SEVKAZENERGO

Energy
of transformation

ANNUAL REPORT
2016

ABOUT THE REPORT

SEVKAZENERGO JSC has been releasing annual reports since 2013. The previous annual report for 2015 was published in August 2016.

This Report contains information on activities of **SEVKAZENERGO JSC** and its subsidiaries. The document includes a Sustainable Development Report prepared in accordance with GRI G4 Guidelines. The main information disclosure principles and GRI guidelines for the electric power industry were used during the preparation. Section "Table of Report's Compliance with the GRI G4 Guidelines" contains a table explaining where to find standard reporting elements and performance data.

TABLE OF CONTENTS

LETTER OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

Dear partners!

In 2016, SEVKAZENERGO JSC implemented the investment program activities to improve the quality of services provided to consumers in North Kazakhstan, as well as performance figures of major equipment of the power complex enterprises. As before, modernization, reconstruction, technical upgrading and renewal of existing assets are the Company priorities.

Turbine unit No. 5 commissioning after complete replacement and boiler No. 12 startup after substantial reconstruction are the major projects implemented at the plant in 2016. New equipment provided the plant capacity increase by 62 MW and steam production capacity - by 50 tons/hour. Within the framework of the Ceiling Tariffs Program of the Government of the Republic of Kazakhstan, attraction of additional investment based on loan agreement with the European Bank for Reconstruction and Development (EBRD), as well as infusion of own funds of the Company, extensive reconstruction of power equipment at Petropavlovsk CHP-2 enabled to achieve high performance indicators. Three turbine units and one boiler were completely replaced, and three more boilers were reconstructed within seven years. Measures on CHP-2 (Combined Heat and Power Plant) modernization resulted in the plant equipment wear reduction from 89.24% in 2009 to 59.74% in 2016.

Heat networks modernization remains important area in the Company development. In 2016, a trilateral agreement on implementation of the Petropavlovsk heat supply system modernization projects was signed between the European Bank for Reconstruction and Development (EBRD), the Ministry of National Economy of the Republic of Kazakhstan and subsidiaries of Central-Asian Electric Power Corporation JSC as part of Nurly Zhol state program. According to this agreement, 12.01 bln tenge will be allocated for the development of Petropavlovsk heat supply system. In the reporting year, heating mains reconstruction with the use of preinsulated pipe was financed from the program funds. Restoration of Petropavlovsk heat supply system will be continued further based on the investment program effective until 2018.

Within the framework of corporate social responsibility and public private partnership, a small-family hostel was opened in 2016 for employees of SEVKAZENERGO JSC and Petropavlovsk citizens. This is a part of social program on ensuring the best working and living conditions for employees, as well as corporate social responsibility in the region.

The reporting year was jubilee for SEVKAZENERGO JSC: 55 years ago, Petropavlovsk CHP-2 produced its first kilowatts of electricity. The plant has been accomplishing its goals with honour for more than half a century, and today SEVKAZENERGO JSC is the largest in the region modern energy producing company, which priority is to provide stable and good quality energy supply to people of Petropavlovsk and North Kazakhstan region.

I believe that in future the Company staff, smart investment policy and well-established partnership will promote even greater progress in the power industry of North Kazakhstan.

Yerkyn AMIRKHANOV,

The Chairman of the Board of Directors
of SEVKAZENERGO JSC

LETTER OF THE GENERAL DIRECTOR

Dear business partners and colleagues!

Summarizing activities of SEVKAZENERGO JSC in 2016, it is worth to note that the Company has successfully implemented the planned investment projects, made overhauls and repairs, measures aimed at improvement of production and economic performance.

According to the 2016-2020 Development Strategy, the Company implements the projects for increasing generation, energy saving, including reduction of electric and heat energy losses during transmission, and measures for improvement of environmental parameters of production. 11.078 bln tenge was allocated in 2016 for the investment program implementation.

In 2016, Petropavlovsk CHP-2 commissioned turbine unit No. 5 and boiler unit No. 12. The new turbine unit with capacity of 95 MW will allow generating more than 650 mln kWh per year, and the reconstructed boiler with capacity of 270 tons of steam per hour will provide additional generation of 5.7 mln kWh per year. A total efficiency will amount to 40.31% for turbine units and 89.56% - for boilers. Equipment modernization has allowed Petropavlovsk CHP-2 to achieve historically high electric capacity – 541 MW, and maximum electricity output 3,208 mln kWh.

Heat supply systems modernization is one of the important areas of the Company business. In 2016, Petropavlovsk Heat Networks LLP started implementing the projects under the state program Nurly Zhol within the framework of signed trilateral agreement between the European Bank for Reconstruction and Development, Ministry of National Economy of the Republic of Kazakhstan Central-Asian Electric Power Corporation JSC, of which SEVKAZENERGO JSC is an integral part. Reconstruction of heat pipeline No. 5 at Gashek St. and construction of heat pipeline No. 2 at Yegemen Kazakhstan St. have been made within the scope of effected arrangements.

In the reporting year, SEVKAZENERGO JSC continued introducing the automatic system for commercial accounting of electric power, which is the important part of the energy saving program. In total from 2009 to 2016, in Petropavlovsk and North Kazakhstan region 24,210 consumers were connected to the system.

Social policy implementation is the important factor of progressive development of SEVKAZENERGO JSC. On December 22, 2016, within the framework of celebrating the 55th anniversary of Petropavlovsk CHP-2 and the Power Engineers' Day, the Company carried out official opening of a 90-apartment small family hostel for its employees and citizens of Petropavlovsk. Implementation of the project became possible thanks to the public-private partnership of SEVKAZENERGO JSC and the North Kazakhstan regional akimat.

In 2017 SEVKAZENERGO JSC will continue fulfillment of set tasks to accomplish its mission on improvement of the population quality of life and creating an environment for economic development of North Kazakhstan region.

Leonid LARICHEV,

General Director
of SEVKAZENERGO JSC

KEY INFORMATION

Petropavlovsk CHP-2

REDC in North Kazakhstan region

Heat Supply company in Petropavlovsk

Retail Company in Petropavlovsk

2581 employees

Installed electricity capacity **541 MW**

Installed heat capacity **713 Gcal/h**

Main production highlights of Petropavlovsk CHP-2

Installed capacity	Equipment renewal since 2009, %	Year of foundation
541 MW 713 Gcal/h	49.7	1961

Substations

Substation types	Q-ty of units
220 kV	-
110 kV	38
35 kV	121
6-10 kV	2,278
Total	2,437

Total power line length, km

Power line types	Length, km
220 kV	84.8
110 kV	1,327.2
35 kV	2,852.6
6-10 kV	4,538.2
0,4 kV	4,566.4
Total	13,369.2

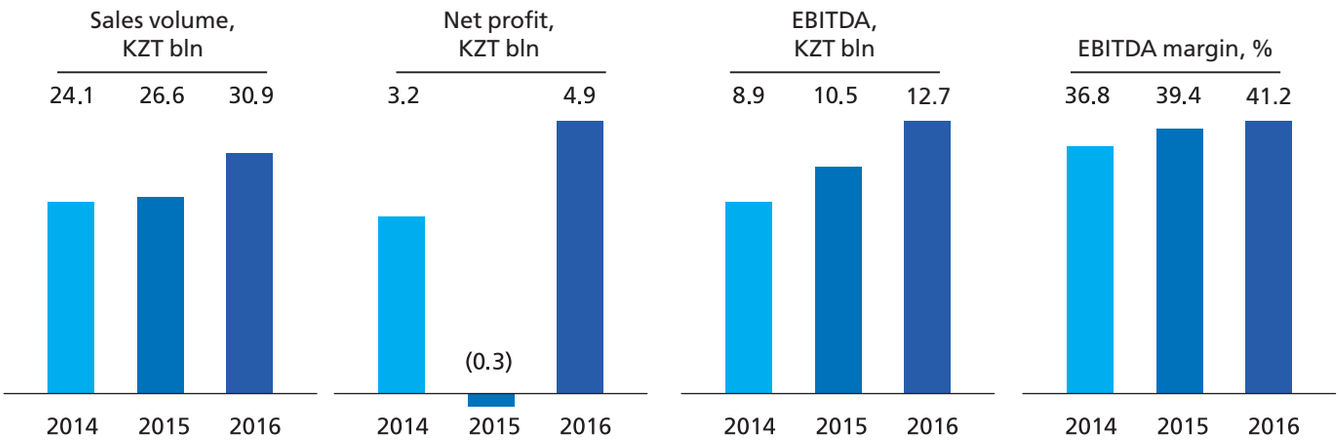
Total heat network length, km

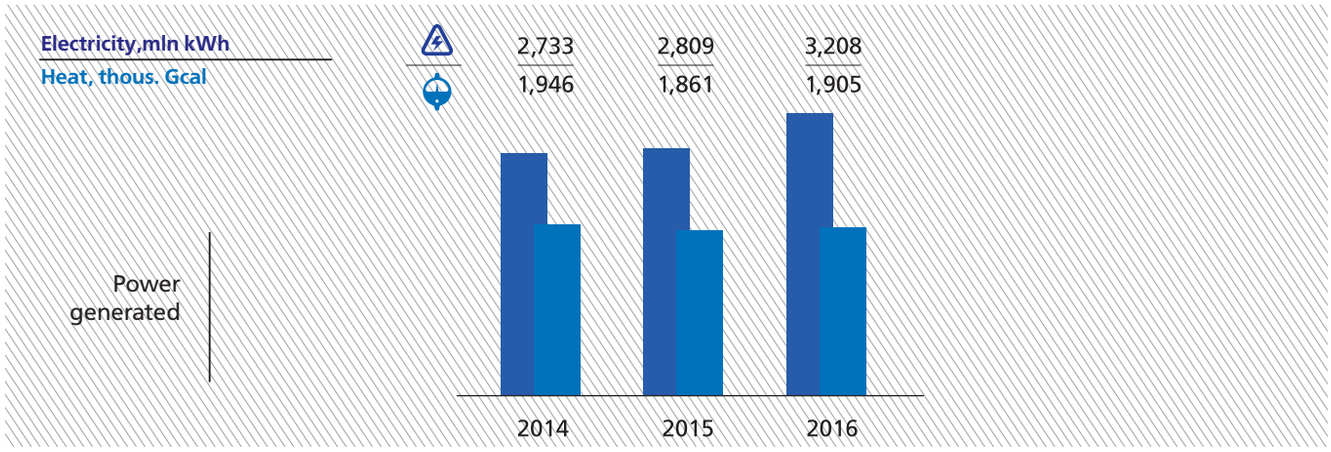
Petropavlovsk Heat Networks LLP	233.5

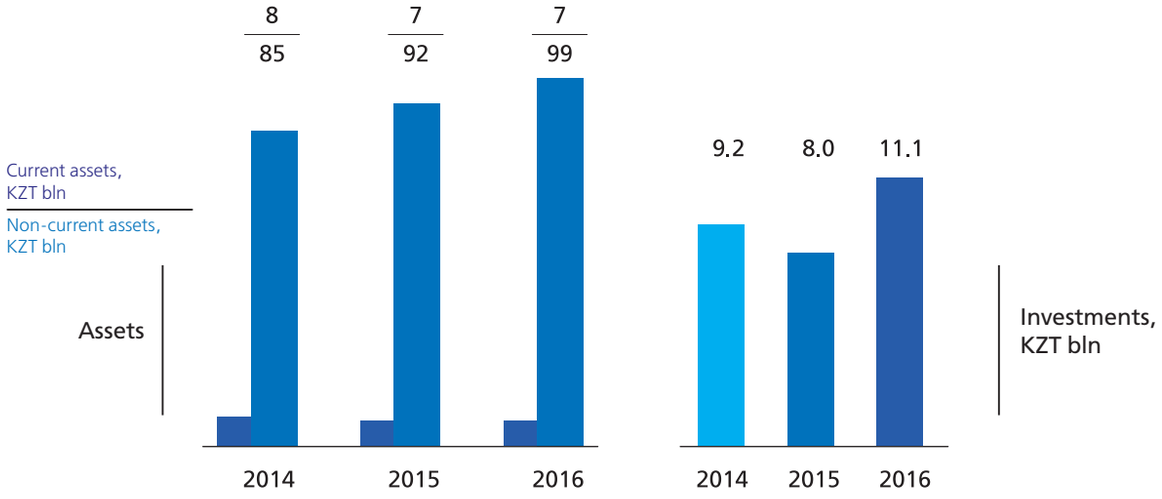
Number of consumers by region

Electric power	Heat power
162 029	71,230

KEY PERFORMANCE INDICATORS FOR 2014–2016







OUTCOMES OF IMPLEMENTATION OF PRIORITY OBJECTIVES IN 2016

INVESTMENT PROGRAM

According to the 2016–2020 Development Strategy, the Company continued implementing the Investment Program in the following three areas: increase in generation; energy saving, including reduction of electric and heat energy losses during transmission; improvement of environmental performance during the production. In 2016, the total amount under the Investment Program was equal to 11.078 bln tenge.

UPGRADING OLD AND ADDING NEW EQUIPMENT

- According to the schedule, turbine unit No. 5 was put into service at SEVKAZENERGO's Petropavlovsk CHP-2 in December 2016. As a result, the installed electricity generating capacity reached 541 MW. The new turbine unit improved the plant's reliability and efficiency and reduced the generation equipment's wear and tear by 2.74%.
- In addition, reconstruction of boiler unit No. 12 BKZ-220-100-4 (E-270) was completed to increase steam output by 50 tons per hour. This measure allowed for improving reliability and effectiveness of the boiler unit and the plant and increase boiler efficiency from 89.12% to 91.3%.

RECONSTRUCTION OF ELECTRIC POWER FACILITIES

The investment program included the reconstruction of 61.69 km of overhead power lines and underground cables with 10-0.4 kV voltage class. The completed projects include reconstruction of 37.04 km of 0.4 kV overhead power lines with bare wire replaced with SIP-4 wire (self-supporting insulated wire) in Petropavlovsk and Beskol village in Kyzylzhar district, installation of 932 low-level electricity meters of AMRCS (automated meter reading and control system) in Petropavlovsk and 102 top-level electricity meters at regional substations.

RECONSTRUCTION OF HEAT NETWORKS

In 2016, Petropavlovsk Heat Networks LLP completed 3.65 km pipeline reconstruction at the expense of own funds as part of its investment program and by raising a loan from the European Bank for Reconstruction and budgetary subsidies from the Ministry of National Economy of the Republic of Kazakhstan. Also, pipe insulation was restored at 0.71 km of pipelines.

In 2016, the activities continued within the EBRD loan agreement signed in 2011. The investment project is aimed at increasing the heat use efficiency as a result of reduction of heat losses during transportation, improvement of environmental performance, reliability and quality of customer services. In the reporting year, restoration of thermal insulation TM Dn 700, 2 Dn 800 mm from TP-406c to Gashek St. was completed at 0.84 km of total pipeline length.

heat networks reconstruction completed / km
Petropavlovsk

3.65

THE COMPANY RATING

SEVKAZENERGOSBYT LLP PROJECTS IMPLEMENTATION

In order to improve the quality of customer services and customer-oriented approach, numerous organizational measures were implemented with the aim to reform sales structures and establish servicing on a «one contact» principle:

- the automated database for calculations by types of energy is improved on a systematic basis;
- electricity consumption control at the level of an individual consumer was introduced;
- the operational analysis of payments receipt was organized;
- debt control for each consumer was established;
- at the one-stop information-computing center the payment acceptance was organized for servicing condominium facilities with indication of effected payment in billing invoice as in the single payment document;
- a network of payment acceptance points was reconstructed.

The Company continues introducing the ISO 9001 Quality Management System in order to improve the quality of customer service.

On July 27, 2016, Fitch Ratings international rating agency assigned to SEVKAZENERGO JSC the long-term issuer default rating «B+» (IDR) in the national and foreign currencies. The rating outlook is stable.

FULL LIST OF RATING ACTIVITIES

- Long-term IDR in foreign and national currencies was downgraded from «BB-» to «B+», outlook is stable;
- National long-term rating was downgraded from «BBB+(kaz)» to «BBB(kaz)», outlook is stable;
- Priority unsecured rating in national currency is downgraded from «BB-» to «B+»/recovery rating «RR4».

Structure of electricity transmission services by groups of end consumers

Population	37%
Industrial consumers	26%
Small and medium business	16%
Public sector	13%
Industrial-agricultural sector	6%
Inter RAO UES	2%

KEY EVENTS AND ACHIEVEMENTS FOR THE REPORTING PERIOD

APRIL

The Board of Directors of CAEPCO JSC held a meeting and adopted the 2016-2020 Development Strategy defining, among other things, the priorities, resources and sequence of steps to achieve strategic goals and objectives of SEVKAZENERGO JSC.

JULY

Fitch Ratings international rating agency assigned SEVKAZENERGO JSC «B+» long-term default rating in the national and foreign currencies with a stable outlook.

JUNE

As part of the PROFENERGY project, SEVKAZENERGO JSC summed up the competition of scientific papers held among Petropavlovsk students. Two winners of the competition were awarded with personal scholarships from Petropavlovsk Heat Networks LLP and North Kazakhstan Regional Electricity Distribution Company JSC.

OCTOBER

In 2016, a trilateral agreement on implementation of the Petropavlovsk heat supply system modernization projects was signed between the European Bank for Reconstruction and Development (EBRD), the Ministry of National Economy of the Republic of Kazakhstan and subsidiaries of Central Asian Electric Power Corporation JSC as part of Nurly Zhol state program. According to this program, 12.01 bln tenge will be allocated for the development of Petropavlovsk heat supply system.

NOVEMBER

Short-term bonds were issued with the participation of SEVKAZENERGO JSC. The instrument became the first in the «Commercial Bonds» sector intended for short-term bonds of companies that had already been listed at Kazakhstan Stock Exchange and whose securities were included in its official list.

DECEMBER

A new T-95/105-8.8 turbine unit No. 5 was commissioned at the Petropavlovsk CHP-2, that generates over 650 mln kWh of electricity within a year. New turbine unit increased the plant's installed capacity by 62 MW, available capacity - by 95 MW. After the turbine unit startup, the total capacity of the plant's power equipment was 541 MW.

In 2016 reconstruction of boiler unit No. 12 BKZ-220-100-4 (E-270) was completed to increase steam output by 50 tons per hour; this measure allowed for improving reliability and effectiveness of the boiler unit and the plant and increase boiler efficiency from 89.12% to 91.3%.

On December 22, 2016, Petropavlovsk CHP-2 of SEVKAZENERGO JSC celebrated its 55th anniversary. For more than half a century, the plant has been supplying electrical and heat energy to the North Kazakhstan region population, expanding production capacities year by year.

To celebrate Power Engineers' Day and 55th anniversary of Petropavlovsk CHP-2, a ceremonial opening of the 90-apartment small-family hostel for employees of SEVKAZENERGO JSC and citizens of Petropavlovsk was held. Thanks to the project implementation, SEVKAZENERGO JSC will partially solve the current problem with provision of the company housing to the employees who do not have own living area, as well as attract high-potential specialists to the Company.

THE COMPANY OVERVIEW

BUSINESS PROFILE

SEVKAZENERGO JSC - vertically integrated company, including enterprises of North Kazakhstan region for generation, transmission and sales of electricity and heat energy. The Company actively introduces global best practices and operates in accordance with international standards in the field of production, environment protection, occupational health and social responsibility.

HISTORY

2009 SEVKAZENERGO is incorporated as a Joint-Stock Company as a result of restructuring and becomes the legal successor of all rights and obligations of AccessEnergo PCHP-2.

2007 Central-Asian power-energy company JSC (CAPEC JSC), which later became one of the shareholders of Central-Asian Electric Power Corporation JSC (CAEPCO JSC), became the owner of the region's energy complex.

1999 AccessEnergo PCHP-2 LLP is registered by the North Kazakhstan Regional Justice Authority.

1965 Tselinenergo's Petropavlovsk Heat Network Administration is created based on CHP-2's heat network shop.

1963 Tselinenergo creates Petropavlovsk Electric Networks Enterprise.

1961 Launch of Petropavlovsk CHP-2.

MISSION

The mission of the Company is to improve the standards of living for the public and create conditions for the economic development of North Kazakhstan region. This goal can be achieved by providing high quality supply of energy to households, industrial companies, and public and private sector organizations in North Kazakhstan region and Petropavlovsk.

The quality of the services provided implies reliable and uninterrupted energy supply in compliance with all technical requirements, as well as a high level of customer service.

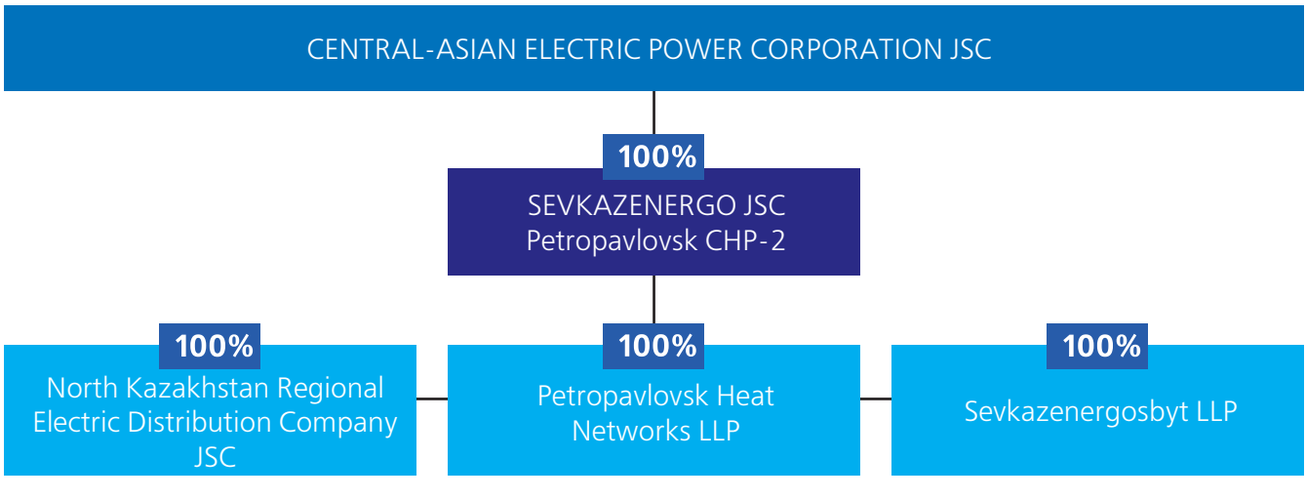
The Company's employees are **the basis of effectiveness.** Their high level of professionalism, teamwork and focus on results allow us to move forward successfully.

VISION

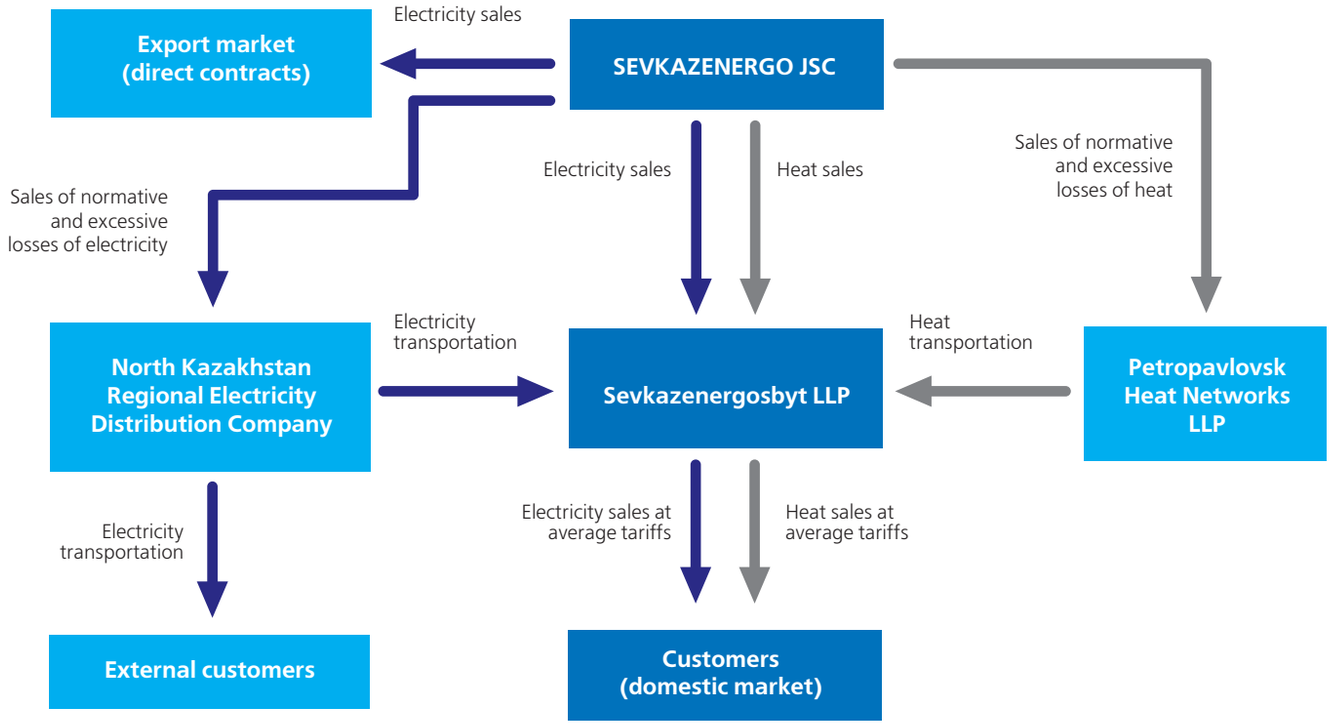
SEVKAZENERGO JSC is the largest energy producing company in North Kazakhstan region, which activity includes the whole lifetime cycle of produced heat and electricity: generation, transmission and distribution. SEVKAZENERGO JSC is a subsidiary of vertically integrated holding Central-Asian Electric Power Corporation JSC.

The Company's relations with customers and suppliers are based on the principles of respect and mutual responsibility. The key resource for achieving the set challenges is the Company's staff - a team of professionals who are striving to reach high production results.

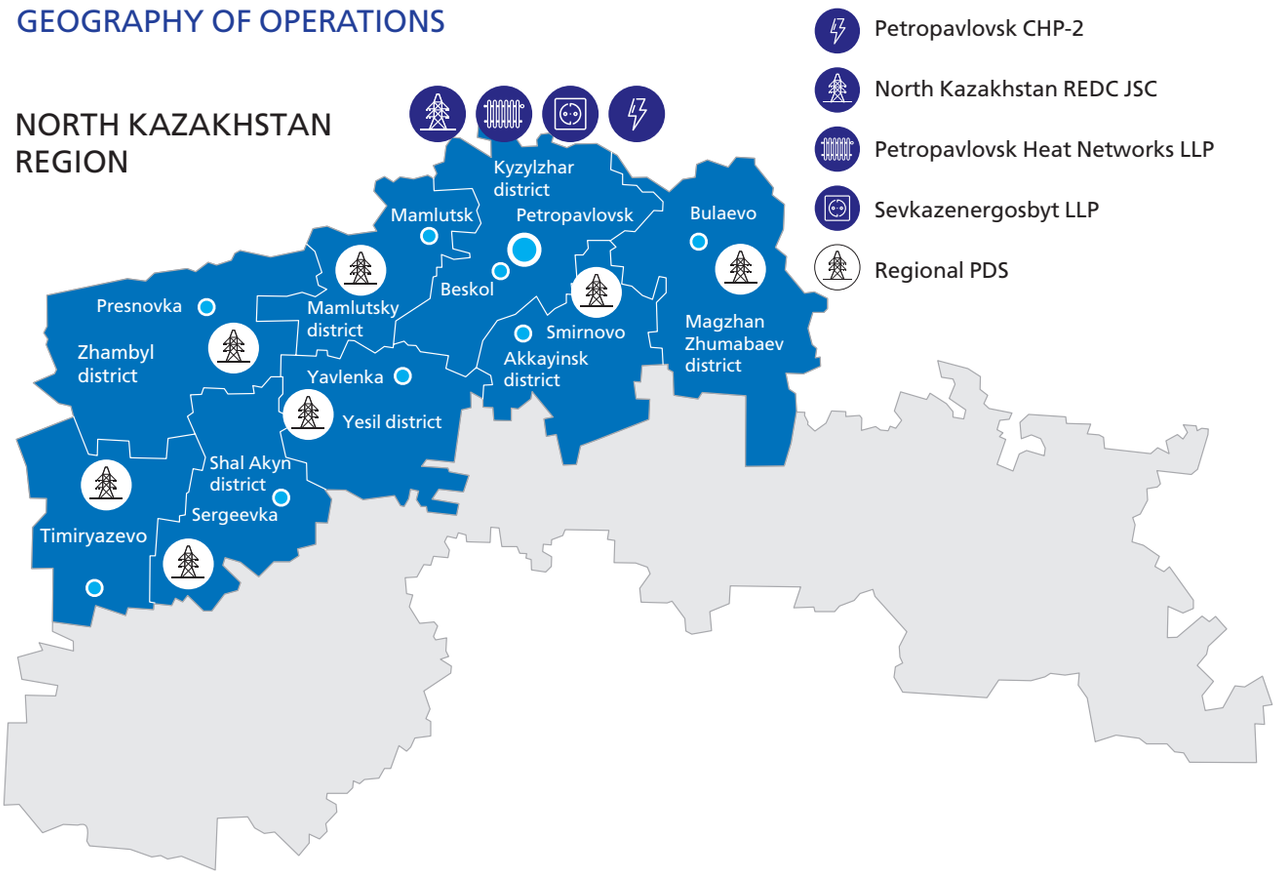
STRUCTURE OF THE COMPANY



BUSINESS MODEL



GEOGRAPHY OF OPERATIONS



DEVELOPMENT STRATEGY

In 2016, the Company approved the implementation of its long-term Strategy for 2016-2020. The Document determined the main areas of business development, management projects and technologies.

Strategic goal of SEVKAZENERGO JSC is to build the advanced energy company ensuring a balanced and sustainable development of the energy system of North Kazakhstan region, promoting economic growth. The Company strives to achieve international standards in the field of production, environmental protection, occupational health and social responsibility.

To achieve this strategic goal, the Company is implementing the following projects:
equipment modernization for the purpose of raising a technical level of production, reducing accident risks and eliminating downtime;
introduction of energy-saving and energy-efficient technologies in energy production and transmission;
minimizing per-unit production costs for heat and electricity;
maintaining certification for compliance with international, national and industrial environmental standards;
strengthening occupational health and safety requirements;
continuous training aimed to enhance employee professionalism;
introduction of an automated enterprise management system.

SUBSIDIARIES

SEVKAZENERGO has a vertically integrated structure which includes generation, transmission and distribution facilities in North Kazakhstan region.

SEVKAZENERGO JSC consists of:

- Petropavlovsk CHP-2;
- North Kazakhstan Regional Electricity Distribution Company JSC (electric networks of North Kazakhstan region, and the city of Petropavlovsk);
- Petropavlovsk Heat Networks LLP (heat networks of Petropavlovsk city);
- Sevkazenergosbyt LLP.

PETROPAVLOVSK CHP-2

Petropavlovsk CHP-2 focuses on the production of heat and electricity. At the end of 2016, the plant's installed capacity was 541 MW (electricity) and 713 Gcal/h (heat), with available capacity of 539 MW and 713 Gcal/h.

The plant consists of the following workshops: fuel and transport, boiler, turbine, electric and chemical. Auxiliary shops: thermal measurements and automation, maintenance, oxygen station, repair and construction.

SEVKAZENERGO uses the «KSN» grade coal (coking caking slightly metamorphized coal) from Ekibastuz basin as its primary fuel. It uses M-100 fuel oil for boiler starting.

NORTH KAZAKHSTAN REGIONAL ELECTRICITY DISTRIBUTION COMPANY JSC

North Kazakhstan Regional Electricity Distribution Company JSC (hereinafter – NK REDC) is an energy transmission organization, operating as a natural monopoly and providing regulated services in electric power transmission and distribution through power lines. The area served is 45 km^2, with 395 settlements and 4 cities.

The Company operates 0.4/220 kV voltage class power lines in the northern part of North Kazakhstan region, which the Company has on its balance sheet.

NK REDC includes 8 network areas, the Southern Part of the Main Power Lines and Substations (SPMPL&S), City Power Lines Administration (CPLA), which corresponds to the number of rural districts of the North Kazakhstan Regional Electricity Distribution Company JSC.

North Kazakhstan Regional Electricity Distribution Company JSC transmits and distributes electricity produced at Petropavlovsk CHP-2 of SEVKAZENERGO JSC for consumers in of North Kazakhstan region, South-Ural railway and Russian Federation.

Power grids of NK REDC connects most of facilities in North Kazakhstan region with about 6,094 enterprises of different types of incorporation and number of consumers of North Kazakhstan REDC JSC amounts to 154,764 people.

In September 2012, to make its services more accessible to customers, NK REDC JSC opened a customer service center providing the following services:

- issues related to land and easement;
- providing technical specifications for connecting to electricity and heat supply;
- connecting to/disconnecting from electricity supply;
- sealing electricity meters;
- other advisory and operational services.

PETROPAVLOVSK HEAT NETWORKS LLP

Petropavlovsk Heat Networks LLP (hereinafter – PHN) focuses on the transmission and distribution of heat from SEVKAZENERGO's CHP-2 to customers, heat network maintenance, ensuring uninterrupted heat supply to the city of Petropavlovsk. In addition, the company is upgrading the city's transmission and distribution networks, constantly searching and introducing new energy-efficient technologies capable of meeting modern standards for heat supply.

The total length of heat networks that PHN has on its balance sheet is 233.503 km, including 148.834 km of distribution pipelines and 84.669 km of main pipelines.

The heat network's equipment wear and tear rate as of January 1, 2017 was 71.87%, with 83.17% rate for main pipelines and a 58.53% rate for distribution pipelines.

The Company has 52 pumping stations on its balance sheet, including 5 main stations, 46 subscriber stations and one Central Heat Exchanger (CHE).

Total installed (rated) capacity of the pumping stations, including heat exchangers, is 12,202.9 kWh.

To ensure proper transmission and distribution of electricity and heat, Petropavlovsk Heat Networks LLP has operation and maintenance, occupational health and safety departments.

SEVKAZENERGOSBYT LLP

Sevkazenergosbyt LLP supplies electricity and heat to customers in the city of Petropavlovsk and North Kazakhstan region on a contract basis.

It focuses on ensuring reliable and uninterrupted supply of energy in amounts that meet the people's needs. The total number of customers of Sevkazenergosbyt as of December 31, 2016 was: electricity – 162,029, heat - 71,230.

The regional center has three customer service and payment locations for the public and 12 such locations in the region's district centres. The company has agreements with 10 banks for payment through self-service terminals and internet banking. A Customer Service Center was launched in December 2013. The new and modern facility helps to ensure the high quality and efficiency of customer service.

To promote the idea of energy saving among its customers, Sevkazenergosbyt LLP implements the time-of-day electricity pricing and educates the public on the importance to use energy meters.

Average rates

	from 1.01.2013	from 1.10.2013	from 1.07.2014	from 1.07.2015	from 1.01.2016	from 5.10.2016
Heat (KZT incl. VAT/Gcal)	3,096.02	3,374.54	3,364.13	3,374.54	3,890.56	3,907.18
	1.01.2013	1.01.2014	1.01.2015	1.04.2015	1.07.2015	1.01.2016
Electric power (KZT incl. VAT/kWh)	11.272	12.557	13.824	13.779	13.858	14.62

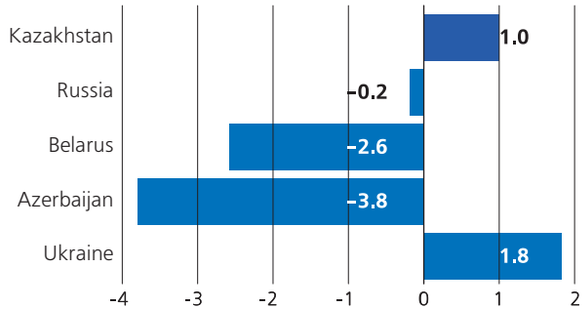
MARKET ENVIRONMENT ANALYSIS

ECONOMIC OVERVIEW

At the end of 2016, economy of Kazakhstan demonstrated growth at the rate of 1.0% against 1.9% of the previous year, which is currently one of the best indicators in the post-Soviet territory over the reporting period. The GDP slowdown resulted from decrease in the physical volume of crude oil production (from 79.5 mln tons to 78.0 million tons or 1.8%) as well as a negative multiplier effect of low oil prices on the economy at the beginning of the year: according to the U.S. EIA, in January 2016, a barrel of Brent crude oil was traded at an average price of 30.70 US dollars, while by December the oil price increased to 53.29 US dollars (+73.6%).

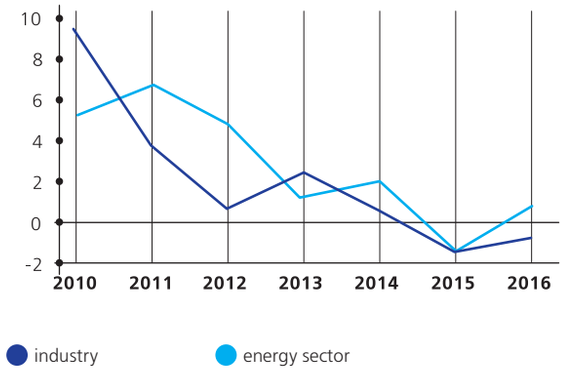
GDP dynamics in Kazakhstan and certain post-Soviet countries in 2016, %

Source: data of statistical agencies of the countries



Production dynamics in the overall industry and in the energy sector, %

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



The most marked growth in the GDP structure by 1.3% was demonstrated by the real sector. Outperformance of the real sector ensured a slight increase in its ratio in the GDP structure - from 35.5% to 36.0%. The service sector ratio decreased from 59.4% to 57.9%.

The construction and agriculture sectors demonstrated the most successful indicators among the real sectors of economy - 7.9% and 5.5%, respectively. At the end of the year, the production figures of Kazakhstan industry reduced by 1.1%. The mining industry experienced a 2.7% decline caused by decrease in production of oil, as well as coal - by 4.6% and iron ore - by 12.9%. The manufacturing industry demonstrated growth in indicators by 0.7% due to increase in metallurgy by 6.6% (including 8.5% in non-ferrous metallurgy, 3.3% in ferrous metallurgy), oil refining by 0.6%, food industry by 3.9% and pharmaceuticals by 2.5%. Other energy-consuming sectors of the manufacturing industry - chemical and construction - demonstrated a decline of 2.2% and 4.7%, respectively.

After the last year decline, the energy sector (electricity, gas, steam supply and air conditioning) demonstrated a minimum growth of 0.4%. The positive year end for the sector was affected by favorable dynamics in the electric power industry with an increase in production by 0.7%. Gaseous fuel production and distribution increased by 0.3%, while steam supply and conditioning decreased by 0.1%.

The production output of the water supply industry has been declining for several years. This year, a negative value reached 4.6%.

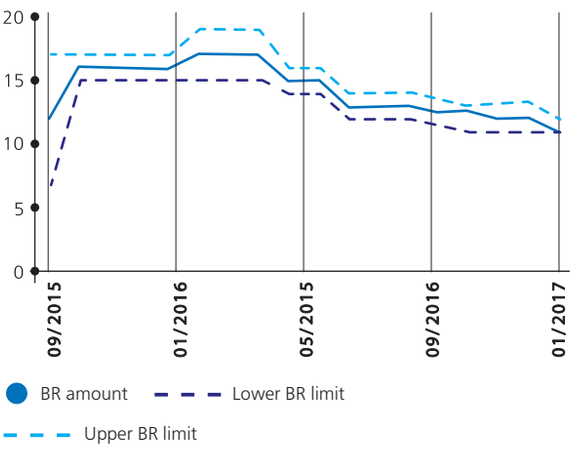
Investment activity in Kazakhstan's economy continued growing last year. The growth in fixed asset investments amounted to 5.1% (in 2015 - 3.7%). The main source of investments is still the companies' own funds - 60.7% of all capital investments. Over one third of investments (35.7%) are accounted for the mining sector. The volume of investments in the energy sector amounted to 6.0%.

MONETARY POLICY

The monetary policy of the National Bank of the Republic of Kazakhstan (NB RoK) is aimed at ensuring price stability. To realize this goal, since August 20, 2015, the NB RoK has changed its policy from currency to inflation targeting depending on a floating exchange rate. Against the background of weakening prices for crude oil, which is the main export commodity of the country, the national currency - tenge - devaluated by 79.7% from August 2015 to January 2016, while the value of the US dollar increased from 203.62 tenge/US dollar to 365.83 tenge/US dollar. During 2016, tenge was strengthening as oil prices recovered. The growth over the period of 12 months amounted to 8.8%: in December, the NB RoK fixed an average exchange rate at the level of 333.73 tenge/US dollar.

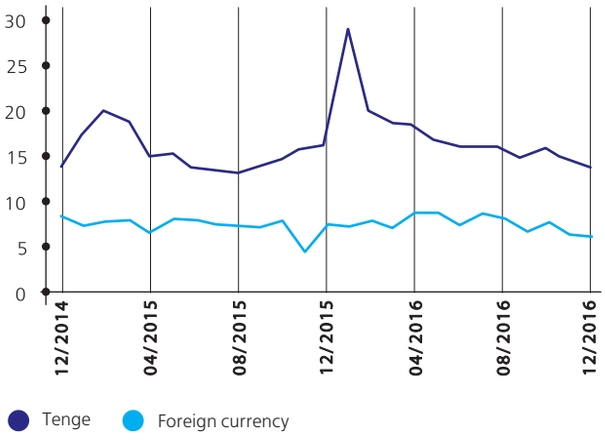
Amount and limits of a base rate (BR) if the National Bank of the Republic of Kazakhstan, %

Source: National Bank of the Republic of Kazakhstan



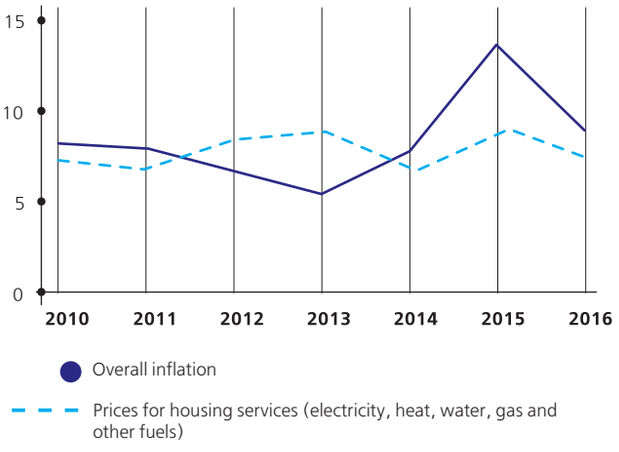
Average interest rate on loans granted to non-banking legal entities, %

Source: National Bank of the Republic of Kazakhstan



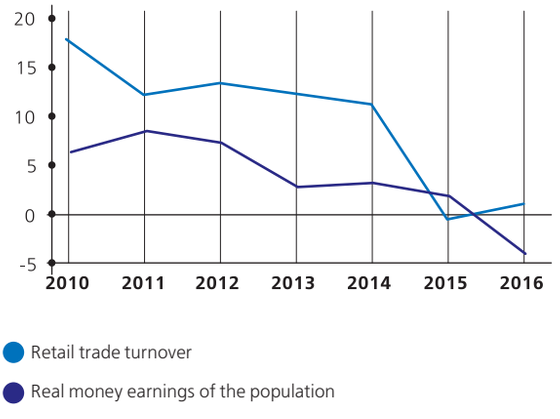
Inflation dynamics in the Republic of Kazakhstan, %

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



Dynamics of retail sales and real earnings of the population, %.

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



One of the most important elements of inflation targeting was the resumption of using monetary instruments to influence the credit activity of banks, including open market transactions involving provision and withdrawal of liquidity for the purpose of forming interbank interest rates close to the base rate.

During 2016, the NB RoK revised the base rate 5 times: 1 time - upward (from 16% to 17% in February), and 4 times - downward (in May, July, October and December). In January 2016, the base rate was fixed at the level of 16.0% with a lower limit of 15.0% and upper limit of 17.0%; in December - at the level of 12.0% with a lower and upper limit of 11.0% and 13.0%, respectively.

The overall credit activity of second-tier banks (STB) in 2016 was low. The loan portfolio of STBs for the year decreased by 1.6% from 15,553 KZT bln as of January 1, 2016 to 15,303 KZT bln as of January 1, 2017, while a share of foreign currency loans in the structure of liabilities did not practically change (33.7% vs. 32.6%). At the same time, interest rates on tenge-denominated loans granted to non-bank corporate entities decreased for the year from 16.0% to 14.4%. Interest rates on foreign-currency denominated loans granted to economy sectors also decreased from 7.4% to 6.5%.

CONSUMER MARKET

During the reporting year consumer markets met some difficulties. The physical volume of wholesale and retail trade decreased by 1.4%. Retail trade turnover increased by 0.9% against a 0.4% decline in 2015.

In December 2016, the inflation rate amounted to 8.5%, while food prices rose by 9.7%, prices for non-food goods - by 9.5%, and paid services rose in prices by 6.1%. Prices for housing services, water, electricity, gas and other fuels increased by 6.9%. (The target of the NB RoK for 2016-2017 is the annual inflation band of 6-8%. The regulator will strive to achieve a level of 3-4% by 2020).

As a result, real earnings of the population continued declining throughout the year. The annual decline value was equal to 4.5% (in 2015 the indicator grew by 1.4%). The influence of the decline in real earnings on consumer markets will continue during 2017. Due to rise in prices for inelastic goods and services (food, utilities), consumers will refuse to purchase durable goods.

FORECAST FOR 2017

Analysts believe that 2017 will be the first year of post-crisis recovery of economy of the Republic of Kazakhstan.

According to the data predicted by the International Monetary Fund (IMF) in February 2017, by the end of the year GDP of Kazakhstan will grow by 2.5%. The IMF believes that acceleration of economic growth rates resulted from structural reforms and vigorous measures implemented as part of «100 specific steps» program.

In November 2016, the European Bank for Reconstruction and Development (EBRD) predicted GDP growth in Kazakhstan at the level of 2.4% in 2017. EBRD experts believe that the growth will be affected by the restoration of confidence on the part of foreign investors, stabilization of the exchange rate, as well as favorable commodity prices.

The Ministry of National Economy of the Republic of Kazakhstan provided the most cautious forecast for 2017. GDP growth by 2.0% will be ensured by positive dynamics in the mining sector (3.6%) as well as in manufacturing segments such as food production (3.2%) and machine engineering (13.0%); the agricultural sector will grow by 2.5%, the construction sector - by 2.6%, transport sector - by 4.0%.

ENERGY SECTOR OVERVIEW

A distinctive feature of economy of Kazakhstan is high energy intensity. This is associated with a high weight of the real sector of economy, namely, energy-intensive industries such as oil and gas production, coal mining, metal ore mining, metallurgy and oil refining. About two thirds of the generated electricity is consumed by large industrial enterprises.

Kazakhstan is located in the moderate climate zone, and a long winter with an average temperature from -0.7°C (Shymkent) to -18.6°C (Petropavlovsk) is typical for the most regions of the country. Most of the cities of the country are provided with heat through the district heating system (DHS). All above-listed characteristics make the energy sector of Kazakhstan a strategic branch of the country's economy.

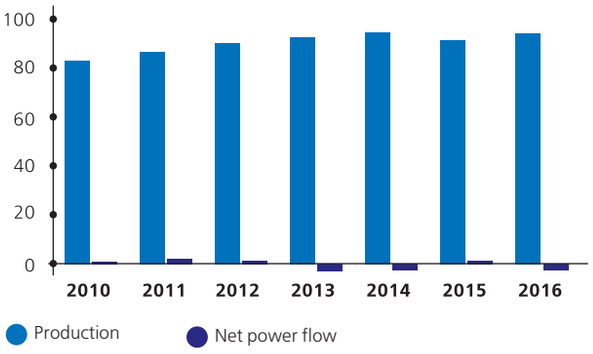
ELECTRIC POWER GENERATION

According to the data of the system operator of the Unified Energy System (UES) of the Republic of Kazakhstan - the National Company KEGOC, electricity is generated in the country by 118 electric power stations of various forms of ownership. As of 01.01.2017, the total installed electric capacity of power stations in Kazakhstan amounted to 22,055 MW, the available capacity - 18,789 MW.

The basis of the generation segment is thermal power stations (TPS, using both coal and gas turbine), which generate about 88-90% of electricity in recent years, including about 8% of electricity produced by gas turbine stations. Hydroelectric power plants (HEPP) of medium and high capacity produce about 10-12% of energy. Currently, renewable energy sources are actively developing in Kazakhstan in the form of small HEPPs, wind power plants (WPP), solar power plants (SPP) and bio-electric power plants.

Electric energy production in Kazakhstan and net power flow, bln kWh

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, Kazakhstan Electric Market Operator (KEMO)



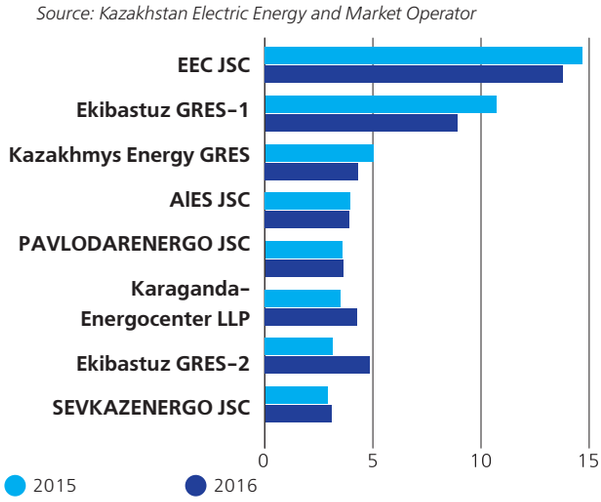
So far, a share of this kind of energy in the country's energy balance does not exceed 1% (0.98% at the end of 2016, according to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan).

The peak production and consumption of electricity falls on the autumn and winter period. The lowest average monthly generation output is observed in June and July, the highest figure - in December and January. About 70% of electricity is generated in four regions - East Kazakhstan, Pavlodar, Karaganda and Almaty while other 10 regions produce 30%.

According to KEGOC JSC, in 2016, Kazakhstan power plants produced 94.08 bln kWh of electricity, which was 3.6% more as compared to the level of 2015. In monthly terms, the year started with a recession; a positive dynamics was observed from April to December: in January generation decreased by 3.1% compared to the same month of 2015, in April the indicator increased by 2.3%, in October - by 9.9%. At the same time, in 2016, the generating segment of the national electric power industry could not restore its peak values recorded in 2014.

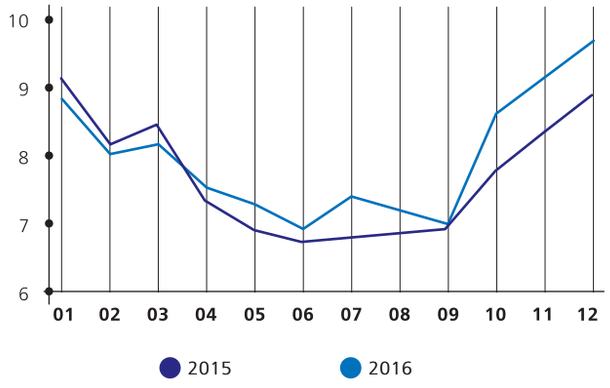
Electric energy generation at the largest energy-producing enterprises of the country, bln kWh

Source: Kazakhstan Electric Energy and Market Operator



Production of electric energy in RK by months, bln kWh

Source: Kazakhstan Electric Energy and Market Operator



Despite the overall increase in production, the year was very difficult for the largest energy producing enterprises of the country. Three leading organizations of the generation segment – EEC (part of ERG), Ekibastuz GRES-1 (a subsidiary of Samruk-Energo holding) and Kazakhmys Energy GRES - have reduced energy production compared to 2015. A noticeable growth in output was observed in PAVLODARENERGO JSC, SEVKAZENERGO JSC, Karaganda-Energocenter LLP and Ekibastuz GRES-2.

ELECTRICITY TRANSMISSION, DISTRIBUTION AND SUPPLY

Electric energy is transmitted through electrical networks, which represent a set of substations, distribution stations and power transmission lines with a voltage of 0.4-1150 kV.

The function of the backbone network in the UES RoK is performed by the National Power Grid connecting the Unified Energy System with the systems of border countries as well as ensuring interregional transit and release of electricity to wholesale consumers within the country. Electric networks that release electricity with a voltage of 220 kV and more are part of the National Power Grid and are included in the balance sheet of KEGOC JSC. In total, KEGOC JSC has more than 25 thous. km of electric grids, which transmit an average of 40% of electric energy generated at the country's power plants.

At the regional level, there are regional electricity distribution companies (REDCs) that provide electrical connections within the regions and electricity transmission to retail customers.

Energy-supplying organizations (energy retail companies) purchase electricity from energy-producing enterprises and sell it to retail customers at fixed tariffs.

ELECTRICITY CONSUMPTION STRUCTURE

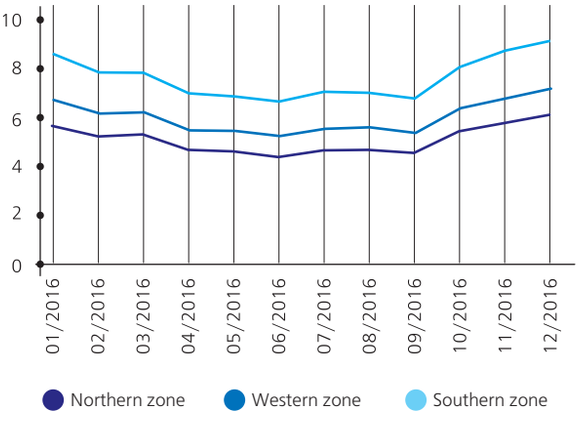
According to KEGOC JSC, in 2016, electricity consumption in Kazakhstan increased by 1.6% - up to 92.31 bln kWh. The main electricity consumers in Kazakhstan are large mining and metallurgical, oil refining and chemical enterprises, as well as the national railway carrier - Kazakhstan Temir Zholy JSC, Aksu Ferroalloy Plant, ArcelorMittal Temirtau JSC , Kazakhstan Electrolysis Plant JSC, Kazzinc LLP, Kazphosphate LLP and other enterprises. In total, 16 largest enterprises, as stated in the reporting of Kazakhstan Electric Energy and Power Market Operator, consume an average of 35 to 40% of electricity.

Since most of large metallurgical companies are located in the northern, central and eastern parts of the country, the Northern zone of the UES of Kazakhstan takes a 2/3 share in the consumption structure (at the end of 2016 - 67.0%). The Southern and Western zones account for 20.5% and 12.5%, respectively. It should be noted that a seasonal factor has a significant influence on the electricity consumption dynamics. During three winter months, 28.0% of the annual volume is consumed, in three summer months - 22.7% (data of 2016).

In 2016, Kazakhstan regained its position as a net electricity exporter; the net power flow has formed in the negative values zone for the third time over the last 7 years: in 2013, net electricity exports amounted to 2.33 bln kWh, in 2014 - 2.27 bln kWh, in 2016 - 1.76 bln kWh.

Structure of energy consumption by regions, %

Source: Kazakhstan Electric Energy and Power Market Operator



HEAT PRODUCTION, DISTRIBUTION AND CONSUMPTION

Heat energy is regarded as a social product in Kazakhstan, because the main consumers in this segment are households, mostly apartment buildings in urban areas, the amount of which at the end of 2016 was about 150 thousand, and part of the urban private sector, as well as over 20 thousand of social and budgetary objects (kindergartens, schools, universities, hospitals, state institutions, etc.). The population as well as housing and utilities consume 55% of the heat output.

According to Kazakhstan Electricity Association (KEA), there are 38 CHPs, 29 large and about 5,400 small boiler houses. Most of CHPs provide combined production - they produce both heat and electricity. The municipal property prevails in the ownership structure of heat-generating enterprises - it takes 80%, and only 20% of enterprises are in private ownership. According to KEA, 11% of facilities were built 20 years ago; the same number of facilities are in operation for 20-30 years, 38% - for 30-40 years, 39% of heat generating capacities - more than 40 years.

According to 2015 data, the length of the republican heat networks is 11.88 thous. km. In 2014, depreciation of the networks was officially estimated at the level of 70-80%. According to the state plan for heat networks modernization for 2014-2020, by 2020 the level of depreciation of the heat network facilities will reduce to an average of 55%.

At the end of 2016, CHPs and boiler houses of Kazakhstan produced 80.7 mln Gcal of heat energy, which was 0.1% less than in 2015. The decrease in heat energy production in Kazakhstan has been observed since 2013: reduction in generation by this year is 22.0% as compared to the results of 2016, the average annual dynamics since 2013 is -5.8%.

The production decline trend is associated with the implementation of programs aimed to improve energy efficiency at industrial enterprises and residential sector facilities, as well as with the modernization of energy generating capacities and heat network facilities.

PRICES FOR ELECTRICITY AND HEAT

Companies operating in heat energy transmission and distribution sectors are regulated by the anti-monopoly authority - the Committee on Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan

Tariffs of electric grid companies are aimed to provide compensation for operating costs and capital expenditures of natural monopoly entities. In this regard, the regulator's policy provides for the application of tariffs that include an investment component - so-called cap rates.

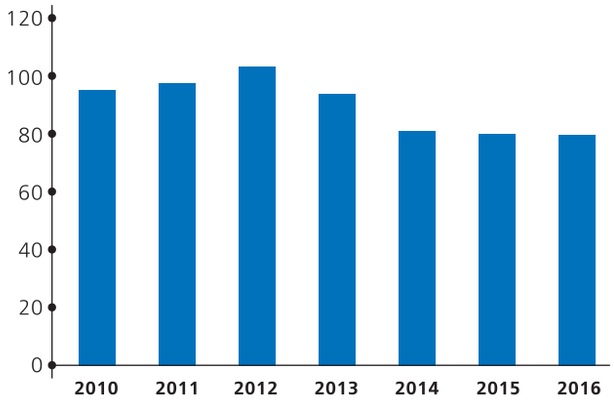
In 2015, the Government of the Republic of Kazakhstan extended the program of cap rates being in effect from 2009 to 2015 until January 1, 2019. From 2019, the investment activities in the electric energy generation sector should be supported through introduction of a power market model.

Since 2016, electricity and heat supply organizations have switched to 5-year cap rates, which can be adjusted.

According to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, final selling prices for electricity increased by 6.1%, for heat energy - by 8.0%. As compared to 2015, the growth in tariffs can be estimated as moderate: one year earlier, they increased by 8.3% and 14.0%, respectively. Since 2010, the average annual rate of tariff growth is 8.5% (electricity) and 6.8% (heat).

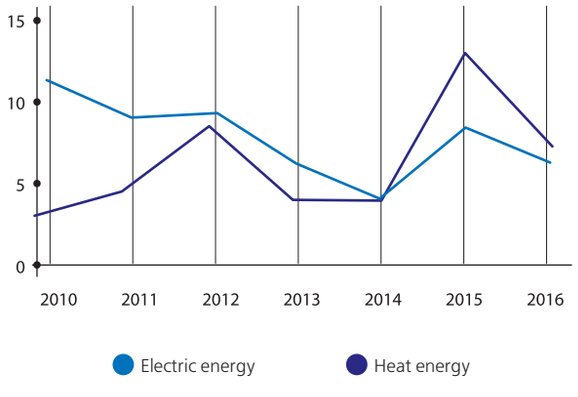
Heat energy production in Kazakhstan, mln Gcal

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



Growth of tariffs for electric and heat energy in Kazakhstan, %

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



KEY EVENTS OCCURRED IN LEGISLATION IN 2016

During 2016, state bodies (central and local) approved more than 100 regulatory acts in the field of electricity and heat energy.

In February 2016, the Government of the Republic of Kazakhstan approved new Rules for determination of fixed tariffs prescribing the norms for calculation of tariffs for renewable energy sources.

In April 2016, the Law «On introduction of amendments and additions to some legislative acts regarding the transition of the Republic of Kazakhstan to the green economy» providing details of mechanisms of using renewable energy sources came into force.

In August of the reporting year, the Minister of Energy of the Republic of Kazakhstan issued an order, pursuant to which the association of legal entities «Kazakhstan Energy Association» was defined as the Market Council. The Market Council is an integral element of the electric power market, the goal of which is to monitor market activity.

In October 2016, the Council of the Eurasian Economic Commission approved a list of activities aimed to implement the main macroeconomic policy guidelines of the EEU member states for 2016-2017. The unified energy market of the Eurasian Economic Union should be introduced in 2019. During the following two years, the union members should elaborate common rules for operation of the unified electric energy market, including the rules for accessibility of services rendered by natural monopoly entities.

In November 2016, the Government of the Republic of Kazakhstan submitted a draft law «On introduction of amendments and additions to some legislative acts of the Republic of Kazakhstan relating to electric energy» to the Parliament for review. The aim of amendments was to ensure the implementation of activities under the «100 specific steps» plan - «Enlargement of Regional Electric Grid Companies».

State power grids are transferred into trust management or gratuitous use of energy transmission organizations (ETO), to whose networks such grids are connected. The transfer of ownerless power grids to local executive bodies is regulated on a gratuitous basis and it is stipulated that assets of ownerless power grids transferred to ETO's balance sheet are not included in the ETO's tax base. The requirements to ETOs are strengthening: ETOs should have in place dispatching process management, a group of certified employees with the appropriate material and technical base for operation and repair of networks, a service agreement signed with a system operator, automated commercial accounting systems and telecom systems unified with KEGOC systems.

KEY EVENT OCCURRED IN THE INDUSTRY IN 2016

The main event of the year in the energy industry of Kazakhstan was the postponement of two most anticipated projects: construction of Balkhash TPS and power unit No. 3 at Ekibastuz GRES-2. At the end of 2016, two out of eight assets of Samruk-Energo JSC, which were put up for sale under the 2014-2020 privatization program, were privatized. 100% stake of East Kazakhstan REDC JSC and 78.64% of Mangistau REDC JSC were sold. Sale of assets such as Aktobe CHP, Alatau Zharyk Company JSC, AlES JSC, Almatyenergosbyt LLP and Tengis Munay JSC is also expected. The ultimate goal of Samruk-Energo JSC is to prepare for the public listing on the stock exchange.

INVESTMENT PROJECTS

In 2016, investment activities in the energy sector continued to decline. The volume of investments in fixed assets decreased by 19.6% to 459.7 KZT bln. The decline lasts for the second year due to the following two key events - the completion of the main part of the cap rates program in the electric energy generation sector and the decline in consumption due to the national economic crisis.

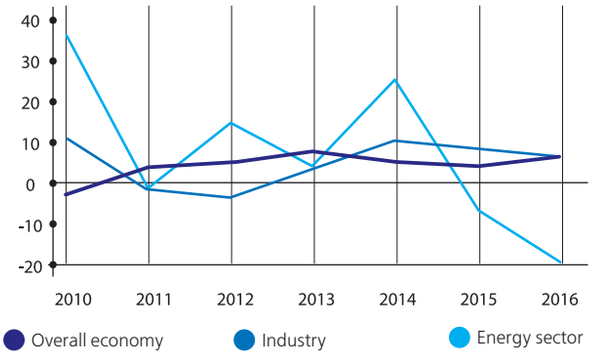
At the same time, the gross inflow of foreign investments demonstrated a positive trend in the reporting year. Following the results of I-III quarters of 2016, the sector received 82.9 mln US dollars of foreign investments - an increase in this indicator is 6.7 times relative to the level of four quarters of 2015.

At the corporate level, it is important to note several players with the largest investment programs implemented in 2016 and whose projects had a great significance for the industry. According to the plan of Samruk-Energo JSC, the total amount of the investment program for 2016 was set at the level of 91.8 KZT bln. Following the results of 2016-2017, a total of 223.9 KZT bln will be invested in the development of new and maintenance of old assets.

In September, a boiler No. 8 was put into operation at Almaty CHP-2, which allowed increasing the heat capacity of the station by 20% up to 1,414 Gcal/h. The project cost amounted to 25.7 KZT bln. Capital expenditures incurred for implementing the project of upgrading and expanding the open switchgear (OSG-500 kV) at EGRES-1 amounted to 18 KZT bln. The cost of the project of installing a new turbine at Aktobe CHP, which allowed increasing the installed capacity of the station from 88 to 118 MW, amounted to 3.5 KZT bln.

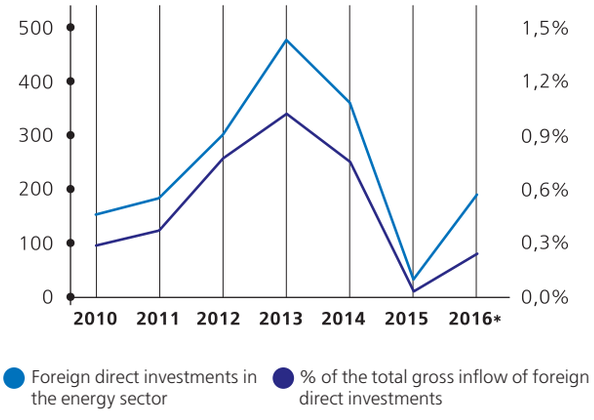
Dynamics of investment to fixed assets in the Republic of Kazakhstan, %

Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan



Gross inflow of foreign direct investments to the energy sector of Kazakhstan, USD mln, %
***according to the results of I-III quarters**

Source: National Bank of the Republic of Kazakhstan



The main project of Central-Asian Electric Power Corporation JSC in 2016 was the modernization of a turbine unit No. 5 (95 MW, complete replacement) and a boiler No. 12 (reconstruction) at Petropavlovsk CHP-2. The new turbine unit will allow generating more than 650 mln kWh per year, and the reconstructed boiler with a capacity of 270 tons of steam per hour will provide additional generation of 5.7 mln kWh per year, while a total efficiency will amount to 40.31% (turbine units) and 89.56% (boilers).

In November 2016, a turbine unit No. 12 was commissioned at Ust-Kamenogorsk CHP (included in AES Kazakhstan group). The cost of the project of installing a new turbine with a capacity of 120 MW was equal to 53 mln US dollars.

In May, a turbine unit with a capacity of 110 MW (electric energy) and 180 Gcal/h (heat) was commissioned at Karaganda CHP-3 owned by Karaganda-Energocenter, and therefore the plan efficiency should increase by 25%.

In December, the system operator KEGOC completed the construction of 500 kV high-voltage power transmission lines of Ekibastuz - Shulbinskaya HEPP (Semey). This is the first part of the project for electricity transit in the North-East-South direction. The completion of the project for construction of a transit main, which will also pass through Aktogay and Taldykorgan to Alma substation, with a length of 700 km (500 and 220 kV overhead lines) and costing 120 KZT bln, is expected in 2018.

MARKET DEVELOPMENT PROSPECTS

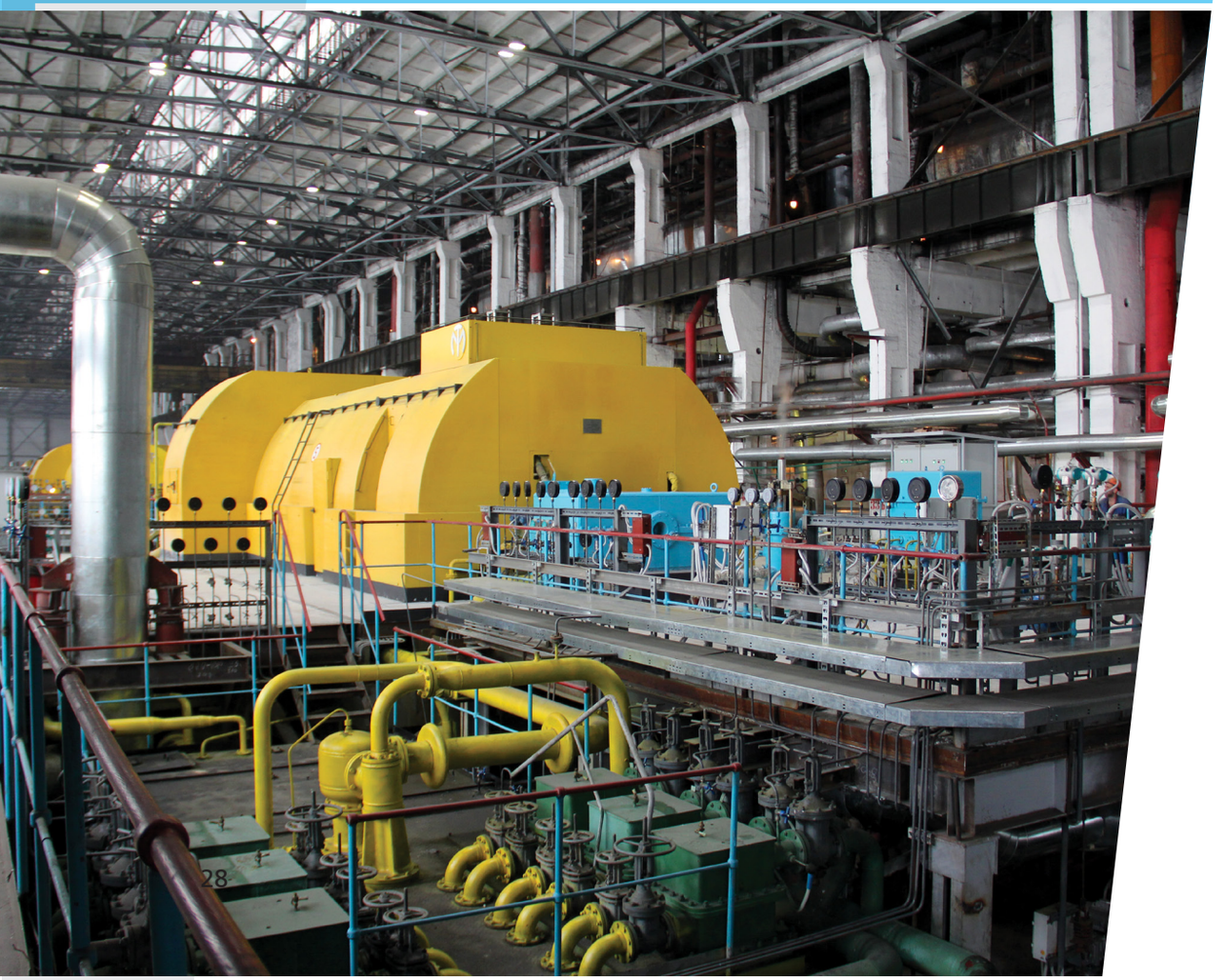
The positive dynamics outlined in the energy sector of the Republic of Kazakhstan will continue in 2017. The economic growth resulted from increase in production in the mining and manufacturing sectors of industry, as well as in transport, will lead to increase in the electric energy production and consumption.

According to the power balance of the UES of Kazakhstan approved by the Ministry of Energy of Kazakhstan in October 2016, electricity production will amount to 103.9 bln kWh in 2017 (+10.4% compared to the actual figure of 2016). In the long term until 2023, production will grow from 103.9 to 113.4 bln kWh. After 2016, the growth will be affected by newly introduced energy sources, which will generate 19% of the output in 2023. Generation of electric energy by renewable sources will grow from 1.4 to 5.6 bln kWh.

In the next 6 years, the total installed capacity in the energy system of Kazakhstan will grow by 2.2% (from 22,346 to 22,832 MW), the available capacity - by 6.0% - from 18,638 to 18,756 MW.

PERFORMANCE AND DEVELOPMENT PROSPECTS OVERVIEW

In 2016, SEVKAZENERGO JSC Group continued implementation of the Investment program allowed to increase heat and electricity generation, significantly reduce electricity transmission losses and improve environmental performance. 11.078 bln tenge was allocated in 2016 for the investment program implementation.



GENERATION INCREASE

In December 2016, Petropavlovsk CHP-2 commissioned new turbine unit No. 5 after complete replacement. Turbine provided the region and the city of Petropavlovsk with additional 62 MW of electric capacity. Thus, in 2016, capacity increased by 18.9% compared to 2015.

In 2016, the electricity output increased by 14.2% compared to 2015. The increase in electricity generation will amount to 650,051.2 thous. kWh per year after the launch of turbine unit No. 5. Also in 2016, reconstructed boiler No. 12 was put into operation with increase in steam output of the plant by 50 tons/h. All mentioned units are equipped with automated process control system (APCS).

The plant's capacity increases considerably thanks to the introduction of new equipment, allowing to fulfill the region's growing needs in heat and electricity and creating a foundation for consistent development of business projects and the manufacturing sector in North Kazakhstan region.

REDUCTION OF ELECTRICITY AND HEAT LOSSES

Thanks to the introduction of modern energy saving technologies, the North Kazakhstan Regional Electricity Distribution Company JSC eliminated completely excessive losses in its electric networks. Furthermore, measures taken under the investment program helped to reduce wear and tear of fixed assets from 71.1% at the beginning of 2016 to 69.8% at the end of the reporting year, as well as reduce the number of technological violations and lost load, thereby improving the reliability of electricity supply to customers.

Losses have been reduced largely thanks to the on-going installation of AMR CS (automated meter reading and control system) systems and reconstruction of power lines using self-supporting insulated wire.

The AMR CS system is intended to improve the accuracy of accounting and power quality monitoring, detect and localize losses, identify theft and ensure transparency of electricity distribution. The principle on which retail AMR CS systems are based is automatic readings from the customers' meters and their transfer online to the servers of the energy company. This helps to reduce energy losses, simplifies the collection of meter readings and time-of-use accounting of electricity consumption.

Item	2013	2014	2015	2016
Installed electricity generation capacity as of the year end, MW	397	434	455	541
Electricity output, mln kWh	2,603	2,733	2,809	3,208
Share in Kazakhstan's total electricity generation, %	2.8%	2.9%	3.1%	3.4%
Electricity transmitted, mln kWh	1,182	1,225	1,187	1,200
Electricity sold, mln kWh	2,080	2,207	2,308	2,692
Installed heat generation capacity as of the year end, Gcal	874.8	791.65	717.65	713
Heat generated, thous. Gcal	1,791	1,946	1,861	1,905
Heat transmitted, thous. Gcal	1,262	1,333	1,330	1,297
Heat sold, thous. Gcal	1,249	1,319	1,316	1,288

The self-supporting insulated wire technology is the most innovative and promising, as its purpose is to improve the quality of services provided to customers, reduce production costs (energy losses during transmission, power line and energy equipment repair costs and emergency relief costs). Moreover, self-supporting insulated wire virtually eliminates the possibility of energy theft, ensures high reliability of power supply with technical losses reduced to a minimum.

The main measures taken to reduce heat losses are aimed at reconstruction and modernization of district heating networks in Pavlodar, Ekibastuz and Petropavlovsk. The project is implemented as part of the Investment Program for 2016 - 2020 financed both at the expense of own funds and by raising a new investment loan from the EBRD and budgetary subsidies from the Ministry of National Economy of the Republic of Kazakhstan under Nurly Zhol program.

The project is aimed at increasing the heat supply reliability, energy efficiency, reducing losses and improving environmental standards through CO_2 emissions reduction due to coal consumption saving resulted from reduction of heat losses during transmission over networks.

Petropavlovsk Heat Networks LLP install automatic heat flow regulators, industrial controllers and modems to connect the mechanisms and instrumentation with the dispatch service. All equipment installed at heat supply stations is integrated into a single network, which allows dispatchers to monitor promptly the hydraulic and temperature conditions, and specialists - to make urgent decisions in extraordinary and emergency situations.

In addition, the enterprise uses advanced technologies to detect heat loss sources: thermal imaging devices to monitor and diagnose trunk pipelines, and ultrasonic flaw detectors.

In the **Construction and Reconstruction** section of the investment program, the following activities have been implemented: replacement of 15.5 km of 10-0.4 kV cables in Petropavlovsk, reconstruction of the equipment and buildings of 7 transformation substations 10/0.4 kV, reconstruction of 9.15 km of 10 kV overhead power lines in Petropavlovsk; reconstruction of equipment of 110/10 kV substation No. 8 with replacement of 110 kV cells vacuum circuit breakers in packaged modular building; accumulator battery changing at Kiyaly substation 220/110/35/10 kV; overhaul of transformers at substations 110/35/10 kV Blagoveschenka, 10/35/10 kV Pokrovka and 110/10 kV No. 4.

In the **Modernization of Fixed Assets** section, the following activities have been implemented: installation of Tellur device at 10 kV RP No. 12 in Petropavlovsk; installation of Ovod MD device at 10kV RP No. 3 in Petropavlovsk; replacement of outdoor switchgear (KRUN) with automatic circuit reclosers in Petropavlovsk at 110/10 kV substation N. 8 «F-10 KRUN-1» and at 110/10 kV substation No. 8 F-4 KRUN-3.

As for **Replacement of Electrical Equipment,** the following items were purchased under the 2016 investment program: 630 kVA power transformer, two 250 kVA power transformers and three 160 kVA transformers.

In the **Reconstruction of heat networks** section, the Company performed scheduled maintenance of the main and distribution networks with replacement of pipes with a total length of 14.715 km (4.857km of main networks and 9.858 km of distribution networks). Damaged thermal insulation and bare parts of pipelines were restored or repaired using glass wool panels with a total length of 10.886 km.

For the reconstruction of its heat networks, Petropavlovsk Heat Networks LLP used pre-insulated pipes which are superior to conventional pipes (pipe – mineral wool insulation - sheet iron shell) thanks to their high thermal insulation characteristics (the insulation layer is waterproof, wear-resistant and doesn't require replacement throughout the service life), higher equipment reliability, rated service life of 25 years, high corrosion-resistance of the pipe surface thanks to high-density polyethylene waterproof coating. Moreover, the underground installation of such pipes does not require concrete trays, and there is an alarm system informing about the leaks and detecting their exact location. In 2016, construction and reconstruction of heat pipelines using pre-insulated pipes with a length of 3.65 km was completed.

Another technology that has been used in Petropavlovsk is pipe insulation restoration using polyurethane (PU) foam shell to eliminate heat losses in networks with a length 1.55 km. What makes this material stand out is the stability of its thermal insulation properties throughout the entire service life up to 30 years. This is how Petropavlovsk Heat Networks LLP solves the problem of old and partially destroyed insulation.

ENERGY SAVING

HSEVKAZENERGO's Petropavlovsk CHP-2 is implementing a special five-year energy efficiency program developed based on recommendations of the energy audit performed by KazakhEnergoAudit Technical Research Center in 2014. Thanks to this program, in 2015 savings achieved 277.712 thous. tons of coal.

An important event for the CHP was the launch of type T-95/105-8.8 turbine unit No. 5 in December 2016. The new turbine helped to improve reliability and efficiency of the plant, increasing its installed capacity by 62 MW and annual electricity output by 650 mln kWh. It is expected that fuel savings per year will amount to 273.912 thous. tons of fuel equivalent. In addition, reconstruction of boiler unit No. 12 BKZ-220-100-4 (E-270) was completed to increase steam output by 50 tons per hour. This measure allowed for improving reliability and effectiveness of the boiler unit and the plant and increase boiler efficiency from 89.12% to 91.3%. Estimated fuel savings per year will amount to 4.2 thous. tons of fuel and additional electricity generation due to increase in boiler steam output will amount to 5,683.72 thous. kWh per year.

Thanks to the energy saving initiatives, coal savings at Petropavlovsk CHP-2 in 2016 reached 23.043 thous. tons compared to 2015. In 2016, Petropavlovsk CHP-2 produced 3,208 mln kWh of electricity.

In 2017, the plant expects to produce 3,571 kWh of electricity or 11.3% more compared with 2016. The plant's installed electricity generation capacity as of January 1, 2017 was 541 MW.

OUTCOMES OF THE INVESTMENT PROGRAM FOR 2009-2016

PETROPAVLOVSK CHP-2 OF SEVKAZENERGO JSC

is the main source of heat and electricity for North Kazakhstan region. Petropavlovsk CHP-2 focuses on the production of heat and electricity. SEVKAZENERGO's total installed electricity generation capacity is 541 MW and its total installed heat generation capacity 713 Gcal/h.

2012

boiler units No. 6 and No. 7 were modernized by increasing the steam capacity of each boiler by 100 tons per hour, increasing boilers efficiency by 5.9%, reducing fuel consumption, coal savings amounted to 29.5 thous. tons per year.

2013

the project for reconstruction and modernization of a turbine unit No. 4 was completed with 30MW increase in the turbine capacity; a turbine unit No. 6 was upgraded with an increase in electric capacity by 24 MW. The implementation of two projects resulted in increase in the installed electric capacity by 54 MW.

2014

a new boiler No. 8 was installed, so steam capacity increased by 50 tons/h.

2015

a turbine unit No. 1 was put into operation, which allowed increasing its installed electric capacity by 21 MW. The installation of new equipment allowed the plant to increase its installed electric capacity from 434 to 455 MW. A turbine unit No. 7 was reconstructed, which provided a possibility to increase its installed and available capacity by 24 MW.

2016

an upgraded turbine unit No. 5 was put into operation, as a result of which electric capacity increased by 62 MW. An upgraded boiler No. 12 was put into operation as a result of which steam capacity increased by 50 tons per hour.

PROCESS AUTOMATION

In 2014, North-Kazakhstan REDC JSC became the first company in Kazakhstan to install vacuum circuit-breakers at substation cells. During the period from 2014 to 2016, seven oil circuit breakers were replaced with vacuum VRS-110 kV breakers, which allowed not only increasing the reliability of power supply to consumers in a number of regions of North Kazakhstan region and Petropavlovsk, but also reducing operating costs related to constant repair of oil circuit breakers.

CUSTOMER AFFAIRS

Major consumers of Sevkazenergosbyt LLP: ZIKSTO JSC, PPHMB JSC (Petropavlovsk Plant of Heavy Machine Building), South-Ural Railway

Services are rendered to the population, small and medium-sized businesses and stated-funded organizations in compliance with the service quality requirements stated by state authorities within their competence and taking into account tariffs approved by an authorized state body.

In 2016, services to retail customers were provided through the following three communication channels - direct, remote and interactive servicing.

Remote telephone servicing is provided through the Contact Center. The main function of the center is to serve customers by a multi-channel phone while recording the calls with the aim to control the service quality. The customer service quality is improved through monitoring of customers' electronic requests.

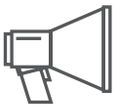
Interactive servicing is provided through corporate web-site www.sevkazenergo.kz.

GRIEVANCE MECHANISM

Sevkazenergosbyt LLP keeps records of complaints and applications in the following ways:

through the Contact Center (conversation recording)

by registering complaints from individuals and legal entities in special logs and boxes at service center administrator desk



by holding public hearing with population of the city with attendance of mass media (local TV-channels) and publishing information in local print press

on the official website the following columns were created: "Customer Service", "Anti-corruption", "Questions-Answers", "Feedback"; they are used to receive the grievances submitted by consumers of Petropavlovsk and regional districts

FINANCIAL AND ECONOMIC INDICATORS

The consolidated financial statements of the Company for 2016 were prepared in accordance with the International Financial Reporting Standards. Accounting policies are applied to all enterprises of the Company on a uniform basis.

The key financial and economic indicators of the Company demonstrate the effectiveness and efficiency of operational and financial activities, as well as its performance in line with the primary areas of its strategic development.

REVENUE FROM SALES OF PRODUCTS/SERVICES

Based on the results of 2016, the Company produced electrical and heat energy, including the transmission and sales of purchased energy, for a total amount of 30,905 mln tenge, which was 16.1% more than in 2015 due to the increase in sale of electrical energy and rising in heat tariffs.

The dominant factors affecting the level of income from sales in 2016 compared to the previous period are as follows:

- Volume of sales of electric energy increased by 3,419 mln tenge or 18.4% as compared to the level of 2015 due to increase in electricity sales by 384.2 mln kWh (16.6%) as a result of commissioning of new generating capacities under the Investment Program and positive dynamics of external market demand;
- The revenues from transmission of electric energy increased by 334 mln tenge or 8.1% due to growth of tariff by 6.2% and increase of transmission volume by 21.3 mln kWh (1,8%);
- Revenues from transmission of heat energy increased by 354 mln tenge or 19.7% due to increase in transmission tariffs by 22.3%;
- Revenues from sales of heat energy, taking into account the marketing margin, increased by 188 mln tenge or 8.9% due to increase in tariffs for generation and a selling tariff of retail companies by 11.3% as a whole.

Key financial and economic indicators for 2014–2016, KZT mln

INDICATORS	2014	2015	2016
Operating income	24,079	26,608	30,905
Cost including period expenses	(18,316)	(20,462)	(23,026)
Profit from operating activities	5,763	6,146	7,879
Total EBITDA for the year*	8,857	10,487*	12,726
Total EBITDA for the year, margin in %	36.8	39.4	41.2
Income tax expenses	(1,194)	(110)	(1,484)
Net profit for the year	3,181	(303)	4,886
Assets	92,948	99,261	105,633
Capital	52,264	51,118	56,004
Capital expenditures for fixed assets	11,327	10,739	10,962

*Total EBITDA is stated excluding the impact of the exchange rate difference

COST OF GOODS/SERVICES SOLD

The cost of electrical and heat energy sold in 2016 amounted to 20,900 mln tenge having increased by 2,639 mln tenge or 14.5% compared to 2015 due to increase in operating costs under such items as Fuel, "Emissions", "Wear and Deprecation", "Remuneration of labor", "Purchased Energy" and the "Third Parties' Services".

In the cost structure of the Company the largest specific ratio (41%) has the "Fuel" item.

Value appreciation for this item amounted to 1,271 mln tenge or 17.4%, including 810 mln tenge due to fuel consumption increase by 10.7% and 461 mln tenge due to 7% increase in price with account of transportation.

Increase in coal consumption for production resulted in increased emission costs by 160 mln tenge. Amortization deductions increased by 330 mln tenge or 8.6% due to commissioning of fixed assets in 2016 for a total amount of 10,962 mln tenge.

The increase in remuneration by 135 mln tenge or 5.3% occurred due to salary increase from January 1, 2016.

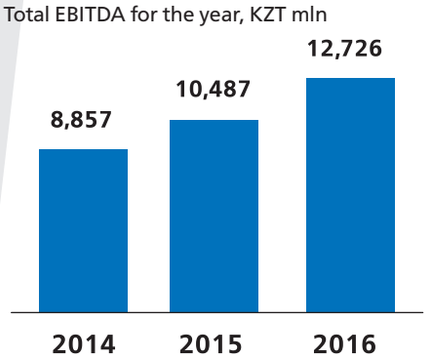
Cost for purchasing electric energy from renewable energy sources increased by 225 mln tenge or 125.8% due to increase of purchase amount by 9.3 mln kWh or 127.9%.

Cost of production type services increased by 450 mln tenge or 16.6% due to increase of expenses for technical dispatching control and balancing by KEGOC, and expenses for repair and maintenance of equipment.

TOTAL EBITDA DYNAMICS*

The EBITDA indicator for 2016 amounted to 12,726 mln tenge, having increased by 2,240 mln tenge or 21.4% as compared to 2015. The main factors affecting the operating performance growth are increase in electric energy sales by 384.2 mln kWh or 16.6%,increase in tariffs for heat energy generation - by 10.4%, heat transmission - by 22.3% and heat sales - by 15.6%, and tariffs for electric energy transmission - by 6.2%.

Total EBITDA for the year, KZT mln



*Total EBITDA is stated excluding the impact of the exchange rate difference

OPERATING EBITDA BY SEGMENTS

Operating EBITDA has been chosen as a basic indicator in the evaluation of the Company production performance. This performance indicator does not take into account other income, finance income, non-monetary component of exchange rate liabilities, amortization, and non-recurrent or non-permanent items that do not affect the primary production activities of the Company.

Operating EBITDA indicator of the Company for 2016 amounted to 12,226 mln tenge, having increased by 2,099 mln tenge or 20.7% compared to 2015. A leading (primary) margin segment in the operating EBITDA structure is accounted for electricity and heat production (11,764 mln tenge), which increased in 2016 by 1,055 mln tenge or 10% due to 384.2 mln kWh or 16.6% increase in additionally produced electrical energy, the efficient operation of introduced capacities as well as increase in tariffs for heat energy generation.

DYNAMICS OF NET INCOME/LOSS

Profit from operating activities for 2016 amounted to 7,879 mln tenge (25.5% margin to sales income), having increased by 1,732 mln tenge due to increase in electrical energy sales by 16.6%.

Net financial expenses increased by 608 mln tenge or 46.2% due to accrual of interest on investment loans as a result of completion of interest expenses capitalization for commissioned facilities as well as due to increase in the interest rate on loans denominated in the national currency. Income tax expenses increased by 1,374 mln tenge due to commissioning of equipment after upgrading and reconstruction and granting tax preferences.

ASSETS AND LIABILITIES

As of December 31, 2016, the total assets of the Company amounted to 105,633 mln tenge, which is 6.4% more than in 2015.

As of December 31, 2016, the value of fixed assets amounted to 98,437 mln tenge or 93.2% of the total assets. In 2016, as part of the large-scaled Investment Program for 2016, the amount of 10,962 mln tenge was allocated to construction in progress and acquisition of fixed assets. Commissioning of new and upgraded facilities of the current period and carried forward from previous years amounted to 15,156 mln tenge. In particular, it is connected to the commissioning of a new turbine unit No. 5 and upgraded boiler unit No. 12 at Petropavlovsk CHP-2 in December 2016.

Other financial assets are the deposits in amount of 206 mln tenge with flexible partial replenishment and withdrawal conditions. The deposits are represented by the funds accumulated for loan servicing, financing the investment program and maintenance of working capital.

Financial and economic indicators by segments for 2016, KZT mln

Indicators	Production of heat and electrical energy	Electrical energy transmitted and distributed	Heat energy transmitted and distributed	Sale of heat and electrical energy	Others	Total
Operating income	23,786	4,441	2,147	519	12	30,905
Cost	(14,835)	(3,623)	(2,083)	(284)	(75)	(20,900)
Gross profit	8,950	818	64	235	(63)	10,005
Period expenses	(521)	(488)	(694)	(424)	-	(2,126)
Profit from operating activities	8,430	331	(630)	(188)	(63)	7,879
Financial expenses	(1,853)	(71)	3	-	-	(1,921)
Other incomes	95	112	25	27		260
Losses from exchange rate difference	76	58	20	(1)		153
Income tax expenses	(1,446)	-99	27	34		(1,484)
Net profit for the year	5,302	330	(555)	(129)	(63)	4,886
Operating EBITDA by segments	11,764	979	(281)	(173)	(63)	12,226

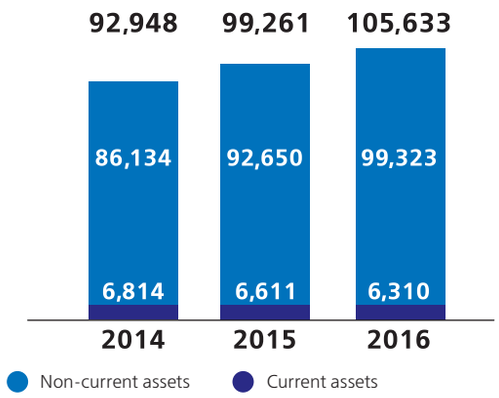
The Company authorized capital is composed of 143.9 mln ordinary shares. As of December 31, 2016, the fully paid ordinary shares amounted to 16,292 mln tenge.

In November 2016, SEVKAZENERGO JSC placed short-term coupon commercial bonds in the amount of 400 mln tenge at a par value of 100 tenge and an indexed interest rate of 13-13.5% for replenishment of current assets. Coupon payments is made semi-annually, date of maturity is November 21, 2017. These funds were spent to finance the Investment Program and development projects in accordance with the Company's strategy.

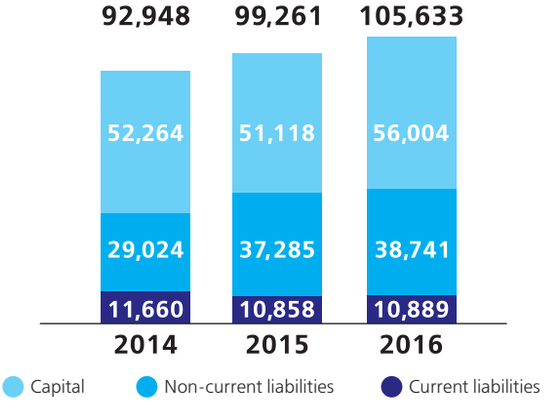
Long-term loans include loans granted by the EBRD to finance the long-term Investment Program for reconstruction and modernisation of the Company assets.

At the end of the reporting year, the total financial debt amounted to 26,891 mln tenge, while the Company maintained its financial stability.

Assets, KZT mln



Liabilities, KZT mln



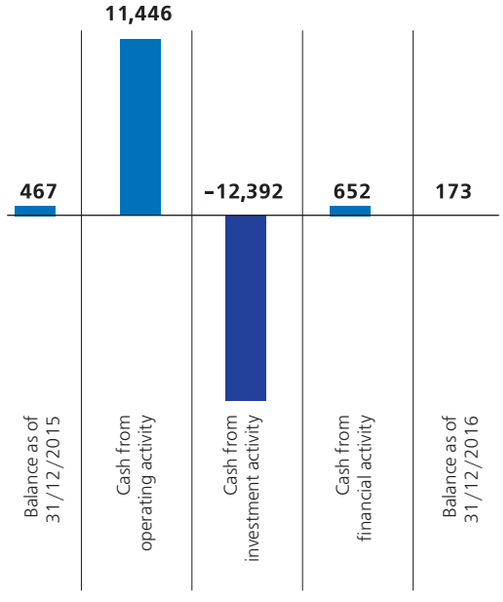
CASH FLOW

In 2016, there was a trend of increasing cash flows from operating activities, which was caused by increase in sales volumes of electricity and tariffs for heat energy. Net inflow from operating activities, taking into account the effect of exchange rate fluctuations on cash balances in foreign currency, amounted to 11,446 mln tenge. Changes in the working capital are associated with increase in trade receivables. Decrease in accounts payable related mainly to implementation of the Investment Program, resulted in reduction in the working capital.

The most significant cash outflows related to investment activities in the amount of 12,392 mln tenge in 2016 were related to the accelerated investment program of the current year.

At the year-end, cash and deposits amounted to 379 mln tenge. A sufficient cash reserve allows the Company to maintain the required level of its internal resources for debt servicing.

Cash flow, KZT mln



MAIN GOALS AND OBJECTIVES FOR 2017

As part of investment programs, in 2017 SEVKAZENERGO JSC will continue implementing large-scaled equipment modernization projects with the aim to increase generation, reduce electricity and heat transmission losses and improve environmental performance.

Petropavlovsk CHP-2 will continue modernization of 110kV outdoor switchgear (OSG) with commissioning in November 2017 to increase the plant electrical equipment reliability. Turbine unit No. 2 will be equipped with automated process control system (APCS) with full-scale functions of monitoring and control of the turbine unit in all operational conditions including start and stop. Modelling turbine unit operation modes will allow optimizing composition and modes of its operating equipment at fixed heat and electrical load. APCS will allow increasing the turbine unit efficiency by 0.5%, reducing electrical frequency fluctuations. Electricity generation in 2017 is expected to grow by 363 mln kWh or 11.3% compared with 2016.

In 2017, North Kazakhstan Regional Electricity Distribution Company JSC will spend 1.070 bln tenge on investment projects. The Company has a long-term investment program "Reconstruction and Modernization of Fixed Assets at North Kazakhstan Regional Electricity Distribution Company" JSC during 2017–2020 with a budget of 4.307 bln tenge. The program includes plans for replacement and construction of 60 km of 10-0.4 kV cable lines, reconstruction of 32 km of 10 kV overhead power lines in Petropavlovsk, equipment reconstruction at 10 substations with voltage of 35 kV and higher, 52 transformation substations 10/0.4 kV (including 26 with the reconstruction of buildings), major overhaul of 10 transformers with the replacement of high-voltage bushings. Further, the company intends to renovate 0.4 kV overhead power lines in Petropavlovsk and North Kazakhstan region replacing 144 km of bare wire with self-supporting insulation wire.

In 2017, Petropavlovsk Heat Networks LLP plans to use its own funds to replace 12.604 km of pipelines, including 8.054 km of distribution networks and 4.550 km of main networks. Under the investment program, in 2017 the company plans the heat network construction using pre-insulated pipes with length totalling 8.178 km, in addition to the restoration of 1.7 km of insulation using PU foam insulation shell. These plans are part of the 2016–2020 investment program which will be funded from both the company's own budget, the investment loan from the EBRD and government subsidies from the Ministry of National Economy of the Republic of Kazakhstan.

PROSPECTS OF THE 2020 INVESTMENT PROGRAM

SEVKAZENERGO JSC implements one of the most large-scale investment programs among the electric power industry enterprises of Kazakhstan in terms of the volume of capital investments in the renovation and reconstruction of production facilities. The planned volume of SEVKAZENERGO's investments for 2009-2020 amounts to 77.22 bln tenge. Within the framework of the Investment Program, activities are carried out in the following three areas:

- increase in generation;
- energy saving, including reduction of electricity and heat transmission losses;
- improvement of environmental performance during the production.

The main activities under the Investment Program were completed in the period of 2009-2015. Thanks to the modernization projects, capacities were introduced and upgraded in the volume of 174 MW, the installed capacity increased by 26%, electricity generation grew by 18.2%, respectively, while ash emissions decreased by 75%.

In 2016, CAEPCO JSC adopted a new Development Strategy for 2016-2020. The document develops and complements the areas of the 2010-2015 Strategy, which has been successfully and fully implemented. Pursuant to the 2016-2020 Strategy, SEVKAZENERGO JSC will continue implementing the Investment Program for equipment modernization aimed to increase energy generation, reduce electricity and heat transmission losses and improve environmental performance. In addition, the Company will continue improving the corporate governance system and the human resources policy, and introduce an automated enterprise resource management system.

As a result of the investment program, by 2020 equipment wear at the generation facility will fall to 54.16%. Due to the main equipment modernization and replacement the growth of the electric energy generation is expected to be 400 mln kWh (13% growth).

SEVKAZENERGO JSC will continue implementation of the complex of measures for reducing electricity and heat energy transmission losses as well as increasing reliability of energy supply to consumers. For the period of 2016-2020 the total heat energy losses in the networks is expected to reduce by 12.3%, with complete elimination of excessive losses.

Implementation of these measures will allow to achieve the strategic goal - to form a vertically integrated private energy company providing customers with consistent and reliable services through the synergy of energy generation, distribution, transmission and guaranteed sales of both electricity and heat power.

CORPORATE GOVERNANCE

SEVKAZENERGO JSC has an effective and transparent corporate governance system that meets the national and international standards. Corporate governance promotes improvement of the Company's activities transparency, growth of assets and maintaining the Company's financial stability and profitability.

GENERAL MEETING OF SHAREHOLDERS

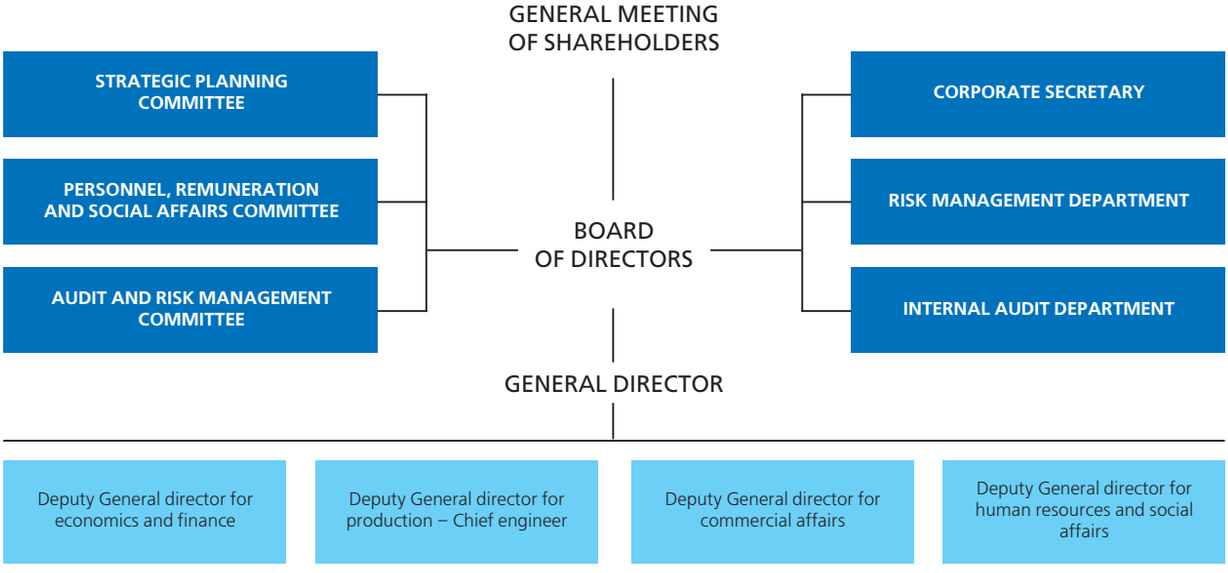
A superior management body of the Company is the General Meeting of Shareholders. Shareholders of the Company may make suggestions to the agenda of the annual General Meeting, nominate candidates to the Board of Directors and its Committees, and convene meetings of the Board of Directors.

RESULTS OF THE GENERAL MEETING OF SHAREHOLDERS

In 2016, decisions that are within the authority of the General Meeting of Shareholders of SEVKAZENERGO JSC were made by the General Meeting of Shareholders of CAEPCO JSC on the following subjects:

- Decision on the increase of the number of members of the Board of Directors of SEVKAZENERGO JSC, election of new members of the Board of Directors of SEVKAZENERGO JSC, determination of the term of office, the amount and terms of remuneration payment to the newly elected members of the Board of Directors of SEVKAZENERGO JSC;
- Decision on distribution of net income of SEVKAZENERGO JSC for 2016 fiscal year;
- Decision on interested party transaction by SEVKAZENERGO JSC.

ORGANIZATIONAL STRUCTURE



EQUITY STRUCTURE

As of December 31, 2016, the Company's authorized share capital was equal to 16,291,512 thous. tenge. The sole shareholder owning 100% of the shares is Central-Asian Electric Power Corporation JSC.

Shareholder	Ordinary stock		Preferred stock	Total shares	
	number	share		number	share
Central-Asian Electric Power Corporation JSC	143,863,799	100%	–	143,863,799	100%

INFORMATION ON DIVIDENDS

The Company's policy regarding distribution, announcement, size, form and terms of dividend payment is set out in the Company's Charter.

The main principles of the Company's Dividend Policy include:

- balance between the interests of the Company and its shareholders in determining the amount of dividend payment;
- improvement of investment attractiveness, financial stability, capitalization and liquidity of the Company;
- ensuring the market return on invested capital;
- respect for and strict observance of the rights of shareholders and improvement of their prosperity.

The Company intends to allocate a certain portion of its net income for payment of dividends in the amount that would allow the Company to keep enough funds for its further development.

A decision on dividend payment is made by the annual General Meeting of Shareholders of CAEPCO JSC based on the recommendation of the Board of Directors. In case of any unforeseen circumstances that affect negatively the Company, the Board of Directors shall recommend the General Meeting of Shareholders of CAEPCO JSC to refrain from making a decision to pay (announce) dividends.

In 2016, the annual General Meeting of Shareholders of CAEPCO JSC decided not to accrue or pay dividends to SEVKAZENERGO's shareholders for 2015 fiscal year.

EXECUTIVE BODY

General Director is the sole executive body of SEVKAZENERGO JSC. The General Director manages day-to-day operations of the Company and implements the decisions of the Board of Directors and the General Meeting of Shareholders.

The amount of remuneration for the executive body is determined by the decision of the Board of Directors of SEVKAZENERGO JSC.

The General Director of SEVKAZENERGO JSC is Leonid Larichev. He has no share in the charter capital of the Joint Stock Company, subsidiaries or affiliated organizations.

BRIEF BIOGRAPHY

Started his career in 1993 in the energy sector as a centralized repair foreman at Karaganda CHP-3. Held management positions at Karaganda CHP-3, Astana-Energia JSC and PAVLODARENERGO JSC. On August 22, 2014, appointed as the Chairman of the Executive Board of SEVKAZENERGO JSC by the decision of the Board of Directors. As of September 10, 2014, assumed the post of the General Director of SEVKAZENERGO JSC.

Leonid Larichev was awarded with The Distinguished Energy Professional of the Republic of Kazakhstan badge of honor, and "For Labor Excellence" medal. In 2011, Mr. Larichev was named The Distinguished Energy Professional of the CIS. In 2016, the General Director of SEVKAZENERGO JSC was awarded with Kurmet state order. Under the guidance of Leonid Larichev, the Company implements projects of modernization in electrical and heat energy sector, as well as other programs in compliance with international standards in the field of production and social responsibility.

Executive bodies of the Company's subsidiaries include: North Kazakhstan Regional Electricity Distribution Company JSC, Petropavlovsk Heat Networks LLP and Sevkazenergosbyt LLP are separate entities each having its own General Director.

Name, legal form of business organization	Sole executive body	Position	Date of election/end of tenure
SEVKAZENERGO JSC	Leonid Larichev	General Director	10.09.2016-09.09.2018
NORTH KAZAKHSTAN REGIONAL ELECTRICITY DISTRIBUTION COMPANY JSC	Anatoly Kazanovsky	General Director	16.10.2015-15.10.2017
Petropavlovsk Heat Networks LLP	Igor Rybas	General Director	16.09.2014-15.09.2018
Sevkazenergosbyt LLP	Magawiya Sagandykov	Acting General Director	from 12.06.2016

BOARD OF DIRECTORS

The Board of Directors of SEVKAZENERGO JSC is responsible for overall management of the Company, except for the issues that are within the exclusive authority of the General Meeting of Shareholders in accordance with the Charter and the Joint-Stock Companies Act.

The Board of Directors is responsible for establishing and monitoring the executive body of the Company. To achieve the performance goals, the Board of Directors is guided by the following principles:

- making decisions based on collective and thorough discussion of issues using reliable and complete information on the Company's activities in accordance with the highest business standards;
- no restrictions on legitimate interests and rights of shareholders to participate in the management of the Company, receive dividends, reports and information about the Company;
- ensuring a balance between the interests of shareholders of the Company and making maximum objective decisions in the best interests of its shareholders;
- providing the Company's shareholders with reliable and timely information.

Furthermore, the Board of Directors of SEVKAZENERGO JSC makes decisions on the activities that are within the authority of the General Meeting of Shareholders (members) of the following legal entities: North Kazakhstan Regional Electricity Distribution Company JSC, Sevkazenergosbyt LLP, Petropavlovsk Heat Networks LLP, in which SEVKAZENERGO JSC is the owner of 100% of shares. The Board of Directors of the North Kazakhstan Regional Electricity Distribution Company (subsidiary of SEVKAZENERGO JSC) is also responsible for the management of the power distribution company. Remuneration for members of the Board of Directors is determined by the decision of the General Meeting of Shareholders of the Company.

The total amount of remuneration paid to the Board of Directors in 2016 is 34 mln 678 thous. tenge.

MEMBERS OF THE BOARD OF DIRECTORS

As of December 31, 2016, the Board of Directors of Joint-Stock Companies included:

Name, legal form of business organization	Members of the Board of Directors	Position	Date of election/end of tenure
SEVKAZENERGO JSC	Yerkyn Amirkhanov	The Chairman of the Board of Directors	17.04.2015-16.04.2017
	Gulnara Artambayeva	Member of the Board of Directors	17.04.2015-16.04.2017
	Leonid Larichev	Member of the Board of Directors	05.09.2016-16.04.2017
	Gennadiy Andreyev	Independent Director	05.09.2016-16.04.2017
	Eldar Tabanov	Independent Director	17.04.2015-16.04.2017
NORTH KAZAKHSTAN REGIONAL ELECTRICITY DISTRIBUTION COMPANY JSC	Yerkyn Amirkhanov	The Chairman of the Board of Directors	13.06.2015-13.06.2017
	Leonid Larichev	Member of the Board of Directors	13.06.2015-13.06.2017
	Mukan Zuleyev	Member of the Board of Directors	31.10.2016 -13.06.2017
	Albert Safarbakov	Independent Director	31.10.2016 -13.06.2017
	Eldar Tabanov	Independent Director	13.06.2015-13.06.2017

MEMBERS OF THE BOARD OF DIRECTORS

YERKYN AMIRKHANOV (1967)

Chairman of the Board of Directors of SEVKAZENERGO JSC

President of CAEPCO JSC, member and shareholder of the BoD of CAPEC JSC
01.07.2001 – Chairman of the BoD of PAVLODARENERGO JSC;
30.06.2004 – Member of the BoD of Eximbank Kazakhstan JSC;
20.08.2007 – Member of the BoD of CAPEC JSC;
16.03.2009 – Member of the BoD of CAEPCO JSC;
28.05.2009 – Chairman of the BoD of Caustic JSC;
22.04.2011 – President of CAEPCO JSC;
25.10.2011 – Chairman of the BoD of SEVKAZENERGO JSC;
25.02.2013 – Chairman of the BoD of AEDC JSC;
13.11.2013 – Chairman of the BoD of NK REDC JSC;
20.01.2014 – Chairman of the BoD of PREDC JSC

GULNARA ARTAMBAYEVA (1969)

Member of the Board of Directors of SEVKAZENERGO JSC

President of CAPEC JSC, members and shareholder of the BoD of CAPEC JSC
16.06.2000 – President of CAPEC JSC;
27.06.2002 – Member of the BoD of CAPEC JSC;
27.06. 2002 – Member of the BoD of PAVLODARENERGO JSC;
07.10. 2002 – Member of the BoD of PREDC JSC;
31.03. 2004 – Member of the BoD of Eximbank Kazakhstan JSC;
27.04.2007 – Chairman of the BoD of CAPEC Invest SICAV;
16.03.2009 – Member of the BoD of CAEPCO JSC;
07.07.2011 – Chairman of the BoD of Astana Invest House;
22.02.2013 – Member of the BoD of SEVKAZENERGO JSC;
14.11.2014 – Member of the BoD of AEDC JSC

ELDAR TABANOV (1968)

Independent Director of SEVKAZENERGO JSC;
NORTH KAZAKHSTAN REGIONAL ELECTRICITY DISTRIBUTION COMPANY JSC

2013 – Member of the BoD (Independent Director) of CAPEC JSC;
2015 – Member of the BoD (Independent Director) of Akmola Electricity Distribution Company JSC.

GENNADIY ANDREYEV (1943)

Independent Director of SEVKAZENERGO JSC

2015 – Honorary President of KazNIPI Energoprom JSC;
2016 – Member of the BoD (Independent Director) of Central-Asian Electric Power Corporation JSC.
2016 – to the present day - Member of the BoD (Independent Director) of PAVLODARENERGO JSC.

LEONID LARICHEV (1969)

Member of the Board of Directors of SEVKAZENERGO JSC, North Kazakhstan Regional Electricity Distribution Company JSC;

10.09.2014 – General Director of SEVKAZENERGO JSC.

MUKAN ZULEYEV (1979)

Member of the Board of Directors of North Kazakhstan Regional Electricity Distribution Company JSC

2011 – Advisor at IFM Group LLP;
2012 – Advisor at Almatyenergomontazh LLP;
2013 – Member of the BoD (Independent Director) of Akmola Electricity Distribution Company JSC;
2015 – General Director (Independent Director) of Akmola Electricity Distribution Company JSC;

ALBERT SAFARBAKOV (1940)

Indepent Director of North Kazakhstan Regional Electricity Distribution Company JSC

1997 – Director of Pavlodartekhenergo LLP;
06.03.2012 – Member of the BoD (Independent Director) of PAVLODARENERGO JSC; 12.03.2012 – Member of the BoD (Independent Director) of Pavlodar Regional Electricity Distribution Company JSC.

THE BOARD OF DIRECTORS PERFORMANCE OVERVIEW

In 2016, the Board of Directors held 13 meetings.

The Board of Directors focused on the following key issues:

- Changing the terms of financing of SEVKAZENERGO JSC by Sberbank SB JSC under the revolving credit facility agreement;
- Election of the Chairman of the Board of Directors of SEVKAZENERGO JSC;
- Election of members of the Committees of the Board of Directors of SEVKAZENERGO JSC and determining their terms of office;
- Preliminary approval of the annual consolidated financial statements of CAEPCO JSC for the year 2015.
- Approval of internal policies and procedures of the structural units reporting to the Board of Directors;
- Approval of the financial statements of North Kazakhstan Regional Electricity Distribution Company JSC for 2015 and distribution of net income;
- Increase of the number of members of the Board of Directors, election of new members of the Board of Directors of North Kazakhstan Regional Electricity Distribution Company JSC, determination of the term of office, the amount and terms of remuneration payment to the newly elected members of the Board of Directors of SEVKAZENERGO JSC;
- Determination of terms due to extension of financing by Al Hilal Islamic Bank for SEVKAZENERGO JSC jointly with CAEPCO JSC, PAVLODARENERGO JSC and Astanaenergosbyt LLP;
- Terms of remuneration for employees of SEVKAZENERGO JSC's companies.
- Related-party transactions of SEVKAZENERGO JSC;
- Appointment of employees reporting to the Board of Directors of SEVKAZENERGO JSC;
- Approval of the budget of the SEVKAZENERGO JSC Group of Companies for 2017;
- Approval of the schedule for physical meetings of the Board of Directors and its Committees in 2017.

COMMITTEES OF THE BOARD OF DIRECTORS PERFORMANCE OVERVIEW

The Strategic Committee is a permanent working body of the Board of Directors. The Committee is responsible for determination and implementation of the Company's priorities and its development strategy, effectiveness of corporate governance, implementation of investment projects and strategy implementation monitoring.

In 2016, the Committee held no meeting.

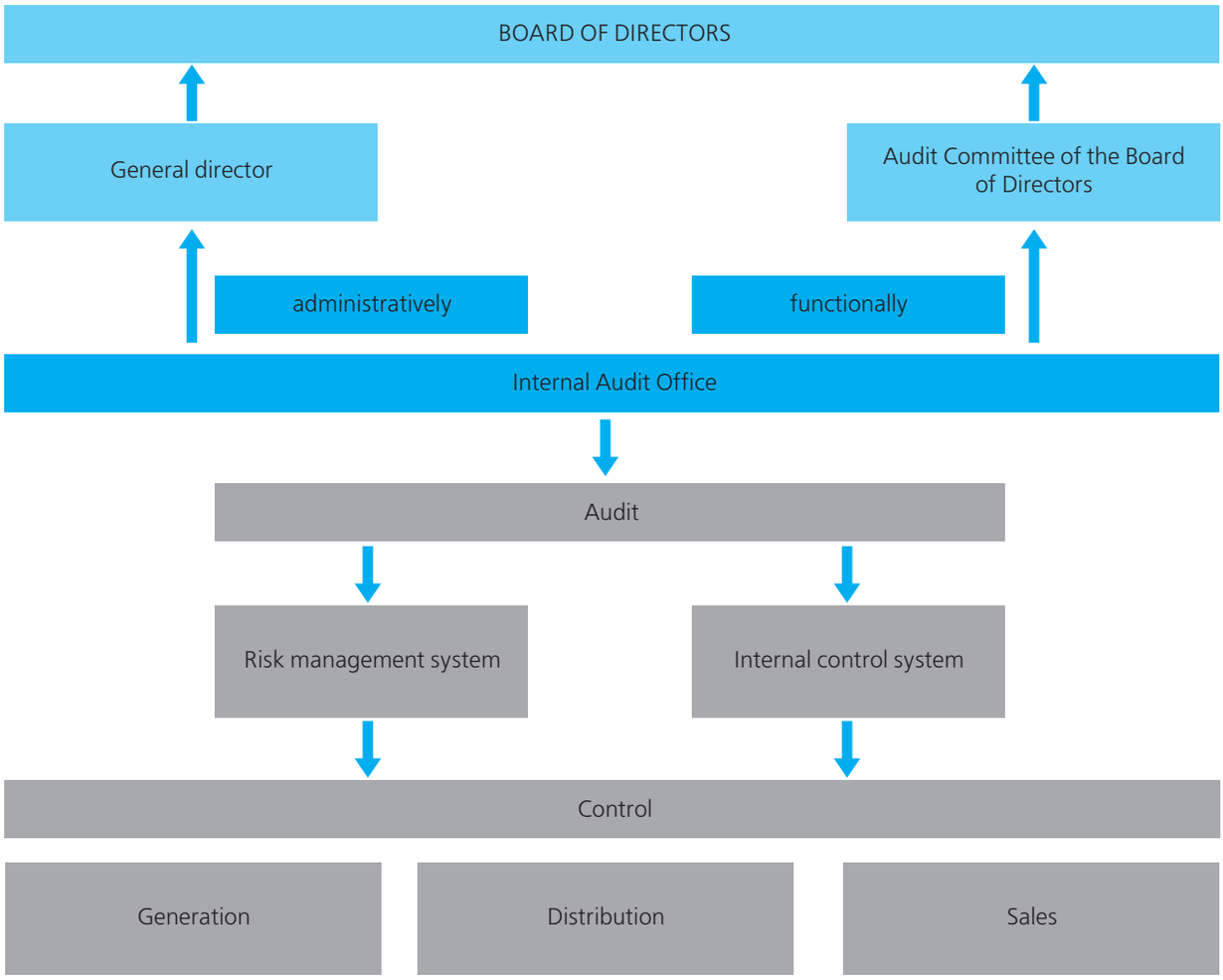
The Audit and Risk Management Committee is a permanent working body of the Board of Directors. It is responsible for improvement and strengthening of risk management and internal control procedures, preparing recommendations to the Board of Directors and the Executive Body.

In 2016, the Committee held 2 meetings.

The Personnel, Remuneration and Social Affairs Committee is a permanent working body of the Board of Directors. It is responsible for election/appointment of candidates for positions in the executive body, internal audit department, risk management department, Corporate Secretary, and other bodies and subsidiary bodies of the Company, determination of amount and payment of remuneration, development and implementation of human resources policy, employees social support policy and resolving social issues.

In 2016, the Committee held 2 meetings.

INTERNAL CONTROL AND AUDIT



For the purpose of improving business processes and effectiveness of making decisions, the Company has introduced internal control mechanisms. Independence and objectivity of activities carried out by the Internal Audit Office (IAO) are ensured through subordination and accountability to the Board of Directors of the Company and supervised by the Audit and Risk Management Committee, which monitors decisions and processes to ensure the reliability of financial reporting and coordination of internal control and risk management systems.

The IAO operates in accordance with an annual work plan approved by the Board of Directors. The IAO submits its annual report as well as quarterly progress reports to the Board of Directors and the Audit Committee.

The IAO operates in accordance with the International Standards on Auditing (ISA) developed by the Institute of Internal Auditors Inc., as well as in compliance with the current laws and regulations of the Republic of Kazakhstan and the Code of Ethics of internal auditors of SEVKAZENERGO JSC. Internal auditors adhere to the following principles in the course of their activities: integrity, objectivity, confidentiality and professional competence.

The activities of the IAO conform to the requirements of the Internal Audit Department of CAEPCO JSC and consistent with the audit methodology and practice.

Both in 2016 and at the present day, the Company has an operating internal control system, which provides sufficient confidence in the effectiveness at all levels of control, including financial and operational one, and compliance with laws and regulations.

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

The Company's corporate governance practices in 2016 were fully consistent with the provisions of the Corporate Governance Code.

The corporate management system of SEVKAZENERGO JSC regulates the process of interaction between the management and internal control bodies of the Company, shareholders, other stakeholders, and ensures a balance of interests of all the persons listed.

Corporate governance is regulated by the Company's internal by-laws and is summarized in SEVKAZENERGO JSC's Corporate Governance Code. The Code fully complies with laws and regulations of the Republic of Kazakhstan "On joint-stock companies": the document is based on the current international practices in the field of corporate governance and recommendations on the use of corporate governance principles by Kazakhstani joint stock companies.

Following the principles of the Corporate Governance Code is aimed to form and introduce into the Company's daily operations corporate behaviour norms and traditions that meet international standards and contribute to creating a positive image of the Company for its shareholders, customers and employees with a view to exercising shareholders' rights to the maximum extent and improving their awareness about the Company's activities, as well as to control and reduce risks, maintain sustainable improvement of the Company's financial performance and implement successfully its statutory goals.

COMPLIANCE WITH KEY PRINCIPLES OF THE CORPORATE GOVERNANCE CODE in 2016

Key Principles of the Corporate Governance Code	Adherence to the Principles	Comments
Justice Equal treatment of all shareholders, regardless of their capital contribution and location, and providing opportunities for the effective protection of their rights.	Followed	Corporate governance in SEVKAZENERGO JSC is based on the principle of protection and respect for the rights and legitimate interests of the Company's shareholders and promotes the growth of assets and maintaining the Company's financial stability and profitability.
Accountability The Board of Directors of the Company reports to its shareholders, executive bodies report to the Board of Directors of the Company, employees report to the executive management (the President of the Company). This principle ensures accountability and delineation of powers between the Company's management bodies, as well as full accountability of the Company to its shareholders.	Followed	This principle of the Corporate Governance Code is followed through the introduction of the Company's organizational structure as provided for in the Charter and the Law of the Republic of Kazakhstan "On Joint-Stock Companies". The principle of accountability is reflected in the statutes of all management bodies/structural units, which allows to determine the lines of authority of the Company's management bodies.
Responsibility Responsibility of the Company to its shareholders, employees, customers and partners, close cooperation with them aimed to increase its assets of the Company and improve its stability and reliability. This principle determines ethical standards for the Company's shareholders and employees, and envisages liability of the Company's officers for their illegal and wrongful actions or inaction as provided for by the current legislation.	Followed	of Business Conduct comprising business relationship standards in the following four areas: • business and professional ethics; • organizational ethics; • corporate governance; • social responsibility of the Company. The Code of Business Conduct is a set of rules and principles followed by the Company's employees when applying the principles of business ethics in their work.

Key Principles of the Corporate Governance Code	Adherence to the Principles	Comments
Transparency Timely disclosure of reliable information on all material facts relating to the Company's activities, including its financial position, performance, ownership and management structure, in the volume prescribed by the legislation and internal regulations, as well as provision of free access for all interested parties to such information through its publishing in publicly available sources in the manner stipulated by the legislation and the Company's internal regulations.	Followed	The main objectives of the Company with respect to the implementation of the principle of transparency include: • timely provision of information on all significant matters related to the Company; • ensuring availability of public information about the Company to all interested persons; • increasing openness and trust between the Company and interested parties; • improving the Company's corporate governance; • creating a favourable image of the Company.
Environmental protection and social responsibility The Company treats the environment responsibly and rationally, operating as a socially responsible business.	Followed	SEVKAZENERGO JSC has developed and adopted an environmental and social action plan, which regulates the Company's policy in the field of environmental protection and social responsibility.
Effectiveness The General Director of the Company and its Board of Directors must ensure that the Company is managed in a sensible and responsible manner promoting steady improvement of its financial performance, growth of shareholder wealth, effective human resources policy, employee training and development, motivation and social security, and protection of the interests of the Company's employees.	Followed	The principle of effectiveness is regulated by the Statute of the General Director. The General Director is the sole executive body of the Company responsible for managing day-to-day operations and implementing the strategy determined by the Board of Directors and shareholders.
Controllability Control over financial and business activities of the Company to protect the rights and legitimate interests of its shareholders, supervision of senior managers over junior managers in accordance with the policies and procedures approved by the Board of Directors of the Company, as well as efficient engagement of internal and external auditors along with the introduction of an effective risk-based internal control system.	Followed	Control over financial and business activities of the Company is the responsibility of the General Director of SEVKAZENERGO JSC in accordance with the provisions set forth in the Company's internal regulations. In addition, the Company has an Audit Committee acting as an advisory body of the Board of Directors of SEVKAZENERGO JSC, whose goal is to assist the Board of Directors in monitoring the decisions and processes, and ensuring the reliability of financial reporting и functioning of relevant internal control and risk management systems.

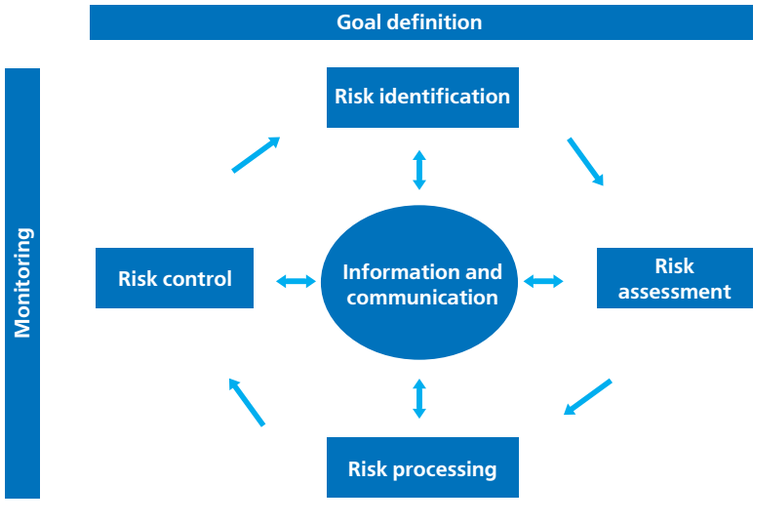
RISK MANAGEMENT

Minimization of economic, social, environmental and other risks is an important priority of SEVKAZENERGO JSC. Timely and comprehensive analysis of risks in the management of the Company's activities allows making optimal decisions in terms of expenses and losses as well as improving efficient and sustainable operations in subsidiaries.

CORPORATE RISK MANAGEMENT SYSTEM

The Company has a corporate risk management system (RMS) aimed at identification, assessment and monitoring of all significant risks. Risk identification is carried out at all levels: production, transportation and sales enterprises, business units as well as at the level of the SEVKAZENERGO Group. Risks are identified, evaluated and monitored.

INTERNAL ENVIRONMENT



The work on improving the RMS in the Company is conducted by the Risk Management Office, which is accountable to the Board of Directors of the Company. The Office activity is carried out in accordance with the annual work plan approved by the Board of Directors.

Work performed in 2016	Work planned for 2017
Updating of the Risk Register and Risk Map of the Company	Updating of the Risk Register and Risk Map of the Company
Analysis and testing of the ICS effectiveness in business processes: • Customer service control; • Control of connecting consumers to heat and electric networks; • Control of industrial inspection for compliance with industrial safety requirements when operating hazardous industrial facilities.	Analysis and testing of the ICS effectiveness in business processes: • Occupational health and safety process control; • Revenues and receivables accounting control; • Control of inventory record; • Control of property, plant and equipment and intangible assets accounting.

INTERNAL CONTROL STANDARDS

The Company has introduced the Internal Control System (ICS) as a set of procedures, processes, codes of conduct and actions arranged in one continuing process, which is a part of the Company management process implemented by the Board of Directors, all executive and supervisory bodies as employees.

The Company's management creates an effective control environment at all levels, through:

- Forming an understanding of the need and implementation of internal control procedures among the employees;
- Maintaining a high level of corporate culture and demonstrating the principles of integrity and competence;
- Improving the level of professionalism and competence among employees;
- Ensuring effective interaction between business units and employees;
- Ensuring effective distribution of powers and responsibilities;
- Forming fraud prevention mechanisms;
- Organizing activities of the internal control bodies.

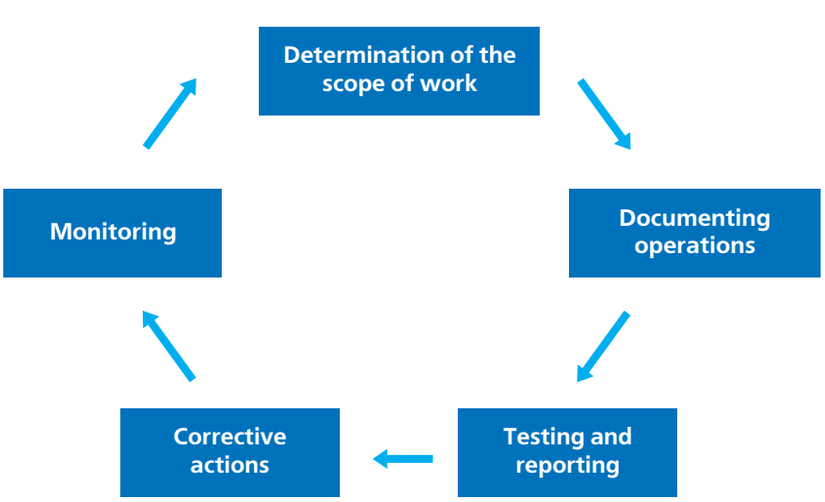
ICS is aimed at ensuring:

- Efficiency and effectiveness of operational and investment activities;
- Compliance with the laws and regulations of the Republic of Kazakhstan;
- Reporting reliability;
- Safeguard of assets.

The Company is striving to ensure that all activities are controlled adequately with the aim to reduce risks. Control procedures have been implemented at all levels of management.

In 2016, the Company continued introducing a risk-based approach in order to minimize various types of risks inherent in activities of enterprises and business units.

ICS LIFETIME CYCLE



RISK INSURANCE

In order to manage properly the risks inherent in the Company's activities, SEVKAZENERGO JSC has developed and implements an insurance protection policy for risk insurance aimed at minimizing and eliminating the consequences (damage, losses) resulted from the occurred risks and reducing (mitigating) the influence of such negative consequences on achievement of the Company's strategic goals. Thus, the Policy is aimed to ensure stable operations and development of the Company through the implementation of cost-effective insurance protection against significant risks that are subject to insurance and threaten the Company's activities, employees' health and property interests of shareholders and investors.

The insurance protection of SEVKAZENERGO JSC group is provided for all types of compulsory insurance in accordance with the legislative requirements of the Republic of Kazakhstan. Besides the compulsory types of insurance, the Company maintains voluntary insurance of property risks in accordance with the requirements of the insurance protection policy and the best world practices. Property risks of generating assets of SEVKAZENERGO JSC group are insured in insurance organizations of the Republic of Kazakhstan in accordance with the legislative requirements. The Company imposes high requirements for insurance of its assets (all risks property insurance) and, therefore, places additional requirements and exercises control over re-insurance of its risks in international re-insurance organizations (such as Munich RE, Hannover RE, etc.) having at least AA credit rating. The Company implements a policy of openness towards representatives of the insurance community through the conduct of periodic insurance engineering survey of its generating assets and implementation of re-insurers' recommendations.

ANALYSIS OF RISKS HAVING SIGNIFICANT IMPACT ON PERFORMANCE

Based on the results of updating the Company Risk Register and Risk Map of the Company in accordance with the approved Risk Management Policy, the Company identified 71 risks having significant impact on its performance.

Risk	Factors	Risk level	CHANGE
Operational risks			
Deficit of qualified/key personnel	1. Low average salary; 2. Immigration to other countries; 3. Low level of education among energy-related educational institutions, etc.		
Excessive heat losses	1. High degree of heat network depreciation; 2. Lower outdoor temperature; 3. Process disturbance and heating main accidents.		
Late replenishment of fuel reserve	1.Late provision of transport for coal transportation by freight companies; 2.Delays of fuel trains in transit; 3.Force-majeure circumstances caused by weather conditions.		
Terrorist threat (act)	1. Growth of threat related to international terrorism and political instability level in developing countries due to economic crisis; 2. Growth of extremist organizations activity, development of industrial terrorism.		
Financial risks			
Change in the national currency exchange rate to foreign currency	1. Change in macroeconomic indicators; 2. Change in oil prices; 3. Interventions of the National Bank of the Republic of Kazakhstan.		
Growth in overdue accounts receivable	1. Low level of customer repayment discipline; 2. Decrease in basic macroeconomic indicators that affect contracting parties' solvency.		


Average risk


High risk


Reduced impact of risk


Raised impact of risk


Decreased risk probability


Increased risk probability

	RISK CHANGE DESCRIPTION	RISK MITIGATION MEASURES
	Analysis based on staff turnover and turnover rate for 2016 indicates a positive trend to decrease in staff turnover as compared to 2015.	1. Differential wage increase by way of transition to a uniform remuneration system (ECOT); 2. Talent pool formation; 3. Development and approval of a program aimed to support young specialists and increase a personnel education level (both for employees of the Corporation, who upgrade their educational level in the enterprise's profile activities and for students of higher and vocational education institutions).
	Subsidiaries of the Corporation show a growth in excessive heat losses.	Modernization of Petropavlovsk heating networks as part of the investment programs Nurly-Zhol and EBRD in 2016-2020. Approval of financing in the amount of 12 KZT bln. The main goal of this investment project is to reduce excessive heat losses to zero by 2020.
	In 2016, during heating period the fuel (coal) operational storage rate reduced at the warehouse of PCHP-2 of SEVKAZENERGO JSC.	1. Consideration of additional coal shipments from open-pit coal mine of Bogatyr-Komir LLP for the following periods for replenishing the fuel operational storage rate; 2. Working out additional routes of open cars with operator and open cars with owner; 3. Developing a schedule of increasing daily unloading of fuel trains PCHP-2 of SEVKAZENERGO JSC.
	Growth of threat related to international terrorism, extremist organizations activity.	1. Activating access control and intrafacility control; 2. Monitoring of factors affecting the Company' s facilities security; 3. Carrying out sites strengthening actions; 4. Regular checking knowledge level of security staff; 5. Regular checking persons hired by the Company against databases (criminal background, implication in fringe groups).
	On August 20, 2015 the National Bank of the Republic of Kazakhstan resolved to cancel an exchange rate band and transit to a freely floating exchange rate. Since the beginning of the current year, a tenge/US dollar exchange rate has changed within the range of 327.66-389.91. The Brent oil price has changed within the range of 27.88-53.14 US dollar/barrel.	The Company has significant dollar-denominated liabilities. To manage a dollar exchange rate risk the Company monitors changes in currency exchange rates. In 2016, SEVKAZENERGO JSC carried out currency risk hedge operations due to no choice of derivative financial instruments on the domestic market. In this regard, the Company uses a natural hedge method by placing free funds in dollar-denominated deposits and monitoring the efficiency of long-term investment programs.
	In 2016, subsidiaries of the Company had a positive trend in payment for energy consumed. Despite this, an overdue debt indicator is still high.	1. Claim-related work is performed; 2. Preparation of a schedule for debt repayment by instalments; 3. Information on employees' overdue indebtedness for utility services is sent to enterprises, as needed.

SUSTAINABLE DEVELOPMENT

The strategic goal of SEVKAZENERGO JSC is to build a leading private energy company strictly complying with the established principles of sustainable development such as provision of high-quality services to customers, compliance with the international industrial and environmental standards, improvement of corporate governance, carrying out an anti-corruption activity.

STAKEHOLDER ENGAGEMENT

An important element of the sustainable development system is stakeholder engagement. Principles of stakeholders' identification and selection are governed by a regional aspect. Ensuring sustainable development and the achievement of strategic goals of the Company is possible provided that the interests of all stakeholders are taken into account and all stakeholders are treated responsibly. In 2016 the Company developed Stakeholder Engagement Plan (SEP). In the preparation of the Plan, the management of SEVKAZENERGO JSC was snap polled and based on results of the poll a Company stakeholders ranking map was prepared and analyzed. Primarily, cooperation is established with those stakeholders that significantly affect activity of the Company and those that can significantly affect it in medium term if the Company implements its strategic initiatives. In addition, the impact of the Company's activity on stakeholders was taken into consideration.

Key Stakeholders	Engagement process	Issues raised
Employees	Provided via corporate newsletters and web-sites. There are special e-mail boxes and phone hotline for employees' appeals. Company management holds meetings with employees.Labor disputes are resolved by grievance committee with the participation of representatives of both the employer and the employee.	Occupational health and safety; Informing employees about Company's activities; Assistance in professional development.
Communities	The Company has systematized its communications with customers and arranged feedback via web-sites and e-mail. Public hearings, round tables and other events are held.	Addressing and approval of applications for tariff rates for monopolistically regulated services; Implementation of the investment program; The quality of services provided to customers, monitoring of compliance with customers' requirements, for example, installation of household energy meters and receiving technical specifications.
Governmental and Regulatory Authorities	Requests from governmental and regulatory authorities are processed: some requests are answered, while others are limited to fact finding. Employees of the Company participate in specialized meetings and consultations. Visits of official delegations are arranged.	Mitigation of a negative impact of industrial facilities operations on the city and the region; Ensuring preparation for a heating season; Performance of investment commitments; Compliance with the law, including environmental and nature protection requirements.
Suppliers, contractors, customers	Tender processes, meetings with contractors and customers are arranged and held. Company's web-sites provide feedback.	Creation of a mutually beneficial partnership; Ensuring transparency of tender processes.
Educational institutions	Meetings with representatives of higher education institutions are held in the Company's presence regions. Employees of the Company participate in admission boards, qualification commissions as well as in accreditation of educational programs.	Staff recruitment for enterprises; Internship and employment of graduates.
Mass Media	The Company facilities on annual basis arrange press tours, media briefings, press conferences, circulate press-releases and provide explanations on the informational requests.	Establishment of cooperation; Provision of information on implementation of the Investment Program for assets modernization and renovation; Compliance with environmental standards; Implementation of social projects.
Non-governmental organizations (NGO)	NGO representatives are regularly invited to participate in press tours and public hearings held during the year. Employees of the group of companies participate in public meetings with small and medium business representatives. Meetings are held with leaders who support socially vulnerable people as well as with representatives of the consumer rights protection society.	Assistance in addressing environmental and social issues.
Trade union	Interaction with trade unions is carried out through arrangement of meetings and handling requests received in the course of activities.	Compliance with a collective labor agreement; Rendering assistance in arrangement of leisure time and recreational activities for employees.

In 2016, SEVKAZENERGO JSC provided regular information to the above-mentioned public groups regarding its activities by updating corporate web-site, posting information in mass media, responding to requests, organizing public hearings, press tours, «round table» meetings and other events.

In 2016, the Company implemented activities under the Stakeholder Engagement Plan (SEP) in accordance with the policy of the European Bank for Reconstruction and Development. Following the results of plan execution, a public report was posted at corporate web-site of the Company, providing information on stakeholder engagement activities.

The Company adheres to the following principles of information disclosure:

- guarantee of completeness and reliability of disclosed information;
- prompt disclosure of information on all material facts relating to its activities;
- regular and timely disclosure of information on the Company;
- relevance of information;
- ensuring a high level of safety of commercial, official and other secrets protected by the law of the Republic of Kazakhstan;
- a reasonable balance between the Company's openness and respect for its commercial interests;
- information support for making managerial decisions;
- provision of relevant, timely, complete, reliable and objective information to employees of the Company and its subsidiaries;
- prevention of loss, leakage and distortion of information.

ENVIRONMENTAL POLICY

ENVIRONMENTAL IMPACT MANAGEMENT

Environmental protection (EP), consistent improvement of environmental performance and energy efficiency are the key strategic priorities of SEVKAZENERGO JSC and an integral part of the sustainable development process.

In order to minimize environmental impact SEVKAZENERGO JSC implements consistently the environmental policy as provided for by the Development Strategy of the Company with the aim to comply with the environmental law requirements and use the latest scientific and technical achievements.

Priority areas of SEVKAZENERGO JSC environmental activities are based on the key influences on the environment. These impacts include:

- atmospheric pollutant emissions;
- greenhouse gas (CO_2) emissions;
- impact on water bodies as a result of water consumption;
- industrial wastes disposal.

Significant environmental aspects are managed through regular monitoring of environmental performance and assessment of compliance with legislative and corporate requirements. Responsibility for monitoring, recording

and analysis of mentioned environmental impacts of SEVKAZENERGO JSC assigned to environmental protection specialists.

Information on environmental protection activities is provided by publishing the Environmental Policy and Regulations, sustainable development, environmental and social responsibility reports on the web-site of the Company.

The Company informs its contractors on the applicable legislative and normative requirements by including such requirements in agreements, terms of reference and requirements for contractors.

SEVKAZENERGO JSC intends to make every possible effort to prevent a negative environmental impact and implement operating methods that meet the requirements of the ISO 14001 international standard in all spheres of its activity.

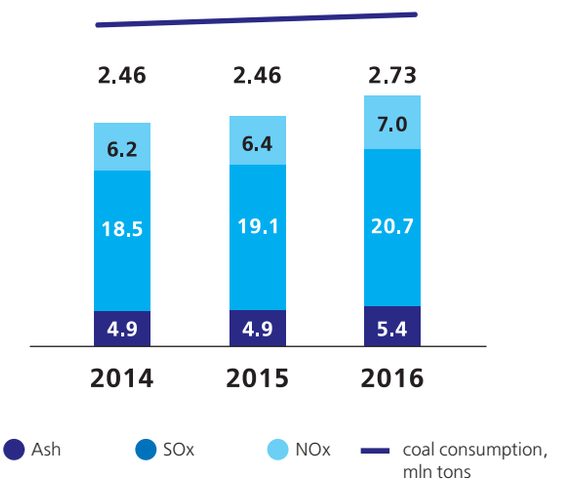
Since 2009, SEVKAZENERGO JSC has been implementing an Environmental and Social Action Plan (ESAP) as a part of its Investment Program and in accordance with the Policy of the European Bank for Reconstruction and Development with regard to projects financed by the EBRD.

ATMOSPHERIC AIR PROTECTION

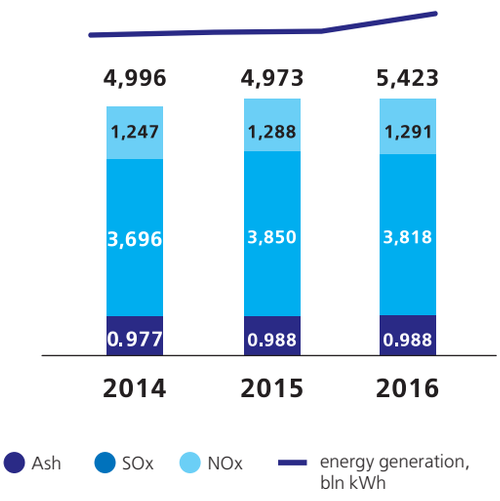
Emissions are one of the main environmental impacts. Replacement of obsolete generating facilities having low energy and environmental efficiency with new facilities that meet modern environmental protection requirements has the highest impact on reduction of the Company's emissions. In order to improve its environmental performance from 2009 to 2014 SEVKAZENERGO JSC upgraded its fly ash collectors adding 2nd generation battery emulsifiers at all boiler units, which increased the degree of purification of flue gases and ensured lower costs of enterprises. The actual purification rate after installation of emulsifiers reached 99.5% up from 95.9%. This action allowed reducing the total annual coal ash emissions from 19,336 thous. tons to 4,878 thous. tons per annum (75%). Throughout 2016, SEVKAZENERGO JSC introduced additional capacities in the form of a single turbine (turbine unit No. 5).

From the end of 2008 till 2016, SEVKAZENERGO JSC facilities reduced total atmospheric pollutant emissions by 26%.

Gross atmospheric pollutant emissions in 2014–2016, thous. tons



Specific atmospheric pollutant emissions in 2014–2016, Mg/MWh



MITIGATION OF ENVIRONMENTAL IMPACTS, ENVIRONMENTAL PROTECTION MEASURES

In 2016, the following main actions were implemented with the aim to mitigate environmental impacts:

- Replacement, reconstruction and modernization of main equipment ensuring efficient treatment, disposal, neutralization, suppression and decontamination of pollutants in gases released from pollutant emission sources, reduction in energy consumption for in-house needs, improvement of fuel consumption accounting, reduction in specific fuel indicators per a unit of generated product;

- Overhaul and current repairs of dust and gas treatment plants (repair of worn-out elements of fly ash collectors (FAC);

- Performance of current repair works to maintain the main equipment operation in accordance with the Technical Regulations of the Republic of Kazakhstan (No. 1232 dated 14.12.2007).

GREENHOUSE GAS (CO_2) EMISSIONS

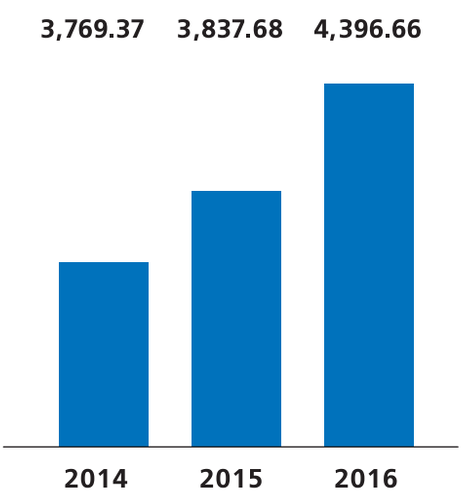
After the Kyoto Protocol entered into force for the Republic of Kazakhstan in 2009, the Company arranged preparation for taking inventory of greenhouse gas emissions and consumption of ozone depleting substances.

To monitor greenhouse gas emissions the Company uses a calculation method, which provides accounting of emissions from normal (regular) production operations, special practices (commissioning works, process shutdown, repair and maintenance) and emergencies. Greenhouse gas emissions are assessed in accordance with normative documents.

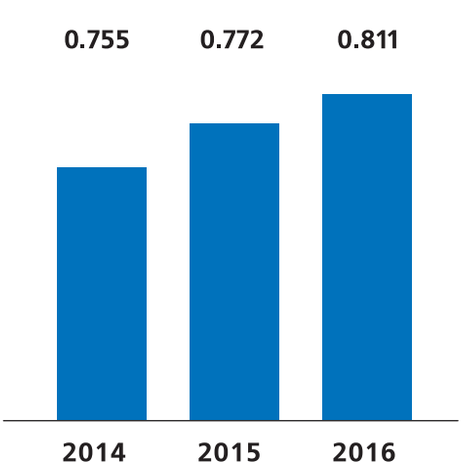
In 2016, a trilateral agreement on implementation of the Petropavlovsk heat supply system modernization projects was signed between the European Bank for Reconstruction and Development (EBRD), the Ministry of National Economy of the Republic of Kazakhstan and subsidiaries of Central Asian Electric Power Corporation JSC as part of Nurly Zhol state program. According to this agreement, 12.01 bln tenge will be allocated for the development of Petropavlovsk heat supply system. Modernization projects are aimed at increasing energy efficiency, reducing losses and improving environmental standards (CO_2 emissions reduction by coal consumption saving through reduction of heat losses during transmission over networks).

The gross greenhouse gas emissions increased in 2016, compared to 2015 (3%) and amounted to 4,396,666 tons CO_2, due to increase of burnt fuel (coal, fuel oil). Specific indicators of greenhouse gas emissions associated with generation of heat and electricity also show a slight rise in 2016.

Gross CO_2 emissions in 2014-2016, mln tons



Specific CO_2 emissions per
a unit of generated energy in 2014-2016, ton/MWh



ENVIRONMENTAL PROTECTION EXPENDITURES

In order to improve efficiency of environmental protection activity SEVKAZENERGO JSC provides financing for environmental actions. In 2016, the total amount of expenditures was equal to 4,566 mln tenge. For all new construction and reconstruction projects, an Environmental Impact Assessment (EIA) project is prepared and communicated to local communities and stakeholders through public hearings. To confirm compliance with the environmental standards of the Republic of Kazakhstan all projects undergo the state environmental examination in local environmental regulatory authorities.

Environmental protection expenditures in 2016

No. p/p	Expenditure name	Expenditure amount, KZT mln			
		2013	2014	2015	2016
	SEVKAZENERGO JSC				
1	Investment expenditures	2,999.9	2,911.7	3,000.0	4,348.9
2	Expenses for overhaul repair of fixed assets intended for nature protection purposes	259.5	212.9	131.5	27.6
3	Current expenses	29.9	237.7	292.9	189.9

Structure of environmental protection expenditures in 2016, KZT thous

Atmospheric air protection	4,356,448
Protection and rational use of lands	168,384
Water resources protection	19,066
Other expenses	15,146
Disposal of production wastes	7,371
TOTAL:	4,566,415

A common component of the Company's activities is the compliance with legislation in the field of environmental protection and power generation. In 2016, the state authorized bodies found no significant violations of the environmental law and other regulations in the environmental activity of the company (one planned inspection of SEVKAZENERGO JSC was carried out by the Ecology Department of the North-Kazakhstan region). The total amount of fines has decreased by 85%, compared to 2014 and amounted to 424 thous. tenge.

WATER MANAGEMENT AND WATER RESOURCES PROTECTION

Use of water resources is an integral part of production process of the companies and it plays a key role in the equipment cooling process. Ishim river and Bolshoye Beloye lake in North Kazakhstan region (Petropavlovsk city) are the main water bodies affected by the SEVKAZENERGO activities.

In order to minimize damage to the environment and at the same time to ensure smooth-running operation of the company, laboratory of SEVKAZENERGO JSC arranged a production monitoring of hydrochemical parameters of water and the water bodies where water is discharged. Control of pollutants in water depends on peculiarities of hydrochemical parameters, changes in their trend by seasons and during a year for water bodies of the Ishim river, Bolshoye Beloye lake, as well as character and peculiarities of formation of quantitative and qualitative indicators under conditions of a landlocked body of water (cooling pond).

Key role in water use management is to use water more efficiently, that provides for reduction of negative impact on the environment. The enterprise has drinking water supply systems, as well as storm and domestic sewerage systems. Water for domestic, drinking, fire-fighting needs is supplied and discharged in a centralized manner via city water supply and sewage networks on a contractual basis. Production water supply is carried out using a circulating water system.

In 2016 SEVKAZENERGO JSC consumed 13,591 thous. m^3 of water for water supply.

Total water consumption by sources, thous. m^3

Indicator	2014	2015	2016
Total water consumption, including:	11,690.468	11,158.997	13,591.0
From surface-water bodies	11,561.703	11,032.316	13,462.6
From third-party suppliers	128.765	126.681	128.4
From surface-water bodies	-	-	-
From closed-circuit water systems	0	0	0
From water reuse	0	0	2,418.6

Volume of waste water discharge, thous. m^3

Indicator	2014	2015	2016
Total waste water generated	128.765	126.681	128.4
Disposal to third party organizations	128.765	126.681	128.4

The most important environmental activities implemented in 2016 in the field of water use and water discharge include the following:

- modernization of industrial circulating water supply systems, water recycling system preventing contamination and depletion of water resources;
- monitoring of qualitative and quantitative characteristics of water;

Biological diversity is the most impacted by water development facilities of power plants:

- in water intake areas there is a risk of mass mortality of hydrobionts. In order to mitigate this risk a number of actions related to equipment of water intake areas with fish protection structures and control of their operation are carried out;
- cleaning of the installed Rubezh 45 floating booms was carried out;

EFFICIENT MANAGEMENT AND DISPOSAL OF PRODUCTION WASTES

The main wastes generated by SEVKAZENERGO JSC are the ash and slag wastes, which represent 99% of the total amount of wastes stored in specially equipped plain-type hydraulic engineering facilities – ash dumps. Compliance with the environmental law of the Republic of Kazakhstan during the creation of new reservoirs for ash wastes storing allows preventing environment contamination by ash and slag wastes and ensuring stable CHP operation. Other wastes generated in the result of production activity of the company are transferred for further processing, recycling or final disposal to the specialized companies operating at the territory of the Republic. The most significant action related to soil protection from production and consumption wastes is compliance with the rules on waste temporary storage and disposal methods.

The total volume of wastes generated at the enterprise in 2016 amounted to 1,135,451.092 thous. tons, including 1,134,195.800 thous. tons of ash and slag wastes, 1,255.292 thous. tons of industrial and domestic wastes. Increase in waste generation by 105,231.592 thous. tons compared to 2015 was caused by increase in a share of ash and slag wastes of the green hazard list. It was caused, in its turn, by increase in share of coal in the fuel balance of SEVKAZENERGO JSC.

The most important actions of 2016 related to wastes management were aimed at improving industrial and environmental safety of ash and slag dumps and other waste disposal facilities:

- recultivation of the ash dump No. 3 (SEVKAZENERGO JSC);
- arrangement of sites for storage of wastes generated during reconstruction and construction of power facilities (preparation of sites, installation of containers).

Total weight of waste generation, thous. tons

Indicator	2014	2015	2016
Ash and slag waste	1,022,074.027	1,028,964.208	1,134,195.800
Other types of wastes	2,941.842	6,685.315	1,255.292

Wastes by hazard levels, thous. tons

Indicator	2014	2015	2016
Waste generation	1,025,015.869	1,035,649.523	1,135,451.092
Green list	1,025,005.363	1,035,635.746	1,135,415.684
Amber list	10.506	13.777	35.408
Red list	-	-	-

ENVIRONMENTAL MANAGEMENT SYSTEM

SEVKAZENERGO JSC was among the first in the Northern Kazakhstan region that obtained a certificate of compliance with the ISO 14001 international environmental management standard.

Availability of the environmental management system developed, well-functioning and certified for compliance with the ISO 14001 standard is the most important indicator of a systematic and efficient work in the field of environmental protection promoting the improvement of Company's competitiveness, creation of a positive image in relations with external stakeholders.

During the reporting period the TÜV Rheinland Inter Cert company (leader in the independent examination and certification industry) carried out supervisory and re-certification audits of compliance of SEVKAZENERGO JSC with the international standards ISO 14001 (Environmental Management System), ISO 9001 (Quality Management System), OHSAS 18001 (Occupational Health and Safety Management System). As a result, the Company obtained Integrated Management System (IMS) certificates and confirmed that its system is robust, efficient and focused on improvement.

PUBLIC APPRAISAL OF ENVIRONMENTAL PROTECTION ACTIVITIES

In order to meet the environmental requirements of the Republic of Kazakhstan, in 2016, SEVKAZENERGO JSC held 2 public hearings with the participation of representatives of local executive bodies: the State Institution «Energy, Housing and Utilities Administration of North Kazakhstan Region», the Republican Governmental Agency North Kazakhstan Regional Ecology Department of the Environmental Regulation and Supervision Committee of the Ministry of Energy and Science of the Republic of Kazakhstan, for addressing the following environmental projects:

1. «Environmental Impact Assessment» to the detailed design «Construction of the group control switchboard TA 6,7 at Petropavlovsk CHP-2 of SEVKAZENERGO JSC at the following address: Petropavlovsk, 28, Gashek St.;
2. «Environmental Impact Assessment» to the detailed design «Reconstruction of Petropavlovsk CHP-2 with replacement of a turbine unit at station No. 5» at the following address: Petropavlovsk, 28, Gashek St., Petropavlovsk.

The main objective of the public hearings is to determine the environmental impact assessment during the implementation of the above stated projects, evaluate possible consequences for the ecology and socio-economic environment, and develop environmental emission standards for reconstruction and construction operations. The sources of environmental impact, volumes of pollutants released during the performance of works, and the volume of production waste generation were addressed in detail. Also, the participants of the hearings were also submitted a number of environmental protection measures for discussion aimed at minimizing a negative environmental impact during the performance of design and construction works.

Payroll by companies within SEVKAZENERGO JSC Group for 2016

Company	Headcount
SEVKAZENERGO JSC	848
North Kazakhstan Regional Electricity Distribution Company JSC	1,229
Petropavlovsk Heat Networks LLP	280
Sevkazenergosbyt LLP	224
Total:	2,581

HUMAN RESOURCES AND SOCIAL POLICY

HUMAN RESOURCES MANAGEMENT POLICY

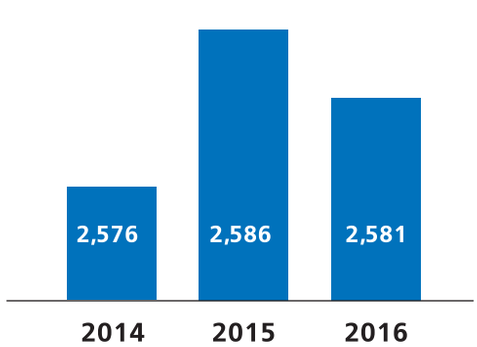
The Human Resources Policy of SEVKAZENERGO JSC is a comprehensive system of interaction with employees aimed to achieve strategic goals of the Company.

The objective of the Human Resources Policy is to form a company with an efficient corporate governance system providing opportunities for maximizing employees' potential. The Company is strengthening its Human Resources Policy by engaging various professional employees, retaining highly qualified employees, conducting continuous professional training and development for employees, providing opportunities for professional growth of initiative young employees, creating a talent pool and managing talents.

EMPLOYEE HEADCOUNT AND QUALITY

As of December 31, 2016, the Company headcount was equal to 2,581 persons. Decrease in the headcount by 0.2% relative to 2015 is a result of implementation of measures to optimize the headcount at facilities. The headcount increase by 0.2% in 2015 vs. 2014 is due to reduction of personnel turnover and hiring persons for vacant positions of production personnel.

Headcount trend, pers.



EMPLOYEE STRUCTURE BY CATEGORY AND GENDER

Due to the nature of the business, the Company's employee structure is dominated by men, with a share of 65.1%. The production personnel are mostly blue-collar workers, with men accounting for 74.0%.

In 2016, the "managers" made up 14.3% of the total employee headcount, which is an optimal rate.

Headcount within the group of facilities of SEVKAZENERGO JSC for 2016

Personnel category	Total:		Men		Women	
	persons	%	persons	%	persons	%
Headcount	2,581	100.0	1,679	65.1	902	34.9
Managers	369	14.3	268	72.6	101	27.4
White-collar workers	698	27.0	290	41.5	408	58.5
Blue-collar workers	1,514	58.7	1,121	74.0	393	26.0

EMPLOYEE STRUCTURE BY GENDER AND AGE

The age structure of the Company's employees is characterized by a high proportion of employees who are in the most productive age for professional work - under 40 years old – they make up 58.2% of the total headcount. Employees over 60 years old make up 4.2%

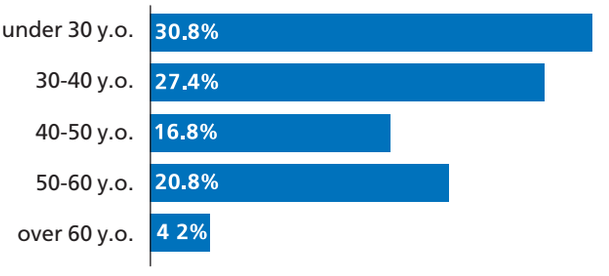
In order to maintain optimal balance between young and highly qualified employees as a part of the Young Personnel Management Policy the Company carries out actions aimed at good-quality planning, attraction and retention of skilled employees of various levels, provision of continuous professional training and development for employees, opening up opportunities for professional growth of initiative young employees.

EMPLOYEE EDUCATION LEVELS

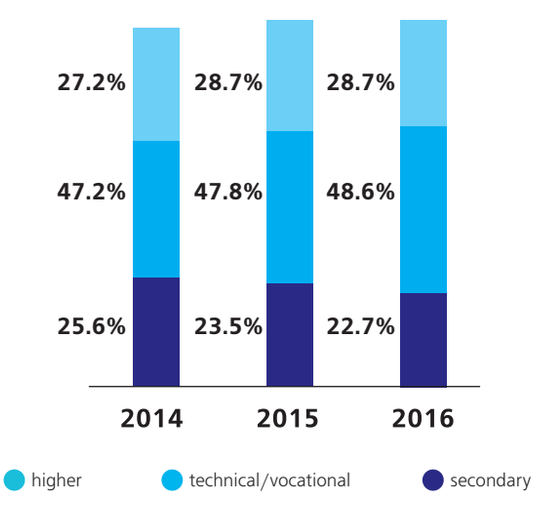
In general, in 2016 the share of the employees with higher education remained at the level of 2015 and amounted to 28.7% of the total headcount. As compared to 2014, this share increased by 1.5% due to implementation of measures for improvement of personnel educational level (granting paid educational leaves, interest-free loans for payment of trainings, reimbursement of expenses for transport to the place of training for those who studies outside Petropavlovsk, bonus for successful graduation).

In 2016, 12 employees completed extramural higher education, including 8 employees in their job related fields; 26 employees completed extramural technical/vocational correspondence training. 56 employees continue study in energy field in higher education institutions, 55 employees - continue technical/vocational education.

Employee structure by age



Educational level trend



PERSONNEL TRAINING AND DEVELOPMENT

The personnel training and development system of the Company covers the following areas:

Compulsory, normative training

Management skills development

Professional skills development

In order to improve efficiency of activities and create safe working conditions at its enterprises, the Company carries out training in accordance with its corporate format and individual development plans.

Item	2014	2015	2016
Number of employees who have completed training, retraining or professional development, including:	1,537	2,001	1,477
Safety and fire safety regulations, operating rules and regulations (initial training, qualification certification/re-certification), training courses for managers, HSE training.	1,162	1,392	1,026
Cross-training	250	288	332
ISO 9001, ISO 14001, OHSAS 1800 quality management system trainings (including environmental protection, internal audit and risk management issues)	17	2	6
Civil defence and emergency training	1	2	0
Other training (professional development, seminars, workshops, etc.)	107	317	113

In 2016, 1,477 employees completed training, which was equal to 57.2% of the total number of employees, including 1,026 production employees who received compulsory training, or 39.7%.

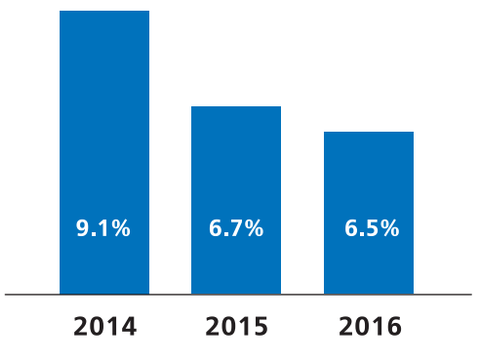
For the purpose of expanding the professional profile of the Company's employees and preparing them for work in secondary (related) professions, 332 employees were trained.

EMPLOYEE TURNOVER

In 2016, employee turnover rate of the Company in general was 6.5% that is 0.2% lower than in 2015. Turnover rate reduction is a result of implementation of measures at the Company:

- Annual differentiated increase of salary level;
- Development of mentorship and incentives to support young specialists;
- Training, professional development and corporate financed by the Company;
- Realization of social projects: opening kindergarten and small-family hostel;
- Financial and non-financial incentives for workers;

Turnover rate



TALENT POOL

In 2016, in order to ensure availability of the required personnel reserve for various managerial positions the SEVKAZENERGO JSC Group of companies created a talent pool of 228 senior, middle and junior level managers. Talent pool development is carried out based on individual programs aimed at professional and managerial training of pool members, including on-the-job training, skills improvement, internships, mentoring, performance of managerial functions and temporary employee relocation. During 2016, 12 persons from the talent pool were appointed to managerial positions. The Company carries out work for external talent pool creation, also including gradates of educational institutions.

INVOLVEMENT OF YOUNG SPECIALISTS

In 2016, implementation of the program for supporting young specialists and improvement of educational level of personnel continued under the Profenergy project. In this area, the following actions were realized:

1. Contest of scientific papers was organized and held for a personal corporate scholarship of SEVKAZENERGO JSC. 8 students having high performance level, studied in energy field, participated in this contest. Two authors of best scientific papers were awarded with personal scholarship from North Kazakhstan Regional Electricity Distribution Company JSC and Petropavlovsk Heat Networks LLP, effective till graduation, and will also be employed by the Company.

2. 11 students were employed during summer holidays.

3. Professional internships were organized for 156 students, 22 of which were enrolled for paid internships.

4. The Company's employees participated in state attestation commission for final examinations and defense of diploma projects.

5. In 2016, 35 guided tours were conducted at production facilities of the Company.

86 young specialists were employed by the Company's enterprises, 39 of which are the graduates hired in 2016.

PERSONNEL MOTIVATION AND REMUNERATION

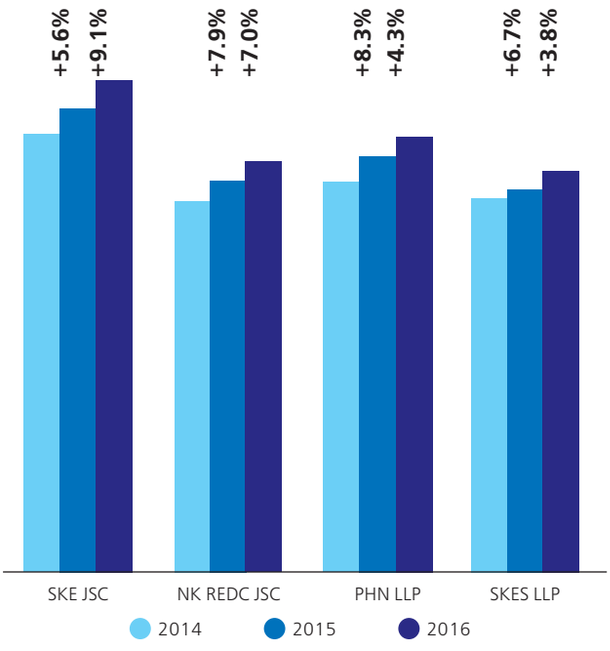
The goal of the Company's motivation and remuneration system is to attract, retain and motivate employees in order to ensure that the Company can achieve its mission and business targets at an optimal cost.

In 2016, the average income level in the companies of SEVKAZENERGO JSC Group increased by 7.4% compared to the level of 2015, and by 14.9% - compared to the level of 2014.

In 2016, SEVKAZENERGO JSC adopted the unified remuneration system aimed to create a flexible system of material incentives taking into account internal and external factors, including the allocation of labor remuneration funds depending on the scope of participation in production process and analysis of social factors and labor market conditions by regions of operations.

The new remuneration system provides for the use of a comprehensive approach for identifying remuneration level depending on a complexity of the job and a level of professional and personal skills of an employee; it aims at intensifying employee's motivation to improving labor productivity, professional skills and qualification.

Average earnings growth rate by the companies of SEVKAZENERGO JSC group



NON–FINANCIAL INCENTIVES

In order to increase motivation and moral incentives for efficient performance, every year the Company undertakes employee recognition initiatives giving out awards, certificates of merit and titles for achieving high production results; information on such initiatives is published in corporate information sources.

Based on performance in 2016, 42 employees received corporate awards for operational excellence, 9 employees and veterans received state awards, 1 employee received awards from the CIS Electric Power Council, 6 employees received awards from the Kazakhstan Energy Association.

INTERACTION WITH TRADE UNIONS

The group of SEVKAZENERGO JSC enterprises has adopted a single collective agreement for 2014-2016. At the year end, the parties' obligations fulfillment under the collective agreement was analyzed. SEVKAZENERGO JSC planned the Single collective agreement for 2017-2019.

Main purposes for the agreement conclusion is improvement of efficient performance of SEVKAZENERGO JSC Group, strengthening the parties social responsibility for the results of production-economic activities, ensuring increase of motivation and manpower productivity due to provision of social guarantees, compensations and benefits.

SEVKAZENERGO JSC as employer and trade unions in its group of companies together implement measures to improve operational efficiency of the companies, workplace morale and discipline, support job prestige and employees professional pride.

Chairman of union assists to employer in organization of cultural, sports recreation activities, summary holidays for employees' children; provides social material support to employees, members of their families and retirees; controls proper use of funds allocated for labor protection, health care of employees and members of their families; takes part in investigations of incidents and making decisions on establishing guilt of injured people and etc.

Item	2014	2015	2016
Number of employees in trade unions, person	1,844	1,822	1,829
Percentage of the total headcount, %	71.5	70.5	70.9

SOCIAL SUPPORT, GUARANTEES AND COMPENSATORY PAYMENTS

Social policy of SEVKAZENERGO JSC Group of Companies is determined together with employees and their representatives – trade unions, and implemented based on financial possibilities of the companies.

In December 2016, within the framework of social policy and partnership of SEVKAZENERGO JSC and the North Kazakhstan regional akimat, a new corporate 90-apartment family hostel was officially opened for the company's employees and residents of Petropavlovsk.

In 2016, the Alakay kindergarten built as part of the public-private partnership for children of employees and citizens of Petropavlovsk celebrated its first birthday.

Goals	Social package
Personnel motivation for long-term work	Additional professional pension contributions at the rate of 5%; Bonus payment for anniversaries and holidays
Effective compensation and benefit payment system	Compensation for housing and utility expenses, provision of benefits for dormitories and rental housing. Transport services for the delivery of employees to/from work. Compensation for camp vouchers for children under 14 years old. Provision of New Year's gifts for employees' children
Support of personnel working capacity and health	Employees insurance against occupational accidents and diseases; Compulsory health insurance; Routing health examination performance; Financial help for serious diseases treatment.
Employee social support	Material aid for the birth of a child; Material aid for ritual services; Material aid to families with many children and needy families; Social paid leave; Allocation of funds to Veteran Organization; Retirement allowance; Program of support of pensioners and veterans of the Great Patriotic War, labor veterans.
Sports and recreational activities	Reimbursement of food expenses to participants of sports events; Allocation of funds for health improvement and collective leisure.

SPORTS AND RECREATIONAL ACTIVITIES

In order to promote a healthy lifestyle, the following activities are carried out at the Company's enterprises:

- organization of active leisure time;
- formation of collective traditions;
- holding of annual sports events, professional competitions.

SEVKAZENERGO JSC on a regular basis holds sports events and competitions in 14 sports, the most popular among them: winter fishing, cross country orienteering, skiing and skating race, ball games, swimming and other.

Sporting competitions are organized on a monthly basis in SEVKAZENERGO JSC subsidiaries and among the employees of the largest enterprises of Petropavlovsk.

56 employees of the Company took part in the summer competitions on track-and-field athletics, darts and table tennis. The competitions were won by the employees of North Kazakhstan Regional Electricity Distribution Company JSC.

Chess, billiards and bowling are also popular in the Company. In 2016, representatives of Sevkazenergosbyt LLP won billiard competitions, and a team of Petropavlovsk CHP-2 of SEVKAZENERGO JSC became the winner in bowling.

276 employees of the Company took part in sports events in 2016.

At the year end, the NK REDC employees maintained leadership in the Company sports. They are the champions within four years.

To celebrate the Fatherland Defender's Day and 71 anniversary of the Victory Day, employees of Petropavlovsk CHP-2 of SEVKAZENERGO JSC held tactical paintball with participation of 10 teams (60 participants).

Winners and participants are awarded with certificates of merit and souvenirs. All sports events are widely covered in corporate newsletter and web-site of the Company.

OCCUPATIONAL HEALTH AND SAFETY

OCCUPATIONAL HEALTH AND SAFETY STRATEGIC GOALS AND IMPLEMENTED ACTIONS

Health and Safety of employees is one of the most important priority tasks under the Company's Strategic Development Program. Occupational injuries and diseases prevention has priority importance for making any decision on operational activity for electrical and heat energy production.

In 2016, a supervisory audit for compliance with the OHSAS 18001 international occupational health and safety standard was carried out in SEVKAZENERGO JSC. The company confirmed its compliance with the system's requirements.

The fundamental liabilities in the health and safety area are the following:

- protection of health and life of the employees of the SEVKAZENERGO JSC group of companies and the representatives of third parties present at its territory;
- compliance with the relevant legislative and normative requirements, related to risks and performance in the sphere of occupational health and safety;
- provision of required resources in order to achieve set tasks and objectives;
- performing activities aimed at reducing and preventing accidents;
- continuous improvement of operation and maintenance quality, reducing injuries, improving working conditions, reducing emissions and waste from energy production, improving ecological conditions and occupational safety.

Petropavlovsk CHP-2 holds Health and Safety Day on the last Wednesday of each month, with the meeting for analyzing comments made during weekly inspections with drawing up reports. According to the results, corrective actions are planned for improvement of occupational health, safety and industrial hygiene level. Health and Safety Days allow to check compliance with normative requirements in-depth and in more details. Assessment of knowledge of occupational health and safety, power plants and networks operation procedures, providing premedical care to injured persons, fire safety basics, special rules, is carried out in two stages – testing and oral interviews. This measure allows to check closely the knowledge of normative requirements in the sphere of health and safety, power plants and networks operation, providing premedical care to injured persons, fire safety, special rules of employees.

The Company introduced permanent and periodic control: inspections, technical examination of equipment, buildings and structures with assignment of persons responsible for safety state and operation, and engineering supervision. The Company has job descriptions for all categories of specialists and workers, occupational safety and health instruction for working specialities and all kinds of works, standard operating procedures and other controlling documents for the plant personnel.

The Company has a list of hazards for each work place, which includes dangerous and hazardous industrial factors impacting each work place, conditions of their appearance, object of impact, undesirable events, risks assessment and measures of control.

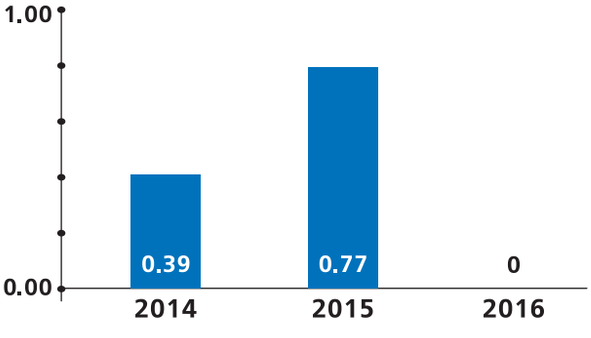
TYPES AND RATES OF OCCUPATIONAL INJURIES

During the reporting period, there was no incident in the companies of SEVKAZENERGO JSC.

Occupational injury rates

	2014	2015	2016
Headcount	2,576	2,586	2,581
Number of traumatic events	1	2	0
Number of injured persons/including women	1/0	2/0	0
Number of fatalities	1	0	0

Total incident frequency rate (TIFR) per 1,000 of employees



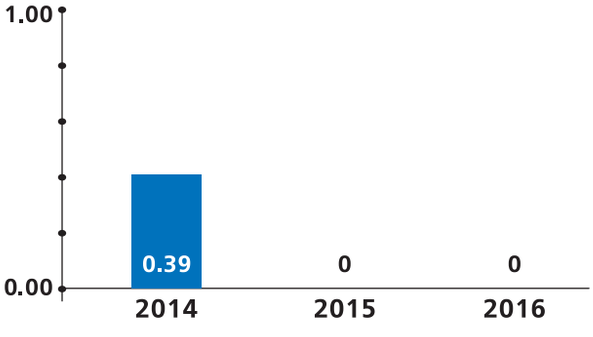
Total Incident Frequency Rate (TIFR) per 1,000 of employees was calculated in accordance with the following formula:

$$F_r = n \cdot 1000/N,$$ where

n - total number of the persons injured in incidents in the reporting period;

N - average number of employees

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



Total Fatal Incident Frequency Rate (FIFR) per 1,000 of employees was calculated in accordance with the following formula:

$$F_{r1} = n_1 \cdot 1000/N,$$ where

n_1 - total number of fatalities in the reporting period;

N - average number of employees

Main health and safety preventive measures performance indicators

	2014	2015	2016
Number of occupational health and safety meetings held	184	190	186
Number of Occupational Health and Safety Days held	76	86	38

In 2016 the Company implemented the following practice:

- monitoring of possible dangerous acts of employees (behavioural safety audit);
- multistage control of health and safety state;
- monitoring of hazardous situations;
- targeted inspections;
- comprehensive health and safety inspections;
- audits;
- cross-audits;
- achievement of annual health and safety performance;
- benchmarking of achieved health and safety performance;

The main performance indicators of occupational health and safety preventive measures are presented in the Table below.

Main performance indicators of occupational health and safety preventive measures

In 2016, the actual costs of implementing occupational health and safety measures held by SKE JSC and its subsidiaries amounted to 232 mln tenge.

Employees were provided with personal protective equipment, including electric safety devices, special fats and medical supplies. The Company has purchased informative banners, fire-fighting equipment, normative and technical documents and safety signs. During a year, the Company implemented measures for additional lighting of workplaces, repairing ventilation and air conditioning systems, buildings, facilities, etc.

SEVKAZENERGO JSC carried out assessment of workplaces.

EMPLOYEES OF THE COMPANY WHOSE PROFESSIONAL ACTIVITY BEARS HIGH INJURY RISK

Works related to maintenance and repair of power equipment are exposed to high injury risks. A particular for employees is the electric current. Electricians/electrical fitters are the employees whose professional activity bears high injury risk.

To ensure safe working at electrical installations the following measures are implemented:

- personnel training;
- organizational and technical measures, including control for their implementation;
- employees are provided with all required personal protective equipment, electric safety devices, etc.

During the reporting period there were no cases of electric injury of personnel at the Company enterprises.

PLANS FOR THE FORTHCOMING PERIOD

In 2017, the Company intends to introduce and maintain the following corporate standards and regulations in the field of occupational health and safety:

- Implementing workplace passports
- Rules for drawing up annual personnel management plan;
- for testing and use of protective equipment, tools, appliances and devices for operation and repair of electrical units, the relevant instruction was put into effect;
- Qualification of production facilities according to labor condition;
- Interaction/communication with personnel about occupational health and safety;
- Implementation of common personnel management plan.
- Occupational health and safety policy;
- The workplace certification working group organization methodology.
- Assessment of workplaces;
- Isolation of energy sources;

The Company implements the Environmental and Social Action Plan (ESAP) and the Stakeholder Engagement Plan (SEP) in accordance with the policies of the European Bank for Reconstruction and Development. According to the ESAP, annual public reports are submitted with information on projects aimed to improve occupational health and safety at enterprises of SEVKAZENERGO JSC.

CONSUMER SAFETY

AWARENESS–RAISING WORK

The management of each electricity supply district of the Company acting jointly with occupational health and safety specialists perform work to raise awareness among the population regarding compliance with safety rules in the vicinity of the operating electrical installations and power lines.

At the beginning and at the end of a school year the Company implements measures to prevent electric injuries among children. For this end, specialists of district power grid enterprises are invited to schools to tell the pupils how to avoid electric shocks and thereby keep up their health.

In order to warn the population and personnel of danger, safety signs and inscriptions are placed on all electrical installations operated by subsidiaries, all equipment is protected against unauthorized access by providing appropriate fences, locks and blocking mechanisms.

The regional and district mass media publish articles aimed to prevent injuries, including among children, and protect public health.

ENSURING CONSUMERS' SAFETY AND HEALTH IN RETAIL COMPANIES

Retail companies implement the following measures aimed to ensure consumers' safety and health:

- service center buildings are equipped with ramps for disabled people;
- all service centers are provided with medical first-aid kits containing necessary medicines;
- subsidiaries of the Company have organized customer feedback through official web-sites and questioning of consumers in order to identify the level of customer satisfaction and address proposals for improvement.

SOCIAL PARTNERSHIP

SEVKAZENERGO JSC is an active participant of social projects aimed at supporting the population in the regions where the Company operates.

On December 22, 2016, within the framework of celebrating the 55th anniversary of Petropavlovsk CHP-2 and the Power Engineers' Day, the Company carried out official opening of a 90-apartment small family hostel for its employees and citizens of Petropavlovsk. Implementation of the project became possible thanks to the public-private partnership of SEKAZAZENERGO JSC and the North Kazakhstan regional akimat. The availability of a departmental hostel will attract young and promising specialists of the industry to the energy complex enterprises.

The Alakay kindergarten designed for 320 children, which was opened in 2015 within the framework of the public-private partnership with the North Kazakhstan regional akimat, continues its working.

Over a number of years, SEVKAZENERGO JSC has been providing financial aid to children of the sponsored Zhuldyzdar family by delivering memorable gifts to the school pupils and graduates in celebration of holidays and arranging leisure time during the vacation period.

CORPORATE EVENTS

Every year, employees of subsidiaries of SEVKAZENERGO JSC take an active part in sports and recreational activities held both at the enterprise level and at district, regional and international levels.

In 2016, Petropavlovsk CHP-2 of SEVKAZENERGO JSC celebrated its 55th anniversary. The following events were held in celebration of the anniversary:

- preparation of the corporate photobook «Transformation Energy» dedicated to the history of Petropavlovsk CHP-2;
- the anniversary concert «Spring on Zarechnaya Street» with the involvement of music-talented employees of SEVKAZENERGO JSC.

MATERIAL ASPECTS AND BOUNDARIES

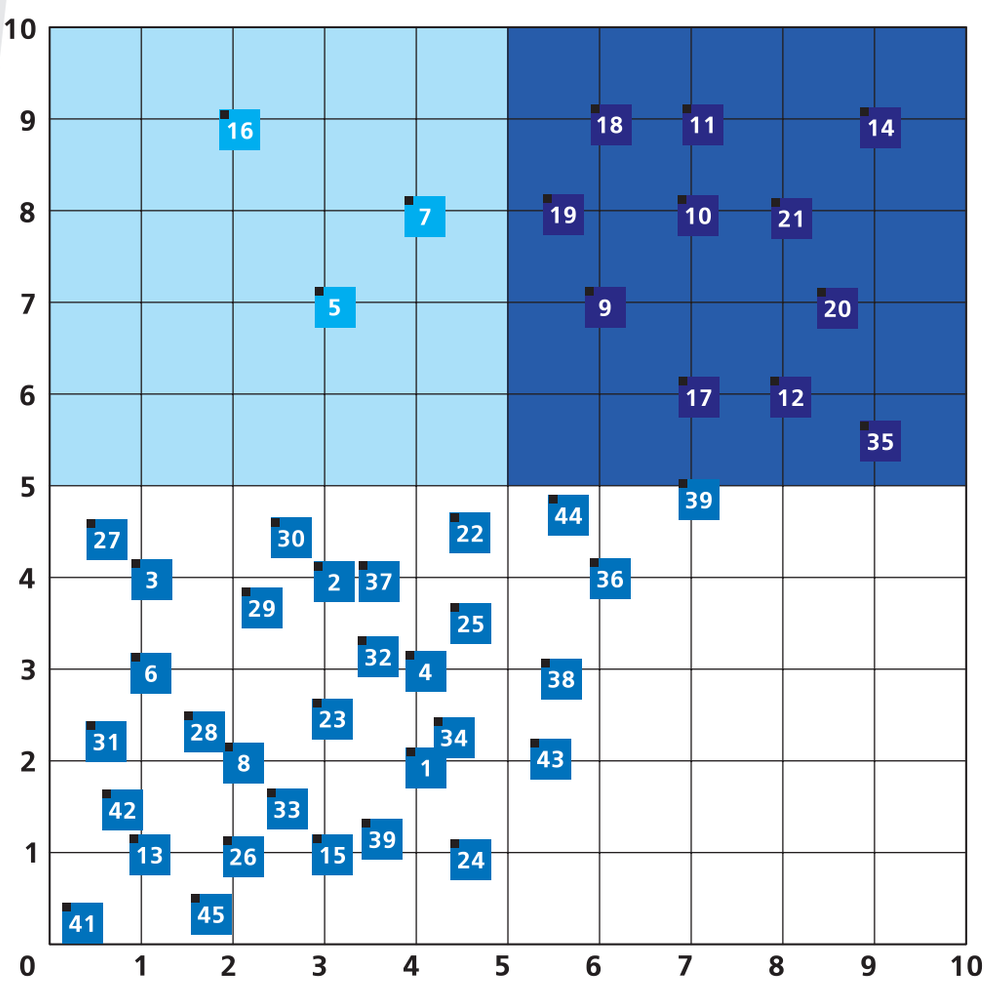
In accordance with the principles for defining the Report content of the GRI G4 Guidelines, the assessment of materiality of topics disclosed in the Report was carried out. The materiality assessment procedure includes the following main phases:

Phase 1. Identification of a maximum wide range of potentially important topics related to sustainable development based on the GRI G4 Guidelines.

Phase 2. Analysis of the degree of impact of the listed topics within and outside the Company. Selection of topics for further disclosure was made with due regard for stakeholders engagement. Besides, the priority of topics was analyzed in the context of their impact on the Company's operations and development strategy.

Phase 3. In accordance with stakeholders' opinion and strategic plans of the Company, key topics were ranked for the purpose of prioritization, and the Materiality Map was created. An average score was attributed to each aspect of activity depending on its impact on the Company (horizontal axis) and its stakeholders (vertical axis). The highest priority was defined for the dark blue zone aspects; they were prioritized during the report preparation. Aspects of the blue zone were also partially disclosed.

LIST OF ASPECTS AND MATERIALITY MAP



List of aspects

No.	Aspects	No.	Aspects
1	Economic effectiveness	24	Mechanisms for grievances about labour practices
2	Market presence	25	Investment
3	Indirect economic impacts	26	Non-discrimination
4	Procurement practice	27	Freedom of association and collective bargaining
5	Materials	28	Child labor
6	Energy	29	Involuntary or compulsory labor
7	Water	30	Safety practices
8	Biodiversity	31	Rights of indigenous and small-numbered peoples
9	Emissions	32	Assessment
10	Effluents and wastes	33	Evaluation of observance of human rights by suppliers
11	Products and services	34	Mechanisms for grievances about human rights violation
12	Compliance with requirements	35	Local communities
13	Transport	36	Corruption control
14	General information	37	State policy
15	Environmental appraisal of suppliers	38	Hindrance of competition
16	Environmental grievances mechanisms	39	Compliance with requirements
17	Employment	40	Assessment of suppliers' impact on community
18	Relations between employees and management	41	Consumer health and safety
19	Occupational health and safety	42	Marking of products and services
20	Training and education	43	Marketing communications
21	Diversity and equal opportunities	44	Consumer privacy
22	Equal remuneration for women and men	45	Compliance with requirements
23	Evaluation of suppliers' labour practices		

DISCLOSURE OF SIGNIFICANT ASPECTS AND INDICATORS IN THE REPORT AND COMPLIANCE WITH GRI G4 GUIDLINES ("SOCIAL" CATEGORY)

Table of Report's Compliance with the GRI G4 Guidelines

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
Strategy and analysis				
1	G4-1	Statement from the most senior decision-maker of the organization about the relevance of sustainable development for the organization and its strategy when addressing sustainable development issues	Completely	Section: Letter of the Chairman of the Board of Directors, page 5 Section: Letter of the General Director 7
2	G4-2	Description of key impacts, risks and opportunities	Completely	Section: Analysis of risks having significant impact on performance, page 52
Organization profile				
3	G4-3	Organisation name	Completely	Section: Company's profile, page14
4	G4-4	Primary brands, products, and/or services	Completely	Section: Business profile, page 14 Section: Business model, page 16
5	G4-5	Location of the organization's headquarters	Completely	Section: Contacts, page 90
6	G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the Report	Completely	Section: Geography of operations, page17
7	G4-7	Nature of ownership and legal form	Completely	Section: Company's structure, page 16
8	G4-8	Markets where the organization operates (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Completely	Section: Geography of operations, page 17 Section: Subsidiaries, page 18
9	G4-9	Scale of the organization, including: total number of employees; • total number of departments; • net sales; • total capitalization broken down in terms of debt and equity; • quantity of products or services provided	Completely	Section: Human resources and social policy, page 62 Section: Key performance indicators for 2014–2016, page 9 Section: Outcomes of implementation of priority objectives in 2016, page 10 Section: Financial and economic indicators, page 33
10	G4-10	Total number of employees by employment contract and gender; • total number of permanent employees by employment type and gender; • total workforce by full-time and part-time employees and by gender; • total workforce by region and gender; • portion of the work performed by employees who are legally recognized as self-employed, or by individuals other than full-time and part-time employees, including employees and supervised employees of contractors; • seasonal variations in employment numbers	Partially	Section: Human resources and social policy, page 62

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
11	G4-11	Percentage of total employees covered by collective bargaining agreements	Completely	100% of employees are covered by a collective bargaining agreement
12	G4-12	Supply chain description	Completely	Section: Business model, page 16
13	G4-13	Significant changes in the organization's size, structure or ownership during the reporting period, including: • changes in the location or changes in operations, including opening, closing and expansions of enterprises; • changes in the share capital structure and other capital formation, maintenance, and alteration operations; • changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination of relations	Partially	Section: Organisational structure, page 39 Section: Share capital structure, page 39
14	G4-14	Application of the precautionary approach	Completely	Section: Environmental protection expenditures, page 59
15	G4-15	Externally developed economic, environmental and social charters, principles or any other initiatives ratified or endorsed by the organization	Completely	Section: Environmental impact management, page 56 Section: Greenhouse gas emissions, page 58 Section: Environmental management system, page 61
16	G4-16	Memberships of associations, industry and/or national and international advocacy organizations in which the organization: • holds a position on the governance body; • participates in projects or committees; • provides substantive funding • beyond routine membership contributions; • considers its membership as strategic	Partially	The Company is a member of the Kazakhstan Electricity Association (KEA)
Identified significant aspects and boundaries				
17	G4-17	List of legal entities included in the organization's consolidated financial statements	Completely	Section: About the report, page 2
18	G4-18	Methods of defining the report content and the aspect boundaries. Explanation of how the organization has implemented the reporting principles for defining the Report content	Completely	Section: Material aspects and boundaries, page 74
19	G4-19	List of all existing materials aspects identified in the course of determining the Report content	Completely	Section: Material aspects and boundaries, page74
20	G4-20	Description of each material aspect, the aspect boundaries within the organization (including a list of legal entities or groups of legal entities specified in clause 3.2 and for which the aspect is material)	Partially	Section: Material aspects and boundaries, page 74
21	G4-21	Description of each material aspect, the aspect boundaries outside the organization (including a list of legal entities, groups of legal entities, facilities and geographical regions for which the aspect is material)	Partially	Section: Material aspects and boundaries, page 74

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
22	G4-22	Effects of all restatements of indicators provided in previous reports, and reasons for such restatements	Completely	Indicators gave not changed and are comparable with the data provided in previous annual reports of the Company
23	G4-23	Significant changes in the scope and aspects boundaries as compared to previous reporting periods	Completely	No changes
Stakeholder engagement				
24	G4-24	List of stakeholders engaged by the organization	Completely	Section: Stakeholder engagement, page 55
25	G4-25	Principles of identification and selection of stakeholders for engagement	Completely	Section: Stakeholder engagement, page 55
26	G4-26	Organization's approach to stakeholder engagement, including frequency of engagement by types and by stakeholder groups; information of whether any of the engagement elements were taken specifically as part of the Report preparation process	Partially	Section: Stakeholder engagement, page 55
27	G4-27	Key topics and concerns raised through stakeholder engagement, and how the organization has responded to such key topics and concerns, including through the preparation of its reporting	Completely	So far, the Company does not include stakeholders directly in the Annual Report preparation process, however, it is planned to be done in the future. In particular, as a part of this Sustainable Development Report a feedback form was prepared in order to get a feedback from stakeholders.
General information on the Report				
28	G4-28	Reporting period, to which the provided information relates	Completely	Section: About the report, page 2
29	G4-29	Date of publication of the previous Sustainable Development Report	Completely	Section: About the report, page 2
30	G4-30	Reporting cycle	Completely	Section: About the report, page 2
31	G4-31	Contact point for questions regarding the Report or its contents	Completely	Section: Contacts, page 92
32	G4-32	Information on the Report preparation option «in accordance» with the GRI Guidelines chosen by the organization. GRI Content Index for the chosen Report preparation option. Statement of public (external) certification of the Report, if the Report has been assured externally.	Partially	Section: About the report, page 2 Section: Table of Report's Compliance with the GRI G4 Guidelines, page 6
33	G4-33	Organization's policy and current practice with regard to seeking public (external) certification for the Sustainable Development Report	Completely	This Report has not been certified externally. The Company does not find it reasonable in the medium term.
Corporate governance				
34	G4-34	The corporate governance structure of the organization, including committees of the superior corporate governance body in charge of economic, environmental and social impacts of the organization	Completely	Section: Organisational structure, page 39 Section: Committees of the Board of directors performance overview, page 44

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
Ethics and Integrity				
35	G4-56	Organization's values, principles, standards and norms of behaviour such as the Code of Conduct and Code of Ethics	Completely	Section: Report on compliance with the Corporate Governance Code, page 46
Category: «Environmental» Aspect: Materials				
36	G4-СПМ	Data on management approach	Completely	Section: Environmental impact management, page 56
37	G4-EN1	Materials used by weight or volume	Completely	Section: Environmental impact management, page 56
Aspect: Water				
38	G4-СПМ	Data on management approach	Completely	Section: Water management and water resources protection, page 60
39	G4-EN8	Total water withdrawal by sources	Completely	Section: Water management and water resources protection, page 60
40	G4-EN9	Water sources significantly affected by water withdrawal	Completely	Section: Water management and water resources protection, page 60
41	G4-EN10	Percentage and total volume of recycled and reused water	Completely	Section: Water management and water resources protection, page 60
Aspect: Emissions				
42	G4-СПМ	Data on management approach	Completely	Section: Greenhouse gas emissions, page 58
43	G4-EN15	Direct greenhouse gas emissions	Completely	Section: Greenhouse gas emissions, page 58
44	G4-EN18	Greenhouse gas emissions intensity	Completely	Section: Greenhouse gas emissions, page 58
45	G4-EN19	Reduction of greenhouse gas (CO_2) emissions	Completely	Section: Greenhouse gas emissions, page 58
46	G4-EN21	NOx, SOx, and other significant pollutant emissions	Completely	Section: Atmospheric air protection, page 57
Aspect: Effluents and Wastes				
47	G4-СПМ	Data on management approach	Completely	Section: Efficient management and disposal of production wastes, page 61
48	G4-EN22	Total water discharge with specification of waste water quality and treatment facility	Completely	Section: Efficient management and disposal of production wastes, page 61
49	G4-EN23	Total mass of waste by types and disposal method	Completely	Section: Efficient management and disposal of production wastes, page 61
Aspect: Products and Services				
50	G4-СПМ	Data on management approach	Completely	Section: Atmospheric air protection, page 57

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
51	G4-EN27	Extent of mitigation of environmental impacts of products and services	Completely	Section: Atmospheric air protection, page 57
Aspect: Compliance with Requirements				
52	G4-СПМ	Data on management approach	Completely	Section: Environmental protection expenditures, page 59
53	G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Completely	Section: Environmental protection expenditures, page 59
Aspect: General Information				
54	G4-СПМ	Data on management approach	Completely	Section: Environmental protection expenditures, page 59
55	G4-EN31	Total environmental protection expenditures and investments	Completely	Section: Environmental protection expenditures, page 59
Aspect: Environmental Grievance Mechanisms				
56	G4-СПМ	Data on management approach	Completely	Section: Grievance mechanism, page 32
57	G4-EN34	Number of grievances about environmental impacts filed, addressed and resolved through formal grievance mechanisms	Completely	Section: Grievance mechanism, page 32
Category: «Social» – sub-category: Labor practices and decent work **Aspect: Employment**				
58	G4-СПМ	Data on management approach	Completely	Section: Human resources management policy, page 62
59	G4-LA1	Total number and share of newly hired employees and employee turnover by age group, gender and region	Completely	Section: Employee headcount and quality, page 62 Section: Payroll headcount by enterprises, page 62 Section: Employee structure by category and gender, page 63 Section: Employee structure by gender and age, page 63
Aspect: Labor/Management Relations				
60	G4-СПМ	Data on management approach	Completely	Section: Interaction with trade unions, page 66
61	G4-LA4	Minimum notice period regarding material changes in operations, including whether this period is specified in a collective agreement	Completely	Section: Interaction with trade unions, page 66
Aspect: Occupational Health and Safety				
62	G4-СПМ	Data on management approach	Completely	Section: Occupational health and safety strategic goals and implemented actions, page 69
63	G4-LA5	Percentage of total personnel represented in formal joint health and safety committees with the participation of management representatives and employees engaged in monitoring and providing recommendations for occupational health and safety programs	Completely	Section: Occupational health and safety strategic goals and implemented actions, page 69

No.	Indicator index	Indicator name	Disclosure	Provision of the Report and comments
64	G4-LA6	Types and rates of work-related injuries, occupational diseases, lost days and workplace absence as well as total number of occupational fatal accidents, by regions and gender	Completely	Types and rates of occupational injuries, page 70
65	G4-LA7	Employees with high rates of injuries and high risk of diseases related to their occupation	Completely	Company employees whose professional activity bears a high injury risk, page 71
Aspect: Training and Education				
66	G4-СПМ	Data on management approach	Completely	Personnel training and development, page 64
67	G4-LA10	Programs for development of skills and lifelong learning aimed to support the continued employability of employees and assist them upon career completion.	Completely	Employee structure by education, page 63 Personnel training and development, page 64 Talent pool, page 65
Aspect: Diversity and Equal Opportunities				
68	G4-СПМ	Data on management approach	Completely	Human resources management policy, page 62
69	G4-LA12	Composition of management bodies and main personnel categories of the organization by gender, age groups, minority groups and other diversity characteristics	Completely	Personnel turnover, page 64 Involvement of young specialists, page 65
Category: «Social» – sub-category: «Society» Aspect: Local communities				
70	G4-СПМ	Data on management approach	Completely	Stakeholder engagement, page 55
71	G4-SO1	Percentage of business units that have implemented local community engagement, impact assessment and development programs	Completely	Stakeholder engagement, page 55
Power industry protocol General information				
72	G4-EU1	Installed capacity	Completely	Section: Company overview, page 14
73	G4-EU2	Power generation	Completely	Section: Key performance indicators for 2014–2016, page 9
74	G4-EU3	Number of residential, industrial, institutional and commercial customer accounts	Completely	Section: Geography of operations, page 17
75	G4-EU4	Length of aboveground and underground power transmission and distribution lines by regulatory regime	Completely	Section: Main production characteristics, page 8
76	G4-EU5	Allocation of CO_2 or equivalent emissions allowances or equivalents	Completely	Section: Greenhouse gas (CO_2) emissions, page 58

FINANCIAL STATEMENTS

Consolidated financial statements of the Company for 2016 were prepared in accordance with International Financial Reporting Standards and include financial statements of subsidiary organizations from the date of their acquisition. Principles of accounting policy are unified for all enterprises of the Company.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2016 (KZT thous.)

	December 31, 2016	December 31, 2015
ASSETS		
I. NON-CURRENT ASSETS		
Property, plant and equipment	98,437,364	91,887,276
Intangible assets	202,025	138,199
Other non-current assets	293,673	-
Advances paid for purchase (constructions) of fixed assets	376,587	614,328
Restricted cash	13,000	10,000
Total non-current assets	99,322,649	92,649,803
II. CURRENT ASSETS		
Inventories	1,885,268	2,320,134
Trade accounts receivable	3,281,502	2,852,890
Advances paid for purchase of current assets	247,908	502,830
Income tax prepaid	69,663	80,304
Other current asset	460,397	242,491
Other financial assets	192,589	145,019
Cash and cash equivalents	173,045	467,229
Total: current assets	6,310,372	6,610,897
TOTAL: ASSETS	**105,633,021**	**99,260,700**
EQUITY AND LIABILITIES		
III. EQUITY		
Share capital	16,291,512	16,291,512
Additional paid-in capital	277,168	277,168
Revaluation reserve on property, plant and equipment	21,480,749	23,007,667
Retained earnings/loss	17,954,086	11,541,439
Equity attributable to the equity of the parent company owners	56,003,515	51,117,786
Minority interest		
Total: equity	56,003,515	51,117,786
IV. NON-CURRENT LIABILITIES		
Bonds issued	8,324,298	8,396,699
Long-term loans	13,408,554	15,028,831
Finance lease liability	302,773	-
Deferred tax liabilities	14,864,231	13,380,146
Ash dump restoration liability	532,213	259,189
Employee benefit obligations	56,935	53,374
Long-term accounts payable	-	-
Deferred incomes	1,251,681	166,982
Total: non-current liabilities	38,740,685	37,285,221

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2016 (CONTINUED)

	December 31, 2016	December 31, 2015
V. CURRENT LIABILITIES		
Current-portion of the bonds issued	877,061	472,015
Trade accounts payable	4,099,627	5,344,850
Short-term loans and current portion of long-term loans	4,280,883	3,500,093
Current portion of ash dump restoration liability	97,785	53,587
Current portion of employee benefit obligations	4,727	4,859
Advances received	373,008	418,302
Current tax liabilities on income tax	-	-
Current portion of finance lease liability	21,380	
Other liabilities and accrued expenses	1,134,350	1,063,987
Total: current liabilities	10,888,821	10,857,693
TOTAL EQUITY AND LIABILITIES	**105,633,021**	**99,260,700**

As of December 31, 2016, a book value of one ordinary share is 388 KZT mln.

As of December 31, 2015, a book value of one ordinary share is 354 KZT mln.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE PERIOD ENDED DECEMBER 31, 2016 (KZT thous.)

	12 months of 2016	4th quarter of 2016	12 months of 2015	4th quarter of 2015
REVENUE				
Production of electrical/heat energy and etc.	30,904,528	9,403,252	26,608,473	8,821,753
COST OF SALES				
Production of electrical/heat energy and etc.	(20,899,798)	(6,053,131)	(18,260,240)	(5,472,541)
GROSS PROFIT/LOSS	10,004,730	3,350,121	8,348,233	3,349,212
General and administrative expenses	(1,838,308)	(523,391)	(1,897,284)	(513,161)
Selling expenses	(287,865)	(72,641)	(305,170)	(81,030)
PROFIT/LOSS FROM OPERATING ACTIVITIES	7,878,557	2,754,089	6,145,779	2,755,021
Other income (expenses), net	259,585	216,888	158,124	152,186
Foreign exchange gains (losses), net	153,099	57,746	(5,183,006)	(2,440,460)
Finance income	88,113	16,896	201,249	56,181
Finance costs	(2,009,540)	(452,317)	(1,514,938)	(425,311)
PROFIT/ LOSS BEFORE TAXATION	6,369,814	2,593,302	(192,792)	97,617
income tax benefit (expense)	(1,484,085)	(1,147,034)	(110,482)	570,191
PROFIT/LOSS FOR PERIOD	4,885,729	1,446,268	(303,274)	667,808
OTHER COMPREHENSIVE INCOME				
PPE revaluation surplus	-		-	
Profit tax on other comprehensive income component	-		-	
TOTAL COMPREHENSIVE INCOME/LOSS FOR THE PERIOD	4,885,729	1,446,268	(303,274)	667,808
As of December 31, 2016, basic and diluted earnings per ordinary share was 33.96 tenge				
As of December 31, 2015, basic and diluted earnings per ordinary share was (2.11) tenge				

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD ENDED DECEMBER 31, 2016 (KZT THOUS.)

	12 months of 2016	12 months of 2015
I. CASH FLOWS FROM OPERATING ACTIVITIES		
1. Profit before taxation	6,369,814	(192,792)
Adjustments for:		
Depreciation and amortization	4,347,002	3,981,665
Finance costs	2,009,540	1,514,938
Recovery/accrual of allowance for doubtful debts	(1,242)	(8,049)
(Recovery)/accrual of provision for obsolete inventories	(4,818)	(25,745)
Loss/(profit) from disposal of property, plant and equipment	16,164	7,802
Employee benefit expense	10,071	13,351
(Recovery)/accrual of unused vacation reserve	4,534	(8,124)
Property, plant and equipment revaluation expense		
Foreign exchange gain/loss	(153,099)	5,183,006
Other non-cash adjustments		
Finance income	(88,113)	(201,249)
Cash flow before working capital changes	12,509,853	10,264,803
2. Increase (decrease) of working capital, total incl.		
Increase (decrease) of inventories	446,867	1,032,890
Increase (decrease) of trade accounts receivable	(487,535)	(1,444,005)
Increase (decrease) of advances paid for acquisition of current assets	254,922	(104,247)
Increase (decrease) of other trade accounts receivable	(203,171)	(99,557)
Increase (decrease) of trade accounts payable	1,072,426	775,953
Increase (decrease) of advances received	(45,294)	(122,822)
Increase (decrease) of other liabilities and accrued expenses	162,114	53,418
Increase (decrease) of ash dump restoration liability		
Increase (decrease) of employee benefit obligations	(6,643)	(9,555)
3. Cash generated by operating activities	13,703,539	10,346,878
Income tax paid		(10,969)
Interest paid	(2,257,541)	(1,925,528)
4. Net cash generated by operating activities	11,445,998	8,410,381
II. CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of property, plant and equipment	(12,709,097)	(8,212,822)
Acquisition of intangible assets	(67,548)	(85,692)
Cash (placed on) deposits / withdrawn from deposits and interest receipt	(46,311)	111,235
Proceeds from disposal of property, plant and equipment	431,182	111,111
Net cash used in investing activities	(12,391,774)	(8,076,168)
III. CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from loans	5,246,520	5,531,600
Placement of bonds	400,100	2,726,336
Repayment of loan	(5,567,198)	(8,430,937)
Repayment of bonds	-	
Dividends paid	(105,000)	(1,144,790)
Proceeds from government subsidies	750,000	
Proceeds from related parties		844,790
Payments to related parties	(72,830)	
Net cash (used in)/generated by financing activities	651,592	(473,001)

	12 months of 2016	12 months of 2015
TOTAL Increase (+), decrease (-) in cash	(294,184)	(138,788)
Cash at the beginning of reporting period	467,229	548,100
Effect of exchange rate changes on the cash and cash equivalents		57,917
Cash at the end of reporting period	173,045	467,229

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE PERIOD ENDED DECEMBER 31, 2016 (KZT THOUS.)

Item name	Parent company equity					Minority interest	Total capital
	Share capital	Additional paid-in capital	Revaluation reserve on property, plant and equipment	non-distributed profits	Total		
Balance as of December 31, 2015	16,291,512	277,168	23,007,667	11,541,439	51,117,786		51,117,786
Share issue					-		-
Increase of share capital					-		-
Discount					-		-
Amortization of revaluation reserve on property, plant and equipment			(1,526,918)	1,526,918	-		-
Share capital payment					-		-
Dividends declared					-		-
Profit/loss for period				4,885,729	4,885,729		4,885,729
Balance as of December 30, 2016	16,291,512	277,168	21,480,749	17,954,086	56,003,515	-	56,003,515
Balance as of December 31, 2014	16,291,512	277,168	24,599,582	11,096,051	52,264,313		52,264,313
Share issue					-		-
Amortization of revaluation reserve on property, plant and equipment			(1,591,915)	1,591,915	-		-
Discount					-		-
Dividends declared				(843,253)	(843,253)		(843,253)
Profit/loss for period				(303,274)	(303,274)		(303,274)
Balance as of December 30, 2015	16,291,512	277,168	23,007,667	11,541,439	51,117,786	-	51,117,786

GLOSSARY

Overhead power line is an electric line for transmission of electric power through the wires located outdoors and attached by means of insulators and fittings to supports or brackets.

Overhead transmission line is a construction for transmission of electric power over a distance by wires.

Gigacalorie is a unit of measurement of heat energy used for assessment in heat power industry, heating systems, utilities sector.

Gigacalorie per hour is a derived unit used to specify the amount of heat produced or used by some equipment per a unit of time.

Cooling tower is a structure having a shape of an exhaust tower providing for an air draught.

Goodwill is the difference between the price of a company and the fair value of all its assets

Ash is an incombustible residue (in the form of dust) that is formed from mineral impurities in complete combustion of fuel.

Ash dump is a place for collection and disposal of waste ash and slag generated during combustion of solid fuel at combined heat and power plants.

Calorie (cal) is an off-system unit for measuring the amount of heat.

Boiler is a device for generating pressurized steam or hot water through fuel combustion, use of electric power, heat of exhaust gas or technological process.

Power transmission line (PTL) is a structure consisting of wires (cables) and auxiliary devices for transmission of electric power from power plants to consumers.

Megawatt is a unit of power measurement in electricity production.

Pump is a device for generating a pressure flow (suction, discharge) of mainly fluids by energizing it (by kinetic or potential energy).

Pumping unit is a pump with a set of equipment mounted according to a certain scheme ensuring pump's operation.

Steam turbine is an energy turbo machine, an element of a steam turbine unit that converts the potential energy of a high-temperature-high-pressure steam into the mechanical energy of rotation of its rotor, which drives an electric generator.

Substation is 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.

Available capacity is a value equal to installed capacity of the equipment minus the power that cannot be generates for technical reasons (insufficient draught in chimney, cooling systems of turbine condensers, etc.).

Available capacity of a unit (plant) is an installed capacity of a generating unit (plant), minus its capacity limitations.

Combined heat and power plant (CHP, cogeneration heating plant) is a thermal power plant generating not only electric power, but also heat, heat is distributed to consumers in the form of steam and hot water.

MPE Plan is draft standards for maximum permissible emissions.

Transformer (from Latin transformare – to transform, to convert) is a device for converting any significant properties of energy (e.g., electric transformer, torque converter) or objects (e.g., photo transformer).

Turbine is a prime motor with rotational movement of its working body – the rotor – that converts kinetic energy of the steam, gas or water medium into mechanical operation.

Turbine unit is a set of steam turbine, electric generator and exciter, united by one shaft train; it converts potential energy of steam into electric power.

Installed capacity is an effective value of the turbine units' rated capability.

Installed thermal capacity of the plant is a sum of all rated heating capabilities for all the equipment commissioned under the act and designed for supplying heat to external customers and steam and hot water for internal needs.

Installed power capacity of the electric power system is total effective power output of all turbo and hydroelectric power plants of the electric power system in accordance with their passports or specifications.

Emulsifier is a device for ash and dust removal working in a phase inversion mode.

ABBREVIATIONS

COSO – Committee of Sponsoring Organizations of the Treadway Commission

CTF - Clean Technology Fund

EBITDA – an analytical indicator, which means Earnings before Interest, Taxation, Depreciation and Amortization

ESAP – Environmental and Social Action Plan

ISO – International Organization for Standardization

KEGOC – Kazakhstan Electricity Grid Operating Company JSC

OHSAS – Occupational Health and Safety Management Systems

JSC – Joint Stock Company

AEDC – Akmola Electricity Distribution Company JSC

ASCAHE – Automatic System for Commercial Accounting of Heat Energy

ASCAEP – Automatic System for Commercial Accounting of Electric Power

GDP – Gross Domestic Product

OL – Overhead Line

OTL – Overhead Transmission Line

Gcal – Gigacalorie

Gcal/h – gigacalories per hour

SPAIID – State Program for Accelerated Industrial and Innovative Development

GRES – State District Power Plant

HEPP – Hydroelectric Power Plant

EBRD – European Bank for Reconstruction and Development

FAC – Fly Ash Collector

IIF – Islamic Infrastructure Fund

kWh – kilowatt per hour

CL – Cable Line

SG – Switchgear

PL – Power Line

MW – Megawatt

MNE RK – Ministry of National Economy of the Republic of Kazakhstan

MCI – Monthly Calculation Index

VAT – Value Added Tax

NGO – Non-Governmental Organization

EP – Environment Protection

PREDC – Pavlodar regional electric distribution company JSC

PCHP-2 – Petropavlovsk Combined Heat and Power Plant No. 2

PE – PAVLODARENERGO JSC

RK – Republic of Kazakhstan

PGA – Power Grid Area

ICS – Internal Control System

SSIC – Self-Supporting Insulated Conductor

NK REDC – North Kazakhstan regional electric distribution company JSC

SKE – SEVKAZENERGO JSC

MM – Mass Media

QMS – Quality Management System

EMS – Environmental Management System

RMS – Risk Management System

AC – Agriculture

LLP – Limited Liability Partnership

CHP – Combined Heat and Power Plant

CAPEC – Central-Asian Power-Energy Company JSC

CAEPCO – Central-Asian Electric Power Corporation JSC

PP – Power Plant

CONTACTS:

The head-office of SEVKAZENERGO JSC is located at: Republic of Kazakhstan, 150009, Petropavlovsk,

215 Zhambyl Str.

E-mail: info@sevkazenergo.kz

Tel: +7 (7152) 31 43 24.

Fax: +7 (7152) 41 28 28.

Company website: www.sevkazenergo.kz

Investor and shareholder relations

Full name position	Contact information
Investor and shareholder relations	
Alla Yazovskaya - Deputy General Director for Economics and Finance of SEVKAZENERGO JSC	Republic of Kazakhstan, Petropavlovsk, 215 Zhambyl Str. Tel: +7 7152 31 43 24 Fax: +7 7152 41 28 28
Tatiana Alekseyevene – Chief Accountant of SEVKAZENERGO JSC	Republic of Kazakhstan, Petropavlovsk, 215 Zhambyl Str. Tel: +7 7152 31 43 24 fax: +7 7152 41 28 28
Natalia Dzhamanchalova - Director of Korghay Legal Firm LLP, Corporate Secretary of SEVKAZENERGO JSC	Republic of Kazakhstan, 144 Shazhimbayev Str. tel.: +7 7152 31 43 07
Person in charge of the Annual report	
Andrey Ageyev - Head of Public Relations office of SEVKAZENERGO JSC	Republic of Kazakhstan, Petropavlovsk, 215 Zhambyl Str. Tel: +7715241-29-39 Fax: +7 7152 41 28 28

AUDITOR

SEVKAZENERGO's auditor is Deloitte Limited Liability Partnership (license for conducting auditing activities No. 0000015, series MFU-2, dated of September 13, 2006, issued by the Ministry of Finance of the Republic of Kazakhstan, the license is perpetual).

Legal address of Deloitte LLP: Almaty, Almaty Financial Center, Building B, 36 Al-Farabi Ave.

REGISTRAR

SEVKAZENERGO's registrar is Integrated Securities Registrar Joint Stock Company (state registration certificate No. 1678-1910-02-JSC, issued on January 11, 2012). Legal address of Integrated Securities Registrar JSC: 141, Ablai-Khan Ave, Almaty.

Annual Report prepared
by Expert Kazakhstan LLP


SEVKAZENERGO