



2017

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ANNUAL
REPORT



PAVLODARENERGO
JOINT-STOCK COMPANY

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LETTER FROM CHAIRMAN OF THE BOARD OF DIRECTORS



DYUSENBAI TURGANOV

DEAR SHAREHOLDERS AND PARTNERS,

This is the Annual Report of PAVLODARENERGO JSC which provides an overview of the Company's achievements in 2017, including performance indicators and welfare projects.

For the Company the reporting year was most notable for dramatic changes, especially in the heat and power sector. Signed in 2016 and being part of the government's Nurlu Zhol infrastructure development program, an agreement between the EBRD, the Ministry of National Economy of the Republic of Kazakhstan and CAEPCO JSC allowed to embark on an unprecedentedly massive investment program, specifically in Ekibastuz. The scale of the project – a total of 29 km of heat networks – exceeds the amount of renovation and modernization works in Ekibastuz during the previous decade. Modernization of heating networks in Pavlodar and Ekibastuz is expected to reduce transmission losses by up to 24,429.81 GCal/year due to the use of new pre-insulated pipes and by up to 4,844.35 GCal/year thanks to the addition of PU foam insulation on renovated pipes; the wear rate of such pipelines is expected to be zero.

It is important to note that in 2017 PAVLODARENERGO JSC continued the introduction of SCADA, ASKAE, ASCAHE and APC automation technology. In 2017, Pavlodar EDC JSC installed and launched a test run of the automatic meter reading system for electricity (ASKAE) for households using wireless LPWAN technology. A total of 107 ASCAHE/ASKAE devices were installed, meaning that a total of 2,444 consumers received ASCAHE/ASKAE devices in 2017.

We continued the introduction of SCADA systems. The central dispatch service of Pavlodar EDC JSC is equipped with a modern video wall connected to the server. Currently, all newly built substations above 35 kV, as well as those renovated, are equipped with remote control, meters and signaling, which allows to control switching devices via the Internet. The introduction of smart electricity meter technology is directly related to the establishment of a direct contact with consumers. Among these projects is Personal Account feature introduced in 2017, as well as THESIS automation system (currently being tested) whose purpose is to enhance transparency of issuing technical specifications for connection to utilities.

Social partnerships have been among the priorities of PAVLODARENERGO JSC during the reporting year. The company is a member of the memorandum of joint community projects signed between the Governor's office of Pavlodar region and Central-Asian Power Energy Company JSC. Focusing on corporate social responsibility, the memorandum was signed in 2016 and will remain effective until 2018. Within the framework of cooperation during the reporting period, PAVLODARENERGO JSC has completed the construction of a modern dormitory for 200 students of an installation college in Pavlodar.

All of these projects are part of the next stage for the Company always striving to improve the quality of energy supply to consumers. The operations of PAVLODARENERGO JSC are being improved with respect for the principles of transparency and corporate responsibility. The projects are implemented in accordance with the highest standards of production quality with services provided to all residents of Pavlodar region.

LETTER FROM THE GENERAL DIRECTOR



OLEG PERFILOV

DEAR COLLEAGUES AND PARTNERS,

In 2017, PAVLODARENERGO JSC continued to provide uninterrupted supply of electricity and heat to consumers in the region. In the reporting period, a total of 4,074 mln kWh of electricity and 4,445.067 thous. GCal of heat were produced. Revenue from sales of core services rose by 4,816 mln KZT reaching 49,885 mln KZT. The number of electricity consumers has increased 0.8% year-over-year reaching nearly 223,000. Heat is provided to more than 167,000 consumers, which is 0.7% more compared to 2016.

In the reporting year, the investment program aimed at upgrading and renovation of fixed assets continued: specifically, CHP-3 designed and constructed stage II of its ash dump site, reclamation of Kuat and Zhyly Su quarries was completed, and Pavlodar CHP-3 conducted renovation of boiler no. 4. The company completed the design, installation and commissioning of the automated process control system, renovation of battery scrubbers and a 1st stage waste heat recovery unit. Thanks to the introduction of the automated process control system, the CHP staff have reliable and continuous process monitoring capability, while operation of the boiler has become more manageable, efficient and safe, allowing to burn less coal respectively and thus reduce emissions of ash into the atmosphere. Thanks to the renovation, the boiler's efficiency increased 3.5%.

In 2017, in a total of 4.36 km and 5.9 km of main and submain networks respectively were renovated. Construction of 2 km long heat network no. 9 was fully completed. One of the most important events in the framework of the Nurly Zhol program was the renovation of a 2.36 km long heat network no. 7 with further reconnection to the working heat network no. 7. Furthermore, Ekibastuz is also working on moving the

submain networks outside the area with private residences. Sixty-six percent of the network distance to be added as part of the project was built in 2017. This is helping to reduce heat losses and control heat supply.

In 2017, PAVLODARENERGO JSC celebrated the 45th anniversary of Pavlodar CHP-3: nearly 90 % of equipment in the turbine shop was replaced, bringing the power plant's capacity to 540 MW and cutting the gap between the installed and available capacity. In 2017, the power plant carried out works within stage II of complete renovation of its 6th turbine. Once completed and commissioned, the installed electric capacity of the turbo generator will rise from 110 MW to 125 MW. The installed electric capacity of the entire CHP-3 will also grow to reach nearly 555 MW. As a result, projects that have been under way since 2009 will help to reduce fuel consumption by 8.1% and heat losses by 6.1% thanks to increased efficiency of turbines and boilers.

We continue to develop the system of social benefits and guarantees to our employees, keeping unchanged the extent of welfare support that our company has been offering for decades. In 2017, within the framework of the memorandum of joint social projects signed between the Governor's office of Pavlodar region and Central-Asian Power Energy Company JSC, we have started a large-scale project: construction of a high-rise apartment building for employees of PAVLODARENERGO JSC Group of companies with completion scheduled for December 2018.

Next year, the Company will continue to focus on enhancing the reliability and efficiency of the supply of electricity and heat to consumers, as well as strengthening the energy stability of the region.

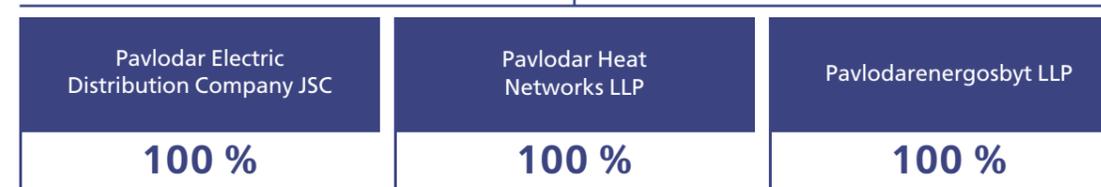
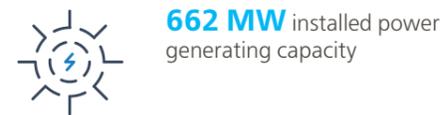
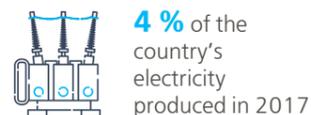
KEY RESOURCES

BUSINESS PROFILE

PAVLODARENERGO Joint-Stock Company is a vertically integrated company composed of generation, transmission and sales affiliates. The Company actively introduces international best practices and operates in accordance with international standards in the field of production, environmental protection, occupational health and social responsibility.

The Company is part of Central-Asian Electric Power Corporation (CAEPCO JSC).

PAVLODARENERGO JSC has implemented corporate governance standards, it is improving its business processes and practices in accordance with international standards in the field of production, environmental protection, occupational safety and welfare.



RATINGS

FITCH RATINGS INTERNATIONAL RATING AGENCY

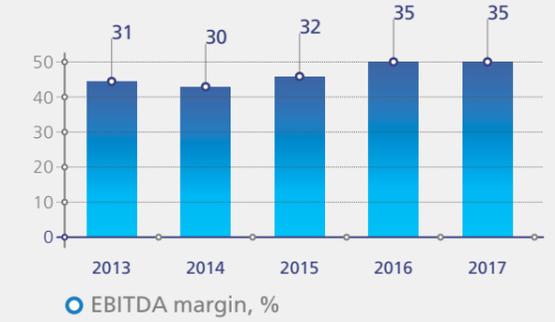
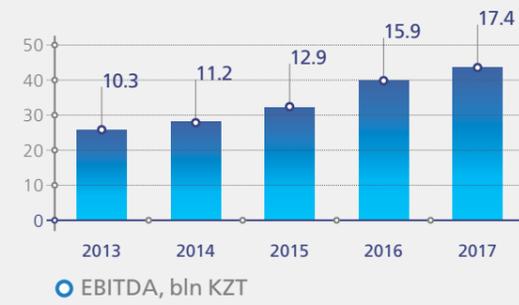
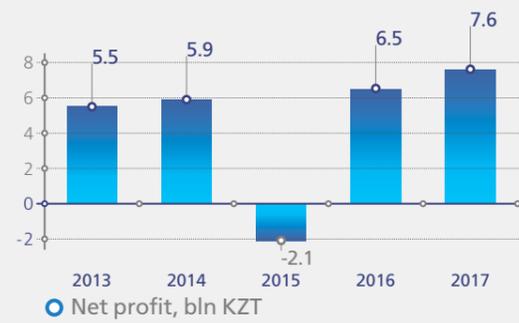
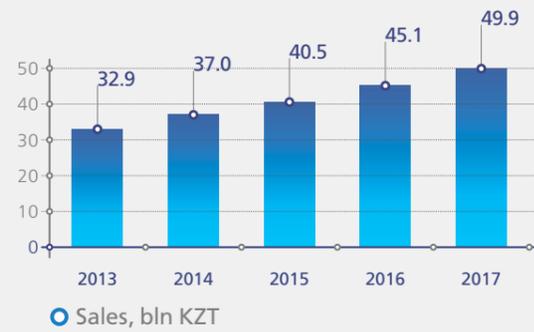
Fitch Ratings

Fitch Ratings confirmed the long-term issuer default ratings in foreign and local currencies at "B+", outlook «Stable».

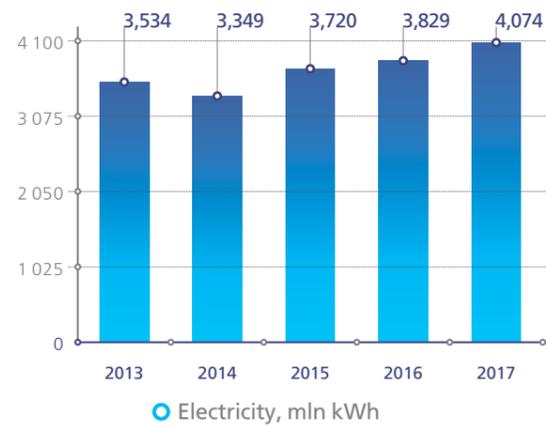
COMPLETE LIST OF RATING ACTIONS

Long-term IDR in foreign and national currencies affirmed at «B+,» outlook «Stable.» National long-term rating affirmed at «BBB(kaz),» outlook «Stable.» Senior unsecured rating in national currency affirmed at «B+,» recovery rating «RR4.»

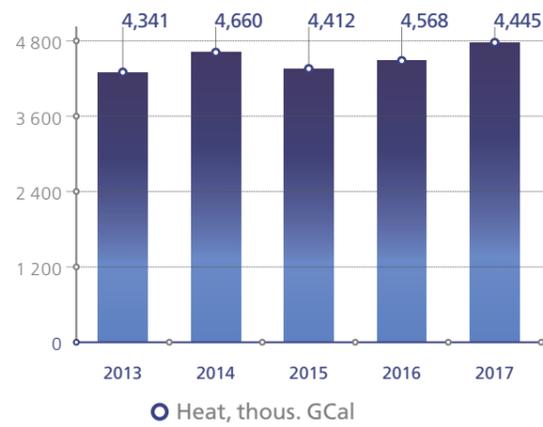
OPERATING HIGHLIGHTS



Electricity generation



Heat generation



PERFORMANCE HIGHLIGHTS

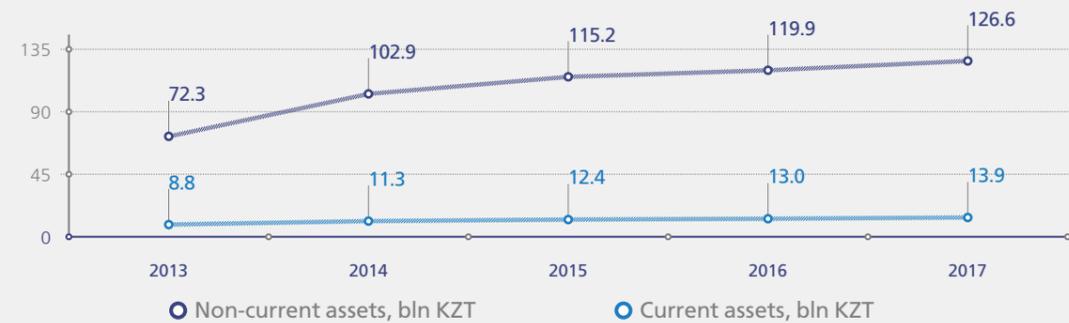
Overhead power lines, km

TYPES OF ELECTRICAL POWER LINES	DISTANCE, KM
220 kV	14.3
110 kV	2,798
35 kV	2,401.2
6-10 kV	6,070.1
0.4 kV	4,613.4
Total	15,897

Substations

SUBSTATION TYPES	NUMBER
220 kV	4
110 kV	74
35 kV	102
6-10/0.4 kV	3,608
Total	3,788

Assets



Investments, bln KZT



Total heat networks distance, km

CITIES	TOTAL, KM
Pavlodar	419.9
Ekibastuz	342.3
Total:	762.2

KEY EVENTS IN THE REPORTING PERIOD

FEBRUARY

Facilities of PAVLODARENERGO JSC were named the best in terms of civil defense and emergency response training. This has been attested by a number of awards.

MARCH

PAVLODARENERGO JSC's website introduced the Personal Account service. Household customer of Pavlodar city can log in and pay bills for energy and services, as well as take advantage of a number of other options: view the balance of the current date for all types of energy and services of Pavlodarenergosbyt LLP and organizations participating in the Single Settlement Centre; enter readings from electric and hot water meters, view and print bills.



APRIL

A training course in risk management and internal controls was arranged for the employees of PAVLODARENERGO JSC. It was attended by unit supervisors and key specialists of the companies within the Group.

MAY

The first ever KVN Humor Contest was held. Dedicated to occupational safety and health, the contests included representatives of Pavlodar EDC JSC, Pavlodar Heat Networks LLP, Ekibastuz CHP, Pavlodar CHP-2, Pavlodar CHP-3 and Pavlodarenergosbyt LLP. The winners were participants from Ekibastuz.

Also, winners of the student project competition were determined and received personal scholarships from the Company.

JUNE

Descendant of Grigory Malenkov visited Ekibastuz: Malenkov contributed to the development of the fuel and energy sector of Ekibastuz and its CHP. Malenkov's son Andrey, granddaughter Anastasia and grandson Andrey came with an exhibition devoted to their famous ancestor.

PAVLODARENERGO JSC held a seminar on applied management skills for middle managers of the Group of companies.

AUGUST

Fitch Ratings affirmed the long-term issuer default ratings of PAVLODARENERGO JSC in foreign currency and local currency at "B+" outlook "Stable."



Journalists and representatives of the Natural Monopolies Committee for Pavlodar region were invited to join a media tour of facilities participating in the investment programs of PAVLODARENERGO JSC.

To celebrate the 20th anniversary of the Central-Asian Power Energy Company, more than 1,000 employees of PAVLODARENERGO JSC visited EXPO-2017 international exhibition.

SEPTEMBER

The main steam pipe of boiler BKZ-420-140 st. no. 6 at Pavlodar CHP-3 was replaced.

The management of PAVLODARENERGO JSC attended a corporate training on occupational health and safety. IOSH course provided an opportunity to gain knowledge and skills that are essential to address the issues in this sphere, and also pointed out the importance of compliance with occupational safety guidelines for the workflow.

To celebrate the 20th anniversary of CAPEC JSC, the first company mini-football tournament was held in Astana. The team of PAVLODARENERGO JSC took the 4th place.

Top managers of PAVLODARENERGO JSC participated in a training designed to improve operational efficiency and labor organization through the implementation of lean manufacturing principles.

In Pavlodar, the facilities of Pavlodar Pavlodar EDC saw a mutual technical audit to exchange experience in modernization, reconstruction and repairs which was conducted for the first time between subsidiaries of CAPECO JSC.

OCTOBER

Pavlodar CHP-3, the city's leading power plant in terms of capacity, celebrated its 45th anniversary. In 2009, CHP-3 began the largest modernization in the history of PAVLODARENERGO JSC, aimed at increasing the useful life of equipment, increasing the available and installed electrical and heat generating capacity, as well as reducing harmful emissions to the environment.

Pavlodar Electric Distribution Company JSC held traditional annual professional skill contests among electrical technicians. The participants demonstrated their knowledge and skills in maintenance and repair, as well as readiness to respond to emergency situations.



The Kazakh language classroom of Ekibastuz CHP was named one of the city's top five. A branch of PAVLODARENERGO JSC's training center was awarded a diploma as one of the best among Kazakh language institutions affiliated with industrial enterprises and organizations of Ekibastuz.

NOVEMBER

The second annual scientific work competition started: the winner will get a personal corporate scholarship from PAVLODARENERGO JSC. The project is intended for university undergraduates and high school students of Pavlodar region majoring in the fields related to energy generation.

DECEMBER

In the run-up to the 26th anniversary of independence of Kazakhstan, a new dormitory capable of accommodating 200 persons was opened for students of energy majors. This dormitory from PAVLODARENERGO JSC to the Pavlodar Installation College became possible thanks to the memorandum of joint community projects signed between the Governor's office of Pavlodar region and Central-Asian Power-Energy Company JSC.

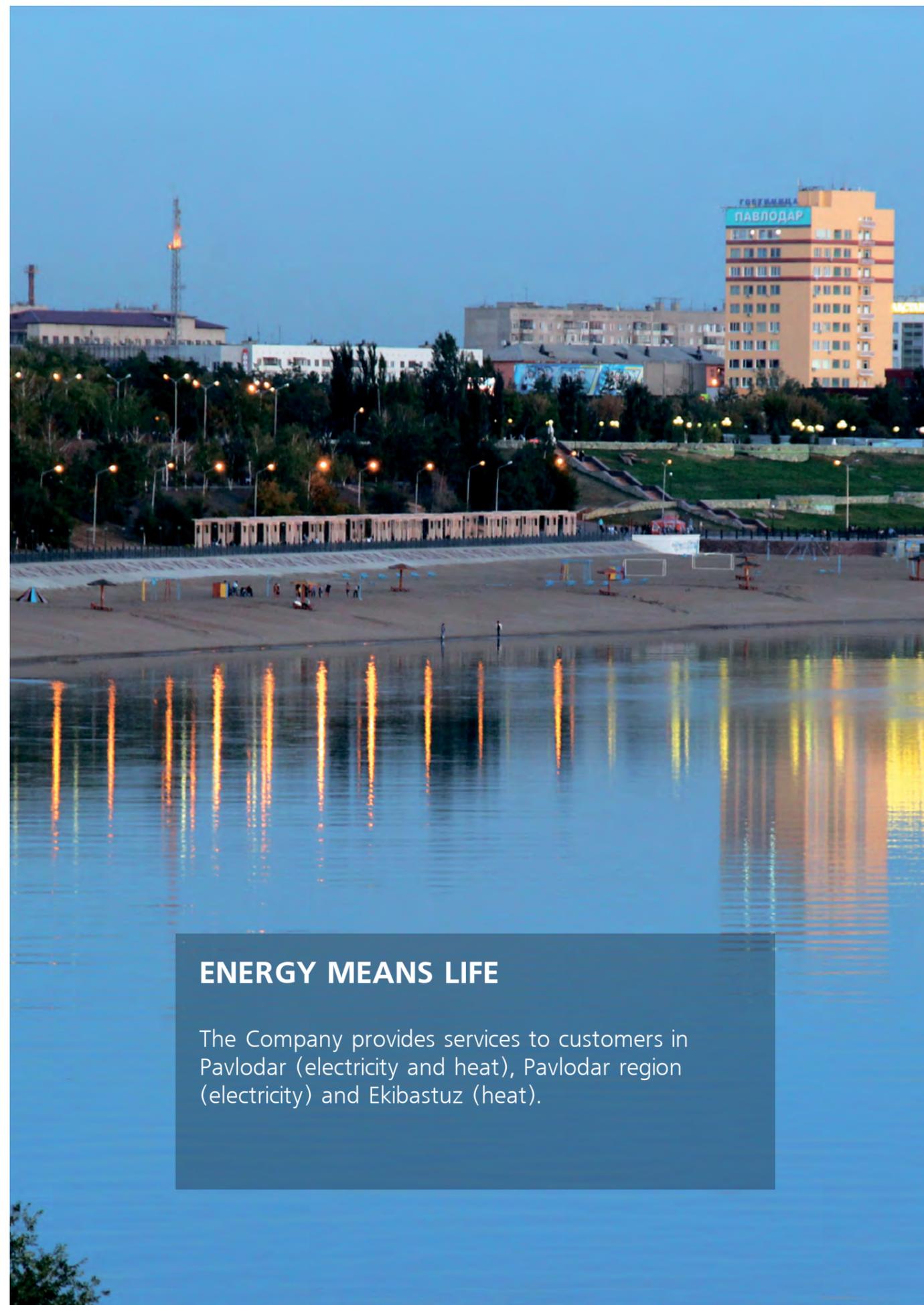


REPORT

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COMPANY OVERVIEW



ENERGY MEANS LIFE

The Company provides services to customers in Pavlodar (electricity and heat), Pavlodar region (electricity) and Ekibastuz (heat).

COMPANY OVERVIEW

HISTORY

2008–2009

CAPEC JSC transferred PAVLODARENERGO JSC to the share capital of its subsidiary, Central-Asian Electric Power Corporation (CAEPCO JSC). The shareholders of CAEPCO JSC include CAPEC JSC and international development organizations such as European Bank for Reconstruction and Development (EBRD) and Islamic Infrastructure Fund (IIF).

2007

PAVLODARENERGO JSC is joined by Ekibastuz CHP and Ekibastuz Heat Networks.

2005

The Company absorbs Pavlodar Heat Networks and forms Pavlodar Heat Networks JSC, which in 2011 became a Limited Liability Partnership.

2002

PAVLODARENERGO open joint-stock company is created; in 2003, it is transformed into a joint-stock company. Pavlodar's CHP-2 and CHP-3 form the system's generating capacity. PAVLODARENERGO JSC is joined by Pavlodar Electric Distribution Company JSC. In the same year, the Company was joined by Energocenter JSC, which was transformed into Pavlodarenergosbyt LLP in 2011.

1995–1997

PAVLODARENERGO production entity becomes a republican state enterprise. In 1997, the assets of Pavlodar's CHP-2 and CHP-3 were bought by Central-Asian Power-Energy Company (CAPEC JSC).

1971

Pavlodar's heating entity is created, which allowed to centralize the city's district heating and gave a boost to the development of Pavlodar's heating infrastructure.

1965

By Decree no.688 of the Council of Ministers of the Kazakh Soviet Socialist Republic, a regional energy department was transformed into Pavlodarenergo production entity.

MISSION

Improving the living standards for customers and promoting economic development of Pavlodar region by providing high-quality energy supply services for households, businesses and organizations.

The Company is pursuing this goal by operating in accordance with international standards in the field of production, environmental protection, occupational safety and welfare.

Employees are key for the Company's efficiency, and their value lies in their high professionalism, ability to work as a team and focus on results.

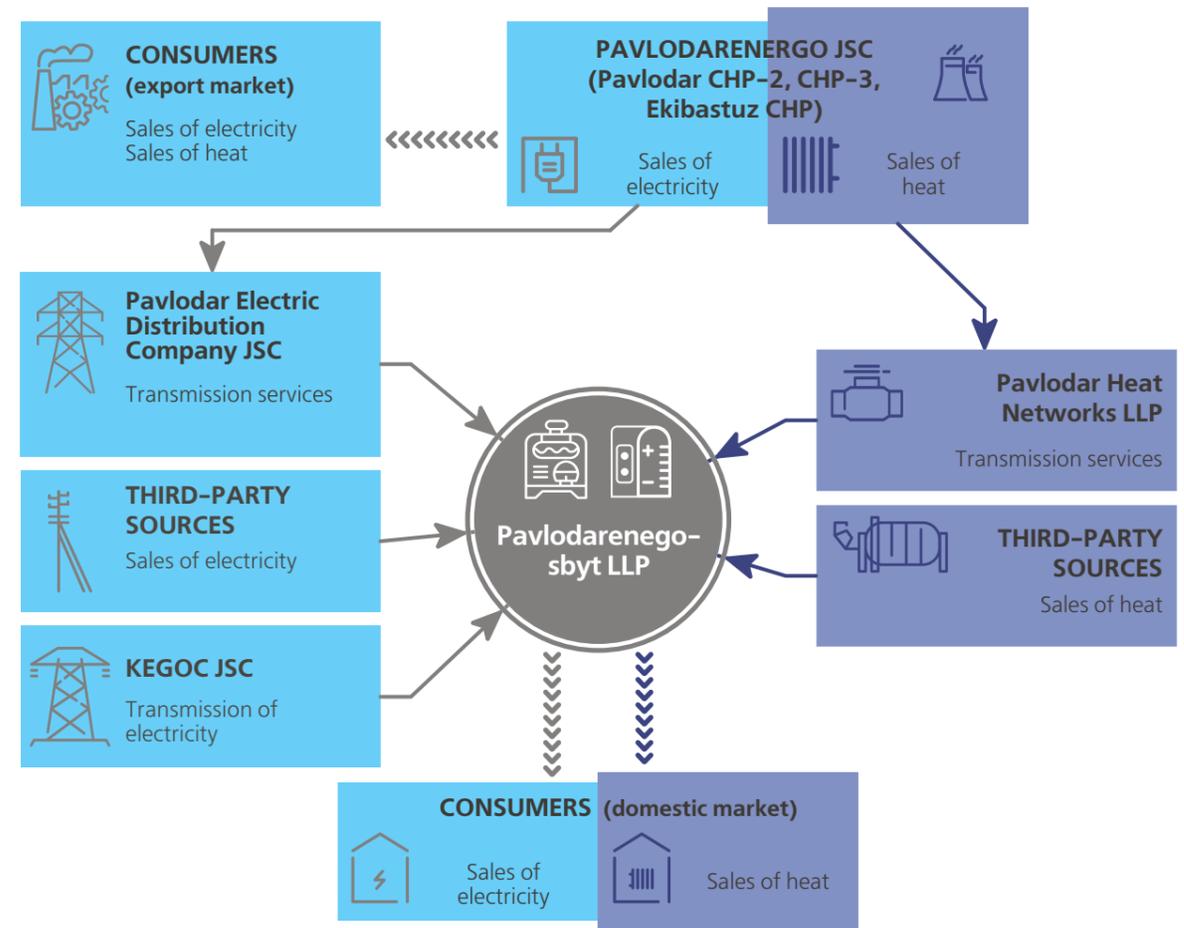
VISION

PAVLODARENERGO JSC is one of the largest enterprises in North-Eastern Kazakhstan in the field of production, transmission and distribution of electricity and heat. PAVLODARENERGO JSC supplies electricity and heat to Pavlodar, Ekibastuz, Aksu and districts of Pavlodar region. Some of the electricity produced by the Company is supplied to other regions of Kazakhstan.

The Company successfully leverages the advantages of the holding structure, combining dynamism and flexibility of its elements (companies within the Group) with stability and reliability of centralized management.

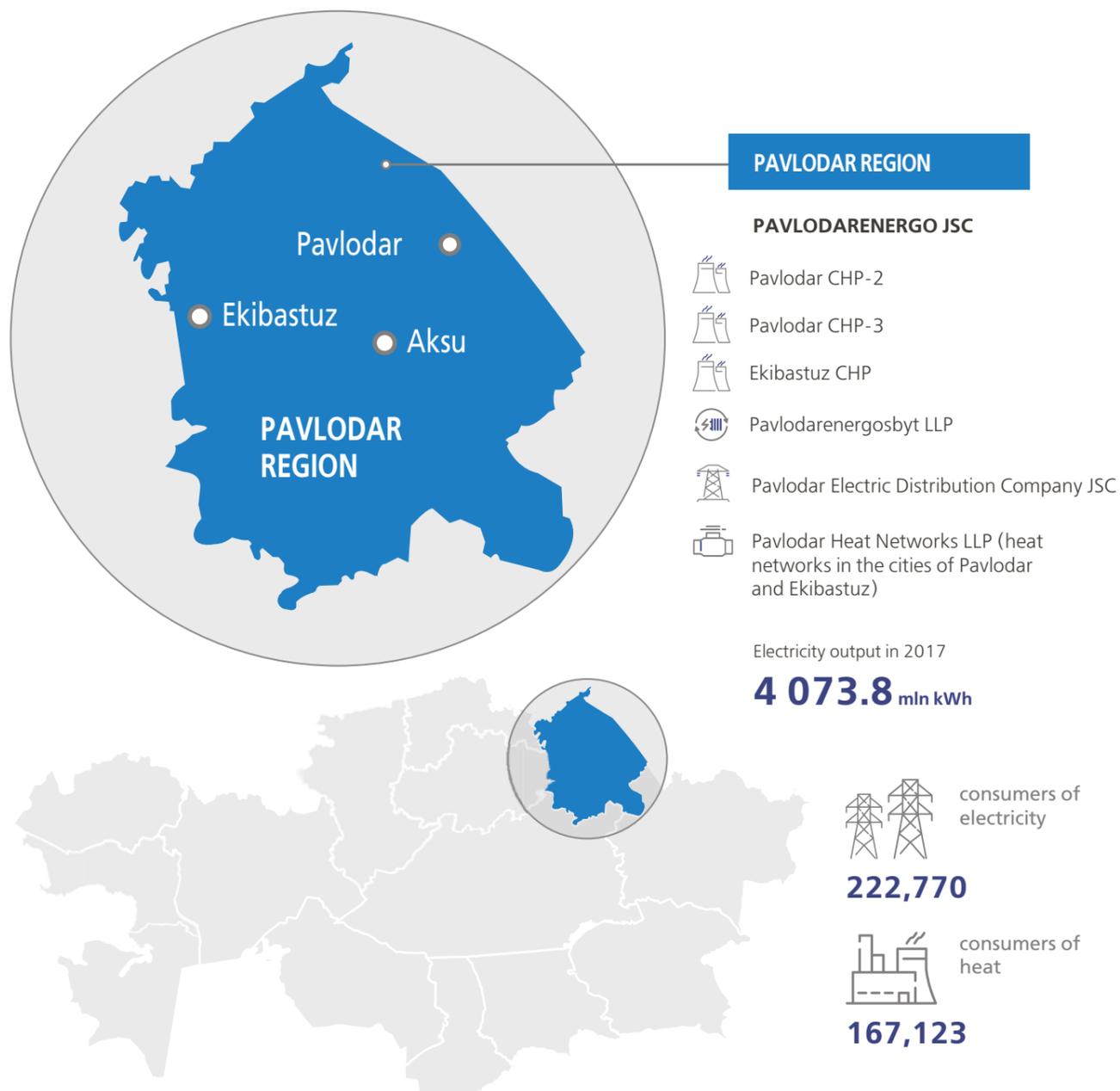
The Company's staff are a team of professionals continuously reaching for higher goals. The Company's relations with customers and suppliers are based on the principles of respect and mutual responsibility.

BUSINESS MODEL



GEOGRAPHY OF OPERATIONS

The Company supplies electricity and heat to consumers in Pavlodar city, electricity to districts of Pavlodar region and Aksu city, and heat to Ekibastuz city.



SUBSIDIARIES

PAVLODARENERGO JSC is a vertically integrated company comprising all elements of the energy supply chain in Pavlodar region (generation, transmission and sales).

Pavlodar CHP-3 of PAVLODARENERGO JSC

Is the biggest generating facility of the Company. The plant's installed electricity generation capacity is 540 MW. CHP-3 supplies electricity to the city's enterprises, local businesses, as well as households. This power plant is one of the most modern in Kazakhstan: since 2009, 70.4% of its generating equipment was upgraded. Modernization of the power plant will continue until 2020.

Pavlodar CHP-2 of PAVLODARENERGO JSC

The plant's installed electricity generation capacity is 110 MW. CHP-2 supplies electricity to the city's enterprises, local businesses, as well as households. It has the country's highest use ratio of installed electricity generating capacity during the heating season of nearly 93%.

Ekibastuz CHP of PAVLODARENERGO JSC

The plant's installed electricity generation capacity is 12 MW. Ekibastuz CHP is the only source of heat in Ekibastuz and the city's oldest industrial facility: in 2017, the plant celebrated its 61st anniversary.

Pavlodar Electrical Distribution Company JSC

The core business of Pavlodar Electric Distribution Company JSC is transmission and distribution of electricity in 11 districts of Pavlodar region, as well as in the cities of Pavlodar and Aksu. The infrastructure is located in Pavlodar city and in Pavlodar region. The serviced area is 105,900 km².

The total power line length of Pavlodar EDC JSC is 15,897 km, including 15,131 km of bare conductors and 766 km of insulated conductors.

Through the network of Kazakhstan Electricity Grid Operating Company JSC (KEGOC JSC), Pavlodar EDC JSC connects to Kazakhstan's and Russia's national grids, which allows Pavlodar EDC JSC to transmit electricity generated by Pavlodar's CHPs nos.1, 2 and 3. CHP-1 belongs to Aluminum of Kazakhstan JSC, while CHP-2 and CHP-3 belong to PAVLODARENERGO JSC.

Most of industrial sites in Pavlodar region are connected to the networks of Pavlodar EDC JSC, with

the region being home to about 5,000 enterprises of various ownership forms and a population of 747,100 people.

Pavlodar EDC JSC consists of affiliates performing maintenance and repair of 0.4-10 kV distribution lines and 35-220 kV substations:

- Western power network enterprise: Aktogay, Bayan-Aul, Irtysh, Maysk district networks and Aksu power networks (left shore);
- Eastern power network enterprise: Zhelezinsk, Kachirsk, Lebyazhensk, Pavlodar, Uspensk, Scherbaktinsk district networks (right shore);
- Municipal Electrical Utility operates and carries out maintenance of 0.4-10 kV distribution networks in Pavlodar;
- Production and Repair Enterprise operates and carries out maintenance of 35-220 kV high-voltage transmission lines in Pavlodar region;
- Municipal Intra-House Network Enterprise, which is not a regulated service, works under an agreement for maintenance of 0.4 kV networks of multistoried buildings in Pavlodar and Aksu cities;
- production departments, services and units.

Pavlodar Heat Networks LLP

Pavlodar Heat Networks LLP transmits and distributes heat for consumers in Pavlodar and Ekibastuz cities. The Company focuses on improving operational reliability of heating networks, as well as coordination of generation, transmission and consumption of heat.

Pavlodar's heating networks have a total length of 742.2 km, including consumer's networks:

- main heating networks - 115 km;
- district heating networks - 281.9 km;
- hot water networks - 23 km;
- consumer networks - 322.3 km;
- pumping stations - 11;
- central heating points - 22.

Heat networks in Ekibastuz have a total length of 422 km, including consumer networks:

- main heating networks – 37.6 km;
- district heating networks – 304.7 km;
- consumer networks - 80.2 km;
- central heat distribution station – 1;
- discharge pumping stations – 4.

Pavlodarenergosbyt LLP

Pavlodarenergosbyt LLP supplies electricity and heat to customers in Pavlodar region and the cities of Pavlodar, Ekibastuz and Aksu.

The Company supplies:

- electricity and heat in the city of Pavlodar;

- electricity in districts of Pavlodar region and the city of Aksu;
- heat in the city of Ekibastuz.

Pavlodarenergosbyt is committed to improving the quality of customer service using new technologies. For customer comfort, bills can be paid at commercial banks, online, using ATMs and POS terminals. Pavlodar has 2 service centers accepting payments from individuals, there are also 3 pay stations and 1 pay office in Leninsky village, 2 pay stations in Ekibastuz, 2 pay stations in Aksu, and 9 pay offices at district sale sites.

Agreements for accepting payments were signed with 13 commercial banks, Kazpost branch, Astana-Plat LLP and Contact 24h LLP.

2016– 2020 DEVELOPMENT STRATEGY

PAVLODARENERGO JSC’s strategic goal is to build an advanced energy company, ensuring a balanced and sustainable development of the energy system of Pavlodar region, promoting economic growth. The Company actively introduces global best practices and operates in accordance with international standards in the field of production, environmental protection, occupational health and social responsibility. Through improving efficiency, PAVLODARENERGO JSC strives to increase the market value of its assets and its investment attractiveness.

Main strategic goals of PAVLODARENERGO JSC:

- Market expansion with guaranteed sales and low risk;
- Improved production efficiency due to streamlined production and renovation of the main production facilities and infrastructure;
- Introduction of promising projects through cautious innovation development;
- Introduction of best management practices through continuous employee training on new efficient technologies in operations and enterprise management.

To achieve this strategic goal, the Company is implementing the following projects:

- Renovation and modernization of equipment at power generation facilities through investment programs, reduction of accident risks and elimination of downtimes;
- Reduction of above-normal losses during transmission of heat and electricity;
- Minimization of per-unit generation costs for heat and electricity;
- Introduction of energy-saving and energy-efficient technologies in energy production and transmission;
- Maintaining certification for compliance with international environmental, occupational health and safety standards;
- Continuous employee training to enhance professional skills;
- Implementation of an automated enterprise management system.

PROSPECTS OF THE 2020 INVESTMENT PROGRAM

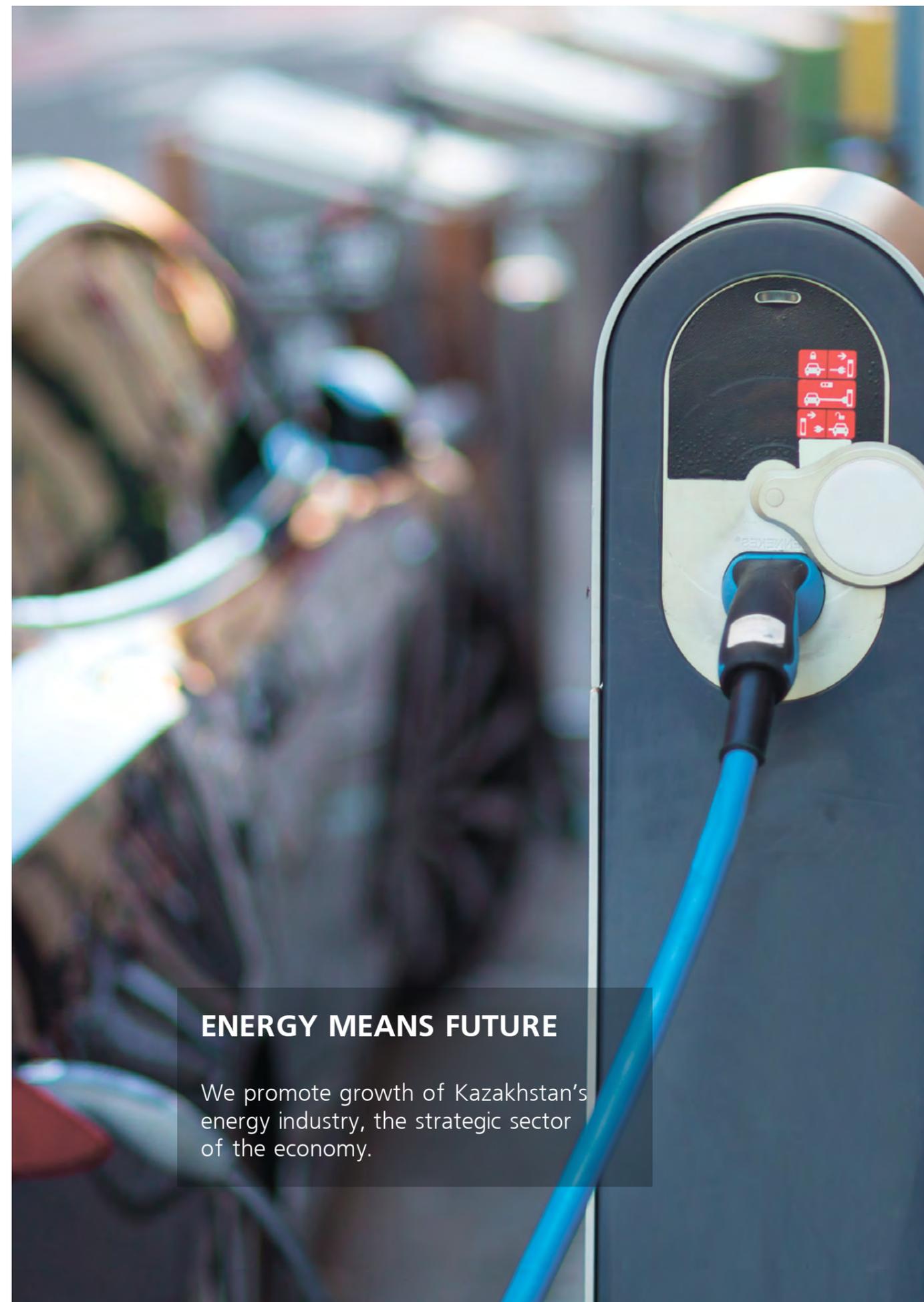
PAVLODARENERGO JSC is implementing one of the most large-scale investment programs in Kazakhstan’s energy sector in terms of capital investments in upgrading and renovation of production facilities.

The Company plans to invest a total of 124.5 bln KZT during the period from 2010 to 2020. In accordance with its 2016–2020 Development Strategy, the Company continued to implement the investment program in three areas: increasing generation; saving energy, including the reduction of transmission losses for electricity and heat; improving environmental performance.





MARKET OVERVIEW



ENERGY MEANS FUTURE

We promote growth of Kazakhstan's energy industry, the strategic sector of the economy.

MARKET OVERVIEW

KAZAKHSTAN'S ECONOMIC OVERVIEW

In 2017, the Kazakhstan's economy demonstrated faster growth thanks to increased output of export-oriented industries, higher investment and stronger domestic demand. The growth in output occurred in many industries and in virtually all regions, conducting to growth in the energy sector. The Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan reported a 4% GDP growth in 2017 totaling 51.6 trln KZT. Goods and services accounted for 36.5% and 57% of GDP respectively. While industrial production as the largest economic sector made up 26.5% of GDP in 2017. Increased net exports were the biggest driver of GDP growth thanks to higher global commodity prices. A major drag on the Kazakhstan's economy came from weak household spending.

Macroeconomic factors

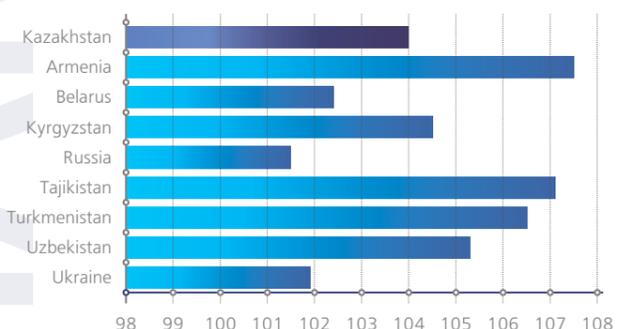
GDP dynamics

Source: Statistics Committee of the MNE RK



YoY GDP change in 2017 in % for selected CIS countries

Source: Statistics Committee of the MNE RK



Manufacturing

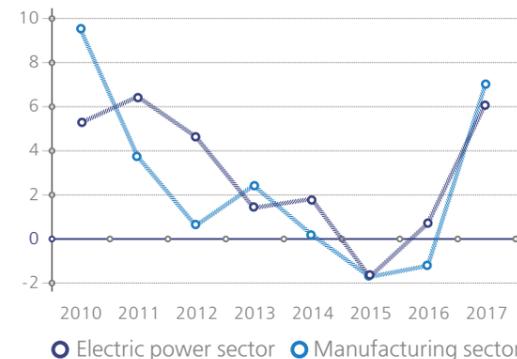
While in decline during 2015–2016, the manufacturing sector showed a 7.1% growth in 2017. The increase in industrial production occurred in 14 regions of Kazakhstan, with only Kyzylorda region reporting a slide of 4.3%. The largest increase was in Atyrau region (20.8%) thanks to increased production of crude oil.

In Astana industrial output grew by 7.8%, while West-Kazakhstan region increased production of gas condensate, thus achieving a 5.5% growth. In 2017, Pavlodar region had the fourth fastest growing industrial sector, showing a 5.1% rise in total output thanks to increased production of coal, gasoline, copper concentrate, raw aluminum and ferrochrome silicon. North-Kazakhstan region produced more food products (milk, butter), as well as PVC pipes, achieving a 4.5% increase in industrial output.

In 2017, Kazakhstan produced **6.2%** more electricity compared to the previous year. The situation in the industry is similar to Kazakhstan's manufacturing sector in general.

Output in manufacturing sector and electric power sector, %

Source: Statistics Committee of the MNE RK



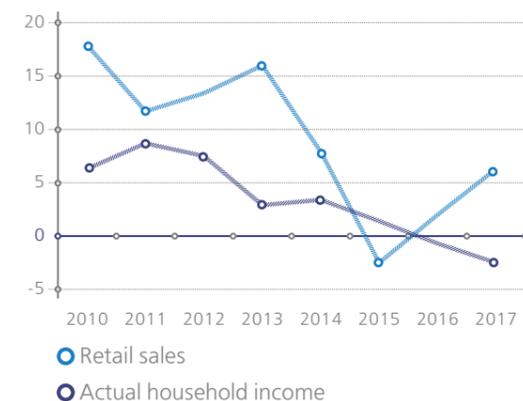
Consumer goods

Once in decline during 2015–2016 due to foreign exchange rate fluctuations and inflation, household spending was on the rise during 2017. According to the Statistics Committee of the MNE RK, retail sales in 2017

grew by 6.3%, which is considerably higher than in 2016 (2%), but still behind the pre-2015 period when annual growth rate exceeded 10% for a number of years. Yet household income continued a negative trend, falling 2.5% in 2017 compared to 0.7% in 2016.

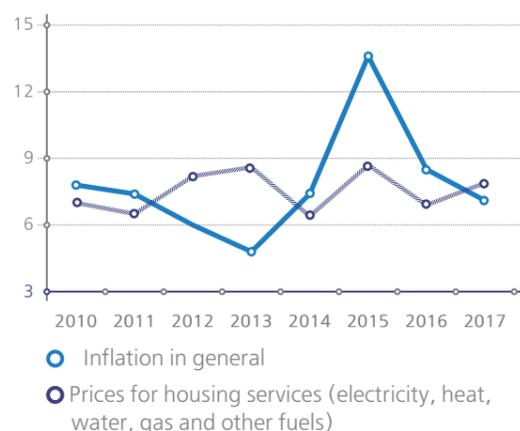
Changes in retail sales and household income, %

Source: Statistics Committee of the MNE RK



Inflation in 2017 was 7.1% compared with 8.5% in 2016. According to the National Bank of the Republic of Kazakhstan, inflation slowed down thanks to reduced external inflationary pressure, stabilization on the foreign exchange market and appreciation of tenge thanks to favorable trends on commodity markets.

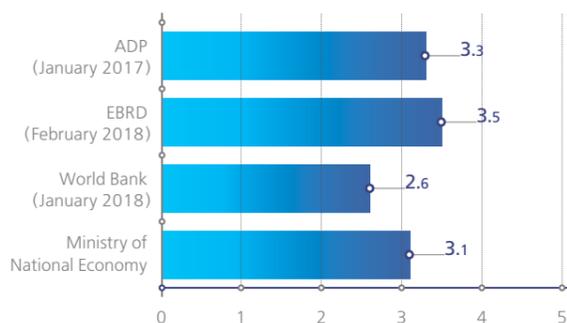
Inflation in Kazakhstan, %
Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan



Market outlook

In 2018, experts expect economic slowdown compared to 2017, pointing out relatively favorable external economic conditions, in particular the growth of major world economies and strong chances oil prices will stay above the 60 dollars per barrel mark. Exports and investments are expected to keep growing, along with household spending.

Kazakhstan economic outlook for 2018, %
Republic of Kazakhstan and international financial institutions



KAZAKHSTAN'S ENERGY SECTOR OVERVIEW

The energy sector continued to grow rapidly thanks to generous investment of major players in modernization of fixed assets and expansion of generating capacities. The fiscal year was record breaking in terms of both production and consumption of electricity.

Production

According to system operator KEGOC, as of January 1, 2018 Kazakhstan had a total of 128 power plants with the total installed capacity of 21,672.9 MW and available capacity of 18,791.4 MW.

In 2017, electricity production increased almost 9%, and output reached 102.38 bln kWh.

Electricity generation in Kazakhstan and net flow, bln kWh
Source: KEGOC



In 2017, thermal power plants accounted for 80% of generated electricity achieving a 10% increase in total output. Gas turbine and hydropower plants accounted for 8% and 11% respectively.

In 2017, renewable energy infrastructure continued to expand. First and foremost, this includes wind and solar power stations, as well as small hydropower plants. In 2017, renewable energy sources accounted for a total of 1.1 bln kWh, showing a 19% year-on-year growth.

PRODUCTION OF ELECTRICITY BY TYPE OF GENERATION, BLN kWh

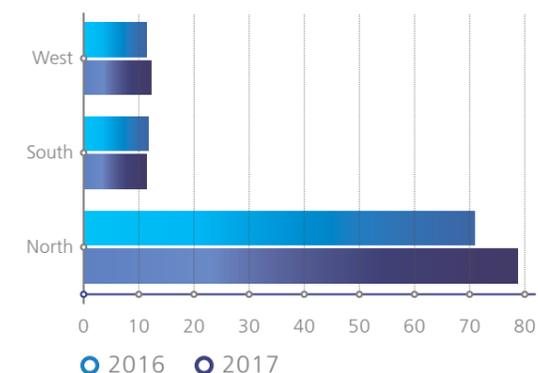
TYPE OF GENERATION	THERMAL POWER PLANTS	GAS TURBINE POWER PLANTS	GAS POWER PLANTS	WIND POWER PLANTS	SOLAR POWER STATIONS
2016	74.70	7.41	11.61	0.27	0.09
2017	82.42	8.37	11.16	0.34	0.09
CHANGE	10%	13%	-4%	24%	4%

Kazakhstan national electrical grid includes three zones:

- North (Akmola, Aktobe, Atyrau, Pavlodar, North-Kazakhstan, East-Kazakhstan and Karaganda regions);
- South (Almaty, Zhambyl, Kyzylorda and South-Kazakhstan regions);
- West (Atyrau, West-Kazakhstan and Mangystau regions).

Russia. West and South have to import electricity. However, supply almost equals demand in the West, while in the South demand exceeds supply by as much as 80%.

Production of electricity by zone, bln kWh
Source: KEGOC



In 2017, North accounted for 77% of electricity produced in Kazakhstan: the country's major power plants are located in the north to benefit from proximity to coal deposits. Eighty-four percent of electricity produced is consumed by customers with many of them being large industrial enterprises. The surplus electricity is exported to other regions of Kazakhstan and to



Companies in Samruk-Energo state-owned holding accounted for 28% of electricity produced in Kazakhstan in 2017, with the increase in production

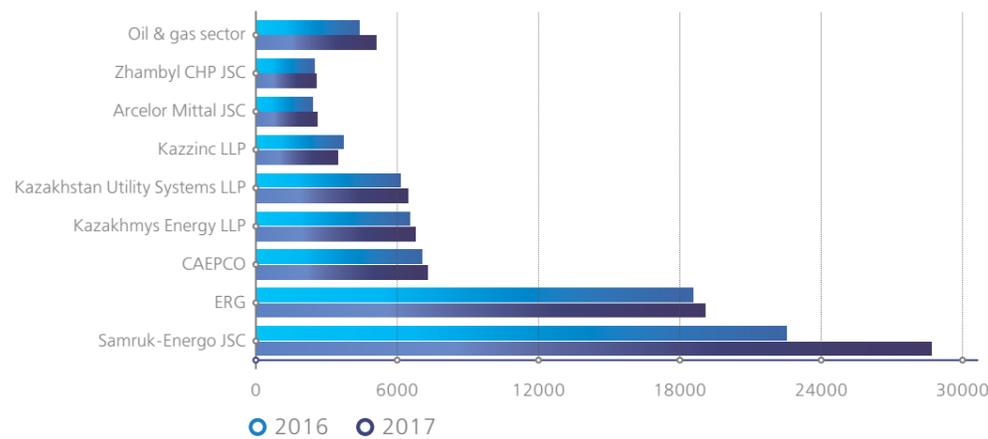
reaching 27.5%. CAEPCO JSC is the third biggest energy producer in Kazakhstan accounting for 7.1% of the country's total output.

Consumption

In 2017, Kazakhstan consumed **97.9 bln kWh** of electricity which is **6 %** more than in 2016. This is the country's all-time high over the years of independence.

Virtually all large consumers showed increased consumption. For example, Kazakhstan Aluminum Smelter JSC, the third biggest consumer, showed a growth of 7%, Arcelor Mittal Temirtau – 4% and Kazchrome – 32%.

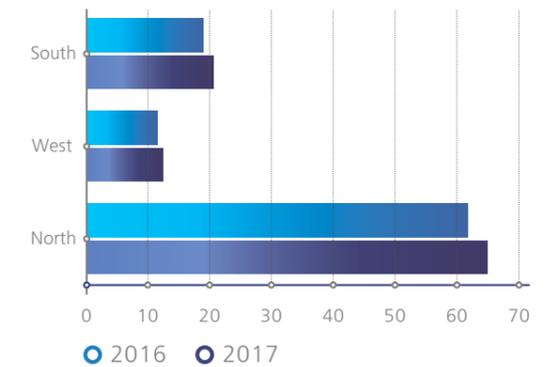
Kazakhstan's biggest energy producers, mln kWh
Source: Samruk-Energo JSC



Electricity consumption in Kazakhstan, bln kWh
Source: KEGOC



Electricity consumption by zone, bln kWh
Source: KEGOC



Rates

According to the Statistics Committee of the MNE RK, in 2017 electricity rates rose just **4.6 %** compared to the previous year, a record low over the last several years.

Heating rates increased **7.4 %**.

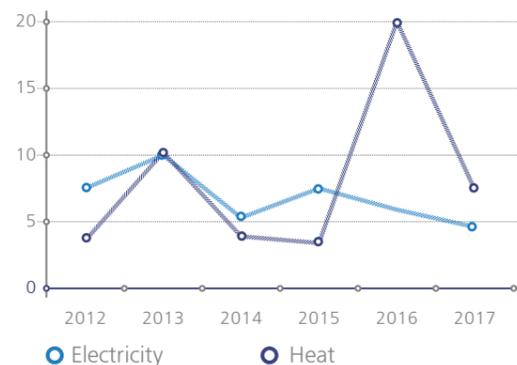
The country's pricing regulator insists that investments are included in prices to stimulate modernization of fixed assets in the industry. Started in 2009, the rate limiting program for electricity generating companies ended in 2015 but was immediately extended until January 1, 2019. As of 2016, power transmission and heating supply organizations in Kazakhstan switched to 5-year limited rates which can be adjusted.

Market outlook

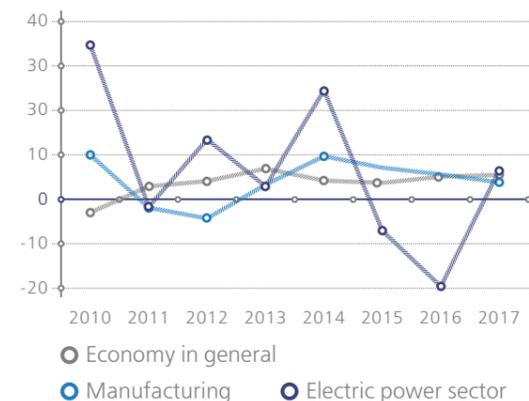
According to the Energy Ministry, in 2018 Kazakhstan will produce 114.5 bln kWh of electricity, including a surplus of 14.3 bln kWh. Renewable energy will account for

2%. By 2024, Kazakhstan will be producing 128 bln kWh per year with a surplus of 18.8 bln kWh and 32 bln kWh generated by new power plants that are yet to be built.

Changes in electricity and heating rates in Kazakhstan, %
Source: Statistics Committee of the MNE RK

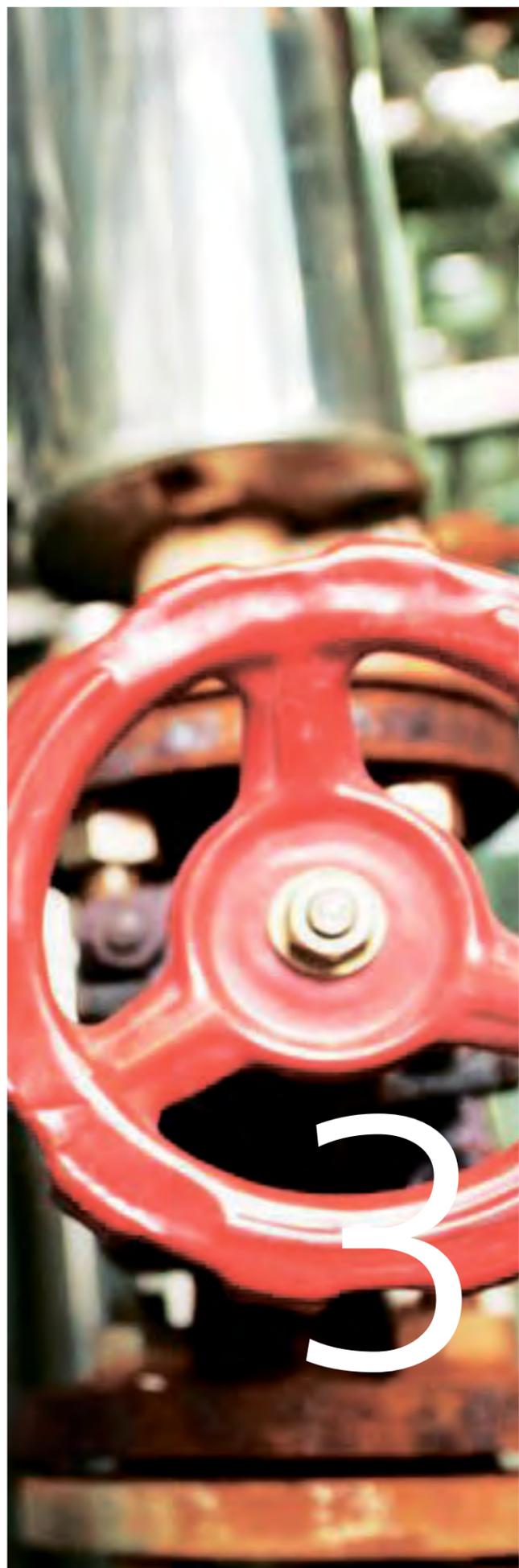


Investments in fixed capital, %
Source: Statistics Committee of the MNE RK



KAZAKHSTAN'S NATIONAL ELECTRICAL GRID OUTLOOK, BLN kWh

ITEM	2018	2019	2020	2021	2022	2023	2024
ELECTRICITY CONSUMPTION	100.1	102.6	105.1	106.1	107.2	108.2	109.2
ELECTRICITY PRODUCTION	114.5	115	115.6	118	119.9	124.2	128
EXISTING POWER PLANTS	105.5	103.3	100.8	100.9	97.3	96.2	96
PLANNED POWER PLANTS	9	11.7	14.8	17.2	22.6	28	32
RENEWABLE ENERGY SOURCES	1.4	2.2	2.9	3.8	4.6	5.4	6.3
SURPLUS	14.3	12.4	10.5	11.9	12.7	16	18.8

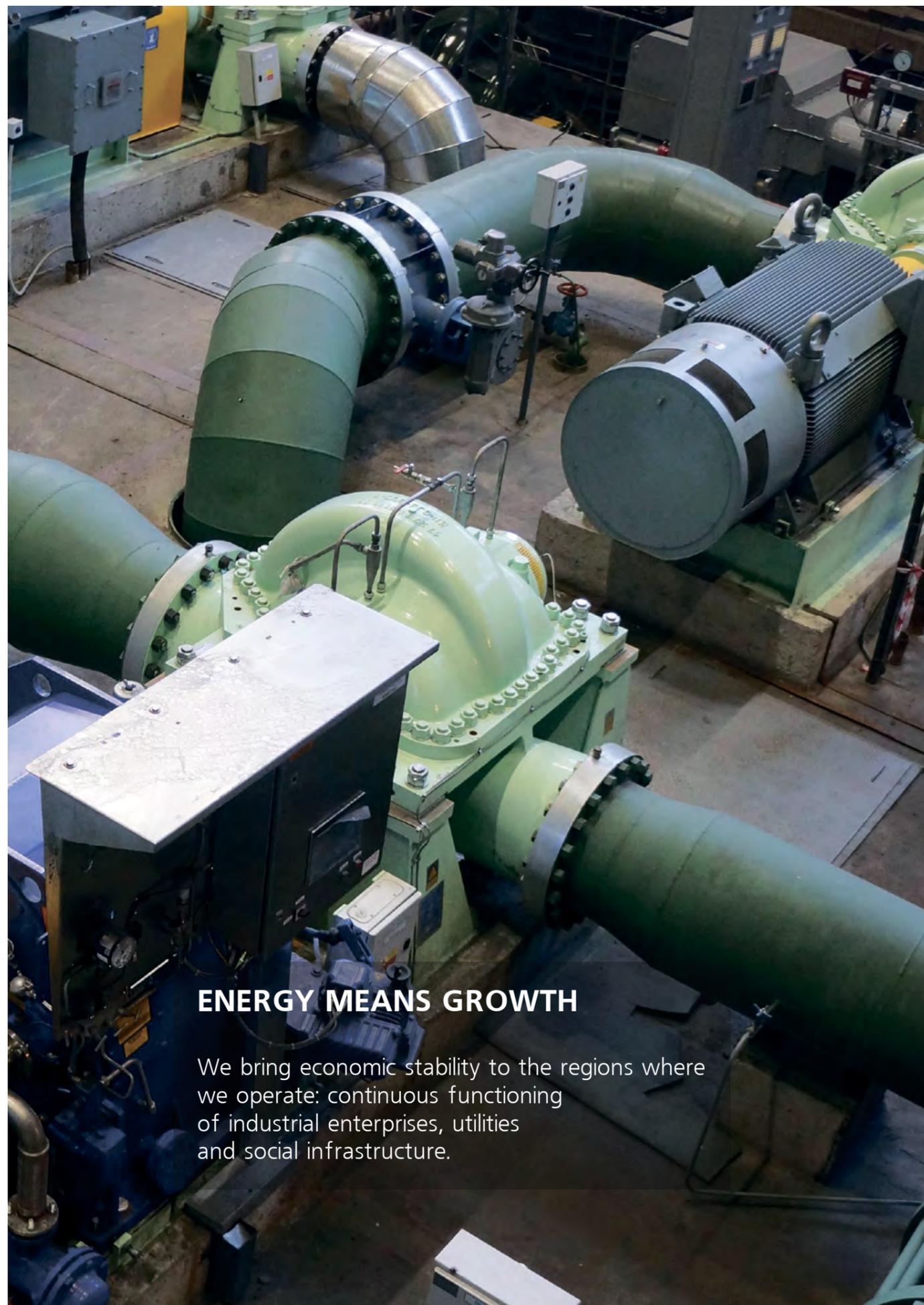


ENERGY

3



OPERATIONAL
RESULTS AND
DEVELOPMENT
PROSPECTS OVERVIEW



ENERGY MEANS GROWTH

We bring economic stability to the regions where we operate: continuous functioning of industrial enterprises, utilities and social infrastructure.

OPERATIONAL RESULTS AND DEVELOPMENT PROSPECTS OVERVIEW

As a part of the investment program, 2017 witnessed a number of earlier started large-scale equipment modernization projects to increase generation, lower transmission losses for electricity and heat, as well as improve environmental performance. In 2017, the Company spent a total of 10,172.9 mln KZT on investment projects.

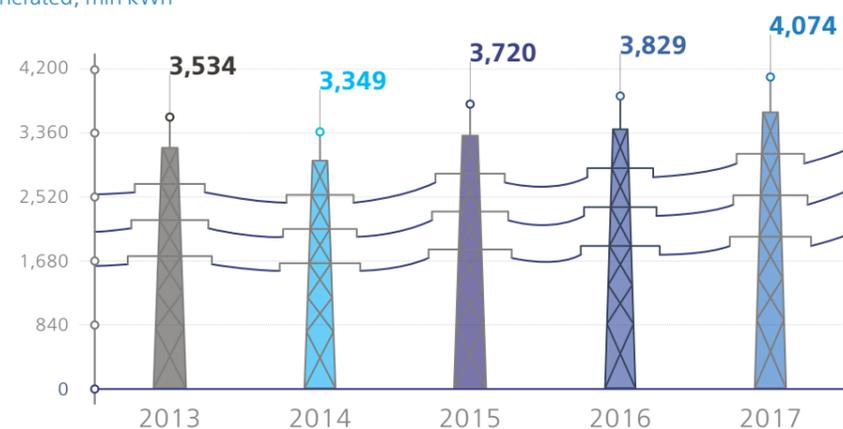
INCREASED GENERATION

Electricity generation capacity in 2017 amounted to 4,074 mln kWh, a 6.4 % increase compared to 2016. Heat generation capacity in 2017 totaled 4,445 thous. GCal, the decrease in the previous year's service amounted to 2.7%.

The power plant 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 Pavlodar region.

ITEM	2013	2014	2015	2016	2017
Installed electricity generation capacity, MW	627	642	662	662	662
Electricity generated, mln kWh	3,534	3,349	3,720	3,829	4,074
Share in Kazakhstan's total electricity generation, %	3.8	3.5	4.1	4.1	4.0
Electricity transmitted, mln kWh	2,251	2,221	2,434	2,493	2,568
Electricity sold, mln kWh	2,698	2,738	2,963	3,058	3,245
Installed heat generation capacity, GCal	2,102	2,140	2,240	2,240	2,240
Heat supplied, thous. GCal	4,341	4,660	4,412	4,568	4,445
Heat transmitted, thous. GCal	3,149	3,276	3,209	3,225	3,195
Heat sold, thous. GCal	4,109	4,204	4,154	4,192	4,175

Electricity generated, mln kWh



PROJECTS COMPLETED IN 2017

PAVLODAR CHP-3 OF PAVLODARENERGO JSC

Pavlodar CHP-3 of PAVLODARENERGO JSC is the biggest generating facility of the Company.

This power plant is one of the most modern in Kazakhstan. Modernization of the power plant will continue until 2020.

Installed electricity generating capacity
540 MW

70.4% of generating equipment has been upgraded

Modernization of turbo generator no. 6 continues and is expected to increase installed electrical capacity by 15 MW to 125 MW. Network, booster and circulation pumps with fluid drives were installed; assembly of the foundation steel frame was started. All the works are scheduled for completion in 2018.

In 2017, boiler no. 4 was fitted with an automated process control system (APCS) to enable a cost-effective and secure mode of operation where the set parameters are controlled automatically.

Stage II of construction of CHP-3's ash dump was completed. This is one of the measures to ensure continuous operation of the power plant and to create an ash dump site enough for up to 25 years of use.

Stage III of the ash dump construction was started.

PAVLODAR CHP-2 OF PAVLODARENERGO JSC

Pavlodar CHP-2 of PAVLODARENERGO JSC supplies electricity to the city's enterprises, local businesses, as well as households. It has the highest use ratio of installed electricity generating capacity during the heating season of nearly 93%.

Installed electricity generating capacity
110 MW

Stage II of construction of CHP-2's ash dump was completed.

EKIBASTUZ CHP OF PAVLODARENERGO JSC

Ekibastuz CHP is the only supplier of heat in Ekibastuz. This power plant is the oldest among the Company's facilities.

Installed electricity generating capacity
12 MW

Ekibastuz CHP continued the construction of stage II of the ash dump site in the bed of Lake Tuz.

TRANSMISSION OF ELECTRIC POWER

In accordance with the reconstruction, modernization and re-equipment investment program, a total of **2.2 bln KZT** was spent in 2017 for implementation of various projects. Implementation of the investment program is funded by internal funds of the enterprise, namely depreciation and earnings specified in rates.

The investment program was prepared taking into consideration current technical state of equipment of substations and power network, as well as economic and technical priorities which include measures aimed increasing the utilization ratio of the assets. The program includes actions aimed at reduction of normal electricity losses and improvement of power equipment reliability.

In 2017, Pavlodar EDC JSC performed construction, renovation and re-equipment of 0.4-10 kV power lines with a total length of 45 km, including 22.06 km of aerial bundled conductor wires. The Company completed construction of VL-35 kV power lines (17.2 km) and renovation of VL-110 kV power lines (14 km); a total of 2,444 ASKAE devices for electricity were installed. Pavlodar EDC JSC implemented projects aimed at reduction of transmission and distribution losses for electricity, as well improvement of reliability of supply to consumers. In 2017, technical losses reduced from 8.5% to 8%.

In 2017, the Company completed renovation/construction of 0.4-110 kV transmission lines with a combined length of 76.2 km, plus a total of 22 km of bare conductors were replaced with insulated ones. The Company completed construction of new 10 kV distribution points in Pavlodar, RP-1 and RP-3. Three modular transformer substations were set up featuring power transformers with dry insulation and vacuum circuit breakers on the territory of Pavlodar: they are equipped with modern security and fire alarm systems, and also dry transformers have replaced four oil ones. The Company developed projects for the reconstruction of three 110-220 kV substations in Aksu district, began purchasing and signed contracts to carry out construction and installation works for the reconstruction of three 110 kV substations (two in Pavlodar, one in Bayanaul district) and the construction of a 110 kV substation named "Severnaya-gorodskaya" with the construction of a VL-110 kV double line and the installation of two cells at Promyshlennaya substation.

TRANSMISSION OF HEAT

The main activities to reduce heat losses include restoration and upgrading of district heating pipelines in Pavlodar and Ekibastuz. This project is funded from the budget of Pavlodar Heat Networks JSC, as well as a new investment loan from the EBRD and government subsidies from the Ministry of National Economy under Nurly Zhol program. The plan is to be implemented during the period from 2016 to 2018, with a total budget of 13.94 bln KZT for the modernization of heat networks in Pavlodar and Ekibastuz. The EBRD loan will provide 4.65 bln KZT, another 4.65 bln KZT will come from the government subsidies under Nurly Zhol program, plus the Company will allocate 4.64 bln KZT of its own funds in the form of capital allowances. The goal of the project is to improve reliability of heat supply and energy efficiency, reduce losses and enhance environmental performance (through reduction of CO₂ emissions by burning less coal thanks to reduced heat transmission losses).

The Company uses pre-insulated pipes which have better insulation characteristics, improved reliability and a useful life of 25 years. As a result, the program with help to reduce fuel consumption and CO₂ emissions by 10,069 tons and 14,837.8 tons per year respectively.

In 2017, a total of **1.45 km** of heat networks in Pavlodar and **10.26 km** in Ekibastuz were built or renovated using pre-insulated pipes.

In 2017, works in Pavlodar focused on replacing mineral wool insulation with PU foam insulation on the main heat pipelines no. 22 (1.963 km) and no. 37A (2.050 km). A total of 4.013 km of heat pipelines in Pavlodar and 0.21 km in Ekibastuz were fitted with PU foam insulation. In Ekibastuz, the focus was on the construction of the main heat pipeline no. 9, renovation of heat pipeline no. 7, as well as the removal of heat pipelines from private territories and the commencement of the construction of modular heat substations.

Projects completed in Ekibastuz:

- Construction of heat pipeline no. IX along Pshembayev Street: from TC-25E to TC-4A, with a total length of 1,842 m;
- Reconstruction of TM-VII heat pipeline from the Central Heat Distribution Facility (CHDF) to TC-3E, together with the installation of control valves and meters (D=820 mm), with a total length of 2,355 m;

- Removal of heat networks from private territories - stage I, with a total length of 5,913 m;

- Construction of 4 modular heat substations.

In accordance with the Investment program for reconstruction and development of heat networks, within the framework of capital allowances, the following projects were completed in Pavlodar:

- Renovation of heat pipeline no. 22 of from NO-56 to NP-9 and heat pipeline no. 37 from NP-15 (NP-2) to NP-17 with replacement of thermal insulation with a total pipe length of 2,227 m;

- Renovation of heat pipeline from TK-868 to the swimming pool in Usolsky 1A residential area (construction: section from UT-3 to the swimming pool) with a total pipeline length of 1,246 m.

Implementation of design documentation and passing of the state review were successful for the facilities included in the investment program thanks to capital allowances in the following facilities:

- Development of design documentation for the renovation of heat network from NO-21 to NO-21/8;

- Development of design documentation for the renovation of heat pipeline TM-37 from NP-15 to NP-18;

- Renovation of the heat pipeline from TK-868 to the swimming pool in Usolsky 1A residential area;

- Development of design documentation for renovation of pumping station no. 3, with the addition of a CHDF for Lesozavod residential area;

- Development of design documentation for the construction of heat pipeline no. 42 from UT-13 (TM-43) to TK-864 (TM-24).

Ekibastuz:

- Stage II of the reconstruction of the heat network along Chalbyshev Street from TK-8K to a residential home at Bezymyanny Street with a total length of 155 m, using pre-insulated steel pipes with PU foam insulation and fittings;

- Reconstruction of the roof of pumping station ONS-3 with a total area of 385 m²;

- Restoration of thermal insulation on heat pipeline TM-I from the CHDF to NO-5V – stage I (mineral wool

replaced with PU foam shell) with a total length of 206 m and pipe diameter of 820 mm.

Implementation of design documentation and passing of the state review were successful for the facilities included in the investment program thanks to capital allowances in the following facilities:

- Reconstruction of TM-VII heat pipeline from the CHDF to TC-3E, together with the installation of control valves and meters;

- Removal of heat networks from private territories of low-rise buildings in Ekibastuz – stage II;

- Construction of 4 modular heat substations in Ekibastuz – stage II.

Implementation of these projects using new technology has improved the quality of heat supply to consumers and reliability of heat network, increased the service life of pipelines, reduced heat losses and improved performance characteristics.

EQUIPMENT RENOVATION AND MODERNIZATION IN 2018

As a part of the investment program, 2018 will see a number of equipment modernization projects to increase generation, lower transmission losses for electricity and heat, as well as improve environmental performance.

In 2018, the Company plans to produce the same amount of electricity as in 2017, i.e. up to 3,984 mln kWh, and expects a 3.3% YoY increase in heat supply from heat collectors based on heat consumption plans of the consumers.

The Company plans to spend a total of 6,771.481 mln KZT on investment projects.

PAVLODARENERGO JSC's CHP-3 plans to complete stage III of renovation of turbo generator no. 6, which will increase the turbine's installed electrical capacity from **110 MW** to **125 MW**. The Company will begin construction of stage III and enhancement of stage I of its ash dump site. There are also plans to start the construction of a chimney no. 2 at CHP-3.

Pavlodar CHP-2 plans to renovate its boiler no. 5.

The ash dump construction at Ekibastuz CHP will also continue, with another important project of 2018 being the reconstruction of boiler no. 7.

In 2018, Pavlodar EDC JSC plans to carry out construction, reconstruction and technical re-equipment of 0.4-10 kV power networks with a total length of 42.665 km, to build 35-110 kV overhead power lines with a combined length of 23.3 km, to renovate four 110 kV substations, to start the construction of 110/10 kV substation "Severnaya gorodskaya", to complete reconstruction of 110 kV substation in Bayanaul district and 220 kV substation in Aksu district, to develop documentation for the renovation of "Tsentralnaya gorodskaya" substation and the construction of 35 kV power line with a total length of 22 km.

Within the framework of the tripartite agreement signed between the European Bank for Reconstruction and Development, the Ministry of National Economy of the Republic of Kazakhstan and Pavlodar Heat Networks LLP, the following activities are planned for 2018:

Pavlodar:

- Renovation of heat pipeline no. 37 with replacement of thermal insulation from NO-17 to NP-19 and heat pipeline no. 39 from NP-24 to NP-26 with a total pipe length of 2,835 m;

Ekibastuz:

- Removal of heat networks from private territories of low-rise buildings (stage II, total length of 15.98 km plus another 11.55 km remaining back from 2017);
- Construction of 5 modular heat substations (stage II).

In accordance with the Investment program for reconstruction and development of heat networks, the following projects are planned for 2018 within the framework of capital allowances.

Pavlodar:

- Replacement of thermal insulation on heat pipeline TM-37A from NP-17 to NP-19 and on heat pipeline TM-39 from NP-24 to NP-26 with a total length of 1,547 m.

Implementation of design documentation and passing of the state review were successful for the facilities included in the investment program thanks to capital allowances in the following facilities in Pavlodar:

- Renovation of the heat pipeline from TK-868 to the swimming pool in Usolsky 1A residential area (section from TK-868 to UT-3) - stage II;
- Obtaining government approval for the project to renovate pumping station no. 3, where the Central Heat Distribution Center will be repurposed for supplying heat to Lesozavod residential area;

- Renovation of heat network from TK-221/10 to TK 221/8;
- Renovation of heat network from TK-137 to TK 137/2;
- Development of design documentation for the construction of heat network from NO-21 to NO-21/8 and extension of the offsite heat network from UP-8 located along Kamzin Street to Ladozhskaya Street, then along Ladozhskaya Street to Kutuzov Street, to be assigned to Dostyk residential area in Pavlodar;
- Obtaining government approval for the construction of heat pipeline TM-42 from UT-13 (TM-43) to TK-864 (TM-24);
- Purchase of special equipment for the restoration of asphalt road surface;

Ekibastuz:

- Restoration of thermal insulation on heat pipeline TM-I from the CHDF to NO-5V; stage I (mineral wool replaced with PU foam shell) with a total length of 469 m and pipe diameter of 820 mm.
- Reconstruction of thermal insulation on heat pipeline TM-III from the CHDF to TK-1L, total length of 865 m;
- Installation of 17 metering devices in residential areas of Ekibastuz.

Implementation of design documentation and passing of the state review were successful for the facilities included in the investment program thanks to capital allowances in the following facilities:

- Renovation of heat pipeline TM-XII from TK-4A to NO-41A;
- Renovation of heat pipeline TM-II from TK-19L to TK-24L;
- Renovation of heat pipeline TM-V from pavilion no. 2 to pavilion no. 3;
- Renovation of heat pipeline TM-VII from pavilion no. 3 to TK-4A;
- Removal of heat networks from private territories of low-rise buildings in Ekibastuz – stage II;
- Construction of 4 modular heat substations in Ekibastuz – stage II.

In 2018, a total of 0.95 km of pipelines in Pavlodar and 27.52 km in Ekibastuz is expected to be constructed or renovated using pre-insulated pipes.

PROCESS AUTOMATION

In year 2017, Pavlodar CHP-3 completed installation of an automated process control (APC) system on boiler no. 4, meaning that 5 out of the plant's 6 boilers are now connected to an APC system. The main goal of equipping boilers with the APC system is to achieve complete automation of combustion, thus providing prompt, reliable and continuous information to the management and CHP staff, improving efficacy and safety of boiler operation and boiler operation process control, and burning less coal.

Also, Pavlodar CHP-3 launched a project on the introduction of a data processing suite to facilitate process control. The goal of the pilot project is to improve economic efficiency through optimal composition and mode of operation of the plant and to automate time-consuming calculations. In December 2010, the plant started a trial run for the new system, which will eventually allow to upgrade software and equipment used by the CHP. In the future, the Company plans to expand the scope of application of the data processing suite by implementing at each one of its facilities.

Ellipse

PAVLODARENERGO JSC introduced an automated control system for managing production infrastructure based on Ellipse 8 (Eclipse enterprise resource planning system). Ellipse ERP system is an integrated solution for the maintenance and repair of fixed assets and infrastructure, allowing to make decisions about the impacts on the equipment based on system data, including:

- Logging all repair costs (materials, time, work) and comparing them against those planned;
- Control by engineering technicians of all equipment repair activities by means of clear planning;
- Prompt response upon the occurrence of deviations from the specified parameters and making rational and efficient decisions.

Automatic system for commercial accounting of electricity (ASCAE)

In 2017, the Company continued implementation of ASCAE devices for electricity, specifically, modernization and full automation of on-site metering devices to automatically collect and transfer online various energy transmission and consumption data. This system can automatically detect points of energy losses facilitating timely response. ASCAE devices allow to reduce electricity losses considerably.

In 2017, the Company installed and launched a test run of the ASCAE for households using wireless LPWAN technology ASCAE. For a trial run, Pavlodar EDC JSC installed 107 devices.

With ASCAE technology, you no longer need to collect and transfer data from each and every transformer substation. There is only one base station for the entire locality, and all meters equipped with a radio module with built-in battery wirelessly transfer readings to this base station once every 24 hours. From the base station, the data is uploaded to a server where it is stored. Customers can log in to their accounts online and view meter readings for a certain period. This project is scheduled to be launched in 2018.

Pavlodar EDC JSC began to implement ASCAHE devices for electricity back in 2013. As of the end of 2017, as many as 19,000 consumers had ASCAHE devices.

Automatic system for commercial accounting of heat energy (ASCAHE)

In 2017, the Company continued implementation of ASCAHE devices for heat aimed at modernization and automation metering equipment. New meters improve accuracy and authenticity of data and transactions between suppliers and customers on existing and future rate plans, as well as help to monitor actual heat consumption by households.

ASCAHE devices for heat improve the efficiency of data collection to monitor consumption of heat and reduce overdue payments by customers. Thanks to this system losses can be detected quickly, and appropriate measures can be taken to prevent such losses by households.

THESIS grid-connection monitoring system

In November 2017, the Company started a test run of an automated system to monitor connection to the electricity grid by new customers. The purpose of the system is to make applying for specifications to connect to the grid more transparent.

The great advantage of the system is the intermediate control where you can see at what stage and who of the participants in the process has the documents. The system will support enterprise operation by introducing accountability and control in such processes as issuing of specifications, approval of engineering documentation and preparation of documents for the consumer.

The project helped new customers connect to the electricity grid faster and made the whole process more transparent and streamlined.

PLANS FOR AUTOMATING PROCESSES IN 2018

ASCAE/ASCAHE DEVICES FOR ELECTRICITY AND HEAT

In 2018, the Company plans to merge its ASCAE/ASCAHE projects for electricity and heat in order to implement a common management approach and improve organizational and technical activities to achieve better project performance.

The experience gained from the practical operation of dozens different types of meters and ASCAE/ASCAHE devices will help to develop a uniform vision of the device's full life cycle, from installation to commissioning to maintenance and support under warranty.

To improve availability and reliability of the ASCAE/ASCAHE platform for households, measures are being taken to consolidate server capacity into a single data center in Pavlodar.

BILLING

In 2018, the Company expects to complete transition to a uniform billing system. This will not only help to automate and standardize recording of heat and electricity consumption data, but also to improve communication with consumers as billing will be based on the actual amount of electricity and heat consumed; plus customers will be able to log in to their account and check consumption data at any time.

CONNECTION TO UTILITIES (ELECTRICITY & HEAT)

Based on successful testing results, in June 2018 the Company plans to introduce the system for automatic processing of applications from new customers in Pavlodar EDC JSC. In order to ensure complete and transparent services, by the end of 2018 the Company expects to introduce features where customers will be able to log in to their accounts and check their application status.

Mobility

In 2018, the company plans to complete the development and implementation of Mobility, a smartphone app fully integrated with Ellipse ERP system. Pavlodar EDC JSC is expected to start using Mobility before the end of 2019.

PROJECTS IN THE SALE COMPANY

In order to improve the quality of service provided to customers, Pavlodarenergosbyt LLP continues to improve physical and remote customer service centers. Every day, from 8:00 to 22:00, without breaks, contact center agents provide advisory support to individuals in matters of energy supply. Since the beginning of the work unit in October 2015, by the end of 2017 a total of 1 million calls were handled.

In March of the reporting year, a Personal Account feature was introduced, where registered users can check the balance on the current date for all types of energy and services provided by Pavlodarenergosbyt LLP and organizations that have joined the Single Payment Center, enter meter readings for electricity and hot water, as well as print bills. For the convenience of users, in May 2017 Personal Account was integrated with banking systems, so customers can now pay bills online.

Given that performance of energy companies directly depends on the timeliness and completeness of payment for the used energy, the sales company conducts a number of activities aimed at improving the payment discipline.

In October 2017, Pavlodarenergosbyt LLP together with private enforcement agents, worked on 176 debt cases, where the property of debtors was seized, and their electricity was cut off. Also a two-bedroom apartment was sold off in an online auction.

Some of the issues related to the activities of Pavlodarenergosbyt LLP have to be resolved with the help of regional and city authorities. An Action Plan to Reduce the Arrears to Utilities was developed based on the results of a special meeting in the regional Governor's office.

In December, in order to reduce household debt, the company conducted a motivational ad campaign "New Year without Unpaid Bills" for customers of Pavlodarenergosbyt LLP. The Company agreed to forgo late payment fees, provided that customers paid off their entire debt in December.

More than 60,000 people responded: 30,906 in Pavlodar, 3,773 people in Aksu and 8,238 people in Ekibastuz. In districts of the region as many as 16,213 people fully paid off their debt for energy and services.

Plans for 2018

Further expansion of the Single Payment Center on the basis of Pavlodarenergosbyt LLP, where the participants include utilities, community administration bodies and other organizations providing services to consumers in Pavlodar region. In the near future, the Personal Account feature will be available in all cities of Pavlodar region, as well as to non-household customers, while the registration procedure will be made as simple as possible. In parallel with the development of existing services Pavlodarenergosbyt LLP will introduce and expand services such as SMS notifications and smartphone apps. In 2018, in order to monitor the quality of customer service, service centers will be equipped with special buttons which customers will use to rate the service. Furthermore, it is expected that 1C-based Billing software suite will be implemented before the end of 2018.

PROCUREMENT AND SUPPLY

Building effective procurement remains one of the important goals of the Company with a view to improving operational efficiency. The key priorities of PAVLODARENERGO JSC Group of companies in the field of procurement include ensuring transparency during tenders, attracting more vendors for better business efficiency and reduced costs.

In 2017, the procurement department started transformation processes to improve the efficiency and transparency. During the year, projects were developed to introduce process automation, improve procurement planning, develop category strategies, adopt KPIs, among other things. At the end of the reporting period, the following goals were achieved:



- Procurement planning system in the form of the Annual Procurement Plan was developed and implemented;
- A weekly reporting system based on a number of KPIs was developed and implemented;
- Updated organizational structure was approved;
- Approach to procurement centralization was revised;
- Procurement policies and procedures were revised.

Priorities in procurement in 2018:

- Enhance the transparency of the procurement process;
- Improve financial performance and introduce KPIs;
- Introduce an effective procurement planning system;
- Introduce procedures for assessment and pre-qualification of vendors;
- Automate procurement processes and introduce e-procurement.



FINANCIAL AND ECONOMIC HIGHLIGHTS

Consolidated financial statements of the Company for 2017 were prepared in accordance with the International Financial Reporting Standards. Principles of accounting policy are the same for all enterprises of the Company.

The Company's financial and business highlights demonstrate effectiveness and efficiency of its operational and financial activities, as well as movement in line with the Company's strategic development targets.

KEY FINANCIAL AND BUSINESS INDICATORS FOR 2015–2017, MLN KZT

ITEM	2015	2016	2017
Income from core activities	40,547	45,069	49,885
Prime cost, including expenses of the period	(31,736)	(34,786)	(37,952)
Profit from operating activities	8,811	10,283	11,933
Total EBITDA for the year*	12,961*	15,868	17,418*
Total EBITDA for the year, margin in %	32.0%	35.2%	34.9%
Income tax expenses	(61)	(1,909)	(2,121)
Net profit for the year	(2,097)	6,475	7,617
Assets	127,557	132,850	140,473
Equity	62,374	68,849	73,424
Capital expenditures on fixed assets	18,631	8,979	9,774

* Total EBITDA excludes exchange rate differences

INCOME FROM SALE OF PRODUCTS/ SERVICES

Based on the results of 2017 the Company sold electricity and heat, including purchased energy, for a total amount of 49,885 mln KZT, which is 10.7% more than in 2016. This change was due to the increase in supply of electricity generated at the Company's own power plants and higher rates electricity and heat.

The main factors which affected revenues in 2017 compared to the previous year are as follows:

- Sales of electricity compared with 2016 grew by 2,041 mln KZT, or 8.5%, due a 245 million kWh (6.9%) increase in electricity generation;

- Revenues from sales of heat including the sales margin increased by 285 mln KZT, or 3.7%, due to a 7% spike of production rates;

- Income from the transmission of electricity increased 1,586 mln KZT (18.2%) compared to 2016 due to a 4.9% increase of transmission and distribution rates, as well as a 75 million kWh (3.0%) increase in the amount of electricity transmitted; and also as a result of recalculation for 2015 worth 884 mln KZT (according to a court ruling, a number of invoices for electricity were re-issued);

- Income from transmission of heat increased by 904 mln KZT or 20% due to a 21.1% increase of transmission rates.

COST OF SOLD GOODS/SERVICES

Sales of electricity and heat in 2017 totaled 37,952 mln KZT. An increase of 3,166 mln KZT or 9.1% compared with 2016 was due to higher operating expenses under such cost items as "Fuel," "Fuel and Lubricants for Vehicles," "Production-Related Services," "Payroll Costs," etc.

"Fuel" is the most significant item in the Company's cost structure accounting for 25% of expenses. An increase of 245 mln kWh, or 6.4%, in the amount of electricity produced led to the increase of natural coal consumption by 113,000 tons, or 3%: the coal price including shipping costs increased by 15%, adding 1,543 mln KZT or 19% to the Fuel costs. Because bulldozer fleet was no longer outsourced, spending on Fuel and Lubricants for Vehicles grew by 141 mln KZT. In 2017, the Company spend 222 mln KZT for the reclamation of the ash dump site under the Production-Related Services cost item; in addition, the cost of production audit also increased to ensure compliance with the schedule and government regulations. Payroll Costs increased 665 mln KZT or 9.2%.

TOTAL EBITDA TRENDS*

Total EBITDA for 2017 was 17,418 mln KZT, showing a year-on-year increase of 1,550 mln KZT, or 9.8%. The main factors improving the operational efficiency include higher rates for the transmission and distribution of electricity (4.9%) and increased sales of the Company's own electricity (269 mln kWh, or 9.1%), as well as higher rates for regulated monopoly activities for the production, transmission, distribution and sale of heat, as well as due to the recalculation for 2015 (re-issuing a number of invoices for electricity transmission, according to a court ruling).

Total EBITDA for the year, mln KZT
* Total EBITDA excludes exchange rate difference.



OPERATING EBITDA BY SEGMENT

The operating EBITDA indicator was chosen as the main for evaluation of production activity of the Company. This productivity indicator does not account for other income, income from financing, non-monetary part of exchange rate difference-related liabilities, depreciation and non-recurring or erratic cost items that impact the core production activity of the Company.

The Company's operating EBITDA was 16,972 mln KZT in 2017, growing 1,891 mln KZT or 12.5% year on year. For operating EBITDA, the leading (paramount) margin segment is the production of electricity and heat (12,087 mln KZT), showing an 850 mln KZT or 6.6% decline compared with 2016. Operating EBITDA for "Transmission and Distribution of Electricity" surged 2,226 mln KZT (78.8%) due to increased revenues thanks to a 4.9% climb in the rate, as well as due to the recalculation for 2015 (re-issuing a number of invoices for electricity transmission, according to a court ruling).

For "Transmission and Distribution of Heat" operating EBITDA shot up 272.6%, or 840 mln KZT thanks to a 21.1% increase in transmission rates. Losses in operating EBITDA for "Sales of Electricity and Heat" grew 327 mln KZT or 88.7%.

FINANCIAL AND BUSINESS INDICATORS BY SEGMENT FOR 2017, MLN KZT

Item	Electricity and heat produced	Transmission and distribution of electricity	Transmission and distribution of heat	Electricity and heat sold	Other	Total
Sales revenue	31,819	10,313	5,440	2,336	0,163	49,885
Prime cost	-21,897	-5,478	-4,542	-2,110	-0,163	-33,636
Gross profit	9,922	4,835	898	226	0,000	16,249
Costs during period	-1,472	-538	1,315	-947	0,000	-4,316
Operating profit	8,450	4,252	-417	-720	0,000	11,933
Net financial costs	-1,974	-156	-322	-56	0,000	-2,497
Loss from exchange rate difference	151	17	2	0	0,000	170
Other revenues	-325	92	271	93	0,000	132
Corporate income tax costs	-1,391	-627	-103	1	0,000	-2,121
Profit/loss for the year	4,912	3,578	-569	-682	0,000	7,617
EBITDA by operational segment	12,087	5,050	152	-696	0,000	16,972

CHANGES IN NET INCOME/LOSS

Profit from operating activity in 2017 was 11,933 mln KZT (with a 23.9% margin to the income from sales), profit increased by 1,649 mln KZT due to a 6.4% increase in electricity production and higher rates.

acquisition of fixed assets; plus a total of 9,774 mln KZT worth of new and upgraded facilities were commissioned from the current period and from the previous years.

Other financial assets include deposits in the amount of 1,540 mln KZT accumulated by the Company to service loans and to finance investment program.

ASSETS AND LIABILITIES

Total assets of the Company as of December 31, 2017 were 140,473 mln KZT, or 6% more compared with 2016.

The Company's stated equity capital is 200 million ordinary shares. As of December 31, 2017, the value of completely paid ordinary shares was 16,664 mln KZT.

As of December 31, 2017, the value of fixed assets was 120,167 mln KZT, or 86% of the value of all assets. As a part of the large-scale investment program, 8,463 mln KZT was spent in 2017 on unfinished construction and

Long-term loans mostly include loans from the EBRD, which are meant for financing of the long-term investment program for renovation and modernization of the Company's assets.

In September 2017, Pavlodar Electric Distribution Company JSC and a government body signed an asset management contract for a substation and a power line with the right to purchase, subject to payments totaling 1.812 mln KZT during a 7-year period in accordance with the approved schedule.

As of the end of the reporting year, total financial liabilities reached 33,463 mln KZT, while the Corporation maintains financial stability.

CASH FLOWS

In 2017, there was an upward trend in cash flows from operating activity due to increased sales and higher rates for heat and electricity. The net inflow from operating activity totaled 14,398 mln KZT. Change in the working capital was due to increased inventory and receivables. Increase in the accounts payable mainly related to large supplies for actions of the investment program lead to increase of the working capital.

The most significant cash outflows from investment activities in 2017 were caused by implementation of the investment program for the current period, as well as payment of debts for facilities completed in 2016.

Funds on were placed on deposit accounts to repay bonds and loans from the EBRD.

For financial activities, significant cash outflows were due to repayment of the bond issue for 8.4 bln KZT and bank loans totaling 6.9 bln KZT.

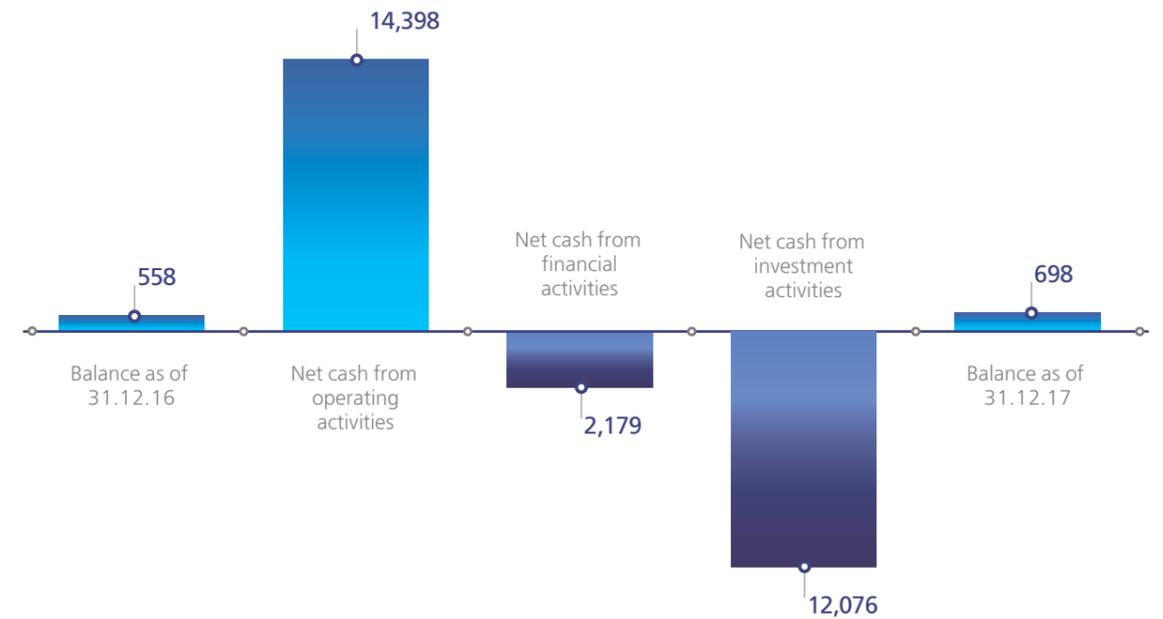
Assets, mln KZT

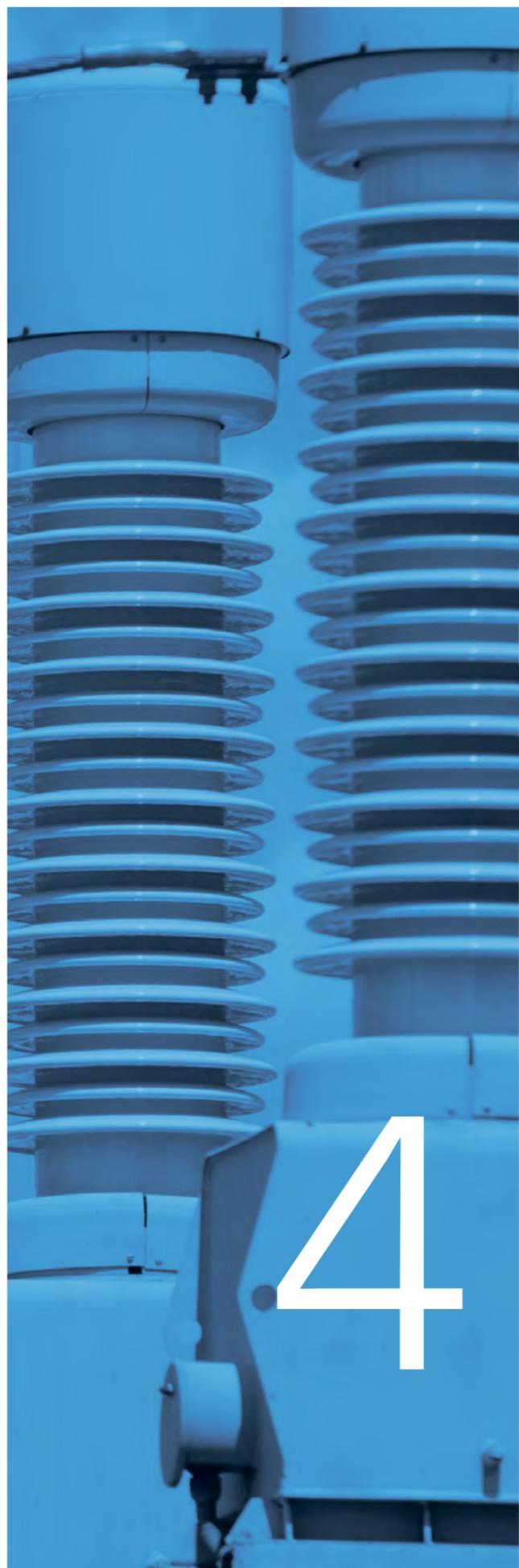


Liabilities, mln KZT



Cash flows, mln KZT



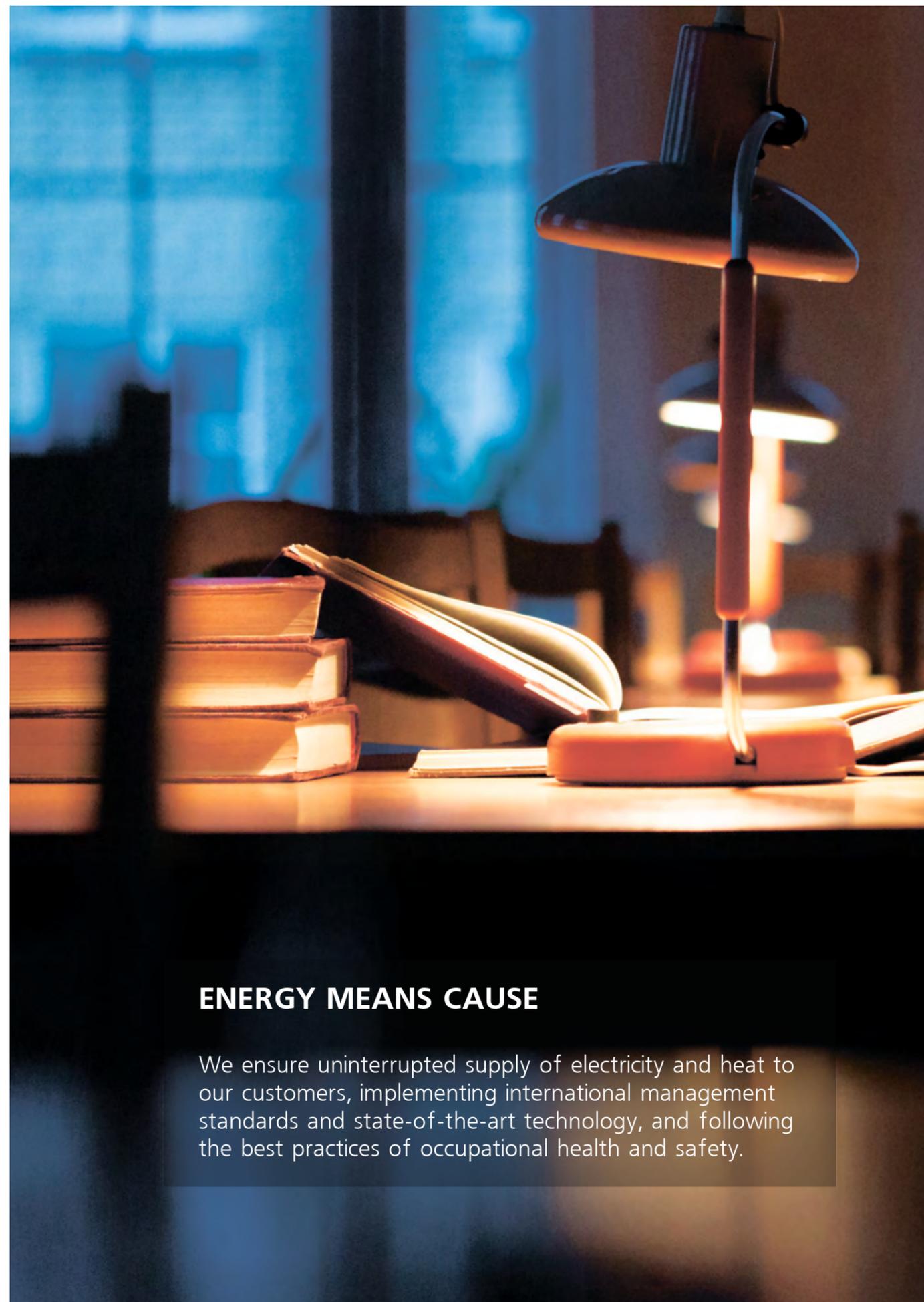


ENERGY

4



CORPORATE GOVERNANCE



ENERGY MEANS CAUSE

We ensure uninterrupted supply of electricity and heat to our customers, implementing international management standards and state-of-the-art technology, and following the best practices of occupational health and safety.

CORPORATE GOVERNANCE

PAVLODARENERGO JSC has a corporate governance framework meeting Kazakhstani and international standards. Advanced corporate governance system is a requisite for attracting investments, ensuring the Company's stronger competitive capacity and increasing shareholder value. PAVLODARENERGO JSC's corporate governance system regulates interaction between the management bodies, the Company's internal control body, its shareholders and other stakeholders, ensuring a balance between the interests of all the parties.

The Board of directors includes independent directors to ensure effectiveness and transparency of corporate governance in the Company. The Company complies with all applicable codes and standards and strives to follow the principles of business ethics to ensure sustainable development.

GENERAL MEETING OF SHAREHOLDERS

The General Meeting of Shareholders is the supreme management body of the Company. The shareholders' primary way to exercise their rights, as reflected in the Charter of the Company, is to participate in an annual general meeting of shareholders, as well as in extraordinary meetings called by the Board of directors or the executive body.

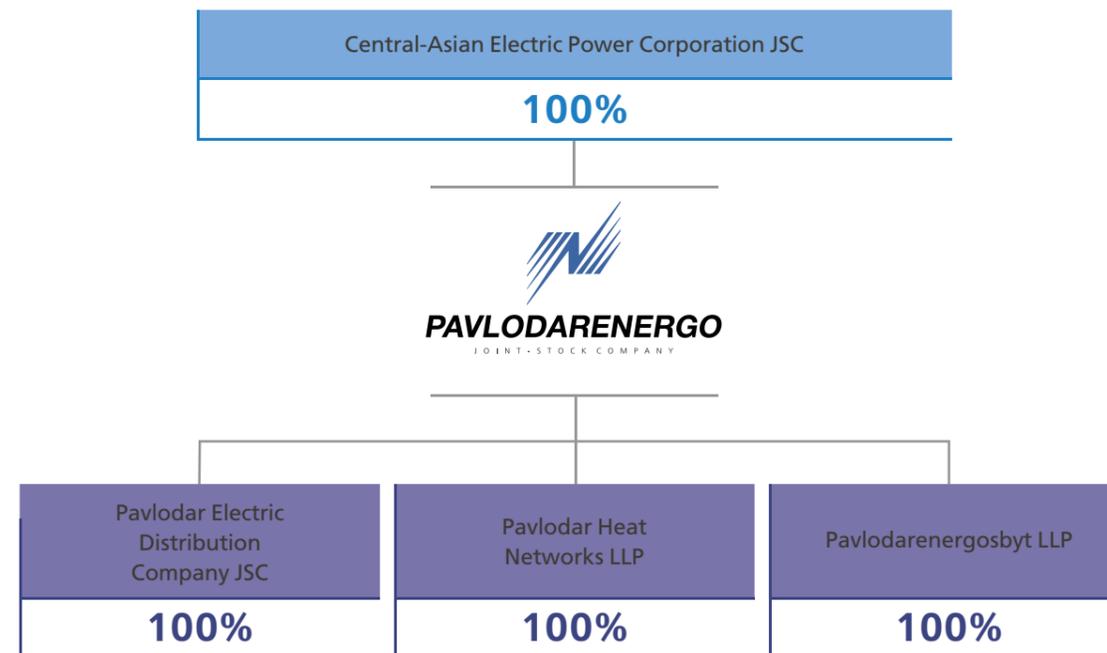
The shareholders of the Company may make suggestions to the agenda of the annual General meeting, nominate candidates to the Board of directors and Committees, and convene meetings of the Board of directors.

RESULTS OF THE GENERAL MEETING OF SHAREHOLDERS

In 2017, there was one annual and three extraordinary General Meetings of Shareholders which addressed issues such as the approval of financial statements of PAVLODARENERGO JSC, determining net income allocation, responding to shareholder inquiries regarding actions of PAVLODARENERGO JSC, selecting an audit firm to audit the financial statements of PAVLODARENERGO JSC and its subsidiaries, election of new members of the Board of directors of PAVLODARENERGO JSC, determining remuneration terms for newly elected members of the Board of directors of PAVLODARENERGO JSC.



ORGANIZATIONAL STRUCTURE



Based on the financial statements, the Company's equity as of December 31, 2017 was 16,664 mln KZT. The sole shareholder owning 100% of the shares is Central-Asian Electric Power Corporation Joint-Stock Company

SHAREHOLDER	COMMON STOCK		PREFERRED STOCK	TOTAL SHARES	
	QUANTITY	PERCENTAGE		NUMBER	PERCENTAGE
Central-Asian Electric Power Corporation JSC	166,639,957	100%	-	166,639,957	100%

DIVIDENDS

The Company policy regarding distribution, announcement, size, form and timing of dividend payments is set out in the Charter.

The basic principles of the Company's Dividend policy include:

- Balance between the interests of the Company and its shareholders in determining dividend payouts.
- Increasing investment attractiveness, financial sustainability, capitalization and liquidity of the Company.
- Ensuring market returns on invested capital.
- Respect for and strict observance of the rights of shareholders and promoting their prosperity.

The Company intends to allocate a certain part of its net income for dividend payouts in the amount that would allow the Corporation to keep enough funds for its further development. The decision on dividend payout is made by the annual General Meeting of Shareholders based on the recommendation of the Board of directors. In case of any unforeseen negative circumstances affecting the Company, the Board of directors has to advise the General meeting of shareholders against payment (declaration) of dividends.

In 2017, during the annual General Meeting of Shareholders, it was decided to pay dividends to the sole shareholder of PAVLODARENERGO JSC for the fiscal year 2016 in the amount of 3,237,459,000 (three billion two-hundred thirty-seven million four-hundred and fifty-nine thousand) KZT.

BOARD OF DIRECTORS

The Board of directors determines strategic objectives, maintains the necessary control mechanisms, including ongoing monitoring and evaluation of business performance.

To enhance the transparency of the Company's Board of directors, it includes four independent directors who are not affiliated with the Company. The Board of directors is headed by the Chairman, who convenes meetings of the Board of directors and presents their agenda based on the recommendations received from members of the Board of directors and Board Committees.

To achieve these objectives, the Board of directors is guided by the following principles:

- Decision making based on a collegial and thorough discussion of issues using reliable and complete

information on the activities of the Company in accordance with the highest business standards;

- No restrictions on the legitimate interests and rights of shareholders to participate in the management of the Company, receive dividend payouts, reports and information about the Company;
- Ensuring a balance between the interests of shareholders of the Company and maximum objectivity of decisions made by the Board of directors serving shareholder interests;
- Providing the Company's shareholders with reliable and timely information.

Remuneration for the Board of directors and the executive body is determined by the decision of the General Meeting of Shareholders of CAEPCO JSC. The total amount of remuneration paid to the Board of directors and Executive body in 2017 was 222,315 thous. KZT.

MEMBERS OF THE BOARD OF DIRECTORS

NAME, LEGAL FORM OF BUSINESS ORGANIZATION	MEMBERS OF THE BOARD OF DIRECTORS	TITLE	DATE OF ELECTION/END OF TENURE
PAVLODARENERGO JSC	Turganov Dyusenbai Nurbayevich	Chairman of the Board of directors	15.01.2018 – 14.01.2020
	Karyagin Andrey Valerevich	Member of the Board of directors	15.01.2018 – 14.01.2020
	Perfilov Oleg Vladimirovich	Member of the Board of directors	15.01.2018 – 14.01.2020
	Nigai Alexander Danilovich	Member of the Board of directors	15.01.2018 – 14.01.2020
	Andreyev Gennady Ivanovich	Independent Director	15.01.2018 – 14.01.2020
	Tabanov Eldar Rashitovich	Independent Director	05.03.18. – 13.06.2020
Pavlodar Electrical Distribution Company JSC	Zuleyev Mukan Makhambetovich	Chairman of the Board of directors	14.06.2017-13.06.2020
	Perfilov Oleg Vladimirovich	Member of the Board of directors	14.06.2017-13.06.2020
	Tabanov Eldar Rashitovich	Independent Director	15.01.2018 – 14.01.2020

PERFORMANCE OVERVIEW OF THE BOARD OF DIRECTORS

In 2017, the Board of directors held 10 meetings. The Board of directors focused on the following key issues: adoption of the budget of PAVLODARENERGO JSC for the construction of the dormitory in Pavlodar within the program of corporate social responsibility, review of the reports submitted by the Office of Risk Management and the Office of Internal Audit of PAVLODARENERGO JSC for 2016 and Q1 2017, adoption

of consolidated budget of PAVLODARENERGO JSC for 2017, obtaining of a loan from Sberbank JSC, approval of the Policy for the provision of information to shareholders and investors on decisions made by the Board of directors of PAVLODARENERGO JSC, about paying off the first issue of coupon bonds of PAVLODARENERGO JSC, approval of the financing terms of Al Hilal Islamic Bank for PAVLODARENERGO JSC together with CAEPCO JSC, SEVKAZENERGO JSC, Akmolra EDC JSC and Astanaenergobytt LLP, adoption of a number of corporate documents, etc.

ACTIVITIES OF THE COMMITTEES OF THE BOARD OF DIRECTORS

NAME	TASKS	MEMBERS	RESULTS
Strategic Committee 3 members	<ul style="list-style-type: none"> – Raising the standards of corporate governance – Monitoring of projects – Overseeing implementation of the Company's development strategy – Assisting the Board of directors in improving the Company's planning and operational development mechanisms. 	Tabanov E. R. Chairman Turganov D. N. Perfilov O. V.	The Committee had no meetings in 2017.
Audit and Risk Management Committee 5 members One meeting in 2017	<ul style="list-style-type: none"> – Assisting the Board of directors in the effective performance of regulatory and oversight functions – Improvement and strengthening of the internal audit and risk management mechanisms – Advising the Board of directors on matters requiring action on its part. 	Tabanov E. R. Chairman Perfilov O. V. Karyagin A. V. Rakhimberlinova Z. Z. Stanbayeva A. O.	In 2017, the Committee assisted the Board of directors in performing its regulatory and supervisory functions, improvement and strengthening of the internal audit and risk management mechanisms. The Committee addressed issues pertaining to the responsibilities of the offices for internal audit and risk management, including review of the relevant reports on the offices' performance, approval of budgets, work plans, introduction of changes and additions to corporate policies and procedures, etc.
Committee for Human Resources, Remuneration and Social Affairs 4 members One meeting in 2017	<ul style="list-style-type: none"> – Development and implementation of human resources policy for the Company and its subsidiaries – Establishing an effective corporate governance system and enforcing its principles. 	Andreyev G. I. Chairman Perfilov O. V. Nigai A. D. Konstantinova N. V.	In 2017, the Committee assisted the Board of directors in building an effective system of corporate governance. The Committee addressed issues related to the Human Resources department of PAVLODARENERGO JSC, election of the Chair of the Board of directors of PAVLODARENERGO JSC and members of Committees under the Board of directors.



TURGANOV DYUSENBAI NURBAYEVICH (born 1959)
CHAIRMAN OF THE BOARD OF DIRECTORS.

First Vice President of CAEPCO JSC.

15.01.2018 – Chairman of the Board of directors of PAVLODARENERGO JSC.
15.01.2018 – Chairman of the Board of directors of SEVKAZENERGO JSC.
15.01.2018 – Chairman of the Board of directors of Akmola EDC JSC.



KARYAGIN ANDREY VALEREVICH (born 1967)
MEMBER OF THE BOARD OF DIRECTORS.

15.01.2018 – member of the Board of directors of PAVLODARENERGO JSC.
15.01.2018 – member of the Board of directors of Akmola EDC JSC.
06.12.2017 – Vice President for Economics and Finance of CAEPCO JSC.
25.12.2017 – Chairman of the Board of directors of Astana Invest Investment House.



PERFILOV OLEG VLADIMIROVICH (born 1968)
MEMBER OF THE BOARD OF DIRECTORS.

General Director of PAVLODARENERGO JSC.

15.12.2016 – member of the Board of directors of Pavlodar EDC JSC.
05.09.2016 – member of the Board of directors of PAVLODARENERGO JSC.
10.09.2014 – General Director of PAVLODARENERGO JSC.



ANDREYEV GENNADY IVANOVICH (born 1943)
MEMBER OF THE BOARD OF DIRECTORS, INDEPENDENT DIRECTOR.

Is not affiliated with PAVLODARENERGO JSC or its subsidiaries and has not been the same for the past three years.

05.01.2018 - member of the Board of directors, Independent Director of Akmola EDC JSC.
13.11.2017 - member of the Board of directors, Independent Director of CAEPCO JSC.
02.07.2015 - Honorary President of KazNIPIEnergoprom Institute JSC.



NIGAI ALEXANDER DANILOVICH (born 1984)
MEMBER OF THE BOARD OF DIRECTORS.

15.01.2018 – member of the Board of directors of PAVLODARENERGO JSC.
15.01.2018 – member of the Board of directors of Akmola EDC JSC.
03.05.2012 – Strategic Development Director of ComTradeProduct LLP.



TABANOV ELДАР RASHITOVICH (born 1968)
MEMBER OF THE BOARD OF DIRECTORS, INDEPENDENT DIRECTOR.

Is not affiliated with PAVLODARENERGO JSC or its subsidiaries and has not been the same for the past three years.

05.01.2018 - member of the Board of directors, Independent Director of Akmola EDC JSC.
13.11.2017 - member of the Board of directors, Independent Director of CAEPCO JSC.
29.09.2017 - Director of City Box LLP.

EXECUTIVE BODY

The General Director is the sole executive body of the Company responsible for managing the executive body of PAVLODARENERGO JSC. The General Director is governed by the Statute of the General Director of PAVLODARENERGO JSC. The General Director manages day-to-day operations of the Company and implements the strategy determined by the Board of directors and the shareholders. The General Director operates based on such key principles as honesty, integrity, diligence, reasonableness and serving the interests of the shareholders to the maximum extent possible.



General Director of PAVLODARENERGO JSC
Oleg Vladimirovich Perfilov

BRIEF BIOGRAPHY

Oleg Perfilov was born in July 15, 1968 in Pavlodar region. In 1992, he graduated from the Pavlodar Industrial Institute with a degree in Automatic Control of Electric Power Systems.

He started his career in the energy sector in 1992. During his career, he held various positions at Pavlodar's energy enterprises, starting as an ordinary workman and eventually becoming a manager. From 2002 to 2007, he was the head of CHP-2 and CHP-3 of PAVLODARENERGO JSC.

On November 11, 2007, he was appointed Deputy General Director for Production at AccessEnergO LLP, which changed its name to North-Kazakhstan Energocenter LLP (Petrovsk) on February 29, 2008. In 2009, he was Deputy General Director for Production at SevKazEnergO Petrovsk LLP, which was later restructured into SEVKAZENERGO JSC. From 2013 to June 2013, he was Deputy Chairman of the Executive Board for Production of SEVKAZENERGO JSC.

In January 2013, he was appointed acting Chairman of the Executive Board of PAVLODARENERGO JSC. Currently, he is General Director of PAVLODARENERGO JSC.

Mr. Perfilov was awarded a certificate of merit from the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan (2005). In 2011, for his contribution to the development of the electrical power industry of the CIS countries, Mr. Perfilov was awarded the title Distinguished Energy Sector Professional of the CIS.

Executive bodies of the Company's subsidiaries include: Pavlodar Electric Distribution Company JSC, Pavlodar Heat Networks LLP and Pavlodarenergosbyt LLP are separate entities and each has its own general director.

No	NAME, LEGAL FORM OF BUSINESS ORGANIZATION	SOLE EXECUTIVE BODY	TITLE	DATE OF ELECTION/ END OF TENURE
1.	PAVLODARENERGO JSC	Perfilov Oleg Vladimirovich	General Director	10.09.2014 – 06.09.2018
2.	Pavlodar Electric Distribution Company JSC	Bodrukhin Fyodor Frolovich	General Director	07.10.2011 – 26.04.2021
3.	Pavlodar Heat Networks LLP	Imanayev Marat Shamilyevich	General Director	01.06.2015 – 01.06.2020
4.	Pavlodarenergosbyt LLP	Arginov Talgat Gabdullinovich	General Director	01.11.2013 – 01.11.2020

Remuneration policy

The amount of remuneration of the executive body is determined by the Board of directors of PAVLODARENERGO JSC.

The General Director's remuneration structure meets the following requirements:

- Remuneration must consist of fixed and variable parts;
- The variable part of remuneration depends on the General Director's key performance indicators, his or her qualifications and personal contribution to the Company's results for a certain period, promoting motivation for high performance;
- Social benefits, guarantees and compensation payments to the General Director shall be made in accordance with laws and regulations, the Company's internal procedures and the employment contract.

INTERNAL CONTROL AND AUDIT

To improve business processes and enhance the effectiveness of its decisions, the Company has established internal control mechanisms. The Corporation's Office for Internal Audit (OIA) reports directly to the Board of directors of the Company and is subject to oversight by the Audit and Risk Management Committee which monitors decisions and processes to ensure the reliability of financial reporting and to coordinate internal controls and risk management procedures.

In 2017, the OIA operated in accordance with the annual plan approved by the Board of directors: it conducted evaluation of the effectiveness of the internal control system in a number of business processes: "Procurement, contracts and payables," "Connection of consumers to electrical/heat networks," "Revenue accounting and receivables." In addition, the OIA oversaw the issuance of technical specifications, monitored implementation of its recommendations, conducted random checks to inspect fixed assets and inventory. The OIA submitted annual and quarterly reports to the Board of directors and the Audit Committee.

The Office operates in accordance with the International Standards on Auditing (ISA) developed by the Institute of Internal Auditors Inc., as well as in accordance with the current laws of the Republic of Kazakhstan and the Code of ethics of internal auditors of PAVLODARENERGO JSC.

Internal auditors adhere to such principles as integrity, objectivity, confidentiality and professionalism.

The OIA acts in accordance with the requirements of the Internal Audit Department of the parent organization and complies with the audit methodology and practice.

Since 2017, the Company has had a functional system of internal controls which provides reasonable assurance of effectiveness at all control levels, including financial and operational control, compliance with laws and regulations.

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

Corporate governance of PAVLODARENERGO JSC regulates interaction between the authorities, the Company's internal control bodies, shareholders and other stakeholders. It is aimed at ensuring a balance between the interests of all the above mentioned parties.

Corporate governance is regulated by the internal documents of the Company published on its corporate website. A generic description of the corporate governance principles is provided in the Corporate Governance Code of PAVLODARENERGO JSC adopted in 2010 by the Company's Board of directors.

The Code complies with the Joint-Stock Companies Act of the Republic of Kazakhstan: 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 Kazakhstan's joint stock companies.

Adherence to the principles of the Corporate governance code is aimed at shaping and implementing into the Company's day-to-day operations the principles and traditions of corporate behavior that are consistent with international standards and contribute to creating a positive image of the Company in the eyes of its shareholders, customers and employees to achieve the fullest realization of the rights of shareholders and improve their awareness about the Company's activity, as well as to control and reduce the risks, maintain sustainable improvement of the Company's financial performance and successful pursuit of its statutory goals.



KEY PRINCIPLES OF THE CORPORATE GOVERNANCE CODE

KEY PRINCIPLES OF THE CORPORATE GOVERNANCE CODE	ADHERENCE TO THE PRINCIPLES	COMMENTS
<p>Justice</p> <p>Equal treatment of all shareholders, regardless of the percentage of ownership and whereabouts, provision of opportunities for the effective protection of their rights.</p>	<p>RESPECTED</p> 	<p>Corporate governance in PAVLODARENERGO JSC is based on the principle of protection of and respect for the rights and legitimate interests of the Company's shareholders, including promoting the growth of assets and maintaining financial stability and profitability of the Company. Shareholders' rights are enshrined in the Charter and the Statute of the General Meeting of Shareholders of PAVLODARENERGO JSC and comply with the Joint-Stock Companies Act of the Republic of Kazakhstan. Statute of the General Meeting of Shareholders specifies the procedure of access to the information about the Company's activities by shareholders, including information affecting their interests.</p>
<p>Accountability</p> <p>The Board of directors of the Company reports to its shareholders, executive bodies report to the Board of directors, and employees report to the management (General director of the Company). This principle ensures accountability and determines the lines of authority in the management of the Company, as well as full accountability of the Company to its shareholders, which is achieved through the provision to the shareholders, in a timely manner, of accurate and complete information about the current financial situation of the Company, its economic performance, management structure, so that shareholders and investors could take reasoned and viable decisions.</p>	<p>RESPECTED</p> 	<p>This principle of the Corporate governance code is followed by maintaining the organizational structure of the Company in accordance with the Charter and the Joint-Stock Companies Act of the Republic of Kazakhstan. In addition, 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 and ensure full accountability of the Company to the shareholders.</p>
<p>Responsibility</p> <p>Responsibility of the Company to its shareholders, employees, customers and partners, close cooperation with them in order to grow the assets of the Company, increasing its stability and reliability. This principle determines the ethical standards for the Company's shareholders and employees, as well as outlines the liability of the Company officers for their illegal, wrongful actions (willful or ignorant) or inaction, as provided by the current law.</p>	<p>RESPECTED</p> 	<p>In 2010, the Company adopted a Business Ethics Code which determines the basic principles of the Company's relationship with its shareholders and investors, employees and officers of the Company, and customers of the PAVLODARENERGO JSC group. To implement its ethical values, the Company has developed and adheres to the ethical principles that cover nine major areas:</p> <ul style="list-style-type: none"> • relations with shareholders and investors; • employees and officers of the Company; • relationships with customers (consumers); • relations with business partners; • relations with government authorities; • conflict of interest; • confidential information; • safety, health and the environment; • efficiency, control and reporting.

KEY PRINCIPLES OF THE CORPORATE GOVERNANCE CODE	ADHERENCE TO THE PRINCIPLES	COMMENTS
		<p>PAVLODARENERGO JSC has also developed and adopted an action plan for stakeholder engagement, based on which the Company prepares and presents annual report on action plan implementation, which covers the following principles:</p> <ul style="list-style-type: none"> • responsibility; • continuity of relations; • feedback from stakeholders; • accountability; • openness and transparency.
<p>Transparency</p> <p>Timely disclosure of accurate information about all material facts relating to the Company's activities, including its financial situation, performance, ownership and management structure, in the amounts stipulated by the legislation and internal policies, as well as ensuring the free access of all interested parties to such information by publishing it so as to make it easily accessible to the public, as provided by the law and the Company's internal documents.</p>	<p>RESPECTED</p> 	<p>The transparency principle stipulated by the Corporate governance code is developed in the Information Policy of PAVLODARENERGO JSC, main tasks of which are as follows:</p> <ul style="list-style-type: none"> • Timely provision of information on all material matters relating to the Company in order to respect legitimate rights of the shareholders, investors and other stakeholders, providing them with the information required to make informed decisions or any other action that could affect the financial and business activities of the Company, as well as other information conducive to the fullest understanding of the Company's activities. • Ensuring availability of public information about the Company to all stakeholders; • Promoting openness and trust between the Company and its shareholders, potential investors, market participants, government agencies and other stakeholders; • improving corporate governance of the Company; • Creating a favorable image of the Company.
<p>Environmental protection and social responsibility</p> <p>The Company treats the environment responsibly and rationally and operates in a socially responsible manner.</p>	<p>RESPECTED</p> 	<p>PAVLODARENERGO JSC has developed and adopted an action plan on environmental and social initiatives, which governs the Company's policy in the field of environmental protection and social responsibility.</p>

KEY PRINCIPLES OF THE CORPORATE GOVERNANCE CODE	ADHERENCE TO THE PRINCIPLES	COMMENTS
<p>Effectiveness</p> <p>The Company's General Director and Board of directors have to ensure that the Company is managed in a reasonable and responsible manner, promoting a steady growth of its financial performance and shareholder wealth, as well as effective human resources policy, employee training, motivation, social security, and protection of the interests of the Company's employees.</p>	<p>RESPECTED</p> 	<p>The principle of effectiveness specified in the Corporate governance code is regulated by the Statute of the General director and the Statute of the Board of directors of the Company. The General Director is the sole executive body of the company, who is responsible for managing its day-to-day operations and implementing the strategy determined by the Board of directors and shareholders. The General Director operates based on such key principles as honesty, integrity, diligence, reasonableness and serving the interests of the shareholders to the maximum extent possible. The objectives of the Board of directors include ensuring the availability of a well thought-out and long-term strategy, growing the Company's assets, ensuring effectiveness of operations, enforcing the rights and legitimate interests of shareholders and controlling the executive body.</p> <p>To achieve these objectives, the Board of directors is guided by the following principles:</p> <ul style="list-style-type: none"> • Decision making based on a collegial and thorough discussion of issues using reliable and complete information on the activities of the Company in accordance with the highest business standards; • No restrictions on the legitimate interests and rights of shareholders to participate in the management of the Company, receive dividend payouts, reports and information about the Company; • Ensuring a balance between the interests of shareholders of the Company and maximum objectivity of the decisions made by the Board of directors serving interests of the Company's shareholders; • Providing the Company's shareholders with reliable and timely information.
<p>Control</p> <p>Control over financial and business activity 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 use of internal and external auditors along with the establishment of an efficient risk-oriented internal controls system.</p>	<p>RESPECTED</p> 	<p>Control over financial and business activity of the Company in order to protect rights and legitimate interests of its shareholders is the responsibility of the General director of PAVLODARENERGO JSC in accordance with the provisions set forth in the Statute of the General director. The Company also has an audit and risk management committee, which is an advisory body of the Board of directors of PAVLODARENERGO JSC, which is created to assist the Board of directors in monitoring the taken decisions and processes, ensuring the reliability of financial reporting and functioning of proper internal control and risk management procedures</p>



5
RISK



RISK
MANAGEMENT



ENERGY MEANS RESPONSIBILITY

We are aware of our responsibility toward consumers, the government, investors, employees, business partners and the public.

RISK MANAGEMENT

The main goals of PAVLODARENERGO JSC in the field of risk management include reduction of the negative impact of the events surrounding the activities of the Company, as well as pursuit of interesting opportunities.

CORPORATE RISK MANAGEMENT SYSTEM

The Company has an Corporate risk management (RMS) system aimed at identification, assessment

and monitoring of all significant risks, as well as minimization measures. Risk management is performed at all levels: industrial enterprises, departments and at the level of the Group of companies.

RISK GROUPS

STRATEGIC RISKS	FINANCIAL RISKS
<ul style="list-style-type: none"> Regulatory risks Investment risks Project risks Reputational risks Market risks Managerial risks 	<ul style="list-style-type: none"> Financial statements Interest rate risks Liquidity risk Credit risks Price risks Foreign exchange risks
LEGAL RISKS	OPERATIONAL RISKS
<ul style="list-style-type: none"> Violation of law Litigation risk Corruption and fraud risk Property risks Collection risks 	<ul style="list-style-type: none"> Technological risks Procurement and sourcing Planning and operational decision making Human resource management Occupational safety and health Interaction with contractors IT and information security Government relations Emergencies Interaction with consumers Human resources risks Environmental risks

Risks are identified, evaluated and controlled.

ORGANIZATION OF RMS ACTIVITIES



INTERNAL CONTROL STANDARDS

The Company has an Internal Control System (ICS) which is a set of policies, processes, procedures and norms of behavior and actions combined into a single

continuous process that is part of the Company's management process, exercised by the Board of directors, as well as all the executive and supervisory bodies and employees, aimed at providing a reasonable confidence in achieving the operational goals and minimization of risk.

The Company has a three-level Internal Control System:

OPERATIONAL	FINANCIAL	COMPLIANCE
Applies to the business objectives of the organization, including productivity, profitability and safety of resources.	Refers to the preparation of reliable published financial statements, including the interim condensed financial statements, as well as any data derived from these reports (for example, income data) which is published openly.	Focuses on compliance with laws and regulations governing the operations of the organization.

INSURANCE AGAINST RISKS

In order to properly manage risks inherent in the Company's operations, PAVLODARENERGO JSC has developed and implemented an Insurance Policy for insurance against risks aimed at minimization and elimination of the consequences (losses, losses) of realized risks, as well as mitigation (reduction) of negative effects on the Company's strategic goals. Therefore, the purpose of the Insurance Policy is to ensure sustainable operation and development of the Company through the implementation of a commercially feasible insurance protection against significant risks that are subject to insurance and are a threat to the Company's operations, employee health and the interests of shareholders and investors.

PAVLODARENERGO JSC has all the types of compulsory insurance coverage in accordance with the regulations of the Republic of Kazakhstan. In addition to compulsory insurance and in accordance with the provisions of the Insurance Policy and international best practices, the

Company has insurance against property risks, which is a voluntary type of insurance. The property risks of generating facilities of PAVLODARENERGO JSC group of companies are insured by insurance companies of the Republic of Kazakhstan in accordance with the regulations. The Company has very high expectations when it comes to the insurance of its assets (property insurance against all risks), which is why we set additional requirements and demand that reinsurance be provided by international reinsurance organizations (such as Munich RE, Hannover RE, etc.) with a minimum credit rating of AA. The Company is committed to open communication with the insurance sector: we conduct regular insurance risk surveys of our generating facilities and fulfill the recommendations of reinsurers.

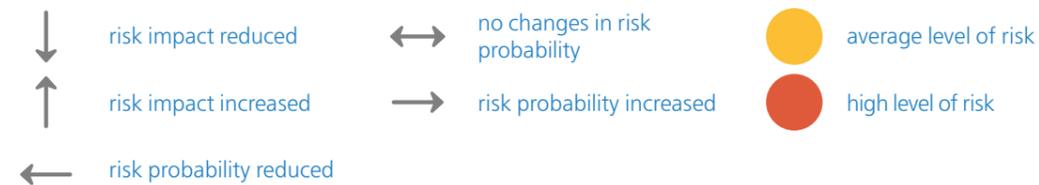
ANALYSIS OF SIGNIFICANT RISKS AFFECTING PERFORMANCE

Sixty-nine risks affecting the Group were identified in the new Corporate Risk Register and the Risk Mapping updated in accordance with the approved Risk Management Policy.

ITEM NO.	RISK	FACTORS	LEVEL OF RISK	CHANGE	DESCRIPTION OF THE CHANGE	MEASURES TO MINIMIZE THE RISK
Strategic risks						
1.	Damage to the corporate reputation	1. Negative public reaction, lack of counter/positive media coverage. 2. Increase in the number of customer complaints, including those caused by poor service, as well as employees' failure to comply with the corporate ethics code.			In 2017, there was a negative coverage in social media and mass media, as well as complaints from customers due to poor quality of heat supply.	1. Internal policies were developed: - On the rules for contact center employees of Pavlodarenergosbyt LLP, Pavlodar Heat Networks LLP and Pavlodar Electric Distribution Company JSC regarding the provision of information about energy supply; - On the provision of heat to customers for Pavlodarenergosbyt LLP and Pavlodar Heat Networks LLP. - About reconciliation commissions to review recalculation of heat supply and heat shortfall. 2. Statements about dealing with customer feedback were made in mass media, social media and on PAVLODARENERGO JSC's website.

ITEM NO.	RISK	FACTORS	LEVEL OF RISK	CHANGE	DESCRIPTION OF THE CHANGE	MEASURES TO MINIMIZE THE RISK
Operational risks						
1.	Injuries / accidents	1. Violations of health and safety regulations by employees, including contractor staff; 2. Equipment failures, accidents at work; 3. Low-skilled employees.			In 2017, the Company had a year-on-year decline in the number of workplace injuries.	1. Reciprocal audits are conducted with the participation of occupational health and safety departments of subsidiaries of CAEPCO JSC. 2. The Company issued a Policy Regarding Alcohol, Drugs and Smoking in PAVLODARENERGO JSC Group of Companies." For more information, please go to Occupational Safety and Health section of this report.
2.	Delayed purchase and delivery of goods, works and services	1. Lengthy approval procedure for purchasing orders to ensure compliance with procurement guidelines, as the Group is a natural monopoly; 2. Delivery of goods, services and equipment of poor quality whose characteristics fail to meet the required specifications.			Delayed purchase and delivery of goods, works and services, as well as poor procurement procedures throughout the year put the maintenance works behind schedule. At the end of the year, all the repairs were completed as scheduled.	1. A meeting between heads of procurement within the Group of companies was held in order to improve the efficiency of procurement, develop a uniform process control systems and promote a corporate culture in the field of procurement. During the meeting, workshops were conducted and new initiatives for streamlining procurement procedures were presented, while experts took part in the Supply Chain Management / Effective Procurement seminar. 2. A uniform procurement procedure was developed and approved: quotes from potential vendors are collected to select a single vendor for supplying the entire lot. 3. Procurement specialists took test to check their knowledge of procurement regulations. 4. A task group was established to develop Guidelines for the Procurement of Goods, Works and Services.
3.	Above-normal heat losses	1. Significant wear of heat networks; 2. Technical violations and accidents at heat networks; 3. Normal losses in consumer networks were removed from the rate as of January 1, 2010 by the Committee on Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan for Pavlodar region.			In 2017, the Company reduced above-normal heat losses compared with 2016.	In 2016–2020, heat networks in Pavlodar will be upgraded as part of Nurly Zhol and EBRD investment programs with a total budget of 14 bln KZT. The main goal of this project is to completely eliminate heat losses above the normal level.

ITEM NO.	RISK	FACTORS	LEVEL OF RISK	CHANGE	DESCRIPTION OF THE CHANGE	MEASURES TO MINIMIZE THE RISK
Financial risks						
1.	Increase in overdue receivables.	1. Delayed bill payment by customers; 2. A decline of basic macroeconomic indicators that affect the solvency of counterparties.	●	↔	In 2017, there was a positive trend in payments for the consumed energy. The share of overdue debts (more than 3 months) decreased in total receivables. Despite this, the amount of overdue receivables remains high.	1. At the end of 2017, Pavlodarenergosby LLP held a campaign to reduce receivables. All consumers with unpaid debt for heat or electricity were given an opportunity to pay without penalties, provided that they paid the entire amount due by the end of December. 2. Court actions were initiated for debt recovery; 3. Installment payment schedules are developed to collect debt; 4. Notices about the customers' unpaid bills for utilities are sent to their employers.
Legal risks						
1.	Damage to the Company by unscrupulous acts by staff or third parties	1. Fraudulent and corrupt practices by employees of the Company and third parties. 2. Low level of self-discipline and culture. 3. Poor knowledge of the laws and regulations of the Republic of Kazakhstan. 4. Lack of respect for the law.	●	↔	Risk probability remained at the same level.	In order to create and implement an effective strategy for the prevention of corruption and fraud, as well as to promote integrity among the employees and management of the Group, PAVLODARENERGO JSC is in the process of developing a Fraud and Corruption Prevention Policy based on the principles set out in a similar Policy adopted by the Board of directors of CAEPCO JSC.



Dealing with risks is the responsibility of the Group's Office for Risk Management which reports to the Board of directors. The Office operates based on the

work plan for the year, approved by the Board of directors.

WORK PERFORMED IN 2017	WORK PLANNED FOR 2018
Analysis and testing of the effectiveness of internal controls in business processes: – Monitoring compliance with occupational health and safety standards; – Monitoring compliance with environmental protection standards; – Monitoring of revenue accounting and accounts receivable; – Monitoring inventory accounting; – Monitoring accounting of fixed assets and intangible assets.	Analysis and testing of the effectiveness of internal controls in business processes: – Control of distribution and metering of electricity consumption, energy monitoring; – Control of distribution and metering of heat consumption, energy monitoring; – Human resources management; – Payroll accounting.





SUSTAINABLE DEVELOPMENT



ENERGY MEANS SUSTAINABILITY

We provide good working conditions, promote the introduction of a dual education system, work to bring vocational education to the mainstream, support local communities and social infrastructure.

SUSTAINABLE DEVELOPMENT

The strategic goal of PAVLODARENERGO 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.

The Company's goals and objectives within the framework of sustainable development include:

- Improvement of stakeholder engagement system;
- Improvement of economic efficiency and sustainability;
- Production technology modernization;
- Supporting the development of the regions, where the Company operates;
- Corruption prevention.

STAKEHOLDER ENGAGEMENT

Interaction with stakeholders is an important part of the sustainable development system. Principles of stakeholders' identification and selection are governed by a regional aspect. Because of the great public significance

of its work and in order to minimize risks, PAVLODARENERGO JSC is implementing a number of measures aimed at increasing and improving stakeholder engagement in accordance with such principles of corporate behavior as openness, accuracy and completeness of the information about the Corporation's activities, balance of the interests of all stakeholders and rapid response to any concerns. Ensuring sustainable development and pursuing strategic goals of the Company is achieved upon observance of interests and responsible conduct for all stakeholders. In 2017, the Company has prepared a SEP (Stakeholder Engagement Plan) Report. During preparation of the Report the management of PAVLODARENERGO 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 the stakeholders significantly affecting the Company's operations, and also with those who could have a significant influence in the medium term if the Company implements its strategic initiatives. In addition to that, the impact of the Company's activity on stakeholders was taken into consideration.

THE COMPANY COMMUNICATES WITH STAKEHOLDERS ON THE FOLLOWING SUBJECTS:

SOCIAL RESPONSIBILITY	ENVIRONMENTAL PROTECTION	OCCUPATIONAL HEALTH AND SAFETY	ECONOMIC SECURITY
Employees	Non-governmental organizations (NGOs)	Employees	Shareholders
Government agencies and regulators;	Government agencies and regulators	Vendors, Contractors	Local communities
Local communities	Local communities	Trade union	

STAKEHOLDER ENGAGEMENT

KEY STAKEHOLDERS	ENGAGEMENT PROCESS	ISSUES RAISED
Employees	Done through corporate newspapers and an Internet website, personal blog of the General Director of the Company. There are emails and a helpline which employees can use. Group management holds meetings with employees. Labor disputes are resolved by the Reconciliation commission with participation of representatives of both the employer and the employee.	<ul style="list-style-type: none"> • Respecting occupational health and safety standards. • Informing employees about the Company's activities. • Promoting professional development.
Local communities	The Company has a comprehensive system for processing customer queries and providing feedback with the help of Internet sites and email, a contact center and a personal blog of the Company's General Director. Public hearings, round tables and other events are held.	<ul style="list-style-type: none"> • Processing of applications and adoption of rates for monopoly-controlled services. • Implementation of the investment program. • The quality of services provided to customers, monitoring of fulfillment of the requirements, for example, installation of household energy meters, and obtaining technical specifications.
Government agencies and regulatory authorities	Requests from the government and regulatory authorities are processed: some are answered, others are for notification purposes only. Employees of the Company participate in specialized and general meetings. Visits of official delegations are arranged.	<ul style="list-style-type: none"> • Mitigation of the negative impact of industrial facilities on the city and region. • Ensuring readiness for the heating season. • Fulfilment of investment commitments. • Compliance with laws and regulations, including environmental and nature protection requirements.
Suppliers, contractors and customers	Tenders are organized and held, as well as meetings with contractors and customers. Corporate website has a special feedback section.	<ul style="list-style-type: none"> • Promoting a mutually beneficial partnership. • Ensuring transparency during tenders.
Educational institutions	Meetings are held with representatives of higher education institutions of Pavlodar region. Employees of the Company take part in the activities of examination boards and certification commissions, as well as in accreditation of educational programs. Profenergy program is designed to support promising young graduates from universities and vocational schools, with the possibility of employment in the Company.	<ul style="list-style-type: none"> • Recruitment for the enterprises. • Internship and employment opportunities for graduates.
Mass media	Enterprises of the Company on annual basis arrange press tours, press conferences, circulate press releases and provide answers on the informational queries.	<ul style="list-style-type: none"> • Promoting cooperation. • Communication on the status of the investment program aimed at modernization and renovation of the infrastructure. • Compliance with environmental standards. • Implementation of welfare projects.
Non-governmental organizations (NGOs)	Representatives of NGOs are regularly invited for participation in the press tours and public hearings, which are held throughout the year. Employees of the Company participate in public hearings with representatives of small and medium enterprises. Meetings are held with leaders of NGOs that support socially vulnerable people, with participation of representatives from the consumer right protection associations.	<ul style="list-style-type: none"> • Assistance in addressing environmental and social issues.
Trade union	Interaction with trade unions is carried out through the organization of meetings and processing requests during operations.	<ul style="list-style-type: none"> • Respecting the terms of the collective agreement. • Assistance in arranging leisure and recreation for employees.

INFORMATION POLICY

PAVLODARENERGO JSC's information policy is a complex of actions, activities and regulations to manage the dissemination of corporate information and creating a single image of the Corporation among the target audience.

The Policy covers internal and external communications. External communication means informing the public about the activities of the Company by publishing reports, messages, documents and other materials. The purpose of internal communications is to inform all employees about the current situation, promote corporate loyalty, regulate access of various employees and divisions to corporate information.

decisions or any other action that could affect the financial and business activities of the Company, as well as other information conducive to the fullest understanding of the Company's activities;

- Ensuring availability of public information about the Company to all interested parties;
- Promoting openness and trust between the Company and its shareholders, potential investors, market participants, government agencies and other stakeholders;
- Improving corporate governance of the Company;
- Creating a favorable image of the Company.

In 2017, PAVLODARENERGO JSC Group of companies



The main goals of information disclosure are as follows:

- Timely provision of information on all substantive matters relating to the Company in order to respect legitimate rights of the shareholders, investors and other interested parties, providing them with appropriate information to make informed

regularly shared information about its activities with the above stakeholders by updating the official websites of the Company and its subsidiaries, providing information to mass media, responding to requests, and by arranging public hearings, press tours and other events.

In 2017, 843 materials were published in mass media and social media about the activities of the Group of companies, PAVLODARENERGO JSC's corporate website was redesigned, 24 issues of Energetik corporate newspaper were released.

During the reporting year, the public relations department of PAVLODARENERGO JSC participated in the preparation, holding and coverage of sports and sponsorship events, as well as anniversary and celebratory holiday celebrations.

PLANS FOR 2018

Moving in line with the information policy, more measure will be taken to ensure timely and regular disclosure of all material facts of the Company. This includes:

- Awareness-raising measures for customers on popular topics;
- Improving communication channels within the Group of companies;
- Improving external communication channels.

- Impact on water bodies due to water consumption and water discharge;
- Disposing of industrial waste.

Significant environmental aspects are managed through regular monitoring of environmental performance, assessment of compliance with the legislative and corporate requirements. Responsibility for control, accounting and analysis of the listed environmental impacts of PAVLODARENERGO JSC is assigned to the Environment department.

Information about environmental activities is provided by publishing on the web site of PAVLODARENERGO JSC of the Integrated Management system policy, environmental management tasks and objectives, reporting documents such as corporate reports, drafts of Environmental impact assessment sections for developed projects of reconstruction and modernization, minutes of public meetings, nature protection action plans, and non-technical summary of projects.

Gross harmful emissions into the atmosphere in 2011–2017, thous. tons



ENVIRONMENTAL POLICY

ENVIRONMENTAL IMPACT MANAGEMENT

Environmental protection, consistent improvement of nature protection performance and energy efficiency are key strategic priorities of PAVLODARENERGO JSC and an integral part of its sustainable development. In 2017, the Company generated 4,073.839 mln kWh of electricity and 4.445 thous. GCal of heat. To generate this energy, the Company burned 3,818 thous. tons of Ekibastuz coal and 4.8 thous. tons of heating oil.

In order to minimize its environmental impact, PAVLODARENERGO JSC Group of companies consistently implements the environmental policy provided for by the Strategy of Company's development in order to comply with the requirements of the nature protection law and use the latest achievements in science and technology.

Priority areas of PAVLODARENERGO JSC's environmental activities are based on the key factors affecting the environment. These include:

- Harmful emissions into the atmosphere;
- Greenhouse gas (CO₂) emissions into the atmosphere;

Per-unit emissions into the atmosphere in 2011–2017, mg/MWh



In addition, PAVLODARENERGO JSC informs its contractors of the applicable regulations by adding the appropriate terms to agreements, specifications and requirements for contractors.

The Company intends to do its best to prevent a negative environmental impact and operate in accordance with ISO 14001 requirements whenever possible.

Starting from 2009, PAVLODARENERGO JSC has been implementing the Environmental and Social Action Plan (ESAP) as a part of its Investment Program and in accordance with the Environmental Protection Policy of the European Bank for Reconstruction and Development which applies to EBRD-financed projects. Actions of the Environmental and Social Action Plan are aimed at the improvement of the environmental attributes of the production process, as well as of the health and safety policy in the enterprises of PAVLODARENERGO JSC. Within the frameworks of the ESAP, the Company provides a public report on an annual basis.

PREVENTION OF AIR POLLUTION

Emissions are one of the main environmental impacts of thermal power plants.

Replacement of obsolete generating equipment relying on low energy and environmental efficiency with modern facilities meeting current environmental standards is the most important factor in bringing down emissions. To improve its environmental performance, from 2009 to 2014 PAVLODARENERGO JSC renovated its fly ash scrubbers at all boilers of its power plants; as a result, filtering efficiency increased from 97% to 99.5%. This allowed to reduce total annual coal ash emissions from 29.9 thous. tons to 9.2 thous. tons (69.2%).

At the end of 2008, when the investment program was launched, PAVLODARENERGO JSC produced a total of 65.9 thous. tons of harmful emissions into the atmosphere (including other emissions), which in 2017 fell to 44.3 thous. tons (32.8%).

Due to increased production and consequently increased consumption of fuel (coal, heating oil), gross and per-unit emissions of particulate matter (coal ash) and sulfur oxide (SO_x) associated with the production of heat and electricity increased slightly in 2017 as compared 2016 (gross emissions of coal ash and SO_x rose 3.76% and 0.52% respectively (tons per year); per-unit coal ash emissions rose 2.06%).

MITIGATION OF ENVIRONMENTAL IMPACT, ENVIRONMENTAL PROTECTION MEASURES

In 2017, the following main measures were implemented to mitigate environmental impact:

- Overhauls and maintenance of emission filtering equipment, specifically replacing worn-out elements of scrubbers and ductwork, ensuring that scrubbers operate at their design capacity of 99.5%, repairing aspiration units and measuring their performance, restoring thermal insulation and burner brickwork, repair and replacement of burners during boiler overhauls;
- Replacement of old lamps with energy-saving lamps;
- Routine repairs to ensure that operating parameters of the main equipment comply with the Technical Regulations of the Republic of Kazakhstan (no. 1232 of 14.12.2007);
- Construction of stage II of the ash dump site at Ekibastuz CHP;
- Repairing coal ash ducts;
- Reclamation of a quarry provided for subsoil use (for construction of hydro facilities).

GREENHOUSE GAS (CO₂) EMISSIONS

After the Kyoto Protocol entered into force for the Republic of Kazakhstan on 17.09.2009, the Company arranged work for preparation to carrying out the inventory of greenhouse gas emissions and ozone-depleting substances consumption.

For greenhouse gas monitoring in accordance with the guideline regulatory documents a calculation method is used; it provides for accounting of emissions from normal (regular) production activity, special practices (commissioning works, process shutdown, repair and maintenance) and emergencies.

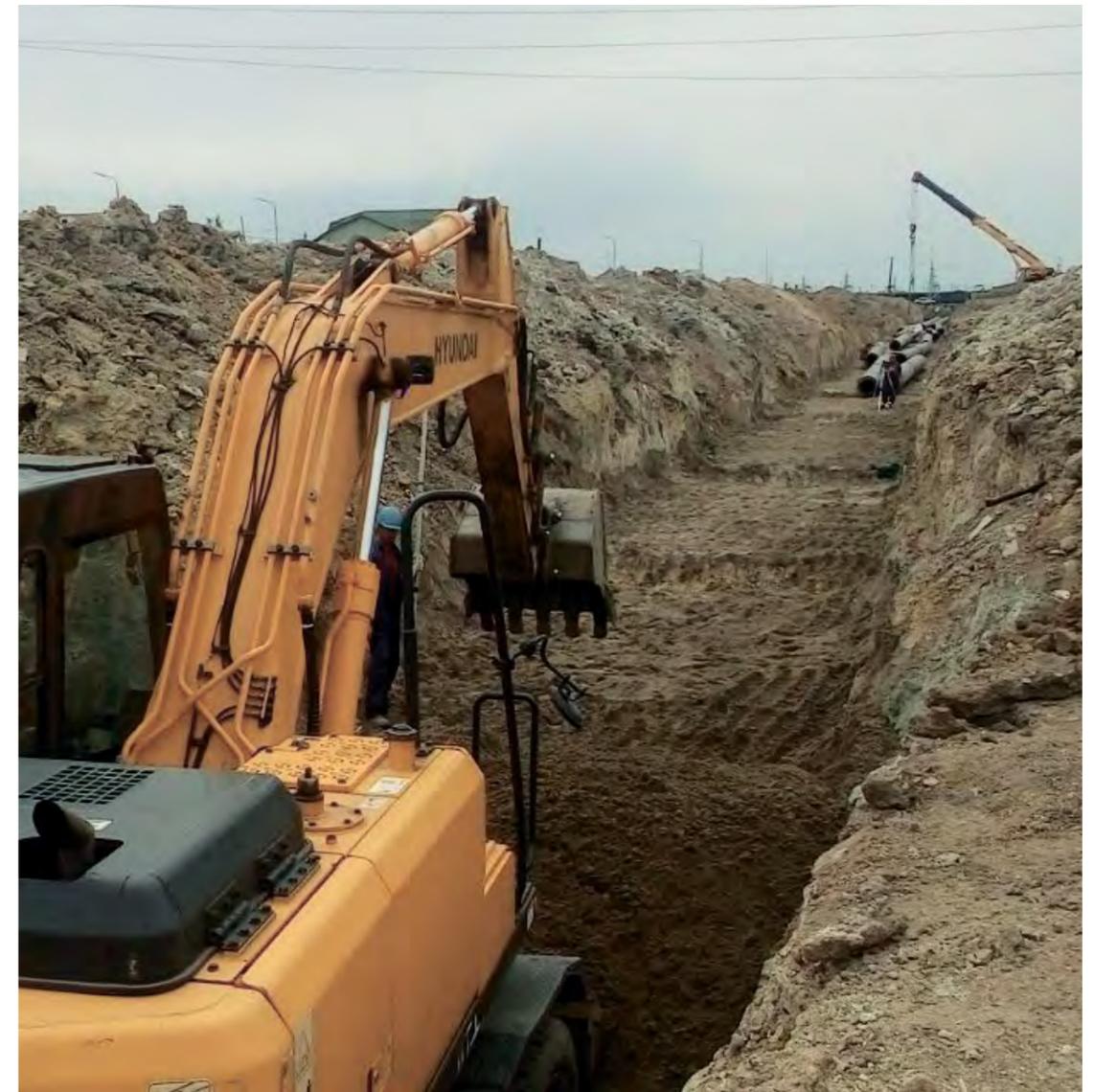
In 2016, the Company signed a tripartite agreement to implement projects on modernization and renovation of district heating systems in Pavlodar, Ekibastuz and Petropavlovsk between the European Bank for Reconstruction and Development (EBRD), the Ministry of National Economy of the Republic of Kazakhstan and the Central-Asian Electric Power Corporation JSC within the framework of Nurly Zhol government program. Under this Agreement, a total of 25.29 bln KZT will be invested in renovating the

district heating systems of Pavlodar, Ekibastuz and Petropavlovsk. These initiatives are aimed at improving energy efficiency, loss reduction and environmental performance (reduction of CO₂ emissions by burning less coal thanks to reduced transmission losses of heat in pipelines). As a result, by 2017 gross CO₂ emissions fell by a combined total of 200.98 thous. tons compared with 2010, while per-unit emissions fell 3% compared with 2010.

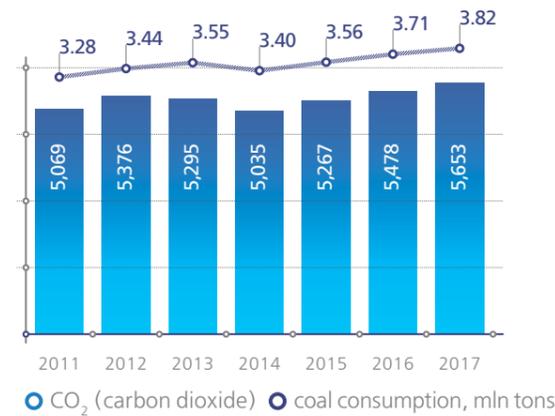
Another tool to bring down greenhouse gas emissions is the Energy saving and Fuel Efficiency Program, manifesting in the new generating capacities

making up an increasing share of generated energy, as well as in the implementation of ISO 50001 energy management system (energy saving measures), whose purpose is not only to increase energy efficiency of production processes but also to reduce greenhouse gas emissions. Thanks to this program, in 2017 greenhouse gas (CO₂) emissions fell by 41,481 tons.

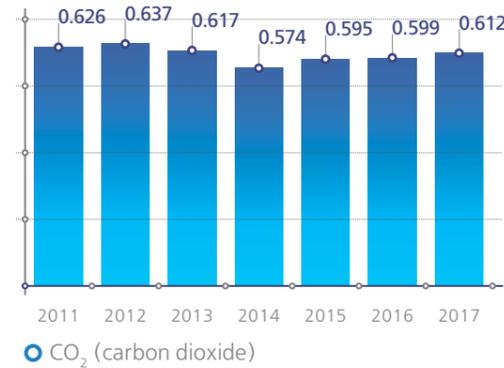
Due to increased production and increased fuel consumption (coal, heating oil), in 2017 gross greenhouse gas emissions increased slightly compared to 2016 (3.21%) clocking at 5.653 mln tons of CO₂. Per-unit greenhouse gas emissions also rose slightly (2.17%).



Gross CO₂ emissions in 2011–2017, mln tons



Per-unit CO₂ emissions in 2011–2017, ton/MWh



ENVIRONMENTAL SPENDING

In order to improve efficiency of environmental protection, PAVLODARENERGO JSC provides financing to environmental initiatives. In 2017, environmental spending totaled 1,497.9 mln KZT. A special Environmental Impact Assessment section is included in every new construction and renovation project: its

contents are shared with local communities and other interested parties in the form of public hearings. To ensure compliance with the environmental standards of the Republic of Kazakhstan, all projects undergo the government environmental review by regional environmental authorities.

ENVIRONMENTAL COSTS, MLN KZT

EXPENSE	EXPENSE AMOUNT, MLN KZT		
	2015	2016	2017
Investment costs	2,735.8	958.5	836.6
Major repairs of fixed assets for environmental purposes	788	60.8	59.05
Operating expenses	1,152	837.5	602.25

In 2017, the government found no significant violations of the environmental laws or regulations by the subsidiaries. In 2017, PAVLODARENERGO JSC did not have to go through any audits conducted by regional environmental regulators.

WATER MANAGEMENT AND WATER RESOURCES CONSERVATION

Use of water resources is an integral part of the production processes of PAVLODARENERGO JSC. The main water unit impacted by the Company is Irtysh river. Water for technical needs is sourced from third party organizations on a contractual basis.

The main technological systems consuming the bigger part of water are cooling systems, hydraulic ash removal and water treatment plants.

In accordance with the production monitoring program of PAVLODARENERGO JSC for 2015-2019, agreed in 2014 by the Environmental Regulation Committee of the Republic of Kazakhstan, quality of the water discharged to the ash dump is monitored, just as the level and quality of underground water is monitored through a network of observation wells. Reports on fulfillment of the production environmental control program are submitted to the Ecology Department for Pavlodar region on a quarterly basis. For technological purposes, monitoring of quality of

(initial) technical water is carried out by corresponding laboratories.

A major goal of water use management is to use water more efficiently, helping to reduce negative impact on the environment.

PAVLODARENERGO JSC has drinking water supply systems, storm drain and domestic sewerage systems. Water for domestic, drinking and fire-fighting

needs is supplied and discharged in a centralized manner, via city water supply and sewage networks based on contracts. Water for production needs is supplied via a closed-circuit water system.

In 2017, a total of 652,568.961 thous. m³ of water was consumed, mostly for closed-circuit water systems. In the reporting period, a total of 332.371 thous. m³ of waste water was produced.

TOTAL WATER CONSUMPTION BY SOURCES, THOUS. M³

ITEM	2015	2016	2017
Total water used, including:	528,978.552	529,982.768	652,568.961
from surface water bodies	-	-	-
from third-party suppliers	24,746.647	24,313.469	23,662.189
from closed-circuit water systems	490,700.853	491,645.221	613,936.441
from recycling	13,531.052	14,024.078	14,970.331

DISCHARGED WASTE WATER, THOUS. M³

ITEM	2015	2016	2017
Total waste water	342.469	346.127	332.371
Discharged to third parties	342.469	346.127	332.371

The most important environmental initiatives related to water use and water discharge in 2017 include the following:

- Monitoring of qualitative parameters of underground water (water analysis was carried out in accordance with the approved schedule) in the area of industrial sites and ash dumps;
- Repair of pipelines, stop and control valves for industrial, service and drinking water at CHP-3 and CHP-2;
- Replacement and repair of valves on pipelines for service water, fire-fighting water pipes and heating network at Ekibastuz CHP.

EFFICIENT HANDLING AND DISPOSAL OF PRODUCTION WASTE

Accounting for 99% of total waste, coal ash is the main type of waste produced by PAVLODARENERGO JSC: it is stored in specially equipped water management facilities called ash dump sites. Compliance with the environmental law of the Republic of Kazakhstan during the creation of new reservoirs for coal ash waste storage prevents contamination and ensures stable operation of CHPs. Other types of industrial waste are transferred for further processing, recycling or final disposal to specialized companies. 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.

In 2017, facilities of PAVLODARENERGO JSC produced a total of 1,518.243 thous. tons of waste, including 1,513.489

thous. tons of coal combustion residuals and 4.754 thous. tons of industrial and household waste. Increase in waste generation by 46,5 thous. tons vs. 2016 is due to increase of share of ash wastes of the green hazard list in the general structure of wastes. In 2017, there were 1.024 thous. tons less industrial and household waste handed over to third parties for disposal or recycling compared to 2016, which is due to the general decrease in waste production by companies within PAVLODARENERGO JSC Group.

In 2017, the most significant waste management measures aimed at improvement of industrial and environmental safety of ash dump sites and other waste disposal facilities included:

- Dam heightening at stage II of the ash dump at CHP-3 (PAVLODARENERGO JSC);

- Construction of stage III of the ash dump at CHP-3 (PAVLODARENERGO JSC);
- Construction of stage II of the ash dump at Ekibastuz CHP (PAVLODARENERGO JSC);
- Designating areas for storing waste from renovation and construction of energy infrastructure facilities (preparation of sites, installation of containers).

It should be noted that ash dump sites used Canadian polysynthetic geomembrane for bed reinforcement, which is a state-of-the-art waste containment technology. The use of this special geomembrane film will guarantee 100% waterproofing. It is a reliable and durable landfill liner ensuring protection of soil and ground water against contamination with chemicals contained in clarified water of wet scrubbers used for fly ash capture.

TOTAL WEIGHT OF GENERATED WASTE, THOUS. TONS

ITEM	2015	2016	2017
Coal combustion residuals	1,408	1,465.965	1,513.489
Other types of waste	7.7	5.778	4.754

WASTE BY HAZARD LEVELS, THOUS. TONS

ITEM	2015	2016	2017
Waste generated:	1,416.2	1,471.743	1,518.243
Green list	1,415	1,471.333	1,517.901
Amber list	1.2	0.41	0.342



WASTE BY METHOD OF HANDLING, THOUS. TONS

ITEM	2015	2016	2017
Waste generated	1,416.2	1,471.743	1,518.243
including coal combustion residuals	1,408	1,465.965	1,513.489
Waste used at the enterprise	1.3	0.443	0.409
Waste decontaminated	-	-	-
Waste handed over to third parties	6.7	5.278	4.34
Waste disposed at enterprise's own sites	1,408	1,465.965	1,513.489
including coal combustion residuals	1,408	1,465.965	1,513.489

ENVIRONMENTAL MANAGEMENT SYSTEM

PAVLODARENERGO JSC was one of the first companies in Kazakhstan that obtained a certificate of compliance with the ISO 14001 international environmental management standard.

Availability of the environmental management system that is developed, well-functioning and has ISO 14001 certification is an important indicator of a systematic, efficient work in the sphere of environmental protection, increasing the enterprise's competitive capacity and market value and creating a positive image in relations with external stakeholders.

During the reporting period, TÜV Rheinland Kazakhstan (leader in the independent examination and certification industry) carried out supervisory and certification audits at PAVLODARENERGO JSC to verify compliance with ISO 14001 (Environmental management system), ISO 9001 (Quality management system), OHSAS 18001 (Occupational health and safety management system) and ISO/CD 50001 (Energy management system). As a result, the Company obtained the Integrated management system (IMS) certification, confirming that its system is robust, efficient and focused on improvement.

PUBLIC ASSESSMENT OF ENVIRONMENTAL ACTIVITIES

To meet environmental requirements of the Republic of Kazakhstan, in 2017 PAVLODARENERGO JSC held two public hearings in the form of open meetings attended

by representatives of local executive bodies, the public and the regional office of the Environmental Protection Department for Pavlodar region of the Ministry of National Economy of the Republic of Kazakhstan, as well as the Office for Subsoil Use, Environment and Water Resources for Pavlodar region, with a poll conducted to collect public feedback on a number of environmental projects such as:

- 1) "Environmental impact assessment (EIA)" section to the project "Construction of stage III of the ash dump site at PAVLODARENERGO JSC's CHP-3" (29.03.2017);
- 2) EIA section to the project "Residential complex with the addition of a 3-storey corner structure in Usolsk-1 residential area in Pavlodar" (14.04.2017);
- 3) EIA section to the project "Prospecting of clay rocks on Beta plot" (13.12.2017).

The main goal of public hearings is to determine the environmental impact from the above projects, assessment of possible environmental and economic effects, development of emission limits when conducting renovation and construction. The discussion focused on sources of environmental impact, amounts of harmful emissions during the works, the amount of waste produced.

Announcements in the media about the public hearings were in Kazakh and Russian languages in newspapers Zvezda Preertyshiya and Saryarka Samaly, as well as on the websites of the Office for Subsoil Use, Environment and Water Resources for Pavlodar region.

PLANS FOR 2018

1. Development of draft emission quotas and waste disposal guidelines for CHP-2, CHP-3 and Ekibastuz CHP of PAVLODARENERGO JSC.
2. Conducting an independent environmental audit of CHP-2, CHP-3 and Ekibastuz CHP pursuant to paragraph "0" included in the plan of environmental and social activities, using the best available assessment tools (BAT Assessment), which is an integral part of the agreement between CAEPCO JSC and the European Bank for Reconstruction and Development.
3. Conducting public hearings on projects included in the investment programs of PAVLODARENERGO JSC in 2018.

HUMAN RESOURCES AND SOCIAL POLICY

HUMAN RESOURCES MANAGEMENT

Human resources management policy of PAVLODARENERGO JSC Group of enterprises is a comprehensive system of interaction with employees to achieve strategic goals of the Company.

The goal of the human resources management policy is to build a company with an efficient corporate governance system, providing opportunities for maximizing employee potential. The Company is strengthening its human resources management policy by engaging professional employees of various level, retaining highly qualified employees, providing continuous professional training and development for employees, opening up opportunities for professional growth of initiative young employees, creating a talent pool and managing talents.

HEAD COUNT AND EMPLOYEE SKILL LEVEL

As of December 31, 2017, the Company employed 5,189 people.

An increase of 2.6% compared with 2016 was caused by the planned introduction of the Company's new structural units and filling vacancies.

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 62.3%. Production personnel are mostly blue-collar workers of whom 71.6% are men.

In 2017, "Managers" made up 14.1% of the total head count, which is an optimal rate.

EMPLOYEE AGE STRUCTURE

Employees under 40, the most productive age group, make up 50% of the total head count. Employees over 60 make up 5.7%.

As a part of the human resources management policy implementation, the Company carries out actions aimed at gradual reduction of personnel's average age for achieving an optimal ratio between the young initiative employees and the experiences, highly qualified employees in order to ensure succession and transfer of professional knowledge and skills.

The average age of the Group's employees is 42.3.

EMPLOYEE CATEGORY	TOTAL		INCLUDING			
			MEN		WOMEN	
	PERSONS	%	PERSONS	%	PERSONS	%
Head count	5,189	100	3,235	62.3	1,954	37.7
managers	731	14.1	563	77	168	23
white-collar workers	1,269	24.4	390	30.7	879	69.3
blue-collar workers	3,189	61.5	2,282	71.6	907	28.4

Changes in head count, persons

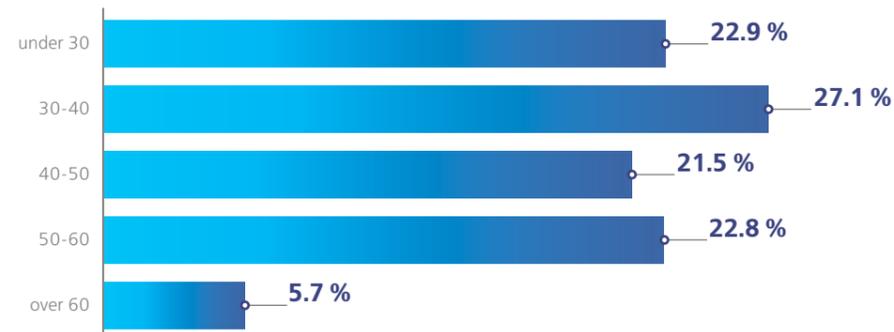


HEAD COUNT BY ENTERPRISE WITHIN PAVLODARENERGO JSC ENTERPRISES IN 2017

COMPANY NAME	NUMBER OF EMPLOYEES
PAVLODARENERGO JSC	1,949
Pavlodar Electric Distribution Company JSC	2,021
Pavlodar Heat Networks LLP	740
Pavlodarenergosbyt LLP	479
Total:	5,189



Employee age

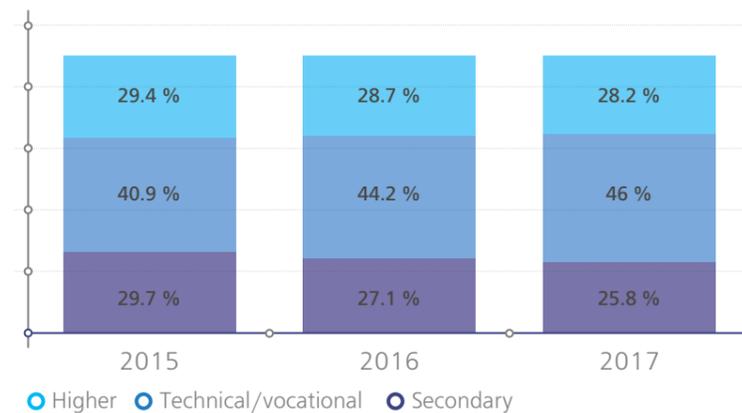


EMPLOYEE EDUCATION LEVELS

In 2015-2017, the share of employees with professional education was growing, while the share of employees who only finished high school was dropping. Because the focus is on filling blue-collar vacancies, the share of employees with university degrees declined slightly by 0.5% compared to 2016.

In 2017, 30 employees earned university degrees by correspondence training, including 21 employees with majors in their job related fields; 16 employees finished technical/vocational colleges by correspondence training, including 11 employees with majors in their job related fields.

Employee structure by education



EMPLOYEE TRAINING AND DEVELOPMENT

Personnel training and development system of the Company covers the following areas:

- compulsory, normative training;
- development of leadership skills;
- development of professional competencies.

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

In 2017, a total of 5,917 persons received training, including 4,548 blue-collar employees (87.6%) who

received compulsory training. In 2017, 3,462 persons (66,7% of the total head count) were trained in the Company's own training center.

In 2017, PAVLODARENERGO JSC Group of companies continued implementation of the Key Personnel Development Program as part of the PROFENERGY project. Thus, 146 middle and lower-level managers received corporate training to enhance management skills. In 2017, 1,049 employees received advanced training to develop professional competencies, including 42 managers and white-collar workers who were trained in the following areas: occupational health and safety, procurement, international standards of financial reporting, project management in capital construction, lean manufacturing.

ITEM	2015	2016	2017
The number of employees who received training, retraining, or advanced training, including:	5,207	5,569	5,917
Safety precautions, fire safety guidelines and operating procedures (initial training, qualification, certification/re-certification), courses for managers	4,428	4,221	4,548
ISO9001, ISO14001, OHSAS1800 quality management systems trainings (including environmental protection, internal audit and risk management)	11	39	12
Related occupations training	315	320	308
Civil defense and emergency training	3	22	0
Other (advanced training, seminars, workshops, etc.)	450	967	1,049

EMPLOYEE TURNOVER

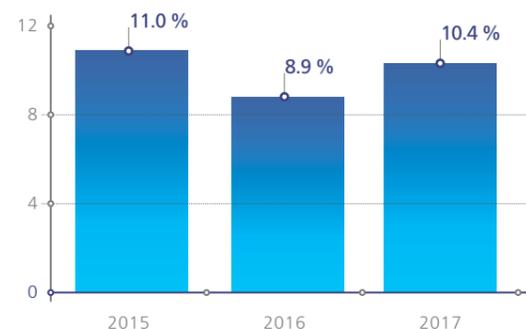
In 2017, the turnover rate across the Company rose 1.5% year-on-year and reached 10.4%. The increase in turnover was due to the increase in employment terminations across all employee categories caused by the following factors:

- Migration (relocation to Russia or other CIS countries);
- Dissatisfaction with compensation;
- Violation of labor and production discipline.

The Company takes the following measure to improve performance:

- Annual salary raises;
- Promoting mentoring;
- Training, advanced training and corporate training funded by the Company;
- Tangible and intangible incentives for employees.

Turnover rate



TALENT POOL

In order to ensure availability of qualified candidates for management roles of various levels, in 2017 PAVLODARENERGO JSC Group of companies created a talent pool of senior, middle and junior managers to fill 615 management jobs. Succession planning is based on individual programs of professional and management training for the employees in the talent pool, including training in the Company's own training center, skills improvement, internships, mentoring, performing management functions, and temporary employee relocation. In 2017, 84 people from the talent pool were appointed to management

positions. Efforts are made to create an external talent pool, including but not limited to graduates of educational institutions. As many as 583 young specialists are employed by PAVLODARENERGO JSC Group of companies, of whom 150 persons hired in 2017, including 87 for leading positions and professions. Degree-wise, 86 new hires (57.3%) finished technical/vocational colleges and 64 persons (42.7%) had university degrees.

ATTRACTING YOUNG SPECIALISTS

In 2017, as part of PROFENERGY initiative, the Company continued implementation of a special program to support young employees and encourage training. This included the following activities:

- A contest of science projects to win a personal corporate scholarship of PAVLODARENERGO JSC, where two winners were undergraduate students from Ekibastuz Engineering Institute and Ekibastuz College of the Engineering Institute;
- Four students were employed during summer;
- As many as 239 students were admitted for internship and pre-graduation training, of whom 5

received payment and signed employment contracts effective after graduation;

- Chief of the boiler workshop at CHP-3 was a member of the Admissions at Pavlodar State University;
- Twelve employees received bonuses for successful graduation;
- Seventy-four employees received paid training leaves.

training, including 38 employees majoring in job related fields; 32 employees are enrolled in technical/vocational schools by correspondence, including 28 employees majoring in job related fields.

EMPLOYEE MOTIVATION AND REMUNERATION

The purpose of employee motivation and remuneration system is to attract, retain and motivate employees to ensure the Company can accomplish its mission and achieve business goals at optimal cost.

In 2017, 21 field trips to production sites of the Company were arranged, 52 employees are studying to obtain a university degree by correspondence

In 2017, the average income in the enterprises of PAVLODARENERGO JSC Group increased 7% compared to 2016.

AVERAGE INCOME IN ENTERPRISES OF PAVLODARENERGO JSC



INTANGIBLE INCENTIVES

To increase motivation for employee efficiency and productivity, every year the Company grants awards, commendations and honorary titles with announcements in corporate media.

In 2017, 53 employees and veterans of PAVLODARENERGO JSC Group received awards for outstanding work: 20 employees received corporate awards, 11 employees

– government awards, 15 employees – awards from the Veterans Council of the Kazakhstan Electric Power Association, 15 veterans and 6 employees – from the Kazakhstan Electric Power Association; furthermore, one employee was named "Distinguished Energy Sector Professional," three employees were named "Honorable Energy Sector Professional" and one employee was named "Distinguished Energy Sector Professional of the CIS" by the CIS Electric Power Council.

INTERACTION WITH TRADE UNIONS

PAVLODARENERGO JSC has a uniform collective agreement for 2016–2019. When preparing a collective agreement, the Company adheres to the principles of economic feasibility, sufficiency, joint responsibility and transparency. The collective agreement provides privileges and guarantees for the employees of PAVLODARENERGO JSC Group and their families.

Interaction with trade unions of PAVLODARENERGO JSC Group of companies:

- Monitoring of fulfillment of the terms of the collective agreement;

- Controlling working hours and rest time of employees in accordance with the labor contract, internal working guidelines and the employer’s other bylaws;
- Compensating employees in accordance with the Uniform Remuneration Regulation and other local remuneration regulations;
- Work in the Reconciliation Commission;
- Participation in the work of the commissions conducting comprehensive surveys on occupational safety and health, workplace certification;
- Working with the Veterans Council;
- Suggesting the required industrial sanitation activities based on employees’ proposals.

ITEM	2015	2016	2017
Number of employees in trade unions	3,865	3,616	3,229
Percentage of total head count, %	75.3	71.5	62.2

SOCIAL SUPPORT, GUARANTEES AND COMPENSATION

Social policy of PAVLODARENERGO JSC Group of enterprises is shaped by employees and trade unions representing them and is financed from budgets of the Group’s enterprises.

For social work with retirees, the terms of the collective agreement require the allocation of funds to the Council of PAVLODARENERGO. Every year, the Company honors World War II and labor veterans, providing material support to the non-working retirees in the form of food packages, cash rewards and coal supplies. Veterans are provided with home care, invited to concerts and gala dinners during WWII Victory Day celebrations.

In September 2017, PAVLODARENERGO JSC embarked on a new large-scale social project: construction of a nine-floor apartment building with 96 apartments for the Company’s employees. Completion is scheduled for December 2018.

In December 2017, in the run-up to the celebration of the Independence Day of the Republic of Kazakhstan and the Day of the Energy Sector Professional, a

new 200-person dormitory was opened in Pavlodar for students of the Installation College majoring in Power Engineering. The dormitory was built by PAVLODARENERGO JSC with the support of Central-Asian Power Energy Company JSC, under the framework of the memorandum of joint social projects signed between the Governor’s Office of Pavlodar region and CAPEC JSC.

SPORTS AND RECREATIONAL EVENTS

The Company conducts the following activities to promote healthy lifestyle:

- Providing fitness club memberships;
- Organization of active leisure;
- Developing collective traditions;
- Organization of annual competitions and professional contests.

A total of 1,134 employees visit sports facilities, e.g. swimming pools, tennis courts, football and volleyball clubs, etc.

GOALS	EXTRA BENEFITS
Motivation for long-term employment	Additional pension contributions at the rate of 5%; Bonuses for professional competitions; Rewards to celebrate anniversaries and holidays.
Effective compensation and benefits policy	Subsidizing camp tours to children under 14; Christmas gifts to children of employees; Home-to-work and work-to-home shuttle buses for employees.
Support of employee fitness and health	Insurance against accidents and illnesses in the workplace; Professional health insurance; Regular medical examinations; Reimbursement of the cost of sanitarium treatment.
Social support of employees	Financial assistance in case of childbirth; Financial assistance for funeral services; Paid sabbatical; Cash reward upon retirement; Additional paid leave in the event of a first marriage or death of an immediate family member.
Sports and recreational events	Reimbursement of food expenses to participants of sports competitions; Reimbursement of expenses on cultural events and group recreation.

Every year, employees of the PAVLODARENERGO Group of companies actively participate in sports and recreational activities in the enterprises, as well as on regional levels. The practice of holding sports events within the enterprises allows teams to achieve winning places in external competitions. The Group’s favorite sports include volleyball, cross-country skiing, fall cross-country running, football, swimming, chess, fishing.

In 2017, competitions were held in nine sports and were attended by 250 employees.

PLANS FOR 2018

In 2018, the Company will continue to implement HR policies aimed at employee retention and professional development. To this end, measures will be taken to support young professionals. Additionally, the Company continues to implement key performance indicators and automation of HR processes. This includes:

1. Further implementation of PROFENERGY initiative in the following areas:
 - Measures to support young employees and promote employee training and education;
 - Promoting mentoring;
 - Program to develop key employees;
 - Critical occupations program.

2. Development and introduction of key performance indicators (KPIs) to achieve strategic and operational objectives of the Corporation.

3. Providing the Company’s employees with social benefits and guarantees under the Uniform Collective Agreement of PAVLODARENERGO JSC Group of companies.

4. Further implementation of programs to improve the living conditions of production workers.

5. Unification of human resources processes and development of internal human resources guidelines.

6. Development and implementation of automated processes on payroll administration, employee assessment and productivity monitoring.

OCCUPATIONAL HEALTH AND SAFETY

STRATEGIC GOALS AND IMPLEMENTED MEASURES IN THE FIELD OF OCCUPATIONAL HEALTH AND SAFETY

In 2017, according to the approved occupational safety and health action plan of CAEPCO JSC for 2016-2017, the following activities were carried out in PAVLODARENERGO JSC Group of companies:

- Ambulance Call Form Regulation was approved and became effective;
- In case of employee misconduct in the workplace, his or her family members are notified;
- "Safety Traffic Light" graphic guidelines are displayed on occupational health and safety information boards;
- Occupational health and safety banners and posters are developed and displayed on information boards on the enterprises' premises;
- According to routine overhaul schedules, platforms and handrails were adjusted to meet occupational health and safety requirements, toe plates were restored.
- For the first time in its history, PAVLODARENERGO JSC Group of companies held an event to celebrate the World Health Day: this included an "Occupational Safety"-themed competition between young employees with 5 teams representing divisions of PAVLODARENERGO JSC and subsidiaries:
- Pavlodar EDC JSC, Pavlodar Heat Networks JSC, Pavlodarenergosbyt LLP;
- Pavlodar EDC JSC upgraded plumbing for technical and drinking water in the administrative building (replacement of pipes, filters, faucets, check valves, etc.);
- Pavlodar EDC JSC purchased two robot-simulators with multimedia software, "Grisha" and "Anton 1-01," designed for annual employee training in first aid in accordance with electrical labor guidelines;
- In order to prevent accidents, PAVLODARENERGO JSC Group of companies conducted training and unscheduled examination of occupational health and safety requirements when working with hoisting mechanisms, including near power lines, during excavation works, when working at height, basic requirements of the clearance system in Pavlodar EDC JSC and Pavlodar Heat Networks LLP, with the participation of the occupational safety departments of PAVLODARENERGO JSC, Pavlodar EDC JSC and Pavlodar Heat Networks LLP, as well as PAVLODARENERGO JSC's training center;
- In order to ensure the correct usage of protective equipment, tools, and devices used in the operation and maintenance of electrical installations of Pavlodar EDC JSC, the Company adopted "Guidelines for use and testing of protective equipment, tools and devices used in the operation and maintenance of electrical installations";

- In 2017, occupational health and safety departments of PAVLODARENERGO JSC, Pavlodar EDC JSC and Pavlodar Heat Networks LLP conducted 862 audits and revealed 9,328 violations all of which were resolved.

PAVLODARENERGO JSC Group of companies employs technical occupational safety inspectors. They interact with department managers, occupational safety and health teams, operational inspectors, industrial safety inspectors, as well as with government labor inspectors.

The main responsibilities of the technical occupational safety inspectors include:

- Protecting the rights and interests of the employees;
- Participation in the development and submission of proposals for the Occupational Safety section of the collective agreement, as well as in integrated programs and plans of priority measures to improve occupational safety practices developed by authorities;
- Monitoring of compliance with occupational safety guidelines at workplaces;
- Representing trade unions in government agencies, NGOs, courts of various instances when dealing with labor disputes where the Occupational Safety section of the Labor Code applies

PAVLODARENERGO JSC Group of companies established occupational health and safety councils. The councils are headed by chairpersons who are also employees. The councils consist of representatives of the employer and the trade union, plus technical labor inspectors.

Occupational safety and health councils perform the following functions:

- Examine the causes of occupational accidents and occupational diseases, analyze the effectiveness of measures related to occupational safety, review information and analytical materials about the actual state of occupational safety in the organization;
- Analyze the results of employee workplace certification, participate in the preparation of structural subdivisions and the organization as a whole for bringing workplace to compliance with occupational safety regulations;
- Review proposals on remedying the revealed violations in the field of occupational safety and health and creation of safe working conditions in the organization,

formulating programs, recommendations, decisions, etc., to preserve the life and health of workers in the course of employment;

- Assist in carrying out timely and quality employee training on occupational safety and health, conducting occupational health and safety tests, regular training of employees and trade union activists on relevant occupational safety regulations;

- Make proposals for the introduction of improved and new technology in order to create safe working conditions and eliminate hard physical labor;

- Inform employees of the organization on activities aimed at creating better working conditions and occupational safety practices, prevention of occupational accidents and occupational diseases, explaining regulations regarding special clothing, footwear and personal protective equipment and correct methods of using them;

- Participate in the review of occupational safety budgets, compulsory social insurance against industrial

accidents and occupational diseases; monitors spending aimed at improving occupational safety practices;

Measures to create safe working conditions include outreach efforts, inspection of equipment, introduction of advanced technologies, as well as activities aimed at enhancing safety in the workplace.

TYPES AND INCIDENCE OF OCCUPATIONAL INJURIES

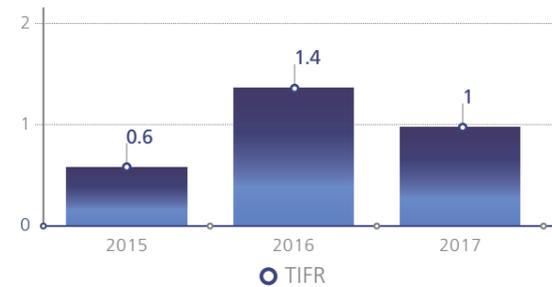
In 2017, PAVLODARENERGO JSC Group of companies had 5 accidents including 2 cases with minor and 3 cases with severe injuries. There were no worker fatalities in the reporting year. The accident incident rate was 0.66 per 1,000 employees with an average head count of 5,178 persons. In 2017, contractors experienced one accident with minor injuries.

Conclusion: In 2017, the number of workplace injuries compared to 2016 fell among the Company employees and contractors by 25% and 80% respectively. In 2017, there were no fatalities among the Company or contractors' personnel.

WORKPLACE INJURY STATISTICS

	2015	2016	2017
Employee head count	5,163	5,086	5,178
Number of injuries	3	7	5
Number of injured persons	3	7	5
Number of fatalities	0	1	0

Total injury frequency rate (TIFR) per 1,000 employees



Total injury frequency rate (TIFR) per 1,000 employees was calculated using the following formula:

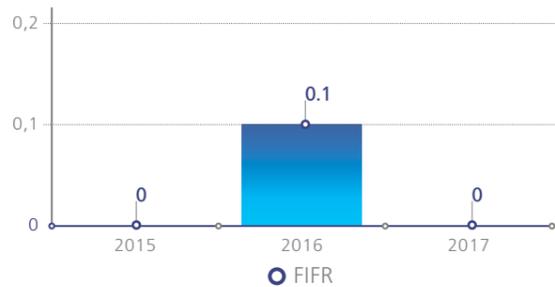
$$Kh = \frac{n \times 1000}{N}$$

where

n – total number of occupational injuries during the reporting period

N – average head count.

Fatal incident frequency rate (FIFR) per 1,000 employees



Fatal incident frequency rate (FIFR) per 1,000 employees was calculated using the following formula:

$$Kh1 = \frac{n1 \times 1000}{N}$$

where

n1 – total number of workplace fatalities during the reporting period

N – average head count.

PLANS FOR 2018

PAVLODARENERGO JSC Group of companies will continue a number of initiatives such as:

- Certification of work places and making them safe;
- In case of employee misconduct in the workplace, his or her family members will be notified;
- Replacing body belts with full body safety harnesses;
- Introduction of ambulance call forms in PAVLODARENERGO JSC Group of companies.

PAVLODARENERGO JSC has scheduled the start of construction of the training ground, where employees of electrical distribution companies will be able to practice overhead line maintenance and repair skills, and employees of heating network companies will practice heating network maintenance and repair skills.

CORPORATE EVENTS

- In April, the Company held a Humor Contest event to celebrate the Health and Safety Day. The participants included six teams with representatives

of Pavlodar EDC JSC, Pavlodar Heat Networks LLP, Ekibastuz CHP, Pavlodar CHP-2, Pavlodar CHP-3 and Pavlodarenergosbyt LLP. The contest was arranged by occupational health and safety specialists of PAVLODARENERGO JSC and CAEPCO JSC.

- In June, the family of George Malenkov visited Ekibastuz. Malenkov’s son Andrey, granddaughter Anastasia and grandson Andrey came with an exhibition devoted to their famous ancestor. From 1958 to 1968, Malenkov was head of Ekibastuz CHP. His work played a significant role in the development of Ekibastuz energy industry. Malenkov’s relatives visited the CHP, met with the staff and the management, discussed the possibility of joint social projects.
- In June, a photo contest called “Spring Lyricism” held by Energetik corporate newspaper among employees of PAVLODARENERGO JSC was completed. The four winners followed the contest rules and were able to combine the storyline, color palette and composition.
- In June, on the Day of Communications and Information Professionals, the Public Relations department of PAVLODARENERGO JSC received a merit award “For Vitality and Warmth” in the form of a figurine.

- In July–August, the Company held a creative crafts competition among children of the employees called “Second Life to Waste,” where 18 winners received a diploma and a one-day trip to Energetik resort.

In 2017, the Company held a number of events to celebrate the 20th anniversary of Central-Asian Power Energy Company JSC such as:

- in July–August, employees, their children and retirees of the Company (800 adults, 200 children, 10 retirees) took a trip to attend EXPO 2017 Future Energy;
- In September, PAVLODARENERGO JSC team took part in a mini-football tournament together with teams of subsidiaries of CAEPCO JSC from Pavlodar, Petropavlovsk, Almaty and Astana. The team of PAVLODARENERGO JSC took the 4th place;
- In the run-up to the celebration of the Day of Energy Professionals, an arts contest was held among the employees’ children with the topic “EXPO 2017 – Future Energy”; five children were named winners and two children were runners-up.
- In September, the participants of the Veterans Council of PAVLODARENERGO JSC were among the winners of the contest dedicated to the 35th anniversary of the Pavlodar veteran organization. Works by our veterans won the 2nd prize.
- In October, a Kazakh language classroom of Ekibastuz CHP was named one of the city’s top five. A branch of PAVLODARENERGO JSC’s training center was awarded a diploma as one of the best among Kazakh language institutions affiliated with industrial enterprises and organizations of Ekibastuz.
- During 2017, Energetik corporate newspaper and the Group’s corporate website featured materials about the 45th anniversary of Pavlodar CHP-3.

SOCIAL PARTNERSHIP

PAVLODARENERGO JSC is implementing a social policy aimed at supporting the communities in the regions of operation. In 2017, in the framework of the Memorandum of Joint Social Projects signed between the governor’s office of Pavlodar region and CAEPCO JSC (shareholder of CAEPCO JSC), a dormitory for students of the Pavlodar Installation School was commissioned with a housing capacity of 200 people.

The dormitory has furnished rooms for two or three persons with private bathrooms, laundries and kitchens on every floor equipped with all necessary appliances, plus there is a gym and a dance hall. Access to the dormitory is by special electronic pass-cards, while the corridors are monitored by video surveillance cameras.

Priority allocation is given to students majoring in Welding (to become electric and gas welders) and in Power Engineering (electrical power line and equipment installers).

Currently, the dormitory is fully managed by the Pavlodar Installation School of the Office for Education of Pavlodar region which is part of the governor’s office of Pavlodar region.

Furthermore, in 2017 under this memorandum PAVLODARENERGO JSC launched another large-scale social project in Pavlodar. The company is building a nine-floor apartment building for its employees in Usolsky residential area. Completion is scheduled for December 2018.

The Company’s charity activities mainly include help to the Company’s veterans: financial aid to non-working retirees, home visits to sick people, purchasing coal and honoring the veterans-retirees of the Company. For social work with retirees, collective agreements provide for the allocation of funds to the Council of Veterans which operate at all enterprises of the Corporation. Every year, the Company honors World War II and labor veterans, providing material support to the non-working retirees. Veterans are provided with home care, invited to concerts and gala dinners during WWII Victory Day celebrations.

In 2017, PAVLODARENERGO JSC participated in the nation-wide initiative “Road to School” under the motto “Happy Childhood Territory.” It was the second year that the Company took an active part in the initiative and provided material support to orphaned children.

PAVLODARENERGO JSC is a general sponsor of the children’s national first category tennis tournament PAVLODAR-OPEN. Every year young sportsmen from different cities throughout Kazakhstan participate in the competition.

ABOUT THE REPORT

This report was prepared by PAVLODARENERGO JSC following based on the results achieved in 2017. The report provides information on the activities of PAVLODARENERGO JSC and its subsidiaries.

The document includes the Sustainable Development Report prepared accordance with the GRI Standards: "The main scenario of conformity". The report is prepared on an annual basis. The previous Annual Report, which included 2016 Sustainable Development Report, was published in July 2017.

No substantial changes to the content of the report have been made, while the Company now follows the GRI Standards for information disclosure. Section "Index of GRI elements" contains a table explaining where to find standard reporting elements and performance data. This report has no external verification.

MATERIAL ASPECTS AND BOUNDARIES

In accordance with the Principles for defining report content as per GRI Standards, the materiality of the topics disclosed in the Report was assessed. The procedure of materiality assessment includes the following main steps:

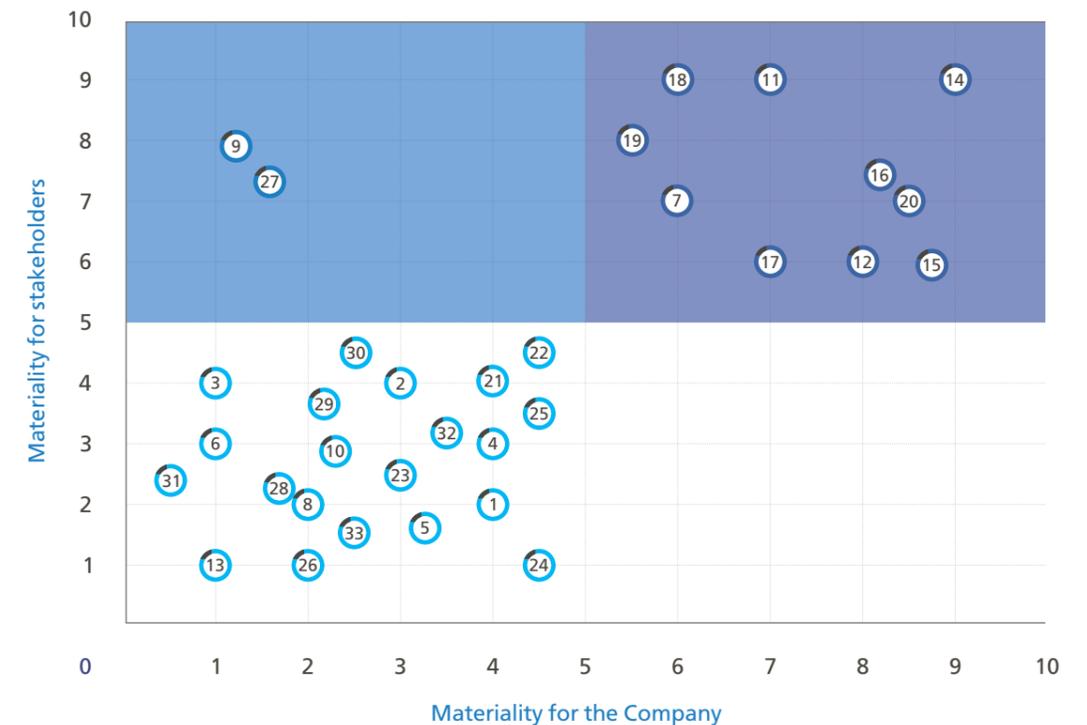
Step 1. Identification of the widest possible range of potentially important topics related to sustainable development based on GRI Standards.

Step 2. Analysis of the extent of impact of the indicated topics within and beyond the Corporation. Selection

of topics for further disclosure, taking stakeholder engagement into consideration. Besides that the priority of topics from the point of view of their impact to the Company's activity and its development strategy were also analyzed.

Step 3. In accordance with the opinion of stakeholders and strategic plans of the Corporation, key topics were ranked in order to determine priorities and develop Materiality Map. Average score was attributed to each aspect of operations based on the impact on the Corporation (horizontal axis) and its stakeholders (vertical axis). The highest priority was determined for aspects located in the Medium Blue area: they were given priority during preparation of the Report. Also the report partially discloses aspects of the Velvet area.

LIST OF TOPICS AND MATERIALITY MAP



LIST OF TOPICS

NO.	ASPECTS	NO.	ASPECTS
1	Economic performance	18	Training and education
2	Market presence	19	Diversity and equal opportunities
3	Indirect economic impacts	20	Non-discrimination
4	Procurement practices	21	Freedom of association and collective bargaining
5	Anti-corruption	22	Child labor
6	Anti-competitive behavior	23	Forced or compulsory labor
7	Materials	24	Precautions and safety measures
8	Energy	25	Rights of indigenous people and minorities
9	Water	26	Respect for human rights man
10	Biodiversity	27	Local communities
11	Emissions	28	Assessment of vendor compliance with social criteria
12	Sewage and waste	29	Public policy
13	Assessment of vendor compliance with environmental standards	30	Customer health and safety
14	Compliance with environmental guidelines	31	Product and service labeling
15	Employment	32	Respect for customer privacy
16	Relations between employees and management	33	Violations of social and economic legislation
17	Occupational health and safety		

GRI ELEMENT INDEX

GRI STANDARD AND THE YEAR OF ITS PUBLICATION	ITEM	PAGE NUMBER, SECTION	EXCEPTIONS/ COMMENTS	
GRI 101: Reporting principles (2016)				
GRI 102: General information (2016)	Organization profile			
	102-1 Name of organization	Section "Business profile", p. 8		
	102-2 Areas of business	Section "Business profile", p.8 and section "Business model", p. 17		
	102-3 Location of the head office	Section "Contacts", стр. 110		
	102-4 Geography of operations	Section "Geography of operations", p.18		
	102-5 Form of ownership	Section "Corporate structure", p. 8		
	102-6 Markets	Section "Geography of operations", p.18 Section "Subsidiaries", p. 19		
	102-8 Information on employees	Section "Human resources and social policy", p. 80		
	102-9 Supply chain	Section "Business model", p. 17		
	102-10 Significant changes in the Company	Section "Organizational structure", p. 49	no changes	
	102-11 Principles of precaution	Section "Environmental spending", p. 76		
	102-12 Support of external initiatives	Section "Environmental management", p. 73 Section "Greenhouse gas emissions", p.74 Section "Environmental management system", p. 79		
	102-13 MembershipsStrategy	-	The Company is a member of the Kazakhstan Electricity Association (KEA)	
	Strategy			
	102-14 Statement of management	Section "Letter from Chairman of the Board of directors, p. 4 Section "Letter from the General director", p. 6		
Ethics and integrity				
102-16 Values, principles, standards and rules of conduct	Section "Corporate governance code compliance report", p. 58			

GRI STANDARD AND THE YEAR OF ITS PUBLICATION	ITEM	PAGE NUMBER, SECTION	EXCEPTIONS/ COMMENTS
Governance			
102-18 Management structure		Section "Organizational structure", p. 49 Section "Activities of the committees of the Board of directors", p. 51	
Stakeholder engagement			
102-40 List of stakeholders		Section "Stakeholder engagement", p. 70	
102-41 Collective agreements		Section "Interaction with trade unions", p. 86	
102-42 Identification and selection of stakeholders		Section "Stakeholder engagement", p. 70	
102-43 Approaches to engagement		Section "Stakeholder engagement", p. 70	
102-44 Key topics and concerns raised		Section "Stakeholder engagement", p. 71	
About the report			
102-45 Basis of consolidation		Section "About the report", p. 92	
102-46 Determining the content of the report and boundaries		Section "List of topics and materiality map", p. 93	
102-47 List of material topics		Section "List of topics and materiality map", p. 93	
102-48 Recalculation of data from past periods		-	Indicators were not changed and are comparable with the data provided in previous annual reports of the Company.
102-49 Changes in the content of the report		-	Not changed
102-50 Reporting period		Section "About the report", p. 92	
102-51 Date of the last publication		Section "About the report", p. 92	
102-52 Reporting cycle		Section "About the report", p. 92	
102-53 Contact information for questions about the content of the report		Section "Contacts", p.109	
102-54 GRI compliance level		Section "About the report", p. 92	
102-55 GRI Content Index		GRI Element Index , p. 94	
102-56 External assurance		Section "About the report", p. 92	

GRI STANDARD AND THE YEAR OF ITS PUBLICATION	ITEM	PAGE NUMBER, SECTION	EXCEPTIONS / COMMENTS
Significant topics			
Ecology			
GRI 103: Approaches to management (2016)	103-1 Materiality and boundaries	Section "List of topics and materiality map", p. 92-93	
	103-2 Approaches to management	Section "Environmental impact management", p. 73	Comprehensive environmental impact management policy covers all major topics in this area.
	103-3 Management assessment	-	not held
Materials			
GRI 303: Water (2016)	301-1 Materials used by weight or volume	Section "Environmental impact management", p. 73	
Water			
GRI 303: Water (2016)	303-1 Total water withdrawal by source	Section "Water management and water resources conservation", p. 76	
	303-2 Water sources significantly affected by withdrawal of water	Section "Water management and water resources conservation", p. 77	
	303-3 Water sources significantly affected by withdrawal of water	Section "Water management and water resources conservation", p. 77	
Emissions			
GRI 305: Emissions (2016)	305-1 Direct greenhouse gas emissions	Section "Greenhouse gas emissions", p. 74	
	305-4 Intensity of greenhouse gas emissions	Section "Greenhouse gas emissions", p. 74	
	305-2 Reduction of greenhouse gas emissions (COR2R)	Section "Greenhouse gas emissions", p. 74	
	305-7 NOx, SOx, and other significant harmful emissions	Section "Prevention of air pollution", p. 74	
Waste			
GRI 306: Sewage and waste (2016)	306-1 Total sewage by quality and destination	Section "Efficient management and disposal of industrial wastes", p. 77-78	
	306-2 Total weight of waste by type and disposal method	Section "Efficient management and disposal of industrial wastes", p. 77-78	
Compliance			
GRI 307: Compliance (2016)	307-1 Information on non-compliance with environmental laws and regulations	Section "Environmental spending", p. 76	

GRI STANDARD AND THE YEAR OF ITS PUBLICATION	ITEM	PAGE NUMBER, SECTION	EXCEPTIONS / COMMENTS
Social category			
GRI 103: Approaches to management (2016)	103-1 Materiality and boundaries	Section "List of topics and materiality map", p. 92-93	
	103-2 Approaches to management	Section "Human resources policy", p. 80	Integrated HR policy covers all major topics in this area.
	103-3 Management assessment	-	not held.
Employment			
GRI 401: Employment (2016)	401-1 Head count and turnover	Section "Employee turnover", p. 83	
Employee/management relations			
GRI 402: Employee/management relations (2016)	402-1 Minimum notice periods regarding significant operational changes	Section "Human resources and social policy", p. 80	
Health and safety			
GRI 403: Health and safety (2016)	403-1 Representation of employees in the official joint health and safety committees with the participation of representatives of management and employees	Section "Strategic goals in the field of occupational health and safety and measures implemented", p. 88	
	403-2 Type and frequency of workplace injuries, occupational diseases, lost-workday rate, absenteeism rate in the workplace, total number of work-related fatalities	Section "Types and incidence of occupational injuries", p. 89	
Training			
GRI 404: Training and education (2016)	404-2 Professional development programs	Section "Employee training and development", p. 82	
Diversity and equal opportunities			
GRI 405: Diversity and equal opportunities (2016)	405-1 Composition of the governing bodies	Section "Employee structure by category and age", p. 81	

GRI STANDARD AND THE YEAR OF ITS PUBLICATION	ITEM	PAGE NUMBER, SECTION	EXCEPTIONS/ COMMENTS
Local communities			
GRI 103: Approaches to management (2016)	103-1 Materiality and boundaries	Section "List of topics and materiality map", p. 92-93	
	103-2 Approaches to management	Section "Stakeholder engagement", p. 71	
	103-3 Management assessment	-	not held.
GRI 413: Local communities (2016)	413-1 Programs aimed at local community engagement, community impact assessment and community development	Section "Stakeholder engagement", p. 71	
Further Information			
GRI G4 Electric Utilities protocol	G4-EU1 Installed capacity	Section "Operating highlights", p. 32	
	G4-EU2 Power generation	Section "Operating highlights", p.32	
	G4-EU3 Number of household, industrial, institutional and commercial customer accounts	Section "Geography of operations", p. 18	
	G4-EU4 Length of overhead and underground electrical transmission and distribution lines by control mode	Section "Production highlights," p.11	
	G4-EU5 Allocation of COR2R emission allowances or their equivalents	Section "Greenhouse gas emissions", p. 74	

FINANCIAL STATEMENTS

FINANCIAL STATEMENTS
CONSOLIDATED FINANCIAL CONDITION REPORT
AS OF DECEMBER 31, 2017

FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL CONDITION REPORT
AS OF **DECEMBER 31, 2017**
(THOUS. KZT)

	DECEMBER 31, 2017	DECEMBER 31, 2016
ASSETS		
LONG-TERM ASSETS:		
Fixed assets	120,167,271	115,406,857
Goodwill	1,687,141	1,687,141
Intangible assets	457,713	358,755
Advances paid	2,923,346	1,022,304
Other financial assets	1,000	1,000
Deferred tax assets	363,835	467,523
Other non-current assets	1,007,172	955,078
Total long-term assets	126,607,478	119,898,658
CURRENT ASSETS:		
Inventories	2,503,466	2,877,057
Trade receivables	6,697,232	6,476,275
Advances paid	930,641	1,142,014
Prepaid income tax	33,002	77,990
Other current assets	1,463,883	764,199
Other financial assets	1,539,319	1,055,981
Cash	697,759	557,829
Total current assets	13,865,302	12,951,345
TOTAL ASSETS	140,472,780	132,850,003
EQUITY AND LIABILITIES		
EQUITY:		
Owner's equity	16,663,996	16,663,996
Additional paid-in capital	1,188,176	1,188,176
Revaluation reserve	23,226,465	24,533,989
Retained earnings	32,345,817	26,462,967
Total equity	73,424,454	68,849,128

CONSOLIDATED FINANCIAL CONDITION REPORT
AS OF **DECEMBER 31, 2017** (CONTINUED)
(THOUS. KZT)

	DECEMBER 31, 2017	DECEMBER 31, 2016
LONG-TERM LIABILITIES:		
Loans	24,326,339	21,036,006
Deferred income	4,345,484	2,420,725
Deferred tax liabilities	18,991,354	17,469,769
Commitments for reclamation of fly ash landfill areas	135,280	121,143
Accrued benefits	77,697	74,686
Finance lease commitments	1,410,865	582,987
Other non-current liabilities	2,965,685	176,730
Total non-current liabilities	52,252,704	41,882,046
CURRENT LIABILITIES:		
Bonds currently outstanding	-	8,729,071
Short-term loans and long-term loans currently outstanding	7,409,107	5,933,510
Current accrued benefits	6,493	5,472
Trade payables	4,135,089	4,501,900
Advances received	918,144	853,630
Accrued income tax	68,681	-
Finance lease commitments	316,957	168,420
Other liabilities and accrued expenses	1,941,151	1,926,826
Total current liabilities	14,795,622	22,118,829
TOTAL EQUITY AND LIABILITIES	140,472,780	132,850,003

CONSOLIDATED PROFIT, LOSS AND OTHER TOTAL INCOME STATEMENT
FOR THE YEAR ENDING **DECEMBER 31, 2017** r.
(THOUS. KZT)

	2017	2016
INCOME	49,884,794	45,069,458
COST OF GOODS SOLD	(33,635,865)	(30,819,342)
GROSS EARNINGS	16,248,929	14,250,116
General and administrative expenses	(3,648,877)	(3,332,808)
Selling expenses	(667,398)	(633,912)
Financial expenses	(2,640,610)	(2,686,580)
Financial income	143,332	93,546
Income from exchange rate difference, net	169,742	182,592
Other income, net	132,473	510,497
EARNINGS BEFORE TAX	9,737,591	8,383,451
INCOME TAX EXPENSES	(2,120,916)	(1,908,546)
EARNINGS AND TOTAL COMPREHENSIVE INCOME for the year	7,616,675	6,474,905
EARNINGS PER SHARE		
Earnings for the year per share, basic and diluted, in KZT	45.71	38.86

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDING **DECEMBER 31, 2017**
(THOUS. KZT)

	OWNER'S EQUITY	ADDITIONAL PAID-IN CAPITAL	REVALUATION RESERVE	UNDISTRIBUTED EARNINGS	TOTAL EQUITY
As of January 1, 2016	16,663,996	1,188,176	25,880,707	18,641,344	62,374,223
Earnings and total annual income	-	-	-	6,474,905	6,474,905
Amortization of revaluation reserve	-	-	(1,346,718)	1,346,718	-
As of December 21, 2016	16,663,996	1,188,176	24,533,989	26,462,967	68,849,128
Earnings and total annual income	-	-	-	7,616,675	7,616,675
Amortization of revaluation reserve	-	-	(1,307,524)	1,307,524	-
Dividends declared	-	-	-	(3,237,459)	(3,237,459)
Dividends declared	-	-	-	196,110	196,110
As of December 31, 2017	16,663,996	1,188,176	23,226,465	32,345,817	73,424,454

CONSOLIDATED CASH FLOW STATEMENT
FOR THE YEAR ENDING **DECEMBER 31, 2017**
(THOUS. KZT)

	2017	2016
Cash flow from operating activities:		
Earnings before taxes	9,737,591	8,383,451
Adjustments for:		
Amortization and depreciation	5,039,480	4,797,641
Financial expenses	2,640,610	2,686,580
Provision for doubtful debts	93,672	278,281
Losses from disposal of fixed assets	32,228	40,270
Employee compensation expenses	15,284	16,743
Financial income	(143,332)	(93,546)
Income from exchange rate difference	(169,742)	(182,592)
Provision for inventory impairment	95,610	53,358
Provision for unused leaves	44,450	31,452
Cash flow before changes in floating capital	17,385,851	16,011,638
Changes in floating capital		
Inventory change	277,981	944,804
Changes in trade receivables	(187,893)	(1,315,778)
Change in advances paid	175,994	(480,717)
Change in other receivables	(826,107)	267,434
Change in trade payables	(163,523)	321,346
Change in deferred income	76,868	(37,199)
Change in advances received	64,514	(23,422)
Reduction in accrued benefits	(11,252)	(9,469)
Change in other liabilities and accrued expenses	1,255,345	676,229
Cash flow from operating activities	18,047,778	16,354,866
Income tax paid	(431,002)	(19,875)
Interest paid	(3,219,268)	(2,472,207)
Net cash flow from operating activities	14,397,508	13,862,784
Deposits	(378,774)	(50,217)
Acquisition of fixed assets	(11,618,403)	(12,278,255)
Acquisition of intangible assets	(157,049)	(143,825)

CONSOLIDATED CASH FLOW STATEMENT
FOR THE YEAR ENDING **DECEMBER 31, 2017** (CONTINUED)
(THOUS. KZT)

	2017	2016
Interest from deposits	78,448	64,348
Interest from deposits	(12,075,778)	(12,407,949)
Cash flow from financial activities:		
Loans taken	11,777,890	5,173,695
Loans repaid	(6,952,035)	(7,538,606)
Bonds issued	100,438	400,134
Bonds retired	(8,388,266)	-
Dividends paid	(1,383,023)	(251,000)
Interest-free loan taken/repaid	1,065,000	(83,000)
Income from government subsidies	1,847,890	819,792
Principal repayment on the financial lease obligation	(246,519)	-
Net cash used in financial activities	(2,178,625)	(1,478,985)
NET INCREASE (DECREASE) IN CASH	143,105	(24,150)
CASH at the beginning of year	557,829	580,983
CASH at the beginning of year	(3,175)	996
CASH at the end of year	697,759	557,829

GLOSSARY, ABBREVIATIONS

Overhead power line	– is an electric line for electricity transmission through wires located outdoors and attached using isolators and fittings to supports or brackets.
Overhead transmission lines	– are the constructions used for electricity transmission through wires.
Polluting emissions	– are various types of waste released to the environment.
Gigacalorie	– is the unit of thermal energy used for measurements in heat generation, heating systems and utilities.
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.
Ash and slag waste	– is the dust compound (ash), as well as coal slag generated by combustion of an organic part of coals in the form of volatile compounds (smoke and steam), as well as non-flammable mineral part of the fuel released in the form of solid chemical residues.
Investment program	– is a combination of intentions and actions aimed at implementing investments and achieving certain financial, business, production and social targets, constitutes an investment project.
Insider information	– is any information about securities and related transactions, as well as information about the issuer of those securities and its activities that is not known to third parties, whose disclosure can have a significant impact on the market value of these securities.
Insider information	– is any information about securities and related transactions, as well as information about the issuer of those securities and its activities that is not known to third parties, whose disclosure can have a significant impact on the market value of these securities.
Information policy	– means priorities and standards in the information activities of the Company with respect to its target audiences and the public.
Committees of the Board of Directors	– are collegiate bodies formed to work in a special field related to management and administration.
Boiler	– is a device for obtaining pressurized steam or hot water because of fuel combustion, the use of electric power, heat from waste gases or technological process.
Power transmission line	– is a structure composed of wires (cables) and support devices for the transmission of electric power from plants to consumers.
Quota mechanism	– is setting limits on emissions of certain substances (for example, carbon dioxide, sulfur dioxide, nitrogen oxide) in a particular area over a specific period.
Waste	– is material resources lost during the production process. Waste and by-products (useful products of complex processing of raw materials produced unintentionally) can be used as secondary raw materials.
General meeting of shareholders	– is the supreme management body of the joint stock company consisting of the shareholders that own common registered stock of the company. To resolve issues within their competence according to the Charter, the company's shareholders gather for general meetings periodically, but at least once a year (annual general meeting of shareholders).
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.
Executive Board	– is the executive collegiate body responsible for day-to-day operations of the company.
Industrial monitoring	– is a comprehensive system of environmental monitoring, assessment and forecasting the environmental changes caused by production factors.
Nature protection activities	– are all types of economic activities of a company aimed at reducing and eliminating the negative impact on the environment, conservation, improvement and rational use of natural resources.
Disclosure	– is providing information about the company's activities to target audiences as often as required by organizations responsible for regulating the activities of issuers, in accordance with the needs of those interested in this information and based on best corporate disclosure practices.
Available capacity	– is equal to installed capacity of the equipment minus the power that is impossible to generate for technical reasons (insufficient chimney draught, cooling systems of turbine condensers, etc.).

Corporate governance system	– is the system of interaction between shareholders and management of the company, including its Board of Directors, as well as with other stakeholders, whereby shareholders' rights are exercised; a complex of mechanisms enabling shareholders (investors) to control company executives and resolve issues.
Internal control system	– is a set of procedures, institutional arrangements and practices adopted by the company's management to ensure proper and effective financial and business operation.
Board of Directors	– is the management body of the company, which is formed by the election of its members at a general meeting of shareholders.
Average rate	– is a rate calculated as sales revenue divided by useful output.
Combined heat and power plant (CHP)	– 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.
Titanium emulsifiers	– are devices made of titanium and designed for removing ash particulates from combustion gases.
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.
Internal audit department	– is responsible for control over administration and various aspects of the company's operations in line with internal procedures; representatives of a special supervisory body carry out its activity in order to provide assistance to management bodies.
Emissions control	– is a complex of actions for collection, transportation, processing, re-use, or disposal of waste from production process and control of the entire process.
Installed thermal capacity of the plant	– is the 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.
Target audience	– includes groups inside and outside the company, with which it comes in contact while carrying out its activities.

LIST OF ACRONYMS

ASKUE	– Automatic system for commercial accounting of electric power
ASKUTE	– Automatic system for commercial accounting of heat energy
ARCS	– Automated remote control system
ISO	– International organization for standardization
OHSAS	– Occupational health and safety management systems
JSC	– Joint-stock company
ASCAHE	– Automatic system for commercial accounting of heat energy
ASCAE	– Automatic system for commercial accounting of electric power
GDP	– Gross domestic product
OL	– Overhead line.
OPL	– Overhead power line
Gcal	– gigacalorie
Gcal/h	– gigacalories per hour
GPIFD	Government program of fast industrial and innovation development
ND	– nominal diameter
EBRD	– European Bank for Reconstruction and Development European Bank for Reconstruction and Development EBRD)

FAC	– fly ash collector
IIF	– Islamic infrastructure fund
Blr	– Boiler
kWh	– Kilowatt per hour
kV	– Kilovolt
kVA	– Kilovolt-Ampere
Kilovolt-Ampere	– Cable line
SG	– Switchgear
PTS	– Packaged transformer substation for outdoor installation
EPL	– Electric power line
MVA	– Megavolt ampere
MW	– Megawatt
MP	– Minimum penalty
VAT	– Value added tax
PS	– Pumping station
EP	– Environment protection
PP	– Percentage point
SS	– Substation
PLA	– Power line area
ABCL	– aerial bundled conductor lines
NKEDC	– North-Kazakhstan Electrical distribution company JSC
SKE	– SEVKAZENERGO JSC
MM	– Mass media
QMS	– Quality management systems
EMS	– Environmental management system
HC	– Heating chamber
HP	– Heating pipeline
CHP	– Combined heat and power plant
ON	– Operational needs
CAPEC	– Central-Asian Power Energy Company
CAEPCO	– Central-Asian Electric Power Corporation

CONTACTS

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AUDITOR

PAVLODARENERGO JSC's auditor is Deloitte Limited liability partnership (License for conducting auditing activities No. 0000015, series MFU-2, dated 13.09.2006, issued by the Ministry of finance of the Republic of Kazakhstan, the license is perpetual).

Registered office: Deloitte LLP, Almaty, Almaty financial center, Building B, 36 Al-Farabi Ave.

REGISTRAR

PAVLODARENERGO JSC's registrar is Integrated Securities Registrar Joint-Stock Company (state registration certificate No. 1678-1910-02-JSC, issued on 11.01.2012). Registered office of Integrated Securities Registrar JSC: Almaty, 141, Ablai-Khan Ave.



PAVLODARENERGO
JOINT-STOCK COMPANY