

KAZAKHSTAN UTILITY SYSTEMS



KAZAKHSTAN UTILITY SYSTEMS LLP IS ONE OF THE LARGEST PLAYERS IN THE ENERGY **MARKET OF THE COUNTRY** 

# 2021

SUSTAINABLE ENERGY IS OUR PRIORITY

ANNUAL REPORT





KAZAKHSTAN UTILITY SYSTEMS

2021

SUSTAINABLE ENERGY Is our priority

ANNUAL REPORT





STRATEGY

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KEY

MANAGEMENT	SUSTAINABLE	CORPORATE	RIS
REPORT	DEVELOPMENT REPORT	GOVERNANCE	MA

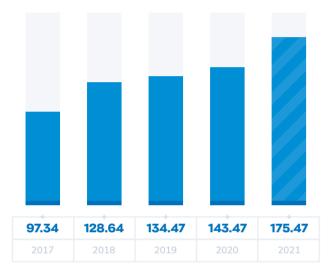
## KEY **INDICATORS**

### Revenue, billion KZT

EBITDA, billion KZT

18.8\*

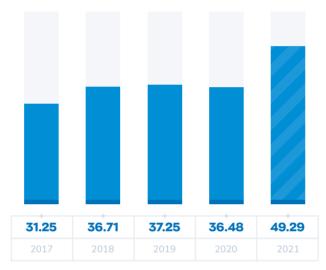
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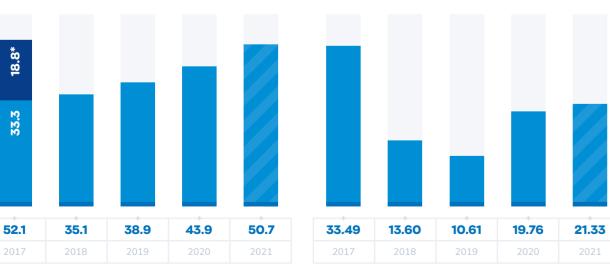
Gross profit, billion KZT

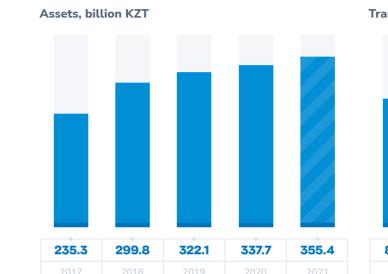
ABOUT

COMPANY

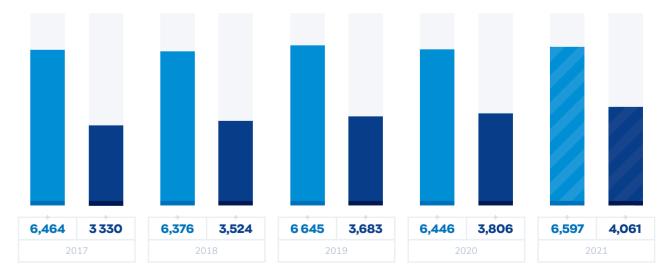


### Net profit, billion KZT





### Production and sale of electric power, million kWh

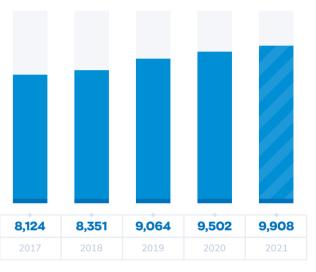


\* Gain from a bargain purchase of subsidiaries (in accordance with IFRS standards).









Electricity sales

STRATEGY

# MESSAGE OF THE CHAIRMAN OF THE SUPERVISORY BOARD

### **Dear Ladies and Gentlemen!**

Let me greet you on behalf of the Supervisory Board of Kazakhstan Utility Systems LLP! We present to you the next annual report, which reflected all the main events, financial and production indicators of Kazakhstan Utility Systems LLP for 2021. Currently, there is a positive trend in the energy sector of the republic, which certainly entails the reform of the entire industry market.

With constructive interaction between the regulator and energy market participants, domestic power plants are at the stage of active modernization of their generating assets, and energy transmission enterprises systematically upgrade the electric grid economy.

Thanks to relevant, timely measures, we see a concrete result and the expected effect in a form of reducing the depreciation of fixed assets of generating enterprises and improving the quality of power supply during transmission and distribution of electric energy.

We can confidently predict that stable investment in the domestic energy system by industry market participants will continue in the near future. Kazakhstan Utility Systems LLP has always set as its main priorities a systematic, sustainable increase in energy capacity, the introduction of innovative methods in asset management, innovative, high-tech solutions aimed at stable and uninterrupted energy supply to consumers in the regions of its presence.

Based on the results outlined in this annual report, I can note with satisfaction that KUS Group completed 2021 with indicators demonstrating stable growth and progressive development of its divisions – generation of electric power and heat, transmission and its sale to end consumers. These annual results demonstrate the success of the corporate strategy and the financial and economic course of the KUS Group.

Kazakhstan Utility Systems LLP, adhering to its fundamental principles, will continue the policy aimed at the systematic, integrated development of the company. Implementation of large-scale investment programs, expansion of generating capacities, construction of new power grids, as well as the customer orientation of sales enterprises form the basis of the conceptual postulates of our Group. I am convinced of the further development of the Group and the success of the projects being implemented. Taking into account the existing potential, many years of experience and opportunities, I sincerely wish the entire team of Kazakhstan Utility Systems to achieve their ambitious goals and believe in their high results. **APPENDICES** 

Annual Report 2021

### Dinmukhamet Idrissov

Chairman of the Supervisory Board

#### MANAGEMENT SUSTAINABLE REPORT **DEVELOPMENT REPORT**

CORPORATE

# **MESSAGE** OF GENERAL DIRECTOR

### **Dear readers!**

Let me welcome you on behalf of the management of Kazakhstan Utility Systems LLP!

In accordance with the concept of openness and transparency of our company, we are pleased to present you this annual report, which contains economic indicators and dynamics of the KUS Group's production activity for the year 2021. In this report, we have fully covered the entire range of goals and solved tasks that we set for and achieved in the reporting year.

I am sure that the information published in this annual report will be useful both for our partners, with whom we have a long-term, mutually beneficial cooperation, and for potential partners who will be able to get acquainted in detail with all aspects of the activities of Kazakhstan Utility Systems LLP reflected in the report.

To date, Kazakhstan Utility Systems LLP is one of the largest, system-forming participants in the country's energy market. Without stopping at the achieved indicators, we are setting ourselves new tasks aimed at increasing our potential and strengthening our positions in the industry.

The system structure of Kazakhstan Utility Systems LLP consists of the following divisions: generation of heat and electric power, its transmission and distribution, as well as the sale of electricity and heat.

The corporate development strategy we systematically implement covers all structural divisions of the company. The effectiveness of our policy has been proven by obvious results. The year 2021 continued the set pace, which we have been following for many years.

Speaking about specific figures, I will only say that over the past 10 years, the production of electric power at KUS Group's heat power plants has increased by 160.4% and the heat power - by 67.8%.

During the same period, about 10,000 kilometers of power transmission lines, as well as more than 2,000 substations and distribution points, were built and reconstructed by the power transmission companies that are part of our structure. The volume of electric power transmission services via electric networks has increased by 4.7 billion kWh over the past 10 years. The number of subscribers of the KUS Group's sales companies has increased by more than 360,000 over the past decade.

In 2021 alone, the increase in the volume of electric power transport by power transmission companies compared to 2020 amounted to 4.3% or 407 million kWh The, volume of electric power sales by the KUS Group's sales companies in the reporting year increased by 6.7% or 254.9 million kWh compared to 2020. The number of subscribers of the KUS sales companies has increased by about 19,116 in 2021.

Of course, the growth of production indicators became possible thanks, first of all, to the conscientious work of the many thousands of employees of the Kazakhstan Utility Systems Group, the team of which we are rightfully proud. I would like to emphasize that the highest value of our company is human capital, highly gualified specialists focused on a specific result.

All the projects that we are implementing - modernization of existing assets, construction of new power grids, expansion of generating and transmission capacities, introduction of new technologies and automation of services in sales companies - are aimed at providing high guality and stable supply of heat and electric power to our consumers in the regions where the Group operates.

Steady, natural population growth, an increase in the number of small and medium-sized businesses, the growth of housing construction, the construction of social facilities entail the need for energy supply to new consumers. In this regard, we are systematically working to increase the power capacity of the heat power plants, modernize the power grid complex, and put new energy facilities into operation on a permanent basis. These are not one-time events, but an ongoing process that we work on every day.

Undoubtedly, the effectiveness of implementation of the corporate development strategy would not have been possible without the comprehensive support and trust of the Supervisory Board of the KUS Group.

I am convinced that corporate unity and further cohesive work of the Kazakhstan Utility Systems Group will allow us to achieve the goals that we have set for ourselves in the long-term future and continue the dynamic development of the company.



### KAZAKHSTAN **IITH ITY SYSTEMS**

ABOUT **KEY EVENTS** COMPANY

STRATEGY

MANAGEMENT REPORT

SUSTAINABLE CORPORATE **DEVELOPMENT REPORT** GOVERNANCE

# **KEY EVENTS OF THE YEAR** 2021 AND REALIZATION OF PRIORITY TASKS

### 01. Kazakhstan Utility Systems LLP

KEY

- On March 4, 2021, the international rating agency Fitch Ratings confirmed Kazakhstan Utility Systems LLP's long-term issuer default ratings (IDR) in foreign and national currencies as "B+". The rating outlook is "Stable".
- On April 6, 2021, Kazakhstan Utility Systems LLP had fully repaid its obligations under the issued bonds in the amount of 856.744 thousand

### 02. Karaganda Energocenter LLP

- Recultivation of the 1st, 2nd sections of the ash dump No. 2 of the Karaganda CHPP-3 was carried out.
- The 3rd section of the ash dump No. 2 of the Karaganda CHPP-3 was put into operation.
- Start of construction of ash dump No. 3 of Karaganda CHPP-3.
- The project of reconstruction of the heating plant of the Karaganda CHPP-3 was updated.
- An investment program was developed and approved to increase the tariff for heat energy for 2021-2026.

### 03. Ust-Kamenogorsk CHPP LLP

- Investment agreement No. 8 dated 20.01.2021 was concluded with the Ministry of Energy of the Republic of Kazakhstan for the modernization. reconstruction, expansion and/or renewal of Ust-Kamenogorsk CHPP for 2025-2034.
- Construction of ash dump No. 5 (power supply).
- Development of the project of replacement of the steam pipeline 140 ata (3rd stage).
- Implementation of the project of replacement of the main steam pipelines 140 ata (1st stage).
- Reconstruction of the vibration measuring complex TG-11.

### 04. Ontustik Zharyk Transit LLP

- The construction of 10-0.4 kV electrical networks was completed in Karabastau mcrdt., Karatobe mcrdt., Otyrar mcrdt., Yelaman mcrdt., Kyzylzhar mcrdt. of Shymkent.
- Reconstruction of 110 kV HV line with a total length of 48 km was carried out.
- Reconstruction of the 35 kV HV line with a total length of 79 km was carried out.
- Reconstruction of a number of substations (SS) with a voltage of 110/35/10 kV was carried out.
- Reconstruction of a number of overhead and cable lines with a voltage of 0.4-10 kV, as well

as transformer substations (TS) and distribution points (DP) of 10/0.4 kV with the use of selfsupporting insulated wires (SIW) was completed.

- implemented on 0.4 kV networks of Shymkent and Turkestan region on ten SS in the amount of 78 metering devices (MD) and 4,514 MDs on 22 TSs.
- Construction of SS-35/10 kV and HV-35-10 kV in Arvs. Sairam district. was completed.
- Construction of HV-35-10 kV in Shubarsu settlement. Ordabasv district. PTL-35/10 kV a length of 5.67 km was completed.
- An automated dispatch control system (ADCS) was implemented on SS-110/35/10 kV

### 05. Karagandy Zharyk LLP

- In connection with the start of the investment program 2021-2025, work has begun on development of design documentation for:
  - construction of 110/10 kV "Novy Maikuduk", 110/6 kV "Fedorovka" and 110/10 kV "Bolashak" SSs:
  - reconstruction of 110/35/6 kV Karaganda, 35/10 kV Tikhonovka, 110/35/10 kV Botanicheskava, 35/10 kV Komarovskava, 35/10 kV Zhosaly SSs.

2021

#### • Completed in 2021:

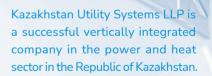
- construction and installation works on cable and overhead lines (KHL) 0.4 kV with a total length of 30 km, KHL 6(10) kV with a total length of 7 km, and on TS 0.4/6(10) kV in the amount of 66 pcs.;
- main work on the first stage of SCADA implementation at the upper voltage level over 35-220 kV networks.

### 06. Mangistau Regional Electricity **Network Company JSC**

- HV 110 kV with a length of 6 km was put into operation, and a 110/10 kV substation in the area of the Warm Beach in Aktau.
- Power lines 10 kV with a length of 10.3 km in the area of Warm beach was put into operation.
- The UMS was implemented at substations "1G", "2G", "3G", "Pribrezhnaya", "SS-4", "N-2", "Kuyulus", "RMZ", "Recreation Center".
- The SCADA was implemented at SS-220/110/10
- A number of works on SCADA implementation at 220,110,35 kV substations was completed.
- Modernization (reconstruction) of the water fire extinguishing system on AT-1,2 SS-220/110/10 kV "Uzen" was carried out.



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KAZAKHSTAN UTILITY SYSTEMS

Revenue structure, 2021

CORPORATE

GOVERNANCE

**66.7**%

# 5.1% 0.5% 11.0% 16.6% Sale of electric power Transmission of electric power Sale of heat power Income from maintaining the availability of electric power Other

### Brief company profile

Kazakhstan Utility Systems LLP (KUS LLP, KUS, Company, KUS Group or the Group) is a successful vertically integrated company in the power and heat sector in the Republic of Kazakhstan.

Enterprises of the KUS Group form an industrial chain from power and heat generation to their delivery to the end user. In 2021, the Company operated in Karaganda, East Kazakhstan, Mangistau and Turkestan regions, as well as in Shymkent. All KUS enterprises have unified management processes that provide effective interaction of all structural subdivisions of subsidiaries.

Development strategy of the Group corresponds to priorities of the government policy in the field of energy. The key strategic directions are modernization of existing assets, expansion of generating and power transmission capacities, as well as customer orientation of retail companies. KUS is a stable company with a stable financial position, which is confirmed by ratings of international rating agency Fitch Ratings.

The company is a member of the Kazakhstan Electricity Association (KEPA). KEPA includes 108 corporate members: energy producers and power grid companies, large industrial energy consumers, industry research and design institutes, power equipment producing companies, and other companies. In addition, KUS is a member of the KAZENERGY Association and the RK National Chamber of Entrepreneurs "Atameken".

### Vertical integration

**KEY EVENTS** 

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\*

The Group is a vertically integrated Company that includes 9 energy companies at the end of 2021. The number of employees of the Group's companies in 2021 is 8.7 thousand people.

The Group's Segments



- KaragandyZhyluSbyt LLP
- Raschetnyi servisnyi center LLP
- Energopotok LLP

2021

015

### **Profiles of** subsidiaries

### GENERATION

Karaganda Energocenter LLP is a company that combined two power plants of the Group – Karaganda CHPP-1 and Karaganda CHPP-3.

1,285 people		
The total number of employees o	of KEC LLP	
Karaganda CHPP-1		
Electric power:		
24 MW	24 MW	
installed	available	
Heat power:		
392 Gcal/h	226.8 Gcal/h	
installed	available	
Karaganda CHPP-3		
Electric power:		
670 MW	532.2 MW	
installed	available	
Heat power:		
1,432 Gcal/h	1,069.1 Gcal/h	
installed	available	

STRATEGY

MANAGEMENT	SUSTAINABLE	CORPORATE
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### **TRANSMISSION AND DISTRIBUTION**

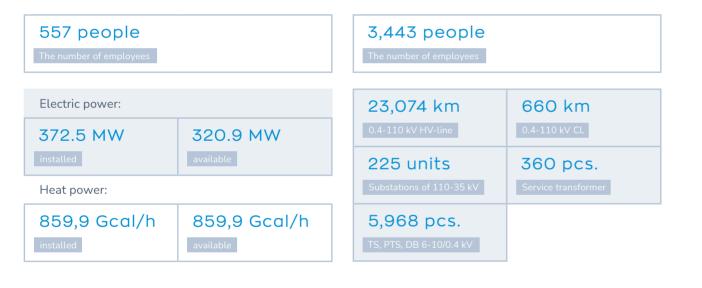
**Ontustik Zharyk Transit LLP** is a regional power grid company in Shymkent and Turkestan region.

0.4-110 kV electrical networks, designed for electric power supply to urban, industrial and agricultural consumers in Shymkent and Turkestan region:

Karagandy Zharyk LLP is a power grid company in the Karaganda region.

0.4-220 kV electrical networks, designed for electric power0.4-220 kV power networks, designed for electric powersupply to urban, industrial and agricultural consumers ofsupply to urban, industrial and agricultural consumers inKaraganda and Karaganda region:Mangistau region:

#### Ust-Kamenogorsk CHPP LLP



<b>1,570 people</b> The number of employees	
5 149 km	<b>1,744 km</b>
0.4-220 kV HV-line	0.4-35 kV CL
105 units	<b>2,232 units</b>
Substations of 220/110/35 kV	TS, PTS, DB 6-10/0.4 kV
21.4 thou km <sup>2</sup> The service area	

**Zhuzimdyk Wind Farm LLP** is a project for development of alternative energy in Turkestan region (Shayan village, Baidibek area of TR), which is at the stage of concluding an "off-take" contract with the state.

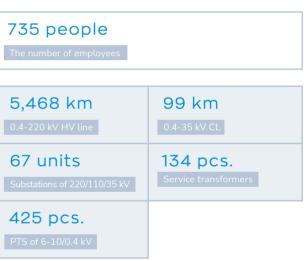
40 MW The installed capacity of the Zhuzimdyk wind



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### Mangistau Regional Electricity Network Company JSC

is a power grid company in Mangistau region.



SALE

KaragandyZhyluSbyt LLP is a power supply company in Karaganda and Karaganda region.

201 people	281	peop	е
------------	-----	------	---

is the number of employees

2 district and 2 city sales areas.		
Number of power supply subscribers:		
200,307	8,512	
subscribers are individuals	subscribers are legal entities	

Number of heat supply subscribers:

158,219	4,799	
subscribers are individuals	subscribers are legal entities	
Number of subscribers for domestic hot water (DHW):		
132,316	2,427	

Raschetnyi servisnyi center LLP is a power supply company in Karaganda region.

49 people is the number of employees

2 district and 1 city sales areas.				
Number of power supply subscribers:				
61,201 1,788				
subscribers are individuals subscribers are legal entities				

Energopotok LLP is a power supply company in Turkestan region and Shymkent.

702 people					
is the number of employees					
21 regional and 5 city sales sites.					
Number of power supply subscribers:					
643,891	31,443				
subscribers are individuals	subscribers are legal entities				

Financial performance of subsidiaries by the end of 2021

Company
Karaganda Energocenter LLP
Ust-Kamenogorsk CHPP LLP
Karagandy Zharyk LLP
Ontustik Zharyk Transit LLP
Mangistau Regional Electricity Network Company JSC
KaragandyZhyluSbyt LLP
Raschetnyi servisnyi center LLP
Energopotok LLP





Assets, thousand KZT	Net profit, thousand KZT
84,793,685	11,458,820
41,078,179	5,458,694
74,584,450	2,122,052
48,879,679	2,923,033
58,881,685	1,225,283
6,703,356	449,550
726,121	74,325
7,644,100	960,915

STRATEGY

### Brief Company history

### 2008-2010

- On November 3, 2008 Management company Kazakhstan Utility Systems LLP was formed.
- The Group gained control over 100% ownership interest in Ontustik Zharyk Transit LLP and Karagandy Zharyk LLP to create a vertically integrated energy company.
- In 2010, the Group joined the participants of Karaganda Energocenter LLP by making an additional contribution to the authorized capital and redistribution of shares between the participants.

with the purpose of issuing technical conditions for the fastest possible identification of connection points.

- Signing of EPC-contract for expansion of Karaganda . CHPP-3, installation of power unit No. 6.
- Commissioning of a new turbine No. 5 with a capacity of 120 MW.
- Commissioning of the cooling tower No. 4 of Karaganda Energocenter LLP.
- Implementation of the UMS by the company Karagandy Zharyk LLP, the 3rd stage.

### 2011

- Obtaining control over 100% shares in KaragandyZhyluSbyt LLP, Raschetnyi servisnyi center LLP, Energopotok LLP and Ontustik Zharyk LLP with the goal of creating a vertically integrated energy company.
- Decision on the construction of a new power unit (boiler) + turbine) at 110 MW and 185 Gcal/h at Karaganda CHPP-3.
- Karagandy Zharyk LLP commissioned two new substations.
- Karagandy Zharyk LLP has implemented a utility metering system (UMS), the second stage.
- of Karagandy Zharyk LLP was completed.
- Ontustik Zharyk Transit LLP has implemented an automatic database and consumers system (ADCS)

### 2012-2013

- Signing an agreement with Development Bank of Kazakhstan JSC for opening a credit line of KZT 30 billion for Karaganda Energocenter LLP.
- Construction of new ash dumps for dry storage of waste at stations of CHPP-1 and CHPP-3 of Karaganda Energocenter LLP.
- Construction of Zharyk substation (SS) of Karagandy Zharvk LLP.
- Ontustik Zharyk Transit LLP has begun construction of 110 kV Severnaya substation and 110 kV Nursat substation.
- The construction of 110-kV HV line RHPP-1 CHPP-2
   Establishment of Energy Center LLP. The company's statutory activity is the production of heat and power energy. 100% share in the partnership belongs to KUS LLP.

### 2014

- Since 2013 there is a process of expansion of CHPP-3 of Karaganda Energocenter LLP, by installing turbine No. 6 and boiler No. 8.
- Karagandy Zharyk LLP commissioned 220/110/10 kV Zharyk and 110/35/6 kV Santekhnicheskaya-2 substations.
- Ontustik Zharyk Transit LLP commissioned Severnaya substation (2x40.000 kVA). constructed and modernized 10/0.4 kV networks, and various voltage class substations.
- The project "Construction of a wind power station in the South Kazakhstan region" was initiated.
- Subsidiary marketing organizations expanded their customer base and introduced the "Unified billing system" for suppliers of all types of utilities and, buildings were acquired to create contact centers.

### 2015

- In December, Ontustik Zharyk Transit LLP introduced a 10/0.4 kV UMS, as a result, 31 KTP and 3,740 consumers were tied up in Turkestan in 2015.
- Ontustik Zharyk Transit LLP designed, built and commissioned 110/10-10 kV Nursat closed type substation with installed capacity of 2 x 40 MVA power transformers.
- Karagandy Zharyk LLP constructed and commissioned 220/110/35-kV Zharyk substation.

2021

Karagandy Zharyk LLP constructed and commissioned 110/35/10-kV Santechnicheskava-2 and 110-kV CHPP-3 Santechnicheskaya-2 HV line, L = 1.3 km with the installation of AC wire 300 sg. mm.

In order to diversify the Group's activities through the development of alternative energy, on July 15, 2015, Zhuzimdyk Wind Farm LLP was established, with 100% shares belonging to KUS LLP.

In November, in Karaganda region, for the convenience of consumers, a joint project with ERC LLP for implementation of a unified payment document (UPD) was completed and developed on the principle of "one window", the number of cash handling units was increased, and the electronic queue system was introduced.

Installation of the new 110-MW power unit was completed at Karaganda CHPP-3 of Karaganda Energocenter LLP. A trial run of the unit was carried out at full capacity with an ad hoc acceptance of equipment; a new fan cooling tower was commissioned.

New contact centers were opened in subsidiaries of retail organizations of the South Kazakhstan region and Shymkent.

### 2016

 Kazakhstan Utility Systems LLP has acquired 6.54% of the common shares of Mangistau Regional Electricity Network Company JSC.

- In the trading system of Kazakhstan Stock Exchange JSC (KASE), the first specialized trades on placement of bonds of Kazakhstan Utility Systems LLP were held.
   The international rating agency Fitch Ratings confirmed
- that Kazakhstan Utility Systems LLP has long-term issuer default ratings (IDR) in foreign and national currencies at the level of "BB-". The rating outlook is "Stable".
- During the international contest "Choice of the Year No. 1 in Kazakhstan" Kazakhstan Utility Systems LLP officially received "Energy Company No. 1 of 2016 in Kazakhstan" award.
- A new power unit commissioned at Karaganda CHPP-3 of Karaganda Energocenter LLP, which includes a 110 MW power turbine and a 400 Gcal/h steam heat boiler. Due to this, Karaganda CHPP-3 became the largest heat and power plant in the Republic of Kazakhstan.
- In Shymkent 110/10 kV Nursat power substation of closed-type was commissioned.
- Ontustik Zharyk Transit LLP has developed the project and completed modernization of 0.4-10 HV transmission lines with the use of self-supporting insulated wire with total length of 0.4 kV overhead transmission line – 220 km for 0.4-kV HV lines, for 6-10 kV HV line – 7 km.
- Karagandy Zharyk LLP reconstructed TSS, PTS with power equipment – 119 pcs, CL – 52 km, ACL (SIW) – 88 km; a new building of dispatcher station of the operational dispatching service for high-voltage electrical networks.
- In 2016, KaragandyZhyluSbyt LLP switched to unified payment document (UPD) in settlements with consumers.

 KUS LLP has attracted funding in the amount of 882.4 million KZT through successful placement of bonds on KASE.

- A credit line was opened with SB Sberbank JSC for purchase of 100% of shares in AES Middelzee Holding B.V. for a total amount of 7.2 billion KZT maturing in March, 2024. 6.6 billion KZT was used.
- Generating assets purchased in East Kazakhstan region: Ust-Kamenogorsk CHPP and Sogrinsk CHPP with total installed capacity 447.5 MW.
- 37.5% of the shares of Mangistau Regional Electricity Network Company JSC (MRENC) from the total number of outstanding shares were purchased, and the total number of MRENC shares in the KUS portfolio reached 43.73%.
- Karaganda CHPP-3 completed the first stage of project to increase the number of dams of 3rd section of ash dump No. 2.
- At Ust-Kamenogorsk CHPP, the project for reconstruction of existing ash dump is completed, and construction of new ash dump for storage of ash and slag was started.
- MRENC JSC constructed 220 kV power line Aktau– Karazhanbas with autotransformer 1x150 MVA at tie distribution substation "Karazhanbas".
- In the course of diversification of activities, the project for maintenance of household utilities successfully expanded the market for services.
- Number of serviced personal accounts of consumers has increased by almost 20 thousand, or 1.8%, compared to 2016.

### 2018

- 6.77% of ordinary shares in subsidiary MRENC JSC were acquired. The Group owns 50.19% of placed shares of MRENC JSC, the share of ownership of voting shares – 52.63%.
- Transaction for sale of Sogrinsk CHPP LLP was completed.
- At Karaganda CHPP-3, the 2nd stage of the project to build up the dams of the 3rd section of the ash dump No. 2 was completed.

 Ust-Kamenogorsk CHPP LLP is currently completing a project for reconstruction of the existing ash dump, and construction of a new ash dump for storing ash

CORPORATE

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**DEVELOPMENT REPORT** 

- and slag waste has begun.
   In March 2018, MRENC JSC attracted financing from the European Bank for Reconstruction and Development in the amount of 12.3 billion KZT from the Bank's regular resources and 5.3 million US dollars from a special Green Climate Fund will be used for the implementation of the investment program.
- Expanding the customer base of Energopotok LLP through the participation of customers of Ontustik Zharyk Transit LLP.

### 2019

MANAGEMENT

REPORT

- At Karaganda CHPP-3, the third stage of the project for increase in number of dams in the third section of the ash dump No. 2 was completed.
- The project for the construction of the 1st section of the new ash dump No. 3 at Karaganda CHPP-3 was completed.
- Reconstruction of the ash dump No. 3 was performed with the use of ash and slag waste in the body of the dam for the first time in domestic practice; construction of a new ash dump No. 5 has begun; boiler unit No. 15 was upgraded to reduce nitrogen oxide emissions; implementation of automated process control system on boiler unit No. 15 was completed.
- Construction of a closed 110/10-10 kV "Yassy"
   substation with a capacity of 2\*40 MVA with 110 kV lines in Turkestan has started with a plan for
  - commissioning in 2020 at Ontustik Zharyk Transit LLP.
- At OZhT LLP, the UMS has been implemented with coverage of 12 high-voltage substations (for wholesale market entities), as well as on 0.4 kV networks with coverage of 3,940 subscribers of Shymkent (for retail market entities).

Annual Report 2021

Construction of 110/10 kV "Tikhonovka" SS is completed, as well the reconstruction of the 110 kV HV line "CHPP-3 – Karaganda" was completed. Technical modernization of 6-35-110 kV equipment was performed at nine substations: Novaya Dubovka, Karabas SS, Kzyl SS, Fedorovka-2 SS, Astakhovka TSS, Karbyshevka SS, Karaganda SS, Karagaily SS, and Saran SS.

The construction of the power line – 220 kV Aktau – Karazhanbas with autotransformer 1x150 MVA at URPS-220/110/35/10 kV Karazhanbas has been completed at Mangistau Regional Electricity Network Company JSC:

- construction of 110 kV transmission line from Uzen -220 kV SS to 110/35/6 kV SS (with the length 1x18.7 km) with replacement of 1x40 MVA transformer was completed;
- modernization of outdoor switchgear 110 kV of SS 220/110/10 kV "Uzen".
- a number of substations (9 pcs.) and HV lines with a voltage of 35 kV and higher (180 km) were purchased.

#### 2020

On March, 2020, the international rating agency Fitch Ratings confirmed Kazakhstan Utility Systems LLP's long-term issuer default ratings (IDR) in foreign and national currencies as "B+". The rating outlook is "Stable".

KEC LLP has concluded an investment agreement for the expansion of the Karaganda CHPP-3 with the Ministry of Energy of the Republic of Kazakhstan.

 Dams of the 3rd section of the ash dump No. 2 of the Karaganda CHPP-3 was completed.

• At Ust-Kamenogorsk CHPP LLP:

 boiler of station No. 13 has been overhauled with the replacement of a smooth-tube water economizer of the 1st stage with a membrane one;



 boiler unit No. 14 has been overhauled with the replacement of burners (8 pcs.);

**MESSAGE FROM** 

THE MANAGEMENT

KEY

INDICATORS

- reconstruction of discharge heat No. 5 of conveyor 5/2;
- construction of a package transformer substation (PTS) with power supply networks for coastal pumping station No. 2 (purchase of equipment).
- At Ontustik Zharyk Transit LLP:
  - closed substation 110/10-10 kV "Yassy" with a capacity of 2\*40 MVA with 110 kV cable lines in Turkestan was completed and put into operation;
  - construction of 10-0.4 kV electrical networks in residential areas of Zhuldyz, Badam, Tasken, Bazarkakpa, Martobe, Shymkent was completed;
  - reconstruction of 110 kV HV line with a total length of 9 km was carried out.
  - reconstruction of the 35 kV HV line with a total length of 27.75 km was carried out.
  - reconstruction of a number of SS was carried out: 110/35/10 kV "Samsonovka", 110/35/10 kV "Shaulder", 110/35/10 kV "Abai-Bazar", 110/35/6 kV "No. 4", 110/35/6 kV "Cement", 35/10 kV "KSKhT", 35/10 kV "Kaitpas", 35/10 kV "Slavyanka", 35/10 kV "Darmino", 110/35/10 kV "Turkestan";
  - reconstruction of a number of HV lines-0,4-10 kV, KL-0,4-10 kV, as well as PTS, TS, DB 10/0.4 kV was completed;

 The UMS was implemented over 0.4 kV networks with coverage of 3,171 subscribers in Shymkent, Turkestan (for retail market entities).

STRATEGY

ABOUT

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At Karagandy Zharyk LLP:

**KEY EVENTS** 

- 220 kV outdoor switchgear 220/110/35/10 kV "Saran" TS – with the use of SF6 circuit breaker instead of S and SCB;
- replacement of supports and wires along the entire route of the 110 kV HV line "Karaganda – New City";
- technical modernization of the SS equipment in the amount of 34 pcs.
- overhaul of the 35/110/220 kV HV line 10 pcs.
- At Mangistau Regional Electricity Network Company JSC:
  - power lines 10.5 kV with a length of 10.5 km in the area of Warm beach was put into operation;
  - modernization (reconstruction) of 6 kV equipment was performed at 110/35/6kV Sai-Utes Substation;
  - repair of metering devices UMS-6-10/0.4 kV was carried out;
  - modernization of RPAE at SS-220/110/10kV Uzen was carried out;
  - workshops for the mechanization and transport service of MRENC JSC were put into operation;
  - power line-10 kV from 35/10 kV KTZh SS to 10 kV HV-line of cell 113 PS-110/10-10 "Kuryk" 1x7 km was put into operation.

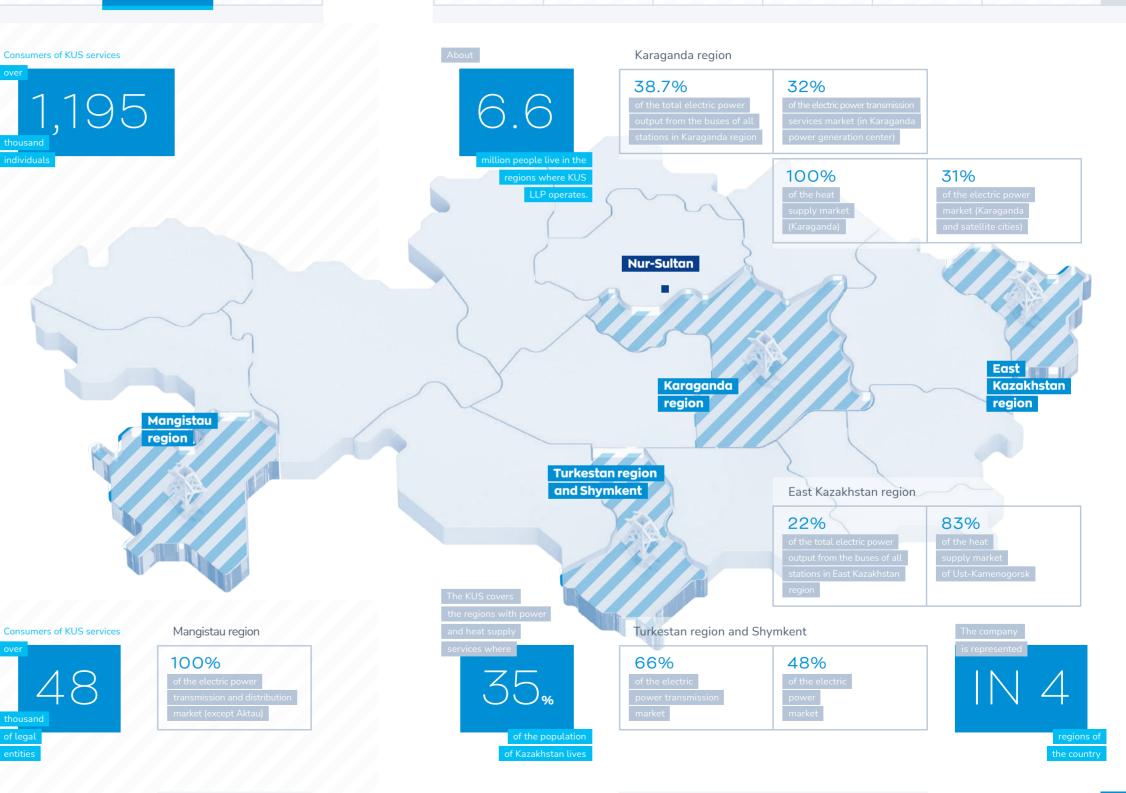
KAZAKHSTAN

**UTILITY SYSTEMS** 

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In 2021, the Group was represented in 4 of 14 regions of Kazakhstan -Karaganda, Turkestan, East Kazakhstan and Mangistau. The total population of these regions is 6.6 million people, which is about 35% of the republic's population.

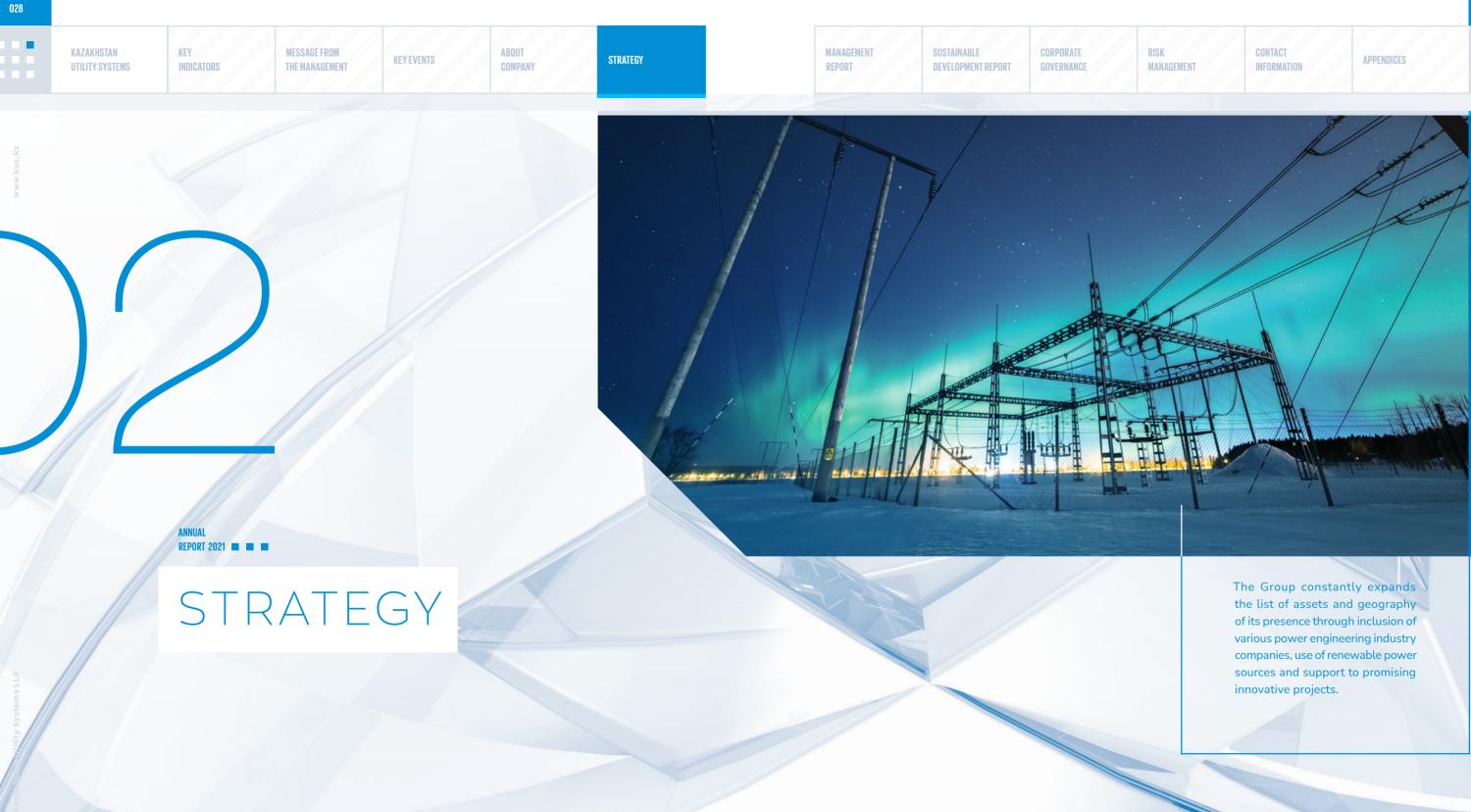
KEY

In 2021, consumers of KUS services were more than 1,195 thousand individuals and over 48 thousand of legal entities.

In Karaganda region, the Group focuses on production of heat, electric power energy and chemically purified water, as well as transmission, distribution and sale of electric power and heat. In Turkestan region and in Shymkent – only transmission, distribution and sale of electric power, in the East Kazakhstan – production of heat and power energy, in Mangistau - transmission and distribution of electric power.

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KAZAKHSTAN UTILITY SYSTEMS

**KEY EVENTS** 

STRATEGY

### Mission, vision, values

### MISSION

The mission of the KUS Group is to provide reliable and high-quality power supply to its consumers, to promote long-term economic growth and social stability in the regions of presence, their prosperity and progress. The Group also sees its mission in preservation and protection of the environment when using natural resources rationally. At the same time, the Group places its unity with consumers, honest and open dialogue and implementation of joint tasks as the main priority.

### VISION

The KUS Group is an actively developing structure that is leading in key segments of power and heat power of Kazakhstan: generation, transmission and sale of energy.

The Group constantly expands the list of assets and geography of its presence through inclusion of various power engineering industry companies, use of renewable power sources and support to promising innovative projects.

### VALUES

**Reliability** is ensuring reliability and high quality of the services provided by the Company.

Professionalism and team spirit - improvement of professional level of employees as one of the most important tasks of the Company.

**Human capital asset** is a belief in success of a common goal, mutual respect, assistance to each employee in growth and development, understanding of their interests and needs.

Innovativeness is continuous aspiration to improve and optimize already existing approaches and technologies as well as strenuous support and promotion of development of new products and solutions.

### **GOALS AND PRIORITIES**

The goal of KUS LLP is to increase the value of the Company, to maintain profitability and stability of business, to ensure shareholders' return on investment through increase in the value of assets.

To achieve these goals, the Company is constantly working to develop and optimize business processes, including reducing costs, increasing the efficiency of operations, improving the quality of products and services provided, and applying new advanced technologies.

Kazakhstan Utility Systems LLP considers quality management, labor safety, and preservation of life, health, environmental protection as an integral part of its mission of a high-tech, efficient and dynamically developing company in the Republic of Kazakhstan.

The main priorities of Kazakhstan Utility Systems LLP that allow us to ensure quality and timely implementation of all projects are:

- **1)** systematic training and continuous improvement of professional skills of KUS Group employees, improvement of human resources, preservation and enhancement of human capital assets of KUS LLP:
- 2) maximum of effective use of existing production, financial and human assets of the KUS Group to achive set goals;
- 3) customer orientation of retail companies, providing constant feedback to consumers, improving services;
- 4) strict observance of legislation of the Republic of Kazakhstan, government legal acts regulating energy policy, which are guides to the KUS Group in its activities;
- 5) construction of new power grids, expansion of generating and power transmission capacities, stable growth of production indicators of enterprises belonging to the KUS Group;
- 6) modernization of existing energy assets, use of innovative solutions at their production facilities, scientific, innovative approach and optimization of energy costs;
- 7) constant focus on preserving the environmental balance in the course of operations of the organizations belonging to the KUS Group, implementation of the most progressive, energy efficient and safe solutions considering the environment and labor protection, technical solutions for implementation of projects;

- 8) openness and transparency of all activities of KUS Group, provision of necessary information to consumers, partners and the public about the work of KUS LLP, including media coverage, taking into account the high social significance of the products manufactured and sold by the Group:
- 9) continuous analysis of activities of all suppliers and contractors of the KUS Group, building long-term, mutually beneficial relationships with them.

### RESPONSIBILITY

The Group strives to create value in the long term for various stakeholders, and voluntarily assumes responsibility for taking into account the interests of stakeholders in making strategic decisions.

### **Responsibility to the government** – security:

- ability of the Company'S networks and energy assets to meet the growing demand for heat and electric power; sufficiency and reproducibility of the resource base, effective cost management;
- efficient and reasonable use of funds invested in the Company, as well as-minimization of investment risks; coordination of the Company's plans and regional development plans in such a way as to meet the longterm energy supply needs of the regions.

Responsibility to shareholders - protection and implementation of the rights and interests of shareholders by further improving the corporate governance system (in

**KEY EVENTS** 

STRATEGY

# Strategy of Kazakhstan Utility

### Systems LLP

The Group occupies one of the leading places in the list of energy companies in the country. The strategic goal of KUS is to become one of the three largest energy companies in Kazakhstan in the future for 5 years.

Raw material base	Generation	Transmission	Transmission and distribution	Sales
Diversification of activities by entering the coal mining industry.	Development and expansion of existing generating capacities.	State monopoly	Modernization of existing electrical networks.	Increase in the volume o sales of products.
	Development of alternative and		Acquisition and development of new electric grid facilities.	Uninterrupted power supply.
	renewable energy sources.			Improving the quality of customer service.
The Group implements management innovations	The emphasis is on stimulating the	The Group strives to support the development	Formation of a positive image of the company	Active promotion of the company's interests at
and international	expansion of the flow of	of human capital by	and a strong brand.	the legislative level.
corporato governanco	international investments	building responsible		
standards.	in the KUS and the energy sector of the country as a whole.	relationships with employees.		

activities by entering the coal mining industry.	expansion of existing generating capacities. Development of alternative and renewable energy sources.	
The Group implements management innovations and international corporate governance standards.	The emphasis is on stimulating the expansion of the flow of international investments in the KUS and the energy sector of the country as a whole.	The G support of hur buildin relat e

terms of increasing the value of assets), based on modern Kazakh and international standards.

**Responsibility to consumers** is to ensure reliable and high-quality electric power and heat supply, as well as transparent justification of the tariff policy.

Responsibility to the environmental community and future generations is to reduce the negative impact on the environment through the introduction of environmentally friendly and safe technologies for generating, transporting electric power, energy environmental management. Responsibility to contractors and suppliers – creating

saving, and improving the efficiency of the Company's

a transparent competitive environment and fulfilling all obligations imposed on the Company.

Responsibility to the staff, corporate social **responsibility** – ensuring a stable and competitive level of wages, creating decent and safe working conditions, opportunities for professional growth; assistance to socially vulnerable segments of the population.



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 KAZAKHSTAN Utility systems	KEY Indicators	MESSAGE FROM The Management	KEY EVENTS	ABOUT Company	STRATEGY	MANAGEMENT Report	SUSTAINABLE Development report	CORPORATE Governance

for 2022

N⁰ Key performance indicators UoM Fact for 2019 Fact for 2020 EBITDA million KZT 38,941 43,857 1. Capitalization million KZT 214,180 331,364 2. The average capacity of the electric power supply 3. MW 660.4 648.0 Volume of electric energy transport 9,502 million kWh 9,064 4. % 10/9.39 Losses in networks 9.01 5.

(as of January 1, 2022)

### **Business model**

Using existing resources, by implementing a long-term sustainable development strategy, we create values for stakeholders.

### **OUR RESOURCES**

### **Production capacity**

The Group has a strong production base, which is a combination of power and heat generating sources, as well as power transmission networks, heating plants and substations.

Generation:		Transmission and distribution:	
Electric power capacity of	sources:	33,691 km	
1,066.5 MW 877.1 MW		length of HV lines is 0.4–220 kV	
installed	available	2,503 km	
Heat power capacity of sources:		length of cable lines	
2,683.9 Gcal/h	2,071.5 Gcal/h	427 units	
installed	available	number of substations	

### Personnel structure

The basis of the Company's activity is professional employees who are committed to their business and share its values.

### 8,678 people

e number of employees of the Group

### Capital

The company strives to effectively use the shareholders' capital and borrowed financing, ensuring proper profitability and stably performing the financial liabilities, which is confirmed by high credit ratings ("B+" from Fitch Ratings).

178,358 million KZT cequity capital
91,746 million KZT
principal debt on loans and bonds

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RISK MANAGEMENT

**APPENDICES** 

Annual Report 2021

Adj. plan for 2021 / Fact for 2021	Plan for 2022
50,769 / 50,746	55,921
372,285 / 372,204	375,029
679 / 670	710
9,548 / 9,908	9,950
9.08 / 9.1	9.05



ABOUT COMPANY

STRATEGY

Enterprises of the KUS Group form an industrial chain from power and heat generation to their delivery to the end user. In 2021, the Company operated in four regions of the country. Effective interaction of all structural subdivisions of subsidiaries is provided.

### Heat and power generation

The basis for heat and power generation of the Group consists of 3 combined heat and power plants. CHPP-1 and CHPP-3 are included in subsidiary organization of Karaganda Energocenter LLP which is the only centralized supplier of heat power and the largest electric power supplier in Karaganda. Ust-Kamenogorsk CHPP is a subsidiary company of Shygys Energo LLP. The power and heat generated by Ust-Kamenogorsk CHPP covers 80% of the city's housing and utility services. Group assets play a significant role in the energy sector of these regions of operation.

### Electric power transmission and distribution

The Group's power networks are a set of substations, switchgears and transmission lines with a voltage of 0.4–220 kV. Three subsidiary power grid companies provide electric power to urban, industrial and agricultural consumers in Karaganda, Turkestan and Mangistau regions.

### Sale

Power retail enterprises of the Group carry out direct work on interaction with consumers, which are both individuals and large industrial companies. Electric power retail companies of the Group operate in Karaganda and Turkestan regions.

#### Investment activity

**KEY EVENTS** 

The Group implements several large-scale activities to modernize production facilities aimed at significantly improving the efficiency and reliability of equipment. Execution of the investment program allows us to reduce the regulatory technical losses, as well as to increase the reliability of power supply to regions covered.



**VALUE ENGINEERING** 

(results of 2021)

### Consumers

Consumers of KUS services in four regions of the Group's presence are more than 1,195 thousand individuals and over 48 thousand of legal entities.

### 6.597 million kWh of electric power was produced

5,927 thousand Gcal

#### Personnel

The Company is maintaining the status of a responsible employer, strives to create the best working conditions for its employees, providing them with the appropriate material and non-material remuneration, training and development of competencies.



### Founders and creditors

An effective system of corporate and risk management is aimed at maintaining the balance of interests of founders and creditors and Group's development.

# 10,029,831 thousand KZT

#### Governmental bodies and regions of presence

The Company is a large employer and taxpayer in the regions of its presence, and also provides infrastructure development and supports local communities.

23 545 thousand KZT		
was spent on the social services		
25.3 billion KZT		
was the capital investments of the Group for the year		

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### 2021

### **COMPETITIVE ADVANTAGES**

- Strategic importance In 2021, the Group and its subsidiaries supply regions of presence with power and heat, where 6.6 million people of Kazakhstan's population live.
- Being a vertically integrated, large scale and diversified, the Group operates to a maximum effect in order to provide qualitative services to its customers, which at the end of 2021 counted more than 1.195 thousand individuals and 48 thousand legal entities. In the regions of its presence, KUS occupies a dominant position.
- The possibility of concluding **long-term purchase** and sale contracts for electric power allows us to attract large industrial consumers with long-term development plans.
- The Group has established itself as **one of the** most attractive issuers of debt obligations among operating companies present on Kazakhstan securities market.
- Absence of debt burden in foreign currency, and as a consequence, ability to provide flexible pricing policy.
- The Group successfully diversifies its funding sources.

### 16,579,504 thousand KZT\*

STRATEGY

MANAGEMENT Report SUSTAINABLE CORPORATE DEVELOPMENT REPORT GOVERNANCE

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REPORT 2021

# MANAGEMENT REPORT



### CONTACT INFORMATION

Annual Report 2021



Energy-producing organizations that are part of the Company annually carry out the necessary scope of measures to maintain reliable and sustainable production of heat and electric power.

### Environment overview

KAZAKHSTAN

UTILITY SYSTEMS

### MACROECONOMIC OVERVIEW

KEY

INDICATORS

**MESSAGE FROM** 

THE MANAGEMENT

Growth of the Kazakh economy, according to preliminary data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, amounted to 4.1% in 2021. After a reduction in 2020, against the background of economic difficulties caused by the pandemic, positive dynamics have again emerged as the main industries of goods and services began to recover.

Industrial production in 2021 increased by 3.8% (in 2020, the decline was 0.5%). An increase in production volumes was recorded in 15 regions of the republic, a decrease was observed only in West Kazakhstan and Mangistau regions. The largest growth (almost 21%) was demonstrated by Almaty by a large margin due to an increase in the production of soft drinks, cases, boxes made of paper or cardboard, plastic bags and packages, ready-mixed concrete, mortars, steel pipes, prefabricated metal structures, passenger cars, and buses. Nur-Sultan was in second place, showing an increase in industrial production by 12.4%. Growth is also due to an increase in the output of a number of products, including those necessary for construction, as well as soft drinks, refined gold, locomotives.

In the mining industry, the growth was moderate and amounted to 1.7%, mainly the increase in industrial production was observed in the production of metal ores (by 4.2%) and the provision of services (by 4.3%), while in coal production the increase was 0.8%, and crude oil 0.3%.

ABOUT

COMPANY

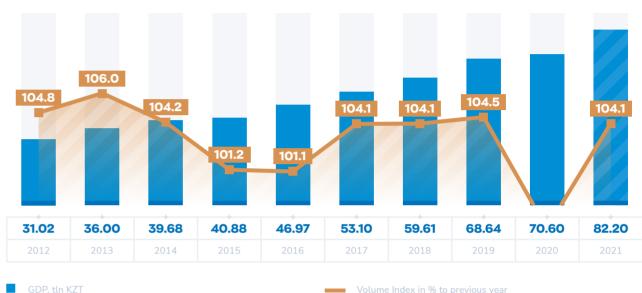
**KEY EVENTS** 

More impressive growth rates in 2021 were observed in the manufacturing industry – 5.5%. In particular, the production of pharmaceuticals increased (by 23.9%), rubber and plastic products (45%), other non-metallic mineral products (9.8%), finished metal products, except machinery and equipment (18.2%) and mechanical engineering (20.4%).

In the supply of electric power, gas, steam, hot water and conditioned air, the growth reached 4.8%, mainly due to an increase in the production and distribution of gaseous fuels through pipelines by 5.7%.

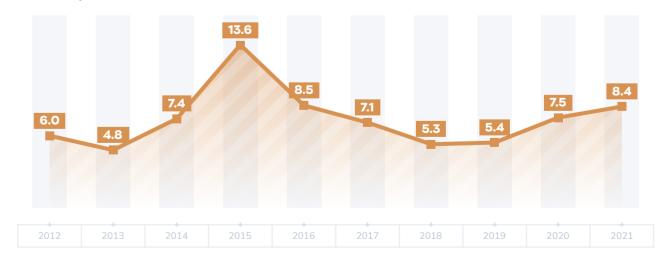
Inflation, prices and tariffs for consumer goods and services reached 8.4% in 2021, including prices for food products increased by 9.9%, for non-food products - by 8.5%, for paid services - by 6.5%.

Official forecasts of the Ministry of National Economy of the Republic of Kazakhstan and a number of analysts at the beginning of the year assumed the country's GDP growth in 2022 at the level of 2021. However, the deterioration of the economic situation in the region, due to the events in Ukraine, led to a decrease in forecasts for the Kazakh economy, - growth according to the official forecast is now expected at 2.1%.



Consumer price index, %

**GDP** dynamics

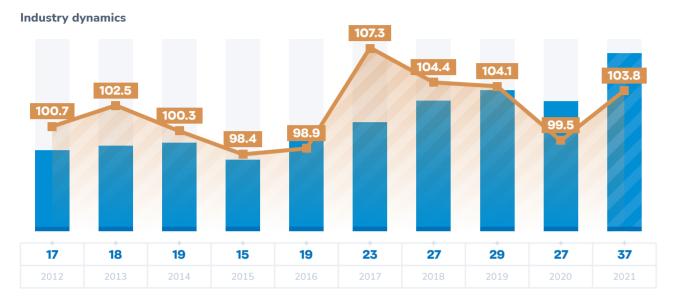


RISK Management	CONTACT Information	APPENDICES	Annual Report 2021

Volume Index in % to previous year

KAZAKHSTAN UTILITY SYSTEMS     KEY INDICATORS     MESSAGE FROM THE MANAGEMENT     KEY EVENTS     ABOUT COMPANY     STRATEGY
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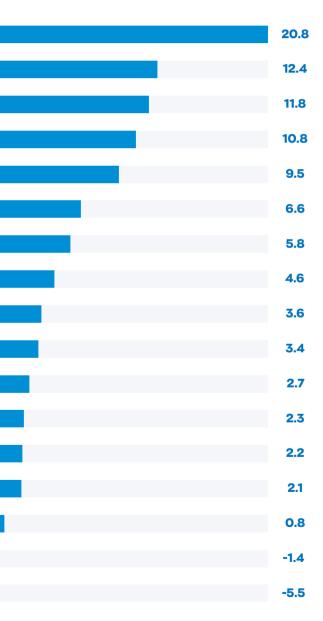
Volume of industial production, trillion KZT

Volume Index in % to previous year



MANAGEMENT Report	SUSTAINABLE Development report	CORPORATE Governance
Change in industr indicies by region 2021 in % to 202	IS,	
Almaty		
Nur-Sultan		
Almaty Region		
Kostanay Region		
Akmola Region		
Shymkent		
North Kazakhstan	Region	
Jambyl Region		
Turkestan Region		
East Kazakhstan R	egion	
Aktobe Region		
Pavlodar Region		
Karaganda Region		
Atyrau Region		
Kyzylorda Region		
Mangystau Regior	1	
West Kazakhstan I	Region	





### **ENERGY INDUSTRY OVERVIEW**

KEY

The installed capacity of power plants of the Republic of Kazakhstan at the beginning of 2022 was 23,959.3 MW, which is 412.3 MW more than in 2021. The available capacity increased by 161 MW to 20,200.5 MW.

According to the System Operator KEGOC JSC, the power plants of the Republic of Kazakhstan produced 114,447.9 million kWh of electric power in 2021, which is 5.8% more than in 2020 and one of the most significant growth indicators for several years. Production growth was observed in all zones of the UES of Kazakhstan.

Approximately 80% of electric power was generated at the thermal power plant in 2021 and production growth was 5%. At the GTPP, the increase in generation was 12.3%, HPPs showed a decrease of 3.8%. Significant growth is observed at stations using renewable energy sources. Wind power generation in 2021 increased by 60.6% to 1,758 million kWh, solar – by 30.8% to 1,636.5 million kWh. According to the Ministry of Energy of the Republic of Kazakhstan, the volume of electric power production by renewable energy facilities (SPP, WPP, BGS, small hydroelectric power plants) in 2021 amounted to 4,220.3 million kWh, which is 30.1% higher than in 2020. In the total output of the Republic of Kazakhstan, their share reached 3.7% compared to 3% years earlier.

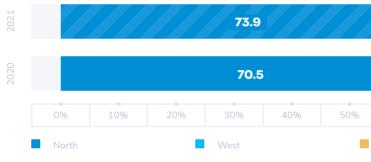
Electric power consumption in 2021 compared to 2020 increased by 6% (by 6,545.48 million kWh) to 113,890.28 million kWh. In the northern zone, consumption increased by 5% (by 3,331.69 million kWh), in the southern zone by 9% (by 2,200.75 million kWh) and in the western zone by 7% (by 1,013.04 million kWh). Growth of consumption is primarily associated with the recovery of industrial production, as well as with the episodic growth of crypto-currency mining.

According to the forecasts of the Ministry of Energy of the Republic of Kazakhstan, the UES of Kazakhstan will maintain a surplus of electric power in the coming years and the growing consumption will be covered by the growth of generation at current stations and the introduction of new capacities, in particular, a gradual increase in renewable energy capacity is planned.

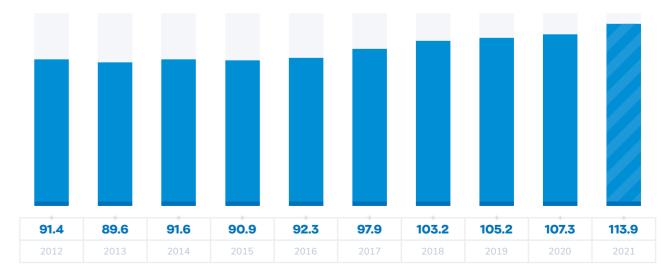
Structure of electric power generation in Kazakhstan by types of energy sources, billion kWh



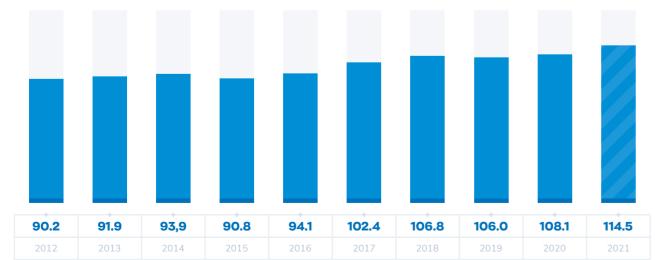
#### Structure of electric power consumption, billion kWh







Dynamics of electric power production, billion kWh



				045
K Nagement	CONTACT Information	APPENDIC	ES	Annual Report 2021
	1	0.7 9.2	3.4	
		9.5 9.5	2.3	
	+ +	+	+	

60%	70%	80%	90%	100%
HPP			SPP, WPP and	BGPs

14.5	25.5	

	13.5		23.3	
60%	70%	80%	90%	100%

South

### **Business Environment**

### **PRICING OF SUBSIDIARIES**

KEY

Regulation of tariff formation depends on the type of activity carried out by each individual enterprise. In particular, tariffs of traditional energy-producing organizations of the country (stations) are regulated for certain types of goods or services: a marginal and selling tariff is set for electric power, above which the sale of electric power is prohibited; tariffs for produced heat are approved within the framework of regulation in the field of natural monopolies by the Department of the Committee for Regulation of Natural Monopolies of the Republic of Kazakhstan. Activities on electric power transmission, as well as the supply of heat, are also regulated within the framework of legislation on natural monopolies. And, finally, tariff formation when engaging in electric power supply activities is regulated within the framework of socially significant markets. At the same time, certain changes took place in each of the sectors of the energy production-consumption chain in 2021.

### **POWER PLANT**

In 2021, the policy of tariff formation for electric energy has radically changed at electric power plants. In addition to the actual revision in April of the same year of the values of marginal tariffs for electric energy, dated July 1, 2021, according to amendments to the Law of the Republic of Kazakhstan dated July 9, 2004 "On Electric Power Industry", the concept of a through surcharge for electric power from renewable energy sources (RES), paid by conditional consumers (traditional electric power stations) to RFC for RES LLP was introduced. This surcharge was added to the marginal tariff of the corresponding group of energyproducing organizations, thereby forming a new value of the price of electric power supplied by traditional stations. which was called the "selling price".

The following are data on the actual dynamics of tariffs for goods and services of KUS power stations.

### Karaganda Energocenter LLP

**Electrical energy.** By Order of the Minister of Energy of the Republic of Kazakhstan dated December 5, 2018 No. 476 "On Approval of the Group of Energy-Producing Organizations that Sell Electric Energy", the energyproducing organization of Karaganda Energocenter LLP is included in Group 6.

From January to March 2021, the Order of the Minister of Energy of the Republic of Kazakhstan dated June 29, 2020 No. 243 approved the maximum tariff level for electric energy for the 6th group of energy-producing organizations in the amount of 7.91 tenge/kWh without VAT.

Starting from April 1 of the same year, the Order of the Minister of Energy of the Republic of Kazakhstan dated March 30, 2021 No. 108 approved the maximum tariff level for electric energy for the 6th group of energy-producing organizations in the amount of 9.92 tenge/kWh without VAT.

In accordance with the amendments mentioned above to the Law of the Republic of Kazakhstan dated July 9, 2004 "On Electric Power Industry" and the Order of the Acting Minister of Energy of the Republic of Kazakhstan dated June 24, 2021 No. 211, the marginal tariff for electric energy of

Karaganda Energocenter LLP from July 1, 2021 amounted to 8.78 tenge/kWh without VAT. At the same time, amount of the surcharge to support the use of renewable energy sources, determined by the RFC for RES LLP in accordance with the legislation of the Republic of Kazakhstan on support for the use of renewable energy sources from July 1, 2021 amounted to 1.57 tenge/kWh without VAT. Thus, from July 1, 2021, the selling price for electric energy is set at 10.35 tenge/kWh without VAT.

Heat energy. Since the beginning of 2021, by Order of the Department of the Committee for Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan for the Karaganda region No. 81-OD dated July 14, 2020, the tariff for heat energy production was approved in the amount of 1721.93 tenge/Gcal without VAT with entry into force from September 1, 2020.

Based on the Order of the Department of the Committee for Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan for the Karaganda region dated October 25, 2021 No. 211-OD dated December 1, 2021, tariffs for heat energy production services for the period 2021-2026 were established in the following amount:

- 2021 in the amount of 2,012.16 tenge/Gcal without VAT;
- 2022 in the amount of 2,198.45 tenge/Gcal without VAT;
- 2023 in the amount of 2,598.98 tenge/Gcal without VAT;
- 2024 in the amount of 2,942.74 tenge/Gcal without VAT;
- 2025 in the amount of 3,289.50 tenge/Gcal without VAT;
- 2026 in the amount of 3,400.34 tenge/Gcal without VAT.

Change in the tariff for production of heat energy from 2022 is due to the approval of the investment program for the type of activity - production of heat energy, as well as reduction of a number of costs to actual indicators as required by current legislation.

#### Ust-Kamenogorsk CHPP LLP

**Electrical energy.** By Order of the Minister of Energy of the Republic of Kazakhstan dated December 5, 2018 No. 476 "On Approval of the Group of Energy-Producing Organizations that Sell Electric Energy", the energyproducing organization of Ust-Kamenogorsk CHPP LLP is included in Group 7.

Tariff for production of electric energy of 7.72 tenge/kWh, which has been in effect since the beginning of 2021, was put into effect from 01.07.2020, due to an increase in the main costs for the production of electric energy in 2020.

Tariff for production of electric energy of 9.68 tenge/kWh has been put into effect since 01.04.2021, due to an increase in the main costs for the production of electric energy in 2021.

For the same reasons related to legislative amendments, from July 1, 2021, a tariff of 8.48 tenge/kWh was established for the enterprise, which was valid until the end of the same year. Since 01.01.2022, the company has a tariff for production of electric energy of 8.48 tenge/kWh, and a surcharge for RES support of 1.58 tenge/kWh.

Heat energy. The average tariff for production of heat energy was approved by the Order of the Department No. 186-OD dated 21.12.2020 with the entry into force from 01.01.2021 in the amount of 2,448.98 tenge/Gcal, including by consumer groups:

KAZAKHSTAN UTILITY SYSTEMS     KEY INDICATORS     MESSAGE FROM THE MANAGEMENT     KEY EVENTS     ABOUT COMPANY     STRATEGY
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	2021		
Name of consumer groups	Approved tariff, January 2021	Actual tariff, January 2021	
Industrial consumers	6,369.30	6,369.30	
UK heat networks, incl.:	1,507.00	1,539.38	
Population	1,276.46	1,276.46	
Other consumers	2,058.30	2,058.30	
Average tariff (approved), tenge/Gcal	2,448.98	2,565.04	

Deviation of the actual average tariff from the approved level for January 2021 is due to a change in the structure of heat energy consumption between groups of consumers with different tariff levels. The current average tariff level for production of heat energy was approved by the Order of the Department No. 12-OD dated 26.01.2021 with the entry into force from 01.02.2021 in the amount of 3,046.00 tenge/ Gcal.

In fact, the weighted average tariff for production of heat energy for the reporting period amounted to 3,114.85 tenge/Gcal, which is higher than the approved level by 68.85 tenge/Gcal, or 2.3%:

Consumer groups	Order 200-OD – Approved tariff for a long-term period	Order 12-OD taking into account the increase in the cost of strategic goods	Actually 01.02.2021- 31.01.2022	Devi	ation
Average tariff, tenge/Gcal	2,968.56	3,046.00	3,114.85	68.85	2.3%
Ust-Kamenogorsk Heat Networks JSC, including:	1,721.85	1,721.85	1,727.33	5.47	0.3%
population	1,276.46	1,276.46	1,276.46	0.00	0.0%
other	2,825.02	2,825.02	2,825.02	0.00	0.0%
Other industrial customers	9,241.52	9,708.61	9,708.61	0.00	0.0%

Deviation of the actual weighted average tariff from 01.02.2021 to 31.01.2022 from the approved level is due to a change in the structure of heat energy consumption between consumer groups.

CORPORATE

GOVERNANCE

### ELECTRICAL NETWORKS

### Karagandy Zharyk LLP

Since January 2021, the tariff of 5.52 tenge without VAT, At Mangistau Regional Electricity Network Company JSC approved by the Order of DCRNM No. 180-OD dated (MRENC JSC), the tariff for electric power transmission 12.11.2020, has entered into force in Karagandy Zharvk in 2021 was at the level approved by the Order of the LLP. With the introduction of a temporary compensating Department of the Committee for Regulation of Natural tariff - TCT (according to the result of the audit, for non-Monopolies in the Mangistau region "On approval of fulfillment of the 2020 tariff estimate), from August 2021, tariff estimate of MRENC JSC for regulated electric power the tariff changed to the level of 5.51 tenge without VAT. transmission 2021-2025" No. 70-OD dated 05.11.2021. Due to the change in the cost of strategic goods (the cost of electric energy of Karaganda Energocenter LLP), Later, an application was submitted and approved for a tariff of 5.68 tenge without VAT was introduced from approval of the tariff estimate for a regulated service for October 2021, but due to the continued operation of the transmission of electric energy in 2021-2025, taking into TCT, the actual tariff of Kagandy Zharyk LLP from October account adjustments (No. 200-OD dated 11/26/2021), to December 2021 amounted to 5.67 tenge without VAT. where the tariffs remained unchanged.

In 2022, in accordance with the adjusted tariff estimate, by Order of the DCRNM No. 253-OD dated 25.11.2021, the company has a tariff for transmission of electric energy in the amount of 6.14 tenge without VAT, in connection with the introduced TCT in 2021, the tariff was lowered to 6.13 tenge without VAT. Karagandy Zharyk LLP plans to submit an application for an increase in the tariff in July 2022, in case of an increase in the cost of strategic goods.

### Ontustik Zharyk Transit LLP

Company's tariff for 2021 amounted to 6.41 tenge/kWh. For 2022, the tariff approved as part of the tariff estimate for 2015-2022 amounted to 7.35 tenge/kWh. However, in 2021, this tariff was reduced to the level of 7.25 tenge/ kWh due to an increase in the volume of services provided. Since the current tariff estimate is coming to an end, it is planned to submit a new application for approval of a long-term tariff in 2022.

# Mangistau Regional Electricity Network Company JSC



Report 2021

	KAZAKHSTAN Utility systems	KEY INDICATORS	MESSAGE FROM The Management	KEYEVENTS	ABOUT Company	STRATEGY
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Name	2021 (Order No. 70-OD dated 05.11.2021)	2021 (Order No. 201-OD dated 26.11.2021)
Tariff for legal entities	5.93	5.93
Tariff for SPEs that transmit and distribute electric power	2.40	2.40
Tariff for the population	2.28	2.28
Tariff for consumers of Aktau (through the networks AUES SPE) and Munaily district (through the networks of the Mangistauenergo SPE)	0.00	0.00

Name	2022 (No. 70- OD dated 05.11.2021)	2022 (Order No. 185-OD dated 16.11.2021)
Tariff for legal entities	5.93	6.26
Tariff for SPEs that transmit and distribute electric power	2.52	2.40
Tariff for the population	2.33	2.28
Tariff for consumers of Aktau (through the networks AUES SPE) and Munaily district (through the networks of the Mangistauenergo SPE)	0.84	0.10

On November 16, 2021, by order of the authorized body No. 185-OD, the tariff for 2022 was approved, due to changes in prices for strategic goods (electric power from MAEK-Kazatomprom LLP), since the price for 1 kW of electric power in in the tariff estimate was 13.10 tenge, whereas from January 1, 2022, the station increased the tariff up to 13.80 tenge/kWh.

### **ENERGY SUPPLY ORGANIZATIONS**

### KaragandyZhyluSbyt LLP

#### Power supply

From January 1, 2021, on the basis of the company's letter No. 09-11070 dated 12/24/2020, the current average price was 15.38 tenge per 1 kWh, excluding VAT. For all groups of consumers, the price reduction was 1.5%.

Based on the reasoned conclusions of the department of the authorized body for Karaganda region in 2021, the following prices for retail sale of electric power were agreed for the enterprise:

Since April 1, 2021, the average price increased by 5.1% and amounted to 16.16 tenge per 1 kWh, excluding VAT. Price increase occurred for legal entities by 10%, for budget organizations – 25.6%, price for the population remained unchanged.

By the Department's letter No. 1-4/686 dated 12.04.2021, an addition was made to the previously sent reasoned conclusion regarding the allocation of a new group of legal entities "producers of socially significant food products" with a price of 16.16 tenge per 1 kWh excluding VAT - at the level of the average price.

Since June 1, 2021, an average price of 18.34 tenge per 1 kWh excluding VAT has been agreed, which is 13.5% higher than previously agreed. Increase is due to an increase in the cost of electric power from sources and services of infrastructure organizations and by groups amounted to: 10% for the population and legal entities, 13.5% for producers of socially significant food products, 36.7% for budget organizations.

MANAGEMENT REPORT

SUSTAINABLE CORPORATE **DEVELOPMENT REPORT** GOVERNANCE

RISK

Since September 1, 2021, after introduction of a through surcharge at stations and changes in their marginal tariffs, an average price of 19.17 tenge per 1 kWh, excluding VAT, has been agreed with an increase of 4.5%. Increase in prices for the population, legal entities and budget organizations amounted to 5.3%, for producers of socially significant food products - 4.5%.

#### Heat supply

By the orders of the authorized body for Karaganda region, the following tariffs for the heat supply service for 2021 were approved for the enterprise:

Since January 1, 2021, the average tariff was approved in the amount of 4,146.62 tenge per 1 Gcal excluding VAT, the increase to the previously approved tariff was 6%. Tariffs for the population and other consumers were approved unchanged, the third group of consumers "budget organizations" was allocated, the tariff growth for this group was 36%.

Since October 1, 2021, a temporary compensating tariff of 4,098.50 tenge per 1 Gcal excluding VAT was approved, which is 1.2% lower than previously approved. Tariffs for all consumer groups have been reduced by 0.5%. Validity period of the temporary compensating tariff is 1 year.

### **Raschetnyi servisnyi center LLP**

The company's tariffs for 2021 underwent several changes, as did the rest of the energy supply companies of the KUS and the whole country.

Since April 1, 2021, the tariff has increased to 18.47 tenge/ kWh without VAT, an increase of 4.5% compared to the tariff of 17.67 tenge/kWh without VAT in effect since the beginning of the year.

2021

The main reason for the increase in the marginal price of electric power supply was the increase in the cost of buying electric power in connection with the previously mentioned increase in tariffs of energy-producing organizations from July 01, 2020.

Since June 1, 2021, the tariff has risen to 20.63 tenge/ kWh without VAT. an increase of 11.7%. Reasons for the increase were the introduction of a through surcharge on renewable energy.

### **Energopotok LLP**

The average electric power tariff of Energpotok LLP from January 1, 2021 amounted to 20.40 tenge/kWh. At the same time, due to the increase in the cost of electric power from energy-producing organizations from April 1, 2021, the authorized body agreed to increase the tariff of the enterprise by 4% (up to 21.22 tenge/kWh) with entry into force from May 15 of the same year.

Due to the increase in electric power tariffs of the stations from July 1, an increase in the tariff from August 1 by 1.6% to 21.57 tenge/kWh was agreed for the enterprise.

KAZAKHSTAN UTILITY SYSTEMS

**KEY EVENTS** 

### **ENSURING RELIABILITY**

Energy-producing organizations that are part of the Company annually carry out the necessary scope of measures to maintain reliable and sustainable production of heat and electric power.

This is confirmed by the annual successful completion of electric power plant certifications conducted in accordance with the Rules approved by the Order of the Minister of Energy of the Republic of Kazakhstan dated December 3, 2015 No. 686. During the certification, it is necessary to use all generating equipment at maximum loads for a long period. In case of unsatisfactory condition of the equipment, this fact would be impossible. For example, in 2021, the certifications were successfully passed:

- Karaganda CHPP-3 February 11, 2021
- Karaganda CHPP-1 February 12, 2021
- Ust-Kamenogorsk CHPP February 05, 2021

On the basis of acts of certificates, contracts are concluded with organizations for maintaining electric power.

Also, the equipment of the stations annually undergoes a technical inspection for its condition and operability. For example, as required by paragraph 43 of the Rules of technical operation of power plants and networks approved by the Order of the Minister of Energy of the Republic of Kazakhstan No. 247 dated March 30. 2015 (hereinafter referred to as RTO), in 2018, a technical inspection of the equipment was carried out by the Commission of the Karaganda CHPP-3 with involvement of the expert organization El-Nur-Service LLP Karaganda CHPP-3, CHPP-1: external and internal inspection, verification of technical documentation, testing for compliance with equipment safety. According to the technical inspection results, the condition of technical devices is satisfactory, it is maintained in working condition and, if the RTO requirements are met, their safe operation is possible. Frequency of these works according to the RTO is every 5 years.

If the equipment economic life is exceeded, an additional inspection and metal control is carried out, on the basis of which a decision is made to extend the economic life in accordance with the technical instructions for metal control and extending the service life of main elements of boilers, turbines and pipelines of thermal power plants of the Republic of Kazakhstan RD 153-34 RK.1-17.421-03.

In addition to these works, power plants have their own accredited metal control laboratories that perform technical diagnostics of station equipment, pressure vessels, support structures, etc. For each of them, a schedule of metal control has been drawn up and observed, which is coordinated with the schedule of equipment withdrawal for scheduled repairs.

The technical diagnostics results are taken into account annually when compiling repair programs of stations, which allows maintaining the equipment in working condition.



### **CONTINUOUS IMPROVEMENT**

Organizations have successfully implemented a system of continuous improvement of Kaizen according to the Japanese philosophy of conducting and improving production and auxiliary business processes. Within the framework of this program, a provision was developed according to which it is provided for the nomination, development and execution of Ideas at the level of each individual employee aimed at modernizing or rationalizing any process or procedure in order to improve their effectiveness, efficiency and quality of results. Based on the results of consideration of these Ideas, decisions are made on their implementation and encouragement of employees, both those who developed the Idea and those who implemented it.

According to the results of 2021:

- In Ust-Kamenogorsk CHPP LLP, 27 projects participated in the Kaizen program, 15 were approved, 9 rational proposals, 11 Ideas were implemented, 61 employees were encouraged. The potential economic effect amounted to 170 million tenge.
- In Karaganda Energocenter LLP, 26 projects participated in the Kaizen program, 24 were approved, of which 21 proposals were implemented, 79 employees were encouraged. The potential economic effect amounted to 652 million tenge.

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### CAPACITIES

The Group's production capacities in 2021 are a combination of electric power and heat generating sources, as well as energy transmission grids, heating plants and substations.

### Generation:

- installed electric power capacity of sources is 1,066.5 MW. available power is 877.1 MW:
- installed heat power capacity of sources: is 2,683.9
  - Gcal/h, available capacity is 2,071.5 Gcal/h.

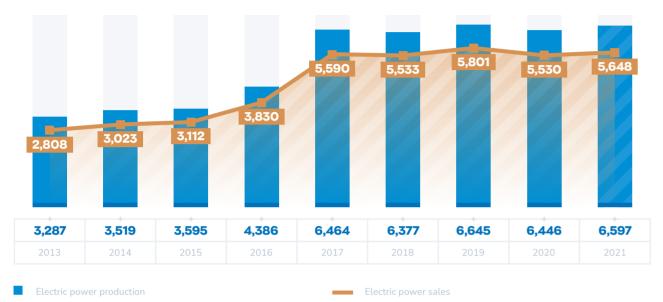
### Transmission and distribution:

- length of HV lines is 0.4–220 kV 33,691 km; length of 0,4–110 kV cable lines is 2,503 km;
- number of substations is 427 units.

### GENERATION

Volume of electric power generation in 2021 was 6,597 million kWh. Compared to 2020, there was a decrease in electric power generation at the Ust-Kamenogorsk CHPP, but an increase at the Karaganda CHPP-1 and CHPP-3. Total volume of electric power production in 2021 is 2.3% higher than in 2020, which is due to growth in economic activity in 2021 compared to the previous year during the COVID-2019 pandemic. Productivity of Karaganda CHPP-3 was also increased in the summer period as a result of the activities carried out. Electric power sales by the stations in 2021 amounted to 5.648.3 million kWh.

#### Production and sale of electric power, million kWh



### Production and sale of heat power, thous. Gcal



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MANAGEMENT	SUSTAINABLE	CORPORATE	F
REPORT	DEVELOPMENT REPORT	GOVERNANCE	

Production of heat power in 2021 was 5,927 thousand tons Gcal. Cumulative indicator of heat power production increased by 4.9% due to the colder weather during the heating period in the regions where it operates, there is also an increase in consumption in Karaganda. Sale of heat power by the Group's stations amounted to 5,776 thousand Gcal.

Specific fuel equivalent consumption for the supply of electric energy in 2021 at Karaganda Enegrocenter LLP In addition, there was 1 (one) accident in 2021, and the is 364 g.t./kWh, which is 1% lower than in 2020, and number of failures of the 1st degree was - 2, failures of the specific fuel equivalent consumption for supply of the 2nd degree - 66.

### Largest clients in 2021

### Karaganda Energocenter LLP

A total of 28 contracts for the supply of electric power were signed by Karaganda Energocenter LLP in 2021.

Name of consumers	Volume of electric power sales, thousand kWh	Volume of electric power sales, thousand tenge (excluding VAT)	Share in total volume of electric power sales, %
KaragandyZhyluSbyt LLP	958,496	9,239,098.62	24.09
Karaganda EnergoSbyt LLP	845,954	8,138,350.43	21.26
YDD Corporation LLP	739,521	7,117,301.85	18.59
Asia FerroAlloys LLP (Kaz Karbon)	443,229	4,294,219.12	11.14
Energopotok LLP	288,755	2,840,351.03	7.26
Karagandy Zharyk LLP	262,067	2,504,879.34	6.59
Karagandy Su LLP	77,470	744,680.96	1.95
Teplotransit Karaganda LLP	75,849	699,212.67	1.91
AB Energo LLP	77,464	748,282.06	1.95
Raschetnyi servisnyi center LLP	73,258	661,862.89	1.84
Energougol XXI LLP	61,610	589,743.58	1.55
EnergoSbytContract LLP	50,065	479,518.31	1.26
Other consumers	24,431	234,862.75	0.61
Total	3,978,169	38,292,363.63	100

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heat power is 196.8 kg g.t./Gcal, which is 0.5% lower than in 2020.

Specific fuel equivalent consumption for the supply of electric energy in 2021 at Ust-Kamenogorsk CHPP LLP is 312.6 g.t./ kWh, which is 2.4% lower than in 2020, and the specific fuel equivalent consumption for supply of heat power is 181.7 kg g.t./Gcal, which is 1.5% lower than in 2020.

KAZAKHSTAN         KEY         MESSAGE FROM THE MANAGEMENT         KEY EVENTS         ABOUT COMPANY
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### Ust-Kamenogorsk CHPP LLP

A total of 26 contracts for the supply of electric power were signed by Ust-Kamenogorsk CHPP LLP in 2021.

Name and location of consumers	Volume of electric power sales, thousand kWh	Volume of electric power sales with VAT, thousand KZT	Share in total volume of electric power sales, %
Shygysenergotrade LLP	611,836	5,607,781	32.3
AB Energo LLP	270,634	2,387,821	14.3
Energopotok LLP	435,562	4,311,579	23.0
OESK JSC (ex. VK REK JSC)	243,600	2,151,832	12.8
Raschetnyi servisnyi center LLP	87,348	858,525	4.6
Karaganda EnergoSbyt LLP	100,730	891,438	5.3
KaragandyZhyluSbyt LLP	69,225	674,028	3.6
Neftegazmash Service LLP	14,836	138,328	0.8
Energosnab XXI LLP	12,511	125,732	0.7
VostokenergoGroup LLP	10,042	92,471	0.5
Other consumers	40,461	358,989	2
Total	1,896,784	17,598,524	100

### **TRANSMISSION AND DISTRIBUTION**

The total transformer capacity of Karagandy Zharyk LLP as of December 31, 2021 was 4,086 MVA. In 2021, there were 932 failures of the 2nd degree, 1 failure of the 1st degree, and there were no accidents.

According to the results of 2021, the total transformer capacity of Ontustik Zharyk Transit LLP as of December 31, 2021 was 3,926 MVA. The percentage of depreciation of fixed assets was reduced by 0.3% (from 58.2 to 57.9%).

According to the last year results, 5 technological violations occurred in Mangistau Regional Electricity Network Company JSC, the total transformer capacity increased and amounted to 2,710 MVA at the end of 2021. The total depreciation of fixed assets decreased to 65.9%, regulatory losses decreased by 2.99%. At the same time, no accidents were recorded during the year.



### Electric power transmission volumes in 2021

Name

Karagandy Zharyk LLP

Ontustik Zharyk Transit LLP

Mangistau Regional Electricity Network Company JSC

### Statistics of electric power losses for the KUS Group of Companies

#### Karagandy Zharyk LLP

Name of indicators	UoM	2019	2020	2021
Transmission volume	thousand kWh	3,068,969	2,976,134	3,075,829
Losses of energy	thousand kWh	269,842	248,261	254,903

### **Ontustik Zharyk Transit LLP**

Name of indicators	UoM	2019	2020	2021
Transmission volume	thousand kWh	2,763,528	2,902,896	3,180,783
Losses of energy	thousand kWh	535,727	565,396	607,998

### Mangistau Regional Electricity Network Company JSC

Name of indicators	UoM	2019	2020	2021
Transmission volume	thousand kWh	3,231,326	3,623,142	3,651,777
Losses of energy	thousand kWh	138,148	162,683	160,863



2021		
thousand kWh	thousand KZT	
3,075,829	17,103,639	
3,180,783	20,388,820	
3,651,776	16,335,179	

KEY

### Large consumers in 2021

### Karagandy Zharyk LLP

Large customers and volume of energy transmitted in 2021

Client	Sales volume, thousand kWh
KaragandyZhyluSbyt LLP	1,081,626
ArcelorMittal Temirtau JSC	732,349
AB Energo LLP	286,616
Raschetnyi servisnyi center LLP	244,528
Karaganda EnergoSbyt LLP	195,607
Branch of Kazakhmys Corporation LLP for Karagandatsvetmet OP	110,157
Teplotransit Karaganda LLP	75,849
Energougol XXI LLP	61,610
Karagandy Su LLP	51,395
Kazakhmys Coal LLP	27,024
Branch of "Satpayev Channel"	2,064
Other consumers	207,004

### Mangistau Regional Electricity Network Company JSC

Large customers and volume of energy transmitted in 2021

Client	Sales volume, thousand kWh
Ozenmunaygas JSC	745,559
Mangistau Zharyk LLP	461,217
AllianceEnergoSnab-Aktau LLP	624,941
Mangistaumunaygas JSC	471,162
Karazhanbasmunay LLP	261,238
AktauEnergoSbyt LLP	200,321
Branch of Buzachi Operating Ltd	286,013
Karakudukmunay LLP	112,460
Mangistauenergomunay LLP	312,879
AliansEnergoSbyt LLP	98,123

### **Ontustik Zharyk Transit LLP**

Large customers and volume of energy transmitted in 2021

Name of consumers	Sales volume, thousand kWh
Energopotok LLP	2,708,428
Alem Pavlodar LLP	2,285
FSHMES OF "KEGOC" JSC	413
Energosnab XXI LLP	61,935
Kazsbytgroup LLP	37,507
NC Kazakhstan Temir Zholy JSC	1,114
Yugenergoimpuls LLP	167,958
Garant Energo LLP	155,056
KuatZhylu Ortalyk-3 SCE	46,087

### Investment projects

- The implementation of measures to modernize capacities allows
- reducing regulatory technical losses, as well as improving reliability of power supply in the covered regions. From 2010
- to 2022, the Group has invested more than 275 billion KZT.
- Volume of investment of Karaganda Energocenter LLP, Recultivation of 1, 2 section of the ash dump No. 2 aimed at upgrading and reconstructing capacities in 2021
- amounted to about 5.7 billion KZT. Successfully completed: Construction of the 1st section of the ash dump No. 3 of CHPP-3. Major repairs of boiler units BKZ-420-140-5 st. No. 6
- Major repairs of boiler units HG-670/14-YM20 st. No. 8. Major repairs of turbogenerator T-110/120-130-3
  - st. No.1.
- Major repairs of turbogenerator S-110-12,7/0,23 st. No. 6.
- Major repairs of cooling towers No. 3, No. 4 with replacement of sprinklers.



- Replacement of the raw water duct ø 820 mm.
- Reconstruction of external power supply RUSN6/0.4 kV. Major repairs of car dumper VRS-125 No. 2.
- Building up of the dam of the 3rd section of the ash dump No. 2 of CHPP-3.
  - of CHPP-3.
- Replacement of tube bundles of peak boilers PSV-500 st. No. 1, 2, 4.
- Replacement of insulation of mains water pipelines of the CHPP-3 - 2 000 M.
- Chemical washing of PSG-1, 2 of turbine units T-110/120-130 st. No. 1-4.
- Major repairs of the boiler unit BKZ-50-39F st. No. 4.

- Major repairs of the turbine unit PR-6-35/5 st. No. 3.
- Replacement of the common duct of boilers BKZ-50-39F st. No. 1. 2 and 4. 5.
- Replacement of the heating sections of the boiler BO-350M st. No. 1.
- Installation of supply and exhaust ventilation of the CHPP-1 chemical laboratory.
- Replacement of excitation of generators of turbine units PR-6-35/5 st. No. 2, No. 3.
- Installation of automatic frequency control of the STU of the PTVP-100 boiler unit. st. No. 3.

Volume of investment of Ust-Kamenogorsk CHPP LLP in 2021 amounted to 1.9 billion KZT. Successfully completed:

- Construction of a new ash dump (power supply).
- Implementation of the project of replacement of the main steam pipelines 140 ata (the first stage).
- Construction of a package transformer substation (PTS) with power supply networks for coastal pumping station No. 2 (laying of a 1-thread supply cable).
- Replacement of high-pressure feed pipelines of the 5-7 stage.
- Reconstruction of k-14 automated control system in connection with the implementation of water washing process control.
- Replacement of swirlers of emulsifiers of the boiler unit No. 11.
- Reconstruction of the vibration measuring complex TG-11.
- Major repair of ash pipelines.
- Overhaul of the boiler unit of station No. 12 with the replacement of steam-supply pipe.
- Major repair of the boiler unit of station No. 14 with the replacement of steam pipes screens.
- Overhaul of the boiler unit of station No. 14 with the replacement of steam-supply pipe.
- Major repair of the boiler unit of station No. 14 with the replacement of downcomers.
- Expansion of outdoor switchgear ORU-2 with the construction of transformer substation.

Volume of investments of Ontustik Zharyk Transit LLP in 2021 amounted to 6.4 billion KZT. As part of the implementation of the investment program, the following activities were implemented:

- Construction of 10-0.4 kV electrical networks in Karabastau mcrdt., Karatobe mcrdt., Otyrar mcrdt., Yelaman mcrdt., Kyzylzhar, Shymkent, at the same time, put into operation:
  - Power lines-10-6-0.4 kV 58,369 km;
  - PTS-16 pcs.
- Reconstruction of 110 kV overhead line with a total length of 48.309 km.
- Reconstruction of the 35 kV HV line with a total length of 79.387 km.
- Reconstruction of PS 35-110 kV 15 pcs.; PTS, TS, DS 10/0.4 kV - 130 pcs.
- Reconstruction of the overhead line-0,4-10 kV: work was carried out with the complete replacement of supports, wires and insulators on the overhead line-10 kV - 327.667 km, overhead line-0,4 kV - 250,578 km.
- Modernization of the overhead line-0.4 kV with a length of 190.862 km with the use of self-supporting insulated wires.
- Reconstruction of cable lines: CL-10 kV 5.098 km and CI -0.4 kV - 2.215 km.
- UMS was implemented for 0.4 kV networks in Shymkent, Turkestan, to work:
  - in the wholesale electric power market (WEM): PS – 10 pcs., 78 PU;
  - in the retail electric power market over 0.4 kV networks using PLC technologies for data transmission from electric power meters to USPS: PTS, TP – 22 pcs., 4,514 PU.
- Construction of a power line-6 kV PS-220 Shymkent-Telecenter:
  - Power line-6 kV with a length of 1,187 km.
- Construction of PS-35/10 kV, overhead line-35-10 kV in the Arys village, Sairam district:
  - Transmission line-35/10 kV with a length of 10.24 km;

- PS-35/10 kV with TMN-6300 kVA.
- Construction of a 35-10 kV overhead line in Shubarsu settlement, Ordabasy district:
- Transmission line-35/10 kV with a length of 5.67 km.
- Implementation of automated dispatch control system (telemechanics) on the 110/35/10 kV "Zapadnaya" substation.
- Repair of RPB of Myrzakent UMES.
- Repair of the Keles REC building.
- Repair of the Asykaty UMES building.
- Construction of RPB in the building of Abai UGPP.
- Construction of front office at the premises of Ontustik Zharyk Transit LLP.
- Repair of the Suburban UGPP building.

Volume of investments of Karagandy Zharyk LLP in 2021 amounted to 6.9 billion KZT. As part of the implementation of the investment program, the following activities were implemented:

- Development of design and estimate documentation for reconstruction of 110/35/6 kV Karaganda, 35/10 kV Tikhonovka, 110/35/10 kV Botanicheskaya, 35/10 kV Komarovskava, 35/10 kV Zhosalv SSs.
- Development of design and estimate documentation Implementation of UMS at substations "1G", "2G", for the construction of 110/10 kV Novy Maikuduk SS "3G", "Pribrezhnaya", "SS-4", "N-2", "Kuyulus", "RMZ", with a supply line, 110/6 kV Fedorovka SS; 110/10 "MRENC Recreation Center". kV Bolashak SS. Modernization (reconstruction) of the water fire
- Development of design and estimate documentation for the reconstruction of 110 kV overhead line "CHPP-
  - 3 South-East". 110 kV overhead line "GPP-1 Implementation of the SCADA system on the Saran SS", 220 kV overhead line "CHPP-3 – Zharyk 220/110/35 kV SS of MRENC JSC.
  - SS", 110 kV overhead line "RHPP-2 Karagaily", overhead line-110 kV "Zhana Zharyk - Bolashak", CL-35 kV "Botanicheskaya – Parkovaya SS", KL-35 kV "Botanicheskaya - Ochistnye SS".
- Installation of security and fire alarm systems on SS – 17 pcs.
- Installation of SCADA equipment of the upper level of 35-220 kV (stage 1) - 20 facilities.

060

2021

- Overhaul of the 35 kV busbar section at the 110/35/6 kV Shakhan substation.
- Reconstruction, technical modernization, construction of electrical networks ACL-0.4-10 kV, development of design and estimate documentation - ACL-0.4 kV - 66 km, ACL-6(10) kV - 92 km, packaged twotransformer substation of urban type-0.4/6(10) kV – 15 pcs.
- Construction and installation works were carried out on - ACL-0.4 kV - 30 km. ACL-6(10) kV - 7 km. TS(PTS)-0.4/6(10) kV - 66 pcs.

Volume of investment investments of Mangistau Regional Electricity Network Company JSC in 2021 amounted to 4.3 billion KZT. As part of the implementation of the investment program, the following major activities were implemented:

- Construction of HV 110 kV with a length of 6 km and a 110/10 kV substation in the area of the Warm Beach in Aktau
- Construction of a 10 kV transmission line with a length of 10.3 km in the area of the Warm Beach in Aktau (2nd stage)
  - extinguishing system on AT-1, 2 SS-220/110/10 kV "Uzen".
- Set-up (installation) of an automatic fire alarm system and a building warning system SS-110/35/6 kV "Plateau".
- Developed DED for the modernization of a number of indoor switchgears 6, 10, 35 kV, as well as DED for construction of SS-35/10 kV in the area of the Sayyn village and overhead line-35 kV from SS-110/35/6 kV "Dunga".

### Procurement

Kazakhstan Utility Systems LLP is fully guided by the Law of the Republic of Kazakhstan "On Natural Monopolies" in its activities, including in the procurement of goods, works and services. In 2019, the Company launched a process for switching purchases of goods, works and services to an electronic format through electronic trading platforms, which in turn allowed the company to optimize a number of processes, as well as ensure transparency of procurement procedures.

In 2021, the Company's Management decided to switch to the electronic trading platform of Caspy tender LLP, which has a number of advantages over other electronic services:

- Caspy tender LLP was audited by the Information Security Committee of the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan and received a certificate of compliance with information security requirements. The document confirms that the platform can operate in state-regulated industries and guarantees the confidentiality of client data.
- Flexibility of the Caspy Tender platform made it possible to conduct any type of bidding, configure integration with the ERP system to record purchased goods, as well as automate the work of all employees of the procurement departments of Kazakhstan Utility Systems LLP.

The volume of purchases of goods and services by natural monopolies in 2021:

- Karaganda Energocenter LLP 59,019,664,450 KZT.
- Ust-Kamenogorsk CHPP LLP 23,164,605,154 KZT.
- Karagandy Zharyk LLP 23,214,637,482 KZT.
- Ontustik Zharyk Transit LLP 6,850,471,865 billion KZT.
- Mangistau Regional Electricity Network Company JSC – 7,669,357,273 KZT.

100% of the volume of purchases is from Kazakhstani suppliers and contractors.

The actual figures are reflected from June 2021 to May 2022. New targets have been set for the 2022-2023 procurement years:

- The average annual volume of purchases of KUS subsidiaries is more than 92.6 billion KZT.
- The average annual savings based on the results of competitive procurement is at least 11%.
- The average annual number of procedures of KUS subsidiaries is more than 1,850.
- The average annual number of unique suppliers is more than 750.
- The average annual number of applications reviewed is more than 4,200.

### Plans for 2022

- Implementation of measures to update the long-term issuer default rating (IDR) in foreign and national currencies.
- 2) Activities to attract international strategic partners to implement the Company's long-term development strategy.
- 3) Active promotion of the Company's interests at the legislative level. Submission of all required draft amendments to the legislation to the relevant associations (Atameken, KEPA, KazEnergy) and the authorized body for consideration of all required draft amendments to the legislation for the Company.
- **4)** The following activities are planned at Karaganda CHPP-1:
  - overhaul of boiler BKZ-50-39F st. No. 1;
  - overhaul of boiler BKZ-50-39F st. No. 5;
  - overhaul of the PTVP-100 st. No. 1;
  - overhaul of the turbine units PR-6-35/5 st. No. 2;
  - modernization of the excitation system of the generator of the turbine unit PR-6-35/5 art. No. 5;
  - current repairs of other boilers and turbine units.
- **5)** The following activities are planned at Karaganda CHPP-3:
  - overhaul of boiler BKZ-420-140-5 st. No. 4;
  - major repairs of the boiler BKZ-420-140-5 st. No. 7;
  - major repairs of turbine T-110/120-130-3 st. No. 3;
  - major repairs of turbine T-110/140-130/12,8 st. No. 5;
  - repair of cooling tower No. 2;
  - repair of overhead cranes No. 1, 2;
  - repair of transformer TDC-125000/110 st. No. 3 with replacement of the current line;
  - current repair of all boilers and turbine units;
  - construction of the 1st section of ash dump No. 3.
- 6) The following activities are planned at Ust-Kamenogorsk CHPP:

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- expansion of the station with the construction of the boiler unit of station No. 16 and replacement of the turbine unit of station No. 10 with an increase in the capacity of Ust-Kamenogorsk CHPP LLP (design and survey work, project appraisal);
- construction of new ash dump;
- implementation of the project "Automated Monitoring System of Environmental Emissions for Ust-Kamenogorsk CHPP LLP";
- implementation of the project of replacement of the main steam pipelines 140 ata (the second stage);
- construction of a package transformer substation (PTS) with power supply networks for coastal pumping station No. 2;
- replacement of high-pressure feed pipelines of the 5th and 7th stages;
- reconstruction of the steam pipeline 31.5 ata;
- replacement of swirlers of emulsifiers of the boiler unit No. 10;
- reconstruction of open switchgear-1;
- modernization of the relay protection and automatics line;
- major repair of ash pipelines;
- overhaul of the boiler unit No. 10 with replacement of the air heater of the 1st and 2nd stages, as well as replacement of the superheater;
- overhaul of boiler unit No. 11 with replacement of steam pipes from the drum to the ceiling superheater and the steam cooler of the 1st stage;
- major repair of the boiler unit of station No. 12 with the replacement of platen superheater and steam pipes of screens;
- major repair of the boiler unit of station No. 15 with the replacement of rear screen panels;
- expansion of outdoor switchgear ORU-2 with the construction of transformer substation.

- 7) The following activities are planned at Karagandy Zharvk LLP:
  - start of construction and installation works on reconstruction of 110/35/6 kV Karaganda substation; 110/35/10 kV Botanicheskava substation:
  - Start of construction and installation work on the construction of the 110/10 kV Noviv Maikuduk substation;
  - construction and installation works for the reconstruction of 110/6 kV "RTI":
  - construction and installation works on reconstruction of 220 kV overhead line "CHPP-3 – Zharvk SS":
  - continuation of installation of SCADA equipment of the upper level 35-220 kV (stage 1);
  - construction and installation works on technical modernization of 35/6 kV "Novaya Dubovka" and 35/6 kV "Ozernava" (GorRES);
  - reconstruction, technical modernization, construction of 0.4-10 kV electrical networks.
  - 8) The following activities are planned at Ontustik Zharyk Transit LLP:
    - construction of 10-0.4 kV networks in residential areas (Igilik, Zhideli, Sairam Shymkent); Kielitas, Kielitas village (Atameken str.) Tolebi district, Taskeshu settlement (Kazakhstan str.), Lenger Tolebi district, Kurkeles village, Nurly Zhol Saryagash district:
    - reconstruction of 110 kV overhead line, 35 kV overhead line, overhead line 0.4-6-10 kV, including 0.4 kV overhead line with the use of self-supporting insulated wire;
    - reconstruction of 6-10-0.4 kV cable lines:
    - reconstruction of SS 35-110 kV:
    - reconstruction of DS, TS, PTS 10-6/0.4 kV;

- implementation of UMS system;
- construction of SS-110/10-10 kV lppodrom;
- reconstruction of a 110 kV overhead line L-103,104 replacement of a section with a 110 kV overhead line (2 lines):
- reconstruction of the overhead line-6 kV replacement of the site with a CI - 6 kV:
- construction of a 35 kV overhead line in the Shornak village;
- construction of the "Shubarsu" SS.
- 9) The following activities are planned at Mangistau Regional Electricity Network Company JSC:
- Development of design and estimate documentation:
  - modernization (reconstruction) of indoor switchgear 10kV SS-110/6 kV "Tenga" with replacement of 2x6.3 MVA power transformers with 2x6.3 MVA;
  - modernization (reconstruction) of indoor switchgear 10kV SS-110/6 kV "Uzen" with replacement of 2x10 MVA power transformers with 2x16 MVA;
  - modernization (reconstruction) of indoor switchgear-10 kV at SS-110/10 kV "GPP-3G".
- Construction and installation works for 2022:
  - reconstruction of SS-110/6 kV PTB:
  - modernization (reconstruction) of indoor switchgear-10 kV at SS-110/10 kV "Recreation center".
  - modernization (reconstruction) of indoor switchgear-10 kV at SS-110/10 kV "GPP-2G".
  - reconstruction of the GPP 35/10 kV "Shetpe";

Modernization (reconstruction) of indoor switchgear - 10kV SS-110/6 kV "Uzen" with replacement of 2x10 MVA power transformers with 2x16 MVA.

### Financial results of operations

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### **REVENUE AND EXPENSE ANALYSIS**

SUSTAINABLE

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MANAGEMENT

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Basic data of income statement, million KZT	2021	2020	2019
Revenue	175,468	143,468	134,469
Cost of sales	-126,175	-106,989	-97,224
Gross profit	49,294	36,479	37,246
Administrative expenses	-10,074	-9,067	-9,121
Selling expenses	-3,768	-3,288	-2,911
Finance costs	-11,664	-11,132	-9,812
Financial income	6,042	5,825	5,752
Foreign exchange loss	-1,552	5,079	-6,685
Other income	298	70	536
Profit before income tax expense	28,576	23,966	15,005
Income tax expense	-7,242	-4,202	-4,394
Net profit	21,334	19,765	10,611

In 2021, there was a significant increase in the Company's revenues and a further improvement in financial indicators was observed. Revenue in the reporting year increased by 22% by 2020 and amounted to 175.5 billion KZT.

to this growth was made by an increase in the cost of purchased electric power - by 65% to 21.9 billion KZT. At the same time, the largest item in the cost price remains the cost of materials – 22% in the cost structure or 27.8 billion KZT (an increase of 9% in 2021). Depreciation and Approximately 67% of the revenue came from the sale amortization expenses amounted to 16.1 billion KZT by of electric energy. In 2021, they increased by 28% and the end of 2021 (an increase of 12%), payroll expenses reached 117.1 billion KZT. Both an increase in generation increased by 19% to 12.9 billion KZT - in the total cost and favorable tariff regulation contributed to the growth. structure they amounted to about 10%. Services for the transmission of electric power amounted to 29.1 billion KZT (an increase of 14%), for the sale of heat As a result of the outstripping revenue growth, gross profit in 2021 increased by 31% to the level of 2020 and amounted to 49.3 billion KZT.

energy – 19.3 billion KZT (also an increase of 14%). The income from maintaining the availability of electric power, which appeared after the market reform in 2019, amounted to 9 billion KZT, showing a slight increase by 2020.

The cost in 2021 increased by 18% and amounted to 126.2 billion KZT at the end of the year. A significant contribution



At the same time, the loss from the exchange rate difference affected the final profitability. As a result, the growth of net profit by the end of 2021 was at the level of 21.3 billion KZT, showing an increase of 8% by 2020.

KAZAKHSTAN UTILITY SYSTEMS     KEY INDICATORS     MESSAGE FROM THE MANAGEMENT     KEY EVENTS     ABOUT COMPANY     STRATEGY
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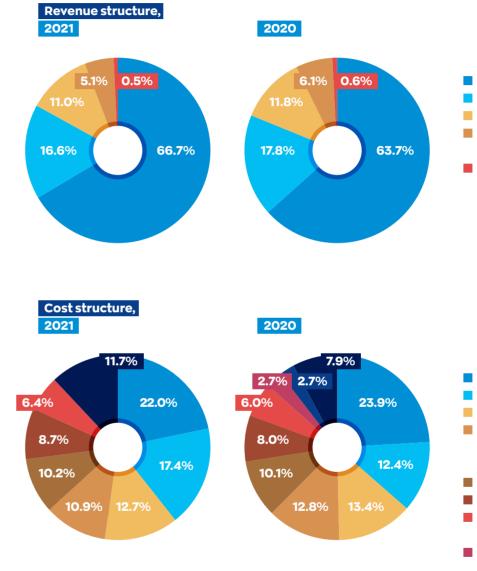




Gross profit







2021

Sale of electric power
Transmission of electric power
Sale of heat power
Income from maintaining the
availability of electric power
Other

Materials
Purchased electricity
Depreciation and amortization
Services for the transmission of
electricity, heat and chemically treated
water
Salary and related taxes
Purchased electricity from the RFC
Technological losses in the
transmission of electricity
Costs of dispatching and regulation of
electricity
Services for ensuring the readiness of
electric power to carry the load
Other



### **BALANCE SHEET ANALYSIS**

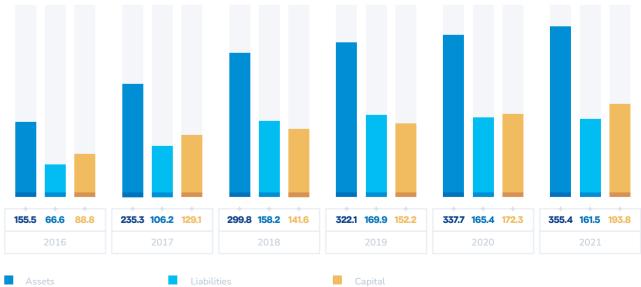
KEY

Basic balance sheet data, million KZT	2021	2020	2019
Assets	355,362	337,742	322,118
ong-term assets	319,509	305,629	295,573
Fixed assets	246,029	237,162	231,091
oans granted to related parties	70,128	67,005	61,352
ong-term advances paid	1,238	441	2,128
Dther	2,114	1,022	1,003
Current assets	35,853	32,113	26,545
nventories	3,997	4,494	4,101
rade accounts receivable	19,446	16,932	12,197
Cash and cash equivalents	5,873	4,029	4,363
Dther	6,537	6,659	5,883
Commitments	161,549	165,443	169,874
ong-term liabilities	104,109	116,432	71,593
Bank loans	67,092	81,159	37,582
Deferred tax liabilities	33,159	32,141	31,329
Dther	3,858	3,133	2,683
Current liabilities	57,440	49,010	98,281
rade payables	16,393	14,118	11,992
oans and bonds	24,414	18,939	71,877
Dther	16,633	15,953	14,411
Capital	193,813	172,300	152,244
Authorized capital	11,636	11,636	11,636
Additional paid-in capital	9,239	9,239	9,239
Foreign currency translation reserve	801	622	331
Retained earnings	156,682	136,817	117,846
Non-controlling interests	15,454	13,985	13.191

The Group's assets in 2021 increased by 5% by 2020 and liabilities amounted to 104.1 billion KZT and decreased amounted to 355.4 billion KZT. Long-term assets were formed by 11%. The reduction is mainly due to a decrease in the at the level of 319.5 billion KZT. Fixed assets increased by 4% volume of bank loans by 17% to 67 billion KZT. Current to 246 billion KZT, loans to related parties amounted to 70.1 liabilities increased by 17% and reached 57.4 billion KZT. billion KZT, an increase of 5% over the year. Current assets In particular, trade payables increased by 16% to 16.4 reached 35.9 billion KZT and increased by 12%. The growth billion KZT, short-term bank loans increased by 29% to is associated with an increase in trade receivables by 19%, 24.4 billion KZT. at the end of the year it amounted to 19.4 billion KZT and occupies 54% of the structure of current assets. Cash and cash Equity increased by 12% in 2021 and amounted to 193.8 equivalents account for 16% of current assets, reserves - 11%. billion KZT at the end of the year. The increase was almost completely provided by an increase in retained earnings The Group's liabilities in 2021 decreased by 2% and by 15%, at the end of the year it was at the level of 156.7 billion KZT.

amounted to KZT 161.5 KZT. In particular, long-term

### Dynamics of assets and liabilities, billion KZT





KAZAKHSTAN

**UTILITY SYSTEMS** 

**KEY EVENTS** 

Key performance indicators	2021	2020	2019
Liquidity ratios			
Current liquidity ratio (current ratio)	0.53	0.52	0.21
Quick ratio	0.46	0.43	0.17
Profit margin			
Net profit margin, %	12.2%	13.8%	7.9%
Gross profit margin, %	28.1%	25.4%	27.7%
Basic earning power, %	7.6%	17.7%	15.0%
Return on assets (ROA), %	6.0%	5.9%	3.3%
Return on equity (ROE), %	11.0%	11.5%	7.0%
EBITDA, in billion KZT	50,745	43,857	38,900
EBITDA margin	28.9%	30.6%	28.9%
Capital structure coefficients			
Equity adequacy ratio, %	54.5%	51.0%	47.3%
Financial leverage ratio, %	34.6%	47.1%	24.7%
Efficiency ratio			
Inventory turnover ratio	29.72	24.90	29.74
Turnover of accounts receivable (in days)	37.84	37.05	26.99
Turnover ratio of fixed assets	0.71	0.60	0.58
Asset turnover ratio	0.49	0.42	0.42
Interest coverage ratio	2.93	2.63	1.94
Return on capital employed (ROCE), %	11.48%	10.14%	8.52%

### \*Calculation of key indicators:

- The current liquidity ratio is calculated as the ratio of current assets (excluding corporate income tax prepayments and other current assets) to short-term
- The quick liquidity ratio is calculated by dividing liquid assets (excluding corporate income tax prepayments and other current assets) by shortterm liabilities.
- Basic earning power = EBIT / assets.
- Return on assets = net profit / assets.
- Return on equity = net profit / equity.
- Equity capital adequacy ratio = capital / assets.
- Financial leverage ratio = long-term liabilities / equity.
- Interest coverage ratio = EBIT / interest payable.
- Return on equity = EBIT / (equity + long-term



2021

By the end of 2021, the Group continues to demonstrate sufficient profitability indicators. Return on assets and return on capital remain approximately at the level of 2020 – 6% and 11%, respectively, by the end of 2021. EBITDA by the end of 2020 increased by 15% to 50.7 billion KZT. The EBITDA margin was 29%.

For the second year in a row, a high level of liquidity has been maintained. The indicator of current liquidity by the end of 2021 is 0.53, rapid liquidity is 0.46.

There is also a strong balance sheet structure, which ensures a stable financial position of the Group. The share of equity in the balance sheet was 54.5% at the end of 2021. The financial leverage ratio decreased from 47% in 2020 to 35% in 2021, primarily due to a decrease in the volume of long-term bank loans.

STRATEGY

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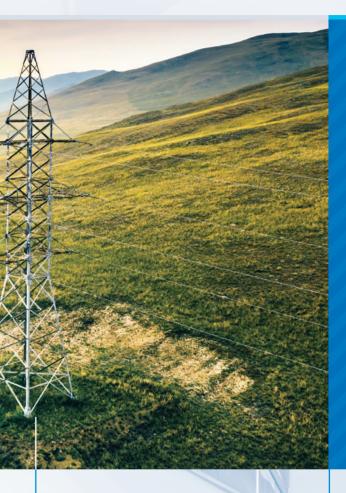
REPORT 2021

# SUSTAINABLE DEVELOPMENT REPORT

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Striving for development in harmony with the environment, the Company takes into account the incoming information from stakeholders and their interests in the course of making key decisions. **KEY EVENTS** 

### CONSUMERS

\*

# Interaction with stakeholders

The Group maintains an open dialogue with all stakeholders. Striving for development in harmony with the environment, the Company takes into account the incoming information from stakeholders and their interests in the course of making key decisions.

Stakeholders largely guide the Group's business strategy. The higher the contribution of stakeholders, the greater the legitimacy and sustainability in the development of the KUS.

Interaction with stakeholders allows making decisions at both the micro and macro levels. Stakeholders provide useful feedback on the Company's impact on economic, environmental and social issues that affect the Group's sustainable development and life in the regions where it operates. Cooperation with stakeholders takes place on a daily basis in the course of the Company's activities.



#### Our approach

The Group supplies energy to thousands of private and commercial customers who rely heavily on the reliable operation of KUS. Interaction helps to better understand customers' needs, as well as ways to ensure continuous improvement of service. KUS takes into account the current and future needs of all energy consumers in the regions where it operates.

#### Interaction tools

Customer feedback system.

#### **Expectations and interests**

- Uninterrupted energy supply.
- Balanced pricing policy.

CONTACT INFORMATION

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Annual Report 2021

#### **EMPLOYEES**



#### Our approach

KUS Group employs more than 8.7 thousand people. The success of a Company depends on the overall talent, skills and values of its employees. The Group creates a basis for constant two-way feedback and involvement of employees at all levels in key issues that affect them. Company strives to be a supportive and attractive employer that people want to work for. We also ensure voluntary participation in collective agreements and receive significant feedback in the course of interaction with trade unions.

#### Interaction tools

- Internal corporate communication channels.
- Meetings and negotiations with trade union representatives.

#### **Expectations and interests**

- Ensuring safe working conditions.
- Transparent and effective remuneration system.
- Training and development.
- Non-discrimination.

**OWNERS** 

Our approach

KEY

INDICATORS

KUS participants own the Company and

expect to receive a return on their investment.

The Group strives to maintain a constructive

dialogue with the participants and regularly

interacts with them to understand their long-

term vision and ensure that it is taken into

account when making decisions. KUS takes

care that the corporate management system

meets international standards and the wishes

GOVERNMENT

Our approach

KUS works constructively with the government

and regulatory authorities. Regulators play a

central role in forming the energy sector. Their

participation is especially important in creating

a sustainable energy system that supports

the achievement of long-term development

goals of the country. KUS ensures high-

guality interaction with regulatory authorities

to protect the longterm interests of energy

consumers and develop in accordance with the

emerging expectations of society as a whole.

#### SUPPLIERS AND CONTRACTORS

#### Our approach

KUS relies on its supply chain to implement investment projects and ensure successful operational activities. The Group's goal is to build strong relationships with suppliers and contractors so that they can maximize cost efficiency and improve positive economic, social and environmental results, which is important for socioeconomic development in the regions where it operates and ensure the transition to a low-carbon economy.

#### Interaction tools

of the participants.

- Work of the Supervisory Board.
- Providing reporting.

#### Interaction tools

- Working groups.
- Negotiations.
- Appeals, inspections by Supervisory authorities.
- Conducting meetings.

#### **Expectations and interests**

- Support of the state policy in the field of energy development.
- Compliance with legislation.
- Growth of payments to the budget.

#### Interaction tools

- Conducting meetings, negotiations.
- Conclusion of contracts.

#### **Expectations and interests**

- Economic performance.
- Long-term cooperation.
- Compliance with business ethics standards.
- Transparent procurement practices.

2021

#### SOCIETY

## iii

#### Our approach

The Group is committed to building a responsible business. Mature bilateral relations with communities in the regions where the company operates become an important basis for corporate strategic decisions in the Company, as well as for making and fulfiling daily obligations to society. KUS interacts with communities on social, environmental and other energy and business issues.

Company also ensures effective interaction with the media and strives for maximum openness of its activities.

#### Interaction tools

- Informing about the Company's activities.
- Conducting meetings.
- Answers to gueries.
- Feedback channels.

#### **Expectations and interests**

- Social policy and support for local communities.
- Careful use of natural resources.
- Transparency of business.
- Economic performance.

ABOUT

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## Human Resources **Management Policy**

Through effective HR management technologies, KUS strives to create high-quality human resources that meet the Group's strategic goals, strengthen human capital, and create additional competitive advantages of the Group.

#### Basic principles of Personnel policy:

- Proactivity.
- Transparency and openness.
- Integration.
- Continuity.
- Motivation of employees.
- The relationship between the interests and goals of the Group and employees.
- Communication with employees.
- Personnel support system.

The Group creates conditions for employees' interest in the success of the common cause, encourages initiative, and provides opportunities for potential realization, career and professional growth in various fields.

The purpose of the incentive and remuneration system is to attract, retain and motivate employees to ensure that the Group successfully fulfills its mission and achieves business goals at optimal costs.

For effective development of the Company, the human resource management process is integrated with all business processes.

Corporate Social Responsibility

KEY

Due to the scale and specifics of the Group's activities, the Group has a significant impact on the quality of life in the regions where it operates. Therefore, much attention is paid to the issues of corporate social responsibility (CSR) in the implementation of operational activities.

### **KEY CSR PRINCIPLES:**

- Quality provision of services, which, ultimately, is the key to the active socio-economic development of the regions of its presence;
- Fair and timely remuneration of Company's employees, as well as ensuring safe working conditions and creating all the conditions necessary for career growth, personal and professional development of each employee;
- Responsibility for preservation of the environment to the state and society as a whole.

CSR principles are observed in all business processes of the Group, are an integral part of business planning and an indispensable tool for preventing emergency and conflict situations.

The Group strives to conduct an open, transparent business, perfectly comply with the legislation of the Republic of Kazakhstan and comply with international CSR standards.



RISK MANAGEMENT

2021

The Group respects and values its employees, takes care of them and takes into account their needs and requirements. contributes to creation of favorable working conditions that meet the safety requirements.

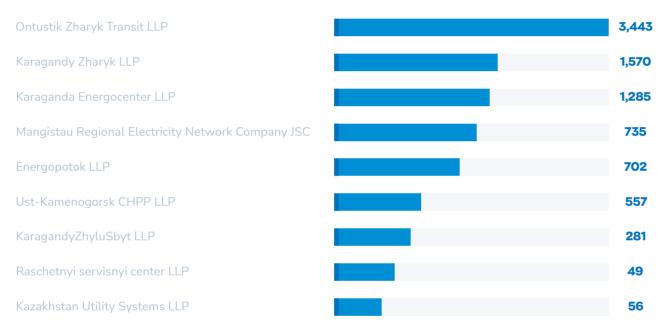
KUS strives to ensure open communication with employees. To build effective communication, all channels and information resources are used in each Company that is part of the Group This ensures that employees are regularly informed about the Group's news, its mission, strategy, immediate plans and development prospects. In case of significant changes related to the Group's activities, employees will be informed using information resources, meetings and the Group's internal corporate newspaper.

The system of recruitment and promotion of employees in the Group provides a fairly high level of professionalism of employees and transparency of recruitment procedures. Career development of employees is carried out based on an objective assessment of their work results, business qualities, as well as professional competence. Group ensures openness at all stages of the human resource management process.

In the Group, the human resources system is built in accordance with regulatory, methodological and legal documents that regulate and create conditions for its effective functioning. Strict compliance with, implementation and application of the norms of the current Labor Code of the Republic of Kazakhstan allows not to discriminate against employees, and not to allow complaints about the practice of labor relations.

Number of employees of the Group as of December 31, 2021 was 8,678 people.

#### Number of staff by Group companies, people



STRATEGY

4,145

3,185

735

557

56

#### Breakdown of the number of staff by regions of the Group's presence, people



## Number of full-time and part-time employees (broken down by gender groups and by region)

			Among	them:	
		Number of full-	time employees	Number of part-	time employees
Region	Total number of employees	male	female	male	female
Nur-Sultan	56	30	26	0	0
East Kazakhstan region	557	452	104	0	1
Mangistau region	735	569	164	0	2
Karaganda region	3,185	2,001	1,183	0	1
Turkestan region and Shymkent	4,145	3,290	716	80	59
Total	8,678				

#### Number of permanent and temporary employees in the reporting year (broken down by gender groups and by region)

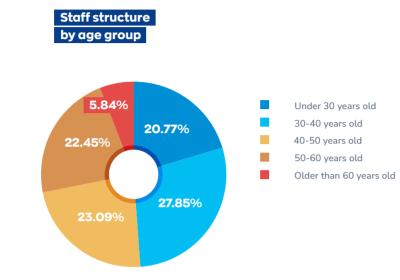
			Among	g them:	
		Number of perma	anent employees	Number of temp	orary employees
Region	Total number of employees	male	female	male	female
Nur-Sultan	56	30	26	0	0
East Kazakhstan region	557	450	106	1	0
Mangistau region	735	567	140	2	26
Karaganda region	3,185	2,004	1,147	10	24
Turkestan region and Shymkent	4,145	3,348	737	22	38
Total	8,678	6,399	2,156	35	88



KAZAKHSTAN KEY MESSAGE FROM Utility systems indicators the management key events about company strategy					MESSAGE FROM The Management	KEYEVENTS	ABOUT Company	STRATEGY
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The share of employees under the age of 40 in the Group is 48.62% of the total number. The share of employees in the age category over 60 years is 5.84%.

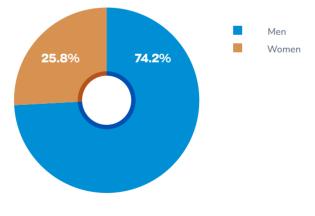


Gender structure of the staff

### Staff structure by category

The structure of the Group's staff is characterized by a high proportion of men-74.2%. Men in the category of "workers" make up 78% due to the specifics of their activities.

The share of employees in the "managers" category is 8.1% of the total number.



Personnel category	Age group	o, total		Among	them:	Among	them:
	age	persons	%	male	%	female	%
Managers		703	100%	586	83%	117	17%
	Under 30 years old	67	10%	51	9%	2	0.3%
	30-40 years old	206	29%	179	25%	36	5%
	40-50 years old	180	26%	150	21%	37	5%
	50-60 years old	178	25%	144	20%	33	5%
	Older than 60 years old	72	10%	62	9%	9	1%
Specialists, employees		2,099	100%	1,284	61%	815	39%
	Under 30 years old	426	20%	273	13%	151	7%
	30-40 years old	774	37%	497	23%	278	13%
	40-50 years old	473	23%	262	24%	217	10%
	50-60 years old	335	16%	181	12%	147	7%
	Older than 60 years old	91	4%	71	9%	22	1%
Workers		5,876	100%	4,569	78%	1,307	22%
	Under 30 years old	1,309	22%	1,120	19%	137	2%
	30-40 years old	1,437	24%	1,143	19%	297	5%
	40-50 years old	1,350	23%	908	15%	426	7%
	50-60 years old	1,436	24%	1,050	18%	416	7%
	Older than 60 years old	244	6%	348	6%	31	0.3%
Total		8,678		6,439		2,239	







KAZAKHSTAN KEY MESSAGE FROM KEY EVENTS ABOUT STRATEGY
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SUSTAINABLE	CORPORATE	RISK
DEVELOPMENT REPORT	GOVERNANCE	MAN

### Structure of hired staff by category and gender

The total number of employees employed by the Group of Companies was 1,756 people, of them 1,406 – workers, 285 – specialists, and 65 – managers.

Personnel category	Age group, total			Among	them:	Among them:	
		persons	%	male	%	female	%
Managers		65	100%	49	75%	16	25%
	Under 30 years old	3	5%	3	6%	0	0%
	30-40 years old	19	29%	16	33%	3	19%
	40-50 years old	19	29%	14	29%	5	31%
	50-60 years old	13	20%	11	22%	2	13%
	Older than 60 years old	11	17%	5	10%	6	38%
Specialists, employees		285	100%	169	59%	116	41%
	Under 30 years old	132	46%	84	50%	48	41%
	30-40 years old	82	29%	50	30%	32	28%
	40-50 years old	46	16%	22	13%	24	21%
	50-60 years old	20	7%	9	5%	11	9%
	Older than 60 years old	5	2%	4	2%	1	1%
Workers		1,406	100%	1,101	78%	305	22%
	Under 30 years old	583	41%	496	45%	87	29%
	30-40 years old	413	29%	299	27%	114	37%
	40-50 years old	217	15%	150	14%	67	22%
	50-60 years old	177	13%	142	13%	35	11%
	Older than 60 years old	16	1%	14	1%	2	1%
Total		1,756		1,319		437	

	ST	<b>AF</b>	FΤ	URN	OVER	
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Staff turnover in the Group of Companies for 2021 was 19.89%, 4.16% higher than in 2020. Increase in the staff turnover is associated with a retirement age /death of employees, at the initiative of the employer and at the initiative of employees.

Personnel category	Total p	ersons	Ma	le	Fer	nale
Managers	89	5%	68	5%	21	6%
Specialists, employees	333	19%	209	15%	124	34%
Workers	1,304	76%	1,081	80%	223	61%
Total	1,726	100%	1,358	79%	368	21%

	By gende	By gender groups		By age groups			
	Male	Female	Under 30 years old	30-40 years old	40-50 years old	50-60 years old	Older than 60 years old
Turnover coefficient	15,31	5,50	7,81	7,09	3,11	1,63	1,17

Region	Turnover coefficient
Turkestan region and Shymkent	22
Karaganda region	33
Mangistau region	11
East Kazakhstan region	9
Nur-Sultan	29

In order to reduce the staff turnover, the following measures are being taken:

- material and non-material incentives for qualified employees;
- improving the conditions of social guarantees in accordance with the collective agreement;
- stable economic situation in the Group;
- healthy psychological atmosphere;
- opportunities for career growth.



**KEY EVENTS** 

### STAFF TRAINING AND DEVELOPMENT

Staff training system is a set of personnel training activities aimed at providing employees with theoretical knowledge and practical skills necessary to achieve the Group's strategic goals.

Main goals of the training:

- **1)** improving the efficiency of the staff;
- 2) ensuring the professional level of staff required by the position;
- 3) ensuring the accumulation and transfer of know-ledge within the company;
- 4) increasing employee loyalty to the company;
- 5) preparation of the personnel reserve.

For the purpose of a structural approach to staff training and development, an annual training plan for a calendar year is approved. The plan includes training related to professional development, preparation for a profession, re-certification, obtaining a related specialty to ensure timely training of new personnel and performance of work.

In 2021, 6,303 people were trained, which is 72.63% of the total number of employees.

In 2021, the total amount of training costs amounted to 43.187.721 KZT.

								087
MANAGEMENT Report	SUSTAINABLE Development report	CORPORATE Governance	RISK Managemi	ENT	CONTACT INFORMATION	APPE	NDICES	Annu Repo 202
		Employees	receiving					
		Employees regular per evaluation	rformance	Amon	g them:	Amon	g them:	
Total number of	femployees	regular per	rformance	Amon male	g them:	Amon	g them: %	

#### ATTRACTING YOUNG PROFESSIONALS

As part of implementation of personnel policy, the Group For these purposes, each student, new employee is conducts activities aimed at ensuring continuity and transfer assigned a mentor, according to the agreements on of professional knowledge and skills from experienced, dual training, the personnel adaptation program within highly professional employees to young initiative employees. the Group.

Total young professionals	Hired in 2021	Technical/ vocational education	%	Higher education	%	Secondary education	%
1,352	342	151	44.15%	128	37.43%	63	18.42%

Thus, the Group conducts activities aimed at attracting The results of testing and presentation are entered in the young specialists to achieve an optimal combination competition list and signed by the contestant and the of young initiative workers and experienced, highly judging panel. professional employees.

Every year in November, Ust-Kamenogorsk CHPP LLP holds a competition "Best young employee of the Year". Young professionals present their presentations containing the following information: the specifics of their immediate work, description of the workplace, suggestions for improving and improving productivity. Each presentation is evaluated by Commission members on a scale from 1 to 10 points, and during a constructive conversation with the contestant, they ask questions about professional activity.

#### Employees trained in 2021, people

Personnel category	Male	Female	Total
Managers	730	85	815
Specialists, employees	414	146	560
Workers	4,670	258	4,928
Total number of trained personnel			6,303

#### Information on training

	Ма	Male		Female		
Personnel category	total number of training hours	average number of training hours per employee	total number of training hours	average number of training hours per employee		
Managers	5,855	8.02	885	10.41		
Specialists, employees	9,557	23.08	2,610	17.8		
Workers	137,415	29.42	2,971	11.51		
Total	152,827	60.52	6,466	39.72		

According to the results of two competitions, prizes are distributed.

Such events have a beneficial effect on the desire of young professionals to develop professionally and see new horizons for building a career within the Company.

**KEY EVENTS** 

Personnel category	Total number of employees	Number of employees eligible for retirement in the next 5 years	%	Number of employees eligible for retirement in the next 10 years	%
managers	703	62	8.82%	66	9.39%
specialists	2,099	105	5.00%	127	6.05%
workers	5,876	373	6.35%	357	6.08%
Total	8,678	540	20.17%	550	21.51%

## SOCIAL SUPPORT FOR THE GROUP'S EMPLOYEES

#### Base rate ratio in 2021

labor productivity.

	Base interest rate, KZT				
Personnel category	male	female	deviation, %		
Managers	472,248	391,917	17%		
Specialists	206,606	179,140	13%		
Workers	138,204	115,485	16%		

Ratio of the annual total remuneration of the highest paid employee of the organization to the average annual total remuneration of all employees (with the exception of the highest paid person) 5.63

Ratio of the percentage increase in the annual total remuneration of the highest paid employee of the organization to the median percentage increase in the annual total remuneration of all employees (with the exception of the highest paid person)

0.67

NON-FINANCIAL MOTIVATION

Every year, events are held with the awarding of awards, certificates of honor, titles in order to increase motivation for effective work, to stimulate employees for achieving high production results in the subsidiaries of the Group.

At the end of 2021, 289 employees were awarded for their effective work. Of them, 92 employees were awarded corporate awards, 50 employees were awarded state

awards, 64 were awarded public awards, 8 employees were awarded by the CIS Electric Power Council, 75 employees were awarded KEPA awards (11 employees were awarded the title of "Merited Power Engineer", 21 employees were awarded the title of "Honorary Power Engineer", 25 employees were awarded the title of "Ardager Power Engineer", 18 were awarded certificates of honor).

In order to increase the loyalty of employees and ensure safety during the daily performance of work duties, the following events were organized:	The ove
<ul> <li>According to the Labor Remuneration Rules of the Labor Code of the Republic of Kazakhstan, employees are provided with additional paid labor leave for long, continuous work in the energy industry as follows:</li> <li>for the first 2 years – 1 day;</li> <li>subsequently, for each year of work – 1 day, but no more than 4 calendar days.</li> </ul>	One wit per
Employees are also provided with all types of paid leave (labor, environmental, disability).	In a ma foll
<ul> <li>The following types of surcharges are made for combining positions and performing the duties of a temporarily absent employee:</li> <li>for combining position of general director, commercial or financial director – 30% of the basic salary of the employee;</li> </ul>	•

- for combining position of the head of a structural unit in connection with the death of a close relative in the 20% of the basic salary of the employee; amount of 20,000 (twenty thousand) KZT;
- in case of dismissal due to retirement in the amount for combining position of a specialist – 10% of the basic salary of the employee. of 2 (two) official salaries;

In 2021, the average salary increase in the Group was

8%. The Group has a flexible payment system aimed

at meeting the key performance indicators of each

employee on a monthly basis. This payment system

allows encouraging employees to work effectively, to

introduce innovations in everyday activities to increase

The percentage of deviation of the size of basic remuneration rate for men compared to women is on average 15.3%. Reason for deviation is the harder work of men, which requires endurance, strength and high performance.

ISK Anagement	CONTACT Information	APPENDICES	Annual Report 2021

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e following types of compensation are made for working vertime, holidays and weekends:

- payment is not less than one and a half times, based on the daily (hourly) employee rates;
- provision of another day of rest (day off) at the request of the employee.

ne-time and current bonuses are provided, in connection ith holidays, anniversaries, retirement, for the best erformance in work.

accordance with the collective agreement, social and aterial assistance is provided to employees in the llowing cases:

- in difficult life situations (illness, accident, robbery, etc.), including the preservation of salary, at the expense of the Company's net income;
- in cases of surgical operations, emergency events (fire, theft, natural disasters, etc.), severe injuries (industrial and domestic) in the amount of 20,000 (twenty thousand) KZT;

- in connection with the death of an employee for the
   provision of transport for centralized delivery to the funeral of 50,000 (fifty thousand) KZT;
- with a positive financial situation of the Company,
   ensuring payment for cellular communications; pools, recreational activities and services:
- if there is a net profit, it is possible to provide interestfree loans to needy workers to improve housing conditions:
- provision of a one-day vacation on the "Day of Knowledge" for employees-parents raising primary school children:
- implementation of partial payment of a voucher for sanatorium treatment in the amount of 25% of the cost of the voucher:

- place of work:
- payment is made for the rental of gyms, swimming organization of a New Year's matinee and New Year's aifts for the children of employees:
  - conducting a lottery with prizes for the Energy Day;
  - referral for training and advanced training of the Company's employees.

For the Group of Companies in 2021, the total number of employees who took social leave to care for a child before reaching the age of 3 (three) years old the was 162 persons. Of them, 63 employees have started performing their work duties.

Total number of employees who took parental leave until reaching the age of 3 (three) years old, persons		Total number of employees who leave until reaching the age o	o started working after parental of 3 (three) years old, persons
female	male	female	male
160	2	63	0

Total number of employees who returned from parental leave until reaching the age of 3 (three) years old, persons		Total number of employees who have worked in the company for at least 12 months, after returning from parental leave until the age of 3 (three) years, people		
female	male	female	male	
51	0	30	0	

### INTERACTION WITH TRADE UNION ORGANIZATIONS

CORPORATE

GOVERNANCE

SUSTAINABLE

**DEVELOPMENT REPORT** 

The purpose of the incentive and remuneration system is to attract, retain and motivate employees to ensure that the Group successfully fulfills its mission and achieves business goals at optimal costs.

In 2021, the total number of employees in the trade union amounted to 5,450 people, which is equal to 65.7% of the In this connection, trade union organizations have been total number of employees of Companies where Collective established and operate in the Group of Companies and agreements have been concluded.

MANAGEMENT

REPORT

Initial data	Total for 2021
Amount spent by the trade union for payments, KZT	70,854,305
Total number of employees as of 01.01.2021 in companies with Collective Agreements, persons	8,292
Number of employees who are in the trade union, people	5,450
Share of the total number, %	65.7%

In the Group of Companies, collective agreements provide social guarantees and benefits for employees who are members of a trade union, their family members, as well as pensioners and veterans of enterprises, particularly:

- financial support in case of death of close relative, birth of the first child, treatment, anniversary date, retirement;
- payment of 50% for health resort treatment;
- payment of 50% of the cost of vouchers to children's health camps;
- New Year's gifts, March 8, Nauryz gifts;
- with positive financial condition of the Company, payment is made for the rental of gyms, swimming pools, recreational activities and services;
- if there is a net profit, it is possible to provide interestfree loans to needy workers to improve housing conditions:
- provision of a one-day vacation on the "Day of Knowledge" for employees-parents raising primary school children:

collective agreements have been concluded to ensure the social protection of employees.

additional paid leave for single parents; mothers who are not married and raising a minor child; who have a large family, i.e. a family with four or more minor children living together; victims of nuclear tests at the Semipalatinsk nuclear test site (upon presentation of the appropriate certificate); who are raising a disabled child (one of the parents);

 provision of social leave with average pay in case of marriage; death of close relatives; birth of a child; on the "Day of Knowledge" to one of the parents (guardian); payment of a one-time benefit to an Employee (or members of his family at his death) who suffered as a result of an accident related to production and issued an accident report in the form determined by the authorized labor body, and establishing the degree of fault of the Employer - 100%.

 material social assistance in the following cases, not related to the production, provided documentary evidence: in case of death of an Employee his family members; to Employees in difficult situations (serious 2021

illness or operation, accident, fire, and etc.); Workers in case of death of relatives; to Employees upon dismissal at retirement age; 1 time per year, with the acquisition of the trade Union group of vouchers to rest homes, or vouchers for health resort treatment of Employees or improvement of their children in children's camps located on the territory of the Republic of Kazakhstan the payment is equal to 50% of the tour price, but not more than 10,000 KZT in the provision of trade Union of the relevant documents; in the birth of children to treatment and medical services;

#### **HEALTH AND SAFETY**

One of the main business principles for the Group is to prioritize the life and health of employees. The main goal is to avoid accidents with employees of the Company and contractors.

The management of Kazakhstan Utility Systems LLP adheres to the following principles in the field of health and safety:

- We put the safety of station employees and contractors first.
- We comply with the requirements of the legislation of the Republic of Kazakhstan and support continuous training, improving the culture of employee safety.
- We strive to preserve the health of every employee.

passing of exams for students studying in educational organizations in specialized energy specialties;

educational leave is provided for the preparation and

drivers are charged extra bonuses for their gualifications;

ABOUT

COMPANY

- lumpsum bonuses are paid to employees in the following cases: at the end of the year, for years of service; for the uninterrupted supply of electric power to consumers in the autumn-winter peak load (working capacity); for economy of materials; for performing particularly important tasks; for significant anniversaries, government holidays of Kazakhstan.
- We openly talk about the company's activities in the field of health and safety.

All personnel of the OS services of subsidiaries are competent, qualified specialists, most of whom are certified under the IMS system: OHSAS 18001, ISO 14001, ISO 9001, IOSH and Nebosh international standards. Also, our specialists constantly undergo advanced training at various special courses and trainings in the area of OS and EP. Specialists participate in the HSE activities of various levels.

Protecting employees from injuries and occupational diseases is an integral part of risk management and is coordinated by senior management. In 2021, no accidents were registered at the Group's enterprises.

#### LABOUR SAFETY SYSTEM

Kazakhstan Utility Systems LLP adheres to the policy of zero tolerance for violations of the fundamental (basic) rules and norms in the area of labor safety and health. The zero tolerance policy is a certain level of responsibility for violation of the basic rules of OS, up to and including termination of the contract (employment contract or contract with the contracting organization). Violation of the cardinal rules, the identification of the fact of the use of alcoholic beverages (the presence in the blood above zero ppm) are grounds for resolving the issue of termination of an employment contract. Measures for violation of safety and environmental protection rules for the employees of contractors are defined in the standard HSE Annex for works / services on the customer's territory. Each employee must comply with and require others to comply with all legal norms and rules on labor protection and safety in force at the enterprise.

The right to suspend work is a process that empowers every employee of a subsidiary and contracting organization with the authority to stop work as soon as a situation is noted which is, in his opinion, unsafe. The right to stop work also includes the obligation of all employees and contractors to stop their work as soon as an employee or contractor asks to do so, applying the right to stop work. A shutdown is considered the last chance to prevent incidents and, consequently, serious injuries and deaths. As soon as the right to stop work was applied, the work shall be immediately suspended, the reason for the work stoppage shall be explained, work safety analysis shall be carried out in order to identify and determine, if necessary, additional control measures to reduce risks. Employees are encouraged and thanked for the identified risks and the suspension of work for the sake of safety.

Annual Report 2021

**Preventive safety** – use of a work safety analysis form to assess risk to qualitatively study each stage of work, identify existing and potential hazards and risks at each stage of work, and identify risk control measures to reduce and eliminate hazard and risk.

**Checklists** of hot works, work at height, HD, works in confined spaces, and so on.

**1C:Safety Walk** (Ust-Kamenogorsk CHPP LLP) is a program for registering rounds in the area of HSE. The process of rounds by employees of the enterprise, as well as the results achieved, are entered into the registration program of Safety Walk to identify unsafe actions and conditions at crew workplaces, as well as to keep records of the detected violations.

Application of the LOTO system. Every year, thousands of workers in various industries are killed or injured during repair or maintenance of industrial equipment under the accidents with an uncontrolled supply of energy. The LOTO system is a monitoring system for hazardous energy sources in order to ensure the safety of people, to protect the equipment, to ensure its uninterrupted operation. The system is based on the processes of multiple inspections of each important stage of control of hazardous energy sources carried out by competent and authorized persons in order to ensure proper disconnection from hazardous energy sources. The LOTO is recommended for use by the International Labor Organization (ILO) as the most effective system of industrial safety during repair and maintenance work, which makes it possible to almost completely eliminate the risks associated with human factors, while providing equipment and blocking the supply of dangerous energy.

CORPORATE

GOVERNANCE

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**Annual purchase of suits for protection against electric arc.** The set is selected in accordance with the nature of the hazard and operating conditions. The set includes: a jacket made of fire-resistant material, a suit or overalls made of fire-resistant material, heat-resistant gloves, heat-resistant helmet with a protective screen for the face, a balaclava.

Sets for protection against the effects of an electric arc provide a chance to save lives and to preserve health during erroneous actions of operating personnel, as well as in emergency situations and allow to extend the time of evacuation from the danger zone.

Also, protection sets help to reduce the likelihood of accidents in organizations of the power industry, including fatal ones.

**Conducting monthly OS and environmental days** is one of the opportunities for staff training, practical skills training, as well as informing staff on the importance of issues in the area of labor safety, occupational safety and environmental protection in their daily work.

Safety days are also an opportunity to get feedback on the effectiveness of measures taken to improve the safety culture and ecology. At the beginning of the calendar year, a schedule of days for OS is drawn up, which is approved by the plant management and includes the most topical topics on labor safety and ecology in the area of energy and related production areas. The schedule is drawn up in such a way that employees of all structural divisions of the enterprise and employees of contracting organizations performing work at the enterprise take part in the events every month.

**Training in the CTC (Ust-Kamenogorsk CHPP).** The Corporate Training Center (CTC) plays an important role in the training of personnel and contractors. It is worth noting training of the contracting personnel. Operating and construction contractors form a large part of the Company's team, and it is critically important that they share the safety culture of the Group. Training in the CTC is a kind of foundation from which all further work begins with the employees of contracting organizations.

#### Weekly issue of the HSE newsletters.

Conducting testing during the qualifying exams under the program.

#### **HSE bonuses**

The quarterly OS bonus for the personnel of the enterprise is given in case of absence of accidents with employees of the enterprise and contracting organizations. In order to motivate contractors personnel to work safely, the Company reserves the right to determine the best contracting organization or employee of the contracting organization for a certain period of time and to provided bonuses.

#### Certification

Kazakhstan Utility Systems LLP group of companies is certified for compliance with the ISO 9001 quality management system, ISO 14001 environmental management, and OHSAS 18001 environmental safety.

#### **CORPORATE EVENTS**

Employees of the Group of companies annually take an active part in professional, as well as sports and Wellness events held at the Company level separately, as well as at the regional and regional levels.

SUSTAINABLE

**DEVELOPMENT REPORT** 

Karaganda Energocenter LLP took part in citywide job fairs. To celebrate the professional Day of the Power Engineer, internal sports competitions are held annually in various sports, among which are popular: volleyball, mini-football, swimming, chess.

Karaganda Energocenterr LLP, with the participation of a trade union organization, organized a fishing trip 2 times a year (winter and spring fishing). In the summer months, summer holidays are organized on the principle of a "weekend trip", when employees with their families go on summer holidays to Karkaralinsk, Balkhash, Bayan-aul.

**In January 2021,** Ust-Kamenogorsk CHPP employees donated blood for the regional Blood Center. The purpose of the event was to help a close relative of their colleague and help replenish the blood bank and its components. 39 employees took part in the action and a total of 17 liters of blood were collected.

Every year, on February 15, Kazakhstan celebrates the Memorial Day of soldiers-internationalists.

In honor of the 32nd anniversary of the withdrawal of Soviet troops from Afghanistan, Mangistau Regional Electricity Network Company JSC congratulated the internationalist soldiers who have been working at the energy enterprise for more than 20 years. In total, three veterans of the Afghan war work in MREC JSC. These are the crane operator of the Mechanization and Transport Service Makhmud Karazhanov, Annual Report 2021

the dispatcher of the Aktau RES Dzhalgasbek Kurkitov and the chief engineer of the Shetpe RES Oryngali Sarkulov.

**In March 2021** Ust-Kamenogorsk CHPP LLP was visited by Vice-Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan Akhmetzhan Primkulov as part of the campaign to explain the new Environmental Code of the Republic of Kazakhstan.

**On March 5, 2021,** a delegation headed by the Ambassador Extraordinary and Plenipotentiary of the Czech Republic to the Republic of Kazakhstan Rudolf Hykl visited Ust-Kamenogorsk CHPP LLP. During the meeting, both sides had the opportunity to discuss new technologies and equipment applicable to coal-fired power plants.

**In May 2021,** the employees of Ust-Kamenogorsk CHPP LLP were awarded Letters of Thanks from the Akim of Ust-Kamenogorsk following the results of the last heating season. In a solemn atmosphere, the head of the city Zhaksylyk Omar thanked the specialists of public utilities for their professionalism, honest and responsible attitude to their work.

**On May 7, 2021,** on the eve of two significant holidays at once – Defender of the Fatherland Day and Victory Day, employees of Ust-Kamenogorsk CHPP LLP congratulated veterans and home front workers of the enterprise.

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It has long been a good tradition in MRENC JSC to provide support to children in need of constant treatment. Observing safety measures in the conditions of the pandemic, it was decided to transfer financial assistance mainly to bank cards of parents of children with disabilities.

Every year, on the eve of the holiday on June 5, the world community organizes environmental actions, contests, voluntary Saturday works to draw attention to environmental conservation issues. Environmental education of children is one of the important directions of environmental education. The creative works of the pupils of the Ust-Kamenogorsk Youth House were awarded with memorable gifts. The presentation of diplomas and gifts took place in the assembly hall of the Department of Ecology of the East Kazakhstan Region.

June 8. 2021 Ust-Kamenogorsk CHPP LLP hosted a meeting with the management of the Federation of Trade Unions and deputies of the Majilis of the Parliament of the Republic of Kazakhstan. On-line visit to Ust-Kamenogorsk CHPP LLP was held as part of the campaign "How are you living, primary?". The meeting discussed topical issues of the activities of the primary trade union organization.

**On June 23, 2021,** students of Ust-Kamenogorsk Higher Polytechnic College studying under the dual program passed the final state exam at the Corporate Training Center of Ust-Kamenogorsk CHPP LLP.

July 29, 2021 The initiative group of the youth of Ust-Kamenogorsk CHPP LLP congratulated the veteran of labor Alexandra Isakovna on such a significant date the 105th anniversary. The power engineers wished health, cheerfulness, optimism, good mood and good emotions.

On August 13, 2021, the international environmental action "One River, One Destiny" was held in Ust-Kamenogorsk. Activists of the initiative group of Ust-Kamenogorsk CHPP LLP and cadets of the Military Technical School took part in the action – they cleaned the bank of the Irtysh River from garbage. The purpose of this action is the formation of environmental knowledge, increasing the effectiveness of the promotion of patriotism and socially positive guidelines, spiritual, moral and patriotic values of youth and the population.

On September 8, 2021, employees of MRENC JSC became participants in a field campaign for voluntary blood donation. The action was organized by the Mangistau Blood Center. The visiting team of the regional Blood Center organized the work of the donor point directly in the building of MRENC JSC. More than 30 employees of the company took part in the action, who became donors for patients in need of blood transfusion. The charity event on blood donation has been held in MRENC JSC for several years. Power engineers are always ready to support this initiative, because donated blood can help a lot, especially in the current epidemiological situation.

On the eve of the 55th anniversary of the company, employees of MRENC JSC planted trees. The event was attended by employees of all structural divisions, the company's management and members of the company's Board of Directors. According to the results of this "green" event, 55 trees of different breeds adapted to the Mangistau climate were planted. The trees were planted on October 22 on the territory of the energy company. The territory was improved by employees of MRENC JSC on their own. Provided with the necessary equipment, having prepared the soil for planting in advance, the power engineers improved the territory of the enterprise.

On October 04, 2021, employees of Ust-Kamenogorsk CHPP LLP took part in the cleaning of the Komendantka River. Young power engineers together with public activists of the city took part in a large-scale voluntary Saturday work. As a result, 10 units of special equipment collected and removed about 600 bags of garbage.

On October 07, 2021, employees of Ust-Kamenogorsk CHPP LLP planted 70 tree seedlings - elm, birch, Manchurian walnut. The planting site was the site behind the Kabanbai Batyr monument at the entrance to Ust-Kamenogorsk.

On October 19, 2021, a press tour was held at Ust-Kamenogorsk CHPP LLP, which is the largest producer of heat and electric energy in Ust-Kamenogorsk. During the event, the head of the Department for Regulation of Natural Monopolies in the East Kazakhstan region Arman Malik and media representatives got acquainted with the implementation of the Investment Program of Ust-Kamenogorsk CHPP LLP.

On October 19, 2021, employees of Ust-Kamenogorsk CHPP LLP visited the Karaganda CHPP to exchange experience with fellow power engineers from Karaganda Energocenter LLP. Igor Sukhanov. Director of Labor and Environmental Protection - Chief Technical Supervisor for Labor Protection of Ust-Kamenogorsk CHPP LLP, conducted training for employees of Karaganda Energocenter LLP

On October 31, 2021, the team of Ust-Kamenogorsk CHPP LLP took first place in the regional table tennis competition among power engineers.

On October 30, 2021, a mini-football tournament among the company's employees was held at the Mangistau Arena sports complex on the initiative of the trade union committee of the Local Trade Union of MRENC JSC. The

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sports event is timed to the 55th anniversary of the founding of the company. Eight teams, all employees of the structural divisions of the enterprise, took part in the competition. Professional referees from the Mangistau Regional Football Federation were invited to judge the participants. Employees of MRENC JSC have once again confirmed their commitment to a healthy lifestyle. The power engineers of MRENC JSC are a cohesive team not only at work, but also demonstrate their unity during offhours, actively engaged in sports.

November 20, 2021, employees of Ust-Kamenogorsk CHPP LLP are the first in the women's triathlon within the framework of the regional Spartakiad of power engineers. The track and field complex named after Olga Rypakova hosted competitions in women's triathlon within the framework of the regional Spartakiad of power engineers of the East Kazakhstan region.

On November 24, 2021, a regional youth forum dedicated to the Day of the First President of the Republic of Kazakhstan was held in Ust-Kamenogorsk, in the building of the Yertis concert hall. The employee of Ust-Kamenogorsk CHPP LLP, Syrym Omirzakov, was awarded the diploma "Young Leader of the Year".

On December 10, 2021, 30 employees of Ust-Kamenogorsk CHPP LLP became donors of the regional Blood Center. Thanks to the help of power engineers, the stock of blood components was replenished by 14 liters.

On December 24, 2021, in honor of the professional holiday - the Day of the Power Engineer of the Republic of Kazakhstan, a monument to the Honored Power Engineer of Kazakhstan and the CIS, Mailybai Aminovich Aimagambetov, was inaugurated on the territory of MRENC JSC. The opening ceremony was attended by the head of the region

Nurlan Nogayev, the management of MRENC JSC, industry veterans and relatives of the Honored Power Engineer. Mailybai Aminovich has passed a long way of life – from an engineer to the President of MRENC JSC, his total work experience was about 40 years. In honor of the 55th anniversary of the enterprise and the Day of Energy of the Republic of Kazakhstan, the head of the region Nurlan Nogayev visited MRENC JSC. The head of the region, Nurlan Nogayev, got acquainted with the activities of the enterprise and visited the regional dispatch center. RDC provides operational dispatching personnel with computational and analytical support, thereby improving the quality and efficiency of decision-making on the management of electric networks of MRENC JSC in preventing possible technological violations and emergencies. During the visit to the enterprise, Nurlan Nogayev met with the employees of the enterprise. Industry specialists are always on the most important frontier, providing the population with electric energy. The energy security of the region largely depends on the successful work of the specialists of MRENC JSC. The company's team has a long and difficult path of electrification of the region. For more than half a century, the main goal of the company remains high-guality and uninterrupted power supply to the Mangistau region. Nurlan

KEY

INDICATORS

**MESSAGE FROM** 

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**On December 24, 2021,** the ceremonial launch of the new substation "Yuzhnaya" SS-110/10 kV took place in the area of the Warm Beach of Aktau. The opening of the power facility is timed to the Day of the Power Engineer of the Republic of Kazakhstan and the 55th anniversary of MRENC JSC. The substation "Yuzhnaya" SS-110/10 kV with 2x25 MVA transformers was constructed to develop tourism in the Mangistau region and within the framework of the signed Memorandum between MRENC JSC and the regional Akimat.

Nogayev took part in the solemn ceremony of awarding

honored employees of the enterprise..

#### **CHARITY AND SPONSORSHIP**

**KEY EVENTS** 

ABOUT

COMPANY

The Group of companies is an active participant in social projects aimed at supporting the population in the regions where it operates.

In 2021, Raschetnyi servisnyi center LLP provided benefits for electric energy consumption within the framework of a Memorandum with local Executive bodies to provide charitable assistance to veterans of the World War II.

In December 2021, the company provided financial assistance to a former employee to pay for treatment in the amount of 100,000 KZT.

The power engineers of Karaganda Energocenter LLP congratulated the veterans of World War II on Victory Day.

On the eve of May 9, Karaganda Energocenter LLP congratulated veterans of the World War II and home front workers who dedicated their lives to the development of energy in the region after the war with the holidays – defender of the Fatherland Day and the Great Victory Day. 19 veterans received a gift of monetary assistance and cards with warm greetings.

Karaganda Energocenter LLP took part in the "World Cleanup Day". The purpose of this environmental event is to increase environmental education and explain the need for separate garbage collection in order to ensure its further processing and prevent environmental pollution. The campaign is aimed not only at cleaning up individual territories, but also at separate garbage collection. The Company's team got a contaminated site in the Oktyabrsky district. During the cleaning, a large amount of plastic, glass, aluminum and other waste was collected. Some of the waste was sent for recycling. Proceeds from transfer of waste to recycling organizations will be used for charity.

From year to year, on the eve of May 9, a special event with material encouragement is held in Onustik Zharyk Transit LLP to honor veterans of World War II, Afghanistan War, participants of the labor front and equal-status persons. Also, in honor of the celebration of the day of the elderly of the Republic of Kazakhstan, a one-time incentive is paid to all retirees of the Partnership, the event is held every year.

Every year, on Kurban-Ait day, financial assistance is provided from the funds of the Partnership to 10 poor families in the Suzak district and an orphanage located in the Sairam area of South Kazakhstan region.

MRENC JSC has been closely cooperating with the charity fund "Fund for Support of Disabled Children". Employees of MRENC JSC provided charitable assistance to the foundation.

Energopotok LLP s an active participant in social projects aimed at supporting the population in the regions where it operates. The company provides monthly free benefits for veterans of the World War II and equal-status persons in the amount of 30 kWh. As well as services for re-connecting large families to the electric grids after eliminating violations of the contract are provided free of charge on the basis of a written request.

Karagandy Zharyk LLP provided charitable assistance for the Day of the Elderly – 99,991 KZT; 48,000 KZT for the manufacture and purchase of badges.

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On October 19, 2021, Ust-Kamenogorsk CHPP LLP donated coal for the Veterans' Home in Tarkhanka village for heating during the heating season of 2021-2022. Within the framework of social responsibility, the company annually provides all possible assistance to labor veterans and pensioners. 15 pensioners live in the Veterans' House. Fourteen tons of coal were delivered just before the onset of cool days.

On Victory Day on May 9, 2021, congratulations were organized for veterans and home front workers who worked at the Ust-Kamenogorsk CHPP LLP: food packages and bonuses were delivered by young specialists.

## Environmental protection

The most noticeable impact on the environment has the coal generation of energy. In accordance with the principle of materiality in disclosing information, in this annual report, the Company discloses environmental protection issues with regard to subsidiary energy generating assets.

Kazakhstan Utility Systems LLP views environmental protection activities as an integral part of its daily work, fully recognizing the need to maintain environmental balance and ensure environmentally sustainable social and economic development of society.

Responsible attitude to the environment is the key principle of the Environmental Policy. The objectives of this policy are to minimize the negative impact on the environment, increase the level of environmental safety, responsibility for ensuring environmental protection, energy saving and rational use of natural and energy resources in the activities of the enterprise.

The enterprises implemented and successfully operate an integrated management system based on the operation of four international standards: ISO 9001; ISO 14001; ISO 45001. In 2021, the organizations successfully passed an inspection of management systems, confirmed the compliance of the functioning environmental management system with the requirements of the international standard ISO 14001:2015.

Karaganda Energocenter LLP and Ust-Kamenogorsk CHPP LLP annually forms the Environmental Program, which defines the necessary environmental measures, as well as the costs of their implementation.

In 2021, the following measures were taken to protect the environment by the company itself and the third-party organizations:

#### Karaganda Energocenter LLP

- Operational and commissioning tests of the ARU of boilers BKZ-50 No. 1-5 and PTVP-100 No. 1-3:
- Monitoring of impact on atmospheric air at the border of sanitary protection and residential zones;
- Periodic watering of the territory of the works performed at the ash dump using special automatic machines;
- Rational use of water resources, reducing the risk of excess water losses:
- Determination of the quality of drinking water;
- Dust suppression of section No. 2 of the dry storage ash dump of CHPP-1 with development and transportation of soils;
- Extending the service life of an ash dump with hydraulic ash removal system;
- Soil cover monitoring:
- Dust suppression in development of ash and slag waste from the existing ash dump No. 1 of CHPP-1 with hydraulic ash removal system loamy soil;
- Disposal of waste to interested individuals and legal entities for processing, disposal and disposal;
- Conducting radiation quality tests of ash and slag waste, fuel oil and coal.
- Repair and partial replacement of burner devices on boilers unit BKZ-420-140 st. No. 1-7:
- Instrumental measurements of emissions of harmful substances into the atmosphere from the station's boilers:

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- Maintenance and inspection of the stationary gas analysis complex SGK-509:
- Steam irrigation to reduce emissions from coal transfer;
- Process flow tests of ash-collecting plants: •
- Soil cover monitoring;

#### Ust-Kamenogorsk CHPP LLP

- Replacement of high pressure boiler emulsifiers swirlers; Environmental studies: environmental control/ Maintenance of an automated system for monitoring monitoring of environmental quality at a place of the emissions into the atmosphere; ash dump, industrial site;
- Repair of ash-collecting installations of boilers;
- Repair of burner devices of boilers;
- Restoration of brickwork envelope and thermal Advanced training of specialists on environmental insulation of boilers: protection.
- Services for the confirmation and verification of the greenhouse gas emissions report;
- Inventory of greenhouse gas emissions and ozonedepleting substances;
- Maintenance of software of the automated workplace of the system of the regional automated measuring system of industrial environmental monitoring;
- Monitoring of wastewater emissions and monitoring of a water body (at the water intake site, above and below the wastewater discharge);
- Monitoring of soil conditions at a place of the ash dump
- Landscaping;
- Construction of ash dump No. 5;
- Use of ash and slag waste;
- Preventive environmental safety overhaul of ash pipelines;
- Transfer of solid household waste for disposal;

KEY INDICATORS

**MESSAGE FROM** THE MANAGEMENT ABOUT COMPANY

**KEY EVENTS** 

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- Recycling of waste rubber products;
- Radiation monitoring of solid fuels:
- Supervisory audit of the environmental management svstem
- ISO 14001:
- Expert assessment of the actual technical condition of the enterprise:
- Observations on the deformation of the earth's surface of ash dump No. 3:
- Pumping of wells and sampling of groundwater at a place of the ash dump and industrial site;

When considering projects on construction, reconstruction, modernization of equipment and facilities, companies assess the completeness of all types of environmental impacts and develop measures to reduce them.

**KEY EVENTS** 

#### VIOLATIONS OF ENVIRONMENTAL LEGISLATION

The Company's enterprises, as large nature users, are almost constantly under the control of state environmental protection authorities. In 2021, 7 inspections were carried out by the Departments of Ecology at Ust-Kamenogorsk CHPP LLP and Karaganda Energocenter LLP. of which 2 were planned, 5 were unplanned. During the control, the following comments were identified:

• Excess of the actual dust emission in the boiler shop at the sources at Karaganda CHPP-3, CHPP-1 in accordance with the "Rules of Economic Assessment of Damage from Environment Pollution" approved by the Decree of the Government of the Republic of Kazakhstan dated June 27, 2007 No. 535 (as amended from 21.06.2016, No. 367) Karaganda Energocenter LLP paid damages for the amount of 1,687,567 KZT.

• The pulp is discharged to the surface with the formation of ash beaches in the western part of section No. 3 of the ash dump No. 2 of Karaganda CHPP-3. An administrative fine of 100 MCI was paid.

The above-mentioned comments were eliminated as soon as possible, which was confirmed by repeated preventive control by state bodies. In addition, Karaganda Energocenter LLP has developed a long-term action plan to improve the environmental performance of the stations for 2023-2027, including the replacement of gas cleaning equipment with more advanced one.



#### **ATMOSPHERIC AIR PROTECTION**

Karaganda Energocenter LLP (hereinafter referred to as KEC) and Ust-Kamenogorsk CHPP LLP (hereinafter referred to as UK CHPP) are major nature users and have a significant impact on atmospheric air.

In accordance with the requirements of the environmental legislation of the Republic of Kazakhstan, regulatory documents (MPE, EIA) were developed for power plants and maximum permissible concentrations (MPC) were established.

In order to comply with the environmental legislation of the The volume of gross emissions from stationary sources in Republic of Kazakhstan and maintain the design emissions of 2021 amounted to: pollutants at power plants, operational monitoring is carried Karaganda Energocenter LLP – 35,191 tons at the out, which includes: calculation of environmental emissions established standard of 46,430 tons/year. from stationary sources, accounting of manufactured Ust-Kamenogorsk CHPP LLP – 16.186 tons at the products, consumption of raw materials and materials, established standard of 17,722 tons/year. the number of hours of operation of each equipment, the In total: 51.377 tons with a standard of 64.152 tons. quality and composition of burned fuel.

According to the Code of the Republic of Kazakhstan In the period from 2004 to 2016, the ash collecting units at "On taxes and other obligatory payments to the budget", all nine boilers of the station were replaced with emulsifiers emissions from mobile sources are not calculated, the of the 2nd generation. The implementation of this measure amount of fuel used is the basis for calculations of payments allowed to increase the efficiency of coal ash capture from for emissions from mobile sources. Transportation of outgoing flue gases. At the same time, the implementation workers, raw materials, materials used for the Company's of this measure made it possible to increase the efficiency activities and performance of work is carried out over short of capturing sulfur dioxide without adding special reagents. distances and does not have a significant environmental impact.

In the period from 2009 to 2013, high-pressure boilers (article 11-15) were reconstructed with the introduction of high-concentration dust supply technology in order to reduce emissions of nitrogen oxides into the atmosphere. The implementation of this measure allowed reducing the concentration of nitrogen oxides in the outgoing flue gases by up to 20%.

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In 2019, the project to reduce nitrogen oxide emissions from the boiler unit No. 15 at UK CHPP was completed. The implementation of design solutions has reduced the concentration of nitrogen oxides in the flue gases leaving the boiler by more than 20%.

The company has implemented all acceptable best available technologies according to the list approved by the order of the Minister of energy of the Republic of Kazakhstan No. 155 dated November 28, 2014.

In 2021, tax payments for pollutant emissions from stationary sources amounted to:

- KEC 341.975 million KZT, from mobile sources (transport) – 0.245 million KZT.
- UK CHPP 260.015 million KZT: from mobile sources (transport) – 0.967 million KZT.

The statistics on the volume of emissions of harmful substances into the atmosphere by the group of companies over the past 3 years are presented below:

Types of emissions (tons/year)	2019	2020	2021
Karaganda CHPP-1			
Total, including:	3,128	3,004	2,867
Ash (inorganic dust SiO2-70–20%)	571	553	572
Nitrogen oxides (NO)	442	525	458
Sulfur dioxide (SO2)	1,851	1,679	1,601
Carbon monoxide (CO)	107	95	86
Other	157	152	151
Karaganda CHPP-3			
Total, including:	34,530	35,575	32,324
Ash (inorganic dust SiO2-70–20%)	5,180	4,853	5,136
Nitrogen oxides (NO)	9,521	10,381	9,175
Sulfur dioxide (SO2)	19,013	19,645	17,189
Nitrogen oxides (NO)         9,521         10,381         9,175		506	
Other	303	309	318
Total for KEC	37,657	38,579	35,192
Ust-Kamenogorsk CHPP LLP			
Total, including:	16,145	16,052	16,186
Sulfur dioxide (SO2)	8,824	8,735	8,724
Nitrogen oxides (NO)	4,970	5,012	4,959
Ash (inorganic dust SiO2-70–20%)	2,162	2,096	2,296
Carbon monoxide (CO)	166	185	183
Other	24	24	24

Total for Group of companies:			
Types of emissions (tons/year)	2019	2020	2021
Total, including:	53,803	54,631	51,378
Sulfur dioxide (SO2)	29,688	30,059	27,513
Nitrogen oxides (NO)	14,934	15,918	14,591
Ash (inorganic dust SiO2-70–20%)	7,912	7,503	8,004
Carbon monoxide (CO)	785	667	775
Other	484	485	494

In accordance with the requirements of the environmental legislation of the Republic of Kazakhstan, companies annually conduct an inventory of greenhouse gas emissions from burnt fuel (coal, fuel oil). The verified reports were submitted to the authorized bodies on environmental protection within the established time frame.

Below is the dynamics of greenhouse gas emissions in tons of CO2-equivalent:

Year	2019	2020	2021
KEC	5,851,934	5,677,555	5,836,680
UK CHPP	2,953,930	2,839,526	2,716,451
Amount	8,805,864	8,517,081	8,553,131

**Note:** the dynamics of emissions depends on the level of heat and electric power production, which affects the amount of fuel used. At the same time, it should be noted that the specific level of emissions per unit of output is

#### WASTE MANAGEMENT

In the course of production activities at CHPP-1 and CHPP-3, industrial and household wastes are generated, which are related to green and amber hazard levels.

In accordance with the requirements of the environmental

legislation of the Republic of Kazakhstan for CHPP-1 and CHPP-3, regulatory documents on waste management were developed (LRW, waste management program, hazardous waste passports).

More than 28 types of waste are generated at enterprises.

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#### Volume and types of waste generated in 2021

#### Hazardous waste

- used ion exchange resins;
- used mercury-containing lamps;
- used mercury-containing devices (thermometers); used lead batteries;
- waste from a medical center of class "B"; oiled rags;
  - used car filters;
- used oils;
  - containers of paint and varnish materials;
- used wooden railway sleepers.

#### WATER RESOURCES

In accordance with the technological process at CHPP-1 and CHPP-3, Karaganda Energocenter LLP, there is a circulating water supply system. To compensate for losses in the circulating water supply system and household needs, CHPP-1 and CHPP-3 use potable water. At CHPP-1, water comes from ArcelorMittal Temirtau JSC and Karagandy Su LLP. Water supply to Karaganda CHPP-3 is provided on a contractual basis from the treatment facilities of Karagandy Su LLP.

The source of water supply for Ust-Kamenogorsk CHPP LLP is the Ulba River (its own water intake), the recycling water supply system, networks of Oskemen-Vodokanal SCE and Atamanovskyi vodozabor JSC of Ulba metallurgical plant JSC (UMP).

In the direct-flow cooling system, water is discharged into Technical water from the Ulba river is used for cooling the Ulba River after passing the technological cooling the main and auxiliary equipment; making up the reverse cycle of the main and auxiliary equipment.

#### Water consumption indicators in 2021, thousand tons

Indicator	CHPP-1	CHPP-3	UK CHPP	Amount
Water consumption, including	687.2	20,369.0	50,744.0	71,800.2
Consumption for technological needs	645.0	20,212.0	50,494.8	71,351.8
Consumption for economic and household needs	42.2	157.5	149.2	348.9
By water supply sources:	648.0	20,369.0	51,042.0	72,059.0
Open sources	0.0	0.0	40,448.0	40,448.0
Third-party organizations	648.0	20,369.0	10,594.0	31,611.0
Reuse of water:	78,388.0	616,425.9	166,642.0	861,455.9
Circulation system	76,315.0	597,719.5	155,721.2	829,755.7
Water circulation of ash dumps	2,073.0	18,706.4	10,920.8	31,700.2

### Non-hazardous waste

- ash and slag waste;
- used tires;
- solid household waste:
- used air filters:
- food waste:
- thermal insulation waste:
- waste from operation of office and electronic equipment:

- construction waste:
- used workwear:
- crop production waste:
- wood waste:
- waste of rubber products:
- waste of electrical insulation material:
- abrasive-metal dust:
- scrap of abrasive products.

In accordance with the requirements of the environmental legislation of the Republic of Kazakhstan and regulatory documents, the Company records generation, permits, accumulation, storage, alienation of industrial and household waste. In 2021, the industrial sites of the stations conducted:

Waste management, t	KEC	UK CHPP	Total for Group of companies
Generated waste for 2021	12,030,895	2,738,885	14,769,780
Neutralized, disposed of and reused	35.2	1.53	36.73
Transferred on a contractual basis for disposal to third-party organizations	1,948,8	1,976.7	3,925.5
Placed in storage tanks (ash dumps)	12,028,911	2,736,907	14,765,818

The ash and slag waste of CHPP-1 is placed on a 24 ha ash dump, which is a hydrotechnical structure. In 2016, the Department of Government Assets and Procurement of Karaganda transferred the 40 hectare dry storage ash dump to Karaganda Energocenter LLP on a contractual basis for trust management. According to the project, the end of operation of these ash dumps is planned for 2028.

Ash and slag waste from CHPP-3 is stored in the 3rd section of ash dump No. 2 with an area of 82 ha, commissioned in 2021. The estimated service life is 3.5 years. At the moment, the construction of section No. 1 of the ash dump No. 3 is underway. The service life of the 1st and 2nd sections of ash dump No. 2 ends in 2021, the sections were recultivated.

Ash and slag waste is placed in the existing ash dump with an area of 31.6 hectares.

In 2019, the reconstruction of the Ash Dump No. 3 for building up the dam was completed, including through the use of accumulated ash and slag waste. In 2021, work continued on the construction of a new ash dump No. 5.

Payments for emissions for the placement of ash and slag waste in 2021 amounted to 80.599 million KZT in the KEC and 24.804 million KZT in the UK CHP.

In 2021, the income from the sale of industrial and household waste amounted to 14.47 million KZT.

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system of wet ashing removal; making up the cooling tower: transferring water to third-party consumers; making up for losses of steam and condensate in mediumpressure boilers. Drinking water from the government enterprise "Oskemen-Vodokanal" is used to feed the city's heat networks (Ust-Kamenogorskiye teplovye seti JSC) and for the economic and drinking needs of the CHPP. Artesian water of UMP JSC is used for the technological needs of thermal power plants (to compensate for steam losses to consumers of UMP JSC, Kazzinc LLP), to feed the city's heat networks (Ust-Kamenogorskive teplovye seti JSC).

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#### Household wastewaters of CHPP-1 and CHPP-3 are discharged on a contractual basis to the treatment facilities of Karagandy Su LLP. Discharges to the terrain and water bodies are not carried out.

KEY

During the production environmental control at the stations, the quality of the incoming water is continuously monitored from Karagandy Su LLP and ArcelorMittal Temirtau JSC, as well as the SWS. According to the results of the monitoring, the incoming and transferred water meets the sanitary and epidemiological requirements.

Every month, the sampling is carried out at the plants of sewage from fecal and storm sewerages, clarified water coming from the ash disposal areas, circulating water. The quality of these waters meets the requirements of OMR.

At the UK CHPP. Standard-clean wastewater is formed during cooling of the main and auxiliary equipment and is partially directed to the circulating system of technical water supply with a cooling tower, partially diverted to the Ulba River through output No. 162. Discharge of effluents to the Ulba river (output No. 162) is carried out through a closed collector.

The volume of discharge of standard-clean wastewater in the Ulba river in 2021 amounted to 37.329 million m3. The amount of discharge of pollutants (petroleum products) in the Ulba river in 2021 amounted to 1.206 tons at the established standard of 1.95 tons.

In accordance with the requirements of the Water and Environmental Codes of the Republic of Kazakhstan, surface and ground waters are monitored in the ash disposal areas. According to the results of the monitoring conducted by an independent accredited organization in 2021, no significant impact on groundwater and surface water was detected.

#### LAND RESOURCES

**KEY EVENTS** 

The main impact on soil re-pollution can have the bottomash waste generated during the combustion of fuel in the boiler furnaces and stored in the ash disposal areas of companies. In order to prevent the risk of soil contamination at the plants, the annually measures are taken to prevent dusting of the ash disposal areas.

At the end of the heating season, at CHPP-1 to prevent dusting of the ash disposal area, the work is carried out to coat the bottom-ash waste with loamy soil (loam layer min 30 cm). At the ash disposal area of CHPP-3 in order to prevent dusting of the bottom-ash waste daily monitoring of the water level in the bowl and alluvial of ash beaches is conducted.

According to the results of the monitoring of the soil cover, conducted in 2021 by an independent accredited organization, no significant impact on soil resources was detected.

#### ENVIRONMENTAL ACTIVITIES AND INITIATIVES

Kazakhstan Utility Systems LLP regularly cooperates with the KAPUR, Kazakhstan Association of Regional Environmental Initiatives ECOJER, Kazakhstan Electric Power Association, Kazakhstan Association of Organizations of the Oil and Gas and Energy Complex KAZENERGY, the Chamber of Entrepreneurs to address environmental issues and improve environmental legislation.

In 2021, the group of companies:

- Cooperated with the NGO "International Center for Green Technologies and Investment Projects" on the development of a directory of the best available techniques.
- Participated in the comprehensive technological audit of the enterprise initiated by the Ministry of EG and NR a landscaping campaign was held: planting 75 seedlings on the basis of NGO "International Center for Green (elm, birch, Manchurian walnut) within the Kabanbai Technologies and Investment Projects". Batyr monument at the entrance to Ust-Kamenogorsk.



2021

- The enterprises have a program "Initiative Youth", where activists from the staff of the enterprise organize various actions to improve occupational safety and environmental protection.
- The staff of the companies in 2021 took part in the following environmental actions:
- in the global international action "Earth Hour" initiated by the international community on March 28, 2021;
- "One River, One Destiny", cleaning the bank of the Irtysh River from household waste;
- in the international campaign "World Cleanup Day", supporting the volunteer movement to clean up urban areas (cleaning of an area adjacent to the enterprise, as well as the coastal zone);

#### 2) Overhaul of the boiler unit HG-670/14-YM20 st. Ust-Kamenogorsk CHPP LLP No. 8 with the restoration of the air heaters, which significantly reduced the suction of cold air into the gas

path of the boiler unit, thereby increasing the efficiency of the boiler and the workload. The potential for saving coal is 1,707 tons and reducing 35 tons of air emissions.

- 3) Overhaul of the T-110/120-130 turbine unit. st. No. 1 – Overhaul allowed to increase the reliability
  - of the turbine, reduce the number of cold air suckers, as well as reduce the specific steam consumption for electric power production by 0.05 t/MW. There is a decrease in steam consumption per turbine, which will lead to a reduction in coal consumption on boilers by
  - 5,652 tons per year. An additional effect was also the reduction of air emissions by 2,444 tons/year (including: emissions into the atmosphere – 85 tons, ash and slag waste - 2,359 tons).
- 4) Overhaul of the S-110-12.7/0.23 turbine unit. st. No. 6 – Overhaul allowed to increase the reliability
- of the turbine, reduce the number of cold air suckers, as well as reduce the specific steam consumption for electric power production by 0.07 t/MW. As a result, a decrease in steam consumption per turbine, which will lead to a reduction in coal consumption on boilers by 10,218 tons per year. An additional effect was also the reduction of air emissions by 4,419 tons/year (including: emissions into the atmosphere - 119 tons, ash and slag waste - 4,300 tons).
- 5) Replacement of the raw water conduit. As a result of the operation, defects were identified, and parts of the sites that are in unsatisfactory condition were replaced in the repair of 2021. The repairs carried out will reduce the internal water losses and increase the reliability of the station equipment.

#### **Resource Consumption – KEC**

**ENERGY SAVING** 

Type of resource	2019	2020	2021
Coal, ton of oil equivalent	3,547,685	3,453,083	3,582,256
Fuel oil, ton of oil equivalent	5,341	5,963	6,302
Fuel total, ton of oil equivalent	2,027,600	1,977,960	2,057,656
Electric power, thousand kWh	539,734	526,486	558,668
Heat power, Gcal	4,493	4,676	4,971

#### **Resource consumption – UK CHPP**

Type of resource	2019	2020	2021
Coal, ton of oil equivalent	1,559,401	1,565,673	1,551,728
Fuel oil, ton of oil equivalent	1,490	855	1,023
Fuel total, ton of oil equivalent	1,044,679	1,064,257	1,032,559
Electric power, thousand kWh	323,401	326,733	324,761
Heat power, Gcal	4,800	4,800	4,800

#### Energy saving measures:

#### Karaganda Energocenter LLP

The main task of energy saving and energy efficiency of Kazakhstan Utility Systems LLP is to reduce the amount of energy consumed, including reducing energy consumption for own needs, reducing specific resource expenditures for the production of power and heat, reducing fuel resources for heat and power, improving the mechanisms for monitoring energy consumption and equipping with power and heat metering devices.

In 2021, Karaganda Energocenter LLP implemented a number of organizational and technical measures aimed at the rational use of energy resources.

- 1) Overhaul of the boiler unit BKZ-420-140-5 st. No. 6
- with the replacement of defective units of the VEK-1 stage and VEK-2 stage, replacement of burner devices, etc. The event allowed to reduce the annual consumption of coal by 2,629 tons and air emissions in the amount of 23 tons.

RISK MANAGEMENT CONTACT INFORMATION

**APPENDICES** 

2021

In 2021, Ust-Kamenogorsk CHPP LLP implemented a number of organizational and technical measures aimed at the rational use of energy resources.

#### 1) Completed major repair of the boiler unit of station No. 14 with the replacement of downcomers.

 Performed replacement of heating surfaces that run out period with partial replacement of the brickwork and thermal insulation.

#### 2) Completed repair of the condenser of the turbine unit, st. No. 11.

 Performed hydro-mechanical reagent-free method of cleaning the inner surface of the tubes of the condenser TG-11 (9,580 tubes), improving the vacuum.

#### 3) Completed overhaul of HDPE (2 pcs.). • Performed complete replacement of HDPE pipe systems

(857 tubes) to improve heat exchange.

#### 4) Completed overhaul of the feed pump.

 Restoration of the equipment resource with replacement of worn parts.

### Karagandy Zharyk LLP

Information on results of implementation of the action plan for energy saving and energy efficiency improvement for 2021 by Karagandy Zharyk LLP

	Actual investments for the reporting period	Actual saving effect from measures for the re	
Measure	(including VAT), KZT	energy resource	in kind
Disconnection of transformers in light-load conditions at substations with two or more transformers.	during the year (organizational event)	electric power (kWh)	1,655,941
Equalization of phase loads in 0.38 kV electrical networks	during the year	electric power (kWh)	27,156
Thermal insulation of the pipeline in the elevator node of the PSC building	October 2021	heat power (Gcal)	6.4
Insulation of the outer door of the building of the MSGI electronic laboratory	December 2021	heat power (Gcal)	1.4
Supervisory audit	October 2021	-	-
Retraining and advanced training of staff	during the year	-	-

### Mangistau Regional Electricity Network Company JSC

Information on the results of the implementation of the action plan for energy saving and energy efficiency for 2021 of Mangistau Regional Electricity Network Company JSC

	Actual investments for the reporting period	Actual saving effect fr measures for the	
Measure	(including VAT), KZT	energy resource	in kind
Replacement of existing porcelain insulators with glass ones	3,122,017.92	electric power (kWh)	increased reliability
Replacing wires on overloaded lines	12,367,999.84	electric power	93,454
Load balancing of 0.38 kV transmission line phases			349,300
Replacement of power transformers SS 110/10 kV "Coastal" 2×16 by 2×25 MVA	6,608,000		144,000
	6 608 000		144 000
	в течение года	-	-

### Ontustik Zharyk Transit LLP

Information on the results of the implementation of the energy saving action plan for 2021 of Ontustik Zharyk Transit LLP

	Actual investments for the reporting	Actual saving effect from measures for the re	
Measure	period (including VAT), thousand KZT	energy resource	in kind
Replacement of overloaded, installation and commissioning of additional power transformers on existing TS, CTS 10-6 kV	232,991.94	electric power (kWh)	127,008
Replacement of underloaded power transformers on existing TS, CTS 10-6 kV	5,230.98	electric power (kWh)	9,240
Replacement of wires on overloaded 0.4 kV HV lines	261,804.18	electric power (kWh)	1,264,947.2
Replacement of wires on overloaded 0.4 kV HV lines (using self-supporting insulated wires)	1,415,176.94	electric power (kWh)	1,679,585.6
Replacement of overloaded power transformers with existing 35-110 kV SS	331,859.13	electric power (kWh)	519,041



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KEY

**KEY EVENTS** 

## Marketing activities

Kazakhstan Utility Systems LLP, which is one of the leaders in its segment of activity in the country, pays special attention to the formation and preservation of its positive image both in the energy market of the country and among its consumers. Power and heat are socially significant products that affect the comprehensive economic development of the country. Given that energy industry has always attracted the attention of public and media, the company cultivates the ideology of openness and transparency of all its activities.

In accordance with the media plan of Kazakhstan Utility Systems LLP, various events, as well as information about the current work of the company, are brought to the public through electronic and print media, as well as through social networks.

It should be noted that the information policy of Kazakhstan Utility Systems LLP focuses on working with regional media, since maintaining a positive image of the company's subsidiaries among residents of the regions where the Group operates is primarily important. According to the media plan, the production activities (implementation of investment programs, modernization of production, repair campaign of CHPP, construction of new power grids, reconstruction of substations, activities of sales companies and other news information) of subsidiaries of the KUS Group are covered in regional media: TV channel news stories, articles in newspapers and on Internet information portals. At the same time, information on operation of the company and its subsidiaries is published on the official website of Kazakhstan Utility Systems LLP and official pages on social networks.

Result of targeted PR activities is:

- Favorable level of consumer loyalty to KUS and its subsidiaries in the regions where it operates;
- Dynamic increase of brand awareness of Kazakhstan Utility Systems;
- Ability of consumers and other audiences to learn about the events of the KUS Group of Companies in a timely manner;
- Increasing the attractiveness of the company as an employer and the ability to attract qualified personnel.
- Strengthening corporate cohesion, creating and maintaining a sense of responsibility and commitment among the Group's employees to the fundamental values and ideology of the KUS Group.

The Kazakhstan Utility Systems Group performs largescale work to improve the quality of providing electric power and heat to its consumers, which requires constant coverage in the information field. Among the significant events and facts published in the media that aroused the greatest public interest in 2021:

- Successful implementation of investment programs of subsidiaries of KUS Group during the year.
- Repair campaign of CHPP in preparation for the upcoming heating season 2021-2022.
- Modernization of power grid and construction of new energy facilities by energy transmission companies.
- Growth in the number of consumers of sales companies.
- Use of new technologies at the production facilities of the KUS Group.
- Presentation of state and industry awards to employees of the Kazakhstan Utility Systems Group.
- Participation of KUS Group employees in national and regional industry events.

 Strict compliance of the Group's enterprises with the environmental legislation of the Republic of Kazakhstan.

The Company's image is focused on the current values of the modern society in which KUS operates. Taking into account these fundamental values allows us to form a regulated policy of interaction with all external and internal counterparties: consumers, partners, own employees, society. At the same time, taking into account the dynamic situation, KUS is constantly working to adapt its image to the new conditions and needs of the energy market.

Forming a positive image of the Company, maintaining it at the proper level are important tasks of the Kazakhstan Utility Systems Group, which determines the status of the Company, the success of activities in the market, the loyalty of consumers and partners, the competitiveness of the Company's energy products.





	KAZAKHSTAN Utility systems	KEY Indicators	MESSAGE FROM The Management	KEY EVENTS	ABOUT Company	STRATEGY	MANAGEMENT REPORT	SUSTAINABLE Development report	CORPORATE Governance
www.kus.kz				KEY EVENTS		STRATEGY			
A			RPOF /ERM	RATE					

Annual Report 2021

The Group considers the development of corporate governance as an important factor in improving competitiveness and achieving economic efficiency. KEY

**KEY EVENTS** 

## **Principles** of corporate governance

The Group considers the development of corporate governance as an important factor in improving competitiveness and achieving economic efficiency.

The most important principles of corporate governance for the Group are:

- ensuring a balance between the influence on management decision-making, responsibility for decisions made and interests of the participant in corporate relations:
- setting standards for reasonable and qualified management and proper control;
- optimization of production structure and the most efficient use of the Group's capital;
- ensuring the transparency of the Group's financial and economic activities and the reliability of reporting indicators;
- increasing investor confidence, improving the investment climate and increasing the volume, improving the structure and quality of investments.

## Management structure

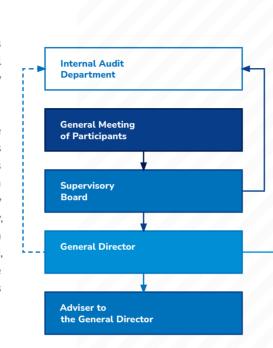
There are three blocks in the Company's management structure: the General Meeting of Participants, the Supervisory Board, and the Executive Body.

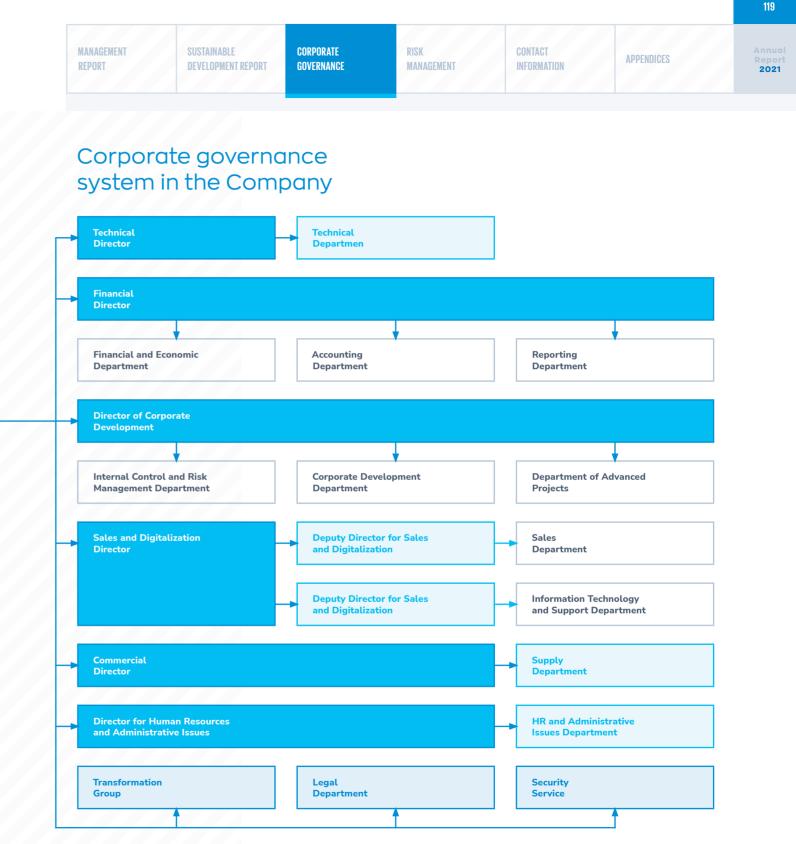
General Meeting of Participants is the supreme body of the KUS that makes decisions on the most important issues of the Company's activities: changes in the charter, authorized capital, company name, formation of the executive body, early termination of its powers, election or termination of the Supervisory Board, approval of financial statements, pledge of the Company's/Group's and others property.

## Composition of participants and capital structure

Participants of Kazakhstan Utility Systems LLP are:

- Idrissova Magda Kamalovna, participation interest in the Company - 99%,
- Appaz Zharmukhamed **Dinmukhametuly,** participation interest in the Company - 1%.





**KEY EVENTS** 

#### **COMPOSITION OF THE SUPERVISORY BOARD**

## Supervisory Board

The Supervisory Board of the Company carries out general management of the Company's activities, control over the activities of the executive body of the Company, control over financial and economic activities. The exclusive competence of the Supervisory Board includes the following issues:

- identification of priority areas of activity and approval of the Company's development strategy, mediumterm development plan, as well as monitoring the implementation of the Company's strategy, plans and budgets;
- making a decision on completion of one or several consecutive transactions for acquisition and/or alienation of property by the Company, the total value of which is 25 percent or more of the total book value of all fixed assets owned by the Group;
- determination of the Company's production and financial policy in the form of approval of certain financial and production documents of the Company, financial and production/technical standards and regulations;
- implementation of guality control and independence of the external auditor;
- determining the amount of payment for the services of an external auditor:

other issues stipulated by the internal rules of the . Company.

The purpose of the Supervisory Board is to monitor the activities of the Company's executive body, including ensuring the implementation of the Company's interests and protecting the rights of participants, establishing the principles and norms of the Company's activities, as well as ensuring understanding and compliance with the Company's obligations to participants and other persons.

In 2021, the Supervisory Board held meeting 6 times. Key issues on which the Supervisory Board focused its attention:

- consideration of the draft Audit Plan for 2022;
- preliminary approval of the audited financial statements of KUS LLP and the audited consolidated financial statements of KUS LLP for 2021:
- on termination and re-election of members of the Audit Committee of the Supervisory Board of KUS LLP;
- launch of the Transformation Program for the KUS LLP Group of Companies;
- approval of the regulations on the Internal Audit Department of KUS LLP;
- on the establishment of the Digitalization Committee of the Supervisory Board of KUS LLP.





Dinmukhamet Appazovich Idrissov

Dinmukhamed Orynbasarovich Baizhanov

Chairman of the Supervisory Board. Chairman of the Strategy Committee

- From September 2021 to the present day - Chairman of the Supervisory Board of Ordabasy Group LLP.
- From March 13, 2019 to September 2021-Chairman of the Management Board of Ordabasy Group LLP.
- From February 6, 2014 to the present day - Chairman of the Supervisory Board of Kazakhstan Utility Systems LLP.
- From September 2021 to the present day – Chairman of the Management Board of Ordabasy Group LLP.
- From July 2021 to the present day Member of the Supervisory Board of Kazakhstan Utility Systems LLP. From January 2019 to September 2021 - First Deputy Chairman of the Management Board of Ordabasy Group LLP.

CONTACT INFORMATION 2021





Member of the Supervisory Board

Member of the Supervisory Board, Chairman of the Finance and

- From July 2021 to the present day – Member of the Supervisory Board of Kazakhstan Utility Systems LLP.
- From May 2019 to the present day - Chief Investment Officer of WESTPORT CAPITAL.
- From September 2014 to January 2019 - Chief Investment Officer of Al Falah Capital Partners.

KAZAKHSTAN KEY MESSAGE FROM KEY EVENTS ABOUT UTILITY SYSTEMS INDICATORS THE MANAGEMENT KEY EVENTS COMPANY
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From July 2021 to the present

day – Member of the Supervisory

Board of Kazakhstan Utility

2021 – Deputy Chairman of the

Management Board for Corporate

Affairs and HR, National Company

Kazakhstan Temir Zholy JSC.

From July 2013 to November

2018 – Adviser to the Chairman

of the Management Board, Vice-

President for Human Resources

Management of National Company

KazMunayGas JSC.

From November 2018 to April

Serik Sakbaldiyevich Abdenov

Systems LLP.

Zharmukhamed Dinmukhametuly Appaz

Member of the Supervisory Board Member of the Supervisory Board

STRATEGY

Yergali Nurlanovich

**Begimbetov** Member of the Supervisory Board,

Chairman of the Audit Committee

- From July 2021 to the present day Member of the Supervisory Board of Kazakhstan Utility Systems LLP.
- From February 2020 to the present day – Sales Director of Kazakhstan Utility Systems LLP.
- From August 2018 to the present day – Vice-Chairman of Dragon Fortune Pte Ltd.
- From October 2017 to December 2018 – Director for Corporate Development of AltynEx Company JSC.
- From May 2017 to August 2017 Economist of AK Altynalmas JSC.

- From July 2021 to the present day Member of the Supervisory Board of Kazakhstan Utility Systems LLP.
- From May 2020 to the present day – Deputy Chairman of the Management Board of Ordabasy Group LLP.
- From March 2015 to March 2020 -Chairman of the Management Board of Insurance Company Amanat JSC.
- From September 2003 to March 2015 - Chairman of the Management Board of Insurance Company London-Almaty JSC.

MANAGEMENT SUSTAINABLE CORPORATE Report development report governance			
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Members of the Supervisory Board	ldrissov D.A.	Baizhanov D.O.	Kilybayev D.A.	Abdenov S.S.	Appaz Zh.D.	Begimbetov E. N
Work experience in the industry total experience, years	17/32	3/12	5/25	1/23	2/5	3/27
			Key competencies Industry knowledge			
Work experience in production in the industry						~
Deep knowledge of the industry	~	~	~	~	~	~
Technical skills/ experience		~	~	~		~
Specific skills and experience						
Finance			~	~		
Deep knowledge of marketing	~	~	~	~	~	~
In-depth know- ledge of social and environmental issues	~	~	~	~	~	~
		Experie	nce in management a	and law		
Corporate governance			~	~		
Strategy development and implementation	~	~	~	~	~	~
International experience			~			

RISK MANAGEMENT

2021

**KEY EVENTS** 

The participants of KUS LLP have the right to nominate candidates for members of the Supervisory Board.

The Supervisory Board has the right, at its discretion, to include candidates in the list of candidates for the positions of members of the Supervisory Board in the absence of candidates proposed by the Participants. The number of candidates proposed in the proposal for the nomination of candidates for members of the Supervisory Board may not exceed the number of members of the Supervisory Board.

The structure and quantitative composition of the Supervisory Board is determined by the General Meeting of the Participants (GMP). The number of members of the Supervisory Board may not be less than four. The Supervisory Board may include independent members. the number of which is determined by the Company's GMP.

The requirements for candidates for members of the Supervisory Board include:

- work experience, knowledge and qualifications necessary for making decisions related to the competence of the Supervisory Board;
- sufficient time for effective and proper performance of duties in the Supervisory Board and its Committees;
- ability to express an independent opinion and defend it if a member of the Supervisory Board believes that this is in the interests of the Company;
- good business reputation and positive achievements in the business and/or industry environment;
- knowledge of specifics of the Company's business and industry;
- compliance with requirements of independence (in relation to independent members of the Supervisory Board).

Only an individual can act as a member of the Supervisory Board. He/She cannot be a member of the Executive Body at the same time. Members of the Supervisory Board may be elected from among:

- participants individuals:
- individuals proposed (recommended) for election to the Supervisory Board as representatives of the Participants;
- individuals who are not a Participant and have not been proposed (recommended) for election to the Supervisory Board as a representative of the Participant.

An individual who is a participant, a member of the management body or an employee of a legal entity competing with the Company may not be elected to the Supervisory Board.

A person who has been found guilty of committing crimes in the field of economic activity or crimes against state power, the interests of public service and service in local self-government bodies, or to who have been charged penalties for offenses in the field of entrepreneurial activity or in the field of finance, taxes, or the securities market. cannot be elected to the Supervisory Board.

All members of the Supervisory Board shall officially take office and regularly improve their professional knowledge and skills.

The determination of quantitative composition of the Committees under the Supervisory Board, the election of their chairmen and members, as well as early termination of their powers falls within the competence of the Supervisory Board. Members of the Supervisory Board and, if necessary, experts with the necessary professional knowledge to work in the Committee are elected to the Committees.

#### MANAGING CONFLICTS OF INTEREST

A member of the Supervisory Board, when exercising his rights and performing his official duties, must promptly inform the Supervisory Board of KKS LLP about the occurrence of a conflict of interest in connection with decisions to be taken by the Board.

A member of the Supervisory Board, when exercising his/her rights and performing his/her official duties, must comply with the following rules and requirements regarding conflicts of interest:

- immediately inform the Chairman of the Supervisory Board in writing about any personal, commercial or other interest (direct or indirect) in transactions, contracts, projects related to KUS LLP (or its subsidiaries);
- not to receive gifts, services or any advantages from the Supervisory Board Committee for Appointments and individuals or legal entities that represent or can be Remuneration. considered as remuneration for decisions or actions Assessment of performance of each member of the taken or performed by a member of the Supervisory Supervisory Board contains the following criteria: Board within the framework of his/her official powers, regularity of attending meetings of the Supervisory except for symbolic advances in accordance with Board: generally accepted rules of politeness or souvenirs readiness for meetings; during official events: participation activity:
- not to disclose confidential, insider and other official independence and objectivity of judgments; information that has become known to a member of the compliance with ethical standards; Supervisory Board in connection with the performance
  - of relevant duties, to persons who do not have access to such information. as well as not to use it for his/her own interests or the interests of third parties, both
  - during the period of performing the duties of a member of the Supervisory Board, and for 3 (three) years after termination of employment contract with KUS LLP;
- comply with all the rules and procedures provided for by the internal documents of KUS LLP and related to safety measures of confidential information of KUS LLP; to the GMP of KUS LLP for consideration.

2021

- provide the Supervisory Board with complete and accurate information on activities and financial position of KUS LLP in a timely manner:
- as to independent members of the Supervisory Board to refrain from actions as a result of which such members will cease to be independent. If, as a result of a change in circumstances, an independent member of the Supervisory Board ceases to be such, he/she must notify the Supervisory Board in writing within five (5) working days.

#### **ASSESSMENT OF PERFORMANCE**

The work of the Supervisory Board and each of its members is assessed in accordance with the criteria developed by

- personal contribution to constructive discussion of issues considered at the meetings of the Supervisory Board, which contributed to the adoption of effective decisions of the Supervisory Board;
- compliance with the principle of loyalty.

Supervisory Board shall annually assess the performance of the activities of the Supervisory Board and each member of the Supervisory Board separately and submit reports **KEY EVENTS** 

### SUPERVISORY BOARD COMMITTEES

In order to create a platform for active discussion and detailed analysis of individual issues, 4 (four) committees function under the Supervisory Board of KUS LLP:

- **1)** Audit Committee;
- 2) Finance and Investment Committee;
- 3) Strategy Committee;
- **4)** Committee on Digitalization.

In 2021, the committees of the Supervisory Board of KUS LLP met 6 times. Key issues on which the Supervisory Board Committees focused its attention:

- reviews of the audited financial statements of KUS LLP and the consolidated financial statements of KUS LLP for 2021;
- review of actual results of the KUS LLP financial and economic activities for the 1st quarter of 2021 and in comparison with the plan for the same period of 2021;
- consideration of the draft Audit Plan of KUS LLP Group of Companies for 2022;
- selection of Deloitte LLP as an audit service provider;
- review of the actual results of the Company's financial and economic activities following the results of the 1st quarter of 2021;
- approval of the report on the actual results of KUS LLP financial and economic activities based on the results of the 2nd quarter of 2021.

The Audit Committee analyzes the process of preparing the Group's financial statements, analyzes the reliability and effectiveness of internal control and risk management systems, as well as the effectiveness and independence of external and internal audits. The Committee is also responsible for ensuring that the Group complies with the legislation of the Republic of Kazakhstan.

#### Composition of the Committee:

Yergali Nurlanovich Begimbetov – Chairman of the
 Committee;

- Dinmukhamed Orynbasarovich Baizhanov member of the Committee;
- Bauyrzhan Yedegeyevich Berdikeyev member of the Committee;
- Zharmukhamed Dinmukhametuly Appaz member of the Committee;
- Vladimir Ivanovich Ussenko member of the Committee.

**Finance and Investment Committee** is in charge of attracting financing, establishing an effective assessment of the funds raised, evaluating investment projects, and supervising the financial and economic activities of the Group. This Committee shall meet least one time per quarter.

#### **Composition of the Committee:**

- Dauletkhan Azimkhanovich Kilybayev Chairman of the Committee;
- Zharmukhamed Dinmukhametuly Appaz member of the Committee;
- Vladimir Ivanovich Ussenko member of the Committee.

**Strategy Committee** makes recommendations on determining the strategic and priority directions of the Group's development, as well as assesses the prospects of investment projects and their impact on increasing the value of the Group. This Committee shall meet at least once every six months.

#### **Composition of the Committee:**

- Dinmukhamet Appazovich Idrissov Chairman of the Committee;
- Dinmukhamed Orynbasarovich Baizhanov member of the Committee;
- Nabi Yerkinovich Aitzhanov member of the Committee;
- Dauletkhan Azimkhanovich Kilybayev member of the Committee;
- Serik Sakbaldiyevich Abdenov member of the Committee.

**The Digitalization Committee** makes recommendations on the formation and approval of IT budgets, the acquisition and implementation of software products, telecommunications.

#### **Composition of the Committee:**

- Dauletkhan Azimkhanovich Kilybayev Chairman;
- Zharmukhamed Dinmukhametuly Appaz member of the Committee;
- Serik Sakbaldiyevich Abdenov member of the Committee.
- Nabi Yerkinovich Aitzhanov member of the Committee;
- Yergali Nurlanovich Begimbetov member of the Committee.

## **Executive Body**

The Executive body of the Company is the General Director, who is accountable to the participants, acts on behalf of and in the interests of the Company and resolves all current issues of the Company's activities, except those that fall within the competence of the General Meeting of Participants.

The General Director represents the interests of the Company, disposes of the Company's property and financial resources, concludes agreements (contracts), including labor ones, issues power of attorney, opens current and other accounts in banks, approves the staffing table, issues orders, gives instructions that are binding on all employees of the Company. **APPENDICES** 

Annual Report 2021

#### **COMPANY MANAGEMENT**





**General Director** 

#### Born on September 11, 1980

- From April 12, 2010 to the present day – General Director of Kazakhstan Utility Systems LLP.
- From 2008 to April 2010 General Director of Ontustik Zharyk Transit LLP.
- From 2006 to 2008 Director of Energosbyt LLP.
- From 2005 to 2006 Deputy Director, Director of Energo-potok LLP.

KAZAKHSTAN     KEY     MESSAGE FROM     KEY EVENTS     ABOUT       UTILITY SYSTEMS     INDICATORS     THE MANAGEMENT     KEY EVENTS     COMPANY	
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Vladimir Ivanovich Ussenko







STRATEGY

Alibek Maratovich Tulekov

Zharmukhamed

MANAGEMENT

REPORT



SUSTAINABLE

DEVELOPMENT REPORT



Damir Aibolovich **Bekmukhambetov** 

- From 2022 to the present day –
   From June 2020 to the present day Commercial Director of Kazakhstan Utility Systems LLP.
- From January 2021 to January 2022 – Deputy Commercial Director of Kazakhstan Utility Systems LLP.
- From February 2020 to January 2021 – Risk Manager of Passenger Transportation JSC.
- From November 2018 to February 2020 – Head of the Rolling Stock Department of Kazzinc-TemirTrans LLP.

- From January 2010 to the present day - Technical Director of Kazakhstan Utility Systems LLP.
- From January 2009 to January 2010 – Head of the Corporate Governance Department of Kazakhstan Utility Systems LLP.
- From June to September 2008 Head of the Department of Electric Stations of Kazakhstan Utility Systems LLP.
- From September 2003 to March 2008 – Senior dispatcher of the regional dispatch center of KEGOC JSC – Almaty Interregional Electric Networks.

- From June 2021 to the present day - Financial Director of Kazakhstan Utility Systems LLP.
- From August 2018 to June 2021 Head of the Financial and Economic Department of Kazakhstan Utility Systems LLP.
- From December 2011 to August 2018 - Leading specialist of the financial and economic department of Kazakhstan Utility Systems LLP.

- From June 2021 to the present day – Director for Corporate Development of Kazakhstan Utility Systems LLP.
- From June 2017 to June 2021 -Specialist, Chief Specialist, Head of Corporate Development Department of Kazakhstan Utility Systems LLP.
- From August 2015 to June 2017 -The 1st category Manager of Department of Business Planning and Tariff Formation of Intergas Central Asia JSC.

- Dinmukhametuly Appaz
- From February 2020 to the present day – Sales Director of Kazakhstan Utility Systems LLP.
- From August 2018 to the present day – Vice-Chairman of Dragon Fortune Pte Ltd.
- From October 2017 to December 2018 – Director for Corporate Development of AltynEx Company JSC.
- From May 2017 to August 2017 Economist of AK Altynalmas JSC.

CORPORATE

GOVERNANCE

Director of Corporate Development

#### CONTACT INFORMATION

2021



Aigul Tureyevna Mirazova

## **Director of Personnel Management**

- **Director of Personnel Management** and Administrative Affairs of Kazakhstan Utility Systems LLP.
- From April 2010 to June 2020 Head of the Administrative Department of Kazakhstan Utility Systems LLP.
- From March 2003 to April 2010 **Director of Personnel Management** of Arlan Holding Company LLP.
- From September 1993 to March 2003 – Head of the Department of Personnel Training and Social Issues of Kazakhtelecom JSC.

KEY

**KEY EVENTS** 

CORPORATE

GOVERNANCE

In 2021, the participants of KUS LLP met 19 times.

The main issues on which the attention of the participants of KUS LLP were focused:

- on approval of the loan provision to Karaganda Energocenter LLP;
- review and approval of the audited financial statements of KUS LLP and KUS Group for 2020;
- Supervisory Board of the Partnership;

- on approval of the audit organization and the amount of payment for audit of financial statements;
- on vesting a Member of the Supervisory Board with the powers to coordinate implementation of the Transformation Program;
- on amendments and additions to the regulatory documentation of KUS LLP:
- on termination and election of members of the
   on notification of the authorized body about change of the legal address of KUS LLP.



#### REMUNERATION

By the decision of the General Meeting of the Company's Participants, the members of the Supervisory Board during the performance of their duties are compensated for expenses related to performance of the functions of members of the Supervisory Board and members of the Supervisory Board Committees, and remuneration may also be paid, which amount is determined by the decision of the General Meeting of the Company's Participants.

Principles for determining remuneration to members of the Supervisory Board:

- **1)** remuneration should be a fair compensation to the members of the Supervisory Board for activities carried out, including activities in the Supervisory Board Committees;
- 2) when determining the amount of remuneration, the interests of members of the Supervisory Board should be correlated with the long-term interests of the Participants;
- 3) remuneration structure should be simple and clear;
- 4) the total amount of remuneration received for the past year by each of members of the Supervisory Board separately, indicating each individual element of remuneration, shall be disclosed by the Company to the Participants annually;
- 5) when determining an amount of remuneration, the results of evaluation of activities of the Supervisory Board and the relevant members of the Supervisory Board are taken into account;
- 6) remuneration to the members of the Supervisory Board shall be paid at the same time during the year.

Remuneration of members of the Supervisory Board consists of basic and additional remuneration.

2021

Remuneration of members of the Supervisory Board:

- 1) remuneration for attending meetings of the Supervisory Board:
- 2) remuneration for work in the Supervisory Board Committees:

Remuneration of the Chairman of the Supervisory Board: 1) remuneration for attending meetings of the Supervisory Board:

- 2) remuneration for work as Chairman of the Supervisory Board.
- 3) additional remuneration for additional work in the Supervisory Board Committees.

The amount of remuneration of the Executive Body is determined by the General Meeting of Participants on the recommendation of the Supervisory Board. The remuneration of the Executive Body consists of constant and variable parts, the latter depending on key performance indicators of the Executive Body and related to the level of personal qualifications and contribution to the results of the Company's activities.

#### **INTERNAL AUDIT**

The Company has an Internal Audit Department (IAD), which carries out an internal audit in the Company and its subsidiaries.

In its activities, IAD is guided by the principles of independence and objectivity, competence and professionalism, as well as by international professional standards of internal audit and the Company's Code of Business Conduct.

The independence and objectivity of IAD is achieved by the corresponding organizational status, which provides for direct functional subordination and accountability of IAD to the Supervisory Board and administrative subordination and accountability to the General Director of the Company. Audit Committee of the Supervisory Board of KUS LLP directly supervises the activities of IAD.

In 2021, IAD conducted the following works:

- analysis and reconciliation of all consumers (legal entities) of subsidiaries for 2021, updating of identification data to reduce tax risks and timely collection of accounts receivable, assessment of customer satisfaction with the quality of services provided;
- check of implementation of investment and repair programs for all the Company's assets, audit of procurement procedures for goods, works and services;
- audit of fixed assets and inventory items in the Company's subsidiaries. Check of processes of registration, transfers and write-offs. Check of accounting data;
- assessment of effectiveness of the corporate risk management system in the Company's management system.

### **CORPORATE ETHICS**

Company considers it necessary to introduce standards of effective business practices allowing it to occupy a leading position in the energy market of Kazakhstan. We understand that honesty, integrity and fulfilment of our potential are key factors for achieving sustainable longterm development of the Group.

The Group's Code of Conduct (the Code) is based on the principles of integrity and describes the standards of behavior expected from employees. The Code is binding on all employees of the Group and applies to interaction both within the Group and with external stakeholders.

#### Ethics of the Group:

- honesty and objectivity;
- conscientiousness:
- commitment to development:
- respect and trust;
- responsibility;
- care:
- competence and professionalism;
- patriotism.

For the purpose of implementation of its ethics, the Group is guided by the following principles:

- compliance with the legislation of the RK;
- protection and respect for the rights and interests of participants and investors:
- respect for rights and interests of employees;
- interaction with business partners based on long-term and mutually beneficial cooperation;
- avoiding conflicts of interest;
- maintenance of the confidentiality of information;
- protection and use of the Group's property;
- responsibility for compliance with safety, health and environmental requirements;
- effective organization of work, management and control over the Group's activities:
- optimal use of available resources, as well as risk analysis and management;
- compliance with high standards of planning, control . and reporting with principle of transparency and strive to safeguard assets, including business information.

Employees are required to report any violations, including issues and situations that may be considered unsafe, unethical or resulting in conflict of interest. Management

of the Group undertakes to ensure careful, objective and competent consideration of the received appeals.

Employees, among other things, may report problems/ violations to the Audit Committee of the Supervisory Board of the Company through ethical hotline:

- Phone: + 7 (7172) 57 69 67
- Email: z.raimbekov@kus.kz

Auditor of the Internal Audit Department is responsible for processing the information received by the hotline and submitting it to the Audit Committee of the Supervisory Board.

The Supervisory Board shall revise the provisions of the Code once every three years, analyze the extent to which they are implemented in practice, and, if necessary, make proposals to the executive body on making changes and/ or additions to the Code.

### **ANTI-CORRUPTION**

Kazakhstan Utility Systems LLP adheres to the policy of absolute intolerance to corruption in any of its manifestations in cooperation with all interested parties, and to conceal corruption offenses. The Company excludes any form of bribery, including offering money or gifts to or from employees. Does not provide and does not accept signs of hospitality or gifts that may entail any further obligations of the parties. Officials and employees involved in corruption shall be dismissed and prosecuted in accordance with the legislation of the Republic of Kazakhstan.

Kazakhstan Utility Systems LLP complies with the anticorruption legislation in its daily activities and takes

2021

maximum organizational and practical steps aimed at uncompromising anti-corruption in all its forms and manifestations.

In particular, within the framework of formation of an anti-corruption culture and intolerance to corruption manifestations, much attention is paid to preventive work aimed at reducing corruption risks.

Thus, anti-corruption clauses are included in business agreements for a Group of Companies (subsidiaries and affiliates).

The Group of Companies has organized a hotline with portfolio companies. During the reporting period, the facts of corruption offenses were not revealed.



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Risk management system of KUS Group of Companies is based in accordance with the international concept of COSO ERM and is aimed at managing risks and opportunities that significantly affect the creation and preservation of the Group of Companies' value.

**MESSAGE FROM** 

THE MANAGEMENT

KEY

## **Risk management** system

Risk management system of KUS Group of Companies is based in accordance with the international concept of **COSO ERM** and is aimed at managing risks and opportunities that significantly affect the creation and preservation of the Group of Companies' value. The main purpose of risk management in the Group of Companies is to achieve the greatest earning yield at admission of the controlled risks' level. Risk management is aimed at identifying, preventing and minimizing events that may have a negative impact on achieving the goals of the Group of Companies.

One of the important elements in the risk management system are the structural divisions of subsidiaries (hereinafter referred to as subsidiaries) represented by each of their employees. Subsidiaries' employees work with risks on a daily basis, manage them and monitor their potential impact in the sphere of their functional duties. Structural divisions are responsible for implementing the risk management action plan, timely identifying and informing about significant risks in their field of activity and providing proposals on risk management for introduction into the action plan.

## Principles of building a risk management system

• System approach. Risk management is an ongoing, dynamic process that is applied in the Group and its companies – at every management level and in every department of the KUS and its subsidiaries.

Supervisory function of the Supervisory Board. The Supervisory Board is an active management body of the Company that provides risk management control.

ABOUT

COMPANY

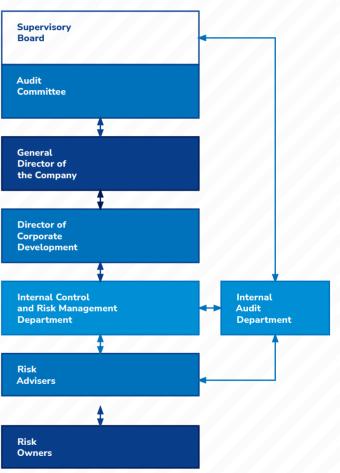
- **Responsibility for the risk management.** Each employee of the Group and its companies is aware of the goals and objectives of risk management and is aware of his/ her personal responsibility for managing its risks within the framework of his/her authority, competence, and the requirements of the Risk Management Manual.
- Separation of decision-making levels. Decisions to minimize the risks are made at different levels of management, depending on the significance of the risks.
- Reference to targets. Risk management is used in development and formation of the strategy of the Group of Companies and is carried out based on the strategic goals and objectives of specific processes and functions.
- Timely reporting. Movement of risk information for decision-making is f rom lower control levels to higher levels. Prompt provision of information is carried out on a regular basis.
- Creation of a corporate risk-oriented culture. Management of the Group of Companies, the Internal Control and Risk Management Department and subsidiaries risk supervisors ensure the dissemination of risk management knowledge and skills in the Group of Companies. The Group of Companies provides an opportunity for effective information exchange and introduction of communication standards within the framework of corporate risk management
- The relationship between target categories. Risk management ensures goals are achieved in one or more separate but overlapping categories.

## Internal control system

Internal control system (hereinafter referred to as the ICS) is part of the corporate governance system, covers all levels of management, all processes and operations of the Group of Companies. The ICS participants are the Supervisory Board, the Audit Committee, the Executive Body, the Internal Audit Department, the owners of business processes, the executors of control procedures, the Internal Control and Risk Management Department. The ICS is integrated into the processes and daily operations of the Group of Companies, includes procedures for immediately informing the appropriate level of management of any significant shortcomings and weaknesses of control, along with details of corrective measures that have been taken or should be taken. As part of the ICS update, the design assessment and testing of the operational effectiveness of control procedures were carried out in the Group of Companies.

2021

## **Risk management** system structure in the Company



KAZAKHSTAN Utility systems

## Risk classification

After identifying the sources of risk, risks are identified for each of source, being classified into main 4 categories:

- strategic risks the risks of not achieving the longterm corporate goals of the Group of Companies due to inadequate monitoring of the strategy implementation process and insufficient response to changes in external conditions;
- operational risks risks of losses arising as a result of deficiencies or errors in the internal business processes of the Group's companies, in the actions of employees and other persons, in the operation of information systems, or as a result of external influence;
- 3) legal risks risks arising as a result of violation of the legislation of the Republic of Kazakhstan, rules, regulations, prescribed procedures, internal policy, regulations and ethical standards. Legal risks also relate to both compliance goals and reporting goals (reliability and timing);
- 4) financial risks risks arising from the management of financial resources of the Group of Companies, such as cash, investments, debt instruments and derivative financial instruments. They include risks related to the capital structure, reduced profitability, fluctuations in foreign exchange rates, interest rates, credit risk, and liquidity risk.

## Main risks affecting the implementation of business strategies

ABOUT

COMPANY

Name	Description	Key risk
of risk	of risk	management activities
Violation of Labor	Failure to	<ol> <li>Operation of the Labour Protection and Occupational Safet</li> <li>Qualification inspection.</li> <li>Work order system.</li> <li>Inspection of work places.</li> <li>Periodical and obligatory medical examination of employed</li> <li>Compliance with the requirements of the legislation on in</li> <li>Control over conclusion of contracts for compulsory insura</li></ol>
protection and	provide safe and	official duties; compulsory insurance of the legal liability of <li>Provision of production staff with milk, provision of war</li>
Occupational	healthy working	footwear, PPE, detergents and disinfectants, first-aid kits <li>On a systematic basis, within the framework of Kaizen, con</li>
Safety Rules	conditions	and labor protection conditions
Technological disturbances	Supply problems of heat and electric power due to equipment failures	

The identified risks are reflected

on the Map of risks against their significance:

- Red zone risks are critical for the Group of Companies
- Yellow zone risks with average probability of occurrence for a Group of companies

Based on the results of risk identification and assessment,to manage them, and risk owners have been identified.28 risks are included in the Company's Risk RegisterThey are constantly monitored for their dynamics and thefor 2022. For each risk, measures have been developedimplementation of measures for their management.



fety System in accordance with the ISO 45 001:2018.

yees.

- industrial safety at hazardous production facilities.
- rance against accidents in performance of labor and / of employer – annually.
- vater and drinking regime, special clothing, special as and technical documentation (NTD).
- nsideration of employee proposals to improve safety

pections of equipment (planned and unscheduled).

modernization and reconstruction of equipment

materials. P).

MANAGEMENT	SUSTAINABLE	CORPORATE	RISI
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## Abbreviations

	and the barrense
	aerial cable line
	biogas station
	boiler and water heating shop
CCTSS	city complete transformer substation
CHPS	combined heat and power station
CL	cable line
CPP	condensing power plant
CSR	corporate social responsibility
СТС	corporate training center
CTS	complex transformer substation
DP	distribution point
EBIT	earnings before interest and taxes
EBITDA	earnings before interest, taxes, depreciation and amortization
EC	efficiency coefficient
	environmental impact assessment
EP	Energopotok LLP
	• •
	engineering, procurement and construction
	energy-producing organization
	energy sales organization
	fuel and lubricants
	gigacalory
	gigacalory per hour
	gross domestic product
	General meeting of participants
	gas switch house distribution transformer
	hydroelectric power station
	hot water supply
	issuer default ratings
	industrial environmental control
	inventory items
	Kazakhstan Stock Exchange JSC
	Association of legal entities «Kazakhstan Electric Power Association»
	Karaganda Energocenter LLP
KEGOC	Kazakhstan Electricity Grid Operating Company JSC
km	kilometer
KPI	key performance indicator
KUS	Kazakhstan Utility Systems LLP
kV	kilovolt
kWh	kilowatt-hour
KZh	Karagandy Zharyk LLP

Annual Report 2021

KAZAKHSTAN

**UTILITY SYSTEMS** 

## CONTACT INFORMATION

KEY

INDICATORS

**MESSAGE FROM** 

THE MANAGEMENT

Kazakhstan Utility Systems LLP

5, K. Mukhamedkhanov str., block D, Nur-Sultan, 010000 Republic of Kazakhstan **Phone** +7 (7172) 27 94 72

E-mail kks.priemnaya@kus.kz

Website www.kus.kz

REGISTRAR

**KEY EVENTS** 

Central Securities
Depository JSC

28, Samal-1 mcdr, Almaty 050051 Republic of Kazakhstan

**Phone** +7 (727) 262 08 46, 355 47 60 **Fax** +7 (727) 262 08 46, 355 47 60

ABOUT

COMPANY

STRATEGY

E-mail csd@kacd.kz, web@kacd.kz

Website www.kacd.kz

AUDITOR

MANAGEMENT

REPORT

Deloitte LLP

36, Al-Farabi Ave., Almaty 050059 Republic of Kazakhstan

SUSTAINABLE

DEVELOPMENT REPORT

**Phone** +7 (727) 258 13 40 **Fax** +7 (727) 258 13 41

E-mail almaty@deloitte.kz

Website www2.deloitte.com





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**APPENDICES** 

Annual Report 2021 KAZAKHSTAN Utility systems

**KEY EVENTS** 

CORPORATE

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## Annex 1. About the report

This Annual Report has been prepared based on the results of 2021 and contains both information on the operational and financial results and a profile of the Group's activities, as well as information on sustainable development, including aspects of corporate governance, environmental protection, personnel management and corporate social responsibility. To ensure high-quality disclosure of non-financial information, this year for the first time Kazakhstan Utility Systems LLP has prepared a report in accordance with GRI Standards. We plan to continue to follow these standards when disclosing information on sustainable development.

This report has not been externally certified, but we will consider the possibility of verifying the report in the future.

Within the framework of this Annual Report, following the principles of GRI Standards, we have focused disclosures on the most significant topics of sustainable development. The materiality analysis included three stages presented below.

- 1) **Context analysis.** We have studied the best practices and opinions of experts to understand which aspects of sustainable development are the most important for the energy industry.
- 2) Impact analysis. We analyzed the Group's operating model to see where the impacts on the economy, environment and society take place. And we tried to assess a degree of impact by collecting quantitative indicators. As part of this process, we also took into account the views of stakeholders.
- 3) Prioritizing. Having ranked all the impacts according to the degree of influence, we drew a cut-off line and identified 10 topics that are the most significant. It was on their basis that the disclosure of information on sustainable development in this annual report was based.

#### The most significant topics of sustainable development

Economy	Environment	Society	
Procurement practice	Energy	Employment	
Anti-corruption	Water	Labor protection	
	Emissions	Trainings	
	Wastes	Diversity and equal opportunities	

## Annex 2. GRI Index

Statement of Use		
Use of GRI 1		
Applicable industry	y standa	rd
GRI Standard		Disclosure
General disclosure	s	
GRI 2 General	2-1	Organization profile
Disclosures 2021	2-2	Organizations included in the report
	2-3	Reporting period
	2-4	2-4 Changes in reporting
	2-5	External assurance
	2-6	Operations, value chain and other relationships
	2-7	Employees
	2-8	Part-time workers
	2-9	Corporate governance structure and composition
	2-10	Appointment of higher management bodies
	2-11	Head of the Supreme Governing Body
	2-12	Role of higher management bodies in overseeing the impacts of the organization
	2-13	Delegation of powers on sustainable development
	2-14	Role of higher management bodies in reporting on sustainable development
	2-15	Conflict of interests
	2-16	Communications and complaints
	2-17	Development of competencies of higher management bodies on SD
	2-18	Evaluation of the supreme governing bodies
	2-19	Remuneration policy
	2-20	Remuneration determination process
	2-21	Relative remuneration indicators
	2-22	Sustainable development strategy statement
	2-23	Responsible business practice policy



	Kazakhstan Utility Systems LLP has prepared a report in accordance with GRI Standards for 2021			
	GRI 1:	Fundame	ntals 20	21
	Not ap	plicable		
		Exception	n	No. in
	Indi-	Rea-	Expla-	the in- dustry stan-
Chapter	cator	son	nation	dard
Brief Company profile				
Profiles of subsidiaries				
About the report				
About the report				
About the report				
Business model				
Number of staff				
Number of staff				
Corporate governance system in the Company				
Selection and appointment				
Composition of the Supervisory Board				
Corporate social responsibility				
Corporate social responsibility				
Corporate social responsibility				
Conflict of interest settlement				
Corporate ethics				
-		Not appli- cable	The Group is an LLP	
Job evaluation				
Remuneration				
Remuneration				
Staff motivation and remuneration				
Corporate social responsibility				
Corporate ethics				
corporate ethics				

	KAZAKHSTAN Utility systems	KEY Indicators	MESSAGE FROM The Management	KEYEVENTS	ABOUT Company	STRATEGY
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	2-24	Policy implementation	Corporate ethics
	2-25	Processes of elimination of negative impacts	Risk management
	2-26	Mechanisms of consulting and appeals on business practice issues	Corporate ethics
	2-27	Compliance with laws and regulations	Corporate Social Responsibility
	2-28	Membership in associations	Brief Company profile
	2-29	Approach to stakeholder engagement	Interaction with stakeholders
	2-30	Collective agreements	Interaction with trade union organizations
Essential topics			
GRI 3 Essential	3-1	Process of identifying essential topics	Об отчете
Topics 2021	3-2	List of essential topics	Об отчете
Procurement practi	ice		
GRI 3 Essential Topics 2021	3-3	Topics management	Procurement activities
GRI 204 Procurement Practice 2016	204-1	Share of costs for local suppliers	Procurement activities
Anti-corruption			
GRI 3 Essential Topics 2021	3-3	Topics management	Anti-corruption
GRI 205 Anti-corruption	205-3	Confirmed cases of corruption	Anti-corruption
Energy			
GRI 3 Essential Topics 2021	3-3	Topics management	Energy saving
GRI 302 Energy 2016	302-1	Consumption of fuel and energy resources within the organization	Energy saving
	302-4	Reduction of energy consumption	Energy saving
Water			
GRI 3 Essential Topics 2021	3-3	Topics management	Water resources
GRI 303 Water	303-1	Interaction with water resources	Water resources
and Waste 2018	303-2	Management of impacts related to water discharge	Water resources
	303-3	Water intake	Water resources
	303-4	Water discharge	Water resources
Emissions			
GRI 3 Essential Topics 2021	3-3	Topics management	Protection of atmospheric air
GRI 305 Emissions	305-1	Direct greenhouse gas emissions (Coverage 1)	Protection of atmospheric air
2016	305-7	Other significant air emissions	Protection of atmospheric air
Wastes			
GRI 3 Essential Topics 2021	3-3	Topics management	Waste management

MANAGEMENT	SUSTAINABLE	CORPORATE
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		do renance

GRI 306 Waste	306-1	Waste-related impacts
2020	306-2	Impact management
	306-3	Waste generation
	306-4	Waste not intended for disposal
	306-5	Waste intended for disposal
Employment		
GRI 3 Essential Topics 2021	3-3	Topics management
GRI 401	401-1	Hired employees and staff turnover
Employment 2016	401-3	Parental leave
Labor protection		
GRI 3 Essential Topics 2021	3-3	Topics management
GRI 403	403-1	Occupational safety systems
Occupational Safety 2018	403-2	Hazard identification, reporting, and incident investigation
	403-3	Labor protection services
	403-4	Employee participation, consultation and exchang of information on occupational health and safety
	403-5	Training of workers in occupational health and safety
	403-6	Employee Health support
	403-7	Prevention and mitigation of health and safety consequences
	403-9	Occupational injuries
Training		
GRI 3 Essential Topics 2021	3-3	Topics management
GRI 404 Trainings	404-1	Average number of hours of training per employee
2016	404-2	Advanced training programs
	404-3	Percentage of employees receiving regular performance evaluation
Equal career oppor	tunities	
GRI 3 Essential Topics 2021	3-3	Topics management
GRI 405 Diversity and Equal Career	405-1	Diversity in management bodies and personnel structure
Opportunities 2016	405-2	Ratio of women's remuneration to men's remuneration
Significant topics for	or the in	dustry, recognized as insignificant for the compa
-		



any	/	Not ap	plicable	
	Staff motivation and remuneration			
	Number of staff			
	Personnel management			
	Staff training and development			
	Staff training and development			
ee	Staff training and development			
	Staff training and development			
	Occupational health and safety			
	. , , ,			
	Occupational safety system			
	Occupational safety system			
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	Occupational safety system			
	Occupational safety system			
	Occupational safety system			
	Occupational safety system			
	· L · · · · <i>L</i>			
	Social policy			
	Number of staff			
	Personnel management			
	The second and generate			
	Waste management			
	Waste management			
	Waste management Waste management			

ABOUT

COMPANY

## Annex 3. Consolidated financial statements

## Consolidated statement of profit or loss and other comprehensive income for the year ended 31 december 2021

(thousands of tenge)	Notes	2021	2020
Revenue	6	175,468,226	143,467,728
Cost of sales	7	(126,174,545)	(106,989,007)
Gross profit		49,293,681	36,478,721
General and administrative expenses	8	(10,073,525)	(9,066,778)
Selling expenses	9	(3,768,245)	(3,287,864)
Finance costs	10	(11,664,244)	(11,132,343)
Finance income	11	6,042,308	5,824,931
Other income, net		297,772	70,414
Foreign exchange (loss)/gain, net	30	(1,551,759)	5,079,044
Profit before income tax		28,575,988	23,966,125
Income tax expenses	13	(7,241,796)	(4,201,523)
Net profit for the year		21,334,192	19,764,602
Other comprehensive income for the year			
Items that will be subsequently reclassified to profit or loss:			
Foreign exchange differences on translation of foreign operations		178,671	290,771
Other comprehensive income for the year		178,671	290,771
Total comprehensive income for the year		21,512,863	20,055,373
Profit attributable to:			
Company owners		19,864,918	18,970,896
Non-controlling interests	22	1,469,274	793,706
		21,334,192	19,764,602
Total comprehensive income attributable to:			
Company owners		20,043,589	19,261,667
Non-controlling interests	22	1,469,274	793,706
		21,512,863	20,055,373

## Consolidated statement of financial position as at 31 december 2021

(thousands of tenge)
Assets
Non-current assets:
Property, plant and equipment
Right-of-use assets
Advances paid
Loans given to related parties
Other non-current assets
Deferred tax assets
Total non-current assets
Current assets:
Trade accounts receivable
Inventories
Loans given to related parties
Advances paid
Prepaid corporate income tax
Other current assets
Cash and cash equivalents
Total current assets
Total assets
Equity and liabilities
EQUITY:
Charter capital
Additional paid-in capital
Foreign currency translation reserve
Retained earnings

31 December



2020	2021	Notes
237,161,609	246,029,026	14
-	1,063,509	15
441,296	1,237,599	16
67,004,782	70,128,483	29
732,623	767,416	
289,075	282,825	13
305,629,385	319,508,858	
16,931,780	19,445,596	17
4,493,560	3,997,156	18
3,129,486	2,385,059	29
591,530	1,073,930	16
777,173	324,405	
2,160,866	2,753,413	19
4,028,566	5,873,166	20
32,112,961	35,852,725	
337,742,346	355,361,583	
11,636,404	11,636,404	21
9 239 137	9 239 137	21

31 December

11,636,404	11,636,404
9,239,137	9,239,137
800,582	621,911
156,682,000	136,817,082
	9,239,137 800,582

MANAGEMENT	SUSTAINABLE	CORPORATE	DI
MANAGLMENT	JUJIAINADLL	UUKPUKAIL	KI
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Consolidated statement of financial position

#### as at 31 december 2021 (continued)

KEY

Equity attributable to owners of the Company		178,358,123	158,314,534
Non-controlling interests	22	15,454,390	13,985,116
Total equity		193,812,513	172,299,650
Non-current liabilities			
Borrowings	23	67,091,716	81,158,704
Deferred tax liabilities	13	33,159,272	32,140,600
Lease liabilities	15	768,393	
Other non-current liabilities	24	3,090,003	3,133,024
Total non-current liabilities		104,109,384	116,432,328
Current liabilities:			
Borrowings	23	24,413,682	18,939,003
Trade accounts payable	25	16,392,948	14,118,363
Lease liabilities	15	346,631	
Other accounts payable and accrued liabilities	26	13,146,164	13,133,286
Other taxes payable	27	2,264,840	2,418,089
Corporate income tax payable		875,421	401,627
Total current liabilities		57,439,686	49,010,368
Total liabilities		161,549,070	165,442,696
Total equity and liabilities		355,361,583	337,742,346



### Consolidated statement of changes in equity

for the year ended 31 december 2021

(thousands of tenge)	Charter capital	Additional paid- in capital	Foreign currency translation reserve	Retained earnings	Equity attributable to owners of the Company	Non-controlling interests	Tot
As at 31 December 2019	11,636,404	9,239,137	331,140	117,846,186	139,052,867	13,191,410	152,244,27
Net profit for the year	-	-	-	18,970,896	18,970,896	793,706	19,764,60
Other comprehensive income for the year	-	-	290,771	-	290,771	-	290,77
Total comprehensive income for the year	-	-	290,771	18,970,896	19,261,667	793,706	20,055,37
As at 31 December 2020	11,636,404	9,239,137	621,911	136,817,082	158,314,534	13,985,116	172,299,65
Net profit for the year	-	-	-	19,864,918	19,864,918	1,469,274	21,334,19
Other comprehensive income for the year	-	-	178,671	-	178,671	-	178,67
Total comprehensive income for the year	-	-	178,671	19,864,918	20,043,589	1,469,274	21,512,86
As at 31 December 2021	11,636,404	9,239,137	800,582	156,682,000	178,358,123	15,454,390	193,812,51

CONTACT INFORMATION

APPENDICES

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CORPORATE

GOVERNANCE

#### Consolidated statement of cash flows for the year ended 31 december 2021 (continued)

(thousands of tenge)	Notes	2021	2020
Financing activities:			
Borrowings received	23	31,201,374	21,950,000
Interest-free short-term loans received	23	2,259,940	1,987,900
Other proceeds		15,360	-
Total cash inflow		33,476,674	23,937,900
Repayment of borrowings	23	(42,087,660)	(26,669,011)
Repayment of interest-free short-term loans	23	(3,257,000)	(765,000)
Lease payments	15	(135,177)	-
Dividends payment	21	(5,564)	(4,464)
Total cash outflow		(45,485,401)	(27,438,475)
Net cash used in financing activities		(12,008,727)	(3,500,575)
Net change in cash		1,947,947	(301,407)
Cash and cash equivalents, as at the beginning of the year		4,028,566	4,363,170
Effect of a changes in the allowance for expected credit losses on cash and cash equivalents		(2,852)	35,198
Effect of changes in foreign exchange rates on cash balances held in foreign currencies		(100,495)	(68,395)
Cash and cash equivalents, as at the end of the year	20	5,873,166	4,028,566

Full financial statements, including notes and the auditor's report, are provided upon written request (in free form). Email address for the request: alibek.tulekov@kus.kz

#### **Consolidated statement of cash flows** for the year ended 31 december 2021

KEY

(thousands of tenge)	Notes	2021	2020
Operating actvities:			
Sales of goods and services		193,887,222	153,074,970
Other proceeds		2,403,004	4,469,495
Total cash inflow		196,290,226	157,544,465
Payments to suppliers for goods and services		(110,967,491)	(93,508,011)
Salary payments		(16,162,467)	(13,769,137)
Other payments to the budget		(16,579,504)	(12,144,398)
Other payments		(2,768,357)	(2,877,546)
Total cash outflows		(146,477,819)	(122,299,092)
Cash from operating activities before interest received and paid and corporate income tax paid		49,812,407	35,245,373
Interest received		245,778	156,789
Interest paid on borrowings and lease		(10,029,831)	(9,747,604)
Corporate income tax paid		(5,153,454)	(4,027,664)
Net cash generated from operating activities		34,874,900	21,626,894
Investing activities:			
Sale of property, plant, and equipment		42,088	11,058
Repayment of financial aid given	29	3,481,486	
Total cash inflow		3,523,574	11,058
Purchase of property, plant, and equipment and materials for capital repairs, and advances paid for acquisition of non-current assets		(23,593,823)	(17,052,626)
Purchase of intangible assets		(14,977)	(11,073)
Disposal of cash to purchase subsidiaries		-	(1,101,151)
Financial aid given to a third party		-	(91,000)
Contribution to restricted cash		(833,000)	(179,047)
Other payments		-	(3,887)
Total cash outflow		(24,441,800)	(18,438,784)
Net cash used in investing activities		(20,918,226)	(18,427,726)

2021