Corporation strives to minimise industrial injuries and pays great attention to both the state of safety at workplaces and the elimination of the causes that resulted in accidents.

Classification of accidents by type of accidents in 2021:

— the victim's fall from a height - 2 cases;

— the victim's fall – 2 cases;

— electric shock - 1 case.

The causes of accidents were:

— unsatisfactory condition of buildings and structures;

— gross negligence of the injured person.

A set of measures was carried out for each accident:

— a detailed investigation to identify the root and systemic causes and prevent the recurrence of such incidents;

— familiarisation of the staff with the circumstances and causes of accidents;

— elimination of the causes of the accident;

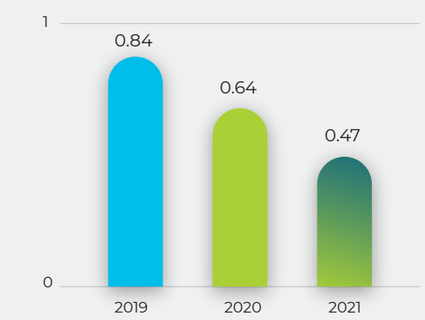
— instructing staff, etc.

The level and coefficients of occupational injuries in the Corporation are shown in the table and diagrams below.

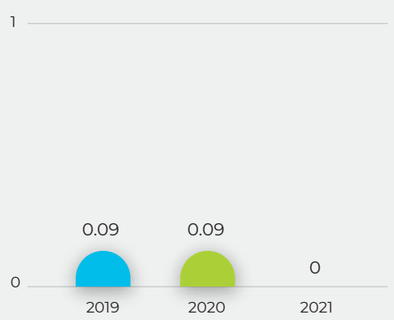
Occupational injury rate

	2019	2020	2021
List number of personnel	10,553	10,441	9,536
Number of traumatic cases	9	7	5
Number of victims / of them women	9/0	7/0	5/0
Number of fatal cases	1	1	0

Total Incident Frequency Rate (TIFR) per 1,000 employees



Fatality Incident Frequency Rate (FIFR) per 1,000 employees



The frequency coefficient of all accidents and injuries at work (TIFR) per 1,000 employees was calculated using the formula:

$$IR = \frac{n \times 1000}{N}, \text{ where}$$

n – the total number of victims of industrial accidents during the reporting period;

N – is the average number of employees.

The frequency coefficient of all accidents and injuries at work (TIFR) per 1,000 employees was calculated using the formula:

$$IR_1 = \frac{n_1 \times 1000}{N}, \text{ where}$$

n_1 – the number of fatal industrial injuries during the reporting period;

N – is the average number of employees.

The system of registration, reporting and notification of accidents operating in the Corporation complies with the requirements of the legislation of the Republic of Kazakhstan and the International Labor Organisation.

In order to prevent occupational injuries, monitor and account for cases of violations of safety and labour protection requirements, the following work is carried out in the Corporation and its subsidiaries:

— investigation of micro-injuries, incidents, potentially dangerous incidents that are the basis for more serious injuries and damage;

— preparation of newsletters on the results of accidents and informing the personnel of all enterprises of the Corporation's subsidiaries about them in order to bring the causes and prevent the recurrence of similar cases in the future;

— training of personnel on occupational health and safety, electrical safety and knowledge testing;

— implementation of internal regulatory documents on occupational health and safety;

— carrying out planned and sudden checks of the state of occupational health and safety;

— conducting occupational health and safety days;

— holding meetings on occupational health and safety;

— bringing workplaces in line with the requirements of occupational health and safety;

— providing workplaces with information posters and safety signs;

— conducting professional competitions;

— carrying out events on an indicative outfit-admission, etc.

In accordance with the requirements of the Law of the Republic of Kazakhstan "On compulsory insurance of an employee against accidents in the performance of his / her labour (official) duties", **all employees of the Corporation's enterprises are insured against accidents**

#Fact

Employees of the Corporation whose professional activity is associated with a high risk of injury

The maintenance and repair of power equipment is associated with high risks. To ensure safety during the work in electrical installations, personnel training, organisational and technical measures are carried out, and their implementation is monitored. The personnel is provided with the necessary personal protective equipment, electrical protective equipment and others.

In recent years, a number of measures have been taken to improve safety during work in electrical installations:

— electrotechnical personnel of CAEPCO JSC are provided with the best personal protective equipment and special clothing for protection from electric arc;

— to increase the labor discipline and responsibility of production personnel involved in operational switching during admission to work, preparation of workplaces, installation/ removal of earthing at workplaces, etc. mobile video recorders are used by personnel in the Company's management department;

— the EDC staff is provided with touch voltage detectors designed for remote monitoring of the presence of dangerous voltage in order to prevent electric shock to personnel servicing electrical installations and overhead lines of 6-10 kV, and a number of others.

Nevertheless, in 2021, 1 case of electric shock / burns from the occurrence of an electric arc during the maintenance of electrical installations was registered.

All cases of electrical injuries have been investigated in detail, and preventive measures have been taken.

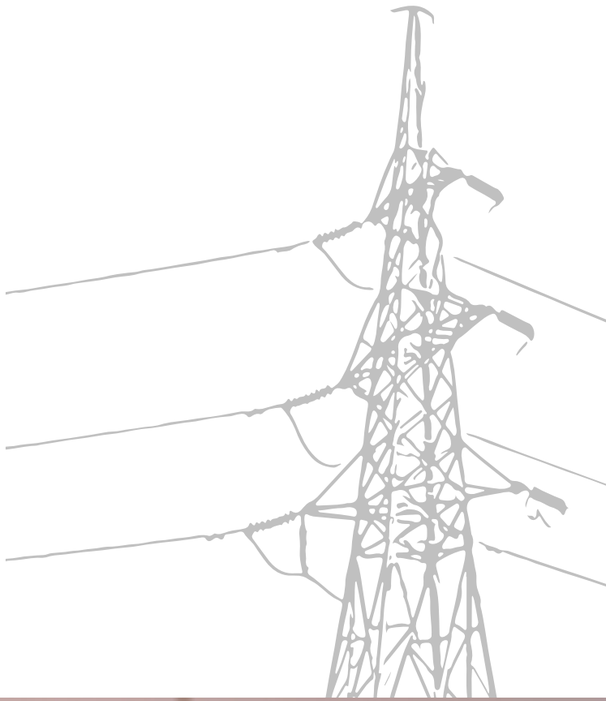
Contracting entities

The activities of contractors involved in the production facilities of the Corporation are monitored: specialists of the subsidiaries conduct inspections in contractors, briefings for contractors' personnel, meetings with contractors.

Interaction with contractors of CAEPCO JSC in terms of the requirements in the area of safety, labour protection and ecology imposed on contractors when performing works or services on the territory of the subsidiaries, as well as when delivering goods/materials, is carried out in accordance with the Rules approved by the Company for interaction with contractors in occupational health and safety and ecology.

Any accident with the contractor that occurs on the contract territory is primarily reflected in the image of the customer's company. In order to prevent injuries and promptly respond to accidents committed by the contractor, the same work is carried out as in the production units of CAEPCO JSC.

In 2021, the contractor had 2 accidents, 1 with a light and 1 with a severe outcome.



Plans for 2022

In 2022, work will continue on the implementation of best practices in the area of occupational health and safety, such as:

1) implementation of the occupational health and safety procedure Work Safety Analysis; the procedure will describe in detail the process of risk assessment before starting work, instructing personnel before performing work, etc.;
2) Holding events dedicated to the World Day of Occupational Health and Safety;
3) conducting mutual audits at the enterprises of AEDC JSC and PAVLODARENERGO JSC;
4) Carrying out work within the framework of the Company's internal regulatory documents:

— Methods of organising the activities of working groups on the certification of workplaces ("Quick victories");

— regulation “On the signal sheet on safety and labour protection”;

— album “Additional safety signs in the energy sector and the requirements”;

— the standard for “Safety requirements for the interaction of vehicles and pedestrians at production sites and facilities”;

— the standard for “Working at height”;

— guidelines for “Safety measures when performing work in confined spaces”;

— “isolation of energy sources” standard;

— "procedure and control of the use of mobile video recorders” instruction.

The following events are also planned for 2022:

1) holding professional skill competitions among divisions of electric grid companies;
2) Ekibastuzteploenergo LLP – purchase and installation of road signs, marking and planning of pedestrian paths, roadways;
3) Ekibastuzteploenergo LLP - purchase of video recorders to control the quality of training sessions conducted by shift supervisors;
4) improvement of sanitary standards for employees of Ekibastuzteploenergo LLP, continuation of reconstruction of the roof of the building of the KVTK hot water building, row B-C, axis 1-29, level +39.0 m;
5) retrofitting with the necessary equipment and propaganda material on occupational health and safety of the training class at CHP-3 of PAVLODARENERGO JSC;
6) major repairs of the central heat supply station 15 building, as well as installation of plastic windows in the administrative and amenity building, replacement of floors in the corridor of the administrative and amenity building of the Southern Network district Of Pavlodar Heat Networks LLP to bring it in compliance with fire safety requirements;
7) repair of the service area in the ground pavilions of the Northern Network District of Pavlodar Heat Networks LLP.

CONSUMER SAFETY

The Corporation cares about the health and safety of its consumers. For this purpose, systematic public awareness efforts, as well as inspection of equipment, are carried out. The Corporation's subsidiaries are introducing advanced technologies, as well as implementing measures for the safe production of works.

Public awareness efforts

The management of each district subdivision of the Corporation's electric grid enterprises, together with specialists of occupational health and safety services, conduct information and explanatory work among the population on the topic of compliance with safety rules near existing electrical installations and power transmission lines.

Extracurricular hours on electrical safety are held annually in educational institutions (in the regions of operation). Letters are sent to the Department of Education of the Akimat of North-Kazakhstan, Pavlodar and Akmola regions, the State Institution Department of Education of Petropavlovsk and Pavlodar, heads of district education departments with a memo of the basic rules of electrical safety and measures to prevent electrical injuries among children for further distribution. These activities are carried out in order to prevent injuries among third parties, namely among school-age children and college students.

In order to warn the public and personnel about the danger, safety signs and inscriptions are placed on all electrical installations operated by subsidiaries, all equipment is protected from unauthorised entry, there are appropriate fences and locks.

Regional and district mass media publish articles aimed at preventing injuries, including children's injuries, and protecting the health of the population.

Ensuring the health and safety of consumers in sales enterprises

In order to ensure the safety and health of consumers, the service centers of energy marketing enterprises of CAEPCO JSC are equipped / provided with:

— anti-slip rubber mats on the entrance units to prevent visitors from falling;

— ramps or call buttons for staff to help customers with disabilities;

— video surveillance systems;

— medical first-aid kits with the necessary medicines;

— air conditioning systems;

— fire and security alarm systems and primary fire extinguishing means, emergency plans and safe emergency exits.

ENVIRONMENTAL SAFETY

In the regions of its presence, the Corporation strives to continuously reduce the negative environmental impact of fossil fuel energy production.

To do this, the Corporation takes a set of measures and carries out systematic modernisation of its production assets, continuously improving the level of environmental safety and sustainable development of its subsidiaries.

During the period of validity of the state program "Tariff in exchange for investment" (2009-2015), the Corporation attracted significant investments for the modernisation of the main generating equipment and funds of environmental significance. All of the Corporation's boilers have upgraded their ash treatment facilities and implemented primary methods for reducing nitrogen oxide emissions. Efficient international technologies are used in the construction of new sections of landfills and materials that prevent contamination of ecosystem components.

In the reporting year, the Corporation developed a draft pre-feasibility study for the implementation of the best available technologies for two of its major power plants. This project considers the best available technologies for reducing atmospheric emissions that can be implemented.

Environmental management system

Certification helps enterprises improve their processes for minimising risks to the environment, personnel or other stakeholders who may be exposed to hazards associated with their production activities, and more effectively fulfil their obligations in the area of environmental safety.

In addition to the environmental management system, the Corporation also successfully operates a quality management system (ISO 9001), a health and safety management system (ISO 45001) and an energy management system (ISO/CD 50001).

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Fact

For more than eight years, **an environmental management system has been operating at all the Corporation's production facilities**, which is developed in accordance with the international standards of the ISO series

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#SDGs #partnership #responsible_consumption

In 2021, TÜV Rheinland Gert GmbH conducted supervisory and certification audits of subsidiaries of the Corporation for compliance with the requirements of international standards ISO 14001 (Environmental Management System), ISO 9001 (Quality Management System), ISO 45001

(Health and Safety Management System), ISO/CD 50001 (Energy Management System). As a result, certificates of the integrated management system were obtained and its efficiency, effectiveness and focus on improvement were confirmed.

Obligations of CAEPCO JSC:

1) According to the contractual obligations of CAEPCO JSC with the EBRD, the Holding and its subsidiaries annually develop and implement environmental and social action plans, which is an integral part of the loan agreement. The HSE department annually generates an ESAP report on the implementation of the Plan posted on the Company's website;

2) Requirements for contractors of CAEPCO JSC and its subsidiaries, prescribed in the Rules of interaction with contractors in the area of safety and labour protection and environmental protection. If the company does not have management systems, the Holding has no right to require the availability of these systems from contractors, involved in the performance of works at the company's facilities;

3) The time and funds spent by the Company on the implementation and maintenance of systems, training of specialists of CAEPCO JSC and its subsidiaries on systems. The complexity and cost of the system recovery process;

4) In the energy sector of Kazakhstan, 95% of the total number of all companies, including the parent company and all production units, have appropriate certificates of compliance with international management system standards.

Information on IMS certificates of CAEPCO JSC subsidiary

Ser. No.	Standard	Reg. Certificate No.	Validity period	Type of audit in 2022	Deadline for performing the audit
PAVLODARENERGO JSC (CHP-2 and CHP-3)					
1	ISO 14001:2015	01 104 1321810	from 20.12.2021 to 19.12.2024	1 compliance audit	September-October
2	ISO 9001:2015	01 100 1321810	from 20.12.2021 to 19.12.2024	1 compliance audit	September-October
3	ISO 45001:2018	01 213 1321810	from 26.01.2021 to 25.01.2024	2 compliance audit	September-October
4	ISO 50001:2018	01 407 1321810	from 20.12.2021 to 19.12.2024	1 compliance audit	September-October
EKIBASTUZTEPLOENERGO LLP					
5	ISO 14001:2015	01 104 1819006	from 20.01.2020 to 19.01.2023	Recertification audit	August-September
6	ISO 9001:2015	01 100 1819006	from 20.01.2020 to 19.01.2023	Recertification audit	August-September
7	ISO 45001:2018	01 213 1819006	from 20.01.2020 to 19.01.2023	Recertification audit	August-September
8	ISO 50001:2018	01 407 1819006	from 20.01.2020 to 19.01.2023	Recertification audit	August-September
PEDC JSC					
9	ISO 14001:2015	01 104 1319426	from 21.06.2021 to 20.06.2024	1 compliance audit	April-May
10	ISO 9001:2015	01 100 1319426	from 21.06.2021 to 20.06.2024	1 compliance audit	April-May
11	ISO 45001:2018	01 213 1319426	from 21.06.2021 to 20.06.2024	1 compliance audit	April-May
12	ISO 50001:2018	01 407 1319426	from 21.06.2019 to 20.06.2022	Recertification audit	April-May
Pavlodar Heat Networks LLP					
13	ISO 14001:2015	01 104 2143050	from 18.02.2021 to 17.02.2024	1 compliance audit	February-March
14	ISO 9001:2015	01 100 2143050	from 18.02.2021 to 17.02.2024	1 compliance audit	February-March
15	ISO 45001:2018	01 213 2143050	from 18.02.2021 to 17.02.2024	1 compliance audit	February-March
SEVKAZENERGO JSC					
16	ISO 14001:2015	01 104 2026502	from 10.09.2020 to 09.09.2023	2 compliance audit	April-May
17	ISO 9001:2015	01 100 2026502	from 10.09.2020 to 09.09.2023	2 compliance audit	April-May
18	ISO 45001:2018	01 213 2026502	from 07.10.2020 to 06.10.2023	2 compliance audit	April-May
North-Kazakhstan REDC JSC					
19	ISO 14001:2015	01 104 1518811	from 28.06.2021 to 27.06.2024	1 compliance audit	May-June
20	ISO 9001:2015	01 100 1518811	from 28.06.2021 to 27.06.2024	1 compliance audit	May-June
21	ISO 45001:2018	01 213 1518811	from 28.06.2021 to 27.06.2024	1 compliance audit	May-June
Petropavlovsk Heat Networks LLP					
22	ISO 14001:2015	01 104 2026503	from 07.07.2021 to 06.07.2024	1 compliance audit	April-May
23	ISO 9001:2015	01 100 2026503	from 02.12.2020 to 01.12.2023	2 compliance audit	April-May
24	ISO 45001:2018	01 104 2026503	from 07.07.2021 to 06.07.2024	1 compliance audit	April-May
AEDC JSC					
25	ISO 14001:2015	01 104 1819000	from 19.08.2021 to 18.08.2024	1 compliance audit	June-July
26	ISO 9001:2015	01 100 1819000	from 19.08.2021 to 18.08.2024	1 compliance audit	June-July
27	ISO 45001:2018	01 213 1819000	from 19.08.2021 to 18.08.2024	1 compliance audit	June-July

Environmental policy

The main obligations and principles in ensuring a favourable environment are set out in the Corporation's Environmental Policy. The document contains the Corporation's goals and objectives in the area of the environment in the regions where it operates, and also emphasises the importance of continuous environmental education for all its employees.

General management of environmental protection activities is carried out by the Department of Safety, Labour Protection and Ecology. The Department coordinates the Corporation's work in the area of environmental protection, analyses the effectiveness of this work, and prepares reports for senior management and shareholders. At the level of subsidiaries, divisions are formed that ensure the implementation of Environmental Policy, compliance of all production processes with legal requirements in the area of environmental protection and corporate standards.

Within the Corporation, mutual environmental audits are conducted twice a year on the basis of one of its subsidiaries, within which environmental specialists from all enterprises actively exchange experience in the area of effective environmental management and environmental management and develop common approaches in the area of environmental safety.

You can read the full text of CAEPCO's Environmental Policy on the website www.caepco.kz

The main principles of the Corporation's environmental policy are as follows:

- recognition of the constitutional human right to a favourable environment
- priority of taking preventive measures over measures to eliminate environmental negative impacts
- energy saving and rational use of natural and energy resources at the stages of production, transmission, distribution and consumption of electric power and heat
- reducing the impact on the environment by implementing the best available technologies and improving the energy efficiency of production

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Fact

In 2021, the mutual audit was conducted in May and September on the basis of PAVLODARENERGO JSC and SEVKAZENERGO JSC, respectively

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#environmental_policy

The Corporation manages environmental safety when working with suppliers and contractors. Environmental requirements for the procurement of products and services are defined in the corporate document "Rules for interaction with contractors in the area of occupational health and safety and environmental protection and the standard contract of the Corporation. Compliance with these requirements is mandatory on the part of counterparties.

The Corporation constantly cooperates with contractors to inform and ensure compliance with local environmental requirements and begins this work at the stage of selecting a supplier and entering into a contract.

The Department of Safety, Labour Protection and Environment, together with the responsible services of subsidiaries, monitors contractors' activities locally by conducting inspections. Based on the results of inspections, reports are generated with an assessment of contractors' performance and their compliance with all corporate environmental standards.

Principles of a **Green Office** in the Corporation

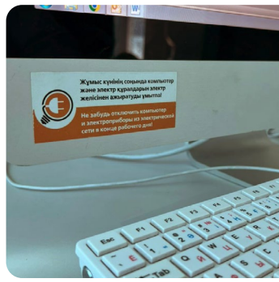
The goal of the **Green Office** is to reduce the negative impact of the company's activities on the environment and promote the rational use of resources.

The Corporation started its activities in accordance with the recommendations of green office since 2018; to date, the following activities have been implemented:

— separate collection of waste paper (waste paper and cardboard);

— a sticker on the PC of employees with a call to disconnect the computer and electrical appliances from the electrical network at the end of the working day;

— raising awareness of employees through internal distribution of videos and presentations on the concept of Green Office.



As part of the green office, by the end of 2021, about 300 kg of waste paper (including paper and cardboard) was collected and transferred to the hydro-trigger at the Corporation's office.
The use of waste paper significantly saves wood (1 ton of waste paper replaces about 4 cubic meters of wood, or 100 kg of waste paper saves 1 tree) and reduces deforestation

#Results

Introduction of THESIS electronic document management system allowed to reduce the number of paper documents in circulation and save office paper.

The Corporation's subsidiaries also have separate waste collection facilities; the materials of introductory briefings and memos for visitors reflect the recommendations of the Green Office in terms of rational use and saving of water resources and energy, as well as calls for separate waste collection.

Environmental protection measures

To improve the efficiency of activities in the area of environmental protection, the Corporation plans and implements environmental protection measures aimed at reducing the level of impact of its activities on the environment and improving the environmental efficiency and safety of its enterprises.

9,340.916 million tenge was used for the implementation of environmental protection measures in 2021.

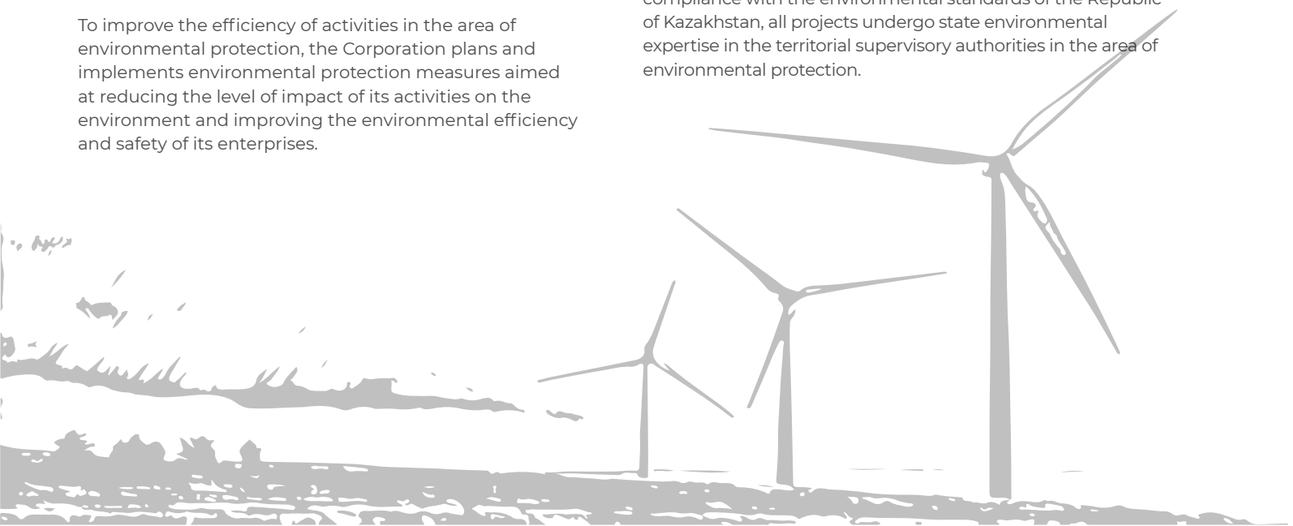
#Fact

1.3 billion tenge of tax payments for environmental emissions was transferred by the Corporation in the regions of its presence

#Fact

The list of such measures includes modernisation of equipment that has a negative impact on the operating system, major repairs of the main and auxiliary technological equipment in power generation, transmission and distribution, industrial waste management, and industrial environmental control.

For all new construction and reconstruction projects, a project or section on environmental issues Environmental Impact Assessment is developed, the materials of which are brought to the attention of local communities and the interested public in the form of public hearings. To confirm compliance with the environmental standards of the Republic of Kazakhstan, all projects undergo state environmental expertise in the territorial supervisory authorities in the area of environmental protection.



Costs for environmental protection measures*, million tenge

Ser. No.	Description of costs	Amount, million tenge		
		2019	2020	2021
	JSC CAEPCO	5,259.676	5,530.789	9,340.916
	PAVLODARENERGO JSC			
1	Investment costs for updating equipment that has a negative impact on the PPE	2,613.091	3,600.752	6,940.504
2	Cost of overhaul repair of key assets intended for environment protection	431.929	20.906	60.070
3	Operating costs	196.625	317.942	285.977
	SEVKAZENERGO JSC			
1	Investment costs for updating equipment that has a negative impact on the PPE	981.923	1,217.167	1,164.349
2	Cost of overhaul repair of key assets intended for environment protection	266.600	306.824	257.756
3	Operating costs	228.987	55.983	70.070
	AEDC JSC			
1	Investment costs for updating equipment that has a negative impact on the PPE	518,343	0	553,171
2	Cost of overhaul repair of key assets intended for environment protection	–	–	–
3	Operating costs	22,178	11,215	9,018

**More information about the completed environmental measures is set out in the following sections.*

Materials used

Manufactured products of the Corporation
Is represented by heat and electrical power. Regulation of this industry is carried out by state bodies represented by the Ministry of Energy of the Republic of Kazakhstan and the Committee for Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan.

Environmental labeling and packaging requirements do not apply to manufactured products.

Electric and heat power was produced using non-renewable fuels (Ekibastuz coal and M100 fuel oil).

Materials consumed	Unit of measurement	value		
		2019	2020	2021
Coal, total	tons	6,521,840	6,729,367	6,029,199
Including electrical power generation	tons	4,312,158	4,556,271	3,738,789
heat power generation	tons	2,209,682	2,173,096	2,290,410
Fuel oil, total	tons	9,257	9,961	10,496
Including electrical power generation	tons	5,515	6,342	6,124
heat power generation	tons	3,742	3,619	4,372

CLIMATE CHANGE

Climate change, especially in recent years, is a very relevant topic for the whole world. Negative trends of climate change are increasingly reflected in Kazakhstan. Water scarcity, loss of biodiversity, and natural disasters can result in severe economic consequences, crop failures, and famine.

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Fact

The Corporation supports the UN Sustainable Development Goal No. 13 and the Paris Climate Agreement, which call for urgent measures to combat climate change and its consequences.

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#SDGs #climate_change

The technological chain of the Corporation's enterprises involves the formation of greenhouse gases in the process of burning fossil fuels (coal, fuel oil) in order to generate energy to support the life of the regions of its presence. On a regular basis, activities are carried out to monitor greenhouse gas emissions, quantify the volume of direct emissions (SCOPE1), including a partial estimate of indirect emissions (SCOPE2), since the calculation of direct emissions also takes into account the company's own energy needs.

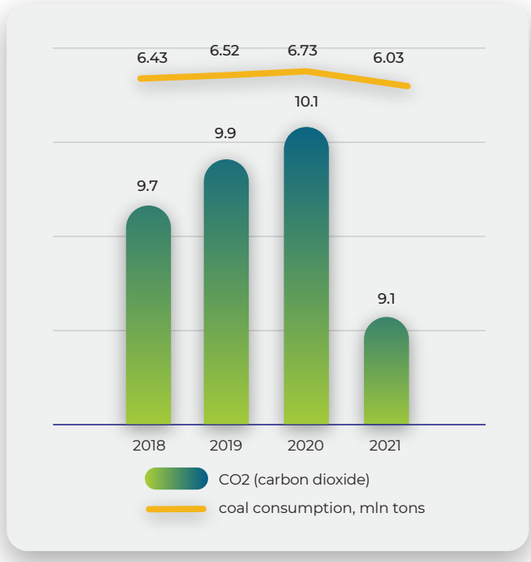
For monitoring greenhouse gases, a calculated method is used with laboratory determination of the carbon content in fuel, according to current regulatory guidelines. Control

Accounting for greenhouse gas emissions is carried out by the Department of Safety, Labour Protection and Ecology.

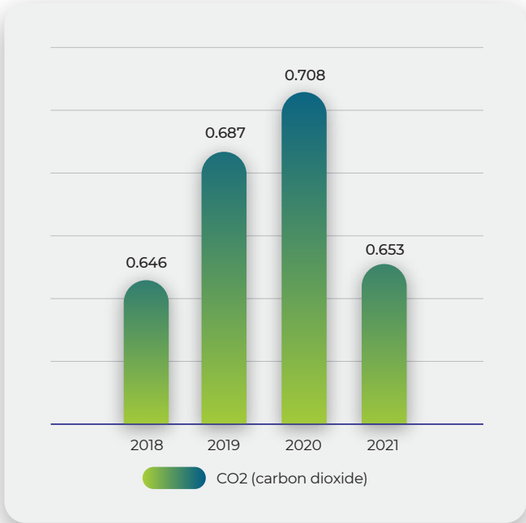
9,056,166 thousand tons of CO2 accounted for the Corporation's greenhouse gas emissions **in 2021, which is 10.5% less than in 2020**

#Results

Direct CO2 emissions in 2018-2021, million tons



CO2 emission intensity in 2018-2021, tons/MWh



The reduction in greenhouse gas emissions in 2021 is associated with a decrease in the volume of fuel combustion (coal and fuel oil) due to a decrease in production.

The total limit of allocated quotas for greenhouse gas emissions for 2021 was 10,140.6 thousand tons of carbon dioxide (CO2).

In the reporting period, the Corporation expects a certain shortage of greenhouse gases due to the withdrawal of part of the quota limit due to a decline in production compared to the baseline.

As a result of the National Plan for Distribution of Greenhouse Gas Emission Quotas 2018-2020, **the Corporation as a whole purchased additional CO2 emission quotas in 2021 for a total amount of 616.032 million tenge.**

#Measures

The Corporation's strategic goals in the fight against climate change include: the development of renewable energy sources, the widespread introduction of an energy management system, and the development of programs to improve energy efficiency and energy conservation.

The implementation of renewable energy projects reduces greenhouse gas (CO2) emissions by generating electricity from wind energy and supplying it with electricity.

Transfer it to the national power grid of the Republic of Kazakhstan. The amount of electric power produced replaces electricity generated from traditional fossil fuel power plants and provides an overall reduction in CO2 emissions in the electricity sector.

Since 2020, the Corporation's structure includes the Astana EXPO-2017 wind power plant (CAPEC Green Energy LLP). Wind farm generation in 2021 saved 130,245 thousand tons of conventional fuel and provided an overall reduction in CO2 emissions in the electric power sector by approximately 330.0 thousand tons/year.

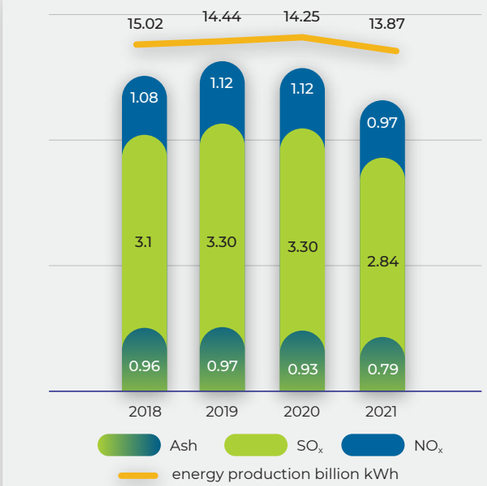
Air emissions

Minimising emissions of pollutants into the atmosphere is an important aspect of the Corporation's environmental activities. Replacement of outdated generating facilities with low energy and environmental efficiency with new capacities that meet modern requirements in the area of environmental protection has the greatest impact on reducing the emissions.

In the reporting year there was a decrease in production (by 2.6%) with a decrease in the volume of burned fuel by 10.4%; gross emissions of pollutants decreased by 19.9 %. Of these, emissions of sulphur oxides (SOx) from other pollutants show a decrease of 13.0-15.0 %.

Specific emissions of pollutants into the atmosphere in 201-2021, kg/ thousand kWh

Gross emissions of pollutants into the atmosphere in 2018-2021, thousand tons



Among the most significant environmental measures aimed at reducing atmospheric emissions and implemented in 2021, the following can be identified:

— repair of battery emulsifiers and ash collecting units during major repairs of boilers, repair of aspiration units;

— modernisation of battery emulsifiers of the second generation with the installation of third-generation swirler units with an efficiency of 99.6 %;

— modernisation consists in installing the second-highest belt of shovel devices in the cells of the existing swirler unit, that is, double flue gas purification is carried out within one swirler.

As part of the program, energy-saving measures are planned, the purpose of which, along with increasing the energy efficiency of production processes, is also to reduce emissions of pollutants and greenhouse gases.

One of the organisational tools for reducing emissions of pollutants and greenhouse gases is the energy saving program and improving overall fuel efficiency, as well as the introduction of the ISO 50001 Energy Management System in the Corporation's subsidiaries

#Fact

Energy saving

The Corporation's activities in the area of energy saving and energy efficiency improvement are carried out on the basis of the international standard ISO 50001 Energy Management Systems. The Corporation's subsidiaries have the Energy Saving and Efficiency Program for 2021-2023.

The purpose of this Program is to develop measures to improve the efficiency of using fuel and energy resources, including the organisation of control and accounting.

As part of the ongoing work on energy saving and energy efficiency improvement in the reporting year, 36 measures were implemented aimed at reducing the consumption of fuel and energy resources, which allowed saving 43.0 thousand tons of conventional fuel, 23,424.0 thousand kWh, 69,599.0 Gcal; and 10 measures aimed at organising control and accounting of fuel and energy resources.

Among the most significant measures of the Energy Saving Program aimed at reducing emissions of pollutants and greenhouse gases implemented in 2021, the following can be identified:

— cleaning of turbine condensers by the hydraulic pumping unit of PCHP-2 of SEVKAZENERGO JSC;

— replacement of pipes of air mixture of burners of boilers of stations No. 2, 4, 6 of CHP-3 of PAVLODARENERGO JSC;

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— removal of leaked-in air in the gas-air path of boilers at stations 1-6 of CHPP-3 of PAVLODARENERGO JSC;

— repair of air heater cubes of boiler units at stations No. 2,4,6 of CHP-3 of PAVLODARENERGO JSC;

— replacement of the water economizer of the second stage of CHP-2 of PAVLODARENERGO JSC.

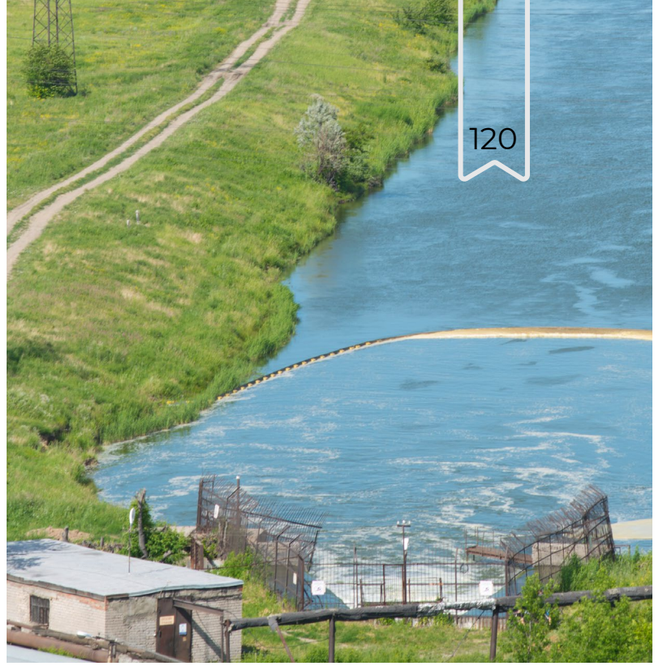
In 2021, thanks to implementation of the measures of this program, we achieved a reduction in greenhouse gas emissions by 67.3 thousand tons of CO_2

#Results

State Environmental Control

In 2021, the Corporation's subsidiaries carried out scheduled inspections to comply with environmental legislation in the form of preventive control and unscheduled inspections to comply with the identified regulations. According to the results of preventive control, orders were issued and damages for environmental pollution were presented for a total amount of 11,120.9 thousand tenge.

All instructions were fulfilled in full and on time, and damages were paid for.



WATER RESOURCES

The use of water resources is an integral part of the production processes of enterprises and plays a key role in the cooling process of equipment. At the generating facilities of the CAEPCO Group of Companies, closed water use is used, i.e. a revolving system of technical water supply with cooling ponds (in Petropavlovsk) or cooling towers (in Pavlodar).

Also, the enterprises of CAEPCO JSC Group of Companies have systems of drinking water supply, stormwater and municipal sewage. Water supply for household, drinking, fire needs and wastewater disposal is carried out centrally, at the expense of city water supply and sewerage networks under the contract.

All the water used by CAEPCO JSC is fresh water. Sensitive water sources are not used.

In 2021, 676,012,885 thousand m3 of water was used for water supply purposes, the main share of which is water from circulating water supply systems. In the reporting period, the volume of water disposal amounted to 2,256.2 thousand m3.

The total amount of water used, broken down by sources, thousand m³

Indicator	2019	2020	2021
Total water used, including:	973,424.3	703,204.8	676,012.9
from surface water bodies	222,224.0	7,787.5	8,472.6
from third-party suppliers	23,515.5	24,282.5	26,947.4
in close water consumption systems	727,685.3	671,134.8	640,592.9

Volumes of waste disposal, thousand m³.

Indicator	2019	2020	2021
Total waste water	1 927,4	3 116,1	2 256,2
Disposed to third-party organisations	648,1	600,0	605,4
Disposed to surface water bodies	1 279,3	2 516,1	1 650,8

Among the most significant environmental measures aimed at the rational use of water resources implemented in 2021, the following can be distinguished:

— reconstruction of the station's water supply system using a 6,000 m3 potable water supply tank as a technical water supply tank of the Ekibastuz CHP;

— replacement and repair of pipelines, shut-off and control valves for technical and domestic drinking water of Ekibastuz CHP;

— cleaning of the cooling pond bed (Bolshoe Beloe Lake) of Petropavlovsk CHP-2;

— repair of pipelines, shut-off and control valves for technical and domestic drinking water of Pavlodar CHP-2.

The decrease in the volume of waste generation compared to 2020 by 365.9 thousand tons is due to a decrease in the consumption of burned fuel

#Results

WASTE MANAGEMENT

Ash and slag waste, which makes up 99% of the total volume of waste, is stored in specially equipped hydraulic structures of the plain type - ash dumps. Compliance with the environmental legislation of the Republic of Kazakhstan when creating a new container for storing ash and slag waste allows to prevent environmental pollution with ash and slag waste from production and ensure stable operation of the CHP.

In 2021, the total volume of waste generation at the enterprises of CAEPCO JSC amounted to 2,479.0 thousand tons, of which ash and slag waste – 2,465.8 thousand tons, industrial and municipal - 13.224 thousand tons.

Total mass of waste generation, thousand tons

Indicator	2019	2020	2021
Ash and slag	2,677.8	2,831.7	2,465.8
Other types of waste	12.307	10.800	13.200

Waste by hazard level, thousand tons

Indicator	2019	2020	2021
Waste generated:	2 690,1	2 842,5	2 479,0
“green” list	2 689,8	2 842,3	2 478,7
“amber” list	0,25	0,20	0,28

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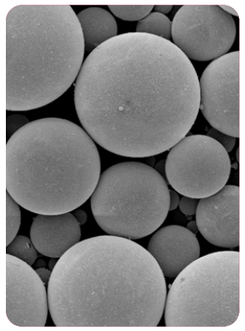
Waste by methods of handling, thousand tons

Indicator	2019	2020	2021
Waste generated	2 690,1	2 842,5	2 479,0
including ash and slag waste	2 677,8	2 831,7	2 465,8
Waste used at the enterprise	2,839	0,335	0,352
Neutralised waste	0,04	0,03	0,03
Transferred waste to third-party organisations*	9,978	10,575	12,404
Waste placed at the company's facilities	2 676,7	2 831,3	2 465,8
including ash and slag waste	2 677,8	2 831,3	2 465,8

In 2021, **22.82 tons of light fly ash fraction** (microsphere) were sold on a contractual basis from the ash dumps of PAVLODARENERGO JSC

#Results



Aluminosilicate hollow microspheres are glass-crystalline aluminosilicate beads that are formed during high-temperature flaring of coal. They are the most valuable components of thermal power plant ash waste. They are used in the manufacture of insulation materials, fillers, aerosols, etc.

The most significant waste management activities aimed at waste management and improving the industrial and environmental safety of landfills, completed in 2021:

— construction of the 3rd stage of the ash dump of Pavlodar CHP-3;

— organisation of storage sites for waste generated during the reconstruction and construction of energy facilities (equipment of sites, arrangement of containers);

— sale of ash and slag waste (microspheres) to reduce the volume of their formation;

— implementation of the mechanism of separate collection of waste that is not subject to placement at the landfill: waste paper, paper and cardboard, plastic and glass waste.

During the construction of new ash dump sections, the latest technology of an anti-filtration screen in the ash dump bed **- the Canadian polysynthetic geomembrane was used**

#Fact

The use of a special geomembrane film will allow achieving 100% waterproofing. This is a reliable and durable anti-filtration screen that protects soils and underground water from contamination by chemical components contained in the clarified water of the reverse hydraulic ash transport system.

Plans for implementation of environmental policy **for 2022**

In 2021, the Corporation develops a medium-term perspective for the development of production, taking into account all energy, economic and environmental challenges in Kazakhstan and in the world as a whole. Within the framework of the developed strategy, the Corporation will continue to work on mitigation, aimed at improving the environmental efficiency and safety of its enterprises, minimising the negative impact of their activities on the operating system, and introducing the best available technologies.

The priority is the implementation of environmental protection plans and energy saving programs, further modernisation of obsolete equipment and restoration of normal operation of Petropavlovsk CHP-2, compliance with environmental legislation, and active participation in initiating amendments to environmental regulations.

SUSTAINABLE DEVELOPMENT RISKS

The Holding's activities are associated with risks in the area of sustainable development. CAEPCO Group of Companies makes every effort to ensure that its activities comply with the fundamental principles of the United Nations Global Compact on Human Rights, labour relations, environmental protection and anti-corruption. The Group shares the UN Sustainable Development Goals and contributes to their achievement, including through timely identification, assessment and response to risks.

Climate change risks

The risks associated with climate change and the resulting tightening of environmental and climate regulations are critical and one of the highest priorities in the formation of plans and strategies for the development of the CAEPCO Group of Companies. To date, international environmental and climate standards and the legislation of the Republic of Kazakhstan in the area of environmental protection oblige the Group to take immediate measures to manage this group of risks.

Kazakhstan ratified the Paris Climate Agreement in 2015, thus confirming its commitment to the global fight against climate change. As part of the commitments made to reduce greenhouse gas emissions, the Country implements carbon quotas for major industries, including energy-producing organisations.

CAEPCO Group of Companies is fully responsible for reducing greenhouse gas emissions, but notes that carbon quotas are associated with the following problems and risks for the Group as a whole, such as:

— annual reduction in the amount of free quotas allocated;

— formation of a quota deficit for energy-producing enterprises with their own specific CO2 emission factors, which are higher than the approved benchmarks;

— withdrawal of part of the limit of free-of-charge distributed quotas from enterprises that have allowed a decrease in production relative to the baseline;

— expected growth in the cost of a carbon unit (from 1 euro / ton of CO2 in 2021 to 15 euros/ton of CO2 in 2023-2025 and to 45 euros/ton of CO2 in 2026-2030);

— it is not possible to cover the costs of purchasing quotas at the expense of tariffs (costs are not included in the tariffs of energy-producing enterprises);

— the probability of the absence/shortage of free quotas in the sales market due to the reduction of free allocated quotas and the lack of effective, working mechanisms for implementing projects aimed at reducing greenhouse gas emissions and absorption.

In 2021, a new Environmental Code of the Republic of Kazakhstan entered into force, motivating enterprises that are sources of pollution (which largely includes coal-fired cogeneration) to reduce their impact on the environment using economic (high-cost) incentive mechanisms.

These include:

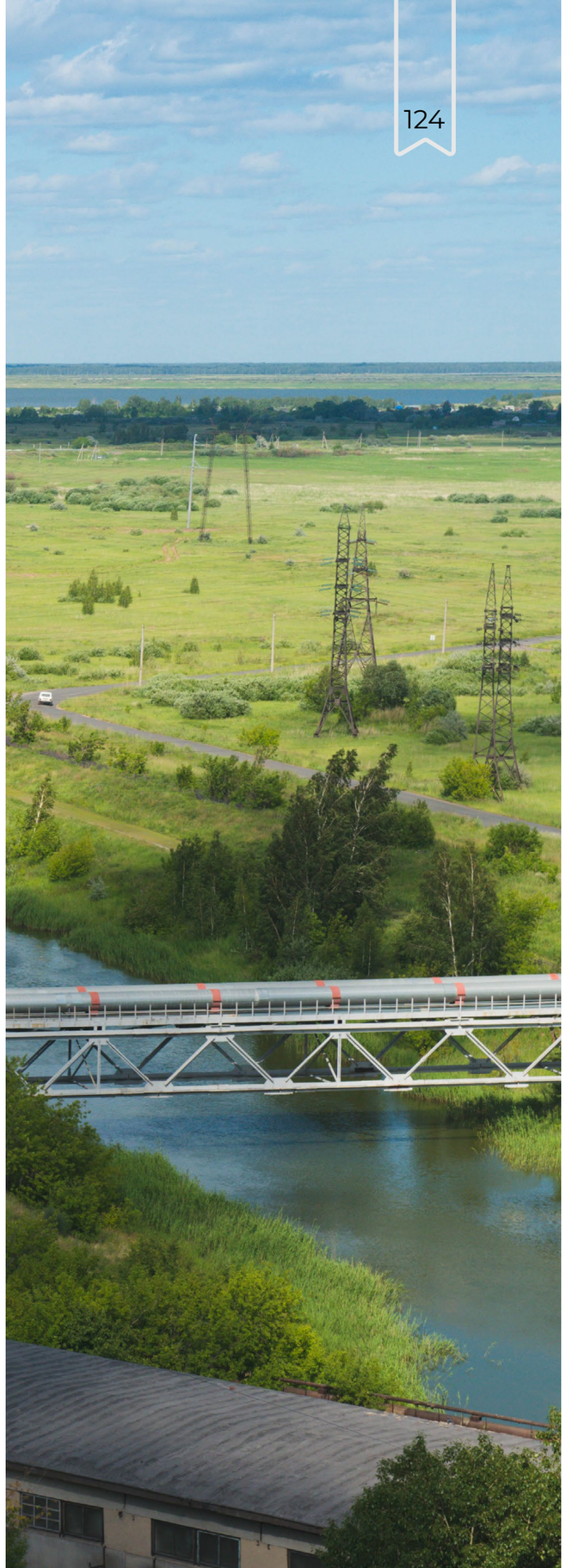
— the need to implement the best available technologies (BAT). Meanwhile, the costs of BAT implementation are not taken into account in either electricity or heat tariffs;

— the need for automated monitoring of emissions to the environment;

— the need for facilities of the first category (which include almost all of the Group's CHPs) to provide financial security for the fulfilment of their obligations to eliminate the consequences of operation. According to preliminary forecast estimates, the minimum amount of elimination of consequences will amount to several tens of billions of tenge (for each CHP), at that, the financing mechanism for ensuring the fulfilment of obligations by energy-producing enterprises, whose tariffs are strictly regulated, has not been developed.

At that, it is planned to increase administrative fines for non-compliance with the requirements of the Environmental Code, strengthen sanctions for repeated breaches, including the statute of limitations and the period of recidivism, and increase payments for emissions to the environment.

Compliance with all modern environmental and climate standards (within the framework of decarbonisation of the economy of the Republic of Kazakhstan) at the Group's generating facilities represents a financial risk that may entail serious financial costs for the Group. Fulfilment of obligations on large-scale implementation of expensive BAT implementation projects and reduction of greenhouse gas emissions will require significant costs and, as a result, may have a significant negative impact on the financial position and results of the Holding's operations as a whole. However, the Group understands that the new Environmental Code poses not only new challenges for the energy industry, but also new opportunities aimed at reducing air emissions and improving the energy and environmental efficiency of the Holding.



Health and safety risks for employees

One of the fundamental principles of the corporate policy of the CAEPCO Group of Companies is that its main asset is employees. Risks of accidents resulting from violations of labour protection, industrial and fire safety requirements during production activities are included in the Group's list of significant risks.

The Holding has special requirements for ensuring the safety of its employees' activities and working conditions: priority training is given to employees in occupational health and safety rules and techniques for safe performance of work at power facilities.

The Group's strategic priority in the area of occupational health and safety is the continuous improvement of processes that ensure the safe performance of work, which is inextricably linked with the adaptation of the best international practices in the area of industrial safety. Measures aimed at preventing accidents and injuries are aimed at achieving the strategic goal of zero accidents.

Anti-corruption management

CAEPCO JSC group of companies has an Anti-Corruption and Fraud Policy approved by the Board of Directors, which is the fundamental internal regulatory document of the Holding and its subsidiaries in this area. The Policy, among other things, determines modelling of a single ethical standard by the top management of the Group for rejection of corruption in all its forms and manifestations.

The main principles of the Policy are represented by maintaining a high level of corporate governance, intolerance to corruption and fraud, proper risk assessment, minimising conflicts of interest based on an effective distribution of powers and responsibilities by building a transparent organisational structure.

Important elements of strengthening this area are represented by creation and implementation of an effective strategy that ensures anti-corruption and fraud, as well as prompt response to emerging events of this nature. The Group develops an appropriate corporate culture and a negative attitude to all manifestations of corruption and fraud.

The Policy highlights the methods and procedures used to counter fraud and corruption, in particular, to identify and assess such facts, conduct official investigations, and bring to justice for all identified cases of illegal actions. CAEPCO JSC group of companies has developed and operating feedback channels (hotline, telephone and mail services) for legal entities and individuals (including employees of the Group) to contact and report on the upcoming or known facts of corruption and fraudulent actions.

Work aimed at increasing the transparency of activities is performed on an ongoing basis. In order to inform the business partners of the group of companies about the existing requirements and principles of the Anti-Corruption and Fraud Policy, the approved standard templates of contracts concluded by the Company and its subsidiaries for the purchase of goods, works and services include certain sections that also reflect communication channels in the event of corruption.

In accordance with internal procedures, all newly hired employees are required to familiarise themselves with the requirements of the Anti-Corruption and Fraud Policy and sign a written confirmation of compliance with these requirements.

No facts of corruption and fraud were identified during 2021

FINANCIAL AND ECONOMIC INDICATORS

The consolidated financial statements of CAEPCO JSC Group for 2021 have been prepared in accordance with International Financial Reporting Standards and comprise of the financial statements of subsidiaries from the date of their acquisition. The principles of accounting policy are the same for all enterprises of the Group. The key financial and economic indicators demonstrate the results of operating and financial activities, as well as implementation of the main directions of CAEPCO JSC Group strategic development.

Key financial and economic indicators for 2019-2021, million tenge

Indicators	2019	2020	2021
Income from core activities	137,195	104,249	139,734
Cost	-116,318	-89,882	-106,088
Gross profit	20,878	14,368	33,646
Expenses for the period	-11,085	-10,388	-11,250
Profit from operating activities	9,793	3,979	2, 396
Operating EBITDA for the year*	20,004	16,869	44,310
Operating EBITDA for the year, margin in %	14.58	16.18	31.71
Loss from impairment	-282	-1,456	-85,000
Foreign exchange losses	-10	1,347	-1,799
CIT expense	-1,829	-2,303	12,607
Net profit (loss) for the year	-5,044	-5,768	-74,835
Loss from discontinued operations	-	296	10,047
Loss for the year	-5,044	-5,472	-64,789
Revaluation of PPE	-	-	69,325
Total comprehensive income (loss) for the year	**-5,044**	**-5,472**	**4,536**
Assets	319,211	375,010	500,244
Equity	136,342	123,535	174,621
Capital expenditures on property, plant and equipment	16,832	14,880	14,073

** Total EBITDA is indicated with due account for impact of foreign exchange differences*

INCOME FROM SALE OF PRODUCTS/ SERVICES

By the end of 2021, the Group produced electric power and heat, taking into account the transfer and sale of purchased energy for a total of 139,734 million tenge, an increase by 35,485 million tenge (+34%) compared to the results of 2020, including:

— revenue from the sale and transmission of electric power increased by 35,762 million tenge (+49%);

— decrease in revenue from the electricity capacity market by 3,335 million tenge (-40%), including SEVKAZENERGO JSC - 3,233 million tenge;

— decrease in revenue from sales and transmission of heat by 3,117 million tenge (-14 %);

— decrease in income from other activities by 59 million tenge.

The main factors affecting revenue growth in 2021 are as follows:

— Effective 1 March 2021, CAEPCO JSC Group gained control over CAPEC Green Energy LLP, increasing its interest in the associate to 51 %, which contributed to an increase in revenue by 17,640 million tenge (+10.6 %).

— an increase in average electricity tariffs of up to 25 % resulted in an increase in the Group's revenue of CAEPCO JSC by KZT 20,477 million, including PAVLODARENERGO JSC by 21,118 million tenge, SEVKAZENERGO JSC by KZT 7,811 million, and AEDC JSC by KZT 2,348 million;

— an increase in heat generation volumes up to 6 % increased revenue by 915 million tenge; - an increase in tariffs up to 11 % for heat transmission services increased revenue by 846 million tenge, an increase in volumes up to 9% increased revenue by 718 million tenge;

— an increase in tariffs up to 6 % for electricity transmission services increased revenue by 1,690 million tenge, while an increase in volumes up to 2 % increased revenue by 589 million tenge.

The main factors affecting revenue decrease in 2021 are as follows:

— reduction of tariffs to 6% for heat generation reduced revenue by 1,082 million tenge.

— reduction of electric power generation volumes by up to 7% reduced revenue by 5,760 million tenge.

COST OF SALES

The cost of electric power and heat sold in 2021 amounted to 106,088 million tenge, which is 16,206 million tenge (+18%) more than in 2020.

The decrease is due to the following main factors:

— reduction of variable costs by 11 %, including fuel costs (coal and fuel oil) by 12 % due to a reduction in electric power generation;

— reduced costs for materials for operation (-7 %), transport services (-4 %), costs for services to ensure the readiness of electric capacity for load-bearing (purchase of RFC capacity) (-17 %), technical dispatching of KEGOK (-24 %), recultivation (-62%);

The following main factors contributed to the increase in production costs:

— consolidation of the share in the authorised capital of CAPEC Green Energy LLP from 1 March 2021 contributed to an increase in the cost of production in 2021 by 4,535 million tenge (+5 %);

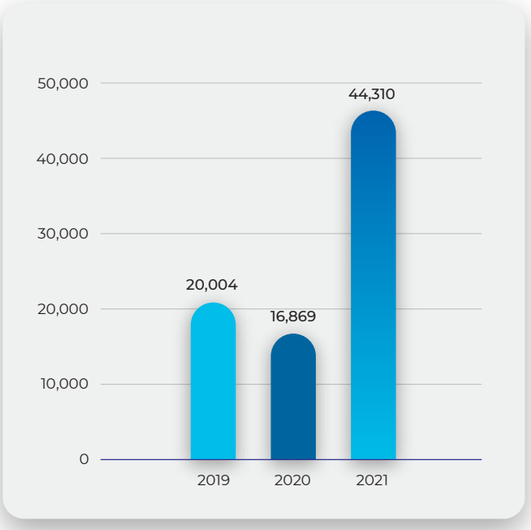
— increase in operating expenses, including labour costs with associated taxes due to employee salary indexation (+15 %), repairs (+28 %), third-party services (+63 %), purchased electricity (+63 %), purchased heat (+24 %), regulatory losses of electricity (+40 %), depreciation (+76%), taxes (+49 %) and other expenses (+17 %).

In 2021, the cost structure of the Group is dominated (20%) by fuel (coal, fuel oil) costs. A decrease in electric power generation by 5,147 thousand kWh (-11 %) resulted in a decrease in fuel costs by 2,938 million tenge. Labour costs increased by 1,882 million tenge (+ 15%) in order to reduce the turnover rate of qualified personnel. An increase in repair costs by 2,161 million tenge (+28 %) is necessary to ensure the stability and reliability of power equipment operation. The increase in the cost of purchased electricity by 3,983 million tenge (+63 %) is mainly due to an increase in the volume of purchases of electricity from RES FSC by 51.4 million kWh (+1,903 million tenge), and GRES-1 and GRES-2 by 644 million kWh (+2,327 million tenge). The increase in the cost of regulatory losses of electricity is due to an increase in the energy source tariff to an average of 33 % and volume-by 5 %, which increased costs by 403 million tenge. The main reasons for reducing the cost of purchasing FSC capacity by 875 million tenge (-17 %) is a 13% reduction in the tariff (from 799,869 to 692,376 tenge/MW per month) and volumes increased by 4 %.

EBITDA DYNAMICS, TOTAL

Operating EBITDA for 2021 was 44,310 million tenge, an increase of 27,441 million tenge or +163% compared to 2020. The main factors contributing to the increase in the indicator are as follows: consolidation of the share in the authorised capital of CAPEC Green Energy LLP from 1 March 2021 (+15,383 million tenge), an increase in electricity tariffs.

EBITDA chart, mln tenge



The operating EBITDA indicator was chosen as the main indicator when evaluating the Corporation's production activities. This performance indicator does not take into account other income, finance income, non-monetary component of foreign exchange liabilities, depreciation, amortisation and non-recurring or non-permanent items that do not affect the basic production activities of the Corporation.

The Corporation's operating EBITDA for 2021 amounted to 44,310 million tenge, an increase by 27,441 million tenge, or 163% compared to 2020 as a result of the following factors:

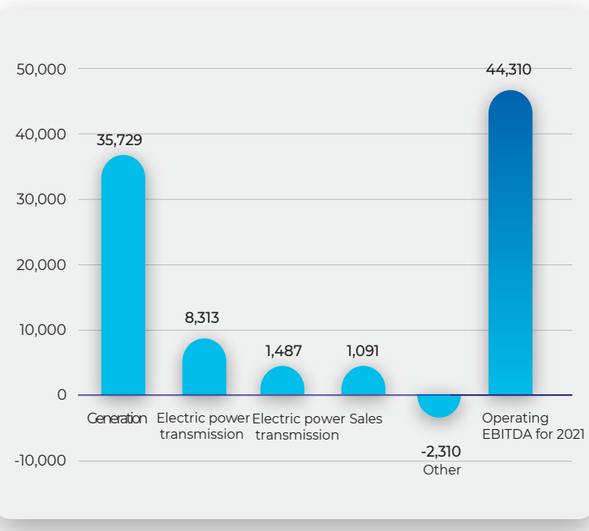
— In the structure of the indicator – operating EBITDA, the leading (primary) margin segment is the production of electric power and heat (35,729 million tenge), an increase of 18,997 million tenge (+ 114 %), including due to the consolidation of the share in the authorised capital of CAPEC Green Energy LLP from 1 March 2021 last year (+15,535 million tenge) and an increase in operating profit due to the increase in tariffs.

— In the electricity transmission and distribution segment, the increase was 198 million tenge (+2 %) due to an increase in depreciation charges due to the commissioning of fixed assets after reconstruction.

— In the heat transmission and distribution segment, EBITDA increased by 759 million tenge (+104 %) due to an increase in operating profit by 651 million tenge.

— In the electricity and heat sales segment, EBITDA increased by 4,823 million tenge mainly due to an increase in operating profit (due to a decrease in cost and expenses of the period).

EBITDA by segment, mln tenge



DYNAMICS OF NET PROFIT/LOSS

Operating profit for 2021 amounted to 22,396 million tenge (margin of 16 % to sales revenue), with an increase of 18,416 million tenge (+463 %) compared to 2020, due to the following main factors

— increase in gross profit by 19,279 million tenge (+134 %), including due to consolidation of the share in the authorised capital of CAPEC Green Energy LLP from 1 March 2021 (+13,105 million tenge); increase in gross profit on generation and sale of electricity and heat (+15 880 million tenge).

Total comprehensive income for 2021 based on the audit results amounted to 4,536 million tenge, which is 10,009 million tenge more compared to 2020 due to:

— increase in operating profit by +18,416 million tenge;

— decrease in the balance of income and expenses from other activities by -84,307 million tenge (including loss from impairment of fixed assets and Goodwill 85,015 million tenge).

— decrease in the balance of foreign exchange gain and loss by -3,146 million tenge;

— decrease in the balance of income and expenses on financial activities by -14,939 million tenge;

— savings on CIT in the amount of +14,909 million tenge;

— loss from discontinued operations + 9,751 million tenge (including income from disposal of AESbyt LLP +10,047 million tenge);

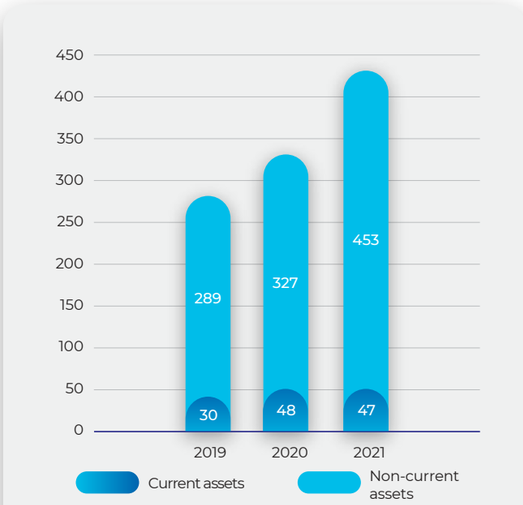
— income from revaluation of fixed assets amounted to +69,325 million tenge.

ASSETS

The currency of the Group's balance sheet as at 31 December 2020 is 500,244 million tenge, which is 125,234 million tenge or 33% more than in 2020.

The Corporation's assets are divided into current and non-current. Non-current assets include property, plant and equipment, the value of which as at 31 December 2021 amounted to 452,907 million tenge, or 91% of the value of all assets. Investments in property, plant and equipment for 2021 amounted to 14,073 million tenge.

Assets, billion tenge



Other financial assets are represented by deposits with flexible option for partial replenishment and withdrawal. Deposits are represented by cash accumulated by the Group for servicing loans, financing the investment program and maintaining working capital.

LIABILITIES AND EQUITY

The declared authorised capital of the Group is 50 million ordinary shares. As at 31 December 2021, the value of fully paid ordinary shares amounted to 46,043 million tenge.

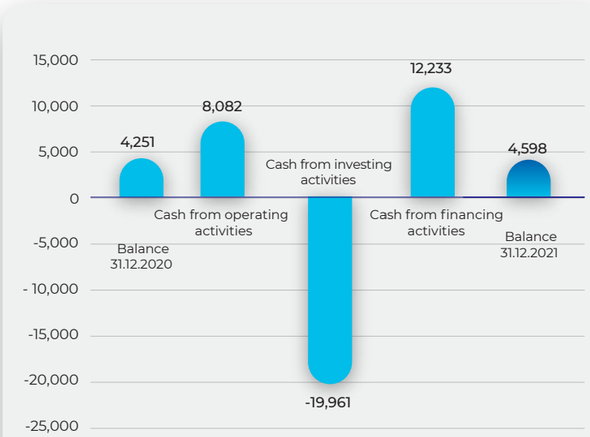
Long-term and current liabilities also consist of obligations to VTB Bank (Europe) JSC, the European Bank for Reconstruction and Development, Halyk Bank JSC, Development Bank of Kazakhstan JSC, and Clean Technologies Fund. The loans were raised to finance a long-term investment program for reconstruction and modernisation of facilities of the Group of Companies and the purchase of a stake in other entities.

CASH FLOW

Net cash from operating activities in 2021 amounted to +8,028 million tenge, which is -14,797 million tenge (or -65%) less than in 2020. The decrease in cash flows from operating activities was due to payments of accounts payable and interest on bank loans. The most significant cash outflows from investing activities in the amount of 24,195 million tenge were related to the current period's investment program and payment of accounts payable for facilities completed in 2020, as well as the acquisition of a stake in subsidiaries (CAPEC Green Energy LLP), for a total net cash of 19,961 million tenge.

Net cash received from financing activities amounted to +12,233 million tenge. The movement in financing activities is associated with the attraction and repayment of bank loans. The cash balance at the end of 2021 is 4,598 million tenge.

Cash flow, mln tenge



FINANCIAL STATEMENTS

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 2021
(in thousands of Tenge)

	Note	31 December 2021	31 December 2020
ASSETS			
NON-CURRENT ASSETS:			
Property, plant and equipment	6	361,604,933	267,050,953
Goodwill	8	-	1,405,202
Intangible assets	9	81,365,610	1,517,948
Deferred tax assets	32	6,139,904	25,503
Loans issued	10	1,874,150	1,923,266
Other financial assets	11	59,916	40,601
Advances paid	13	532,632	6,176,062
Investments in associates	7	94,051	47,999,737
Other non-current assets	15	1,235,901	1,329,874
Total non-current assets		**452,907,097**	**327,469,146**
CURRENT ASSETS:			
Inventories	12	7,179,624	5,695,742
Trade accounts receivable	14	18,211,071	20,102,546
Advances paid	13	3,797,228	463,929
Income tax prepaid		572,534	470,480
Other current assets	15	1,733,617	2,582,139
Loans issued	10	197,305	12,540,459
Other financial assets	11	11,047,702	1,434,725
Cash	16	4,598,104	4,251,137
Total current assets		**47,337,185**	**47,541,157**
TOTAL ASSETS		**500,244,282**	**375,010,303**
EQUITY AND LIABILITIES			
EQUITY:			-
Share capital	17	46,043,272	46,043,272
Additional paid-in capital		1,348,105	1,348,105
Properties revaluation reserve		100,844,231	34,315,020
(Accumulated deficit) / retained earnings		(26,368,558)	41,828,696
Non-controlling interest		52,753,959	-
Total equity		**174,621,009**	**123,535,093**

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMER 2021 (CONTINUED)

(in thousands of Tenge)

	Note	31 December 2021	31 December 2020
LIABILITIES			
NON-CURRENT LIABILITIES:			
Bonds issued	18	14,769,629	14,897,451
Non-current borrowings	19	61,476,988	64,469,805
Deferred income	21	5,940,428	6,292,412
Lease liabilities	22	12,591,042	971,735
Deferred tax liabilities	32	66,585,194	38,042,113
Ash dump restoration obligations	20	2,193,668	2,149,654
Employee benefit obligations		157,122	113,318
Other long-term accounts payable		309,163	767,957
Other liabilities and accrued expenses		241,585	297,056
Total non-current liabilities		**164,264,819**	**128,001,501**
CURRENT LIABILITIES:			
Current portion of bonds issued	18	904,258	929,060
Current borrowings and current portion of non-current borrowings	19	134,508,825	72,265,017
Deferred income, current portion	21	139,748	136,784
Current portion of lease liabilities	22	1,936,515	506,326
Trade accounts payable	23	15,731,715	39,364,740
Advances received	24	2,059,791	3,083,483
Current portion of ash dump restoration obligations	20	571,574	1,061,915
Income tax liability		565,462	-
Current portion of employee benefit obligations		18,246	14,774
Loan from third parties		-	1,039,011
Other current liabilities and accrued expenses	25	4,922,320	5,072,599
Total current liabilities		**161,358,454**	**123,473,709**
TOTAL EQUITY AND LIABILITIES		**500,244,282**	**375,010,303**

Signed on behalf of Group management:

B.Y. Oral
Chairman of the Management Board

29 July 2022
Nur-Sultan, Republic of Kazakhstan

L. I. Miroshnichenko
Chief Accountant

29 July 2022
Nur-Sultan, Republic of Kazakhstan

The notes on pages 14-92 form an integral part of these consolidated financial statements. Independent Auditor's Report is on pages 2-7.

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2021

(in thousands of Tenge, unless otherwise stated)

	Note	2021	2020
Continuing operations			
Revenue	26	139,734,237	104,249,448
Cost of sales	27	(106,088,144)	(89,881,674)
GROSS PROFIT		**33,646,093**	**14,367,774**
General and administrative expenses	28	(9,480,450)	(8,825,990)
Selling expenses		(1,770,040)	(1,562,450)
Finance costs	29	(26,467,589)	(12,185,653)
Finance income	30	2,970,483	3,627,811
Recovery / (accrual) of allowance for expected credit losses		14,846	(1,455,543)
Foreign exchange (loss)/gain, net		(1,799,420)	1,346,945
Impairment loss on goodwill	8	(13,421,531)	-
Impairment loss on property, plant and equipment	6	(69,087,531)	-
Impairment loss on intangible assets	9	(2,506,000)	-
Other expenses	31	(3,193,646)	(1,078,500)
Other income	31	2,606,505	2,235,853
Share of results of associates		1,046,211	64,297
LOSS BEFORE TAX		**(87,442,069)**	**(3,465,456)**
INCOME TAX BENEFIT / (EXPENSES)	32,34	12,606,733	(2,302,695)
LOSS FOR THE YEAR FROM CONTINUING OPERATIONS		**(74,835,336)**	**(5,768,151)**
Discontinued operations			
PROFIT FOR THE YEAR FROM DISCONTINUED OPERATIONS	34	10,046,685	296,022
LOSS FOR THE YEAR		**(64,788,651)**	**(5,472,129)**
OTHER COMPREHENSIVE INCOME / (LOSS) FOR THE YEAR			
Items that will not be reclassified subsequently to profit or loss:			
Gain on revaluation of property, plant and equipment, net of tax		69,325,068	-
TOTAL COMPREHENSIVE INCOME / (LOSS) FOR THE YEAR		**4,536,417**	**(5,472,129)**
Loss attributable to:			
Shareholders of the Group	6	(67,676,007)	(5,472,129)
Non-controlling interests		2,887,356	-
Total comprehensive income / (loss) attributable to:			
Shareholders of the Group		1,291,709	(5,472,129)
Non-controlling interests		3,244,708	-
LOSS PER SHARE			
Loss per share, basic and diluted	**38**	**(1,831.50)**	**(148.09)**

Signed on behalf of Group management:

B.Y. Oral
Chairman of the Management Board

29 July 2022
Nur-Sultan, Republic of Kazakhstan

L. I. Miroshnichenko
Chief Accountant

29 July 2022
Nur-Sultan, Republic of Kazakhstan

The notes on pages 14-92 form an integral part of these consolidated financial statements. Independent Auditor's Report is on

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2021

(in thousands of Tenge)

	Share capital	Additional paid-in capital	Properties revaluation reserve	Retained earnings / (accumulated deficit)	Non-controlling interest	Total equity
1 January 2020	**46,043,272**	**1,348,105**	**36,607,620**	**52,342,715**	**-**	**136,341,712**
Loss for the year	-	-	-	(5,472,129)	-	(5,472,129)
Total comprehensive loss for the period	**-**	**-**	**-**	**(5,472,129)**	**-**	**(5,472,129)**
Amortisation of properties revaluation reserve	-	-	(2,292,600)	2,292,600	-	-
Adjustment to financial guarantees, net of deferred tax	-	-	-	1,347,527	-	1,347,527
Adjustment to borrowings to fair value, net of deferred tax	-	-	-	(925,191)	-	(925,191)
Loss from acquisition of investments in associate from an entity under common control (Note 7)	-	-	-	(7,756,826)	-	(7,756,826)
31 December 2020	**46,043,272**	**1,348,105**	**34,315,020**	**41,828,696**	**-**	**123,535,093**
Loss for the year	-	-		(67,676,007)	2,887,356	(64,788,651)
Prior years adjustment	-	-		(1,203)	-	(1,203)
Other comprehensive income for the year	-	-	68,967,716	-	357,352	69,325,068
Total comprehensive income for the year	**-**	**-**	**68,967,716**	**(67,677,210)**	**3,244,708**	**4,535,214**
Amortisation of properties revaluation reserve	-	-	(2,361,361)	2,361,361	-	-
Sale of subsidiary	-	-	(77,143)	-	-	(77,143)
Impairment loss on loans issued to the Company under common control (Note 10)	-	-	-	(2,881,406)	-	(2,881,406)
Recognition of non-controlling interest from acquisition of subsidiary Pavlodar Vodokanal-Severny LLP	-	-	-	-	111,251	111,251
Recognition of non-controlling interest from acquisition of subsidiary CAPEC Green Energy LLP (Note 33)	-	-	-	-	49,398,000	49,398,000
31 December 2021	**46,043,272**	**1,348,105**	**100,844,231**	**(26,368,558)**	**52,753,959**	**174,621,009**

Signed on behalf of Group management:

B.Y. Oral
Chairman of the Management Board

29 July 2022
Nur-Sultan, Republic of Kazakhstan

I. I. Miroshnichenko
Chief Accountant

29 July 2022
Nur-Sultan, Republic of Kazakhstan

The notes on pages 14-92 form an integral part of these consolidated financial statements. Independent Auditor's Report is on pages 2-7.

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2021

(in thousands of Tenge)

	Note	2021	2020
OPERATING ACTIVITIES:			
Loss for the year		(64,788,651)	(5,472,129)
Income tax (benefit) / expenses recognised in profit or loss, including discontinued operations	32	(12,606,733)	3,033,643
Adjustments for:			
Depreciation and amortisation	6, 9	21,940,837	12,889,705
Finance costs	29, 34	26,494,541	12,407,970
(Recovery) / accrual of allowance for expected credit losses		(10,429)	3,131,082
Impairment loss on advances paid		6,721	812,342
Accrual of provision for obsolete inventories	12	226,578	163,752
Loss from disposal of property, plant and equipment and intangible assets		253,939	342,003
Impairment loss on goodwill	8	13,421,531	-
Impairment loss on property, plant, and equipment	6	69,087,531	-
Impairment loss on intangible assets	9	2,506,000	-
Impairment loss on construction in progress		199,571	-
Loss on acquisition of investment in associate	7	1,378,303	-
Write down to fair value of previously held interest in associate	31	766,330	-
Accrual of provision for unused vacation		26,279	57,684
Foreign exchange loss / (gain), net		1,797,612	(1,153,245)
Finance income	30, 34	(3,014,989)	(3,909,201)
Loss from write-off of accounts payable		50,723	-
Share of results of associates	7	(1,046,211)	(64,297)
Income from government grants	21	(227,334)	(231,930)
Income from ash dump restoration obligations		(246,858)	-
Income from disposal of share in subsidiary	34	(7,608,678)	-
Others		29,723	64,551
Operating cash flow before movement in working capital		**48,636,336**	**22,071,930**
Changes in inventories		(2,172,017)	(755,749)
Changes in trade accounts receivable		3,320,091	(6,957,939)
Changes in advances paid		(2,912,568)	745,720
Changes in other current assets		658,561	2,595,964
Changes in other trade accounts receivable		(72,096)	-
Changes in trade accounts payable		(11,949,684)	15,123,567
Changes in non-current trade accounts payable		(150,547)	1,000,000
Changes in deferred income		2,964	(456,727)
Changes in advances received		(133,889)	678,227
Changes in other liabilities and accrued expenses		(280,140)	1,052,726
Cash generated by operations		**34,947,011**	**35,097,719**
Income tax paid		(1,245,897)	(1,655,192)
Interest paid		(25,673,065)	(10,617,141)
Net cash from operating activities		**8,028,049**	**22,825,386**

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JOINT STOCK COMPANY AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2021 (CONTINUED)
(in thousands of Tenge)

	Note	2021	2020
INVESTING ACTIVITIES:			
Purchases of property, plant and equipment		(16,242,869)	(16,871,588)
Purchases of intangible assets		(78,644)	(102,541)
Placement of cash to deposit accounts		(4,428,254)	(26,228,770)
Withdrawal of cash from deposit accounts		1,650,370	26,045,629
Interest received on placed deposits		462,396	197,822
Interest received on loans issued		-	29,159
Proceeds from disposal of property, plant and equipment		-	39,932
Sale of subsidiaries	34	(548,105)	-
Return of cash given for investments		20,088	1,098,318
Loans issued		(140,000)	-
Repayment of loans issued		1,805,762	1,541,009
Acquisition of subsidiary	33	(7,953,895)	-
Acquisition of associate	7	-	(55,692,266)
Cash returned from guarantee fees		(25,562)	(27,333)
Financial aid provided to entity under common control	10	-	(5,598,203)
Proceeds from financial aid provided to entity under common control	10	5,481,883	5,303,041
Other investment activities		35,380	-
Net cash used in investing activities		**(19,961,450)**	**(70,265,791)**
FINANCING ACTIVITIES:			
Proceeds from bank borrowings	19	97,216,027	93,930,849
Proceeds from third party borrowings		-	1,039,011
Repayment of borrowings	19	(81,949,452)	(39,386,062)
Repayment of loans received from third parties		(1,060,000)	-
Proceeds on issue of bonds	18	-	5,000,000
Bonds redemption	18	(500,000)	(9,244,690)
Lease payments	22	(1,473,997)	(523,971)
Net cash from financing activities		**12,232,578**	**50,815,137**
NET INCREASE IN CASH		**299,177**	**3,374,732**
CASH at the beginning of the year	**16**	**4,251,137**	**894,566**
Effect of exchange rate changes on cash balances in foreign currencies		1,808	(5,543)
Effect of changes in allowance for expected credit losses for cash		45,982	(12,618)
CASH at the end of the year	**16**	**4,598,104**	**4,251,137**

Signed on behalf of Group management:

B.Y. Oral
Chairman of the Management Board

29 July 2022
Nur-Sultan, Republic of Kazakhstan

I. Miroshnichenko
Chief Accountant

29 July 2022
Nur-Sultan, Republic of Kazakhstan

The notes on pages 14-92 form an integral part of these consolidated financial statements. Independent Auditor's Report is on pages 2-7.

ABOUT THE REPORT

The Annual Report of the **Central-Asian Electric Power Corporation JSC** (CAEPCO JSC) has been issued on an annual basis since 2013. The annual report is one of the main channels of communication with stakeholders, and therefore the Corporation pays special attention to the preparation of this document. **The holding was included in the Rating of the 50 best companies for disclosure of information in the area of sustainable development, presented by PwC Kazakhstan.**

The report provides information on the activities of CAEPCO JSC and its subsidiaries in 2021. The document contains a Sustainable Development Report prepared in accordance with the GRI G4 Guidelines.

The main version of information disclosure and the GRI application for the electric power industry were used in the preparation.

ESSENTIAL BOUNDARIES AND ASPECTS

In accordance with the Principles of determining the content of the GRI Standards report, an assessment of the materiality of the topics disclosed in the report was made.

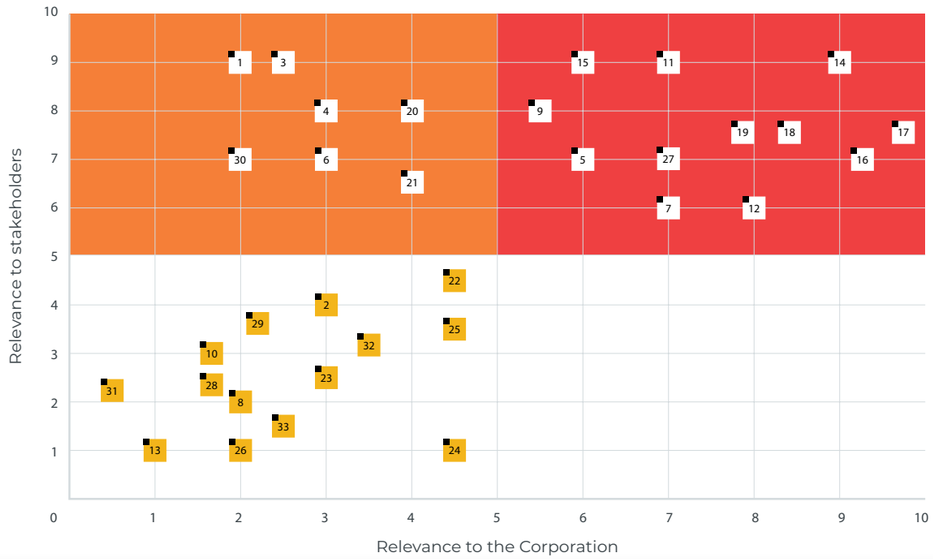
The procedure for determining materiality includes the following main steps:

Stage 1 - identify the widest possible range of potentially relevant topics related to sustainable development based on GRI Standards;

Stage 2 – the analysis of the degree of influence of the topics listed in the list inside and outside the Corporation was carried out; the selection of topics for further disclosure was carried out taking into account interaction with stakeholders; in addition, the priority of topics was analysed in terms of the level of influence on the Corporation's activities and its development strategy;

Stage 3 – in accordance with the opinion of stakeholders and strategic plans of the Corporation, key topics were ranked for prioritisation and a Materiality Map was built; an average score was assigned to each aspect of the activity depending on the impact on the Corporation (horizontal axis) and on stakeholders (vertical axis); the highest priority was determined for aspects in the red of course, they were given priority attention when compiling the report; the report also partially disclosed aspects included in the orange zone.

List of topics and materiality map



Index of GRI Elements

Ser.	Aspects	Ser.	Aspects
1.	Economic performance	18.	Training and education
2.	Market presence	19.	Diversity and equal opportunities
3.	Indirect economic impacts	20.	Non-discrimination
4.	Procurement practice	21.	Freedom of association and collective bargaining
5.	Anti-corruption management	22.	Child labour
6.	Obstacle to competition	23.	Forced or compulsory labour
7.	Materials	24.	Security practices
8.	Energy	25.	Rights of indigenous and small-numbered peoples
9.	Water	26.	Assessment of human rights observance
10.	Biodiversity	27.	Local communities
11.	Emissions	28.	Assessment of suppliers' compliance with social criteria
12.	Discharges and waste	29.	Public policy
13.	Assessment of suppliers' compliance with environmental protection criteria	30.	Customer health and safety
14.	Compliance with environmental requirements	31.	Labeling of products and services
15.	Employment	32.	Personal privacy of consumers
16.	Relations between employees and management	33.	Violations of socio-economic legislation
17.	Health and safety in the workplace		

INDEX OF GRI ELEMENTS

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
GRI 101: Principles of reporting (2016)			
GRI 102: General information (2016)	**Organisation Profile**		
	102-1 Name of the organisation	About the Corporation section, p. 8	
	102-2 Areas of activity	About the Corporation section, p. 8 and Business model section, p. 16	
	102-3 Location of the head office	Contacts section, p. 150	
	102-4 Geography of operations	Geography of operations section, p. 8	
	102-5 Form of ownership	Corporate structure section, p. 18	
	102-6 Sales markets	Geography of operations section, p. 8 Subsidiaries section, p. 18	
	102-7 Scale of the organisation	Performance indicators section, p. 12	
	102-8 Personnel information	Personnel and social policy section, p. 87	
	102-9 Supply chain	Business model section, p. 16	
	102-10 Significant changes in the Company's work	Organisational structure section, p. 30 Corporate structure section, p. 30	
	102-11 Precautionary Principles	Environmental measures section, p. 114	
	102-12 Support for external initiatives	Environmental protection section, p. 110 Climate change section, p. 117 Environmental management system section, p. 110	
	102-13 Membership in associations	—	The Corporation is a member of the Kazakhstan Electric Power Association (KEA)
	Strategy		
	102-14 Management Statement	Letter of the Chairman of the Board of Directors section, p. 4 Letter of the Chairman of the Management Board section, p. 6	
	Ethics and Integrity		
	102-16 Values, principles, standards and norms of behavior	Compliance with the Corporate Governance Code section, p. 42	

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
		Corporate governance	
	102-18 Management structure	Organisational structure section, p. 30 Performance of the committees of the Board of Directors section, p. 37	
		Interaction with stakeholders	
	102-40 List of stakeholders	Stakeholder Engagement section, p. 82	
	102-41 Collective agreements	Interaction with trade union organisations section, p. 85	
	102-42 Identification and selection of stakeholders	Stakeholder Engagement section, p. 81	
	102-43 Approaches to interaction	Stakeholder Engagement section, p. 81	
	102-44 Key topics and concerns raised	Stakeholder Engagement section, p. 81	
		Information about the report	
	102-45 Basis of consolidation	About the report section, p. 139	
	102-46 Defining the report content and boundaries	List of Topics and Materiality Map section, page 140	
	102-47 List of significant topics	List of Topics and Materiality Map section, page 140	
	102-48 Recalculation of data from prior periods	–	The indicators have not been changed and are comparable with the data provided in the previous annual reports
	102-49 Changes in the content of the report	Sustainable development section, p. 80	
	102-50 Reporting period	About the report section, p. 139	
	102-51 Date of last publication	About the report section, p. 139	
	102-52 Reporting cycle	About the report section, p. 139	
	102-53 Contact information for questions about the content of the report	Contacts section, p. 150	

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
	102-54 Level of compliance with GRI standards	About the report section, p. 139	
	102-55 GRI content index	Index of GRI Elements section, p. 141	
	102-56 External assurance	About the report section, p. 139	
		Material topics	
		Economy	
GRI 103: Management Approach (2016)	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
	103-2 Management approach	Financial and economic indicators section, p. 126	
	103-3 Evaluation of the Management Approach	–	Not conducted
GRI 205: Anti-corruption management (2016)	**205-3 Confirmed cases**	Anti-corruption management section, p. 41	
		Ecology	
GRI 103: Management Approach (2016)	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
	103-2 Management approach	Environmental policy section, p. 112	Comprehensive environmental impacts management policy covers all major topics in this area.
	103-3 Evaluation of the Management Approach	–	Not conducted
		Materials	
GRI 301: Materials (2016)	**301-1 Consumed materials by weight or volume**	Atmospheric emissions section, p. 118	

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
Water			
	303-1 Use of water resources	Water resources section, p. 120	
GRI 303: Water and Discharges (2016)	**303-3 Water Intake**	Water resources section, p. 120	
	303-4 Water discharge	Waste management section, p. 121	
Emissions			
GRI 305: Emissions (2016)	**305-1 Direct greenhouse gas emissions**	Climate change section, p. 117	
	305-4 Intensity of greenhouse gas emissions	Climate change section, p. 117	
	305-5 Reduction of greenhouse gas emissions (COR2R)	Climate change section, p. 117	
	305-7 Emissions of NOx, SOx and other significant pollutants	Atmospheric emissions section, p. 118	
Waste			
GRI 306: Discharges and waste (2016)	**306-2 Total mass of waste by type and method of disposal**	Waste management section, p. 121	
Compliance with requirements			
GRI 307: Compliance with requirements (2016)	**307-1 Information on non-compliance with environmental legislation and regulatory requirements**	Atmospheric emissions section, p. 118	
Social category			
GRI 103: Management Approach (2016)	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
	103-2 Management approach	Personnel Management Policy section, p. 87	A comprehensive personnel policy covers all the main topics in this area
	103-3 Evaluation of the Management Approach	–	Not conducted

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
Employment			
GRI 401: Employment (2016)	**401-1 Hired employees and staff turnover**	Staff turnover section, p. 92	
Relations between employees and management			
GRI 402: Relations between employees and management	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
Health and Safety			
GRI 403: Health and Safety (2018)	**403-1 Representation of employees in official joint health and safety committees with the participation of representatives of management and employees**	Occupational health and safety tips section, p. 103	
	403-2 Types and level of injury, occupational diseases, lost day rate and the rate of absenteeism, and total number of deaths related to work	Types and the level of industrial injuries section, p. 104	
	403-3 Workers with high injury risk and a high risk of morbidity associated with their types of activities	Employees of the Corporation whose professional activity is associated with a high risk of injury section, p. 106	
Training			
GRI 404: Training (2016)	**404-2 Skills Development Programs**	Personnel training and development section, p. 93	
Diversity and equal opportunities			
GRI 405: Diversity and equal opportunities (2016)	**405-1 Composition of governing bodies**	Staff structure by category and gender section, p. 89	

GRI standard and year of publication	Indicator	Page number, section and/or URL	Exemptions/ Comments
Local communities			
GRI 103: Management Approach (2016)	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
	103-2 Management approach	Stakeholder Engagement section, p. 82	
	103-3 Evaluation of the Management Approach	–	Not conducted
GRI 413: Local Communities (2018)	**413-1 Programs of interaction with local communities, assessment of the impact of activities on local communities and development of local communities**	Stakeholder Engagement section, p. 82	
Customer health and safety			
GRI 103: Management Approach (2016)	**103-1 Explanation of the Material Topic and its Boundary**	List of Topics and Materiality Map section, page 140	
	103-2 Management approach	Consumer safety section, p. 109	
	103-3 Evaluation of the Management Approach	–	Not conducted
GRI 416: Customer health and safety (2016)	**416-1 Product safety assessment for the consumer**	Consumer safety section, p. 109	
Additional information			
Industry Protocol on Electric Power Industry GRI G4	**G4-EU1 Installed capacity**	Installed capacity section, p. 19	
	G4-EU2 Power generation	Performance indicators section, p. 12	
	G4-EU3 Number of personal accounts of household, industrial, institutional and commercial consumers	Activities of power supply organisations section, p. 64	
	G4-EU4 The length of aboveground and underground transmission and distribution lines of electricity, broken down by regulation modes	Length of power transmission lines section, p. 20	
	G4-EU5 Distribution of quotas for COR2R emissions or equivalents	Atmospheric emissions section, p. 118	

GLOSSARY, ABBREVIATIONS

Overhead power line	an electric line for transmission of electric power through the wires located in the open air and attached by means of insulators and fittings to supports or brackets.
Overhead transmission lines	the structures intended for transmission of electric power over a distance by wires.
Gigacalorie	a unit of measurement of thermal energy used for assessment in the heat power industry, heating systems and the utilities sector.
Gigacalorie per hour	a derived unit of measurement used to specify the amount of heat produced or used by a certain equipment per a unit of time.
Cooling tower	a structure shaped like an exhaust tower providing air stack effect.
Goodwill	the difference between the price of a company and the fair value of all its assets.
Ash	an incombustible residue (in the form of dust) which consists of mineral impurities left after complete combustion of fuel.
Ash dump site	a place for collection and disposal of waste ash and slag generated during combustion of solid fuel at combined heat and power plants.
Calorie or cal	an off-system unit for measuring the amount of heat.
Boiler	a device for generating pressurised steam or hot water through fuel combustion, use of electric power, heat of exhaust gas or technological process.
Power transmission line or PTL	a structure consisting of wires (cables) and auxiliary devices for transmission of electric power from power plants to consumers.
Megawatt	a unit of power measurement in electric power production.
Pump	a device for pressure movement (suction, discharge) of fluid (primartly) as a result of energising (kinetic or potental energy).
Pumping station	a pump set with ancillary equipment mounted according to a certain model that ensures operation of the pump.
Pavlodar Heat Networks	Pavlodar Heat Networks
Substation	an electric installation used for conversion and distribution of electric power and consisting of transformers or other power converters, switchgear, control devices and auxiliary facilities.
Combined heat and power plant or CHP or cogeneration unit	a thermal power plant generating not only electric power, but also heat supplied to consumers in the form of steam and hot water.
Transformer (from Latin: transformare, 'transform')	a device for converting any significant properties of energy (e.g., electric transformer, torque converter) or objects (e.g., photo transformer).
Turbine generator	a combination of a steam turbine, electricity generator and exciter united by one shaft train; it converts potential energy of steam into electric power.
Installed capacity	an effective value of the turbine generators' rated capacity.

Installed heat capacity of the plant	the sum of all rated heating capacities for all the equipment commissioned under the act and designed for supplying heat to external consumers and steam and hot water for internal needs.
Installed electrical capacity of the energy system	total effective capacity of all turbo and hydropower generators of power plants in the energy system in accordance with their passports or specifications.
Emulsifier	a wet ash and dust cleaning device operating in the phase inversion mode.
COSO	the Committee of Sponsoring Organisations of the Treadway Commission.
EBITDA	an analytical indicator, which equals earnings before interest, taxation, depreciation and amortisation.
ESAP	Environmental and Social Action Plan.
ISO	International Organisation for Standardisation.
KEGOC	Kazakhstan Electricity Grid Operating Company JSC.
OHSAS	Occupational Health and Safety Assessment System.
JSC	a joint stock company.
AEDC	Akmola Electric Distribution Company JSC.
ASCAHE	automatic system for commercial accounting for heat energy.
ASCAE	automatic system for commercial accounting of electricity.
GDP	gross domestic product.
OHL	overhead lines.
WPP	wind power plant.
Gcal	gigacalorie.
Gcal-hr	gigacalorie per hour.
GRES	state regional power plant.
GTPP	gas turbine power plant.
HEPP	hydroelectric power plant.
EBRD	European Bank for Reconstruction and Development.
kWh	kilowatt per hour.
MW	megawatt.
NGO	a non-governmental organisation.
Environmental protection	environmental safety.
PEDC	Pavlodar Electric Distribution Company JSC.
PCHP-2	Petropavlovsk combined heat and power plant No. 2.
RK	Republic of Kazakhstan.
ICS	internal control system.
BoD	the Board of Directors.
NK EDC	North-Kazakhstan Electric Distribution Company JSC.

SKE	SEVKAZENERGO JSC
Mass media	Mass media
RMS	risk management systems.
SPS	solar power station
LLP	a limited liability partnership
TPP	a thermal power plant.
CHP	a combined heat and power plant.
CAPEC	Central-Asian Power Energy Company JSC.
CAEPCO	Central-Asian Electric Power Corporation JSC.

CONTACTS

CENTRAL-ASIAN ELECTRIC POWER CORPORATION JSC

The head office of CAEPCO JSC is located at:

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Email: info@energy.kz

tel. +7 (7172) 64-57-50

Contacts

Full name / Position	Contact details
Responsible persons for working with investors and shareholders	
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Sabina Kuanbek Director of Corporate Development Department of CAEPCO JSC	2 Dostyk Str., Nur-Sultan, Republic of Kazakhstan tel. +7 (7172) 64-57-50
Person in charge for the Annual Report	
Public Relations Department, CAEPCO JSC	2 Dostyk Str., Nur-Sultan, Republic of Kazakhstan tel. +7 (7172) 64-57-50

Registrar

CAEPCO JSC was registered on 8 August 2008 by the Department of Justice of Almaty, with the registration number 93550-1910-JSC, Series-B certificate, No. 0336963.

The issue of shares of CAEPCO JSC was registered on 10 October 2008 by the Agency of the Republic of Kazakhstan for Regulation and Supervision of the Financial Market and Institutions No. A5695, Series C certificate, No. 0002550. The system of registers of shareholders of CAEPCO JSC is maintained by the Central Securities Depository JSC.


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