National Power Grid

2019

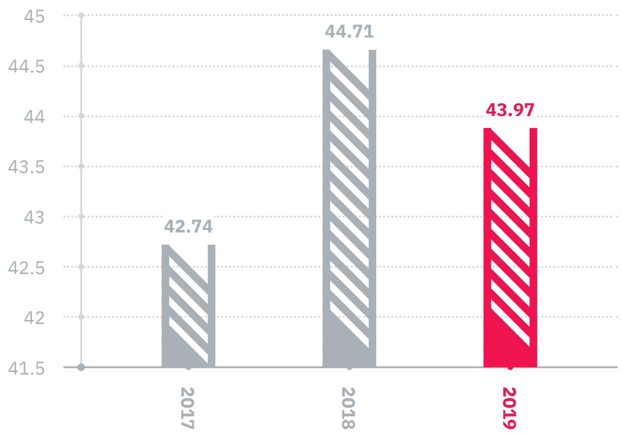
KEGOC JSC
ANNUAL
REPORT

KEGOC

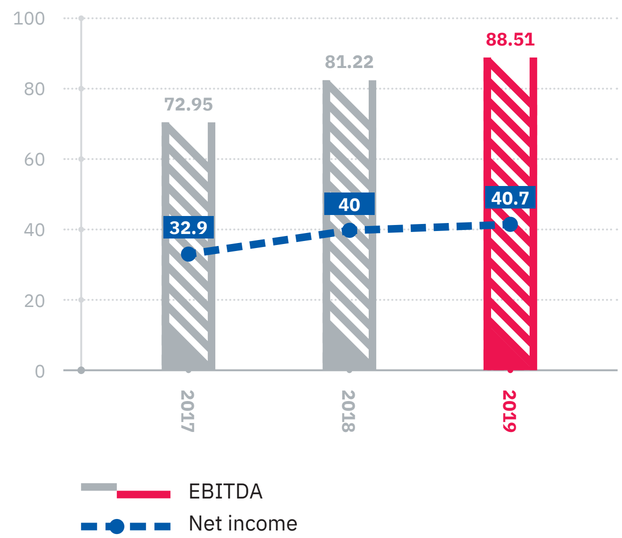
Contents

Key Indicators

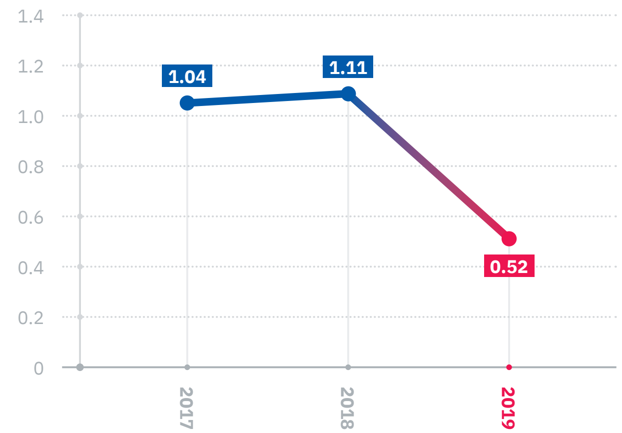
Electricity transmission in KEGOC's networks, billion kWh



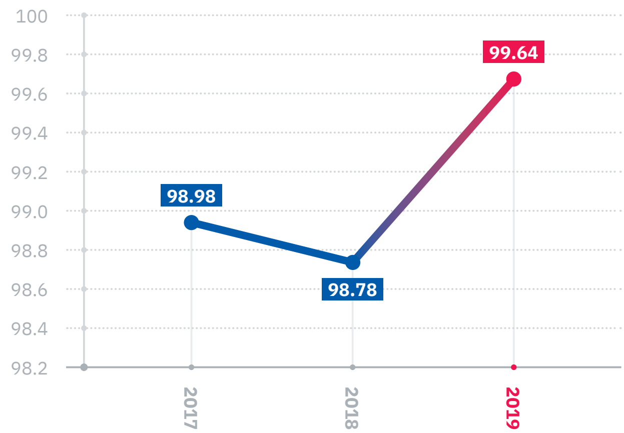
Profitability, KZT billion



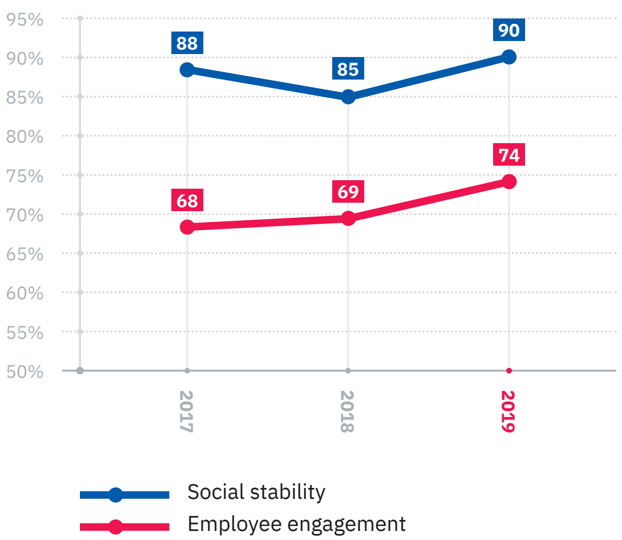
Network reliability:
system minutes lost (SML), min.



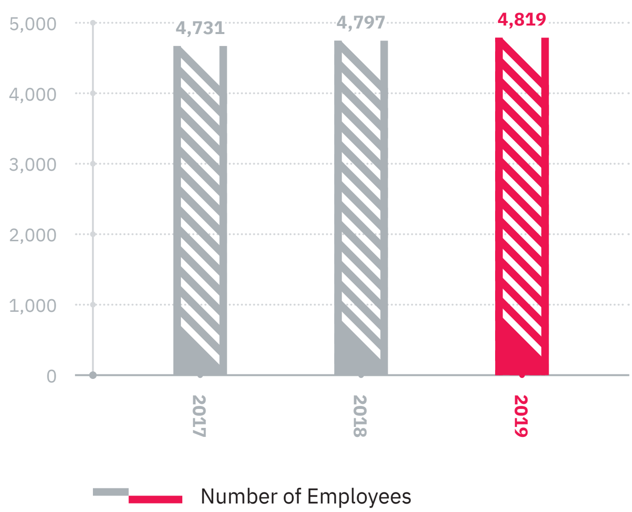
Network reliability:
work without problems (WWP), %



HR policy,%



Number of staff, people

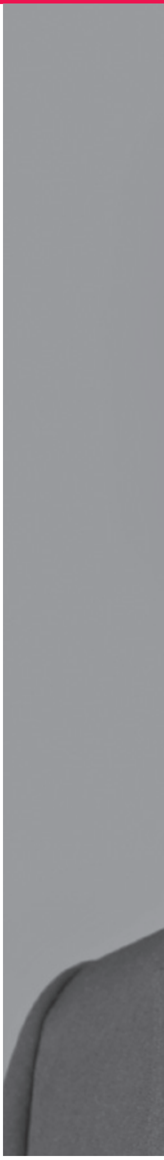


Letter from the Chairman of KEGOC's Board of Directors

102-14

Dear partners,

The year 2019 for KEGOC, as well as for the entire electric power industry of Kazakhstan, began with the electric capacity market going live as part of the implementation of the government's '100 Concrete Steps Plan'.



The role of the single buyer at the electric capacity market was assigned to KEGOC's subsidiary, Financial Settlement Centre for Renewable Energy Support LLP. The main purpose of the capacity market is to ensure the balance in the power system of Kazakhstan. This shall also enhance the investment appeal of the industry by providing long-term guarantees for investors, as well as the reliability of the unified power system (UPS) of Kazakhstan through the accelerated development of generation.

Last year KEGOC showed high performance in managing the business processes, effectively reaching its strategic goals, and delivering its functions of the UPS operator and maintaining the robust financial standing.

The reliable operation of the UPS of Kazakhstan, that is, the quality delivery of the functions of the system operator, is the top priority of our company. It requires quality maintenance, repair, and modernization of existing assets, as well as investment in development of the infrastructure. To this end in 2019, the Board of Directors of the company approved key parameters and gave a 'go' to implementation of West Kazakhstan Electricity Transmission Reinforcement Project and a project for Rehabilitation of 220-500 kV OHTLs in Aktyubinskiye MES branch, Zapadnye MES branch and Sarbaiskiye MES branch of KEGOC.

The second strategic goal is to ensure the efficient operation of KEGOC. In 2019 the company updated the Portfolio and Roadmap of the Business Transformation Programme. The benefits from the implementation of the projects of the Business Transformation Programme in 2019 amounted to KZT 2.16 billion.

Another strategically important area of further improvement is the quality of corporate governance and the sustainable development of the company. Last year the company approved the corporate governance action plan of KEGOC for 2019–2020 and successfully implemented all activities that were planned for 2019.

The reporting year showed high performance of the Board of Directors in delivering quality management decisions with due account the interests of all stakeholders. The company was committed to the best standards of corporate governance and the principles of transparency.

The good reputation of the company, its consistently high financial performance, respect of the rights and interests of

1,613.5

share price in 2019

shareholders supported the growth and high liquidity of KEGOC's shares on the market. In 2019, the price of one share increased to KZT 1,613.5 with an occasional maximum of KZT 1,712.9, which is a historic high and almost 3.3 times of the initial offering price. In 2019, the company paid about KZT 31.6 billion in dividends, which is also the historic high since the IPO.

On behalf of the members of the Board of Directors of KEGOC, I would like to thank all our partners for the fruitful cooperation, the shareholders for their support, and the team for the quality delivery of all the goals set by the Board of Directors and their contribution to the efficient and reliable operation of the industry.

I am sure that the consistent operational and financial results of 2019 will become the foundation for the success of the company in the coming period.

Almassadam Satkaliyev
Chairman of KEGOC's
Board of Directors

Our strategic priorities

1

Ensure reliable operation of Kazakhstan UPS:

- Deliver quality functions of the System Operator of Kazakhstan UPS;
- Ensure quality maintenance, repair, and modernization of the existing assets;
- Enhance the transmission capacity of the national power grid of Kazakhstan;
- Ensure technological development and digitalization of business.

2

Ensure efficiency of KEGOC's operations:

- Improve efficiency of the invested capital and develop new types of business;
- Implement KEGOC's Business Transformation Programme;
- Develop international cooperation.

3

Enhance corporate governance and sustainability:

- Improve OHS management system;
- Enhance corporate governance;
- Develop human capital;
- Protect the environment.

Letter from the Chairman of KEGOC's Management Board

102-14

Dear readers,

I am pleased to present to you the Annual Report of KEGOC, which demonstrates the progress of the company in achieving the strategic goals set by the Board of Directors, ensuring the reliable operation of the UPS of Kazakhstan, sustainable development, stable financial standing of the company, and consistent cash flows to our shareholders and our development projects.

This Report includes the information on our sustainable development performance in economic, environmental, and social areas in accordance with GRI standards. It shows our progress in implementing the Sustainable Development Goals and in commitment to the principles of the UN Global Compact.

43.97

billion kWh
Electricity transmission in National Power Grid of Kazakhstan

KEGOC's customers include the power generators, power transmission entities, power suppliers and electric power consumers. The total number of service provision and electricity purchase contracts that either remain in effect from 2018 or concluded in 2019 was 797.

The electricity transmission in 2019 amounted to 43.97 million kWh. The amount of technical dispatching of electricity supply and consumption in the grid reached 97.06 kWh. The amount of electricity generation and consumption balancing services in 2019 was 188.77 billion kWh.

The reporting period was also noteworthy for the reduction in our cap tariffs for a number of services effective since 1 January 2019 which was required by the instructions of the First President of the Republic of Kazakhstan to reduce electricity tariffs as a part of the effort to support the population, small and medium-sized businesses. Thus, the transmission tariff was reduced from 2.823 to 2.496 KZT / kWh, the technical dispatching tariff was reduced from 0.306 to 0.237 KZT / kWh, the balancing tariff was reduced from 0.098 to 0.088 KZT / kWh.

In the reporting year we completed Pavlodar

Electricity Transmission Rehabilitation Project and Construction of 220 kV Tulkubas-Burnoye OHL, as part of Kazakhstan Electricity Transmission Rehabilitation Project, Phase II. Also, pursuant to Kazakhstan President Decree on the concept master plan for the development of the city of Turkestan as a cultural and spiritual centre of the Turkic world, the company started the implementation of the Turkestan External Power Supply Reinforcement Project that plans to construct 220 kV Ortalyk substation and supporting electric power facilities. The objective of this project, like the two large capital projects implemented in other regions of the country, is to ensure reliability, cover the expectedly growing electricity demand and create conditions for future development of the country regions.

The company has shown strong financial performance: EBITDA in 2019 amounted to KZT 88.5 billion, which is 14.8% higher than expected; the net income at the end of the year was at KZT 40.7 billion, which is almost 50% higher than planned value; the ROACE reached 7.47% in 2019, and the value of net assets was KZT 422.2 billion. All key financial indicators of the company were stably higher than in 2018.

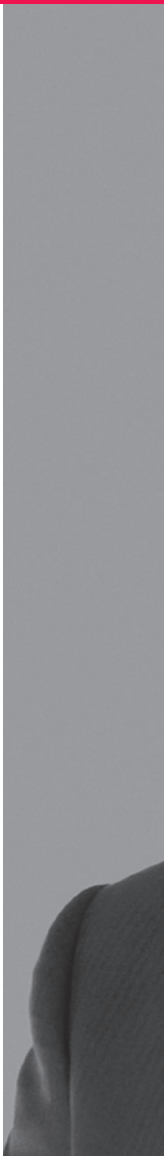
The OHS matters are the absolute priority of the company and they are constantly supervised. During the reporting period there were no accidents at work in the company, which is the result of successful systematic effort of our personnel in this area.

We are proud of that the staff of KEGOC is composed of highly qualified specialists, professionals, who can deliver any ambitious and technically complex project. This is where all our success come from. In 2019, according to an independent study, KEGOC's social stability index was 90%. This is the best performance among all portfolio companies of Samruk-Kazyna JSC. The personnel engagement index is in the green zone at 74%.

Our repair campaign was carried out successfully and in accordance with the schedule. In terms of the reliability indicators: SML (System Minutes Lost) and WWP (Work Without Problems) we are on a par with the foreign system operators.

Another priority of the company is the implementation of the Business Transformation Programme. In 2019 the company started using category procurement management for its operations, and completed the following projects: billing system for financial settlement with consumers; target IT management model to increase the availability, quality and speed of delivery of the IT services; and the target model of information security necessary for expanding the Information Security Management System to all information systems of the Company.

In the upcoming 2020 the company also plans to fully adhere to the principles of sustainable development and complete all planned investment projects and planned events. I believe that this will support our corporate image and reflect our commitment to achievement of our goals, enhancement of our risk management, and, in general, to increasing the value of the company through long-term and positive changes.



0

LTIFR

0.52

SML, min.

7.47

ROACE, %

88.5

EBITDA, KZT billion

99.64

WWP, %

Bakytzhan Kazhiyev
Chairman of KEGOC's
Management Board

KEGOC's Corporate Events in 2019

01

JANUARY

Starting 1 January 2019, the Republic of Kazakhstan launched a new energy market: the electric capacity market, which divided the once single electricity market into two separate segments: electricity and capacity

03

7 MARCH

Standard & Poor's published a report substantiating the outlook for the credit rating of Kazakhstan Electricity Grid Operating Company (KEGOC)

04

1 APRIL

Fitch confirmed 'BBB-' rating of KEGOC with stable outlook

15 APRIL

The Kazakhstan Stock Exchange (KASE) held a meeting on the Issuer Day dedicated to KEGOC to increase the issuer appeal for the investors and seek feedback about the issuer from the shareholders

15-22 APRIL

In the city of Kostanay, the regular VIII professional skill contest of the operational and dispatching staff of the regional dispatch centres (RDCs) of KEGOC took place

27 APRIL

KEGOC held a sports marathon dedicated to the World Day for Safety and Health at Work for the employees of the company

05

3 MAY

The annual General Meeting of Shareholders of KEGOC was held 3 May

31 MAY

Dominique Fache, a member of the Board of Directors of KEGOC, joined the International Global Energy Prize Award Committee

06

6 JUNE

KEGOC paid interest on bonds (KZP01Y15F281)

17 JUNE

KEGOC paid dividends on ordinary shares (KZ1C34930012) for 2018

27 JUNE

The employees of KEGOC and its subsidiaries supported the affected by the emergency in the town of Arys by transferring one-day salary to a special fund established to support the residents of the town

07

JULY
KEGOC completed the implementation of Pavlodar Electricity Transmission Reinforcement Project

08

AUGUST
KEGOC successfully completed the construction of 220 kV OHTL between Tulkubas traction SS and Burnoye traction SS under Kazakhstan Electricity Transmission Rehabilitation Projects, Phase II.

AUGUST
The meeting of the steering committee approved the billing system performance report for the 'System services delivery improvement project', which is thus considered completed

22 AUGUST
KEGOC's employees participated the annual charity campaign titled 'Let's Help Children Prepare for School'

09

11 SEPTEMBER
KEGOC paid interest on bonds (KZP02Y15F289)

23 SEPTEMBER
KEGOC selected the best business rationalization proposals

10

OCTOBER
KEGOC completed the repair campaign and obtained a certificate of readiness for operation in autumn-winter period

15-18 OCTOBER
KEGOC held professional skill competitions, in which the team of electricians of Almatinskiye MES branch of KEGOC took the first place in servicing overhead lines of the national power grid

OCTOBER
Representatives of KEGOC took part in the 55th meeting of the CIS Electric Power Council

25 OCTOBER
The extraordinary General Meeting of Shareholders of KEGOC was held

11

12 NOVEMBER
KEGOC paid dividends on ordinary shares (KZ1C34930012) for H1 2019.

12

18 DECEMBER
The employees of KEGOC took part in 2019 Digital Samruk conference

Company Profile

Kazakhstan Electricity Grid Operating Company (KEGOC) was established in accordance with Decree No.1188 of the Government of Kazakhstan dated 28 September 1996 ‘On some measures to restructure power system management in Kazakhstan’. KEGOC operates the national power grid (NPG) of Kazakhstan and is the system operator of the Kazakhstan unified power system (UPS). The date of initial registration of KEGOC is 11 July 1997.

102-1

According to the power industry regulations in Kazakhstan KEGOC is engaged in the following main activities:

- electricity transmission in the national power grid;
- technical dispatching of electricity supply and consumption in the grid;
- balancing of electricity production and consumption.

The above-mentioned services in Kazakhstan are considered by the regulations as the natural monopoly services, which is why KEGOC’s operations are regulated by the law of the Republic of Kazakhstan ‘On natural monopolies’.

102-2

Mission and Values

Mission

Reliable operation and effective development of Kazakhstan unified power system (UPS) in accordance with the state-of-the-art technical, economic, and environmental challenges and occupational health-and-safety requirements.

Vision

We are the company with advanced reliability and efficiency performance on a par with the world's best peers. Our aim is to continuously increase the value for all stakeholders through the development of the national power grid using advanced technologies, providing conditions for realization of transit and export potential, and fostering corporate social responsibility.

Values

JUSTICE AND HONESTY

We hear the opinion of everyone and discuss complex issues openly to make a decision
We fulfil our obligations and keep our word
We act ethically

CHALLENGE AND DEVELOPMENT

We look for the new ways to improve efficiency and we support the initiatives
We constantly improve and develop ourselves using the best practices as a reference
We overcome any difficulties and achieve our goals

UNITY AND RESPONSIBILITIES

We have zero tolerance to damage to the company, society, and the environment
We personally take responsibility and make decisions
We help and trust each other, share experience and knowledge

TRADITIONS AND RESPECT

We put the interests of the company before the personal ones and do not allow conflicts of interest
We respect people and value everything that has been achieved in the company
We share and follow company standards, rules, and values.

Owner Structure

Until 2006, 100% of KEGOC's shares had been owned by the government. In 2006, the government's stock (100%) was transferred to Samruk JSC (the Kazakhstan holding company for management of public assets) as a payment for the placed shares. In 2008, Samruk-Kazyna JSC (the sovereign wealth fund) was established through merger of Kazyna JSC (the sustainable development fund) and Samruk. Thus Samruk-Kazyna became a legal successor of Samruk.

On 18 December 2014 as part of the programme of public offering of shares in Samruk-Kazyna's affiliates and subsidiaries on the stock market, KEGOC floated 25,999,999 authorized ordinary shares on the Kazakhstan Stock Exchange through subscription.

As on 31 December 2019, the number of authorised and placed ordinary shares of the Company was 260,000,000, of which 234,000,001 shares (90% plus one share) belong to Samruk-Kazyna, the major shareholder, and 25,998,609 shares (9.9995%) belong to minority shareholders, the remaining 1,390 shares (0.0006%) were repurchased by KEGOC.

102-5

Partnership

102-12 102-13

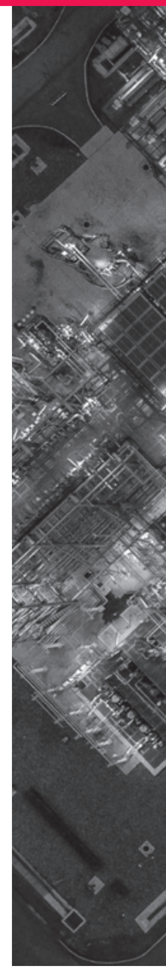
KEGOC is a member of:

www.kazenergy.com

KAZENERGY, Kazakhstan association of oil, gas and energy sector organizations, which has the major objectives to protect the association members' interests and rights with the state bodies; harmonize legislative framework; create an integrated information network for subsoil users, power generation companies, transporters and consumers of goods and services of the energy sector; develop and support industry-specific cooperation and entrepreneurship projects at local, regional and international level; promote positive image of the association, its members and the industry as a whole at the regional and global level; stimulate economic, social, environmental, and scientific-technical activity of the Kazakhstan community.

www.kea.kz

Kazakhstan Electricity Association, which has the major objectives to support all organizations that are directly or indirectly associated with power industry; participate in elaboration of state programmes, laws and regulatory acts relating to power industry; support and protect its members' positions in discussions of industry critical issues with the government, judicial and other authorities.



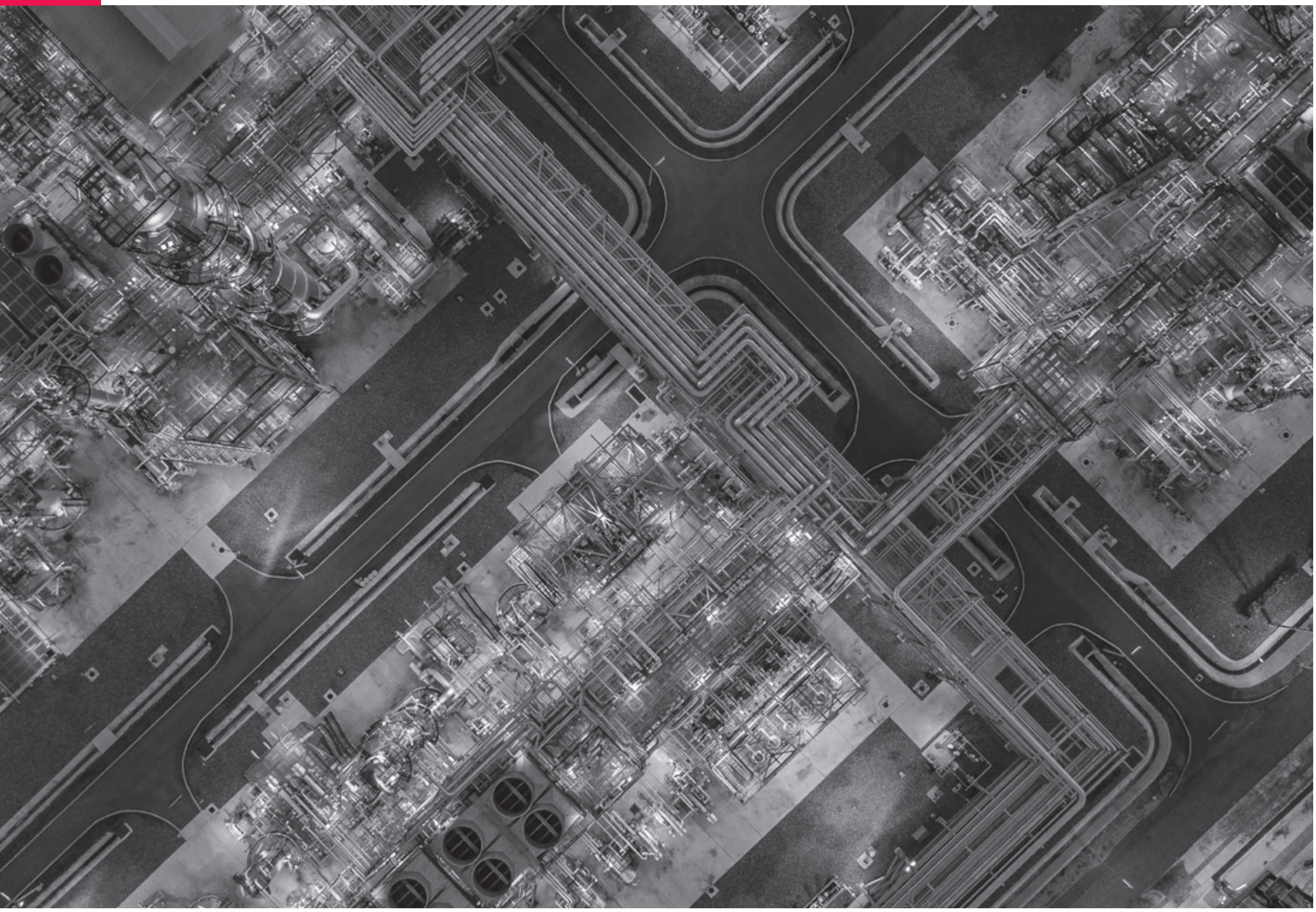
www.atameken.kz

Atameken National Chamber of Entrepreneurs of Kazakhstan, that was established to enhance the negotiation power of business in its relations with the government and public authorities.

Kazakhstan Electric Capacity Reserve Pool, the main purpose of which is to mobilize the necessary amount, structure and location of reserves that would ensure uninterrupted power supply during unforeseen failures of power equipment of to the participants of the pool and / or interregional and regional power transmission lines, in accordance with the rules of the pool.

www.ark.org.kz

Association of Competition Development and Commodity Markets, which is a non-profit organization bringing together, on a voluntary basis, legal entities to coordinate entrepreneurial activity and to represent and protect common interests in state bodies, government agencies, international and public organizations on the matters of competition development and commodity markets. Accession to this organization enables the company to initiate and promote necessary changes in antimonopoly legislation in KEGOC's interests. The association prepares and participates in preparation of draft regulatory legal acts; develops international non-governmental contacts to exchange the experience, holds workshops, conferences, roundtables, and other activities; assists the development of competition and entrepreneurship; and prevents of antimonopoly legislation violations.



In addition, to establish efficient electricity market relations with the neighbouring countries and develop international cooperation, KEGOC joined such international electricity organizations as:

- CIS Electric Power Council;
- International Council on Large Electric Systems (Conseil International des Grands Réseaux Électriques – CIGRE);
- Eurasian Economic Union (Armenia, Belarus, Kazakhstan, Russia, Kyrgyz Republic);
- World Energy Council;
- EURELECTRIC;
- Executive Assembly of the World Energy Council (WEC);
- United Nations Economic Commission for Europe;
- Central Asia Coordination Electric Power Council.

Business Model

Mission

Reliable operation and effective development of Kazakhstan unified power system (UPS) in accordance with the state-of-the-art technical, economic and environmental challenges and occupational health-and-safety requirements.

Vision

We are a leading Company having reliability and performance indicators consistent with the level of the best world companies.

Our aim is to continuously increase the value for all stakeholders through the development of the national power grid using advanced technologies, providing conditions for realization of transit and export potential and fostering corporate social responsibility.

Values

Justice and honesty
Challenge and development
Unity and responsibilities
Traditions and respect

Our results

Social stability rating	90%	Net profit	KZT 40.3 billion
Accidents at work	0	Reliability performance	WWP: 99.64%, SML: 0.52min.
Reduced energy consumption	1.8%	Value of one share as on 31 December 2019	KZT 1,613.5

Our assets

374 overhead power lines with a total length of 26,900.91 km and 80 electrical substations of 35–1150 kV with an installed transformer capacity of 38,246.05 MVA

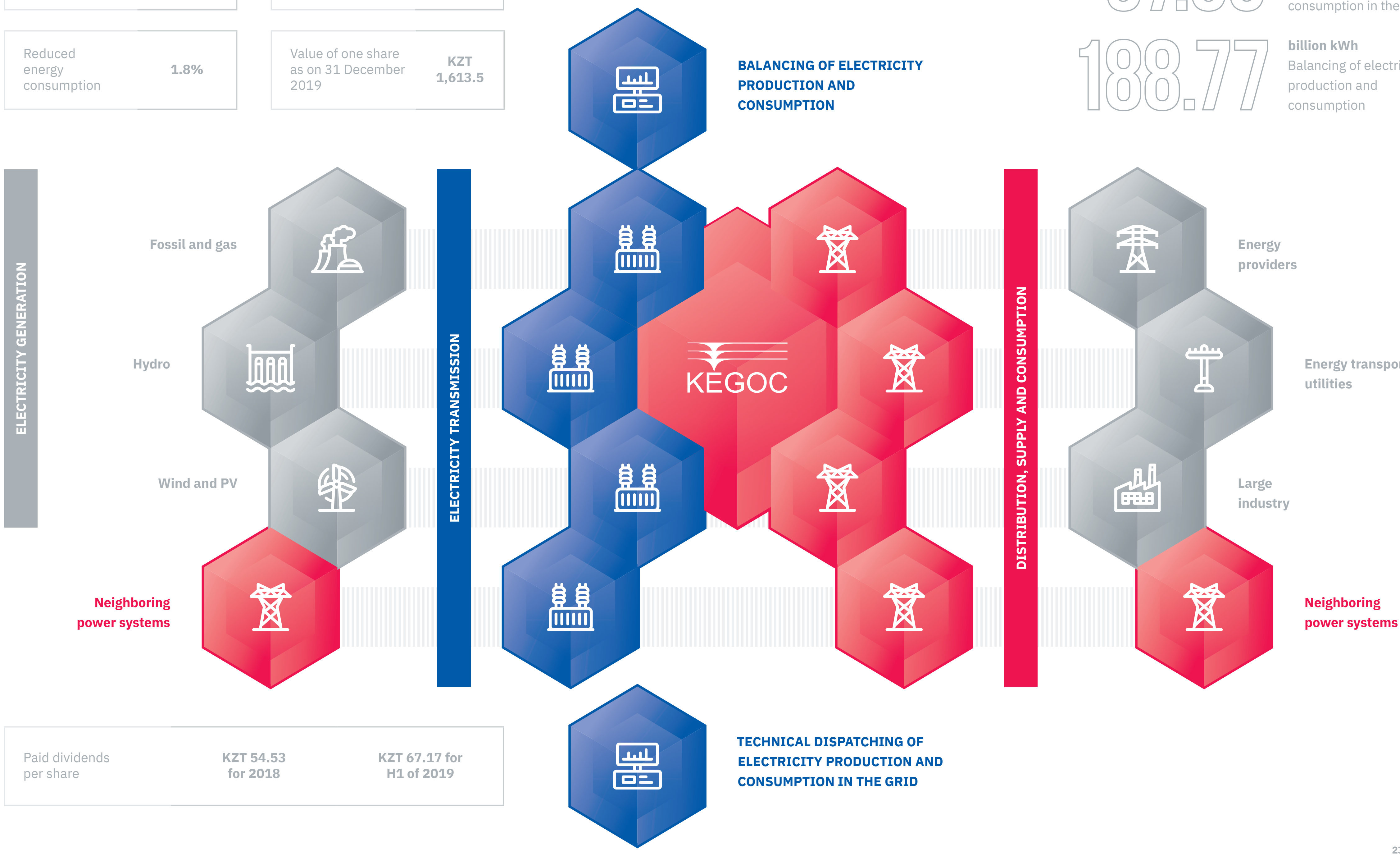
- 9 MES branches and one NDC SO
- 4,819 employees
- Modern technologies

Our results

43.97 billion kWh Electricity transmission

97.06 billion kWh Technical dispatching of electricity production and consumption in the grid

188.77 billion kWh Balancing of electricity production and consumption



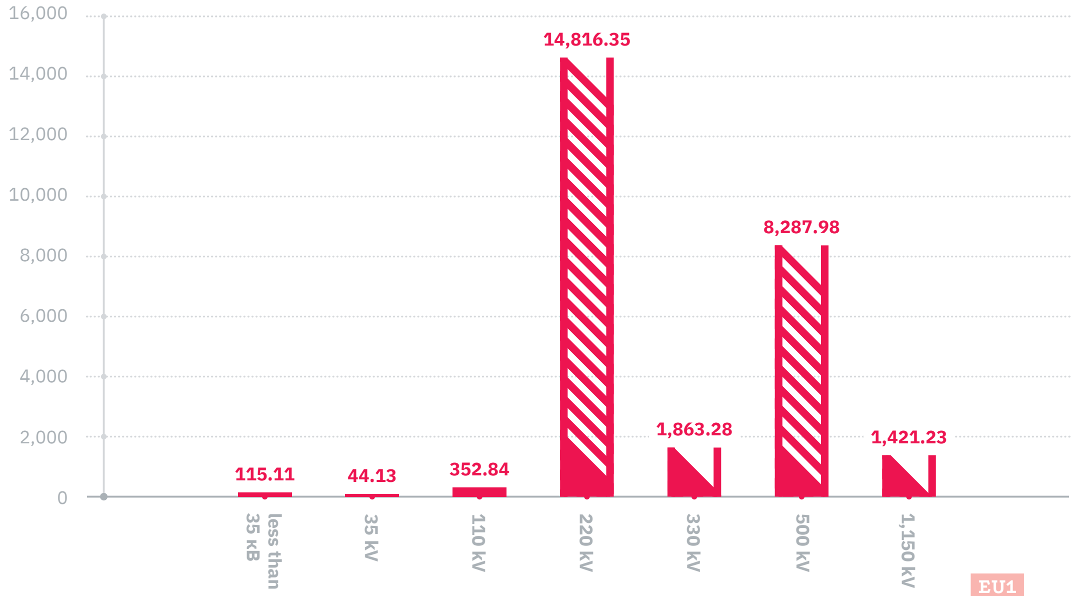
Paid dividends per share	KZT 54.53 for 2018	KZT 67.17 for H1 of 2019

Capacities

The main asset of the Company is the national power grid comprising as of 31 December 2019 of 374 overhead transmission lines of 0.4-1,150 kV totalling to 26,900.91 km (circuits) and 80 electric substations (SS) of 35-1,150 kV with transformer installed capacity of 38,246.05 MVA. They are used for cross-border electricity transmission, delivery of electricity from power plants and connection of the regional power companies with the major consumers.

102-6

Length of KEGOC's transmission lines, as on 31 December 2019, km

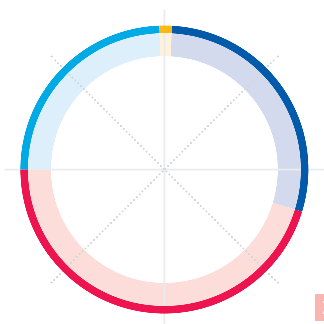


EU1

Capacity and number of KEGOC's substations as on 31 december 2019

80 substations
38,246.05 MVA

- **55 substations** / 220 kV – 11,391.25 MVA
- **20 substations** / 500 kV – 17,447.5 MVA
- **3 substations** / 1,150 kV – 9,384.1 MVA
- **2 substations** / 35 kV – 23.20 MVA



EU4

Company Structure

KEGOC operations cover the entire territory of the Republic of Kazakhstan. The structure of the company includes 9 intersystem electric network branches (MES branches) and the National Dispatch Centre of the System Operator (NDC SO), also as a branch of the company.

Akmolinskiye MES	10 SS	8,136.6 MVA	OHTL 4,230.431 km
Aktyubinskiye MES	7 SS	2,425.5 MVA	OHTL 967.194 km
Almatinskiye MES	12 SS	4,897.35 MVA	OHTL 4,225.143 km
Vostochnye MES	7 SS	4,362.5 MVA	OHTL 1,923.39 km
Zapadnye MES	5 SS	950 MVA	OHTL 1,681.5 km
Sarbaiskiye MES	8 SS	6,569.9 MVA	OHTL 2,447.845 km
Severnye MES	8 SS	3,770.6 MVA	OHTL 3,680.614 km
Tsentralnye MES	10 SS	3,741.6 MVA	OHTL 3,482.19 km
Yuzhnye MES	13 SS	3,392 MVA	OHTL 4,262.603

102-6 102-7

Place of Operations

26,900.91

OHTLs length, km (circuits)

38,246.05

SS total capacity, MVA

80

electric substations

KEGOC has subsidiaries: EnergoInform JSC and Financial Settlement Centre for Renewable Energy Sources LLP (FSC RES).

EnergoInform is engaged in maintenance of the telecom equipment in the national power grid and provide telecom support for the company's operations.

FSC RES LLP was established in 2013 to encourage investments in renewable energy sector and increase the share of renewable energy in Kazakhstan's energy mix through government-guaranteed and centralized electricity purchase of all electricity produced by all renewable energy facilities (who have chosen such support scheme) in accordance with the fixed rates. Also FSC RES LLP was assigned by the Minister of Energy of the Republic of Kazakhstan (order No. 357 dated 7 September 2018) the single buyer of centralized procurement of services of maintaining the readiness of electric capacity and centralized provider of services of ensuring readiness of electricity capacity to bear the power load.

KEGOC is also a co-founder (20% of shares) of Batys Transit JSC established in 2005 to implement the project for construction of inter-regional power transmission line linking North Kazakhstan with Aktobe oblast.

102-7

102-4 102-6

Development Strategy

The business of KEGOC has a strategic importance for the development of the entire economy of Kazakhstan and can affect the interests of a wide range of stakeholders, and this shall be taken into account by the company, when making decisions and building a long-term strategy. The company focuses on careful consideration of the interests of the society and proactive development of Kazakhstan national power grid, decent working conditions and welfare of people, and protection of the environment. This is reflected in the development strategy of KEGOC.

The government assigned KEGOC the status of the system operator of Kazakhstan UPS with the following functions: secure parallel operation with power systems of other countries, maintain balance in the power system, render system services, purchase ancillary services from the wholesale electricity market entities, transport electricity in Kazakhstan national power grid, service the grid and maintain its operational availability.

The important factors for successful development are:

- better efficiency of the company and use of the portfolio approach to asset management and investment projects;
- tracking of the trends in the electric power industry that could have a significant impact on the development of the electric power industry (development of renewable energy sources, digitalization of business, process automation and information security, etc.),
- and transformation of people's minds.

Long-Term Strategic Goals

1

Goal 1: Ensure reliable operation of the unified power system of Kazakhstan, i.e. quality delivery of functions of the System Operator of the UPS of Kazakhstan; quality operational maintenance, repair and modernization of existing assets; increasing the transmission capacity of the NPGs of the Republic of Kazakhstan through the construction of new power transmission lines and substations; technological development and digitalization of business.

2

Goal 2: Ensure efficient operation of KEGOC by increasing the efficiency of invested capital and developing new types of business; implementation of KEGOC's Transformation Programme and the development of international cooperation.

3

Goal 3: Improve corporate governance and sustainable development by improving the OHS management system; improving corporate governance; human capital development and environmental protection.

Strategic Goal Progress in 2019

The Development Strategy roadmap includes projects, activities and strategic KPIs.

The list of investment projects was made using the portfolio approach, i.e. investment projects are based solely on the principles of operational and commercial viability, the achievement of long-term interests of the company and the return of invested capital.

GOAL 1

ENSURE RELIABLE OPERATION OF KAZAKHSTAN UPS

In January 2019 KEGOC put billing system into commercial operation under the System services delivery improvement project.

On 1 January 2019, the electric capacity market was launched, and 51 contracts with power plants and 235 contracts with consumers were concluded.

'Pavlodar Electricity Transmission Reinforcement Project' (57.122 km of overhead lines) and 'Construction of 220 kV OHTL Tulkubas – Burnoye' (61.3 km of overhead lines) were completed. Currently 'Rehabilitation of 220-500 kV OHTL at KEGOC branches' project is in progress, the "turnkey" contracts have been concluded, a feasibility study is being developed.

To automate the management of the operation states of the UPS of Kazakhstan, KEGOC started 3 projects under the government's 'Digital Kazakhstan' programme: WAMS / WACS system (WAMS system has been commissioned and a contract has been concluded with the Almaty University of Energy and Communications to develop an operational algorithm for WACS system); Centralized Emergency Automation System, and Automated Frequency and Power Control.

A high-speed backbone network of fibre-optic communication lines was built and commissioned for data transmission in the company. KEGOC completed the FOCL design to connect its network with the data centre of Kazakhtelecom JSC in Pavlodar and the communication centre of KazTransCom JSC to enable the company to communicate with other commercial service providers. It is planned that the construction for this project will be completed in 2020.

Goal 1 Achievement Indicators

Name of KPI	2017 actual	2018 actual	2019 plan	2019 actual	2020 forecast
WWP,%	98.98	98.78	98.11	99.64	98.35
SML, min.	1.04	1.11	1.08	0.52	1.00

The main objectives of the company for 2020 are:

- the quality delivery of the functions of the system operator of the UPS of Kazakhstan and higher satisfaction of consumers of system services. To complete this objective the company plans to complete a feasibility study project for modernization of SCADA;
- quality maintenance, repair and modernization of the existing assets; For this objective KEGOC plans to continue implementation of the project for rehabilitation of 220-500 kV OHTL at KEGOC branches and to equip the substations with modern complex security technical systems including video surveillance systems, access control management systems and perimeter alarm systems, build checkpoint building, fences and secure lighting.
- enhancement of the national power grid transmission capacity through construction of new transmission lines and substations; KEGOC will continue the projects for construction of the new overhead lines and strengthening of external power supply schemes, including such large projects as ‘West Kazakhstan Electricity Transmission Reinforcement Project’ and ‘Turkestan External Power Supply Reinforcement Project’.

The technological development and business digitalization efforts of the company will continue in 2020 with the project for ‘Unified power system of Kazakhstan operating state automation control’ included in ‘Digital Kazakhstan’ government programme.

GOAL 2 ENSURE KEGOC’S EFFICIENT OPERATIONS

In 2019, the company approved the internal regulatory documents for project portfolio management and commissioned SAP PPM (Project Portfolio Management) ERP module. A phased implementation and decision-making system was also introduced for large capital projects with the approval of their parameters by the KEGOC’s Board of Directors.

In 2019 the company updated the Portfolio and Roadmap of the Business Transformation Programme. The benefits from the implementation of the projects of the Business Transformation Programme in 2019 amounted to KZT 2.16 billion.

In terms of development of international cooperation, the company was an active participant of the efforts and events of the Electric Power Council of the CIS, EEC, CA IES, Wind Farm, IEC, and CIGRE.

Goal 2 Achievement Indicators

Name of KPI	2017 actual	2018 actual	2019 plan	2019 actual	2020 forecast
EBITDA, KZT billion	72.95	81.22	77.1	88.5	100.5
Net income, KZT billion	32.9	40.0	27.2	40.7	50.4
ROACE,%	6.54	7.16	6.78	7.47	10.61
NAV, KZT billion	361.1	416.2	383.9	422.2	433.2

To improve the efficiency of invested capital and develop new types of business, the company plans to introduce portfolio approach in planning investment activities and managing projects of KEGOC JSC. In 2020, the company also will have to do a lot of work to approve the cap tariffs for its system services for the period 2021–2025.

In terms of development of international cooperation, the company plans to continue cooperation with the Electric Power Council of the CIS, EEC, CA IES, Wind Farm, IEC, and CIGRE.

Also, as part of the implementation of the KEGOC Business Transformation Program, the company will continue implementation of the advanced enterprise processes in the ERP system.

GOAL 3 IMPROVE CORPORATE GOVERNANCE AND SUSTAINABILITY

The company is committed to its systemic effort in operational health and safety. In 2019, the company's branches conducted a behavioural safety audit. KEGOC has been implementing its programme for occupational health and safety management system in accordance with ISO 45001. In addition the company organized annual and pre-shift medical examinations of the operating personnel.

In 2019 the company approved the corporate governance action plan of KEGOC for 2019–2020 and successfully implemented all activities that were planned for 2019.

KEGOC also developed a roadmap for the implementation of the HR policy for 2019–2022 and implemented everything that was planned by it in 2019.

In addition, the company completed some environmental protection efforts.

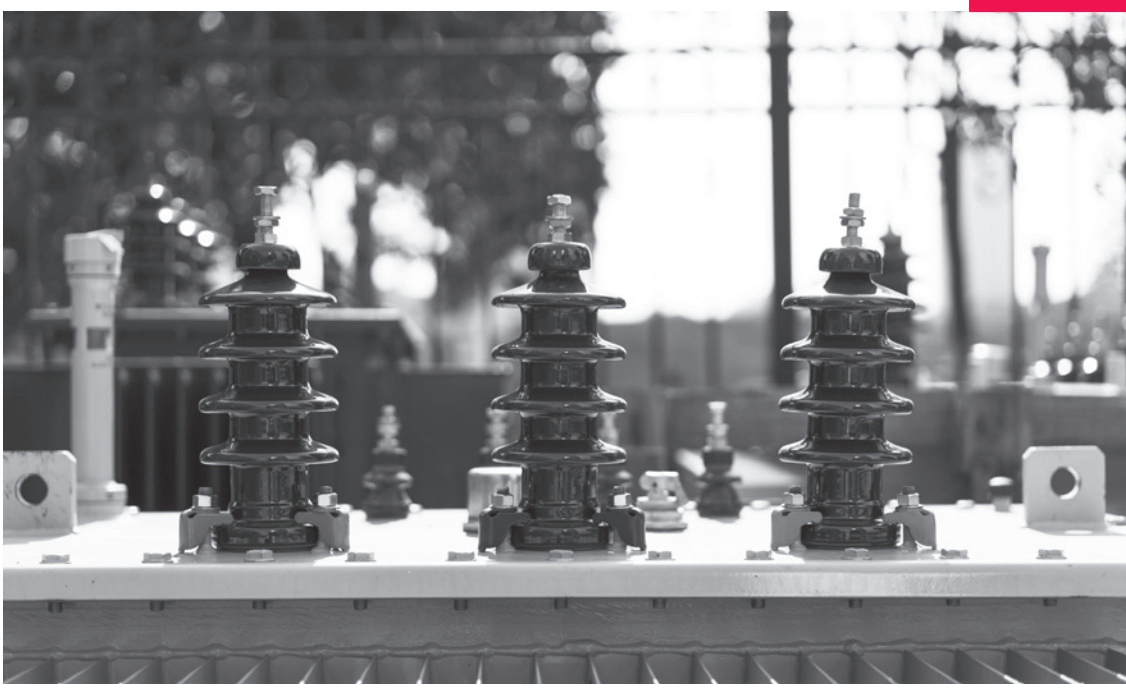
Goal 3 Achievement Indicators

Name of KPI	2017 actual	2018 actual	2019 plan	2019 actual	2020 forecast
LTIFR	0.15	0.29	3.8	0	3.6
Frequency of fatal accidents at work	0.26	0.25	0	0	0
Corporate governance rating	BB	BB	-	BB	BBB

In 2020, the company plans to improve its OHS performance and pursue the policy of zero tolerance to fatal accidents at work.

To improve the corporate governance KEGOC will continue implementation and monitoring of the action plan for improving corporate governance for 2019–2020.

The development of human capital will be carried out as part of the HR policy roadmap for 2019–2022.



Outlook

Based on the stable growth of the country's economy, KEGOC expects future growth in consumption and production of electricity, which shall increase the amount of electricity transmission and regulated services provided by the company. Therefore, the company expects future growth in revenue and other financial performance indicators (ROACE, EBITDA, NAV). However, in many respects, this growth dynamics depends on the outcome of approval of the cap tariffs for system services in 2020 and the growth trends of electricity consumption and amount of system services rendered over the next five years. In addition, it should be noted that the natural monopolies laws have constantly been changing and improving, this may impact in one way or another the Company's operations and the setting of the cap tariffs.

KEGOC will continue the implementation of asset modernization and development projects to maintain reliability of the UPS of Kazakhstan and improve such performance indicators as WWP (Percentage of Work Without Problems), SML (System Minutes Lost), ENS (energy not supplied) and the degree of satisfaction of consumers of system services.

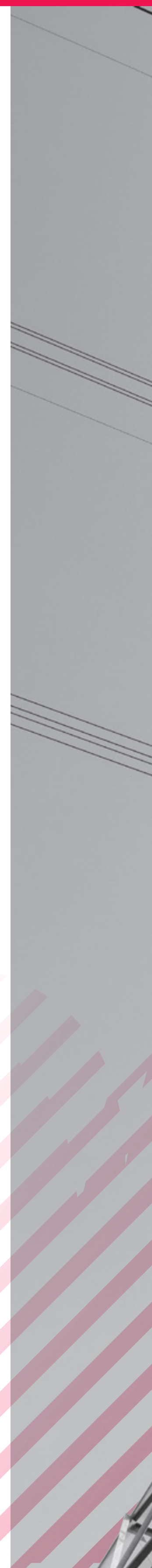
The sustainable development of KEGOC in future will be supported by further improving corporate governance and OHS management system, and implementation of environmental and HR programmes.

Forward-Looking Statement Disclaimer

Some of the statements in this Annual Report are not the real facts but the forward-looking statements.

In particular, any information concerning the plans referred to in this Annual Report is forward-looking and reflects the current views of KEGOC with respect to future events and is exposed to certain risks, uncertainties and assumptions relating to the business, financial condition, operating results, growth strategy and liquidity of KEGOC.

Under the influence of a number of significant circumstances, in particular related to the uncertainty in the global financial markets, as well as to the pandemic that begun in early 2020, the expected results may differ significantly from the planned and target indicators, estimates and intentions contained in forward-looking statements.



Operating Performance Review

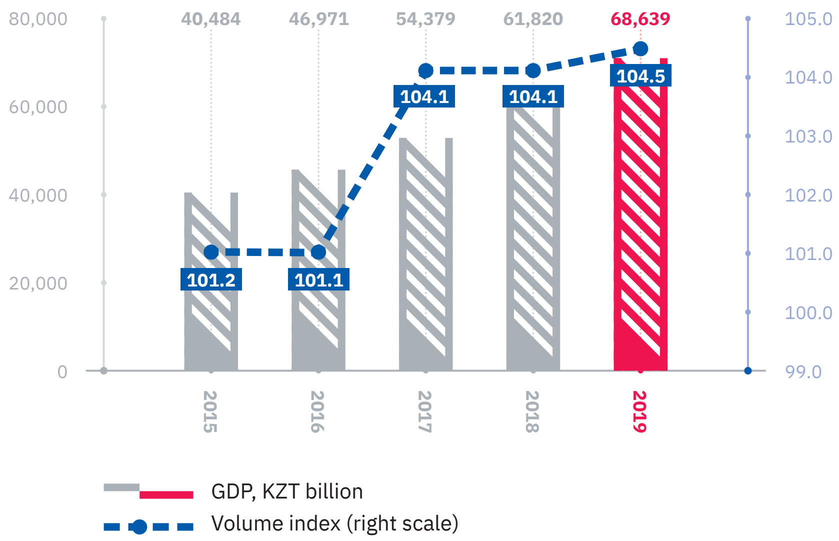
Macroeconomic Review

The gross domestic product in Kazakhstan in 2019 (according to the latest data from the Statistics Committee of the Ministry of National Economy of Kazakhstan) amounted to KZT 68,639.5 billion, which is 4.5% higher than in 2018 in real terms. The growth drivers include civil construction, communications, transport, and trade. The economy of Kazakhstan, thus, shows steady growth due to government investments and growing consumer demand.

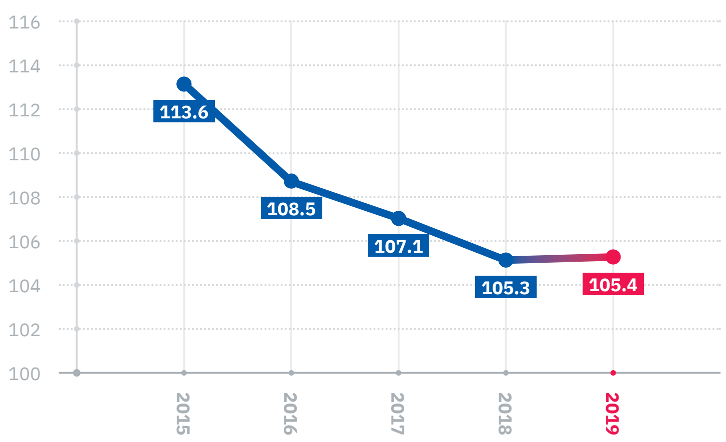
Inflation in 2019 (December 2019 vs. December 2018) was 5.4%. The prices increased by 9.6% for food products, by 5% for non-food products, and by 0.7% for paid services. The inflation rate in 2018 was 5.3%.

According to the Committee on Statistics of the Ministry of National Economy of Kazakhstan, in 2019, the industrial production index was 103.8%. An increase in production was reported in 15 regions of the country, a decrease was reported in the Kyzylorda and West Kazakhstan regions.

GDP



Consumer price index, % (December, year-on-year)

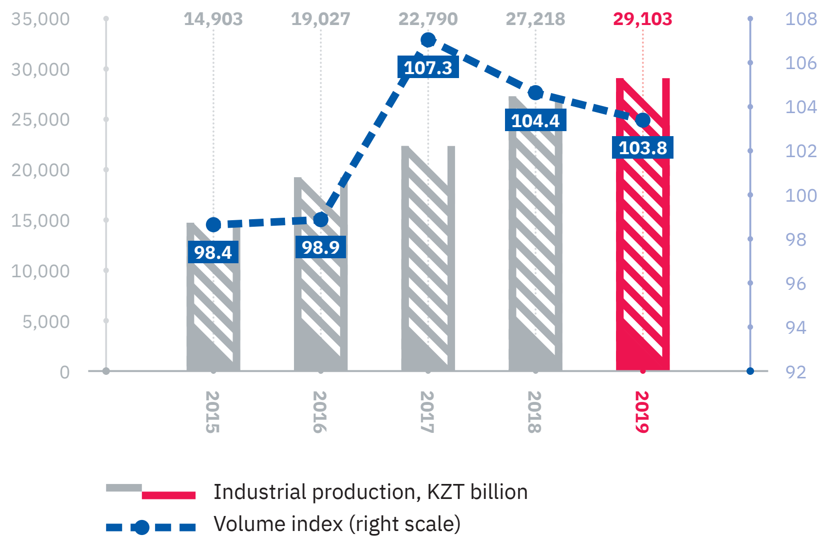


In the mining industry in 2019, the industrial production index was 103.7%. The biggest growth was shown by the extraction of non-ferrous metal ores (116.9%) and the technical mining services (119.5%). The processing industry showed 4.4% increase in production. The growth was also reported in production of food and beverages (110.2%), oil products (106.6%), basic precious and non-ferrous metals (106.8%) and machine manufacturing (120.9%).

In 2019 the industrial production index for electricity, gas, steam, and air conditioning was 101.3%, mainly due to an increase in electricity production, transmission, and distribution by 4.6%.

In water supply, sewerage, waste management, the industrial production index in January – December 2019 amounted to 103.2%.

Industry



Industry Review

Industry Regulation

The main policymaker in the electric power industry is the government of Kazakhstan. The Ministry of Energy of Kazakhstan is the public authority that manages the industry. The Committee of Atomic and Energy Supervision and Control under the Ministry of Energy of Kazakhstan is the public authority to supervise and monitor the industry.

The Committee on Regulation of Natural Monopolies under the Ministry of National Economy of Kazakhstan is the public authority to monitor and regulate the national monopoly activities (including KEGOC as a natural monopoly).

155
power plants,
installed capacity – 22,936.6 MW;
available capacity – 19,329.7 MW

The backbone grid in Kazakhstan UPS is the **National Power Grid** that provides electric connections between Kazakhstan regions and power systems of the neighbouring countries (the Russian Federation, the Kyrgyz Republic and the Republic of Uzbekistan)

KEGOC

374
overhead transmission lines (OHTL) of 0.4-1,150 kV totalling to 26,900.91 km (circuits);

80
electric substations (SS) of 35-1,150 kV with the installed transformer capacity of 38,246.05 MVA

81.1% (TPP) Thermal power plants

8.6% (HPP) Hydroelectric power plants

8.5% (GTPP) Gas turbine power plants

1.8% (RES) Renewable energy sources

● number of contracts signed with KEGOC in 2019

81 ● **industrial enterprises**

32 ● **REC – Regional electric networks** provide electric connections inside the regions and deliver electricity to the retail consumers.

107 ● **PGO – Power generation organisations** generate electric and (or) thermal energy for auxiliary needs and and (or) for sale.

142 ●
PSO – Power supply organisations purchase electricity from power generation organisations or at the centralized auctions and further sell it to the end retail consumers. Some power supply organisations have a role of a 'guaranteed power supplier'.

Consumers that buy electricity on the wholesale market in the amount of not less than 1 MW of the daily average (baseline) capacity

Industry Structure

The participants of the wholesale electricity market are:

- the power generating organisations that supply electricity to the wholesale market in the amount of at least 1 MW of the daily average (baseline) capacity;
- the power transmission organisations;
- the power supply organisations that do not have their own electrical networks and buy electricity on the wholesale electricity market to resale it in the amount of at least 1 MW of the daily average (baseline) capacity;
- the consumers, who buy electricity on the wholesale market in the amount of at least 1 MW of the daily average (baseline) capacity;
- the System Operator (Kazakhstan Electricity Grid Operating Company (KEGOC));
- the operator of the centralized electricity market (KOREM JSC);
- Financial Settlement Centre for Renewable Energy Support LLP.

The centralized dispatch control of Kazakhstan UPS is delivered by the National Dispatch Centre of the System Operator (NDC SO), a branch of KEGOC. The centralized operational and dispatch control in Kazakhstan UPS is organised as direct operational subordination of nine regional dispatch centres (RDCs) to NDC SO; these RDCs are the structural subdivisions of KEGOC's Interconnection Electric Networks (MESs), the branches of the company.

KEGOC JSC ANNUAL REPORT 2019 OPERATING PERFORMANCE REVIEW

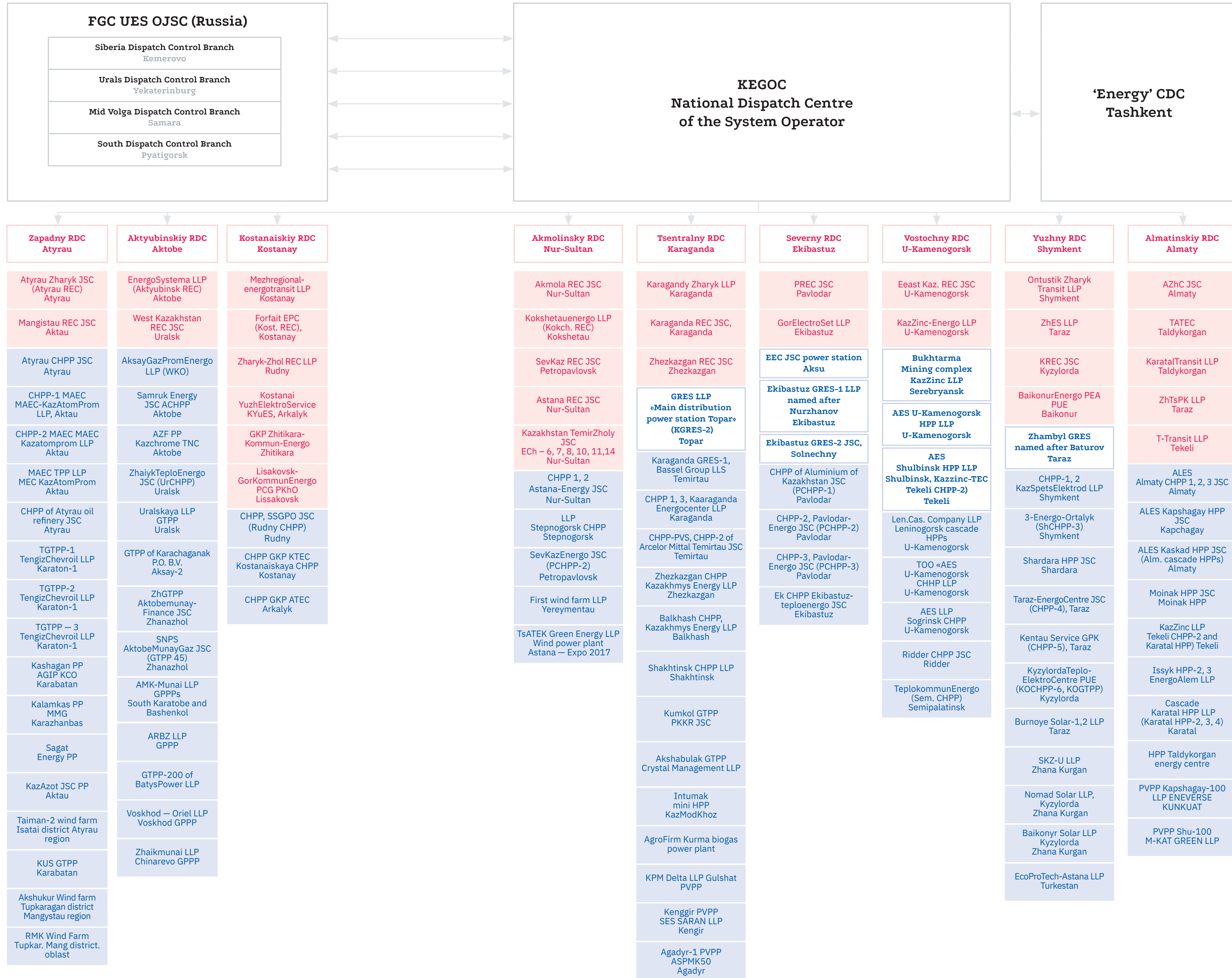
Other activity in electric power industry

There is a number of research and design institutes in Kazakhstan, such as KazNIPIEnergoprom, Energiya, KazSelEnergoProyekt, Chokin Kazakh Research Institute of Power Engineering and Almaty University of Power Engineering & Telecommunications, Nazarbayev University and Energy System Researches LLP that are engaged in research and design in power industry, market researches and forecasting, managing the issues of adopting new energy-efficient and environmentally friendly technologies.

The centralised purchase and sale of the electricity produced by renewable energy facilities and delivered to the electric networks of Kazakhstan UPS is the role of Financial Settlement Centre for Renewable Energy Support LLP.

The structure of operational dispatch control of the Kazakhstan UPS as on 01 Jan. 2020

Zapadny RDC Atyrau	Level of regional dispatch centres
Mangistau REC JSC Aktau	Level of regional network companies
EEC JSC power station, Aksu	Power stations of the national level
Atyrau CHPP JSC Atyrau	Power plants level



Electricity Balance

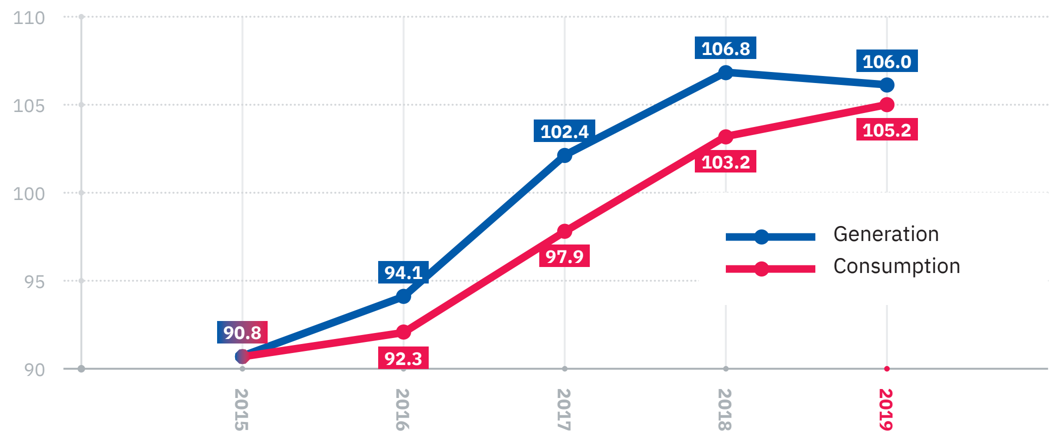
The electricity consumption in Kazakhstan in 2019 as compared to 2018 increased by 1,964.8 million kWh or 1.9% to 105,193.1 million kWh.

The most significant growth in electricity consumption was reported in Pavlodar oblast (by 671.8 million kWh or 3.9%), East Kazakhstan oblast (by 259.2 million kWh or 2.9%), Zhambyl oblast (by 151.9 million kWh or 3.5%), Almaty oblast (by 374.2 million kWh or 3.4%), and Aktobe oblast (by 136.6 million kWh or 2.2%).

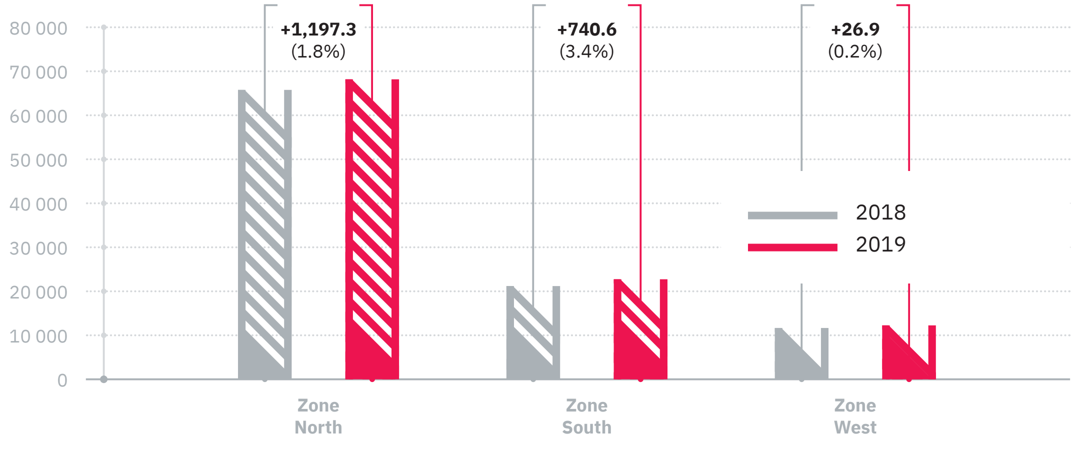
Electricity generation in 2019 reached 106,029.8 million kWh, which is less than in 2018 by 767.3 million kWh or 0.7%.

In 2019, electricity production in Kazakhstan exceeded consumption by 836.7 million kWh.

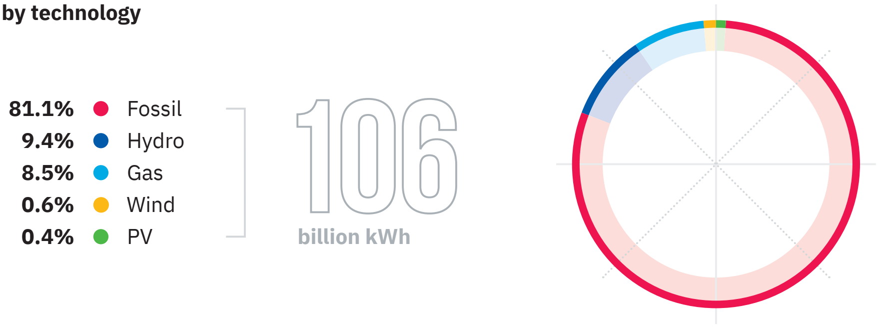
Electricty generation and consumption, billion kWh



Electricity consumption, million kWh

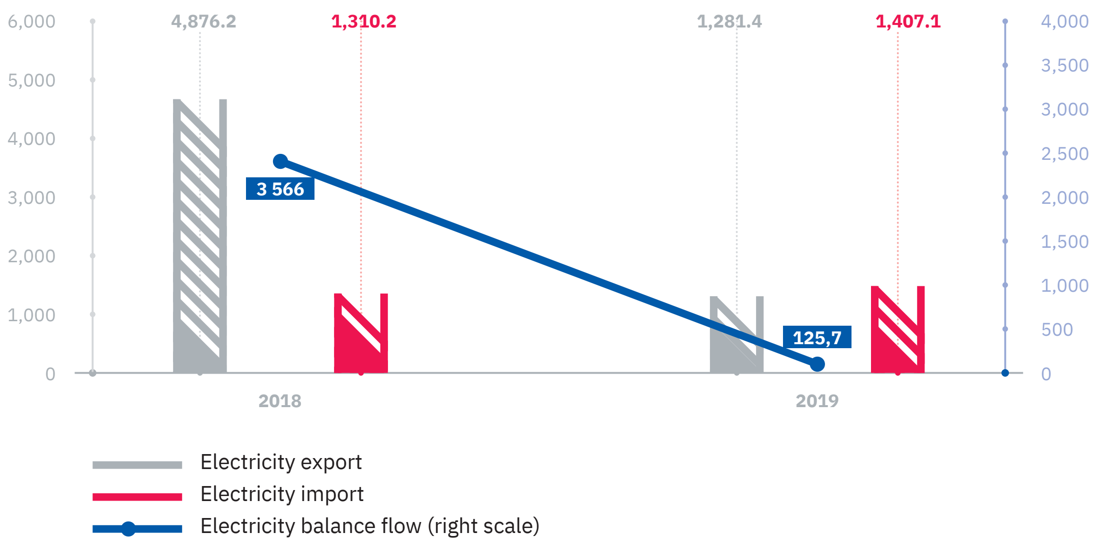


Kazakhstan energy mix in 2019, by technology



The net power flow in the reporting period on the border with Russia amounted to 125.7 million kWh vs. 3,566.0 million kWh in 2018. The diagram presents both export and import with the account of the balancing electricity provided by Russia.

Electricity balance flow on the border with Russia, million kWh



The net power flow on the border with Central Asia amounted to 962.4 million kWh. The export of electricity to Kyrgyzstan amounted to 273.0 million kWh (vs. contracted 269.238 million kWh), the import was 277.2 million kWh (vs. contracted 269.238 million kWh). The amount of electricity imported from and exported to Tajikistan amounted to 13.409 million kWh in full compliance with the concluded contract. Export from Ekibastuz GRES-1 LLP to Uzbekistan amounted to 966.6 million kWh.

Operating Activity

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

In accordance with the law of Kazakhstan 'On Electric Power Industry', KEGOC as the System Operator shall ensure non-discriminatory access to the electricity market for all market players. The connection to the national power grid shall be provided is accordance with the Grid Code and Rules of Electricity Usage. KEGOC shall ensure equal access to the national power grid for all wholesale electricity market participants.

More details on how to access the national power grid is available at 'Company — Activity — Procedure for the access to the National Power Grid' section of the company's website.

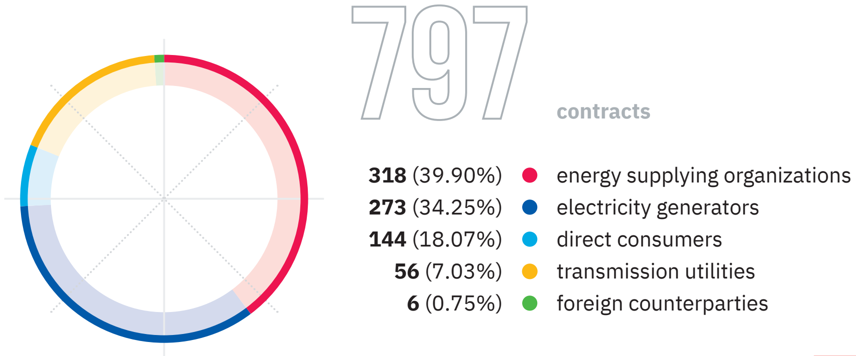
KEGOC's customers include the electricity generators, transmission utilities, energy supplying organizations, and industrial enterprises.

102-6

In 2019, the company delivered 100% of contracted and requested amount of system services to the wholesale market entities. The total number of service contracts and electricity purchase contracts that either remain in effect from 2018 or concluded in 2019 was 797.

Contracts	Quantity
Electricity transmission in the national power grid	322
Technical dispatching of the electricity supply and consumption in the grid	127
Balancing of electricity production and consumption	321
Supply and transmission of reserve electric power	1
Purchase of electricity to compensate technical losses and auxiliary consumption	12
Purchase of power control services	5
Purchase of electricity from Russia to compensate unscheduled hourly deviations of actual interstate net power flow	1
Sale of electricity to Russia to compensate unscheduled hourly deviations of actual interstate net power flow	1
Electricity transmission (transit) services for FGC UES PJSC (Russia)	1
Power (frequency) control services for UzbekEnergo JSC (Uzbekistan)	1
Purchase of electricity transmission services from Batys Transit JSC (Kazakhstan) to compensate the technical losses	1
Purchase of unscheduled electricity	2
Purchase of electricity to manage unscheduled electricity flows (from Kyrgyzstan National Power Grid JSC)	1
Sale of electricity to manage unscheduled electricity flows (for Kyrgyzstan NPG)	1
Total	**797**

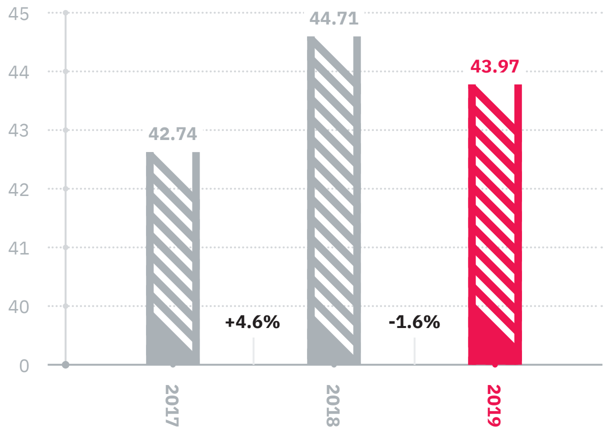
Number of contracts and client structure



EU3 102-6

Electricity Transmission

Electrcity transmission in KEGOC's networks, billion kWh



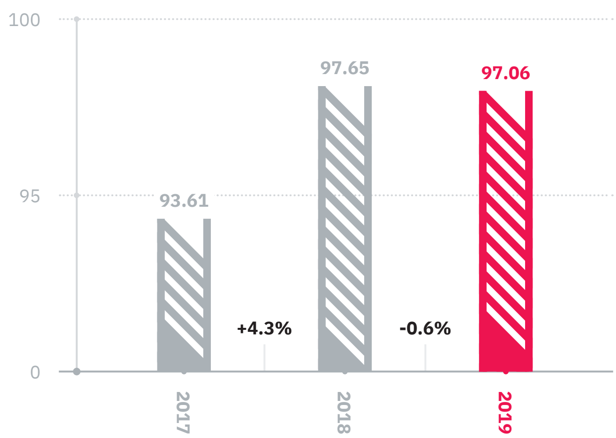
102-7

The actual amount of the transmission services in the national power grid in 2019 amounted to 43,972 million kWh, which is lower than in 2018 by 737 million kWh or 1.6%. The main reason for the decline is the zero export of electricity to Russia in 2019 (vs. 3 758 million kWh in 2018). At the same time there is an apparent increase in electric power transmission to wholesale market participants in Kazakhstan by 698 million kWh or 1.8% vs. the same in 2018.

In 2019, KEGOC under the contract with FGC UES (Russia) transmitted electricity across KEGOC's networks from the Russia through Kazakhstan back to Russia. These transmission services amounted to 3,573.4 million kWh, which is 1,356.7 million kWh or 61% higher than in 2018 (2,216.7 million kWh).

Technical Dispatching

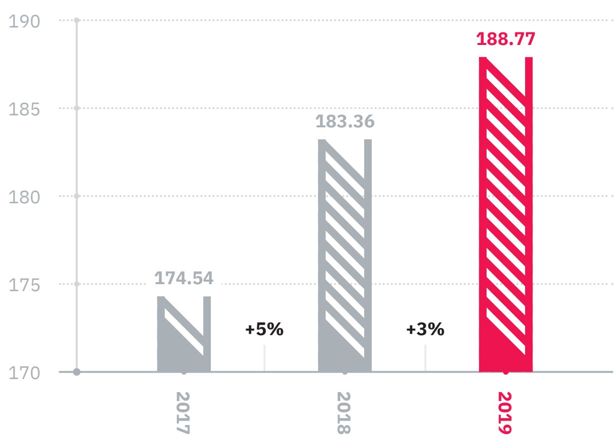
Technical dispatching, billion kWh



The amount of technical dispatching of electricity supply and consumption in the grid amounted to 97,061 million kWh, which is 585 million kWh or 0.6% lower than the same in 2018. The decrease is associated with a decrease in the generation of electricity by the energy-producing organizations of Kazakhstan.

Balancing of Electricity Production and Consumption

Balancing of electricity production and consumption, billion kWh



The actual amount of the balancing services in 2019 amounted to 188,772 million kWh, which is higher than in 2018 by 5,415 million kWh or 3%. The growth is due to increased consumption of electricity in the wholesale market of Kazakhstan.

Electricity Purchase/Sale Transactions

Under the international agreements KEGOC engages in electricity purchase/sale transactions with power systems of neighbouring countries.

In 2019 KEGOC purchased electricity:

- in order to compensate for the hourly unscheduled deviations of the actual interstate balance of electric power flows at the border of the UPS of Kazakhstan and the UES of Russia in the amount of 1,215.6 million kWh or KZT 14,807.5 million (purchased from PJSC Inter RAO (Russia) and from domestic energy sources: Ekibastuz GRES-1 LLP, MAEC Kazatomprom LLP, Batys Power LLP);
- to balance the unscheduled power flows between the power systems of Kazakhstan and Kyrgyzstan in the amount of 7.9 million kWh worth KZT 45.6 million (purchased from the National Power System of Kyrgyzstan OJSC);
- to balance the unscheduled power flows from the power system of Kazakhstan to the power system of Kyrgyzstan in the amount of 3.7 million kWh worth KZT 21.5 million (purchased from Ekibastuzskaya GRES-1).

In 2019, KEGOC sold electricity:

- to balance hourly unscheduled power flows between the energy systems of Kazakhstan and Russia with the total amount of 1,215.6 million kWh worth KZT 6,326.3 million (to Inter RAO (Russia));
- to balance the unscheduled power flows between the power systems of Kazakhstan and Kyrgyzstan in the amount of 3.7 million kWh worth KZT 21.5 million (to the National Power System of Kyrgyzstan OJSC).

Consumer Relations

102-43 102-44

To improve the quality of the services provided, KEGOC developed an internal standard for management of the provision of system services and customer complaints. According to this standard, the questionnaires are sent at least once every six months to all consumers of system services. The questionnaires ask the customers to assess the performance of the company's employees, reliability of the provided business and technical information, efficiency of managing customers' claims, the quality of RDC operation in terms of the operational dispatch management and make suggestions on improving the quality of KEGOC services. The feedback is analysed to improve the quality of rendered services.

In 2019, the average annual consumer satisfaction was rated at 4.7 points on the five-point scale, which is a fairly good level. The areas that need improvement were addressed accordingly.

The high level of customer satisfaction was also the result of commissioning on 1 January 2019 of a billing system, which streamlined settlement processes for consumers. This project, among other benefits, has automated the data entry into the consumer settlement system. The accounting documents are formed based on the data that is received directly from external electricity metering systems. The new system has a database that includes almost 6 thousand contracts and has already issued to consumers more than 4.6 thousand electronic documents for payment based on settlement data and balance information. KEGOC's consumers noted positive changes, in particular, the reduction of time for data processing, the centralized access to all necessary information including documents for payments. Also, users in their personal accounts in the billing system, can easily access the centralized database of contracts and financial documents, and can monitor the status of calculations and communicate with KEGOC.

There were no penalties for violation of laws and regulations relating to the provision of services in 2019.

419-1

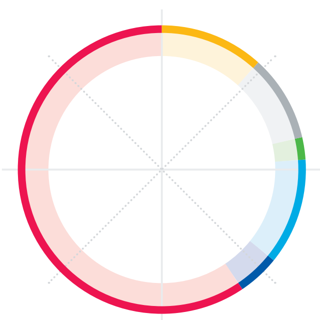
Network Reliability

The good health of power industry in Kazakhstan is critically important because it is vital for the key energy intensive national industries such as metallurgy and oil and gas production. Accordingly, the competitiveness of the production industries in Kazakhstan and the living standards are highly dependent on the reliability and quality of energy supply to consumers.

In 2019, KEGOC had 211 emergency outages in the grid (which is 22% lower than in 2018), including 138 occurrences with successful autoreclosing, and 73 occurrences with unsuccessful autoreclosing.

In 2019, the company recorded and investigated 42 technical disturbances, all them were classified as class 2 failures. The indicator fell by 14% compared with 2018. There were no serious failures or class 1 failures.

Network operation disturbance classification and structure



59.5%	Natural phenomena
11.9%	Manufacture defect
11.9%	Third party impact
9.5%	Other unidentified reasons
4.8%	Installation defect
2.4%	Defective design

There were 32 technical disturbance events on power lines in 2019. Six of the total number of technical disturbances included damage to the transmission line elements.

Ten technical disturbances occurred on substations. Four of them damaged the primary equipment.

The total electricity not-supplied in 2019 decreased by 52% and amounted to 132.1 thousand kWh, as compared to 274.18 thousand kWh in 2018. Undersupply of electricity occurred mainly due to technical disturbances caused by natural phenomena.

The company's development strategy uses SML and WWP indicators to assess the network reliability. 2019 showed 0.52 minutes for SML and 99.64% for WWP, which is higher than in 2018 but on a par with the foreign peers.

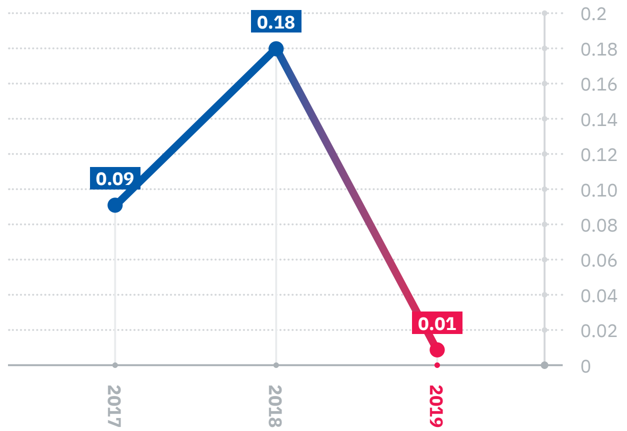
99.64%

WWP

The following sectoral indices are used internationally in the industry to evaluate the network reliability performance.

SAIDI

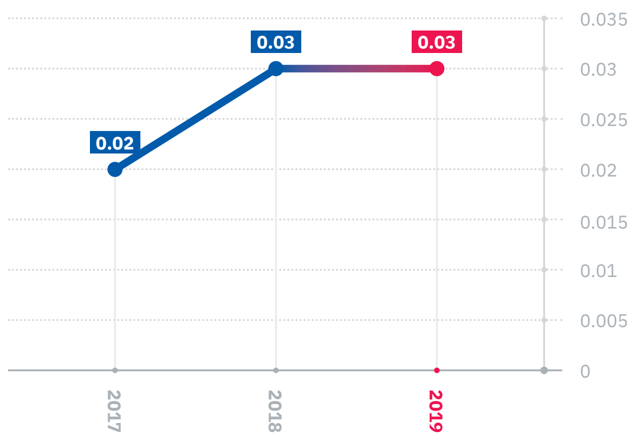
System Average Interruption Duration Index — describes the average one interruption duration per year in minutes.



EU29

SAIFI

System Average Interruption Frequency Index — describes the average interruption frequency.



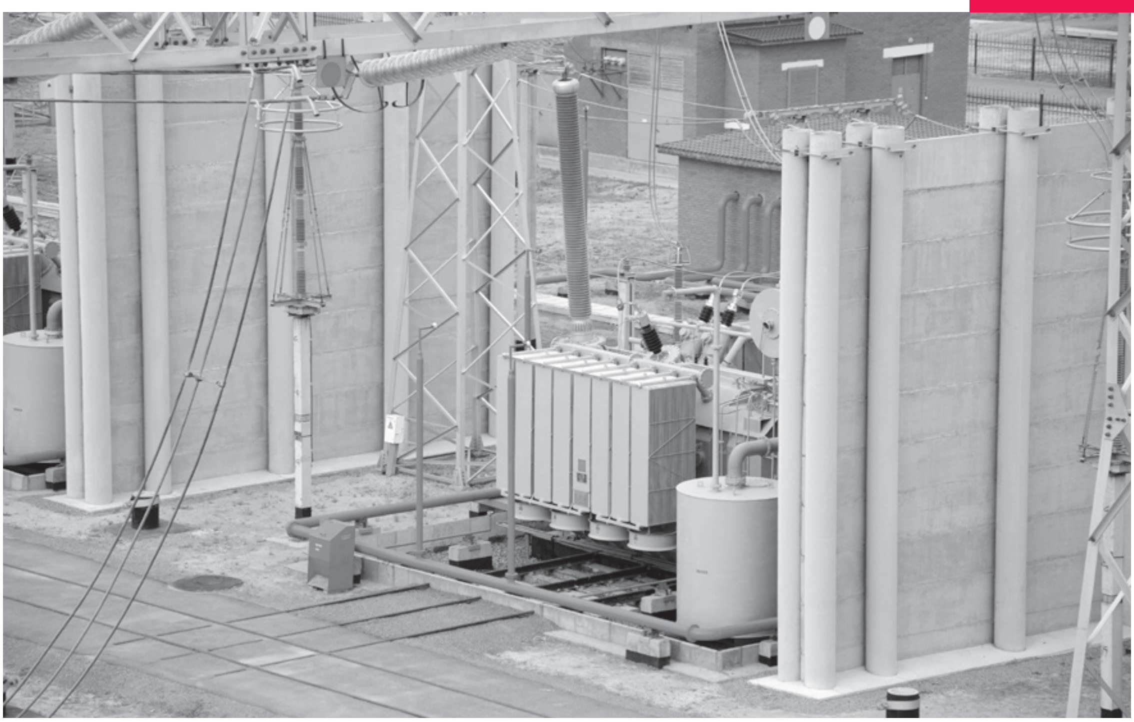
EU28

Investment Activities

The investment activities of the company, including investment projects being implemented and being considered for implementation, are aimed at achieving the strategic goals and shall ensure the reliability of the UPS and the national power grid, increase network transmission capacity and improve energy efficiency.

KEGOC put in place a portfolio approach to investment management and a unified system for managing large and significant investment projects. As a part of portfolio and project management approaches the company developed a methodology and standards of performance assessment and selection of large and significant investment projects, and a system for phased implementation and decision making for the entire life cycle of the project to achieve the planned results and reach its design capacity.

In 2019, KEGOC completed the selection of the optimal implementation concept for the following major investment projects: West Kazakhstan Electricity Transmission Reinforcement Project and Rehabilitation of 220-500 kV OHTLs in Aktyubinskiye MES branch, Zapadnye MES branch and Sarbaiskiye MES branch of KEGOC. The Board of Directors has given a ‘go’ to implementation of these projects and approved their key parameters.



In 2019, the company started implementation of the following projects:

West Kazakhstan Electricity Transmission Reinforcement Project

The project is designed to increase the transmission capacity and reliability of power supply to consumers in Zone West of UPS of Kazakhstan. The project shall strengthen electric networks between the western regions of Kazakhstan and double the capacity of the 220 kV Uralsk-Atyrau-Tengiz transmission line (from 100 MW to 200 MW).

By the end of 2019, as a result of tenders for the project, 11 contracts for design and survey work were concluded. The expenses amounted to KZT 82.14 million.

Rehabilitation of 220-500 kV OHTLs in Aktyubinskiye MES branch, Zapadnye MES branch and Sarbaiskiye MES branch of KEGOC

The project requires rehabilitation of 27 overhead lines of 220–500 kV to restore the original technical performance of power lines, extend their life, maintain / improve the conditions for the transmission of electricity for at least next 30 years. The project itself is one of the stages of a larger umbrella project.

In 2019, following the results of tenders for the project, 3 contracts were concluded with contractors for a comprehensive work package, and contracts for a comprehensive non-departmental examination of the detail design documents. The contractors begun development of design and estimate documentation and the supply of materials for reconstruction of overhead lines. In 2019, capital investments amounted to KZT 4,132.85 million.

Turkestan External Power Supply Reinforcement Project

As part of the project, it is planned to build a new 220 kV substation near the city of Turkestan, which will be connected to the existing 220 kV backbone network. The new substation will become an additional power supply centre for the Turkestan power region. To this end, the city further develops the local distribution electric network to provide the necessary network capacity

The expenses amounted to KZT 41.85 million. The feasibility study for the project has been developed and unqualified opinion on this study has been obtained from the Project Examination Authority (GosEkspertiza).

In 2019, the capital expenses for 500 kV Shulbinsk HPP (Semey) — Aktogay — Taldykorgan — Alma Construction Project (a part of a larger 500 kV North — East — South Electricity Transmission Project) amounted to KZT 2,644.87 million, including KZT 2,124.22 million of capitalized interest and KZT 520.65 million of construction costs.

Pavlodar Electricity Transmission Reinforcement Project was successfully completed in 2019. The capital investments in construction and installation works for the project amounted to KZT 580.49 million. As a result, a new 220 kV outdoor switchgear was built at 110 kV Pavlodar substation; a new 220 kV EEC power plant — Promyshlennaya power line was built (57.122 km); a new 220 kV bay was built at 220 kV outdoor switchgear at EEC power plant; 110 kV L-3077 power line EEC power plant — Pavlodarskaya SS was upgraded to 220 kV; the conventional groundwire cable was replaced by a composite groundwire cable with optical fibres (OPGW) on 500 kV EGRES-1 — EEC power plant power line. All project components have been put into operation in due time.

Kazakhstan Electricity Transmission Rehabilitation Project, Phase II was completed. The expenses for construction its second phase amounted to KZT 292.58 million: 220 kV Tulkubas — Burnoye (traction) overhead line (61.3 km) was constructed. All project components have been put into operation. Commissioning of 220 kV OHTL Tulkubas — Burnoye has solved the issue of safely disabling 220 kV OHTL Kentau — Karatau and Shymkent — Zhambyl, 500 kV OHTL L-5169 Shymkent — Zhambyl overhead lines for their maintenance without disruption of the normal operation of the grid. In addition, it increases electricity transmission capacity in the southern region of Kazakhstan. Prior to implementation of this project, 220 kV Kyzylsai-traction, Tulkubas-traction and Burnoye-traction substations were single end feed, which significantly reduced the reliability of power supply to electrified trains. After 220 kV Tulkubas — Burnoye overhead line was put into operation, the above traction substations now become double end feed.

The expenses on local and pilot projects amounted to KZT 1,033.48 million. Work is underway on the ERP project for advanced business processes and on the unified enterprise content management (ECM) system. Equipment has been supplied for the project of deploying WAMS system in Kazakhstan national power grid.

The construction of a kindergarten for 240 children in the city of Nur-Sultan was completed and accepted by the municipality of the city of Nur-Sultan.

R&D

EU8

The electricity industry is conservative: the service life of the primary equipment could be several decades; the industry is intrinsically slow in updating technologies and requires significant investments with long payback periods. In addition, unlike other industries, the companies in the electricity sector are notorious for typically low intensity of R&D efforts. Nevertheless, R&D management remains an important tool to ensure the effective growth of all leading international electric power companies.

Understanding the importance of R&D for its development, KEGOC has been engaged in research and development activities since its inception, and now uses them to achieve the 2028 strategic goals.

Key R&D objectives of the company:

- create, classify, and develop the processes of R&D planning and implementation based on the priority and urgency of the technology development in the company;
- ensure efficient coordination of development and application of R&D products;
- make practical use of the R&D results to improve the efficiency and quality of operational business processes.

R&D activities in the company are regulated by the 'Rules for R&D management', which set uniform requirements for management, planning, registration, monitoring, and acceptance of research and development works implemented at the request of KEGOC. R&D is considered as a process that covers the entire development life cycle: from determining the list of priority areas of scientific and technical study to assessing of the actual benefit of the findings for the operations of the company.

At present, technologically KEGOC is on a par with the best world's peer utilities and is one of the main drivers for introducing innovations in the electric power industry in Kazakhstan. In terms of future development, the company is studying the international experience and the key global trends in smart electricity grids.

The company has already deployed some smart grid elements through several projects as a part of the government's 'Digital Kazakhstan' programme. Namely the WAMS⁄WACS transient monitoring system and centralized system of emergency and operational automation in the UPS of Kazakhstan. The latter, in turn, consists of two components: a centralized emergency control system and an automatic frequency and power control system.

WAMS⁄WACS is an advanced early warning technology that will allow the company to maintain reliable and stable power system operation. WAMS is a wide area measurement system based on time-aligned high-precision measurements of the main parameters of the power system that allow the operator to dynamically monitor the operation state of the power system in various locations. WACS is a wide area control system that uses WAMS syncrophasor measurements to prevent accidents or act in real time to shut down consumers or unload generators. WACS also can automatically re-connect islanded regions after the emergency in the power system is cleared.

Implementation of the WAMS⁄WACS project will allow KEGOC, based on WAMS measurements, to process information from several substations and power plants in the grid.

In case any detected disruptions, the operational state of the grid will be automatically adjusted to fit the acceptable limits. Not only this will increase the reliability of the UPS of Kazakhstan, but also reduce the number of consumer shedding in emergency situations and allow KEGOC exploiting all available capacity of power lines. It is expected that after completion of WAMS⁄WACS projects, the available transmission capacity of the power line subject to static stability of North-East-South interconnection, will approximately increase by 200 MW.

Completion of centralized emergency control system will allow the power system of Kazakhstan automatically configure its emergency response in real time without operator intervention, and promptly switch from local to centralized emergency control as needed. Thus, this system will raise the reliability of the UPS of Kazakhstan to a completely different level.

The automatic frequency and power control system shall reduce down to zero the unscheduled deviations of the balance of power flows at the border between the power systems of Kazakhstan and Russia, improve the balance of generation and consumption and will prevent unscheduled overload of the interconnection network.

The commissioning of above systems will address the need for modernization of the country's electric power system by using state-of-the art "smart" technologies.

The first component named as 'Synchrophasor-Based Monitoring System (WAMS) project', was implemented in partnership with General Electric Company, which installed PMU (Phasor Measurement Unit) devices at 14 substations including specialized software in National Dispatch Centre and Almaty Regional Dispatch Centre of KEGOC. The second component, 'Development of Algorithms and Creation of WACS Automation project', was launched in 2019.

As part of 2019 grant programmes of USAID and the Asian Development Bank, KEGOC engaged the contractors to study the impact of renewable energy on the energy system of Kazakhstan and rolled out the latest versions of Power Factory and PLEXOS software systems.

The company continues to study the efficiency of automatic excitation control settings for generators of power plants of national importance that would ensure the static and dynamic stability of 220-500 kV inter-system electric networks of Kazakhstan. The study is carried out as a part of "Technological modernization and innovative development of the energy sector of Kazakhstan" effort of the Consortium of the manufacturing sector.

Together with ORGRES Engineering Centre (Russia), KEGOC started a scientific research to determine the root causes of high level of technical electricity losses in 500 kV transmission lines of KEGOC equipped with OPGW and develop substantiated methods that will reduce them.

KEGOC's Business Transformation Programme

As part of the implementation of KEGOC Digital Business Transformation Program, the following projects were completed in 2019:

- Category procurement management project to optimize the procurement management processes;
- Billing system for settlements with consumers to increase the efficiency of payment management and customer satisfaction;
- Targeted IT management model to increase availability, quality and speed of IT services;
- Target information security model to expand the information security management system to all information systems of the company.

Last year, the project portfolio was updated to include 12 projects and activities designed to achieve the strategic initiatives of the company and its main shareholder.

One of the most important for the company is the ERP project. It shall create a common information platform integrating all key processes into a single mechanism. The project shall provide maximum degree of process automation of processes and integrate all key business areas.

This project is implemented in two stages: the implementation of the basic processes and the implementation of advanced target processes.

In 2019, implementation of most of the basic processes was completed. As part of the pilot trial the company identified the productive systems that were used by users for their operations, prepared directories, master data, defined and assigned user roles, authority, and prepared data for initial loading. The productive systems reflected operations for the accounting periods, the reporting period was closed, and reports were generated. User instructions were developed, three levels of user support were established, and the identified defects were remedied.

In 2020, the company will continue the implementation of the reports and forms to automate routine processes and improve the operations of many workers who manually generate reports in financial and economic unit, HR management and business operations.

As part of the implementation of advanced targeted business processes, it is planned to make their models. In 2019, the target models of advanced business processes were updated, technical design was completed including design solutions for integration, and a test concept and plan were prepared. The company forecasts to complete implementation of the advanced processes and of the entire project in 2020.

The most prominent digital transformation project of the company is the project for operational automation in the UPS of Kazakhstan, which was included in “Digital Kazakhstan” government’s programme.

The project is expected to complete:
- transition from local to centralised emergency automation control system;
- implementation of automatic frequency and power control system;
- introduction of a monitoring and control system based on synchrophasor technologies of Wide-Area Measurement & Control Systems (WAMS/WACS).

In 2019 the design and estimate documentation for the centralized emergency automation system and for automatic frequency and power control system was developed and approved by non-departmental project examination public authorities. For WAMS / WACS project the company concluded a contract Almaty University of Energy and Communications to develop WACS control system work algorithms.

In 2020 the company plans to complete the following:
- conclude a contract for construction, installation, and commissioning of the centralised emergency automation control system;
- conclude contract for construction and installation of automatic frequency and power flow control;
- approve the contractor’s report on the developed algorithms for the WACS system and conclude a contract for the supply of WACS.

The implementation of other projects and activities of the program was in accordance with the approved calendar schedule.

As part of the technological development and digitalization of the business, the company is trying to engage active and caring employees who share their vision and suggestions for the development and optimization of production processes, ideas for “quick wins” that would solve the problems of the company and would not require significant financial investments while bringing the financial benefits.

Since the start of the programme, the company has involved more than 400 employees in its projects. In this respect KEGOC is increasing the competencies of employees in the areas of project and change management. The involvement of personnel in project activities continues so that each member of the project team is aware of their contribution to the achievement of the strategic goals by the company. To this end, KEGOC created a proper environment for change management, stakeholder relations, minimizing resistance, providing continuous communications, training users of implemented systems and processes, as well as broadcasting and consolidating successful results.

Information Policy and Security

The Company timely discloses information provided by the laws of the Republic of Kazakhstan and internal documents that define principles and approaches to disclosure and protection of information, as well as the list of information disclosed to stakeholders. The Company determines the procedure for classifying information to access categories, conditions for storing and using information including a group of people who have the right of free access to information constituting commercial and official secrets, and takes measures to protect its confidentiality.

All information provided by internal documents and the laws of the Republic of Kazakhstan for disclosure is disclosed in a timely manner.

In connection with the current situation in the world in the field of information security, as a part of the Business transformation programme, the company completed the project for implementation of a targeted model of information security (IS): IS target processes have been developed and implemented, a security incident and event management (SIEM) system has been put in place, and 2018–2022 IS Development Programme has been approved. The programme defines goals and objectives, the main areas of information security development in the medium term.

As a part of 2018–2022 IS Development Programme an external independent organization conducted penetration tests to analyse the security of operational technology systems of the company.

In addition, the following information systems have been introduced:

1) privileged access management system;

2) wireless LAN authentication system;

3) data loss prevention system.

From 25 to 27 June, TÜV NORD conducted an external audit of the information security management system for compliance with the international standard ISO 27001 as part of the supervisory audit of the IMS. According to the results of the audit, a certificate of conformity was successfully obtained.

The company has launched its cybersecurity project. This is a part of a bigger umbrella project that covers 6 portfolio companies of Samruk-Kazyna group of companies and includes the following objectives to:

- build the Cyber shield of Samruk-Kazyna group of companies by creating and connecting the information systems of the company to a single Operational Information Security Centre of Samruk-Kazyna JSC;
- improve the company’s cybersecurity by developing information security processes, as well as implementing information systems for access control, anomaly management and protection of the operational technology network perimeter.

Also, as a part advanced processes of the ERP project of the Business Transformation Programme, in order to implement the access control process in SAP systems, the SAP GRC Access Control system is being introduced.

KEGOC was an active participant of the Digital Summer programme, and as a part of this programme provided internship for 2 university students. One of them demonstrated high performance and was employed later by IS Department of the company.

Tariff Policy

The operations of KEGOC are regulated by the law of Kazakhstan "On Natural Monopolies", which describes the services provided by KEGOC as the natural monopoly services, including:

- electricity transmission in the national power grid;
- technical dispatching of the electricity supply and consumption in the grid;
- balancing of electricity generation and consumption.

Since its inception, KEGOC has been consistently improving the tariff policy of regulated services and playing an active role in activities of relevant organisations that are engaged in improvement of the tariff policy.

In accordance with the legislation of Kazakhstan, to approve (revise) regulated natural monopoly service tariffs, KEGOC shall submit applications to the Committee for the Regulation of Natural Monopolies of the Ministry of National Economy of Kazakhstan.

The company's tariffs are based on costs-plus approach that uses the company's estimates of its operating and financial costs and a fair rate of return on capital.

In 2013, KEGOC switched to the regulated cap tariffs mechanism. The principles of the cap tariff estimation are similar to the estimation of the annual tariffs except that the cap tariffs shall be approved for a period of several consecutive years. With the cap tariffs the company can plan for longer periods, and the shareholders have more information about the Company.

In accordance with the existing procedures, KEGOC applied to the Committee on Regulation of Natural Monopolies and Protection of Competition for approval of the long-term cap tariffs and tariff estimates for regulated services. The Committee approved the cap tariffs and tariff estimates for KEGOC's regulated services for a five-year period from 01 January 2016 to 31 December 2020.

KZT/kWh	2016	2017	2018*	2019**	2020
Electricity transmission	2.080	2.246	2.496	2.496	2.797
Technical dispatching of the electricity supply and consumption in the grid	0.231	0.234	0.237	0.237	0.306
Balancing of electricity generation and consumption	0.084	0.086	0.088	0.088	0.098

** from 1 August to 31 December 2018, KEGOC upon approval of the Committee, reduced the cap tariffs: by 5% from 0.2482 to 0.237 KZT / kWh for technical dispatching, and by 3.4% from 0.091 to 0.088 KZT / kWh for balancing of electricity generation and consumption*

*** in accordance with the decision of the Ministry of Energy of Kazakhstan to reduce the cost of electricity, and in the context of the growth trend of the regulated services rendered by the company, KEGOC, upon approval of the Committee, decided to reduce its cap tariffs to 2018 level starting 1 January 2019*

The Company annually arranges the reporting events to present the company performance in delivering services (goods, works). The events are intended to protect consumers' rights, ensure transparency of the company's activities for consumers, and other stakeholders. The main principles of conducting the events are publicity and transparency of the company's operations, and balance of consumer interests.

102-44

Procurement Practices

KEGOC's procurement shall follow the Rules for procurement of goods, works and services by Sovereign Wealth Fund Samruk-Kazyna Joint Stock Company, and organizations, fifty per cent of shares (participation share) of which directly or indirectly belong to Samruk-Kazyna on the right of ownership or trust management, approved by the Board of Directors of Samruk-Kazyna (hereinafter referred to as 'the Procurement Rules') . The procurement process includes: development and approval of procurement plans; selection of supplier; execution and delivery of procurement contracts.

Samruk-Kazyna uses a model of preliminary qualification of potential suppliers, i.e. the process of evaluating potential suppliers for compliance with the requirements of qualification criteria. It improves the quality of procurement and estimates the relevance of goods, works and services based on their cost and purpose in the operations of the company. The main principles of preliminary qualification of potential suppliers are to:

- provide equal opportunities for potential suppliers to participate in the preliminary qualification procedure;
- enhance procurement efficiency;
- encourage the potential suppliers to develop and improve quality, technical and operational characteristics, and reduce costs;
- enhance responsibility of the supplier for the submitted documents and information during the preliminary qualification.

During the preliminary qualification, the company assesses the level of compliance of the potential supplier with the following qualification criteria, including social ones:

1) legal matters and contract management capacities of a potential supplier;

2) resources of the potential supplier;

3) goods, works, and services quality management;

4) environment, occupational health, and safety management.

The company's suppliers include Kazakhstan resident and non-resident organizations that supply goods, perform work and render services to support KEGOC's core business. The company's suppliers cannot be the organizations that are included in the blacklist of potential suppliers of Samruk-Kazyna or in the public procurement blacklist, and (or) in the list of false enterprises. Also, the company's open tender or request for quotations procurement was limited specifically to the following categories:

- manufacturers included in Samruk-Kazyna register of manufacturers;
- disabled persons organisations (disabled individual entrepreneurs) included in Samruk-Kazyna register of disabled person organizations (disabled individual entrepreneurs).

Also, during the open tender procurement in accordance with the Procurement Rules, the tender commission of the company evaluates and compares not rejected bids with the additional discounted price proposal (if any) from the potential supplier according to the criteria contained in the tender documentation. This evaluation considers the total / final price of the proposal of the potential supplier. If the evaluated prices of the tender proposals are equal, preference is given to the manufacturer, who is included in Samruk-Kazyna's register of manufacturers, and/or has greater market experience.

The total number of suppliers and the estimated number of suppliers in the supply chain, the estimated monetary value of payments to suppliers are determined by the results of procurement through open tender and request for quotations. The estimated monetary payments to suppliers through the single-source procurement shall not exceed the amount provided for in the procurement plans (annual, long-term) of the company.

In 2019, the share of local content in the procurement amounted to 50% for goods and 73% for works and services

102-9

Procurement of KEGOC in 2019,
including subsidiaries

Type of procurement	Amount, million KZT
Goods	46,098.58
Works	11,389.14
Services	8,847.87
Total	**66,335.59**

Analysis of Financial and Economic Performance

Income Report Analysis

Amount, million KZT	2017	2018	2019	2019/2018
Consolidated income	**178,134.8**	**194,194.0**	**275,338.5**	**41.8%**
Operating income	152,379.8	175,797.4	263,162.1	49.7%
Non-operating income	25,755.0	18,396.7	12,176.5	-33.8%
Consolidated expenditures	**135,493.1**	**143,169.2**	**225,067.5**	**57.2%**
Cost of sales	89,399.4	113,000.0	200,256.7	77.2%
General and administrative expenses	13,142.4	7,777.7	8,964.4	13.6%
Profit before tax	**42,641.7**	**51,024.8**	**50,271.0**	**-1.5%**
Income tax expenses	9,760.4	10,981.9	9,522.0	-13.3%
Net profit	**32,881.3**	**40,042.9**	**40,749.0**	**1.8%**

The income in 2019 grew by 41.8% vs. 2018. The consolidated income increased by KZT 81.2 billion and amounted to KZT 275.4 billion as at the end of 2019.

The growth is primarily associated with an increase in operating income by 49.7%, to KZT 263.16 billion. The growth was driven by KZT 67.7 billion income received from sale of services associated with maintaining readiness of the electric capacity to bear the load (income of FSC RES LLP) as a result of the capacity market launched in January 2019. Also, the income grew by KZT 19.8 billion from the higher amount of sale of purchased electricity. There was also an increase in revenues from renewable energy support transactions and from the sale of electricity to compensate unscheduled hourly deviations of the cross-border power flow. At the same time, the revenues from the regulated services decreased.

Income from non-operating activities decreased by 33.7%, to KZT 12.2 billion. The decrease was due to a decrease in foreign exchange gains, and lower income from the reversal of impairment losses on property, plant, and equipment.

The consolidated expenses in 2019 increased by 57.2%, or by KZT 81.9 billion. The cost of sales increased by 77%, or KZT 87.3 billion, to KZT 200.3 billion. The increase in cost of sales is associated with the cost of the purchase of services associated with maintaining availability of the electric capacity (expenses of RFC RES on LLP) as a result of the capacity market launch in January 2019, which amounted to KZT 58.3 billion. Also, the cost of purchased electricity increased by KZT 20.5 billion. In addition, expenses increased: for purchase of electricity produced by renewable energy sources; for depreciation deductions, due to revaluation of fixed assets; for core and auxiliary business property tax due to re-qualification of expenses from general administrative expenses; for purchase of electricity from the energy system of Russia in order to compensate for imbalances; and for labour compensation to operating personnel. At the same time, the cost of technical losses and expenses for the transmission of electric energy through third-party networks decreased.

The general and administrative expenses increased by 13.6%, to KZT 8.8 billion. There was also a decrease in cost of taxes and other compulsory payments due to reclassification of the tax expenses into cost of sales. At the same time, there was an increase in labour costs increased due to indexation of salaries, and other expenses of the period.

The net profit for the year amounted to KZT 40.75 billion and increased by 1.8% vs. 2018 as a result of a comparable increase in income and expenses.

Plan/Actual Analysis

Indicator, million KZT	2018 actual	2019 plan	2019 actual	2019 plan/actual
Consolidated income	**194,194.0**	**309,801.4**	**275,338.5**	**-11.1%**
Operating income	175,797.4	305,681.6	263,162.0	-13.9%
Non-operating income	18,396.7	4,119.8	12,176.5	195.6%
Consolidated expenditures	**143,169.2**	**273,803.9**	**225,067.5**	**-17,8%**
Cost of sales	113,000.0	242,773.2	200,256.7	-17.5%
General and administrative expenses	7,777.7	18,585.1	8,964.4	-51.8%

At the end of 2019, the consolidated income was 11% lower than planned.

The 14% decrease in the operating income vs the plan was due to a lower-than-expected income of FSC RES LLP from the provision of the regulated services, from the sale of services associated with maintaining readiness of the electric capacity to bear the load as a result of lower amount of rendered services, and from the sale of purchased renewable electricity as well as lower income from the sale of purchased electricity due to zero purchase of electricity by Uzbekenergo JSC in 2019. At the same time, the actual income from the sale of electricity to compensate unscheduled hourly deviations in interstate balance of power flow was higher than expected so as the income from the sale of power control services.

A significant increase in non-operating income is associated with an increase in income from foreign exchange gains, income from changes in the fair value of long-term debt of buyers and customers, as well as income from equity participation in other organizations (share of profit in associates).

The consolidated expenses were approximately 18% lower than planned. It is mainly attributed to lower cost of sales by 17.5% vs plan. The decrease was mainly in the costs of the purchase of services associated with maintaining availability of the electric capacity due to a decrease in the actual amount and prices (expenses of FSC RES LLP, as a result of the capacity market operation);

in the cost of purchasing electricity produced by renewable energy sources, in the costs of compensation for technical losses; in the costs of electric power transmission through third-party networks; in the cost of purchase of electricity from the energy system of Russia in order to compensate unscheduled imbalances; and in the cost of the purchase of electricity to compensate for non-contractual consumption by Uzbekenergo JSC.

A significant decrease in general and administrative expenses occurred as a result of re-classification of expenses on taxes and other obligatory payments to the cost of sale; decrease in the costs of technical support of IT systems and in communal service charges and other expenses of the period.

Coefficient Analysis

Key indicators

Indicator	2017 actual	2018 actual	2019 plan	2019 actual
Strategic KPI, Level 1				
ROACE,%	6.54	7.16	5.77	7.47
EBITDA, KZT million	72,951	81,222	74,252	88,513
Loan agreement covenants				
Current liquidity ratio (not less than 1)	2.23	1.25	1.96	2.19
Samruk-Kazyna covenants				
Debt/EBITDA (not more than 3.50)	2.22	2.00	1.91	1.70
Debt/Capital (not more than 1.00)	0.43	0.34	0.30	0.31

During 2019, the established financial stability indicators and covenants have not been violated. In addition, KEGOC ensures compliance with other, non-financial covenants.

Direct Economic Value Generated and Distributed

The economic component of KEGOC's activities is strategically important both for the company and for the national economy and shall be focused on increasing the long-term value for shareholders and investors of KEGOC.

The procedures for development and approval of the Business Plan and Budgets (including the capital investment plan for implementation of investment projects for construction, rehabilitation and modernization of the company's facilities) are regulated by the Rules for development, coordination, approval, amendment, execution and monitoring of execution of the Business Plan (Development Plan) and Budgets of KEGOC. The Business Plan shall be prepared in a consolidated manner and include plans of the subsidiaries for a five-year period on a rolling basis. The Business Plan implementation is based on annual budgets and the progress is monitored by KEGOC's Board of Directors on a quarterly basis.

The stable financial performance of the company shall enable it to fulfil its obligations to the main stakeholders regarding the following in a timely manner:

- payment of salary and provision of social support;
- payment of dividends to shareholders;
- implementation of investment projects and improvement of the quality and reliability of the NPG operation;
- timely payments to suppliers;
- tax payments.

Economic value distributed

Description, million KZT	2017	2018	2019
Total capitalization	**535,956.40**	**634,752.89**	**632,163.54**
equity capital	374,167.60	472,693.80	481,838.02
borrowed capital	161,788.80	162,059.09	150,325.51
Funds from the government	**-**	**-**	
Economic value generated	**156,957.00**	**185,017.94**	**275,338.49**
operating income	152,379.82	175,797.39	263,162.07
financial income	3,593.21	4,951.34	4,171.53
other income	983.98	4,269.22	8,004.89
Economic distributed value:	**143,973.38**	**176,346.50**	**260,222.43**
payroll expenses	19,074.97	21,048.03	22,699.12
expenses on taxes and duties to the national budget	16,611.48	18,553.89	19,110.84
payments to capital providers	24,421.65	35,233.94	40,842.53
charity and sponsor support	-	-	-
other operating expenses	76,862.34	92,442.60	177,185.20
other non-operating expenses	7,002.94	9,068.04	384.74
Economic value for distribution	**12,983.62**	**8,671.44**	**9,107.14**

102-7 201-1 201-4

Balance Analysis

Amount, million KZT	2017	2018	2019	2019/2018
Non-current assets	539,978.4	698,081.7	659,175.9	-56%
Current assets	88,969.3	57,769.0	97,111.0	68.1%
Total assets	**628,947.7**	**755,850.7**	**756,987.7**	**0.5%**
Equity	374,167.6	472,693.8	481,838.0	1.9%
Non-current liabilities	214,952.9	236,958.6	230,808.2	-2.6%
Current liabilities	39,827.3	46,198.3	44,341.5	-4.0%
Total equity and liabilities	**628,947.7**	**755,850.7**	**756,987.7**	**0.5%**

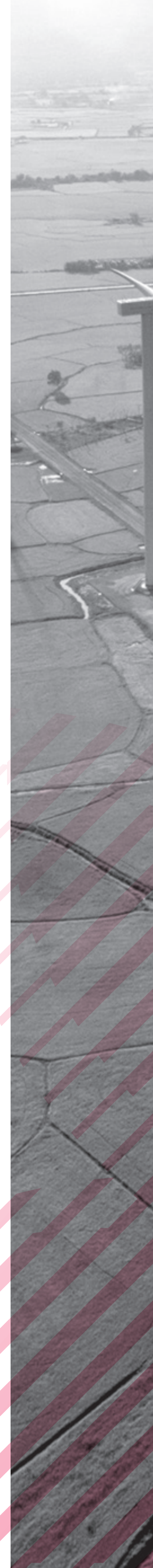
The assets of the company at the end of 2019 amounted to KZT 756.99 billion and increased by 0.5% compared to 2018. 87% of the balance sheet structure consists of the long-term assets, which are mostly represented by the fixed assets. The long-term assets decreased in 2019 by 5.6%, or by KZT 38.9 billion to KZT 659.2 billion. 13% of the balance are the short-term assets. They increased in 2019 by 68.1%, or KZT 39.3 billion to KZT 97.1 billion. The KZT 25.2 billion growth is associated with the transition of a part of financial assets from long-term to short-term ones. Also, the amount of trade receivables increased by KZT 12.6 billion; and cash and cash equivalents increased by KZT 2.1 billion.

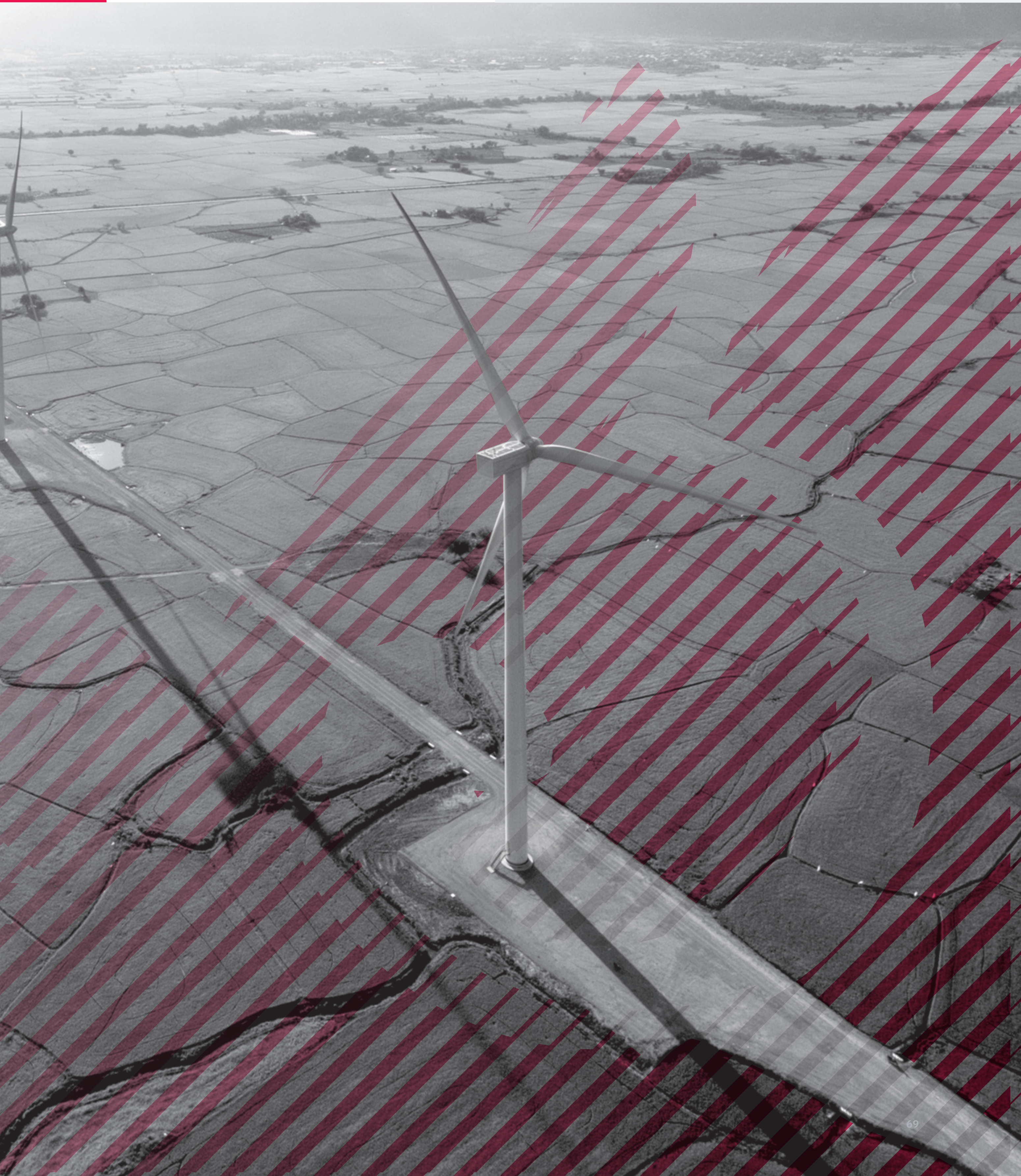
The capital at the end of 2019 amounted to KZT 481.8 billion, which is 1.9%, or KZT 9.1 billion higher than in 2018. The growth is associated with an increase in retained profit. The capital share in the balance sheet structure was 63%.

The liabilities for the year amounted to KZT 275.1 billion and decreased by 2.8% or KZT 8 billion compared to 2018. 84% of liabilities are long-term, and 16% are the short-term ones. The long-term liabilities include 25% of loans, 36% of bonds and 39% of deferred tax liabilities. 53% of the short-term liabilities are represented by accounts payable.

Risk Management and Internal Control

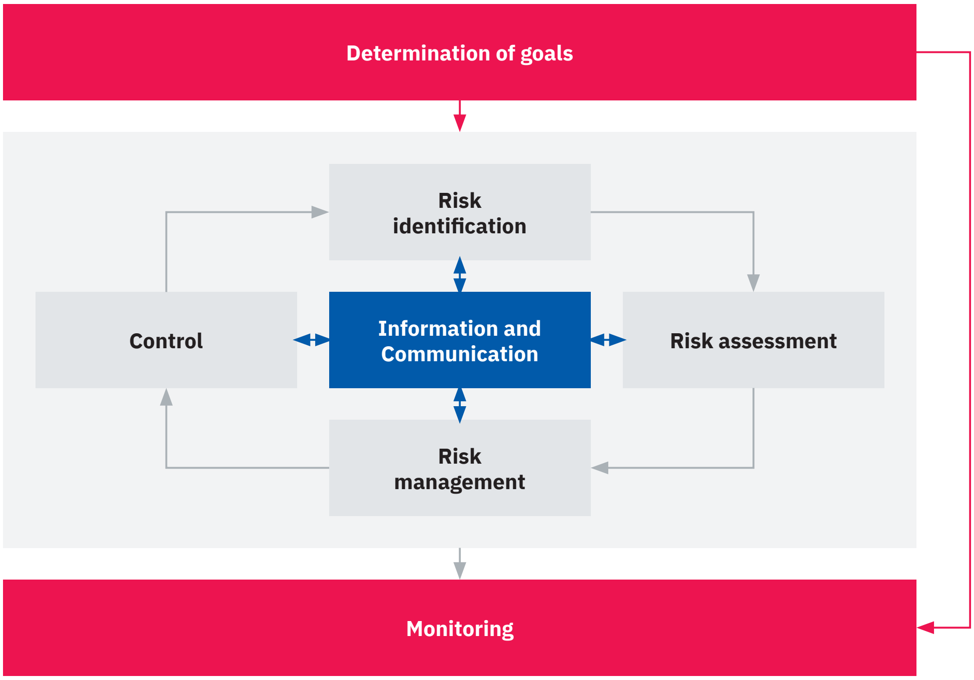
In 2007 KEGOC successfully implemented and since then has been operating the risk management system compliant with generally accepted conceptual models of risk management developed by the Committee of Sponsoring Organizations of the Treadway Commission — COSO ERM 'Risk Management. Integrated model (COSO)' and requirements of Samruk-Kazyna.





The corporate risk management system (CRMS) is a key component of the corporate governance system that shall timely identify risks, evaluate them, and develop risk management measures that would mitigate their impact on the achievement of strategic and operational goals of KEGOC.

Risk management process



The objective of the CRMS is to ensure continuity and stability of operations by mitigating the exposure to internal and external adverse impact on KEGOC's operations.

The main principles of the risk management system operation are to:

- engage KEGOC's executives in risk management;
- continuously improve the risk management system;
- continuously learn and share the knowledge with the company employees in risk management sphere;
- maintain transparency and integrity in disclosure and escalation of risks.

The risk management shall involve the Board of Directors, the Management Board, the internal audit services, structural units that own the risks and the structural unit responsible for the risk management.

There is also a risks committee, which shall be responsible for preparation of risk management recommendations to KEGOC's Management Board. In 2019, the committee held 6 meetings.

KEGOC's operations are exposed to a wide range of business-related risks: strategic risks, financial risks, operational risks, legal and compliance risks. Company's risk register for 2020 includes 49 specific risks. Each risk has the owner and is covered with risk management actions. The key risks trends are continuously monitored and implementation of the corresponding mitigation actions is quarterly reported to the Management Board and the Board of Directors of the company.

The most important and relevant risks of KEGOC for the reporting year:

Key risk	Risk rating	Change	Risk management
The risk of work-related accidents	High	No change	The company activities are associated with risk of incident at work as a result of safety or traffic regulations violation. In order to mitigate this risk KEGOC provides training for the executive employees and persons responsible for health and safety; provides safe driving training in extreme conditions for vehicle drivers; develops and distributes safety training videos and presentations to the MES branches in order to educate staff on safe working methods; practices video recording of the operational switching and repair work in order to identify violation of health and safety regulations and develop measures to prevent them in future; arranges the specialized certification organization inspections of technical condition, management of electric network operations, health and fire safety procedures to identify any violations, certify safe operation conditions at operating facilities in the branches; conducts studies and analysis of best practices of foreign and domestic companies in the field of industrial safety and health.
Currency risk	Significant	No change	An increase in the exchange rate of the USD and other currencies vs KZT may adversely affect the company's business, its financial standing and performance, since the company receives income in KZT, while most of the borrowed capital and expenses are paid in USD or EUR. To manage the currency risk KEGOC holds its funds on deposits in foreign currency.
Asset failure risks	High	No change	This risk can materialise because of natural hazards, damage or tear and wear of SS equipment and transmission lines, erroneous actions of personnel, acts of unauthorised persons and other factors not attributed to defects of electric grid facilities. To mitigate the asset failure risk, KEGOC performs repair and maintenance works on power grid facilities in accordance with the requirements of regulatory documents; identifies and rectifies defects during the operation process; and rehabilitates and upgrade assets, as needed; trains personnel on repair methods and technologies at advanced training courses; educates the population and organizations on observance of the electricity grid buffer zone management rules and special conditions of using land located within the borders of such zones.
Risk of decrease in the amount of rendered system services provided in the business plan	Significant	Increased	This risk may occur due to a general decrease in the production and consumption of electricity in the country; a decrease in electricity consumption; an economic crisis, changes in regulatory framework, force majeure circumstances (natural disasters, etc.) To mitigate this risk KEGOC tries to forecast the amounts of system services for the coming periods based on growth / decrease trends of electricity generations and consumption from the approved forecast balance of electricity and capacity.

The company's internal audit service annually assesses the CRMS performance.

Corporate Governance

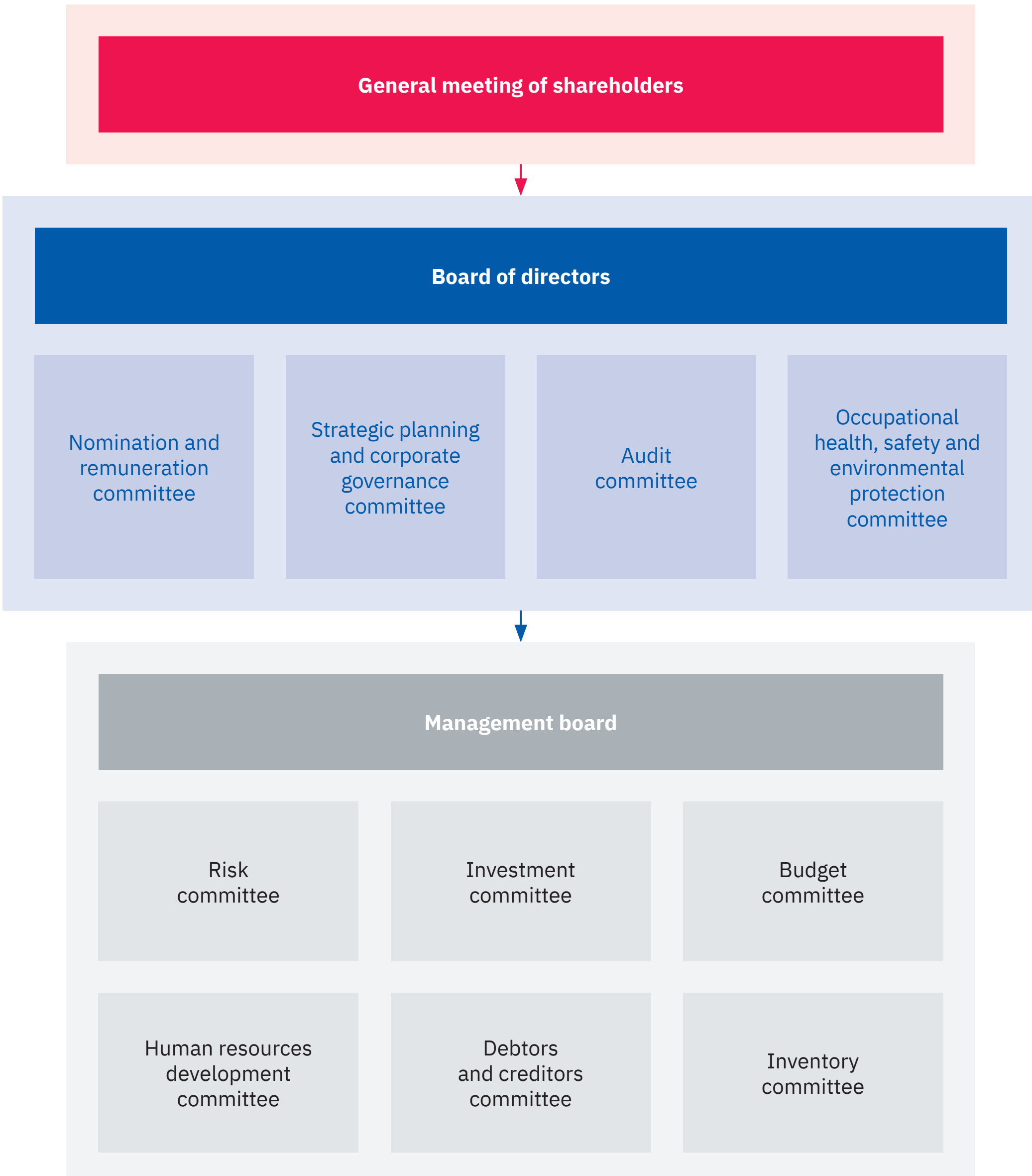
Corporate Governance Principles

The principles of KEGOC's corporate governance include:

- maintenance of effective corporate governance system based on a clear division of responsibilities between the bodies;
- protection and enforcement of shareholder rights;
- provision of equal conditions for shareholders;
- sustainable development and role of stakeholders in corporate governance;
- disclosure of information and transparency;
- efficient performance of the Board of Directors and Management Board of KEGOC.

Organizational Structure of the Company

102-18



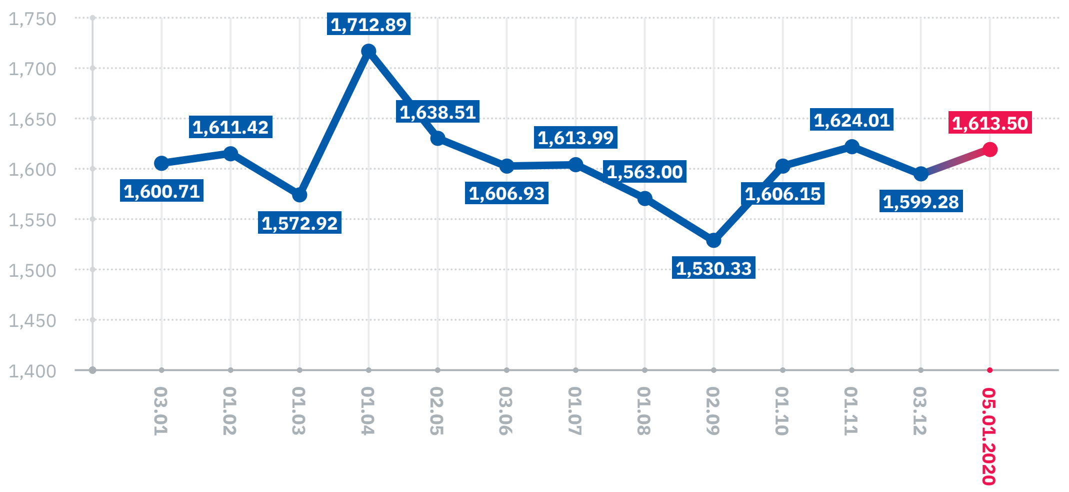
Equity

As on 31 December 2019, the number of authorised and placed ordinary shares of the company was 260,000,000, of which 234,000,001 shares (90% plus one share) belong to Samruk-Kazyna, the major shareholder, and 25,998,609 shares (9.9995%) belong to minority shareholders, the remaining 1,390 shares (0.0006%) were repurchased by KEGOC.

In 2019 there were no material transactions with shares or changes in structure of shareholders that own five or more per cent of the number of the placed shares of the company.

102-10

Market price of KEGOC's shares in 2019 (KZT)



Data source — Kazakhstan Stock Exchange (www.kase.kz).

General Meeting of Shareholders

The general meeting of shareholders is the superior body of KEGOC that operates in accordance with the law of the Republic of Kazakhstan ‘On Joint-Stock Companies’, the Charter and the Regulations on the general meeting of KEGOC’s shareholders.

In 2019 the Board of Directors called the general meeting of shareholders three times. In particular, the meetings considered the following agenda:

- amendments to the KEGOC’s Charter;
- approval of the annual financial statements, distribution of the net income, decision to pay dividends on ordinary shares and approve the amount of the dividend per one ordinary share of KEGOC;
- review of the claims from the shareholders in relation to activities of KEGOC and its officers and results of consideration of such claims.
- selection of the audit organization;
- changes in the number of members of the counting board of KEGOC.

Dividend Policy

The dividend policy of KEGOC is designed to: observe the interests of shareholders in respect to the amount of dividend payments; enhance the Company’s investment appeal and capitalization; and respect and strictly observe the rights of shareholders stipulated by the laws of Kazakhstan. The prerequisites of dividend payment include: the availability at the company of net profit in the reporting period or retained profits; the absence of restrictions on payment of dividends envisaged by the laws of the Republic of Kazakhstan, and the respective decision of the general meeting of shareholders.

The source of dividends is the net income for the corresponding financial year or half-year, or retained profits accrued based on the consolidated financial statements of KEGOC prepared in accordance with the IFRS. A proposal on allocation of the net income for the financial year or half-year shall be made by the company’s Board of Directors and the amount allocated for payment of dividends shall be at least 40% of the net income. The decision to pay dividends on KEGOC’s ordinary shares shall be based on the performance results of the year and made by the annual general meeting of shareholders after the company's annual financial statements have been approved. The dividends on ordinary shares could also be paid for half-year performance results given the respective decision of the extraordinary general meeting within three (3) months after the audit of the company's financial statements for the corresponding period was completed.

The general meeting of shareholders, having reviewed proposals of the Board of Directors, at its discretion, shall make a decision to pay dividends on KEGOC's ordinary shares, approve the amount of dividend per KEGOC's ordinary share, and define a date of dividend payment.

Dividend history

Dividend payment periods	2016		2017		2018		2019
	first half of a year	a year	first half of a year	a year	first half of a year	a year	first half of a year
Amount of dividends per ordinary share, KZT	24.93	53.06	48.4	88.53	80.53	54.53	67.17
Total amount of dividends, KZT thousand	13,795, 526		23,017,677		35,115, 412		17,464, 106
Percentage of IFRS net profit paid as dividends,%	40%	50%	70%	70%	80%	87.6%	77.3%
Name of the issuer governing body that took decision to pay dividends	General meeting of shareholders of KEGOC						
Date of the meeting where the decision was taken to pay dividends	28 October 2016	12 May 2017	26 October 2017	27 April 2018	30 November 2018	3 May 2019	25 October 2019
Date of finalising the list of shareholders having the right to receive dividends	13 November 2016	22 May 2017	6 November 2017	14 May 2018	11 December 2018	14 May 2019	4 November 2019

Minority Shareholders Rights

The corporate governance in the Company is built in such a way as to ensure equal rights and fair treatment of all shareholders. Rights, duties and competencies of shareholders are determined according to the current legislation and stipulated in the Company's Charter. The shareholders' rights include, but are not limited to, timely receipt of information sufficient to make a decision in the manner prescribed by the laws of the Republic of Kazakhstan, the charter and internal documents of the Company on information disclosure; participation in the general meeting of shareholders and voting on the issues of their competence; participation in determining the number, term of office of the Board of Directors, election of its members and termination of their powers, as well as determining the amount and terms for payment of remuneration; receiving dividends in amounts and terms determined by the decision of the general meeting of shareholders on the basis of a clear and transparent dividend policy.

Composition of the Board of Directors

(As on 31 December 2019)

Born in 1970, national of the Republic of Kazakhstan.

Elected on 2 November 2018 (Minutes No. 10) by the extraordinary general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Almassadam Satkaliyev

Chairman of KEGOC's Board of Directors

Education:

Kazakh State al-Farabi University, Almaty, diploma in mechanical and applied mathematics (1987-1992); Russian Academy of National Economy and Public Administration under the President of the Russian Federation, Moscow, Master of Economics (2011-2013); Nazarbayev University, Graduate School of Business (in partnership with Duke University's Fuqua School of Business), Astana, Master of Business Administration (2013-2015); Stanford University, Graduate School of Business, Stanford Executive Program (SEP) (2016).

Work experience for the last five years:

- **Since August 2018:** asset management director, Samruk-Kazyna;
- **July — August 2018:** deputy chairman, KAZENERGY Kazakhstan Association of Oil & Gas and Power Organizations;
- **January 2012 — May 2018:** chairman of the Management Board of Samruk-Energy.

Participation in the management bodies of other entities:

managing director for asset management and privatization of Samruk-Kazyna, chairman of the Board of Directors of KEGOC, member of the Board of Directors of Kazakhstan Temir Zholy National Company and NC KazMunaiGas.

Academic degree, academic status:

- academician of the Kazakhstan Academy of Natural Sciences (2015);
- Doctor of Economics (2015);
- foreign member of Russian Academy of Natural Sciences (2010);
- candidate of economic sciences (2002).

Born in 1946, national of the Republic of Kazakhstan.

Elected on 28 October 2016 (Minutes No. 5) and 27 April 2018 (Minutes No. 8) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Suinshlik Tiyessov

Member of KEGOC's Board of Directors as a representative of Samruk-Kazyna, member of the strategic planning and corporate governance committee and the occupational health, safety, and environmental protection committee of KEGOC's Board of Directors

Education:

Lenin Polytechnic Institute, Almaty, diploma in electrical engineering (1968), Business and Management Centre of Gatton College of Business and Economics, University of Kentucky, USA (1996).

Work experience for the last five years:

- **2004 — 2016:** chairman of the Management Board at KOREM.

Author of the study, titled "Emergence of the electricity market in Kazakhstan". Kazakhstan power industry longtimer, participant to major national grid projects: unique 1,150-500 kV transmission lines and substations, and the largest electricity generators: Aksuiyskaya GRES and Ekibastuzskaya GRES power plants. Participant to multiple national power supply projects: Tengiz oil and gas field power supply project; Kazakhstan electricity transmission rehabilitation programme, electricity and capacity market project in Kazakhstan. One of the co-authors of the first revision of electricity law in 1995 and all regulatory and legal documents relating to operation of the electricity market in Kazakhstan.

Academic degree, academic status:

candidate of technical sciences.

Zhanna Yegimbayeva

member of KEGOC's Board of Directors as a representative of Samruk-Kazyna, member of the nomination and remuneration committee and the occupational health, safety, and environmental protection committee of KEGOC's Board of Directors

Born in 1953, national of the Republic of Kazakhstan.

Elected on 28 October 2016 (Minutes No. 5) and 27 April 2018 (Minutes No. 8) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Education:

Kirov Kazakh State University, lawyer.

Work experience for the last five years:

- **2016 — 2019:** advisor at Baiterek National Holding JSC;
- **2016 — 2019:** independent director, member of the Board of Directors, KazAgro National Management Holding JSC;
- **Since 2017:** member of the Board of Directors of Kazakhstan Engineering NC JSC;
- **Since 2016:** member of KEGOC's Board of Directors as representative of Samruk-Kazyna;
- **2011 — 2016:** deputy head of the Office of the Prime Minister of Kazakhstan.

Participation in the management bodies of other entities:

member of the Board of Directors of Kazakhstan Engineering NC JSC.

Dominique Fache

independent director, chairman of the occupational health, safety and environmental protection committee, member of the audit committee and strategic planning and corporate governance committee of KEGOC's Board of Directors

Born in 1949, national of France.

Elected on 30 April 2015 (Minutes No. 1) and 27 April 2018 (Minutes No. 8) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Education:

University of Sorbonne, France (1972), diploma in engineering, Lomonosov Moscow State University, Russia, the National Centre for Scientific Research (CNRS), Paris, France, University of Sorbonne in collaboration with Ecole Superieure Electricite.

Work experience for the last five years and participation in the management bodies of other entities:

- **Since 2016:** chairman of Board of Directors RTF LLP (Russia);
- **Since 2013:** member of the Board of Directors at Sophia Antipolis Science Park, France;
- **2008 – 2013:** chairman of the Board of Directors, president of EnelOGK-5.

Founder of a series of science and innovation events, conferences and festivals for Sophia Antipolis science park, founder of Club de Nice, which organises European Energy Forum.

Janusz Bialek

independent director, chairman of the nomination and remuneration committee and the strategic planning and corporate governance committee, member of the audit committee of KEGOC's Board of Directors

Born in 1955, national of Poland and the United Kingdom.

Elected on 30 April 2015 (Minutes No. 1) and 27 April 2018 (Minutes No. 8) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Education:

MEng degree in Electrical Engineering (1977), PhD degree in Engineering (1980), Warsaw University of Technology, Poland.

Work experience for the last five years:

- **Since 2018:** professor at Newcastle University (UK) and Skolkovo Institute of Science and Technology Skoltech (Russia);
- **2014 — 2018:** director of the Skoltech Centre for Energy Systems, Skolkovo Institute of Science and Technology (Russia);
- **2009 — 2014:** professor and supervisor of the School of Engineering and Computational Sciences at Durham University, UK.

Academic degree, academic status:

Doctor of Science (PhD) in engineering (1980).

Born in 1970, national of the Republic of Kazakhstan.

Elected on 24 August 2018 (Minutes No. 9) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Yermek Kudabayev

independent director, chairman of the audit committee, member of the nomination and remuneration committee of the Board of Directors of KEGOC

Education:

Moscow Institute of Steel and Alloys, diploma in engineering and economy (1987-1993); Kazakhstan Institute of Management, Economics and Forecasting (KIMEP), master of business administration (MBA) (1994-1996); certified accountant of the Republic of Kazakhstan (1988); certified auditor of the Republic of Kazakhstan (2000); certified accountant practitioner (CAP) (2002); certified accountant and financier for the International Certification System for the Association of Chartered Certified Accountants (ACCA), London, UK (2004).

Work experience for the last five years:

- **Since 2016:** managing director for economics and finance of Intelligent Consulting Solutions LLP;
- **2013-2016:** managing director for economics and finance at KazPetroDrilling JSC.

Born in 1964, national of the Republic of Kazakhstan.

Elected on 31 May 2011 (Minutes No. 24/11) and 8 May 2012 (Minutes No. 21/12) by the Management Board of Samruk-Kazyna;

on 30 April 2015 (Minutes No. 1) and 27 April 2018 (Minutes No. 8) by the general meeting of shareholders of KEGOC.

Shares owned in KEGOC or its subsidiaries: none

Bakytzhan Kazhiyev

Chairman of KEGOC's Management Board, member of KEGOC's Board of Directors

Education:

Alma-Ata Energy Institute, diploma in electrical networks and systems, electrical engineer (1986); Karaganda State Technical University, Bachelor of Economics (2007).

Work experience for the last five years:

- **Since 2011:** chairman of the Management Board of Kazakhstan Electricity Grid Operating Company (KEGOC);
- **2009 — 2011:** vice president of Kazakhstan Electricity Grid Operating Company (KEGOC);
- **2008 — 2009:** executive director at KEGOC.

Academic degree, academic status:

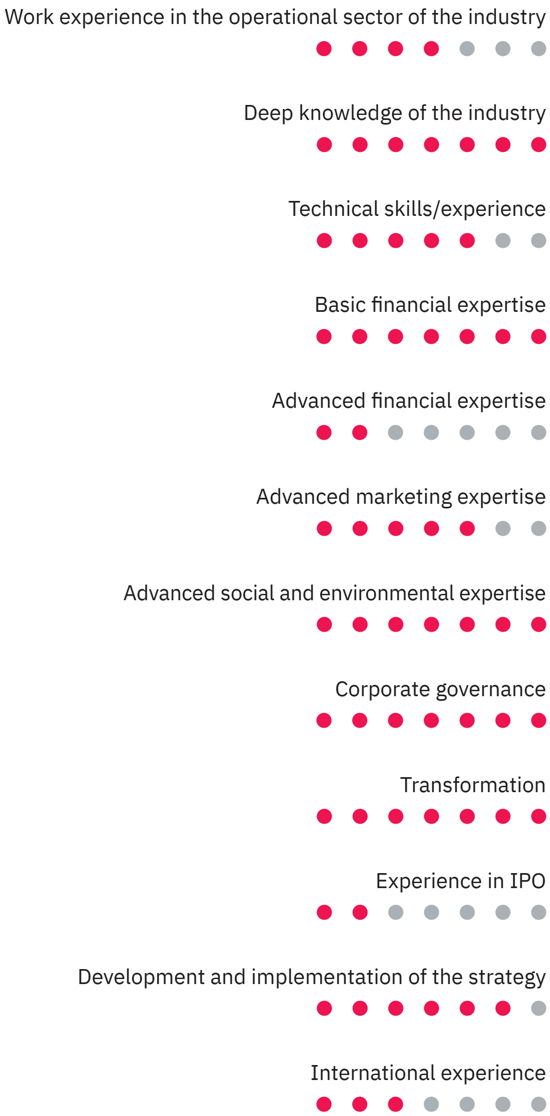
doctoral student in DBA programme, majoring in 6D052000 'Business Administration', Almaty Management University.

The term of office of each member of the Board of Directors of KEGOC is the same as the term of office of the Board in general and expires in April 2021.

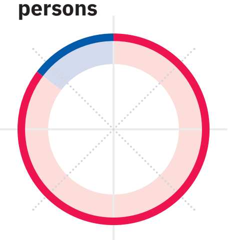
Competence of the members of the Board of Directors

Members of the Board of Directors	Almassadam Satkaliyev	Bakytzhan Kazhiyev	Suinshlik Tiyessov	Zhanna Yegimbayeva	Dominique Fache	Janusz Bialek	Yermek Kudabayev
Experience in the sector/total work experience, years	19/28	34/34	52/52	3.5/48	48/48	40/40	1/27
Core competencies							
Knowledge of the industry							
Work experience in the operational sector of the industry							
Deep knowledge of the industry							
Technical skills/experience							
Specific skills and experience							
Basic financial expertise							
Advanced financial expertise							
Advanced marketing expertise							
Advanced social and environmental expertise							
Experience in management and jurisprudence							
Corporate governance							
Transformation							
Experience in IPO							
Development and implementation of the strategy							
International experience							

Balance of competencies of the members of the board of directors, number of members

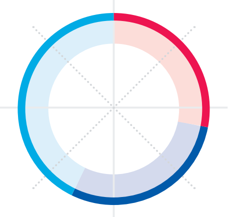


Gender diversity of the Board of Directors, persons



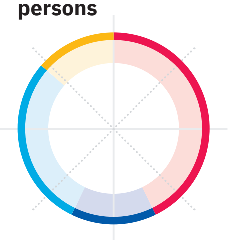
6 Male
1 Female

Age diversity of the Board of Directors, persons in the age groups



2 45-55
2 55-65
3 65-75

Independence of the Board of Directors, persons



42.9% Independent directors
14.3% Executive directors
28.6% Non-executive directors
14.3% Chairman of the Board of Directors

Selection and Nomination

The members of the Board of Directors shall be elected by the general meeting of shareholders based on clear and transparent procedures with due consideration of the competencies, skills, achievements, business reputation and professional background of the candidates. Re-election of a specific member or the entire membership of the Board of Directors for another term shall be based on their contribution to the efficient operation of the Board of Directors.

The Board of Directors and its committees shall maintain the balance of skills, background and knowledge that would ensure independent, objective and efficient decision-making process for the benefit of the company and with due account of fair treatment of all shareholders and sustainability principles. The members of the Board of Directors and candidates to the Board of Directors, to deliver his/her functions, shall have relevant experience, skills, knowledge, qualification, successful achievements and impeccable reputation in business and industry.

The number of members of the Board of Directors should be 7-11 people. The recommended number of independent directors in the Board of Directors of the company shall be at least 30 (thirty) percent but not greater than 50 (fifty) percent of the total number of members of the Board of Directors.

The members of the Board of Directors shall be elected for a term not exceeding three (3) years. Subject to satisfactory performance results, members of the Board of Directors can be re-elected for another term up to three (3) years. An independent director cannot be elected to the Board of Directors for more than nine (9) years successively subject to some exceptions.

Independent Directors

According to international corporate governance practice and the requirements of the law of Kazakhstan “On Joint Stock Companies”, the Board of Directors of KEGOC has three independent directors: Dominique Fache, Janusz Bialek, and Yermek Kudabayev. A director is recognized as independent, if he/she:

- is not, and was not an affiliate of the company within three years prior to his/her election to the Board of Directors (except for holding the position of an independent director in the company);
- is not an affiliate with respect to KEGOC’s affiliates;

- is not subordinated and was not subordinated to the officials of KEGOC or its affiliates within three years preceding the election to his/her Board of Directors;
- does not participate, and did not participate in the company's audit as an auditor of an audit company within three years prior to his/her election to the Board of Directors;
- is not a representative of the shareholder at the meetings of the company's bodies and has not been such representative within three years preceding his/her election to the Board of Directors; and
- is not a civil servant.

Performance of the Board of Directors

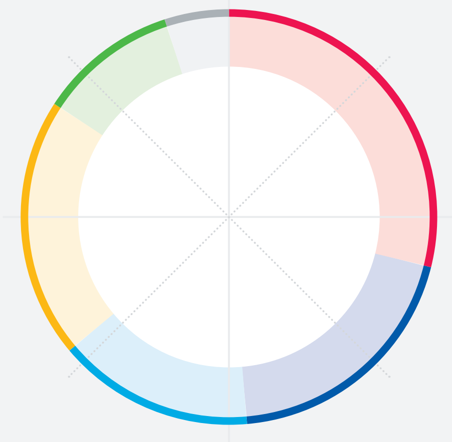
In the reporting period the board held 10 meetings including 9 meetings in praesentia and 1 meeting in absentia.

Attendance at the meetings in praesentia by the members of the Board of Directors in 2019

Members of the Board of Directors	Attendance										%
	25.01	28.02	29.03	03.05	24.05	07.06	29.06	28.08	25.10	30.11	
Almassadam Satkaliyev the chair of the Board of Directors	+	+	+	+	+	+	⊕	+	⊕	+	100
Bakytzhan Kazhiyev the chair of the Management Board	+	+	+	+	+	+	+	+	⊕	+	100
Suinshlik Tiyessov representative of Samruk-Kazyna	+	+	+	+	+	+	+	+	+	+	100
Zhanna Yegimbayeva representative of Samruk-Kazyna	+	+	+	+	+	+	+	+	+	+	100
Dominique Fache independent director	+	+	+	+	+	⊕	+	+	+	+	100
Janusz Bialek independent director	+	+	+	+	+	+	+	+	+	+	100
Yermek Kudabayev independent director	+	+	+	+	+	⊕	+	+	-	-	80

⊕ *Attendance at the meetings of the Board of Directors remotely though a videoconference session.*

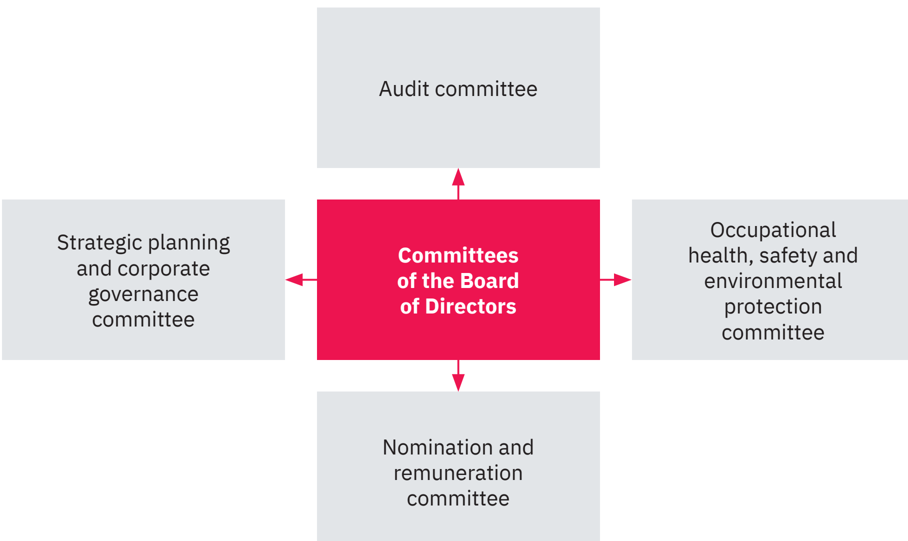
The agenda items considered at the meetings of the Board of Directors in 2019,%



- **29%** strategy, finance, economy and investment
- **20%** corporate governance and sustainable development
- **20%** HR policy
- **15%** risk management, internal control and audit
- **11%** health and safety
- **5%** operation of subsidiaries

Committees of the Board of Directors

To create a platform for active discussion and a detailed analysis of individual agenda items, 4 committees operate under the KEGOC's Board of Directors.



Audit Committee

The authority of the audit committee includes the development of recommendations to the Board of Directors of KEGOC on the following matters:

- establishment of effective control system for financial and economic activities of the company (including the completeness and accuracy of financial statements);
- supervision over reliability and effectiveness of the internal control and risk management systems and over compliance with the corporate governance documents;
- supervision over internal and external audit independence and over compliance with the laws of Kazakhstan.

The committee consists of four members: the chair and two members of the committee are independent directors, and a non-voting expert who provides recommendations to the committee based on the policies and visions of Samruk-Kazyna, the major shareholder of the company.

Attendance at the audit committee meetings by the members in 2019

Members of committee	Attendance									%
	25.01	28.02	28.03	02.05	06.06	29.06	27.08	24.10	30.11	
Yermek Kudabayev independent director	+	+	⊕	+	⊕	+	+	-	-	78
Dominique Fache independent director	+	+	+	+	⊕	+	+	+	+	100
Janusz Bialek independent director	⊕	+	+	⊕	+	+	+	+	+	100
Saltanat Satzhan non-voting expert	-	+	+	-	-	+	+	-	-	56

⊕ *Attendance at the meetings of the committee remotely though a videoconference session.*

In 2019, the audit committee held 9 meetings in praesentia, and reviewed 54 agenda items, including:

internal audit:

- 2019 annual audit plan of the KEGOC's Internal Audit Service.
- key performance indicators for the head of the Internal Audit Service of KEGOC for 2019;
- annual and quarterly performance reports of the Internal Audit Service;
- performance assessment and salaries of employees of the Internal Audit Service;
- 2020 annual audit plan of the KEGOC's Internal Audit Service.

external audit:

- report of Ernst & Young LLP, the external auditor, on the results of the audit of financial statements for 2018;
- report of Ernst & Young LLP, the external auditor, on the results of the audit of the interim financial statements for the first half of 2019;
- Ernst & Young LLP plan of audit of financial statements for the year ending 31 December 2019;

internal control and risk management:

- internal regulatory documents associated with the system of internal control and risk management, as well as amendments thereto;
- quarterly risk reports;
- the Risk Register, the Risk Map, the Key Risk Management Action Plan, the risk tolerance levels and key risk indicators of KEGOC for 2020.
- approval of the Guarantee Map;

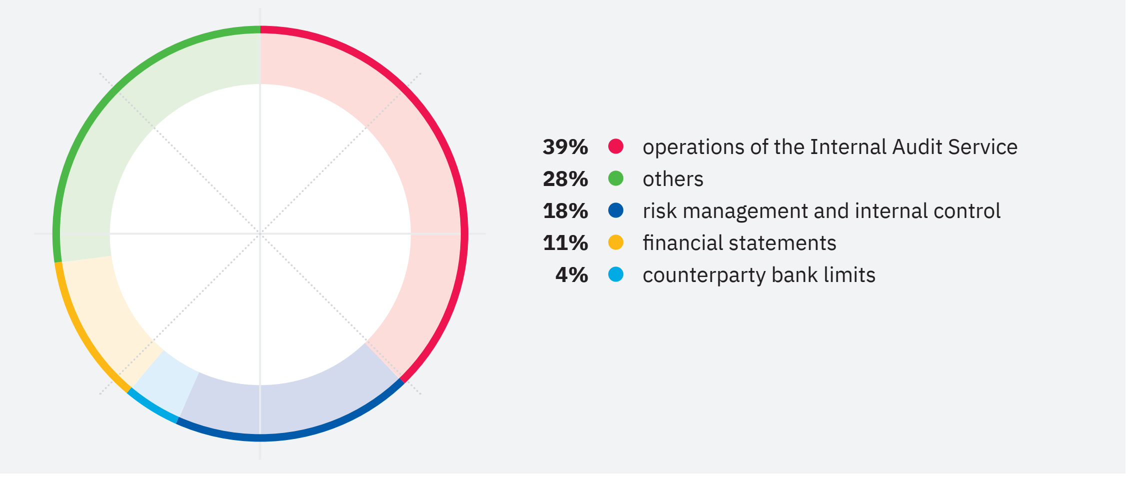
financial statements:

- the annual financial statements, proposed distribution of net income and payment of dividends on ordinary shares including the amount of the dividends per one ordinary share of KEGOC for 2018;
- the interim financial statements of KEGOC for the six months ended June 30, 2019, and the proposal to the general meeting of shareholders of KEGOC regarding the distribution of KEGOC's net income and the amount of dividend per ordinary share of KEGOC for the first half of 2019;

compliance:

- candidatures for the position of compliance officer;
- key performance indicators (goal map) of the compliance officer for 2019;
- quarterly performance of the compliance officer.

Structure of the agenda items reviewed by the audit committee in 2019



Nomination and Remuneration Committee

The nomination and remuneration committee was established as an advisory body under the Board of Directors to assist it by providing recommendations on:

- election and nomination for candidates for independent directors, members of the Management Board, the corporate secretary, and the ombudsman.
- introduction of structured and transparent system of remuneration of directors, Management Board members, the corporate secretary, and the ombudsman;
- remuneration of the directors, members of the Management Board, corporate secretary in

accordance with the goals, objectives and the current standing of the company and level of remuneration in peer companies similar in scope and type of operations;
- maintenance of an effective personnel policy, a system of labour payment, remuneration, and social support, professional development and training of employees, and provision of social support to employees, including recommendations on the harmonization of internal regulatory documents.

The committee consists of four members: two independent directors, one representative of Samruk-Kazyna, and one non-voting expert. The chair of the committee is an independent director.

Attendance at the nomination and remuneration committee meetings by the members in 2019

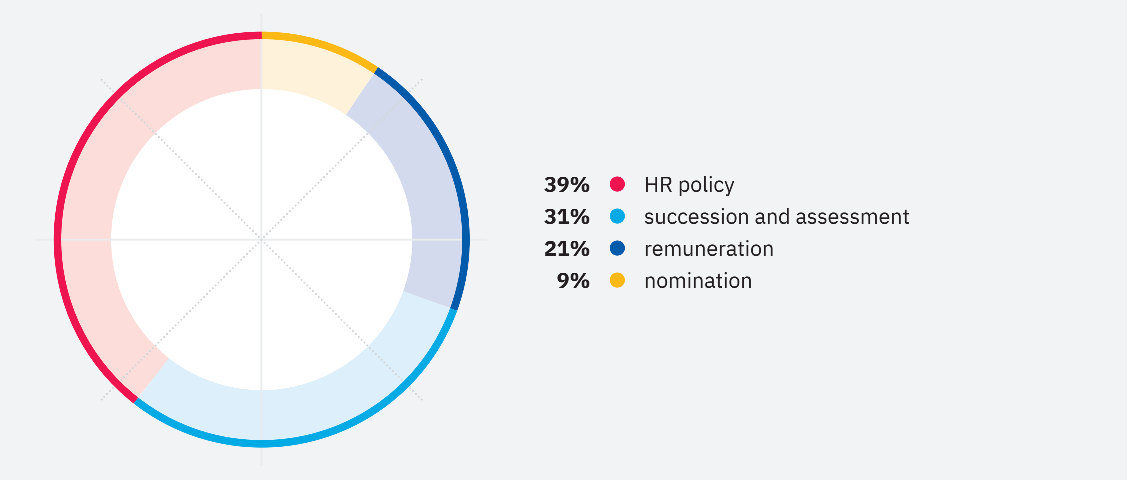
Members of committee	Attendance									%
	24.01	28.02	28.03	02.05	06.06	29.06	27.08	24.10	30.11	
Janusz Bialek chair of the committee, independent director	⊕	⊕	+	⊕	+	+	+	+	+	100
Yermek Kudabayev member of the committee, independent director	+	+	+	+	⊕	+	+	-	-	78
Zhanna Yegimbayeva member of the committee, representative of Samruk-Kazyna	+	+	+	+	+	+	+	+	+	100
Daulet Karimov member of the committee, non-voting expert	+	+	+	+	+	+	+	+	+	100

⊕ *Attendance at the meetings of the committee remotely though a videoconference session.*

In 2019, the nomination and remuneration committee held 9 meetings in praesentia, and reviewed 33 agenda items, including:
- the senior independent director, election of a candidate for the position of the chair of the Management Board;
- termination of term of office of a member of KEGOC's Management Board;
- changes in the organizational structure and the total number of employees of the executive administration;
- the Professional development programme for each member of the Board of Directors;
- KPIs and their target values (Goal Map) for the members of the Management Board, ombudsman, and corporate secretary;
- the Rules for remuneration and bonuses of the chair of the Management Board, members of the Management Board, corporate secretary, ombudsman, compliance officer and head of the internal audit service, the Rules for the provision of social support to employees of the company and the Rules for the election and early termination of powers of the chair and members of the Management Board;

- bonus payments to the corporate secretary and ombudsman;
- holding a calibration session for the corporate secretary;
- succession planning for the members of the Board of Directors and pool management;
- work plan of the nomination and remuneration committee and on the new revision of the Regulations on the nomination and remuneration committee;
- remuneration system and the salary scheme of the corporate secretary and ombudsman;
- Rules for giving the approval by KEGOC' Board of Directors to the members of KEGOC Board of Directors, the Management Board and other employees appointed by the KEGOC Board of Directors to work and/or hold positions in other organizations.
- recommendations for motivational KPI maps of the senior executives.

Structure of the agenda items reviewed by the nomination and remuneration committee in 2019



Strategic Planning and Corporate Governance Committee

102-18

The strategic planning and corporate governance committee was established as an advisory body under the Board of Directors to assist it by providing recommendations on:

- priority areas of activity, strategic planning, medium-term business plans;
- implementation of investment programmes and major investment projects;
- enhancement of the corporate governance;
- sustainable development management system, definition and promotion of sustainability principles, development of sustainability culture in the company;
- implementation of the Business Transformation Programme.

The committee consists of four members: two independent directors, one representative of Samruk-Kazyna and one non-voting expert who presents recommendations to the committee based on the policies and visions of Samruk-Kazyna, the major shareholder of the company. The chair of the committee is an independent director.

Attendance at the meetings by the members of the strategic planning and corporate governance committee in 2019

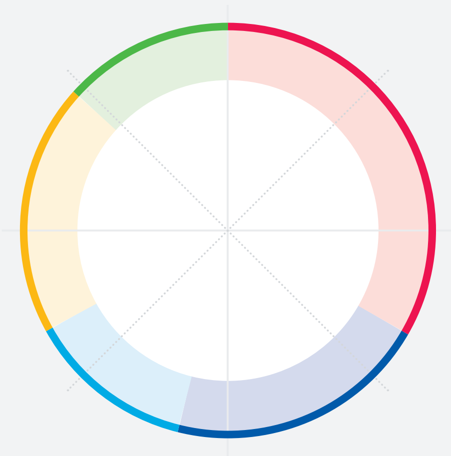
Members of committee	Attendance							%
	25.01	28.02	28.03	06.06	27.08	24.10	29.11	
Janusz Bialek chair of the committee independent director	+	+	+	+	+	+	+	100
Dominique Fache member of the committee, independent director	+	+	+	⊕	+	+	+	100
Suinshlik Tiyessov member of the committee representative of Samruk-Kazyna	+	+	+	+	+	+	+	100
Daulet Karimov member of the committee, non-voting expert	+	+	+	+	+	+	+	100

⊕ *Attendance at the meetings of the committee remotely though a videoconference session.*

In 2019, the committee held 7 meetings in praesentia, and reviewed 35 agenda items, including:

- Business plan (Development plan) and Corrective action plan for achievement of the maximum number of KPI targets and indicators of the Business Plan;
- amendments to the Development strategy and reports on the implementation of the Development strategy, including information on sustainability activities;
- Roadmap for the Business Transformation Programme;
- corporate governance enhancement action plan, progress reports, and a report on compliance / non-compliance with the principles of the Corporate Governance Code;
- parameters and performance indicators of the major projects;
- major investment projects progress reports;
- annual report and sustainability report of the company;
- amendments to the IT Development strategy.

Structure of agenda items reviewed by the strategic planning and corporate governance committee in 2019



Occupational Health, Safety, and Environmental Protection Committee

102-18

The occupational health, safety and environmental protection committee was created as an advisory body of the Board of Directors to assist it by providing recommendations on agenda items, including those related to the sustainable development of the company, namely:

- policy and procedures in occupational health, safety and environmental protection management;
- monitoring of strategic KPIs of KEGOC relating to the occupational health, safety and environmental protection, and achievement of the goals in this area;
- sustainability in occupational health, safety, and environmental protection.
- information policy and security.

The committee consists of four members: one independent director, two representatives of Samruk-Kazyna and one non-voting expert who presents recommendations to the committee based on the policies and visions of Samruk-Kazyna, the major shareholder of the company. The chair of the committee is an independent director.

Attendance at the occupational health, safety and environmental protection committee meetings by the members in 2019

Members of committee	Attendance						%
	28.02	02.05	06.06	26.06	27.08	29.11	
Dominique Fache chair of the committee independent director	⊕	+	⊕	⊕	+	+	100
Suinshlik Tiyessov member of the committee representative of Samruk-Kazyna	+	+	+	+	+	+	100
Zhanna Yegimbayeva member of the committee representative of Samruk-Kazyna	+	+	+	+	+	+	100
Daulet Karimov member of the committee non-voting expert	+	+	+	+	+	+	100

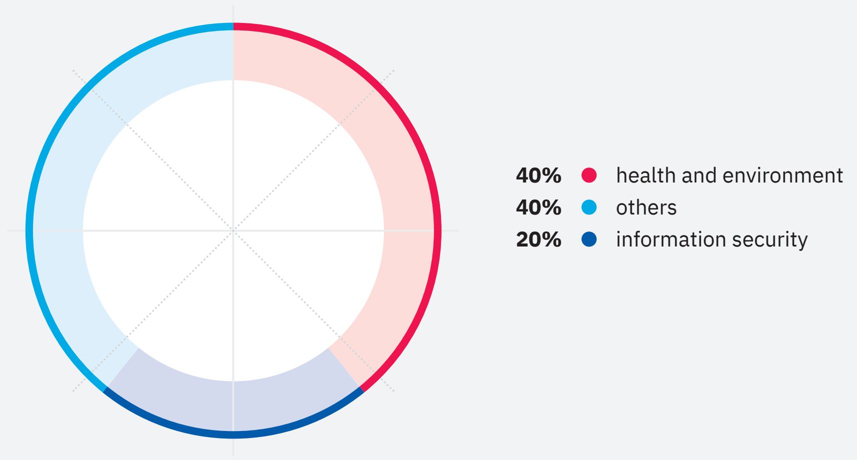
⊕ *Attendance at the meetings of the committee remotely though a videoconference session.*

In 2019, the occupational health, safety and environmental protection committee held 6 meetings in praesentia, and reviewed 10 agenda items, including:

- regular reports on health, safety, and environment of KEGOC and a report on the implementation of the Action plan of the OHS management system enhancement;
- recommendations on enhancement of the internal OHS document in terms of working at heights; on additional training for climbing workers, for methods of safe work at heights; on additional OHS training for drivers of vehicles in terms of carrying out work related to the repair, maintenance and operation of vehicles;
- strengthening of practice of immediately informing members of the occupational safety and health, environment protection committee and the Board of Directors of all facts of emergencies related to the activities of KEGOC as a whole;
- analysis of vulnerabilities and risks of information security.

In August 2019, the chair of the committee held a meeting with the employees of Almatinskiye MES branch of KEGOC, at which employees asked a lot of questions about safety and health protection in European countries, about nuclear energy, etc.

Structure of the agenda items reviewed by the occupational safety, health, and environmental protection committee in 2019



Professional Development

The Board of Directors shall approve the induction programme for newly elected members and the Professional development plan for the members of the Board of Directors. The Corporate Secretary shall ensure the implementation of these programmes. The director training includes informational meetings, participation in trainings, forums, conferences and working groups. To assist directors in fulfilling their duties, procedures are provided for the timely provision of necessary information to them.

In 2019, KPMG Tax and Advisory LLP held a seminar for the members of the Board of Directors on the topic: ‘Risk management’. Human Growth Kazakhstan LLP held a seminar on the topic: ‘Ensuring cybersecurity in the energy company, and information security of SAP systems.’ PricewaterhouseCoopers Tax and Advisory LLP held a seminar for members of the Board of Directors on the following topics: ‘Strategy, issues of sustainable development of the energy company’ and ‘Practical tools to demonstrate personal commitment to the principles of labour health, fire safety and environmental protection.’

Last year, the members of the audit committee took part in the meeting of the unified commission of Samruk-Kazyna for the selection of an external auditor.

The members of the Board of Directors took part in the discussion of the topics held by the employees of KEGOC in Almaty:

1) Future development of the national power grid given the new trends in development of the electric power industry;

2) R&D efforts in KEGOC;

3) Development of renewable energy sources and the launch of the capacity market;

4) Sustainable development of KEGOC, review of the 'best practices';

5) Occupational safety and health in KEGOC in 2017–2019 including information on implemented innovations and tools;

6) Analysis of the subordination of the risk management function;

7) Analysis of consumption and system services amounts.

In June 2019, the members of the Board of Directors took part in the forum of directors on the topic: "Increasing the added value through corporate governance" organized by Samruk-Kazyna.

The Board of Directors and its committees held a field meeting in August including a visit to 500 kV Alma substation in Almatinskiye MES branch of KEGOC (Almaty oblast) with a meeting of the occupational safety and health, environment protection committee with the operating staff of the branch.

On 29 November 2019, the members of KEGOC Board of Directors and Management Board held a meeting with members of KEGOC's talent pool.

Principles of KEGOC's Corporate Governance

The Corporate Governance Code of the company is based on the Corporate Governance Code of Samruk-Kazyna. The objectives of the Corporate Governance Code are to improve corporate governance, ensure its transparency, and confirm commitment to the standards of good corporate governance.

The analysis of compliance with the Corporate Governance Code in the company showed that the company in the reporting year complied with all provisions of the Code applicable to the Company. The Corporate Governance Code Compliance Report for 2019 will be available at: https://www.kegoc.kz/en/shareholders-and-investors/information-disclosure/annual-reports/2019

Conflict of Interest

In accordance with the KEGOC Code of Conduct and the Policy for the Settlement of Conflicts of Interest of KEGOC's Officers and Employees, the prevention of conflicts of interest is an important condition for ensuring the protection of the interests of shareholders, KEGOC and its employees. All employees of the Company shall behave in such a way that would prevent situation when a conflict of interest can arise in respect of them (or related persons) or other persons. None of KEGOC's officials shall participate in the decision making on his/her own appointment, election, and re-election.

Also, to prevent and resolve a conflict of interest, KEGOC's officers shall not participate in decision-making on transactions, in which they have an interest. For example, the members of the Board of Directors of KEGOC, who are the representatives of Samruk-Kazyna, shall not participate in the discussion and voting on transactions to be concluded with Samruk-Kazyna's companies. Also, the company monitors contracts with regard to affiliation between the official signing the contract and suppliers and consumers of the Company.

Anti-corruption

PRINCIPLE 10

UN GLOBAL COMPACT

KEGOC adheres to the policy of zero tolerance for corruption in all its manifestations in relations with all stakeholders as well as zero tolerance for concealment of corruption offences. The officials and employees involved in corruption shall be dismissed and held accountable in accordance with the Kazakhstan laws.

KEGOC, in its daily operations, complies with the anti-corruption laws and takes maximum organizational and practical uncompromising efforts to fight against corruption in all its forms and manifestations.

In particular, the Board of Directors approved the risk management policy including risk of violation of anti-corruption and other laws of Kazakhstan in KEGOC's operations. The policy determines the anti-corruption procedure and corruption risk management. As part of development of anti-corruption culture in KEGOC, the company pays a lot of attention to preventive actions that would reduce corruption risks, e.g. to promote zero-tolerance to corruption among KEGOC's employees, the company sends to the departments of the Executive Administration and branches on a quarterly basis the explanatory informational materials on anti-corruption standards.

In 2019, KEGOC approved an action plan to ensure compliance with the law of Kazakhstan "On Combating Corruption" for 2019 and established three working groups to analyse corruption risks in three areas: procurement; risks in hiring, evaluating, promoting and dismissing staff; risks of other business processes. The company developed measures to combat and prevent corruption in 2020.

To mitigate corruption risks, a meeting was held between employees of the company and representatives of the department of the Agency of Kazakhstan for Civil Service and Anti-Corruption in the city of Nur-Sultan.

The standard contracts with suppliers of goods, works and services include requirements to compliance with the laws of the Republic of Kazakhstan, including anti-corruption, environmental protection, health and safety, taxation and protection of trade secrets and other confidential information; prevention or mitigation of negative impact of operations on the environment, the economy and society, and respective response or preventive measures.

Samruk-Kazyna organized a hotline for stakeholders of its portfolio companies, including KEGOC. All KEGOC stakeholders may report their concerns regarding actual or alleged violations of the law, regulatory requirements, as well as internal policies and procedures on corruption and ethics. They can do it by sending a confidential and anonymous message. Their confidentiality and anonymity are guaranteed, and all reported cases are considered. Hotline hours: 24 / 7.

KEGOC's hotline in 2019 received 7 messages. All complaints were duly investigated however the reported allegations were not confirmed.

102-44

In 2019, the compliance officer has been conducting continuous anti-corruption monitoring, the results of which are presented to KEGOC's Board of Directors. In 2019 there was no violations of anti-corruption laws of Kazakhstan in the company.

205-2 205-3

Executive Body

The day-to-day activities of KEGOC are managed by the Management Board, a collegial executive body, which makes the decisions on KEGOC's business matters that are beyond the competence of other bodies.

The Management Board shall act in accordance with the law of Kazakhstan 'On Joint Stock Companies', KEGOC's Charter, Corporate Governance Code and Regulations on the Management Board.

The appointment (election) and early termination of the powers of the chairman of the Management Board of the company is the competence of the general meeting of shareholders. Determination of the number of members, terms of powers of the Management Board, election of its members (except for the chairman) and early termination of their powers is the exclusive competence of the Board of Directors of KEGOC and it shall be based on principles of transparency, objective assessment of potential, professionalism and competence. According to the decision of the Board of Directors of KEGOC the Management Board of KEGOC has 5 members, 100% of whom are the nationals of Kazakhstan.

Members of the Management Board

(As on 31 December 2019)

Bakytzhan Kazhiyev

Chairman of Management Board, KEGOC

Born in 1964, national of the Republic of Kazakhstan.

Shares owned in KEGOC or its subsidiaries and affiliates: none.

Education:

Alma-Ata Power Engineering Institute, diploma in power systems and networks (1986); Karaganda State Technical University, diploma in economics (2007); Almaty Management University, Doctor of Business Administration (2018). Experience in the industry: 33 years.

Work experience for the last five years:

- **Since 31 May 2011,** the chairman of the Management Board at KEGOC.

Born in 1968, national of the Republic of Kazakhstan, experience in the industry: 19 years.

Shares owned in KEGOC or its subsidiaries and affiliates: none.

Bakytkhan Zhazykbayev

managing director for operations, member of the Management Board since February 2017

Education:

Ryskulov Kazakh State Academy of Management, diploma in marketing and Commerce (1994), Toraigyrov Pavlodar State University, diploma in electrical power systems and networks (2005).

Work experience for the last five years:

- **Since April 2018,** managing director for operations;
- **Since February 2017,** managing director for business assets management;
- **December 2015 – February 2017,** deputy chairman of the Management Board of KEGOC for operations;

Functions in KEGOC:

plan activities on operation, repair, maintenance of operating assets; develop policies and procedures for assets management including the assets maintenance standards; develop and implement the medium-term development programme of MES branches; ensure reliable and efficient operation of MES branches, operation and rehabilitation of relay protection and substation automation, and metrological support of operations.

Born in 1955, national of the Republic of Kazakhstan, experience in the industry: 42 years.

Shares owned in KEGOC or its subsidiaries and affiliates: none.

Member of the Supervisory Board of FSC RES.

Askerbek Kuanyshbayev

Managing director for strategy and development, member of the Management Board, since 2011

Education:

Alma-Ata Power Engineering Institute, diploma in power supply of industrial enterprises and cities (1977), candidate of science in economics, associate professor in economics.

Work experience for the last five years:

- **Since April 2018,** managing director for strategy and development;
- **Since February 2018 — April 2018,** managing director for technological development;
- **December 2015 – February 2017,** deputy chairman of Management Board for NPG development and corporate governance;

Functions in KEGOC:

manage the technical policy of KEGOC; develop NPG, develop plans and projects, feasibility studies, feasibility reports for NPG development projects; develop Kazakhstan UPS electricity and capacity 7-year balance forecasts; cooperate with integration associations and organizations in the power industry; manage research and development efforts; monitor, analyse and rate technological consumption (losses) of electricity in the NPG; coordinate renewable development activities; coordinate the process of approval by the System Operator of: technological connection to the UPS of Kazakhstan, connection design for power plants, and external power supply designs for consumers; approve and issue technical specifications for connection to the grid.

Aibek Botabekov

Managing director for finance and accounting, member of the Management Board since October 2009.

Born in 1976, national of the Republic of Kazakhstan, experience in the industry: 22 years.

Shares owned in KEGOC or its subsidiaries and affiliates: none.

Chairman of the supervisory board of FSC RES LLP and member of the Board of Directors of Batys Transit JSC, the associate company.

Education:

Buketov Karaganda State University, diploma in international relations and economics (1997), Nazarbayev University (2016), Master of Business Administration.

Work experience for the last five years:

- **Since February 2017,** managing director for finance and accounting;
- **June 2009 – February 2017,** managing director for economics, KEGOC.

Functions in KEGOC:

manage financial and economic matters; supervise pricing matters; manage and coordinate KEGOC's shares listing at KASE; manage relations with minority shareholders and other holders of KEGOC's securities; prepare the consolidated audited annual financial statements of KEGOC, cooperate with financial institutions and audit companies; and manage the management reporting system.

Tolegen Safuani

Managing director for legal support and risks, member of the Management Board since June 2017.

Born in 1979, national of the Republic of Kazakhstan, experience in the industry: 15 years.

Shares owned in KEGOC or its subsidiaries and affiliates: none.

Member of Board of Directors of EnergoInform and supervisory board of FSC RES LLP.

Education:

Kazakh State Law Academy, diploma in legal science (2000), Kazakh University of Technology and Business, diploma in public and local administration, Master of Economics (2013), Almaty Management University, Master of Business Administration (2018).

Work experience for the last five years:

- **Since June 2017,** managing director for legal support and risks of KEGOC;
- **April 2012 – June 2017,** head of legal department, KEGOC.

Functions in KEGOC:

supervise legal matters; introduce and improve the systems of risk management, internal control, corporate governance, business continuity and IMS; ensure economic, technical and information security; manage legal claims-related work; and obtain and maintain a corporate governance rating.

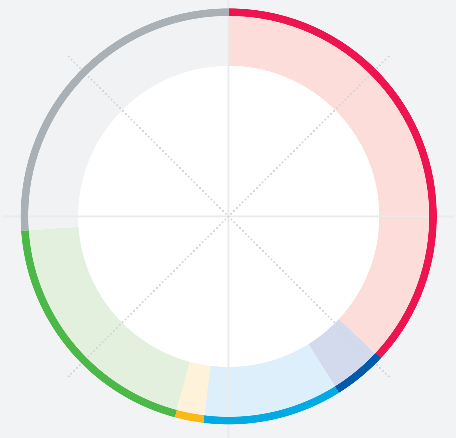
Management Board Performance Report

The main principles of the Management Board activity are to serve interests of shareholders to the maximum extent, ensure fairness, good faith, expertise, prudence, objectivity, soundness, and regularity.

In 2019 KEGOC's Management Board held 31 meetings and reviewed 239 agenda items. In addition to the agenda items related to the competence of KEGOC's Board of Directors and pre-reviewed by the Management Board, the Management Board made some key decisions:

- to approve / amend 43 internal documents of the company;
- to review the progress reports of the risk committee and approve the action plan of the committee for 2020;
- regarding non-arm's length transactions within the competence of the Management Board;
- regarding the Business Transformation Programme;
- regarding HR policy.

Structure of the Management Board Agenda



37% internal regulatory documents
26% others
20% HR policy
11% transactions
4% Business Transformation Programme issues
2% risk committee performance

Board Committees

To preliminarily review, take collegial decisions, and prepare recommendations on the supervised agenda items for KEGOC's Management Board, the company has the following advisory bodies:

- Investment committee
- Risk committee,
- Budget committee,
- Human resources development committee,
- Debtors and creditors committee,
- Inventory committee.

Also, to manage the sustainable development, to develop, implement, operate the integrated management system (IMS) of KEGOC and to ensure continuous enhancement of management system performance, the company established an advisory body: the sustainable development and IMS coordination council chaired by the chairman of the Management Board of KEGOC.

The coordination council includes all managing directors and heads of subsidiaries. The main objectives of the coordination council in sustainable development are to promote and ensure adherence to the principles of sustainable development, to ensure implementation of plans, to determine the responsibility for monitoring the sustainable development management matters, and to determine the content of information on sustainable development activities disclosed for the stakeholders.

102-18

Non-arm's Length Transactions

In the reporting year, KEGOC concluded 136 non-arm's length transactions (including 7 transactions approved by the Board of Directors of KEGOC and 2 transactions approved by the decision of the Management Board of KEGOC) for the total amount of KZT 42.9 billion. No material transactions were made.

The Board of Directors of KEGOC made decisions to conclude the following non-arm's length transactions by signing equipment operation and maintenance contracts between:

1) Aktyubinskiye MES branch of KEGOC and Batys Transit JSC (220 kV outdoor switchgear at 500 kV Ulke substation and 220 kV Ulke — Kazchrome 1 and Ulke — Kazchrome 2 power transmission lines);

2) Aktyubinskiye MES branch of KEGOC and Batys Transit JSC (500 kV outdoor switchgear of 500 kV Ulke substation and 500 kV Zhitikara — Ulke power transmission line);

3) Sarbaiskiye MES branch of KEGOC and Batys Transit JSC (500 kV outdoor switchgear at 500 kV Zhitikara substation and 500 kV Zhitikara — Ulke power transmission line);

4) Zapadnye MES branch of KEGOC and Tengizchevroil LLP (220 kV Kulsary substation (2 bays of 10 kV));

5) Tsentralnye MES branch of KEGOC and Kazakhstan-China Pipeline LLP (220 kV Balkhashskaya substation (2 bays of 110 kV));

6) Tsentralnye MES branch of KEGOC and Kazakhstan-China Pipeline LLP (500 kV Agadyr substation (T-2 transformer, 1 bay of 220 kV, 6 bays of 35 kV, 5 bays of 10 kV));

7) Yuzhnye MES branch of KEGOC and Kazakhstan-French Joint Venture KATCO LLP (220 kV Sholak-Korgan substation (2 bays of 110 kV).

Assessment and Remuneration of the Management Team

In accordance with the Rules for performance assessment of the Board of Directors and its committees, the chair, members of the Board of Directors and the corporate secretary of KEGOC, the performance of the Board of Directors shall be assessed once a year by the Board of Directors on its own and at least once every three years by an independent party. The assessment (self-assessment or by an independent party) is carried out based on the corporate governance diagnostics methodology developed by Samruk-Kazyna.

In 2017, Samruk-Kazyna jointly with an independent consultant carried out the independent diagnostics of corporate governance of KEGOC including efficiency assessment of the Board of Directors. The diagnostics assessed the 'Efficiency of the Board of Directors and the executive body' at 'BB' level, i.e. as meeting in all material respects most established criteria. At the same time, to further improve corporate governance, including the effectiveness of the Board of Directors, the company provided recommendations for implementation for a three-year period (2018–2020).

In 2018, the independent consultant assessed the results of the implementation of their recommendations and left the rating of "Efficiency of the Board of Directors and the executive body" at 'BB level. At the same time PwC commended the company on some progress in this area.

Samruk-Kazyna plans to conduct the assessment of 2019 performance in 2020.

In accordance with the decisions of the general meeting of shareholders, the rules for the payment of remuneration and compensation of expenses to members of the KEGOC Board of Directors and the concluded engagement contracts of the chair of the Board of Directors and members of the Board of Directors, the members and the chair shall receive remuneration and compensations of expenses they incur when they deliver their functions of the members of the Board of Directors.

The remuneration of the directors consists of two parts:

1) annual fixed remuneration as approved by the general meeting of shareholders;

2) additional remuneration for chairmanship or participation in the meetings in praesentia of the committees of the Board of Directors also as approved by the general meeting of shareholders.

The members of the Board of Directors, who are the representatives of Samruk-Kazyna, shall be paid only annual fixed remuneration as approved by the general meeting of shareholders; the additional remuneration for participation in committee meetings is not provided.

The directors shall be compensated for the expenses associated with his/her travel to meetings of the Board of Directors, meetings of committees of the Board of Directors and the meetings held beyond the place of permanent residence of an independent director: (travel, including transfer, accommodation, per diem, telephone (except for mobile communications) in the Republic of Kazakhstan and other services related to the activities of directors).

If a director, starting from his/her election as a member of the Board of Directors during the reporting period participates in less than a half of all the meetings of the Board of Directors held in praesentia and in absentia, except for absence at meetings due to illness, the fixed annual remuneration shall not be paid.

In the event of termination of the powers of a director (including early termination) before the end of the reporting period, the director shall be paid remuneration and reimbursed the expenses for the actual period of being on the Board of Directors.

The remuneration for the chairman and the members of the Management Board includes salary and a year-end performance bonus. A year-end performance bonus shall be paid by KEGOC within the limits of cash provided for this purpose in the budget of KEGOC and subject to approval of the results of the financial and economic performance based on the audited financial statements.

The main condition for payment of the bonus is the availability of the consolidated total profit for the reporting period. The performance of the chairman and the members of the Management Board shall be assessed based on the motivational corporate and functional KPIs, which shall be derived from the strategic goals of KEGOC by cascading them down to specific targets of business processes/areas of KEGOC on the KPI maps of each member of the Management Board.

Main motivational KPI

Strategic goal 1		Strategic goal 2		Strategic goal 3	
WWP	↑	EBITDA	↑	LTIFR	↓
Technical electricity losses,% of electricity delivered to the grid	↓	Net Asset Value (NAV)	↑	Corporate governance rating	↑
Number of technical disturbances on the transmission lines	↓	Achievement of target financial stability indicators	↑	Implementation of the OHS management system enhancement action plan	↑
Non-supplied electricity	↓	Dividends paid	↑	Implementation of the corporate governance enhancement action plan	↑
Completion of Kazakhstan NPG WAMS project	↑	Implementation of the Transformation roadmap	↑		
Number of approved rationalization proposals	↑				

↑ — indicator polarity: more is better

↓ — indicator polarity: less is better

The 2018 performance bonus was awarded to the members of the Management Board, if their work hours in the reporting period in total amounted to five (5) and more months and subject to KPI achievement in the reporting period. The maximum remuneration for the planned period shall be approved by the Board of Directors.

Thus, the total amount paid in 2019 to the members of the Board of Directors and the Management Board of KEGOC amounted to approximately KZT 312.42 million (KZT 346.25 million in 2018).

Corporate Governance Plans

To improve the corporate governance in KEGOC according to the developed plan, the company will continue to make efforts:

- to increase the efficiency of the Board of Directors and the Management Board through optimal planning of meetings, improvement of quality of materials for the meetings, further involvement of the Board of Directors and committees in monitoring of transactions, investments, and sustainable development;
- to enhance the risk management and internal control system by fostering the risk culture and training of employees, effectively planning of IAS activities by coordinating activities between units of the second line of defence and IAS;
- to enhance the sustainable development performance in economic, environmental and social areas, further improve the health and safety system, and compliance with business ethics;
- to increase transparency by reviewing the content and design of the corporate website taking into account the views of the stakeholders in disclosing the company's operation and improving corporate reporting.

Corporate Ethics

The company's operations are based on the fundamental values, such as honesty, reliability, professionalism and high performance of the employees, mutual support, respect for each other, stakeholders, and the company in general.

KEGOC has in place a code of conduct (business ethics code), a document that describes basic rules, principles and values, standards of business and social behaviour, high ethical standards of both internal and external corporate relations, as well as the company's social responsibility to employees, shareholders, business partners, state and society.

The code is based on generally accepted standards of corporate ethics and business conduct and documents defining best corporate governance practices. The code applies to all units and branches of the company. Its observance is mandatory for all employees of the company, regardless of their position.

102-16

The purpose of the code is to define mandatory rules of business conduct and ethics that would increase capitalization and strengthen the company's reputation, financial stability, and efficiency. The code was designed to create such a working atmosphere, where every employee would feel responsibility for the company's performance and reputation and at the same time could expect that the company would consider his/her individuality in the performance of labour duties. A code of conduct is one of the tools to create the best company as a team of professionals.

Commitment to and compliance with ethical and compliance requirements is the responsibility of everyone who works for the company or represent its interests. Any violation of the code of conduct could damage the reputation and performance of the company and may result in disciplinary action. It is important to note that violation of some provisions of the code of conduct may also be regarded as a violation of the laws of Kazakhstan on combating corruption and thus entail personal administrative or criminal charges.

Each employee of the company must comply with the requirements of the code of conduct. At the same time, all employees of the company shall also prevent any potential violations and timely report them using the available communication channels. At the same time, the use of communication channels for giving false information is prohibited. A whistle-blower will face no consequences for the reporting the business ethics violation reporting.

All employees of the Company, including officers, shall study the code on a regular basis, and, specifically, when a person is employed and in case of any amendments to the code.

The company has an ombudsman, who among his other functions shall ensure compliance with the code of conduct by officials and employees of KEGOC and, if necessary, explain the code's provisions. The basic principles of the ombudsman work are independence, neutrality and impartiality, confidentiality, and informality. To visually present to the employees of KEGOC's branches the goals of establishing the ombudsman position, its main functions, operating principles, and inform them about mandatory observance of the new code of conduct and about available communication channels for reporting any violations of the code, the company has developed the following information posters: "The ombudsman functions" and "The code of conduct is the basis of our actions", which are now on display at all facilities of KEGOC, including electrical substations. "Ombudsman's corner" information stands with "Ombudsman message boxes» were also installed for the employees of the company.

The Ombudsman distributes an email message for every employee of the company, including employees of subsidiaries, with an explanation of establishing of the ombudsman position, his role and obligatory requirement to comply with business ethics principles.

In 2019, the ombudsman visited all MES branches and 48 substations, where he met with the staff. He informed the employees about the goals and objectives of the code of conduct, specifically detailing some of its sections such as: ethical behaviour, external communications and social networks, equal conditions of employment and labour, zero-tolerance to discrimination and harassment, anti-corruption, conflict of interest, and compliance. The ombudsmen also informed the employees about available communication channels (telephone hotline of ombudsman and compliance officer), the obligations of the company's employees and explained them the consequences of non-compliance with the code of conduct.

Everyone who wanted, met with the ombudsman in person.

To monitor compliance with business ethics, as well as the moral and psychological climate in the team, the ombudsman conducted an anonymous survey for the employees of Sarbaiskiye MES, Aktyubinskiye MES, Aktyubinskiye MES, Severnye MES, Tsentralnye MES and Yuzhnye MES branches.

The analysis of the results of this anonymous survey showed positive perception of the moral and psychological climate by the staff in the branches. The employees feel comfortable at work, think that they call on the management for help and support, that there is mutual trust, and it is customary in the team to help new employees to adapt. The direct managers are objective in their relations with subordinates, there is no pressure on subordinates. The employees have the right to participate in making decisions that could have a significant impact on their work. There are no cases of any demands that go beyond the scope of their duties. The employees in the branches were informed about where they can address in case of conflict.

412-1

In 2019, ‘The code of conduct is the basis of our actions’ training seminars were held in Aktyubinskiye MES, Severnye MES, Sarbaiskiye MES, Tsentralnye MES and Yuzhnye MES branches with participation of the compliance officer and chairman of EnergoTechProfSoyuz trade union. During the training workshop, the branch employees (focus groups of 50–70 to 100 people) received detailed information about all sections of the code of conduct and the activities of the trade union of the company.

In order to prevent potential conflicts with employees, the company regularly reaches out to them to clarify the internal regulatory documents and procedures of the company, measures are being taken to find common grounds and solve labour problems, provide information and explanations about social and labour dispute management.

Internal Audit Service

The internal audit service (IAS) was established by the decision of the Board of Directors of KEGOC in 2006. As on 31 December 2019 the number of staff in IAS was eight.

The mission of IAS is to assist as necessary the Board of Directors of KEGOC to achieve the strategic goals of the company by providing independent and objective information designed to ensure effective management of the company, by introducing a systematic approach to improvement of the risk management, internal control and corporate systems management.

The activities of IAS are regulated by the following documents:
- International professional standards of internal audit;
- Regulations on the internal audit service of KEGOC as approved by the Board of Directors of KEGOC;

- Rules of the internal audit management at KEGOC as approved by the Board of Directors of KEGOC;
- Job descriptions of IAS employees approved by the chairman of the Board of Directors of KEGOC.
- Annual audit plan of IAS.

All audit engagements in 2019 were planned based on the mission and the main objective of the IAS. The risk-based approach was used to plan the internal audit, i.e. the priority was given to the business processes that are most vulnerable to negative events.

The IAS annual audit plan for 2019 was approved by the Board of Directors of KEGOC. The plan provides for 15 engagements. The scope of audit tasks performed by IAS covered comprehensive inspections of KEGOC branches, audit of business processes for planning, development and management of supply chains, HR processes, information technology, assessment of risk management system and internal control system, and so on. All engagements had been completed.

As a part of the initiative of internal audit service of Samruk-Kazyna endorsed by the audit committee of Samruk-Kazyna to hold synergistic audits in the companies of Samruk-Kazyna's group, the internal audit service of KEGOC took part in 2019 in the audit engagement to audit information security in Kazakhstan Temir Zholy national company.

External Auditor

The external audit services of KEGOC's financial statements for 2019 were procured by the Unified Commission for selection of an auditor in accordance with the Rules for selection of an auditor for Samruk-Kazyna JSC and organizations, more than fifty percent of voting shares (participatory shares) of which are directly or indirectly owned by Samruk-Kazyna JSC under the right of ownership or trust management, and in accordance with the decision of the general meeting of shareholders of KEGOC (minutes No.13 dated 3 May 2019). KEGOC signed a contract with Ernst & Young LLP, an independent audit organization, a member of the professional organization of the Chamber of Auditors of the Republic of Kazakhstan. Ernst & Young LLP has been conducting audit the financial statements of KEGOC since 2012.

To preserve independence and comply with the external audit policy the company shall change an audit partner, if an audit organization has been engaged for five successive years. The last change of the audit partner was made in 2018. The amount of audit service fee for 2019 was KZT 44.41 million including VAT. Ernst & Young LLP has not been engaged to conduct non-audit services for KEGOC in 2019.

Human Resources

PRINCIPLE 4
UN GLOBAL COMPACT

PRINCIPLE 6
UN GLOBAL COMPACT

8 DECENT WORK AND ECONOMIC GROWTH

KEGOC's human resources are the most important strategic factor for the Company's development success. KEGOC manages its human resources based on the principles of the Corporate Governance Code, Business Ethics Code, the integrated management system, HR Policy and internal documents relating to KEGOC's HR motivation.

The Company's HR policy seeks to create intellectual and professional resources implementing KEGOC's Development Strategy through efficient, performance-oriented corporate culture, meritocracy and measures to enhance the social and labour relations.

The human resources management is based on the balance between economic efficiency and social support to the employees taking into account their interests.

The HR policy faces the following objectives to implement KEGOC's Development Strategy:

- ensure the commitment to the principles of meritocracy, including recruitment, training and development, assessment of employee performance and remuneration management;
- develop target corporate culture;
- improve talent pool management and career planning system;
- regulate social and labour relations contributing to the Company's successful operation;
- comply with the succession policy and knowledge transfer;
- train specialists on the application of digital technologies.

Staff listing of the Company's employees (including subsidiaries) as of 31 December 2019 was 4,819 people.

102-7

KEGOC supports and respects the protection of internationally proclaimed human rights and the rights envisaged by the Constitution of the Republic of Kazakhstan. In 2019, there were no cases of human rights abuses, or discrimination in respect of gender, language, race, religion, sexual orientation or gender identity at KEGOC. KEGOC's operations do not use child or forced labour.

406-1

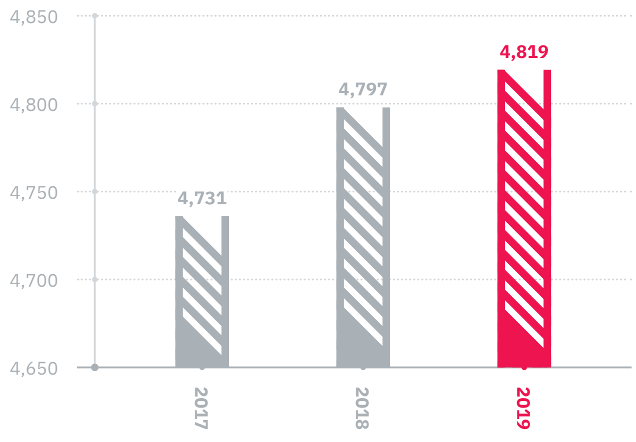
PRINCIPLE 5

UN GLOBAL COMPACT

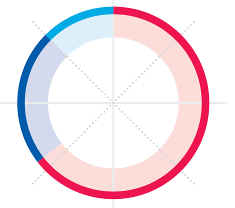
In 2019, KEGOC's Ombudsman received seven requests relating to social and labour relations (bonus payment, use of exemptions and regional ratios, extra payment for work on the switch board, medical insurance). Two requests, once analysed, were satisfied. Reasoned responses with clarifications were provided on the remaining five requests. Meanwhile, no claims from the Company's employees on the labour law breach were registered in 2019.

102-44

Number of employees, people

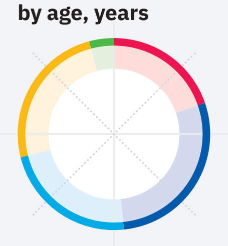


Personnel structure by education



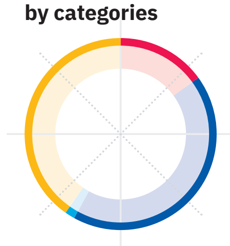
65% higher
23% specialized secondary
12% secondary

Structure of employees by age, years



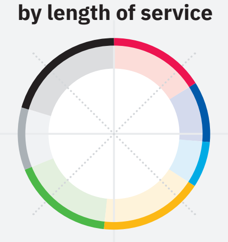
- **20%** under 31
- **29%** 31-40
- **23%** 41-50
- **24%** 51-60
- **4%** over 61

Personnel structure by categories



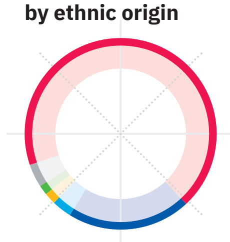
- **14%** executives
- **45%** specialists
- **1%** office workers
- **40%** workers

Personnel structure by length of service



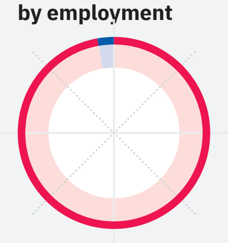
- **15%** up to 1 year
- **11%** from 1 to 3 years
- **8%** from 3 to 5 years
- **19%** from 5 to 10 years
- **17%** from 10 to 15 years
- **10%** from 15 to 20 years
- **20%** over 20 years

Structure of employees by ethnic origin



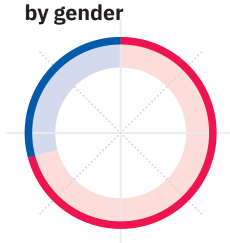
- **69%** the Kazakhs
- **21%** the Russians
- **3%** the Ukrainians
- **2%** the Tatars
- **1%** the Germans
- **4%** other

Structure of employees by employment



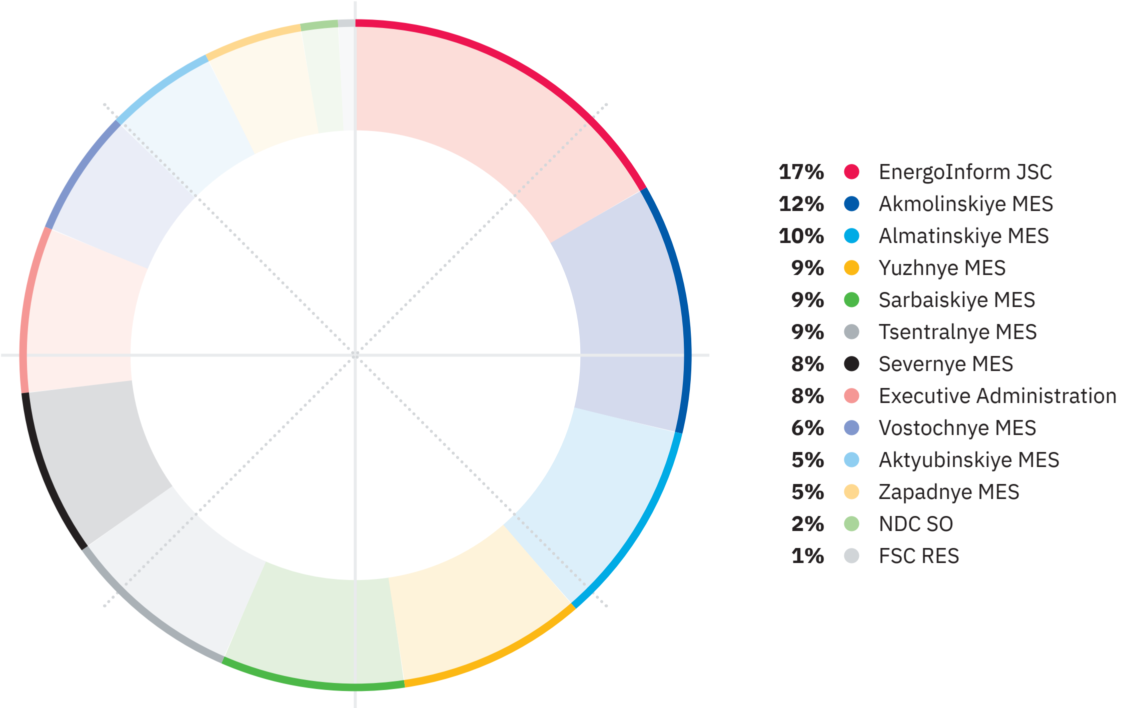
- **97%** regular
- **3%** temporary

Structure of employees by gender



- **73%** male
- **27%** female

Personnel structure by regions



Personnel Structure

Indicator	Total	Proportion,%	AP	OP	Management positions	Management proportion,%
Staff listing	**4,819**	**100**	**761**	**4,058**	**692**	**100**
Gender						
Male employees	3,502	72.7	295	3,207	604	87.3
Female employees	1,317	27.3	466	851	88	12.7
Groups by ethnic origin						
the Kazakhs	3,304	68.6	645	2,659	472	68.2
the Russians	1,017	21.1	77	940	147	21.2
the Ukrainians	156	3.2	8	148	23	3.3
the Tatars	88	1.8	10	78	13	1.9
Other	254	5.3	21	233	37	5.3
Groups by age						
under 30	949	19.7	85	864	27	3.9
from 30 to 50	2,505	52.0	537	1,968	423	61.1
over 50	1,365	28.3	139	1,226	242	35.0

405-1

Recruitment Policy

PRINCIPLE 3

UN GLOBAL COMPACT

One of the Company's HR policy principles is openness and transparency using meritocracy principles through clear and transparent selection criteria based on requirements for position and competence model, compliance with competition procedures, feasibility of made decisions, application of position-relevant candidates evaluation methods allowing impersonal decision-making in terms of hiring, non-discrimination, professional, open and respectful treatment of all candidates. Internal candidates have a priority based on succession and talent pool management programmes.

During recruitment the Company helps new employees to adapt quickly and speed up their onboarding. On a regular basis an employee is introduced to the organization's objectives, its activity characteristics, and the Company's basic rules and expectations from employees. During the adaptation process, employees are instructed on safety as well.

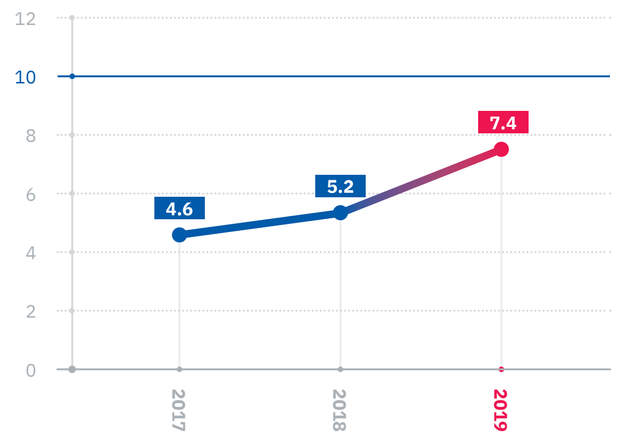
KEGOC ensures equal opportunities for all candidates irrespective of their ethnic origin or race, gender, age, social and family status or other distinctive characteristics.

406-1

As of 31 December 2019, the overall proportion of senior management (members of KEGOC's Board of Directors and Management Board) hired from the local population (citizens of the Republic of Kazakhstan) was 83%.

202-2

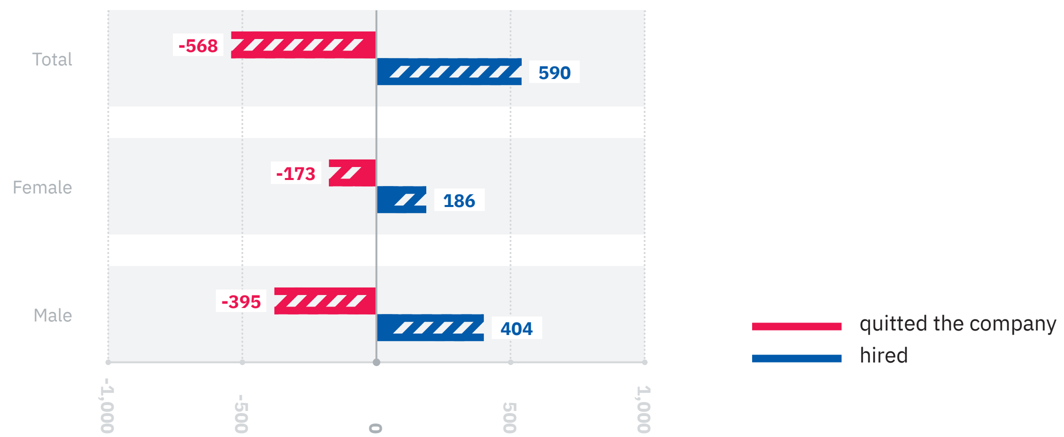
Personnel Turnover, %



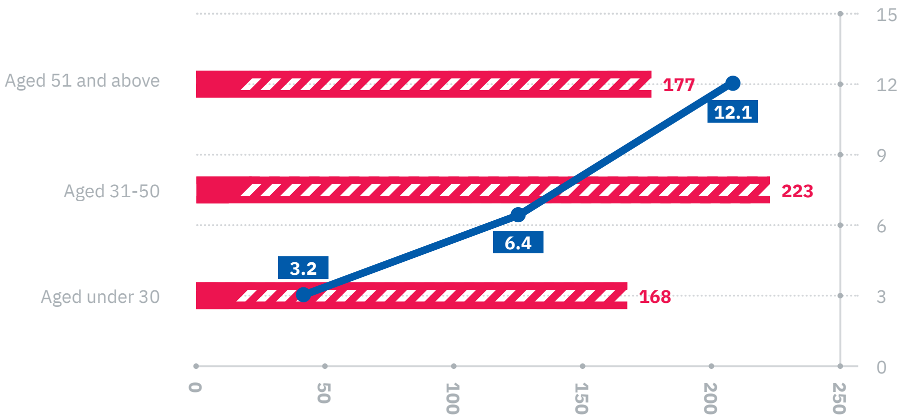
The final value of staff turnover at KEGOC for 2019 was 7.4%, with the threshold value 'not more than 10%'. At that, 7.5% relate to male personnel turnover and 7.0% to female personnel. The average work duration of male employees quitted KEGOC in 2019 was 8.4 years (399 employees), and female employees 5.9 years (169 employees).

401-1

Personnel dynamics in 2019, people



Duration of work of KEGOC employees who quitted the Company in 2019



Employees who can retire in the next 5 and 10 years, % of manpower

Indicator, KZT million	AMP	OP	Total
Employees who can retire within 2020–2024 (in the next 5 years)	0.89%	10%	**10.89%**
Employees who can retire within 2020–2029 (in the next 10 years)	1.56%	19.38%	**20.94%**

EU15

Incentive System

Labour compensation is paid to the Company's employees in accordance with the laws of the Republic of Kazakhstan, the Collective Bargaining Agreement, employment contracts, internal labour and bonus payment documents.

The remuneration system in the Company includes the following:

- basic part (wages, premiums and increments);
- variable part (performance bonuses, one-time bonuses, remuneration of executive and administrative personnel);
- social support to employees;
- non-material remuneration.

Since 1 May 2019 the Company employees' salaries/tariff rates have increased on average by 6% based on the performance results. The labour compensation system has changed since 1 December 2019 with the fixed salary increase by 8.3% and variable part decrease to normalize the salary level to the reference market level median.

KEGOC's labour compensation system

Material remuneration			Non-material remuneration
Basic part	**Variable part**	**Social support to employees**	
(wages, premiums and increments)	(performance bonuses, one-time bonuses, remuneration of executive and administrative personnel)		

The Company provides equal remuneration for men and women, and a single approach in calculating labour payments for men and women in KEGOC's branches located in every region of the country. KEGOC employees' salaries in 2019 exceeded the minimum wage established in Kazakhstan.

Ratio of entry level standard wage of KEGOC's employees to the minimum wage established in Kazakhstan for 2019.

Minimum wage in the Republic of Kazakhstan in 2019, KZT	Minimum wage in KEGOC group of companies* in 2019, KZT	Deviation,%
42,500*	60,400**	142.1%

** The minimum wage established since 1 January 2019 according to Kazakhstan Law on National Budget for 2019-2021 No. 197-VI dated 30 November 2018.*

*** The minimum wage implies a salary of EnergoInform subsidiary's desk man.*

202-1

Social Protection of Employees

KEGOC creates favourable conditions for effective work, loyalty raising and provides social support to the Company's employees, which includes the following: the recreation payment when granting the paid annual leave, on the anniversary dates and the birth of child, on the death of an employee or an employee's family members and pensioner registered with KEGOC, for the medical treatment of an employee and children — disabled, disabled from childhood irrespective of the group of physical inability and age. Employees of retirement age are compensated upon their retirement, and one-time material assistance is provided annually on the professional holiday 'Power Engineers' Day' to the pensioners registered with the Company.

The Company's social support activity with regard to its employees is regulated by the following internal documents:

- Collective Bargaining Agreement;
- KEGOC's HR Policy for 2018-2028;
- Rules for provision of social support for employees;
- Rules for reward and recognition of merits of employees.

In 2019, the Company assisted in accommodation issues for 147 employees through partial repayment of rent costs to the total amount of KZT 128.3 million at the expense of KEGOC. Ten employees became applicants for the acquisition of residential premises with subsequent repurchase on the terms of Samruk-Kazyna Construction JSC in Aktobe and Almaty. As of today the contracts for the acquisition of residential premises with subsequent repurchase are executed between the Company employees and Samruk-Kazyna Construction JSC.

Based on the work results in 2019, 140 employees of KEGOC were rewarded with state and industry awards for special merits.

In the reporting year, the medical insurance in case of illness covered 3,384 employees of KEGOC and its subsidiaries, the services amount totalled to KZT 172.7 million.

KEGOC systematically develops the talent pool project. The pool includes 196 people. In 2019, the number of vacancies with regard to the talent pool was 204, 10 of which were the employees from the talent pool. In November 2019, the members of KEGOC Board of Directors and Management Board held an annual meeting with prospective employees on Knowledge Management.

One of the key indicators of HR policy conducted by KEGOC is the Personnel Engagement Index, which is calculated following the results of employees questionnaire survey and on-line questionnaire for administrative and managerial staff in accordance with the Methodology for Assessment of Personnel Engagement, approved by the Human Resource Committee of Samruk-Kazyna and the social stability rating determined among operational staff in accordance with the Methodology for Assessment of Social Stability approved by the Human Resource Committee of Samruk-Kazyna. In 2019, the Personnel Engagement Index was 74%, and the Social Stability Index was 90%.

HR Development

KEGOC attaches great importance to the process of training and development of personnel and is guided by the following principles:

- effectiveness of training and focus on performance and addressing specific tasks that increase the efficiency of the Company;
- forward-looking nature of training and development — supporting the Company's strategic development goals;
- expediency — the choice of training programs corresponds to the goals and objectives set for the employees;
- integrity of the development system, continuity and systematic training.

The following main types of personnel training are used at KEGOC to ensure continuity in the process:

- self-education;
- in-service training;
- short-time off-job training at the advanced training courses of the specialized training centres.

The staff training was conducted using the full range of modern teaching methods: business workshops, seminars, trainings, internships, advanced training, vocational training and retraining programs, forums and conferences.

In the reporting year, 2,560 employees were trained, which is 46% of the headcount. Average training hours for one employee was 25.2 hours, including AMP — 18.9 hours, and OP — 26.3 hours per year. Average training hours for one male employee — 25.9, one female employee — 21.3 hours. The total training hours came to 108,133: 93,877 hours for male employees, 14,256 hours for female employees; 12,275 hours for AMP, 95,858 hours for OP.

404-1

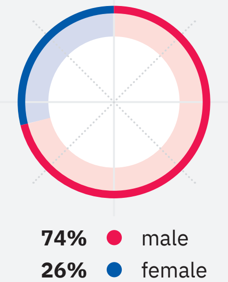
KEGOC's actual training costs in 2019 amounted to KZT 256.97 million, or 68.7% of the plan, which is 22.1% less than in 2018.

Staff Assessment

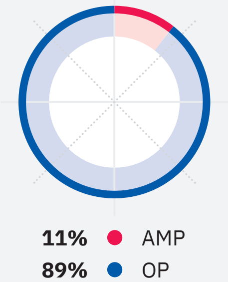
Based on the personnel qualification and business qualities testing on compliance with the requirements set by the Company in 2019, 711 branches employees, or 14.7% of the Company's staff listing, passed the qualification tests. The qualification tests results showed that 100% of the personnel met the established qualification requirements.

404-3

Gender structure of the certified



Structure of the certified by categories



Moreover, the year of 2019 introduced the branches performance assessment system (the Executive Administration employees have been assessed since 2017). The number of KEGOC employees who passed the overall Company's employees 2018 performance testing in 2019 made 2,038, or 42.3% of the Company's staff including 1,336 men (65.6%) and 702 women (34.4%); 495 AMP employees (24.3%) and 1,543 OP employees (75.7%).

404-3

Collective Bargaining Agreement

PRINCIPLE 1

UN GLOBAL COMPACT

PRINCIPLE 2

UN GLOBAL COMPACT

KEGOC supports freedom of association and recognizes the right of employees to conclude collective bargaining agreements.

The Collective Bargaining Agreement provides for the agreement joining procedures, issues of regulating labour order including social leaves, labour payment, ensuring personnel safety and occupational health, granting social guarantees and compensations; it specifies measures on support of employees and development of human resources, health insurance and entertainment and leisure events for the employees. Also it reflects the issues of social support for the veterans of the Great Patriotic War and equated persons and long-service power engineers registered in the Company.

403-4

The Collective Bargaining Agreement covers all employees of KEGOC (100%), regardless of the type of employment. According to the conditions of the Collective Bargaining Agreement the employer shall notify an employee in writing of the changes in employment conditions no later than fifteen days in advance. The minimum period for notifying an employee of the employment contract termination as a result of reduction in the number of employees or staff size is envisaged by the Collective Bargaining Agreement of the Company and is one month in accordance with the Labour Code of the Republic of Kazakhstan.

102-41 402-1

In 2003, the decision of founders meeting established the Trade Union of Kazakhstan Energy Industry Employees including KEGOC's employees. In 2015, it was registered according to the Trade Union Law of the Republic of Kazakhstan as Sectoral Trade Union of Energy Industry Employees public association and is a member of Kazakhstan Labour Confederation National Trade Unions Association.

The Sectoral Trade Union of Energy Industry Employees public association includes the following members:

- Energetiki Zhetysu local trade union (2,000 members),
- KOREM employees local trade union (28 members).

The Trade Union is arranged based on the sector operating principle and open for the Company's employees as well as all enterprises of power industry, research and design institutes, pensioners and even contractors. Currently, the trade union includes more than 7,000 people. The trade union is a member of Kazakhstan Labour Confederation National Trade Unions Association. Our trade union is a member of the working group under the Ministry of Labour and Social Protection of the Republic of Kazakhstan to make amendments and addenda to the Labour Code and Trade Union Law of the Republic of Kazakhstan. It is also included in the Contact Centre under the

Ministry of National Economy of the Republic of Kazakhstan.

The main functions of the sectoral trade union are as follows:

- to represent and protect labour and social rights and interests of its members and member organizations;
- to assist in the social partnership system development at the sectoral level;
- to act as social partnership party when concluding the sectoral agreement and collective bargaining agreement.

The Trade Union also influences the labour payment conditions, bonus payments to employees and discipline including disciplinary penalties. The Trade Union is intended to control the compliance with labour legislation, maintenance and implementation of guarantees and compensations, allowances, etc.

In 2019, the trade union took an active part in the work of Kazakhstan's Power Industry Social Partnership and Social and Labour Relations Regulation Commission.

In 2019, it worked on arranging recreation activities for trade unions members and their families: more than 700 people vacationed at the EnergoInform Training Centre, near Bukhtarma water reservoir and Bayan-Aul. The trade union members received treatment in Kazakhstan health centres.

The trade union pays much attention to the Company's sporting activities, thus more than 130 people participated in Samruk-Kazyna's Sports Festival.

The trade union members participated in the work of the Industrial Occupational Health and Safety Council at KEGOC, regularly visited the Company's branches allowing identification and consideration of a number of problems followed by decision-making on their elimination. The trade union granted funds for these purposes.

Occupational Safety

The Company's absolute priority is to ensure occupational health and safety. Safe labour conditions, low-level of operational injuries, improved operational and sanitary-household and labour conditions of the employees, as well as low-level impact of harmful and adverse factors are the constant development priorities of the Company.

KEGOC uses best safety management and sustainable development practices to improve the safety culture and permanently elaborates and timely amends internal regulatory documents to prevent occupational injuries as part of Programme for Improvement of OHS Management System.

KEGOC performs the Occupational Health and Safety Management System (OHSMS) complying with the requirements of ISO 45001:2018. The OHSMS is aimed at ensuring occupational health effectiveness and performance in accordance with KEGOC's policy along with relevant risk management.

The platform for a dialogue between the employees and the employer at KEGOC is the Industrial Occupational Health and Safety Council that makes decisions on quarterly meetings held.

The annual plan of certification of workplaces and completed measures to bring working conditions at each work place in accordance with the requirements of the rules and regulations on labour protection was completed in 2019. At the facilities of MES branches, KEGOC measured electromagnetic field, audible noise and vibration, identified harmful and unfavourable factors of the operating environment affecting the health of employees at working places, developed

and implemented action plans to improve the safety conditions and set relevant benefits.

To monitor the health of employees, KEGOC carries out regular medical examinations and pre-shift medical inspections.

The personnel is provided with necessary personal and collective protective facilities.

In accordance with the laws of the Republic of Kazakhstan, KEGOC provided its employees with compulsory occupational injury insurance.

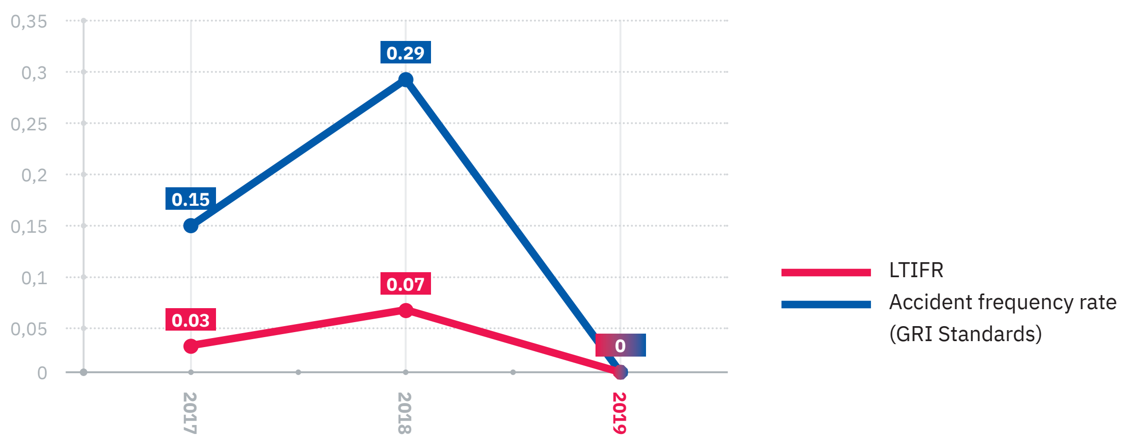
KEGOC takes all necessary actions established by Kazakhstan laws to minimize risks and ensure safe conditions for the Company's employees.

KEGOC uses the Lost Time Injury Frequency Rate (LTIFR) to assess the safe working conditions. The LTIFR is the world's main indicator of companies' occupational safety and health performance. This indicator refers to the number of lost-time injuries (LTI) relative to the total number of hours worked for the Company (Work Hours, WH) for 1 million man-hours. The joint actions on commitment to the occupational safety principles from ordinary employees to top managers of the Company and measures to improve safety conditions made it possible for the Company, for the first time in the last few years, to achieve a 'zero' level of injury to workers; and the LTIFR for 2019 made '0' (0.29 in 2018).

403-2

No fatalities or work-related accidents were registered in the Company in 2019. No occupational diseases were detected at the Company.

Occupational Safety Performance



Work with Contracting Organizations

While works at KEGOC's facilities are being performed by contracting organizations, the Company is responsible for ensuring safety of their workers. KEGOC's contracts with contracting organizations include obligations on full compliance with the requirements of Kazakhstan laws and KEGOC's internal documents on occupational health and safety when performing works and rendering services.

Kick-off meetings are held with contracting organizations prior to the start of works. Work permit is carried out at the work place. Before being admitted to the workplace all employees of contracting organizations are provided with briefings. Particularly, the work supervisors are provided with the briefing on electrical installations circuits. Employees who have daily admittance are provided with a target safety training, which specifies security measures, hazardous and harmful occupational factors existing on the Company's site.

Order for the works in existing electric facilities is issued for the delegated employees and the construction and installation organisations employees in accordance with the requirements of regulatory legal acts. Construction and erection works are performed in specially reserved areas and in cases when there is or may happen an occupational hazard, work permit shall be issued to perform dangerous works.

The following technical events are performed while preparing the work place: necessary outages are made, prohibitory posters are set up, voltage loss at live parts which are to be grounded is checked, grounding is installed, live parts are fenced and safety posters are set up on the protective fences. During a shift the SS operational personnel carries out routine checks and inspection of work places of the delegated personnel and construction and installation organisations personnel.

During works performance and services rendering at facilities, KEGOC carries out internal inspection on compliance of contracting organizations' personnel with the requirements of regulatory legal acts of the Republic of Kazakhstan and internal documents of KEGOC and assesses the contracting organizations' occupational health and safety performance.

EU18

Emergencies and Disasters Response Action Plan

The Company has introduced the business continuity management system (BCM) that defines business processes/subprocesses requiring the BCM plans.

The BCM plans are represented by Accident Response Plan (ARP) for operational business processes, Emergency Action Plans (EAP) typical for the Executive Administration and its branches for large-scale emergencies and BCM plans for each critical business process for other activity areas.

The ARP is the organizational reference document establishing the object, scope and sequence of actions performance in case of emergency and responsibility for the actions to be enabled and delivered. The ARP is tested as regular emergency and fire fighting trainings.

The EAP reflects actions to be taken at the threat of and on elimination of the consequences of an emergency specifying the periods and duration of works to be done. The most common emergency at the Company's facilities may be a fire caused by failure to keep up to fire-fighting measures. The EAP also includes actions to be taken at the threat of terrorist acts causing the death of people, significant property damage or other severe consequences. The Company puts into action communication plan, fire warning and extinguishing plan being a part of the EAP for the employees to be timely notified in case of emergency and for the emergency to be eliminated.

The Company takes part in annual national command-staff exercises, delivers facility-based exercises and earthquake exercises on site (South, East, West) to check the readiness for possible emergency responses. These exercises verify the completeness of plans, coherence of civil defence divisions, action of forces and resources during emergency recovery works at Territorial Electric Networks.

Company's Civil Defence and Emergency Actions in 2019

Description of the Action	Actually delivered
National command-staff exercises	2
Staff exercise	12
Facility-based exercises	4
Special tactical exercises with civil defence divisions	1
Earthquake exercises	15
National and oblast emergencies and civil defence training course	14

In 2019, KEGOC fulfilled a number of actions to improve the quality of fire safety. Particularly, for the purpose to detect and timely eliminate the violations of the Fire Safety Rules (FSR), pursuant to the requirements of Clause 336 of the Technical Regulations ‘General Requirements for Fire Safety’, the heads of branches ordered to set up fire-technical committees and voluntary fire-fighting divisions and appointed people responsible for fire safety.

Based on the work schedule, the structural divisions personnel at the branches completed the following actions:

- automated fire extinguishing installations were tested;
- automatic fire alarm system installations were tested;
- fire fighting trainings were held;
- fire fighting briefings were delivered;
- employees were trained on basic skills of fire safety in the amount of 14 hours.

All operational and auxiliary buildings and offices of the branch keep the fire prevention regime to ensure normal and safe working conditions for personnel in accordance with the FSR requirements and Instructions on Fire Safety at KEGOC’s facilities.

Each facility ensures that people are safe in case of fire, and instructions on fire safety are developed for each explosive-flammable and fire-hazardous section.

All substations developed and approved the operational cards of personnel actions during fire fighting.

The work of preventive groups that monitor the fire safety at substations and the prevention of fires is carried out according to the approved plans.

Fire protection systems and installations, fire water supply systems and other protective devices of premises, buildings and structures are constantly kept in good condition and checked.

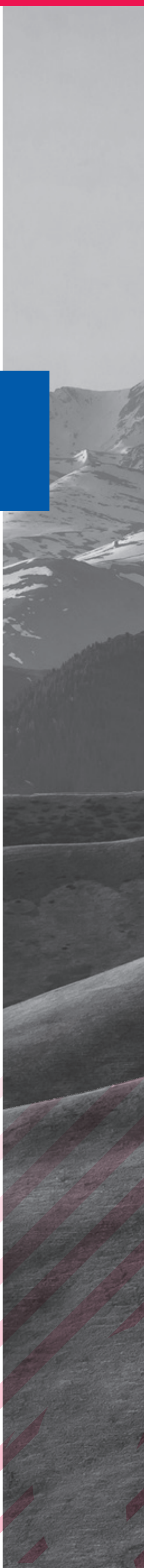
HSE Policy Development

On 25 December 2019, KEGOC's Executive Administration office held the VI meeting of the Committee on Health, Safety and Environmental Protection of Samruk-Kazyna participated by the CEOs of KazMunayGaz, KTZh, Kazakhtelecom, Samruk-Energy, Kazpost, KazAtomProm, and other portfolio companies.

The main goal of the above Committee is to improve the management system on health, safety and environmental protection in the portfolio companies of the Fund so that the system would reach the level of international industry standards through the introduction of international best industry practices, as well as the exchange of experience and approaches.

The meeting discussed the issues related to the formation of the Fund's HSE policy and strategy. It set the tasks on HSE leadership and culture improvement and made a number of decisions on key issues. In addition, the important issue was the adoption of a management performance evaluation system.

On 27 April 2019, KEGOC held the first ever KEGOC ENBEK RUN-2019 marathon among the Company's employees. The sporting event was dedicated to the World Day for Safety and Health at Work, which is annually celebrated on 28 April. All the Company's employees who wanted to take part in the marathon, could try themselves in 5 and 10 kilometres distance.



Environmental Protection

PRINCIPLE 7

UN GLOBAL COMPACT

PRINCIPLE 8

UN GLOBAL COMPACT

Environmental Policy

KEGOC considers environmental activities as an integral part of its day-to-day operations. Environmental responsibility is a key principle of KEGOC Environmental Policy.

The goals of KEGOC Environmental Policy are to minimize adverse environmental impact, increase the level of environmental safety, take responsibility for environmental security of Kazakhstan National Grid development, promote energy saving and rational use of environmental and energy resources in the Company's activities. KEGOC management takes the responsibility for implementation of obligations taken in accordance with Environmental Policy on continuous improvement and pollution prevention, as well as obligation to meet applicable legislative and other requirements related to KEGOC in terms of its environmental aspects. All employees of the Company as well as employees of contractors working for the Company review KEGOC's Environmental Policy.

The Company implemented the environmental management system (EMS), which is certified for compliance with the requirements of international standard ISO 14001. The EMS is a part of KEGOC's integrated management system. The main objective of its implementation and operation is to apply new management methods that would enhance the influence on the environmental aspects of the Company's operational and economic activities. The environmental aspects management is a component of KEGOC's corporate risk management system.

KEGOC's registers of environmental aspects for 2019 were developed for effective management. When identifying the aspects, all components of the environmental impact of the Company's activities are analysed (energy saving, water, soil, emissions, waste). Activities to manage environmental aspects are specified in the Company's Environmental Program for 2019. 'Potential poly-chlorinated biphenyls (PCB) containing waste', 'transformer oil' and 'waste transformer oil' were identified as critical environmental aspects in 2019. The 'potential PCB-containing waste' aspect is critical due to the fact that the polychlorinated biphenyl is a dangerous substance according to the Environmental Code of the Republic of Kazakhstan (red hazard level). The 'spent transformer oil' and 'transformer oil' aspects are critical due to the existence of oil-filled equipment.

Financial or non-financial sanctions or fines for non-compliance with environmental laws and regulations were not imposed on KEGOC in 2019.

307-1

No appeals were received by the Company in connection with the environmental impact.

102-44

Ambient Air Protection

According to the standards, the MES branches identified stationary sources of harmful emissions (both organized and unorganized emission sources). In order to monitor emissions from stationary sources, the MES branches conducted in 2019 the operational monitoring (monitoring of the operating process), namely, they kept records of hours of operation for each item of equipment and consumption of materials. The environmental monitoring of operations conducted by qualified organisations determine stationary resource emissions through calculations or laboratory measurements.

In 2019, the volume of gross emissions of contaminants from stationary sources amounted to 9.45 tonnes (the established standard was 13.57 tonnes).

Emissions from Stationary Sources in 2019

Name of KEGOC's MES branch	Emissions from stationary sources t/y	
	standard	actual
Akmolinskiye MES	0.93	0.72
Aktyubinskiye MES	1.14	0.12
Almatinskiye MES	0.73	0.72
Vostochnye MES	1.42	1.42
Zapadnye MES	0.94	0.35
Sarbaiskiye MES	0.68	0.68
Severnye MES	1.23	0.16
Tsentralnye MES	5.18	5.18
Yuzhnye MES	1.32	0.10
Total	**13.57**	**9.45**

Thus, gross emissions from stationary sources (with regard to standard rate) dropped by 30%. The fact of the reduced emissions in Akmolinskiye MES, Aktyubinskiye MES, Almatinskiye MES, Zapadnye MES, Severnye MES and Yuzhnye MES branches was supported by the findings of the environmental monitoring that was conducted by the specialized organisations.

According to the UN Framework Convention on Climate Change, Kyoto Protocol, Paris Agreement and environmental laws of the Republic of Kazakhstan, the MES branches made an inventory of greenhouse gases emitted as a result of the Company operations in 2019. Greenhouse gas emissions from stationary sources and mobile sources equated to stationary sources were calculated. The 2019 reports on inventory of greenhouse gases were sent to and registered at the territorial environment departments.

102-12

In accordance with the Resolution of the Government of the Republic of Kazakhstan

'On approval of the list of greenhouse gases subject to state regulation', the list includes carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and perfluorocarbons (PCFs). Following the results of inventory of greenhouse gases emitted by stationary sources, emissions amount to 137.91 tonne carbon dioxide equivalent a year, in this connection KEGOC does not fall within the requirements for greenhouse gas cap-and-trade according to the National Plan for Greenhouse Gas Quota Allocation for 2018-2020.

KEGOC's Greenhouse Gas Emissions from Stationary Sources in 2019

CO_2, tonne	CH_4, tonne carbon dioxide equivalent	N_2O, tonne carbon dioxide equivalent	Total emissions in the tonne carbon dioxide equivalent
137.86	0.00175	0.05161	**137.91**

According to the Code of the Republic of Kazakhstan on Taxes and Other Mandatory Payments to the Budget the emissions from mobile sources shall not be measured, reports specify the amount of the used fuel. The vehicles were tested for toxicity and opacity of exhaust gas.

The Company does not emit any ozone-depleting substances influencing the climate change.

EU5

Waste Management

The waste products are generated during operation, repair and rehabilitation of the substation equipment. Waste management in KEGOC is guided by the Environmental Code of the Republic of Kazakhstan and corporate standard ‘Waste management in KEGOC’.

At KEGOC, all wastes are divided according to:

1) the type: operational and municipal wastes (solid domestic wastes) generated in the course of life activity;

2) the hazard level (according to the Environmental Code of the Republic of Kazakhstan):
- ‘green’ – G index (non-hazardous);
- ‘amber’– A index (hazardous);
- ‘red’ – R index (hazardous).

The list of waste and their hazard level is updated as required.

The MES branches annually develop or amend the waste datasheets for each type of waste containing the description of waste production processes by their origin, quantitative and qualitative indicators, handling rules, monitoring techniques, environmental impact, waste producers information.

For safe handling of industrial and consumer wastes, the MES branches defined the areas for temporary safe and separate waste storage, prepared schematic maps of waste disposal on the territory of facilities with the explication and ensure timely removal for the subsequent disposal.

Waste Volume in KEGOC Divisions

Indicator, tonnes	2019
‘green’ – G index	2,538.3
‘amber’ – A index	218.7
‘red’ – R index	–
Total	**2,757.0**

The work on detection of PCBs in the equipment at KEGOC substations continued in 2019; this work was performed in accordance with the Law of the Republic of Kazakhstan on Ratification of the Stockholm Convention on Persistent Organic Pollutants and Rules for Handling of Persistent Organic Pollutants and Wastes Containing such Pollutants (approved by order of Kazakhstan Minister for Environment Protection). The MES Branches updated the PCBs containing equipment registers; the registers were submitted to the territorial environmental authorities within the established deadlines.

In 2019, the planned and conducted laboratory analyses for the presence of PCBs in the oil-filled equipment of Akmolinskiye MES, Aktyubinskiye MES, Almatinskiye MES, Vostochnye MES and Severnye MES branches detected no PCB.

Water Impact

The Company does not use water in its operational process. Water consumption by the Company is insignificant, so this has no material influence on used water sources. Water is consumed and discharged in accordance with contracts concluded by the MES branches with specialized organisations. There are no discharges into water facilities or relief. Water is supplied from artesian wells at the seven KEGOC branches; the wells are used according to obtained permissions. The specialised organisations are contracted to permanently monitor the ground water intake facilities in accordance with the Water Code of Kazakhstan.

Potential sources contaminating water and soil at the Company's facilities include transformer oil used in oil-filled equipment, as well as waste waters resulting from domestic use of water. Environmental friendliness is one of high-priority criteria for KEGOC to select an equipment. The Company smoothly replaces oil circuit breakers with SF6 and vacuum circuit breakers to reduce the volume of transformer oil used at the MES branches substations. The oil free equipment increases reliability, cycles to failure, life duration, fire safety, and excludes pollution of ground water and soil. The oil-filled equipment has oil receiving devices or oil soak pits that prevent oil from spilling on the soil. The containment of oil receiving devices are checked on regular basis.

Environmental Actions during Investment Projects Implementation

The Company addresses the environmental issues in a comprehensive way when implementing projects, including investment projects. PESTEL analysis is used to analyse the risks of project implementation, including analysis of social and environmental risks. The results of the conducted environmental impact assessment are taken into account, and the option that does the least harm to the environment and human health is adopted. Identification and assessment of project risks are carried out on a regular basis and at all stages of project implementation. The impact on atmospheric air, surface and groundwater, landscapes, land resources and soil cover, biodiversity and more is estimated.

In order to manage the environmental risks, the design provides that the grid facilities must be arranged in the territories well removed from populated areas and designated conservation areas. OHTL routes mainly pass along steppes and semideserts. Should the OHTL cross forest-steppe zone, environmental impact assessment (EIA) is prepared to clean glades for the OHTL and take mitigation measures. For the purpose of transparency and availability of the environmental information on the Company's activities, the public hearings of draft EIAs are held.

102-11

Energy Efficiency

7 AFFORDABLE AND CLEAN ENERGY

PRINCIPLE 9 UN GLOBAL COMPACT

The main objectives of energy saving and efficiency improvement at KEGOC is to reduce the consumption of energy resources through reduction of auxiliary energy consumption by KEGOC facilities, reduction of technical electricity loss while transmitting via the national power grid, improvement of the methods used for monitoring of energy consumption, and provision of the Company's facilities with electricity meters and other devices for metering of fuel and power resources, organisation of the information acquisition processes based on the metering devices.

The Company has developed an Action Plan for Energy Conservation and Energy Efficiency for 2019–2020, as a result of which the planned reduction in the consumption of energy resources is expected to be 4,351 tonnes of fuel equivalent, and KZT 215.1 million in financial terms.

The power consumption by the Company comprises two components: the technological power consumption (process losses) for transmission which represents the largest share of the Company's power consumption; and the auxiliary consumption.

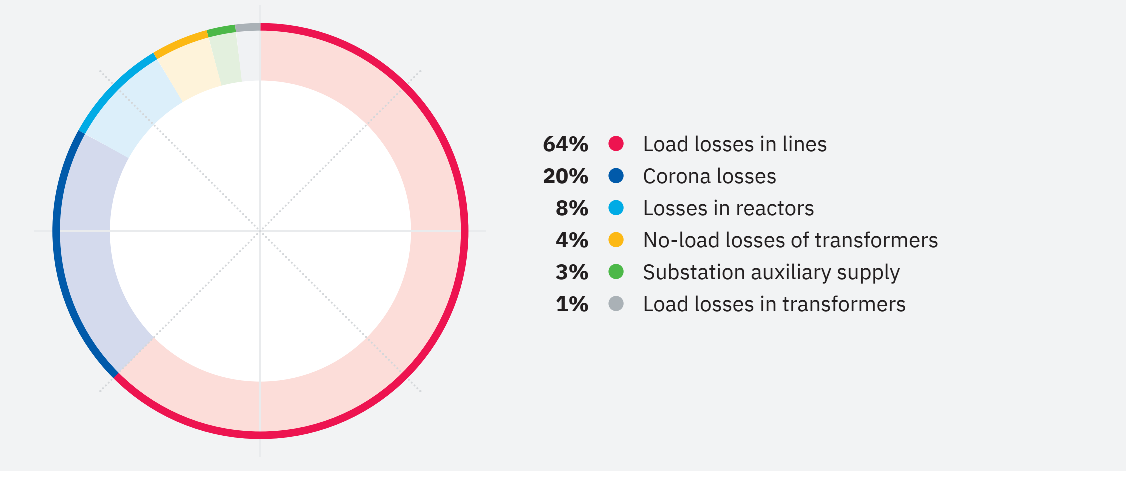
Technical Electricity Transmission Losses in the National Power Grid

The electrical power system of Kazakhstan is defined by large concentration of powerful energy sources in the North and long length transit lines (about 1,000 km) (main transits include Kazakhstan North — South transit and Pavlodar oblast — Aktobe oblast transit): this is due to the vast territory of Kazakhstan and materially affects the level of technical losses. Also technical losses in KEGOC grid depend on the operation modes of neighbouring states' power systems (electricity transit, export and import) and climatic conditions.

The technical losses in KEGOC networks in 2019 amounted to 2.869 billion kWh or 6.4% of electricity supply to the grid.

EU12

KEGOC's technical losses structure for 2019



Reducing Energy Consumption

Consumption of Fuel and Energy Resources in 2019, GJ[1]

302-1

Electricity	**10,502,753**
Heat power	**87,399**
Fuel	**120,470**
including	
motor gasoline	53,935
diesel fuel	62,911
natural gas	3,314
liquefied gas	310
TOTAL	**10,710,622**

[1] When converted to Joul, the international system of units (SI) was used.

The most effective, in terms of reducing the energy consumption, are the measures on reduction of technological consumption of electricity in transmission lines.

It should be understood that technological loss of electric power means the loss of electric power resulting from the physical processes in conductors and electrical equipment which occur during the electricity transmission across transmission lines. Thus, the main goal of planning and taking the measures on reduction of electric power losses is to bring the actual amounts of technological loss to its optimal level.

Due to measures on electricity loss reduction implemented, in 2019 the reduction of electricity consumption amounted to 4.8 million kWh.

Loss Reduction Measures in 2019

302-4

Activity	Outcomes	
	mln. kWh	GJ
Line tripping under low-load conditions	0.390	1,404
Shutdown of power transformers under low load conditions	4.394	15,818
Total for KEGOC	**4.784**	**17,222**

Charity and Sponsorship

The Samruk-Kazyna Trust social project development fund is the sole charity operator of the Fund's group of companies and implements charitable projects and programmes aimed at solving socially significant issues of the country on behalf of the Fund and all portfolio companies.

The most important areas of activity of the Samruk-Kazyna Trust social project development fund are:

1) socially important projects:
- helping people and communities in social and medical sectors;
- development of cultural community, the revival of love for art and native culture;
- strengthening relations between social groups, promoting peace, friendship and harmony among peoples;
- support for projects aimed at developing Kazakhstan's regional initiatives;

2) social reputational projects:
- implementation of projects that promote the country's image on the world arena and contribute to increasing investment attractiveness;
- participation in specialized events and dialogue platforms;
- support for social image projects;

3) social investments in the regions where Samruk-Kazyna's group of companies operates;

4) corporate volunteering.

Moreover, in 2019 the Youth Council of the Almatinskiye MES branch organized a charitable event for the Almaty Regional Orphanage No. 1. The raised funds were used to purchase equipment, building materials for the repair of the classroom and bedrooms, stationery for the school year, individually stocked backpacks, fruits and refreshments for tea drinking. A festive dinner was also served in the McDonalds restaurant. The children received a lot of positive emotions. The staff of the orphanage expressed their gratitude to our employees in warm words and with hand-made gifts crafted by children.

The Great Patriotic War veterans and equated persons, as well as unemployed pensioners registered in KEGOC are provided with the financial support to celebrate the Victory Day and the Power Engineers' Day professional holiday. For this purpose, the financial support was provided to the amount of KZT 62.2 million in 2019.

Contacts

Kazakhstan Electricity Grid Operating Company (KEGOC) joint-stock company

59 Tauyelsizdik Ave.,
Nur-Sultan, Kazakhstan
Tel.: +7 (7172) 69-38-24, 69-02-03
Fax: +7 (7172) 69-04-55
E-mail: kegoc@kegoc.kz
Web: www.kegoc.kz

102-3

Investor Relations Department
Kalila Kokkozova
Tel.: +7 (7172) 69-02-92
E-mail: kokkozova@kegoc.kz

Compliance Officer
Galym Amanbekov
Tel.: +7 (7172) 69-07-70
E-mail: amanbekov@kegoc.kz

Ombudsman
Rishat Rakhimov
Tel.: +7 (7172) 69-05-31
E-mail: rakhimov@kegoc.kz

For enquiries regarding KEGOC's Annual Report

Corporate Development Department
Zhanar Arpabekova
Tel.: +7 (7172) 69-04-34
E-mail: arpabekova@kegoc.kz

AUDITOR

Ernst & Young LLP
77/7 Al-Farabi Av., 050060, Almaty,
Kazakhstan (Yessentai Tower)
Tel.: +7 (727) 258-59-60
Fax: +7 (727) 258-59-61
E-mail: almaty@kz.ey.com

REGISTRAR

United Securities Registrar JSC,
28 Samal-1 microdistrict, Almaty, 050051,
Republic of Kazakhstan
Tel.: +7 (727) 262-08-46, 355-47-60
E-mail: ccmail@kacd.kz, csd@kacd.kz

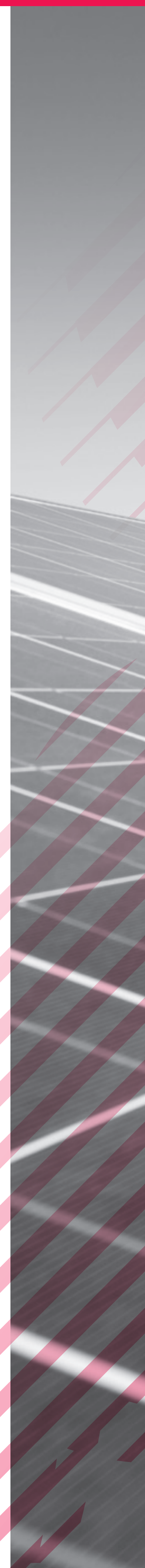
102-53

Glossary

AMP	Administrative and managerial personnel
Branches	KEGOC branches: MES and NDC SO
CIS	Commonwealth of Independent States
Company	KEGOC JSC
EA	Executive Administration
ECR Pool	Kazakhstan Electric Capacity Reserve Pool
EIA	Environmental impact assessment
EMS	Environmental Management System
FOCL	Fiber-optic communication line
FS	Feasibility study
FSC RES	Financial Settlement Centre for Renewable Energy Sources LLP
Fund	Samruk-Kazyna Fund
GRES	State regional power plant
HPP	Hydro power plant
IAS	Internal Audit Service
IFRS	International financial reporting standards
IMS	Integrated Management System
IPS	Integrated power system
IS	Information security
JSC	Joint-stock company
KEGOC JSC	Kazakhstan Electricity Grid Operating Company (KEGOC) joint-stock company
KPI	Key performance indicator(s)
kV	Kilovolt
kWh	Kilowatt-hour
LLP	Limited liability partnership
MES	Interconnection Electric Networks, KEGOC branches
MVA	Megavolt-ampere
MW	Megawatt
NDC SO	National Dispatch Centre of the System Operator, KEGOC branch
NPG	National Power Grid

OHS	Occupational health and safety
OHTL	Overhead transmission line
OP	Operational personnel
PCB	Polychlorinated biphenyl
R&D	Research and development
RDC	Regional Dispatch Centre
REC	Regional electric network company
RES	Renewable energy sources
RMS	Risk Management System
Samruk-Kazyna JSC	Sovereign Wealth Fund Samruk-Kazyna joint-stock company
SS	Substation
UN	United Nations Organization
UPS	Unified Power System
VAT	Value-added tax

Appendices



Appendix 1. About the Report

This KEGOC Annual Report for 2019 is a comprehensive review of the Company's activities in all key areas including sustainability development. The information on sustainable development activities is presented in the form and volume in which KEGOC has traditionally presented it for eleven years (since 2009). The company continues the practice of releasing information on sustainable development on an annual basis.

102-52

The previous KEGOC's Sustainability Report 2018 was approved by KEGOC's Board of Directors and published in June 2019. All the Company's reports are available on KEGOC's official website.

102-51

Since 2011, KEGOC has annually engaged an independent external party to confirm the compliance of the reports information with the GRI Standards. However, in view of the Company's attempt to combine for the first time the Annual Report and the Sustainability Report into a single report, which is experimental for the Company, it does not involve an independent party to audit this Report for 2019. In the future, KEGOC, as far as possible, will continue the practice of independent certification of sustainability reports.

102-56

The report boundaries in terms of sustainability have not changed compared to the previous report: KEGOC has prepared this Report at the corporate level: the data in this Report include the data of KEGOC's subsidiaries, i.e. EnergoInform JSC and the Financial Settlement Centre for Renewable Energy Sources Support LLP.

102-45 102-49

The sustainability information included in this Report has been prepared in accordance with the GRI Standards ('Core Option') and describes the relevant activities of the Company from 1 January to 31 December 2019.

Sustainable Development Goals (SDGs)

This Report contains information confirming KEGOC's commitment to the principles of the UN Global Compact, as well as information on the work on the sustainable development goals adopted by all UN member states in 2015 as part of the 2030 Agenda for Sustainable Development.

102-12 102-54 102-50

We believe that the main contribution of any business to the achievement of the SDGs lies in employment opportunities, taxes and socio-economic development, as well as in respect for the environment. In addition, real and long-term positive changes can be achieved only by taking into account the management of our environmental impact (in a broad sense), focused response, cooperation with key players and stakeholders and the expansion of our efforts.

Each year we will report on work on specific SDGs that have the strongest links to our work. In addition, we analyse areas where we have the greatest potential to make a difference. We look at where negative impact can be, and also look for directions where we have unique opportunities for making positive changes together with interested parties. The evaluation analyses factors such as the relevance of goals and objectives for our value chain, compliance with our aspirations to develop responsibly and sustainably, our ability to use our skills, competencies and resources to stimulate change, and the importance of issues for our stakeholders.

The key highlighted SDGs for this year on which work has been carried out are shown below.

Section: HR Development
page 126

Section: Energy Efficiency
page 146

Section: Human Resources
page 116

Section: Operating Activity
pages 46, 50

Compliance with the principles of the UN Global Compact

Principles of the Global Compact	page
Human Rights Principles	
Principle 1. Businesses should support and respect the protection of internationally proclaimed human rights.	128
Principle 2. Businesses should make sure that they are not complicit in human rights abuses.	128
Labour Principles	
Principle 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	121
Principle 4. Businesses should uphold the elimination of all forms of forced and compulsory labour.	116
Principle 5. Businesses should uphold the effective abolition of child labour.	118
Principle 6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.	116
Environment Principles	
Principle 7. Businesses should support a precautionary approach to environmental challenges.	138
Principle 8. Businesses should undertake initiatives to promote greater environmental responsibility.	138
Principle 9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	146
Anti-Corruption Principles	
Principle 10. Businesses should work against corruption in all its forms, including extortion and bribery.	99

Principles of Report Preparation

In preparing the part of the Annual Report related to reporting on sustainable development activities, the Company applies the following principles:

Materiality	KEGOC covers the Company's significant impacts on the economy, environment and society. KEGOC analysed the materiality to identify most relevant sustainability-related topics to be disclosed, including questioning the external and internal stakeholders: consumers, employees and shareholders of KEGOC.
Stakeholder Relations	The Company receives a feedback upon the sustainability reports publication through different channels including publications and messages by emails and telephones given in the Contact Information. The gathered comments and recommendations are taken into account in preparing the regular report.
Sustainability context	The data in the Report are given in the context of sustainable development defined by KEGOC's Corporate Governance Code including three pillars, namely: economic, environmental and social. KEGOC's development strategy defines the sustainability goals, objectives, main initiatives and strategic KPIs, the information on their achievement in 2019 is included in this Report.
Completeness	This Report includes information on operations of all KEGOC's intersystem electric networks branches (MES branches), the National Dispatch Centre of the System Operator branch (NDC SO), the Executive Administration, and subsidiaries with regard to all significant sector-specific impacts on the economy, environment and society. In some cases, in order to avoid duplication of information, links to KEGOC's website or publicly available documents are provided.
Balance	This Report reflects the positive and negative of KEGOC's performance. This Report discloses the dynamics of some indicators for the last three years.
Comparability	This Report was prepared in accordance with GRI Standards allowing the stakeholders to compare KEGOC's activities with the other organizations.
Accuracy and reliability	This Report's information is collected based on documented data, and the Report sections relating to economy were prepared based on audited financial statements drafted in accordance with the IFRS.
Timeliness	This Report is prepared on a scheduled basis, published in the second quarter of the year following the reported year.
Clarity	KEGOC seeks to make this Report understandable and accessible to a wide range of stakeholders.

Stakeholder Engagement and Materiality Assessment

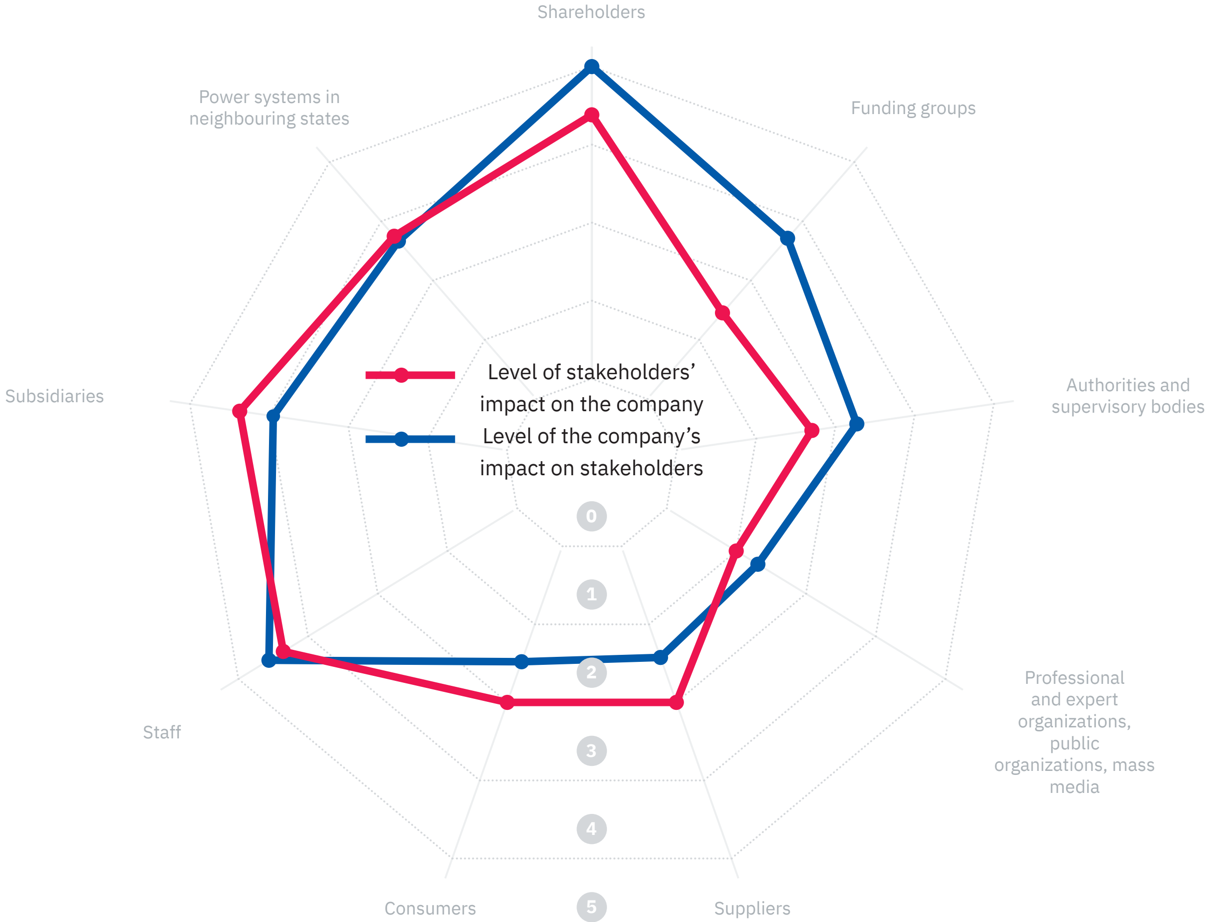
To achieve the Company's strategic goals, it is important to:

- have an effectively functioning policy of interaction with stakeholders,
- achieve openness and mutually beneficial cooperation with all interested parties,
- achieve an understanding by stakeholders of the measures taken by the Company to minimize and eliminate all real risks in the implementation of the Development Strategy,
- create for interested parties a reliable source of information about the activities of the Company and ensure prompt delivery of reliable information about KEGOC's activities to target groups of stakeholders.

KEGOC determined the groups of stakeholders identified jointly with all structural divisions of the Company, as well as the degree of their influence on the achievement of the Development Strategy goals and the exposure to the impact of the Company's activities on them on a five-point scale. At the same time, when summarizing the analysis, special attention was paid to the opinions of 'experts' that is structural units that directly interact with specific groups of stakeholders.

KEGOC is engaged in continuous open dialogue with them and regularly discloses information relating to KEGOC, including sustainability. The Company approved a Stakeholders Map, a Communication Strategy that defines the main channels of interaction, as well as a Communication Plan with all interested parties, which is developed annually in support of the Development Strategy implementation.

Stakeholders map



Stakeholder Relations

102-40 102-42 102-43

Stakeholders	Principles of engagement	Engagement channels
1. Shareholders	The Company's activity on interaction with shareholders is aimed to protect and respect the rights and legitimate interests of shareholders envisaged by KEGOC Corporate Governance Code and Charter.	Publication of the annual and interim reports of the Company, information on corporate events, transactions, information on holding general meetings of shareholders, meetings with the investment community, answers to requests. From 1 January to 31 December 2019, there were no claims from the shareholders in relation to activities of KEGOC and its officers. 102-44
2. Funding groups	The Company timely and fully fulfils its financial liabilities to investors and seeks for long-term cooperation based on mutual trust.	Publication of annual and interim reports of the Company, submission of periodic reports to international financial institutions (IFI) and information on requests, meetings, missions and visits of the IFI delegations under the projects implemented through loan proceeds, and placing information on web-site.
3. Authorities and supervisory bodies	Being a strategic company in the Republic of Kazakhstan and a natural monopoly, KEGOC realizes its responsibility to the state and seeks to fulfil legal and ethical obligations, as well as observe the laws.	Regular reporting, participation in the development of legal acts, programme and sector documents, working meetings, replies to requests, operational meetings.
4. Professional and expert organizations, public organizations, mass media	KEGOC is a member and participant of international, regional and national sectoral organizations, and focuses on integration deepening mechanisms and coordinated power sector development strategy in the Republic of Kazakhstan and beyond. The Company furnishes creation of goodwill and positive image in mass media through engagement and disclosure of information based on urgency, accuracy, accessibility and harmony principles.	Active participation in energy organizations activity; elaboration of programme and sectoral documents and initiatives, public hearings on investment projects; disclosure of information on the activity on website and in mass media, replies to requests, conducting briefings and press conferences.
5. Suppliers	During procurement of goods, works and services the Company relies on the following principles: publicity and transparency of procurement process; purchase of qualitative goods, works and services; granting to all potential suppliers equal opportunities provided that disabled people organisations are supported; fair competition among potential suppliers; control and responsibility for taken decisions; minimizing participation of mediators in procurement process.	Fulfilment of contractual obligations, preliminary discussion of draft tender documentation with potential suppliers, informing of procurement activities.

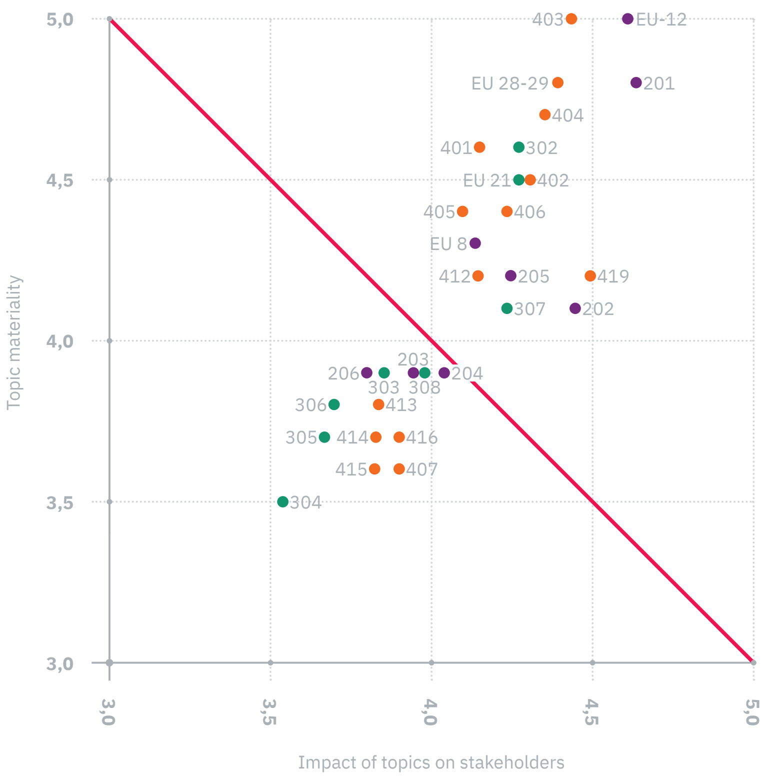
Stakeholders	Principles of engagement	Engagement channels
6. Consumers	The Company has implemented and adheres to the consumer-oriented principle, has established and secures the mechanism for defining and meeting the consumer requirements.	Regular assessment of customer satisfaction, public hearings, annual report to consumers, meetings with consumers, publication on website of spare capacities access and availability in operations areas.
7. Staff	The Company respects and appreciates its employees; it is oriented at needs of the employees, seeks to provide safe labour conditions, adequate level of labour payment and social allowances, professional training and advancement to its employees.	Reporting meetings of management with the staff at year-end and for future plans, questioning the staff on topical issues, informing and getting feedback through internal portal, annual social stability and personnel engagement research, institute of ombudsman, and hotline.
8. Subsidiaries	The Company seeks to maintain the balanced development of subsidiaries based on efficient corporate governance mechanisms.	The interaction is within corporate procedures. KEGOC governs through the representatives in subsidiary governing bodies and renders methodological support to the subsidiaries activity.
9. Power systems in neighbouring states	The Company strives for mutually profitable and efficient cooperation with the Russian Federation and Central Asian countries to ensure parallel operation of the power systems in the Republic of Kazakhstan and neighbouring countries.	Meetings on a regular basis (Central Asia Coordination Electric Power Council, CIS Electric Power Council, Eurasian Economic Union, etc.), coordination of power systems operation modes and regulatory documentation.

Materiality Analysis

The Company seeks to reflect in the Annual Report the relevant and material information for stakeholders. For the purpose of the Annual Report preparation, KEGOC analysed the materiality of sustainability topics. The material topics considered the fullest list covering sector-specific governance of the Company, economic performance, observance of human rights, and Company's impacts on the society and environment. Moreover, to define most relevant topics to be disclosed in this Annual Report an evaluation survey was conducted based on a five-score scale of external stakeholders: consumers of KEGOC services (48 organizations), internal stakeholders — employees of the Company (165 people), and shareholders (109 people). Based on the results of the questionnaire, 17 topics were identified that were most interesting to KEGOC stakeholders and that influenced them (with a rating above 4.0). These topics were evaluated by the Coordinating Council for Sustainable Development and IMS and identified as material for disclosure in this Annual Report.

102-46

Materiality Matrix



Thus, the list of material topics disclosed in this Report includes:

102-47

Economic themes:
201 Economic Performance
202 Market Presence
205 Anti-corruption
EU8 R & D
EU12 Energy Efficiency

Environmental themes:
302 Energy
307 Social and Economic Compliance

Social themes:
401 Employment
402 Labor Management Relationships
403 Occupational Health and Safety
404 Training and Education
405 Diversity and Equal Opportunity
406 Non-discrimination
412 Human Rights Assessment
EU21 Action plan and response to disasters/ emergencies
419 Compliance with Laws Requirements
EU28-29 Electricity Access

Compared with the topics disclosed in the Sustainability Report 2018, the topics ‘Training and Education’, ‘Diversity and Equal Opportunities’, ‘Human Rights Assessment’ were identified by stakeholders as material, and the topics ‘Anti-competitive Behavior’, ‘Consumer Health and Safety’ ceased to be material for disclosure in the Annual Report for 2019.

102-44 102-49

Appendix 2. Indicators

Human Resources

404-1 404-3

Indicator	Unit of Measure	2017	2018	2019	2019/2018	2019/2018,%
Personnel indicators						
Staff listing	people	4,731	4,797	4,819	22	0.5%
including:						
Male employees	people	3,463 (73.2%)	3,499 (72.9%)	3,502 (72.7%)	3	0.1%
Female employees	people	1,268 (26.8%)	1,298 (27.1%)	1,317 (27.3%)	19	1.5%
Social stability rating	%	88	85	90	5	5.9%
Employee engagement index	%	69	69	74	5	7.2%
Development and training						
Average annual hours for one employee	hours	39.2	37.9	25.2	-12.7	-33.5%
including:						
Male employees	hours	38.8	39.8	25.9	-13.9	-34.9%
Female employees	hours	41.3	41.7	21.3	-20.4	-48.9%
AMP	hours	44.2	48.0	18.9	-29.1	-60.6%
OP	hours	38.3	36.2	26.3	-9.9	-27.3%

Total number of employees by employment contract and gender, people as on 31/12/2019

102-8

Unit	Full-time employees, people			Rotational employees, people			Part-time employees, people			Total
	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Akmolinskiye MES	577	468	109	-	-	-	5	4	1	582
Aktyubinskiye MES	254	204	50	-	-	-	-	-	-	254
Almatinskiye MES	472	389	83	5	5	-	-	-	-	477
Vostochnye MES	295	233	62	-	-	-	2	2	-	297
Zapadnye MES	227	178	49	39	39	-	-	-	-	227
Sarbaiskiye MES	426	349	77	-	-	-	1	1	-	427
Severnye MES	384	283	101	-	-	-	6	5	1	390
Tsentralnye MES	403	322	81	6	6	-	3	3	-	412
Yuzhnye MES	435	361	74	-	-	-	1	1	-	436
NDC SO	90	53	37	-	-	-	2	-	2	92
Executive Administration	384	194	190	-	-	-	2	-	2	386
EnergoInform JSC	786	419	367	6	2	4	10	-	10	802
FSC RES	37	20	17	-	-	-	-	-	-	37
Total	**4,770**	**3,473**	**1,297**	**56**	**52**	**4**	**32**	**16**	**16**	**4,819**

Total number of employees by employment and gender, people as on 31/12/2019

102-8

Subdivision	Regular employees, people			Temporary employees*, people			Total
	Total	Male	Female	Total	Male	Female	
Akmolinskiye MES	546	453	93	36	19	17	582
Aktyubinskiye MES	250	201	49	4	3	1	254
Almatinskiye MES	461	388	73	16	6	10	477
Vostochnye MES	291	232	59	6	3	3	297
Zapadnye MES	221	176	45	6	2	4	227
Sarbaiskiye MES	421	350	71	6	-	6	427
Severnye MES	381	288	93	9	-	9	390
Tsentralnye MES	407	329	78	5	2	3	412
Yuzhnye MES	426	358	68	10	4	6	436
NDC SO	92	53	39	-	-	-	92
Executive Administration	366	191	175	20	3	17	386
EnergoInform JSC	798	421	377	4	-	4	802
FSC RES	37	20	17	-	-	-	37
Total	**4,697**	**3,460**	**1,237**	**122**	**42**	**80**	**4,819**

** Temporary employees are employees hired by the Company for temporarily vacant positions (other than internal movements).*

Total workforce by region and gender, people as on 31/12/2019

102-8

Subdivision	including	
	male	female
Akmolinskiye MES	472	110
Aktyubinskiye MES	204	50
Almatinskiye MES	394	83
Vostochnye MES	235	62
Zapadnye MES	178	49
Sarbaiskiye MES	350	77
Severnye MES	288	102
Tsentralnye MES	331	81
Yuzhnye MES	362	74
NDC SO	53	39
Executive Administration	194	192
EnergoInform JSC	421	381
FSC RES	20	17
Total	**3,502**	**1,317**

Personnel Turnover Structure

401-1

Subdivision	As of 01/01/2019			As of 31/12/2019			Turnover for period: 01/01/2019 — 31/12/2019		
	total	including		total	including		total	including	
		male	female		male	female		male	female
Executive Administration	381	198	183	386	194	192	7.61	20.62	9.38
NDC SO	92	55	37	92	53	39	6.52	9.26	2.63
Akmolinskiye MES	571	468	103	582	472	110	8.32	8.94	5.63
Aktyubinskiye MES	253	204	49	254	204	50	5.51	5.88	4.04
Almatinskiye MES	477	393	84	477	394	83	7.72	7.12	10.78
Vostochnye MES	299	233	66	297	235	62	5.67	6.41	3.13
Zapadnye MES	224	175	49	227	178	49	10.62	11.90	6.12
Sarbaiskiye MES	420	345	75	427	350	77	4.25	4.60	2.63
Severnye MES	388	290	98	390	288	102	6.39	6.92	5.00
Tsentralnye MES	421	333	88	412	331	81	4.29	4.22	4.73
Yuzhnye MES	434	358	76	436	362	74	2.30	1.94	4.00
EnergoInform JSC	811	432	379	802	421	381	12.01	13.36	9.74
FSC RES	26	14	12	37	20	17	40.63	35.29	48.28
Total	**4,797**	**3,498**	**1,299**	**4,819**	**3,502**	**1,317**	**7.36**	**7.73**	**7.48**

** Turnover rate is estimated as per Samruk-Kazyna Methodology, according to which the estimate includes the number of employees released from the post on their own request only. The turnover estimate does not include employees: released from the post within the Samruk-Kazyna group of companies for reasons not attributable to the will of the parties, at the initiative of the employer, upon expiration of the employment contract, reduction in the number of employees, termination of the employment contract, cancellation of the employment contract due to transfer of an employee to another job (post) or assignment to a post.*

Number of hired and quitted employees at the Company

404-1

Indicator	2017		2018		2019/2018		2019/2018,%	
	people	%	people	%	people	%	people	%
Total number of hired employees	447	9.45	523	10.9	590	12.24	67	12.8%
by age								
under 30	235	4.97	256	5.34	261	5.42	5	1.9%
from 31 to 50	174	3.68	226	4.71	250	5.19	24	10.6%
51 and over	38	0.8	41	0.85	79	1.64	38	92.7%
by gender								
Male employees	289	6.11	361	7.53	404	8.38	43	11.9%
Female employees	158	3.34	162	3.38	186	3.86	24	12.9%
by regions								
Executive Administration	77	1.63	52	1.08	59	15.28	7	13.5%
Akmolinskiye MES	58	1.23	61	1.27	83	14.26	22	36.1%
Aktyubinskiye MES	22	0.47	20	0.42	21	8.27	1	5.0%
Almatinskiye MES	43	0.91	63	1.31	49	10.27	-14	-22.2%
Vostochnye MES	21	0.44	42	0.88	30	10.10	-12	-28.6%
Zapadnye MES	29	0.61	31	0.65	31	13.66	0	0.0%
Sarbaiskiye MES	30	0.63	25	0.52	35	8.20	10	40%
Severnye MES	41	0.87	32	0.67	36	9.23	4	12.5%
Tsentralnye MES	23	0.49	49	1.02	27	6.55	-22	-44.9%

Indicator	2017		2018		2019/2018		2019/2018,%	
	people	%	people	%	people	%	people	%
Yuzhnye MES	24	0.51	19	0.4	29	6.65	10	52.6%
NDC SO	6	0.13	8	0.17	10	10.87	2	25.0%
EnergoInform JSC	101	2.13	109	2.27	153	19.08	44	40.4%
FSC RES	5	0.11	12	0.25	27	72.97	15	125.0%
Total number of quitted employees	**444**	**9.38**	**457**	**9.53**	**568**	**11.79**	**111**	**24.3%**
by age								
under 30	116	2.45	111	2.31	168	3.49	57	51.4%
from 31 to 50	161	3.4	203	4.23	223	4.63	20	9.9%
51 and over	167	3.53	143	2.98	177	3.67	34	23.8%
by gender								
Male employees	285	6.02	326	6.8	395	8.20	69	21.2%
Female employees	159	3.36	131	2.73	173	3.59	42	32.1%
by regions								
Executive Administration	44	0.93	44	0.92	54	13.99	10	22.7%
Akmolinskiye MES	60	1.27	62	1.29	72	12.37	10	16.1%
Aktyubinskiye MES	26	0.55	20	0.42	20	7.87	0	0.0%
Almatinskiye MES	40	0.85	46	0.96	49	10.27	3	6.5%
Vostochnye MES	15	0.32	28	0.58	32	10.77	4	14.3%
Zapadnye MES	27	0.57	29	0.6	28	12.33	-1	-3.4%
Sarbaiskiye MES	33	0.7	29	0.6	28	6.56	-1	-3.4%
Severnye MES	36	0.77	31	0.65	34	8.72	3	9.7%
Tsentralnye MES	34	0.72	36	0.75	36	8.74	0	0.0%
Yuzhnye MES	23	0.49	14	0.29	27	6.19	13	92.9%
NDC SO	24	0.51	8	0.17	10	10.87	2	25.0%
EnergoInform JSC	107	2.26	104	2.17	162	20.20	58	55.8%
FSC RES	2	0.04	6	0.13	16	43.24	10	166.7%
Total personnel turnover	**-**	**4.57**	**-**	**5.2**	**-**	**7.4**	**2.2**	**42.3%**

Number of employees who took and returned from a maternity/paternity leave as on 31/12/2019

404-1

Indicator	Employees who took a child-care leave	including		Employees who returned from a child-care leave	including	
		female	male		female	male
Executive Administration	14	13	1	11	11	—
NDC SO	4	4	—	4	4	—
Akmolinskiye MES	12	12	—	1	1	—
Aktyubinskiye MES	—	—	—	2	2	—
Almatinskiye MES	8	8	—	5	5	—
Vostochnye MES	1	1	—	3	3	—
Zapadnye MES	4	4	—	5	5	—
Sarbaiskiye MES	5	5	—	2	2	—
Severnye MES	4	4	—	4	4	—
Tsentralnye MES	3	3	—	3	3	—
Yuzhnye MES	5	5	—	8	8	—
EnergoInform JSC	15	15	—	5	5	—
FSC RES	—	—	—	—	—	—
Total	**75**	**74**	**1**	**53**	**53**	**—**

Number of employees eligible to retire

EU15

Indicator	Total, people	The number of employees who can retire in the period 2020-2024			The number of employees who can retire in the period 2020-2029			% of employees who can retire	
		Total	including		Total	including		in the period	
			AP	OP		AP	OP	2020-2024	2020-2029
Akmolinskiye MES	582	74	4	70	142	7	135	12.71	24.40
Aktyubinskiye MES	254	29	1	28	55	1	54	11.42	21.65
Almatinskiye MES	477	55	5	50	95	7	88	11.53	19.92
Vostochnye MES	297	32	3	29	62	4	58	10.77	20.88
Zapadnye MES	227	14		14	45	1	44	6.17	19.82
Sarbaiskiye MES	427	47	2	45	65		65	11.01	15.22
Severnye MES	390	59	1	58	111	2	109	15.13	28.46
Tsentralnye MES	412	48	2	46	105	2	103	11.65	25.49
Yuzhnye MES	436	78	5	73	130	7	123	17.89	29.82
NDC SO	92	1		1	7		7	1.09	7.61
Executive Administration	386	16	16		40	40		4.15	10.36
EnergoInform JSC	802	71	3	68	151	3	148	8.85	18.83
FSC RES	37	1	1		1	1		2.70	2.70
Total	**4,819**	**525**	**43**	**482**	**1,009**	**75**	**934**	**10.89**	**20.94**

Performance Indicators

EU1 EU3 EU4 EU28 EU29 102-7

Indicator	Unit of Measure	2017	2018	2019	2019/2018	2019/2018,%
Performance indicators						
Installed capacity by power sources and control mode	**MVA**	**36,660.05**	**36,660.05**	**38,246.05**	1,586.00	4.3%
including:						
1,150 kV SS	**MVA**	9,384.10	9,384.10	9,384.10	–	0.0%
500 kV SS	**MVA**	16,111.50	16,111.50	17,447.5	1,336.00	8.3%
220 kV SS	**MVA**	11,136.25	11,136.25	11,391.25	255.00	2.3%
110 kV SS	**MVA**	5.00	5.00	-	-5.00	-100%
35 kV SS	**MVA**	23.20	23.20	23.20	–	0.0%
Length of OHTLs and underground transmission lines by control mode (circuit)	**km**	**25,707.25**	**26,775.27**	**26,900.91**	125.64	0.5%
including:						
1,150 kV	**km**	1,421.23	1,421.23	1,421.23	–	0.0%
500 kV	**km**	7,403.25	8,287.98	8,287.98	–	0.0%
330 kV	**km**	1,864.09	1,864.09	1,863.28	-0.81	0.0%
220 kV	**km**	14,511.05	14,693.99	14,816.35	122.36	0.8%
110 kV	**km**	352.84	352.84	352.84	–	0.0%
35 kV	**km**	44.13	44.13	44.13	–	0.0%
under 35 kV	**km**	110.66	111.01	115.10	4.09	3.7%
Number of electricity consumers (number of contracts)	**pcs.**	**606**	**656**	**757**	101	15.4%

Indicator	Unit of Measure	2017	2018	2019	2019/2018	2019/2018,%
System average interruption frequency — SAIFI		**0.02**	**0.03**	**0.03**	0	0.0%
System average interruption duration — SAIDI	**minutes**	**0.09**	**0.18**	**0.01**	-0.17	-94.4%
System Minutes Lost — SML	**minutes**	**1.04**	**1.11**	**0.52**	-0.59	-53.2%
Percentage of the system's operating time without failures — WWP	**%**	**98.98**	**98.78**	**99.64**	0.86	0.9%
Volumes of rendered services						
Electricity transmission	**billion kWh**	**42.74**	**44.71**	**43.97**	-0.74	-1.7%
Technical dispatch control	**billion kWh**	**93.61**	**97.65**	**97.06**	-0.59	-0.6%
Management of electricity generation and consumption balancing	**billion kWh**	**174.54**	**183.36**	**188.77**	5.41	3.0%

Economic Indicators

201-1 201-4 202-2

Indicator	Unit of Measure	2017	2018	2019	2019/2018	2019/2018
Economic indicators						
Total capitalization	**KZT million**	**535,956.40**	**634,752.89**	**632,163.54**	-2,589.35	-0.4%
equity capital	KZT million	374,167.60	472,693.80	481,838.02	9,144.22	1.9%
borrowed funds	KZT million	161,788.80	162,059.09	150,325.51	- 11,733.58	-7.2%
Funds from the government	**KZT million**	**-**	**-**	**-**	-	-
Economic value generated	**KZT million**	**156,957.00**	**185,017.94**	**275,338.49**	90,320.55	48.8%
operating revenues	KZT million	152,379.82	175,797.39	263,162.07	87,364.68	49.7%
financial revenue	KZT million	3,593.21	4,951.34	4,171.53	-779.81	-15.7%
other revenues	KZT million	983.98	4,269.22	8,004.89	3,735.67	87.5%
Economic cost	**KZT million**	**143,973.38**	**176,346.50**	**260,222.43**	83,875.93	47.6%
payroll expenses	KZT million	19,074.97	21,048.03	22,699.12	1,651.09	7.8%
expenses on taxes and duties to the national budget	KZT million	16,611.48	18,553.89	19,110.84	556.95	3.0%
payments to capital providers	KZT million	24,421.65	35,233.94	40,842.53	5,608.59	15.9%
charity and sponsor support	KZT million	-	-	-	-	-
other operating expenses	KZT million	76,862.34	92,422.60	177,185.20	84,742.60	91.7%
other non-operating expenses	KZT million	7,002.94	9,068.04	384.74	-8,683.30	-95.8%
Economic value of distribution	**KZT million**	**12,983.62**	**8,671.44**	**9,107.14**	435.70	5.0%
Proportion of senior management hired from the local community at significant locations of operation	**%**	**69**	**83**	**83**	-	-

Compliance with Laws and Regulations

205-3 419-1 307-1

Indicator	Unit of Measure	2017	2018	2019
Confirmed incidents of corruption and actions taken*	-	0	0	0
Monetary amount of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	KZT million	10.891	0	0
where:				
Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	KZT million	10.891	0	0
Monetary value of significant fines and total number of non-monetary sanctions imposed for non-compliance with environmental laws and regulations	KZT million	0	0	0

** No incidents were registered in 2018 where employees were dismissed or subject to disciplinary punishment for corruption, or contracts were terminated with business partners due to corruption-related violations, or corruption-related cases took place against the Company or its employees.*

Environmental Indicators

EU12 302-1 302-4

Indicator	Unit of Measure	2017	2018	2019	2019/2018	2019/2018,%
Power consumption						
Percentage of losses in electricity transmission and distribution*	%	6.2	6.3	6.4	0.1	1.6%
Effect of measures to reduce losses (energy saving)	GJ	16,920	16,560	17,222	662	4.0%
Energy consumption within the organization	GJ	10,376,121	10,780,276	10,710,622	-69,654	-0.6%
including:						
electricity	GJ	10,165,701	10,570,491	10,502,753	-67,738	-0.6%
heat power	GJ	84,568	90,375	87,399	-2,976	-3.3%
fuel	GJ	125,852	119,410	120,470	1,060	0.9%
including						
motor gasoline	GJ	55,112	53,680	53,935	255	0.5%
diesel fuel	GJ	63,725	61,712	62,911	1,199	1.9%
natural gas	GJ	7,015	3,716	3,314	- 402	-10.8%
liquefied gas	GJ	-	302	310	8	2.6%
Emissions						
Gross emissions of contaminants from stationary sources	tonne	15.81	11.41	9.45	-1.96	-17.2%
Greenhouse gas emissions from stationary sources of KEGOC	tonne carbon dioxide equivalent	143.085	143.085	137.913	-5.17	-3.6%
including:						
CO_2	tonne	143.017	125.451	137.860	12.41	9.9%
CH_4	tonne carbon dioxide equivalent	0.002	0.0019	0.0018	-0.00010	-5.3%
N_2O	tonne carbon dioxide equivalent	0.066	0.0575	0.05161	-0.00589	-10.2%

** Technical losses from electricity supplied to the grid during transmission.*

Occupational Health Indicators

403-2 EU21

Indicator	2017	2018	2019
Occupational health and safety indicators			
Accident frequency rate	**0.03**	**0.07**	**0**
By regions:			
Executive Administration	0	0	0
Akmolinskiye MES	0	0.20	0
Aktyubinskiye MES	0.44	0.45	0
Almatinskiye MES	0	0	0
Vostochnye MES	0	0	0
Zapadnye MES	0	0	0
Sarbaiskiye MES	0	0	0
Severnye MES	0	0	0
Tsentralnye MES	0	0	0
Yuzhnye MES:	0	0	0
NDC SO	0	0	0
Occupational diseases rate	**0**	**0**	**0**
Lost day rate	**0**	**0**	**0**
Absentee rate	**4,821.9**	**7,855.9**	**4,085.5**
by regions:			
Executive Administration	5,839.2	12,717.1	4,652.2
Akmolinskiye MES	4,649.5	4,999.8	4,481.1
Aktyubinskiye MES	2,627.1	3,264.0	3,148.8
Almatinskiye MES	5,742.1	10,440.8	2,343.1
Vostochnye MES	6,149.5	14,902.6	5,218.8
Zapadnye MES	5,709.6	8,545.9	4,049.2
Sarbaiskiye MES	3,740.2	6,118.7	3,599.2
Severnye MES	4,666.8	5,733.7	4,234.9
Tsentralnye MES	5,780.1	10,595.1	6,214.5
Yuzhnye MES	3,091.0	7,907.6	2,935.3
NDC SO	6,776.5	19,256.3	4,895.0
Number of fatal accidents	**1***	**1****	**0**
Civil defence and emergency situations trainings, exercises and drills			
National command-staff exercises	4	4	2
Staff exercise	11	11	12
Facility-based exercises	11	11	4
Special tactical exercises with civil defence divisions	11	11	1
Earthquake exercises	20	16	15
National and oblast emergencies and civil defence training course	56	42	14

** In 2017 there was one fatal accident in the Akmolinskiye MES branch.*
*** In 2018 there was one fatal accident in the Akmolinskiye MES branch.*

Appendix 3. KEGOC's Subsidiaries

EnergoInform JSC

The mission is to ensure reliable operation and effective development of information and telecommunication system of the unified power system (UPS) of Kazakhstan using the world's best practices and innovative technologies. The sole shareholder is KEGOC.

The core operations: maintenance of information telecommunication complex of KEGOC, including: commercial metering system, SCADA, balancing electricity market, information management system, PLC, radio relay links, satellite communication, guaranteed power supply, branch exchange, fiber optic links, fire and security alarm systems and corporate services.

The charter capital of EnergoInform is KZT 2,179.7 million. The number of issued shares is 700,000; the nominal value of one share is KZT 10,000. The number of placed shares is 217,970.

The revenues of EnergoInform in 2019 amounted to KZT 4,797.1 million, including operating income – KZT 4,667.7 million. Compared to 2018 the revenues increased by 12.6% or KZT 537 million.

Following the 2019 performance the net income amounted to KZT 614.6 million, which is higher than in 2018 (KZT 413 million) by KZT 201.6 million or 48.8%.

Financial Settlement Centre for Renewable Energy Sources Support LLP

The Financial Settlement Centre for Renewable Energy Sources Support LLP (FSC RES) was established in accordance with the decision of the Board of Directors of KEGOC dated 12 August 2013 and registered in the Saryarka Justice Administration under Astana Justice Department on 27 August 2013.

KEGOC is the only founder and sole partner.

Resolution No. 1281 of Kazakhstan Government dated 29 November 2013 and Order No. 357 of Kazakhstan Minister of Energy dated 31 March 2015 determined FSC RES LLP as the financial settlement centre for renewable energy sources providing centralized purchase and sale of electricity generated by RES. Order of Kazakhstan Minister of Energy No. 256 dated 7 September 2018 determined the FSC RES as a single purchaser rendering service for maintaining availability of electric capacity and rendering service for ensuring readiness of electric capacity to bear the load.

In 2019, FSC RES LLP purchased electricity from 50 renewable energy facilities, and sold electricity to 60 conventional consumers. The total renewable electricity purchased/sold amounted to 1,348 million kWh.

As of 31 December 2019 the capacity market operation resulted in:

- 236 contracts concluded with capacity market consumers for rendering service for ensuring readiness of electric capacity to bear the load, the actual volume of capacity purchased from energy-producing organizations amounted to 92,212 MW*months;
- 51 contracts concluded with 34 energy-producing organizations for the purchase of service for maintaining availability of electric capacity, the actual volume of electric capacity sold for consumers amounted to 115,898 MW*months.

The total income of FSC RES by 2019 results amounted to KZT 112,709 million. Expenses amounted to KZT 100,472 million. Net income based on 2019 results amounted to KZT 9,783 million.

Appendix 4. GRI Content Index

102-55

GRI Standard	Number	Contents	Page	Remark
GRI 102: General disclosures (2016)				
	102-1	Name of the organization	14	
	102-2	Activities, brands, products, and services	14	
	102-3	Location of the organization’s headquarters	151	
	102-4	Location of operations	26-27	
	102-5	Ownership and legal form	14	
	102-6	Markets served:		
		— geographic breakdown	26-27	
		— sectors served	14	
		— types of customers and beneficiaries	46	
	102-7	Scale of the organization:		
		— total number of employees	23	
		— total number of units	25	
		— revenues	63	
		— total capitalization broken down in terms of debt and equity	67	
		— quantity of products or services provided	4	
	102-8	Information on employees		
		— total number of employees by employment contract and gender	164	
		— total number of permanent employees by employment type and gender	165	
		— total workforce by in-house employees and freelance employees, and by gender	—	There are no freelance employees in the Company
		— total workforce by region and gender	165	
		Sector addition to the General Standard Disclosures		
		— total number of contracting entities employees (contractors, subcontractors, independent contractors) by employment type, labour agreement and control mode.	—	Information is not available now due to the difficult acquisition of data on number of employees of contracting/ subcontracting organizations performing various works of different direction at the Company’s facilities.
	102-9	Supply chain	40-41	All relations with the goods, works, services suppliers are governed by contracts (agreements), concluded in accordance with the Procurement Rules of the Fund, and provide for the terms of amending/cancellation of agreements.
	102-10	Significant changes to the size, structure, and ownership	—	There were no significant changes in the size, structure and ownership in 2019.

GRI Standard	Number	Contents	Page	Remark
GRI 102: General disclosures (2016)				
	102-11	Precautionary principle	68	
	102-12	Externally developed economic, environmental and social charters, principles or other initiatives to which the organization subscribes or which it endorses	19-21	
	102-13	Membership of associations	19-21	
	102-14	Statement from the Chairman of KEGOC Management Board	9-11	
	102-16	Organization's values, principles, standards and norms of behavior	112	
	102-18	Governance structure of the organization, including committees of the highest governance body, responsible for decision-making on economic, environmental and social impacts of the organization	74	
	102-40	List of stakeholder groups	160	
	102-41	Percentage of total employees covered by collective bargaining agreement	128	
	Sector addition to the General Standard Disclosures			
		Percentage of contractors' employees (contractors, subcontractors, independent contractors) working in the reporting organization covered by the collective bargaining agreements by countries and control mode	–	Not applicable. The Company's collective bargaining agreement does not cover employees of the contractors, subcontractors or independent contractors
	102-42	Identifying and selecting stakeholders	160	
	102-43	Organization's approach to stakeholder engagement	161-162	
	102-44	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	161-162	
	102-45	Entities included in the organization's statements	25	
	102-46	Defining report content and topic Boundaries	162-163	
	102-47	List of material topics	163	
	102-48	Effect of any restatements of information given in previous reports	–	There were no restatements of information given in previous reports
	102-49	Significant changes from previous reporting periods in the Scope and topic Boundaries	–	No significant change in the scope was in the report
	102-50	Reporting period	156	
	102-51	Date of the most recent report	156	
	102-52	Reporting cycle	156	
	102-53	Contact point for questions regarding the report	151	
	102-54	Claims of reporting in accordance with the GRI Standards	156	
	102-55	GRI Content Index	174	
	102-56	Organization's practice with regard to seeking external assurance	156	
	Sectoral specific general reporting elements			
	EU1	Installed capacity by power sources and control mode	168-169	
	EU2	Clean energy generation by primary power sources and control mode	–	Not applicable. KEGOC is not a power generating company

GRI Standard	Number	Contents	Page	Remark
GRI 102: General disclosures (2016)				
	Sectoral specific general reporting elements			
	EU3	Quantity of power consumers	168-169	
	EU4	Length of OHTLs and underground transmission lines by control mode	168-169	
	EU5	Allocation of CO2E emissions allowances or its equivalent by scheme of green-gas emissions	142	
Specific elements				
GRI 200: Economic aspects (2016)				
Economic Performance				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	66	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 201: Economic Performance (2016)	**201-1**	Direct economic value generated and distributed	66, 169	
	201-4	Financial assistance received from government	169	
Market Presence				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	118	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 202: Market Presence (2016)	**202-1**	Ratio of standard entry level wage by gender to local minimum wage at significant locations of operation	124	
	202-2	Proportion of senior management hired from the local community at significant locations of operation	169	
Anti-corruption				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	99-100	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 205: Anti-corruption (2016)	**205-2**	Communication and training on anti-corruption policies and procedures	100	
	205-3	Confirmed incidents of corruption and actions taken	100	
R&D				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	55	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI G4 R&D:	**EU8**	Research and development activities and costs to ensure the reliability and development of research and development in direct costs and research and development cooperation.	55-56	

GRI Standard	Number	Contents	Page	Remark
Sector specific aspect: **System Efficiency**				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization’s management approach related to material aspects	146	
	103-3	Assessment of the organization’s management approach related to material aspects	109	
GRI G4 EU: System Efficiency	**EU12**	Percentage of losses in electricity transmission and distribution	170	
GRI 300: Environmental aspects (2016)				
Energy				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization’s management approach related to material aspects	146	
	103-3	Assessment of the organization’s management approach related to material aspects	109	
GRI 302: Energy (2016)	**302-1**	Energy consumption within the organization	147	
	302-4	Reducing energy consumption	147	
Compliance with Environmental Requirements				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization’s management approach related to material aspects	138	
	103-3	Assessment of the organization’s management approach related to material aspects	109	
GRI 307: Compliance with Environmental Requirements (2016)	**307-1**	Monetary value of significant fines and total number of non-monetary sanctions imposed for non-compliance with environmental laws and regulations	140	
GRI 400: Social aspects (2016)				
Employment				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization’s management approach related to material aspects	118	
	103-3	Assessment of the organization’s management approach related to material aspects	109	
GRI 401: Employment (2016)	**401-1**	Total number and rates of new employee hires and employee turnover by age, gender and region	166	
	Sector additions to the ratio			
	401-1	Average work duration of employees leaved employment during the reporting period by gender and age group	123	
	Sector specific ratios			
	EU15	Percentage of employees eligible to retire in the next five and ten years by category and region	168	
	EU18	Percentage of contracting and subcontracting entities employees trained in occupational health and safety	134	
Labor Management Relationships				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization’s management approach related to material aspects	118	
	103-3	Assessment of the organization’s management approach related to material aspects	109	

GRI Standard	Number	Contents	Page	Remark
GRI 400: Social aspects (2016)				
Labor Management Relationships				
GRI 402: Employment (2016)	**402-1**	Minimum notice periods regarding operational changes	128	
Health and Safety				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	130	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 403: Health and safety (2016)	**403-2**	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and gender	133	
	403-4	Health and safety topics covered in formal agreements with trade unions	128	
Training and Education				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	126	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 404: Training and Education (2016)	**404-1**	Annual average hours of training per employee by gender and by employee category	164	
	404-3	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	127	
Diversity and Equal Opportunity				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	118	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 405: Diversity and equal opportunity (2016)	**405-1**	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	121	
Non-discrimination				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	118	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 406: Non-discrimination (2016)	**406-1**	Total incidents of discrimination and corrective actions taken	121	
Human Rights Assessment				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	118	
	103-3	Assessment of the organization's management approach related to material aspects	109	

GRI Standard	Number	Contents	Page	Remark
GRI 412: Human Rights Assessment (2016)	**412-1**	Total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments	114	
Sector specific aspect: **Action plan and response to disasters/emergencies**				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	135	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI G4 EU Action plan and response to disasters/emergencies Disclosures on the management approach	**EU21**	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	135	
Compliance with laws requirements				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	49	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI 419: Compliance with laws requirements (2016)	**419-1**	Monetary amount of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	170	
		Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	50	
Sector specific aspect: **Accessibility**				
GRI 103: Disclosures on the management approach (2016)	**103-1**	Explanations on the aspects significance and their boundaries	162-163	
	103-2	Organization's management approach related to material aspects	50	
	103-3	Assessment of the organization's management approach related to material aspects	109	
GRI G4 EU: Accessibility	**EU28**	Frequency of power failures	51, 168	
	EU29	System average interruption duration	51, 168	

Appendix 5.
Consolidated financial statements

As at and for the year ended 31 December 2019 with independent auditor's report

«Эрнст энд Янг» ЖШС
Әл-Фараби д-лы, 77/7
«Есентай Тауэр» ғимараты
Алматы қ., 050060
Қазақстан Республикасы
Тел.: +7 727 258 59 60
Факс: +7 727 258 59 61
www.ey.com/kz

ТОО «Эрнст энд Янг»
пр. Аль-Фараби, д. 77/7
здание «Есентай Тауэр»
г. Алматы, 050060
Республика Казахстан
Тел.: +7 727 258 59 60
Факс: +7 727 258 59 61
www.ey.com/kz

Ernst & Young LLP
Al-Farabi ave., 77/7
Esentai Tower
Almaty, 050060
Republic of Kazakhstan
Tel.: +7 727 258 59 60
Fax: +7 727 258 59 61
www.ey.com/kz

Independent auditor's report

To the Shareholders, Audit Committee and management of Kazakhstan Electricity Grid Operating Company JSC

Opinion

We have audited the consolidated financial statements of Kazakhstan Electricity Grid Operating Company JSC and its subsidiaries (hereinafter the "Group"), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2019 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Building a better working world

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matters	***How our audit addressed the key audit matter***
Revenue recognition from services to ensure readiness of electricity capacity to bear the power load	
This matter was one of the key audit matters due to the launch of the capacity market since 1 January 2019 to ensure the balance reliability of the energy system of the Republic of Kazakhstan. The matter received special attention due to the large volumes of operations associated with it - in particular, service delivery to more than 230 customers based on uniform weighted average tariff. Estimation of the revenue received by the Group depends on management's assessment of the volume of capacity sold. The Group's disclosure in respect of the new service is included in Note 3 to the consolidated financial statements.	We examined the available information on the launch of the electricity capacity market, including additional explanations received from the management of the Group, and the relevant regulatory framework. We evaluated the accounting policy applied for revenue recognition. We conducted reconciliation of the electricity capacity volume used for revenue calculation during the reporting period with the acts of the actual maximum volume of electricity capacity agreed with customers. We also analyzed tariff calculation for the services to ensure readiness of electricity capacity to bear the power load. We analyzed Group's disclosure in respect of the revenue from this service.
The Group's role in purchase - sale agreements for electricity produced by the renewable energy sector (hereafter - RES) facilities	
This matter was one of the key audit matters due to material amount of revenue from sales and cost of sales of electricity generated by RES facilities, as well as due to the fact that accounting of purchase – sale of electricity requires complex principal-agent analysis and application of significant judgement by	We evaluated the accounting policy applied for revenue recognition from sales of electricity generated by RES facilities. We have tested the relevant internal controls over the revenue recognition process. We have investigated existing information about RES market in the Republic of Kazakhstan including additional

A member firm of Ernst & Young Global Limited

Building a better working world

management of whether the Group receives control over electricity when it is sold to prospective customers. The disclosure of the Group's judgement in respect of the recognition of revenue from sales of electricity generated by RES facilities is included in Notes 4 to the consolidated financial statements.	explanations received from the management of the Group, and the relevant regulatory framework. We also analyzed the Group's management position whether the Group's receives control over electricity generated by RES facilities. We analyzed the Group's disclosure regarding the judgement on revenue recognition from sales of electricity generated by RES facilities.
Changes in accounting information systems	
From 1 January 2019, the Group implemented a new accounting information system. The matter of a new accounting information system implementation was one of the key audit matters, since the accounting information system is fundamental to the processing and generation of financial information for financial statement purposes. Change of the accounting information system involves the formation of new processes, controls and changes in the delegation of duties, as well as the transfer of operational and financial information from the previous system to the new system.	We discussed with the management of the Group the changes made to the new system, as well as the relevant processes, paying particular attention to those changes that have a significant impact on the receipt and processing of financial information. We also checked the correctness of transferring financial data to the new accounting information system. We carried out procedures to evaluate the design and operational effectiveness of the general controls established by the Group's management in the new system, including the access and manage change. We have engaged our IT specialists to complete the above procedures.

Other information included in the Group's 2019 Annual Report

Other information consists of the information included in the Group's 2019 Annual Report, other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information.

The Group's 2019 Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

EY
Building a better working world

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is Adil Syzdykov.

Ernst & Young LLP

Adil Syzdykov
Auditor

Auditor Qualification Certificate
No. МФ - 0000172 dated 23 December 2013

050060, Republic of Kazakhstan, Almaty
Al-Farabi Ave., 77/7, Esentai Tower

28 February 2020

Gulmira Turmagambetova
General Director
Ernst & Young LLP

State Audit License for audit activities on the territory of the Republic of Kazakhstan: series МФЮ-2, No. 0000003 issued by the Ministry of Finance of the Republic of Kazakhstan on 15 July 2005

A member firm of Ernst & Young Global Limited

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2019

In thousands of Tenge	Notes	31 December 2019	31 December 2018
Assets			
Non-current assets			
Property, plant and equipment	6	**651,570,990**	667,936,367
Intangible assets		**1,411,900**	1,472,307
Advances paid for non-current assets	6	**1,485,220**	1,018,989
Deferred tax asset	26	**53,436**	3,760
Investments in associate	7	**1,862,241**	1,107,867
Long-term receivables from related parties	27	**840,324**	929,162
Other financial assets, non-current portion	11	**1,951,795**	25,609,268
Other non-current assets		**–**	4,017
		659,175,906	698,081,737
Current assets			
Inventories	8	**2,134,157**	2,291,378
Trade accounts receivable	9	**21,901,834**	9,251,847
VAT recoverable and other prepaid taxes		**698,928**	791,934
Prepaid income tax		**922,475**	1,541,679
Other current assets	10	**739,483**	528,622
Other financial assets, current portion	11	**45,260,710**	20,127,229
Restricted cash	12	**4,274,085**	4,175,576
Cash and cash equivalents	13	**21,179,282**	19,060,700
		97,110,954	57,768,965
Assets held for transfer		**700,861**	–
Total assets		**756,987,721**	755,850,702

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (continued)

As at 31 December 2019

In thousands of Tenge	Notes	31 December 2019	31 December 2018
Equity and liabilities			
Equity			
Share capital	14	**126,799,554**	126,799,554
Treasury shares	14	**(930)**	(930)
Asset revaluation reserve	14	**310,369,243**	310,840,187
Other reserves		**–**	(37,081)
Retained earnings		**44,670,157**	35,092,074
		481,838,024	472,693,804
Non-current liabilities			
Borrowings, non-current portion	15	**56,925,610**	62,881,150
Bonds payable, non-current portion	16	**83,671,184**	83,660,104
Deferred tax liability	26	**89,995,249**	90,170,202
Government grant, non-current portion		**59,543**	89,972
Finance lease obligations, non-current portion	27	**156,661**	157,175
		230,808,247	236,958,603
Current liabilities			
Borrowings, current portion	15	**6,083,377**	11,420,710
Bonds payable, current portion	16	**3,645,344**	4,097,122
Trade and other accounts payable, current portion	17	**23,389,482**	22,645,297
Construction obligation	18	**683,430**	683,430
Contract liabilities		**2,167,885**	1,734,670
Government grant, current portion		**30,430**	30,430
Finance lease obligations, current portion	27	**262,882**	36,323
Taxes payable other than income tax	19	**3,371,344**	2,144,441
Income tax payable		**723,620**	1,123
Dividends payable		**56**	2,750
Other current liabilities	20	**3,983,600**	3,401,999
		44,341,450	46,198,295
Total liabilities		**275,149,697**	283,156,898
Total equity and liabilities		**756,987,721**	755,850,702
Book value per ordinary share (in Tenge)	14	**1,848**	1,812

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2019

In thousands of Tenge	Notes	2019	2018* (restated)
Revenue from contracts with customers	21	**263,162,073**	175,797,386
Cost of sales	22	**(200,256,677)**	(113,000,234)
Gross profit		**62,905,396**	62,797,152
General and administrative expenses	23	**(8,834,207)**	(7,777,658)
Selling expenses		**(382,278)**	(284,688)
Gain from revaluation of property, plant and equipment	6	**–**	3,342,507
Reversal of impairment of property, plant and equipment	6	**28,364**	266,291
Operating profit		**53,717,275**	58,343,604
Finance income	24	**4,171,530**	4,951,337
Finance costs	24	**(9,200,695)**	(3,862,511)
Foreign exchange gain/(loss), net	25	**469,129**	(5,865,654)
Share in profit of an associate	7	**774,374**	325,786
Accrual of provision for expected credit losses	9, 10, 11, 12, 13	**(134,370)**	(2,931,750)
Other income		**724,097**	334,637
Other expenses		**(250,366)**	(270,638)
Profit before tax		**50,270,974**	51,024,811
Income tax expense	26	**(9,522,004)**	(10,981,936)
Profit for the year		**40,748,970**	40,042,875
Earnings per share			
Basic and diluted profit for the year attributable to common shareholders of the parent (in Tenge)	14	**156.73**	154.01
Profit for the year		**40,748,970**	40,042,875
Other comprehensive income			
Other comprehensive income not to be reclassified to profit or loss in subsequent periods			
Gain from revaluation of property, plant and equipment		**–**	113,259,316
Income tax effect		**–**	(22,651,864)
Net other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of tax		**–**	90,607,452
Other comprehensive income for the year, net of tax		**–**	90,607,452
Total comprehensive income for the year, net of tax		**40,748,970**	130,650,327

** Certain amounts given in this column are not consistent with the consolidated financial statements as at and for the year ended 31 December 2019 as they reflect the adjustments disclosed in Note 2.*

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2019

In thousands of Tenge	Notes	2019	2018
Operating activities			
Profit before tax		**50,270,974**	51,024,811
Adjustments to reconcile profit before tax to net cash flows			
Depreciation and amortisation		**34,348,949**	26,755,934
Finance costs	24	**9,200,695**	3,862,511
Finance income	24	**(4,171,530)**	(4,951,337)
Foreign exchange (gain)/loss, net	25	**(469,129)**	5,865,654
Accrual/(reversal) of allowance for obsolete inventories	23	**67,532**	(398,750)
Gain on disposal of property, plant and equipment and intangible assets	6	**–**	(3,342,507)
Reversal of impairment of property, plant and equipment	6	**(28,364)**	(266,291)
Accrual of provision for expected credit losses		**134,370**	2,931,750
Share in profit of an associate	7	**(774,374)**	(325,786)
Income from government grants		**(58,305)**	(28,468)
Loss on disposal of property, plant and equipment and intangible assets		**108,015**	168,174
Working capital adjustments			
Change in inventories		**89,689**	(17,194)
Change in trade accounts receivable		**(12,725,280)**	(1,915,564)
Change in other trade accounts receivable and advances paid		**(255,298)**	310,559
Change in VAT recoverable and other prepaid taxes		**93,006**	178,286
Change in trade and other accounts payable		**8,327,628**	989,715
Change in contract liabilities		**433,215**	(313,745)
Change in finance lease liabilities		**189,810**	–
Change in taxes payable other than income tax		**1,229,811**	1,197,834
Change in other current liabilities		**472,010**	(27,047)
Cash flows from operating activities		**86,483,424**	81,698,539
Interest paid		**(2,536,865)**	(2,987,933)
Coupon interest paid		**(8,687,000)**	(9,209,500)
Bank guarantee commission paid		**(894,908)**	–
Income tax paid		**(8,093,869)**	(9,502,696)
Interest received		**3,380,005**	4,315,484
Net cash flows received from operating activities		**69,650,787**	64,313,894

CONSOLIDATED STATEMENT OF CASH FLOWS (continued)

For the year ended 31 December 2019

In thousands of Tenge	Notes	2019	2018
Investing activities			
Withdrawal of bank deposits		**31,924,115**	36,509,577
Replenishment of bank deposits		**(32,329,832)**	(27,404,147)
Acquisition of bonds of Samruk-Kazyna	11	**–**	(25,545,272)
Acquisition of debt securities (National bank notes, bills of Ministry of Finance he Republic of Kazakhstan)		**(8,459,310)**	(5,356,676)
Redemption of debt securities (National bank notes, bills of Ministry of Finance of the Republic of Kazakhstan)		**7,953,341**	5,400,000
Change in restricted cash		**(9,352)**	(310,921)
Reclassification of cash to other financial assets		**–**	(2,860,231)
Gain from sale of property, plant and equipment and intangible assets		**196,498**	203,960
Purchase of property, plant, equipment		**(24,541,643)**	(32,977,830)
Purchase of intangible assets		**(177,828)**	(336,653)
Return of project funds used to purchase fixed assets	6	**–**	267,056
Repurchase of DSFK bonds by the issuer	11	**22,141**	12,971
Partial return of funds from Kazinvestbank JSC and Eximbank Kazakhstan JSC		**95,075**	–
Dividends from an associate	7	**20,000**	–
Repayment of loans to employees		**2,092**	7,716
Net cash flows used in investing activities		**(25,304,703)**	(52,390,450)
Financing activities			
Dividends paid		**(31,644,640)**	(31,368,769)
Repayment of borrowings		**(10,517,957)**	(9,217,048)
Net cash flows used in financing activities		**(42,162,597)**	(40,585,817)
Net change in cash and cash equivalents		**2,183,487**	(28,662,373)
Effect of exchange rate changes on cash and cash equivalents		**(54,765)**	154,386
Effect of accrual of provision on expected credit losses on cash and cash equivalents	13	**(10,140)**	(9,096)
Cash and cash equivalents, as at 1 January		**19,060,700**	47,577,783
Cash and cash equivalents, as at 31 December	**13**	**21,179,282**	19,060,700

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2019

In thousands of Tenge	Share capital	Asset revaluation reserve	Treasury shares	Other reserves	Retained earnings	Total
As at 1 January 2018	126,799,554	220,858,720	(930)	(170,701)	26,680,917	374,167,560
Effect of adoption of IFRS 9	–	–	–	–	(886,271)	(886,271)
As at 1 January 2018 (restated)	126,799,554	220,858,720	(930)	(170,701)	25,794,646	373,281,289
Profit for the year	–	–	–	–	40,042,875	40,042,875
Gain from revaluation of property, plant and equipment, net of tax (Note 6)	–	90,607,452	–	–	–	90,607,452
Total comprehensive income	–	90,607,452	–	–	40,042,875	130,650,327
Transfer of asset revaluation reserve (Note 14)	–	(625,985)	–	–	625,985	–
Dividends (Note 14)	–	–	–	–	(31,371,432)	(31,371,432)
Amortization of provision for bonds	–	–	–	133,620	–	133,620
As at 31 December 2018	126,799,554	310,840,187	(930)	(37,081)	35,092,074	472,693,804
Profit for the year	**–**	**–**	**–**	**–**	**40,748,970**	**40,748,970**
Total comprehensive income	**–**	**–**	**–**	**–**	**40,748,970**	**40,748,970**
Transfer of asset revaluation reserve (Note 14)	**–**	**(470,944)**	**–**	**–**	**470,944**	**–**
Dividends (Note 14)	**–**	**–**	**–**	**–**	**(31,641,831)**	**(31,641,831)**
Amortization of provision for bonds	**–**	**–**	**–**	**37,081**	**–**	**37,081**
As at 31 December 2019	**126,799,554**	**310,369,243**	**(930)**	**–**	**44,670,157**	**481,838,024**

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

1. GENERAL INFORMATION

Kazakhstan Electricity Grid Operating Company JSC ("the Company" or "KEGOC") was established in accordance with the Government Resolution of the Republic of Kazakhstan No. 1188 dated 28 September 1996 by transferring of some assets of the former National Energy System "Kazakhstanenergo".

As at 31 December 2019 the Company's major shareholder was Sovereign Wealth Fund "Samruk-Kazyna" JSC ("Samruk-Kazyna") (90 percent plus one share). Samruk-Kazyna is controlled by the Government of the Republic of Kazakhstan.

In 2014 the Company placed 10 percent minus one share on the Kazakhstan Stock Exchange.

KEGOC is the national Company, which provides electricity transmission, dispatch and electricity production-consumption balancing services in Kazakhstan. As the state-appointed system operator, the Company provides centralized dispatching control, ensures parallel work with energy systems of other countries, maintains the balance in energy system, provides system services and acquires auxiliary services from wholesale entities at energy market, as well as transmits electricity through unified power system (the "NES"), ensures its technical support and maintenance. The NES consists of substations, distribution devices, interregional and international power transmission lines which provide the output of electricity of electrical stations with the voltage of 220 kW and more.

As of 31 December 2019 and 31 December 2018 the Company has stakes in the following companies:

		Percentage of ownership	
Companies	**Activities**	**31 December 2019**	31 December 2018
Energoinform JSC	Maintenance of the KEGOC's IT system	**100%**	100%
Accounting and Finance Center for the support of renewable energy resources LLP (hereafter "RFC" LLP)	Centralised sales and purchase of electricity produced by energy producers using renewable energy sources and delivery into the electricity grid of the Republic of Kazakhstan; purchase of services to ensure readiness of electricity capacity to bear the power load and centralised provision of services to ensure the readiness of electricity capacity to bear the power load on capacity market.	**100%**	100%

The Company and its subsidiaries are hereafter referred as the "Group".

For management purposes, the Group's activities are organized into business units based on their services, and has three reportable operating segments, as follows *(Note 5):*

- *Electricity transmission and related support.* Electricity transmission is regulated by the Law of the Republic of Kazakhstan dated 9 July 1998 No. 272 I On Natural Monopolies and Regulated Markets (the "Law") as the Group is a natural monopolist in electricity transmission, technical dispatch and electricity production-consumption balancing services. According to the Law, the Group's electricity transmission, technical dispatch and electricity production-consumption tariffs are approved by the Committee of the Republic of Kazakhstan for the Regulation of Natural Monopolies and Protection of Competition under the Ministry of National Economy of the Republic of Kazakhstan (the "Committee").
- *Ensure readiness of electricity capacity to bear the power load.* From 1 January 2019, the electricity capacity market was put into operation in the Republic of Kazakhstan, the main purpose of which is to ensure the balance of the reliability of the power system of the Republic of Kazakhstan. Balance reliability refers to the ability of a power system to meet consumer demand for electricity at any given time.
- *Sale of purchased electricity.* The sale of purchased electricity segment includes the renewable energy sector (hereinafter – "RES") created by the Government of the Republic of Kazakhstan in order to create conditions for the development of the RES. The renewable energy sector is regulated by the Law of the Republic of Kazakhstan dated 4 July 2009 No. 165-IV On Supporting the Use of Renewable Energy Sources.

The Company's registered office is located at 59 Tauelsyzdyk Ave., Nur-Sultan, Z00T2D0, the Republic of Kazakhstan.

These consolidated financial statements were approved by the Chairman of the Management Board and Chief Accountant of the Company on 28 February 2020.

2. BASIS OF PREPARATION

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

These consolidated financial statements have been prepared on a historical cost basis, except for certain classes of property, plant and equipment, which are stated at revalued amounts and financial assets measured at fair value as described in the accounting policies and notes to these consolidated financial statements. The consolidated financial statements are presented in Kazakhstan Tenge (“Tenge” or “KZT”) and all values are rounded to the nearest thousands, except when otherwise indicated.

Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at 31 December 2019. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the following term apply:
- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:
- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group’s voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group’s accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:
- Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- Derecognises the carrying amount of any non-controlling interests;
- Derecognises the cumulative translation differences recorded in equity;
- Recognises the fair value of the consideration received;
- Recognises the fair value of any investment retained;
- Recognises any surplus or deficit in profit or loss;
- Reclassifies the parent’s share of components previously recognised in OCI to profit or loss or retained earnings, in accordance with IFRS requirements, as would be required if the Group had directly disposed of the related assets or liabilities.

Reclassification of the previously issued financial statements

In course of preparation of these consolidated financial statements reclassifications of comparative information for the previous reporting period were carried out. The effect of adjustments is presented in the following table:

In thousands of Tenge	As previously issued	Reclassification and adjustments	Note	As restated
Consolidated statement of comprehensive income for the year ended 31 December 2018				
Cost of sales	(105,840,194)	(7,160,040)	[1]	(113,000,234)
General and administrative expenses	(14,937,698)	7,160,040	[1]	(7,777,658)
Gross profit	**69,957,192**	**(7,160,040)**		**62,797,152**

[1] In 2019, the Group reclassified property tax on the production assets from General and administrative expenses to the Cost of sales. This reclassification did not affect the Group's net income.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

New standards, interpretations and amendments

The Group applied IFRS 16 Leases for the first time. The nature and effect of the changes as a result of adoption of this new accounting standard is described below.

Several other amendments and interpretations apply for the first time in 2019, but do not have an impact on the consolidated financial statements of the Group. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

IFRS 16 Leases

IFRS 16 supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement Contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise most leases on the balance sheet.

Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have an impact for leases where the Group is the lessor.

The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. The Group elected to use the transition practical expedient to not reassess whether a contract is, or contains, a lease at 1 January 2019. Instead, the Group applied the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. The Group also elected to use the recognition exemptions for lease contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option (short-term leases), and lease contracts for which the underlying asset is of low value (low-value assets).

These amendments did not affect the consolidated financial statements of the Group (Note 4).

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

New standards, interpretations and amendments (continued)

IFRIC Interpretation 23 Uncertainty over Income Tax Treatment

The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 Income Taxes. It does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately;
- The assumptions an entity makes about the examination of tax treatments by taxation authorities;
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates;
- How an entity considers changes in facts and circumstances.

The Group determines whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments and uses the approach that better predicts the resolution of the uncertainty.

The Group applies significant judgement in identifying uncertainties over income tax treatments. Since the Group operates in a complex multinational environment, it assessed whether the Interpretation had an impact on its consolidated financial statements.

Upon adoption of the Interpretation, the Group considered whether it has any uncertain tax positions, particularly those relating to transfer pricing. The Company's and the subsidiaries' tax filings in different jurisdictions include deductions related to transfer pricing and the taxation authorities may challenge those tax treatments. The Group determined, based on its tax compliance and transfer pricing study, that it is probable that its tax treatments (including those for the subsidiaries) will be accepted by the taxation authorities. The interpretation did not have an impact on the consolidated financial statements of the Group.

Amendments to IFRS 9: Prepayment Features with Negative Compensation

Under IFRS 9, a debt instrument can be measured at amortised cost or at fair value through other comprehensive income, provided that the contractual cash flows are 'solely payments of principal and interest on the principal amount outstanding' (the SPPI criterion) and the instrument is held within the appropriate business model for that classification. The amendments to IFRS 9 clarify that a financial asset passes the SPPI criterion regardless of an event or circumstance that causes the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract. These amendments had no impact on the consolidated financial statements of the Group.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement

The amendments to IAS 19 address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to determine the current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event. An entity is also required to determine the net interest for the remainder of the period after the plan amendment, curtailment or settlement using the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event, and the discount rate used to remeasure that net defined benefit liability (asset).

These amendments had no impact on the consolidated financial statements of the Group.

Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures

The amendments clarify that an entity applies IFRS 9 to long-term interests in an associate or joint venture to which

the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests.

The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying IAS 28 Investments in Associates and Joint Ventures.

These amendments had no impact on the consolidated financial statements as the Group applies equity method of accounting for its investments at associate.

IAS 23 Borrowing Costs

The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete.

The entity applies the amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. Information on the effect of the application of amendments to IAS 23 is disclosed in Note 16.

IFRS 3 Business Combinations

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

These amendments had no impact on the consolidated financial statements of the Group as there is no transaction where joint control is obtained.

IFRS 11 Joint Arrangements

An entity that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in IFRS 3. The amendments clarify that the previously held interests in that joint operation are not remeasured.

These amendments had no impact on the consolidated financial statements of the Group as there is no transaction where a joint control is obtained.

IAS 12 Income Taxes

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where it originally recognised those past transactions or events.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

New standards, interpretations and amendments (continued)

IAS 12 Income Taxes (continued)

When the entity first applies those amendments, it applies them to the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Group's current practice is in line with these amendments, they had no impact on the consolidated financial statements of the Group.

Standards issued but not yet effective

The standards and amended standards and interpretations that are issued, but not yet effective at 31 December 2019. The Group intends to apply these standards and interpretations, if applicable, when they become effective.

IFRS 17 Insurance Contracts

In May 2017, the IASB issued IFRS 17 Insurance Contracts. IFRS 17 establishes a single framework for the accounting for insurance contracts and contains requirements for related disclosures. The new standard replaces IFRS 4 Insurance Contracts. The standard is effective for annual periods beginning on or after 1 January 2021. The Company does not expect the standard to have a material impact on the consolidated financial statements.

Earlier application is permitted provided that the entity also applies IFRS 9 and IFRS 15 as at the date of first adoption of IFRS 17 or before. This standard is not applicable to the Group.

Conceptual Framework for Financial Reporting

In March 2018, the IASB issued a revised version of Conceptual Framework for Financial Reporting. In particular, the revised version introduces new definitions of assets and liabilities, as well as amended definitions of income and expenses. The new version is effective for annual periods beginning on or after January 2020. The Company does not expect the revised version of Conceptual Framework to have a material impact on the consolidated financial statements.

Amendments to IFRS 3 Business Combinations

In October 2018, the IASB issued amendments to IFRS 3 Business Combinations. The amendments enhance definition of a business set out by the standard. The amendments are effective for acquisitions to occur on or after 1 January 2020; earlier application is permitted. Since the amendments apply prospectively to transactions or other events after the date of first application the Company will not be affected by these amendments on the date of transition.

Amendments to IAS 1 and IAS 8 Definition of Material

In October 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments to IAS 1 and IAS 8 introduce new definition of material.

The amendments are effective on or after 1 January 2020; earlier application is permitted.

The Company does not expect the amendments to have a material impact on the consolidated financial statements.

Amendments to IFRS 7 Financial Instruments: Disclosures and IFRS 9 Financial Instruments named Interest Rate Benchmark Reform

In September 2019, the IASB issued amendments to IFRS 7 Financial Instruments: Disclosures and IFRS 9 Financial Instruments named Interest Rate Benchmark Reform. The amendments provide relief from certain requirements of hedge accounting, as their fulfillment can lead to discontinuation of hedge accounting due to uncertainty caused by the reform. The amendments are effective on or after 1 January 2020; earlier application is permitted.

The Company does not expect the amendments to have a material impact on the consolidated financial statements.

Amendments to IAS 1 Presentation of Financial Statements named Classification of Liabilities as Current or Non-current

In January 2020, the IASB issued amendments to IAS 1 Presentation of Financial Statements named Classification of Liabilities as Current or Non-current. The amendments clarify requirements for classifying liabilities as current or non-current. The amendments are effective on or after 1 January 2022; earlier application is permitted.

The Company does not expect the amendments to have a material impact on the consolidated financial statements, as the Company already applies criteria set by the amendments.

The Company does not plan for early adoption in respect of above-mentioned new standards and amendments to existing standards to which this option is available.

Current versus non-current classification

The Group presents assets and liabilities in statement of financial position based on current/non-current classification. An asset as current when it is:

- Expected to be realized or intended to sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within 12 (twelve) months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 (twelve) months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within 12 (twelve) months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least 12 (twelve) months after the reporting period.

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair value measurement

The Group measures financial instruments, such as financial assets measured at fair value at each reporting date, and non-financial assets (NES assets) at fair value when fair value differs materially from their carrying value. Also, fair values of financial instruments measured at amortized cost are disclosed in Note 28.

Fair value is the price that would be received from sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:
- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible to by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:
- Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the financial statements on a recurring basis, the Group determines whether transfers have occurred between Levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The Group's finance management determines the policies and procedures for both recurring fair value measurement, such as NES assets and unquoted AFS financial assets, and for non-recurring measurement, if any.

External valuers are involved for valuation of NES assets. Involvement of external valuers is decided upon annually by the finance management. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained. The finance management decides, after discussions with the Group's external valuers, which valuation techniques and inputs to use for each case.

At each reporting date, the finance management analyses the movements in the values of assets and liabilities which are required to be re-measured or re-assessed as per the Group's accounting policies. For this analysis, the finance management verifies the major inputs applied in the latest valuation by agreeing the information in the valuation computation to contracts and other relevant documents.

The finance management, in conjunction with the Group's external values, also compares each the changes in the fair value of each asset of revalued class of property, plant and equipment in accordance with Group accounting policy with relevant external sources to determine whether the change is reasonable.

The finance management and external values discusses the major assumptions used in the valuations.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

Foreign currency transactions

The Group's consolidated financial statements are presented in Tenge ("KZT"), which is also the Group's parent company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange at the reporting date.

All differences arising on settlement or translation of monetary items are recognized in consolidated statement of comprehensive income with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognized in other comprehensive income until the net investment is disposed of, at which time, the cumulative amount is reclassified to profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions.

Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items is treated in line with the recognition of gain or loss on change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognized in other comprehensive income or profit or loss is also recognized in other comprehensive income or profit or loss, respectively).

Exchange rates for foreign currencies in which the Group had significant transactions are represented as follows:

Exchange rate as at the end of the period (to KZT)	**31 December 2019**	31 December 2018
USD 1	**381.18**	384.2
EUR 1	**426.85**	439.37
RUB 1	**6.17**	5.52

Average exchange rate for the year (to KZT)	**31 December 2019**	31 December 2018
USD 1	**382.87**	344.76
EUR 1	**428.63**	406.65
RUB 1	**5.92**	5.5

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property, plant and equipment

Property, plant and equipment, except for NES assets, are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met.

When significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognizes such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in profit or loss as incurred.

NES assets are measured at fair value less accumulated depreciation and impairment losses recognized at the date of revaluation. Valuations are performed with sufficient frequency to ensure that the fair value of a revalued asset does not differ materially from its carrying amount.

A revaluation reserve is recorded in OCI and credited to the asset revaluation reserve in equity. However, to the extent that it reverses a revaluation deficit of the same asset previously recognized in profit or loss, the increase is recognized in profit and loss. A revaluation deficit is recognized in consolidated statement of comprehensive income, except to the extent that it offsets an existing surplus on the same asset recognized in the asset revaluation reserve. Upon disposal, any revaluation surplus relating to the particular asset being sold is transferred to retained earnings.

Depreciation is computed on a straight-line basis over the estimated useful lives set out in the following table:

Buildings	60 years
NES assets	
Power transmission lines	50 years
Constructions	10-30 years
Machinery and equipment	12-30 years
Vehicles and other property, plant and equipment	
Other machinery and equipment	7-25 years
Vehicles	11 years
Computers and other data processing equipment	4-10 years
Furniture	7 years
Other property, plant and equipment	3-15 years

Land is not depreciated.

Due to changes in the National Classifier of Fixed Assets of the Republic of Kazakhstan effective from 1 January 2015 “NES Machinery and equipment” class has been separated from “NES assets” class. Therefore, the Group renamed “NES Constructions” into “NES assets” for the purposes of financial statements. The useful lives and residual values of property, plant and equipment are reviewed annually and, where applicable, adjustments are made on a prospective basis.

If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. These estimates may have a material impact on the amounts of the carrying amount of property, plant and equipment and on depreciation expenses recognized in the consolidated statement of comprehensive income.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the profit or loss in the year the asset is derecognized.

Intangible assets

Intangible assets are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangible assets of the Group, excluding capitalised development costs, are not capitalised and expenditure is reflected in the profit and loss in the period in which expenditure is incurred.

Intangible assets of the Group consist primarily of licenses and software. Intangible assets are amortized on a straight-line basis over their estimated useful lives, generally from 3 to 20 years.

Impairment of non-financial assets

At each reporting date, the Group assesses whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset’s recoverable amount. An asset’s recoverable amount is the higher of an asset’s or cash-generating unit’s (CGU) fair value less costs to sell and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on value in use, which are prepared separately for each of the Group’s CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of 5 (five) years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations, including impairment on inventories, are recognised in the consolidated statement of comprehensive income in expense categories consistent with the function of the impaired asset, except for NES assets previously revalued with the revaluation taken to OCI. For such assets, the impairment is recognized in OCI up to the amount of any previous revaluation. For assets previously impaired, except for goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset’s or CGU’s recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset’s recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognized in profit or loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation surplus.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Investments in an associate

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

The considerations made in determining significant influence are similar to those necessary to determine control over subsidiaries.

The Group's investment in its associate is accounted for using the equity method.

Under the equity method, the investment in an associate is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the associate since the acquisition date. Goodwill relating to the associate is included in the carrying amount of the investment and is neither amortized nor individually tested for impairment.

The consolidated statement of comprehensive income reflects the Group's share of the results of operations of the associate. When there has been a change recognized directly in the equity of the associate, the Group recognized its share of any changes, when applicable, in the consolidated statement of changes in equity.

Unrealised gains and losses resulting from transactions between the Group and the associate are eliminated to the extent of the interest in the associate.

The aggregate of the Group's share of profit or loss of an associate is shown on the face of the consolidated statement of comprehensive income outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate.

The financial statements of the associate are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its associate. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying amount, then recognized the loss as 'Share in profit of an associate' in profit or loss.

Upon loss of significant influence over the associate, the Group measures and recognized any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

Financial instruments – initial recognition and subsequent measurement

Financial assets
Initial recognition and measurement

The Group's financial assets include cash and cash equivalents, short-term and long-term deposits, restricted cash, other financial assets, trade and other accounts receivable, quoted and unquoted financial instruments.

Financial assets at initial recognition are classified as financial assets measured at amortized cost; financial assets measured at fair value through profit or loss; financial assets measured at fair value through other comprehensive income.

A financial asset is measured at amortized cost if two criteria are met:

1) The purpose of the business model is to hold a financial asset to receive all contractual cash flows; and
2) Contractual cash flows are represented only by interest payments and principal debt. The fee is a payment for the time value of money and the credit risk associated with the principal debt to maturity in a certain period of time.

If at least one of the above criteria is not met, the financial asset is measured at fair value.

The Group's financial assets not carried at amortized cost are stated at fair value.

A financial asset is measured at fair value through other comprehensive income if two criteria are met:

1) The purpose of the business model is to hold a financial asset both for obtaining all contractual cash flows and for selling a financial asset; and
2) Contractual cash flows are represented only by interest payments and principal debt. The fee is a payment for the time value of money and the credit risk associated with the principal debt to maturity in a certain period of time.

The Group accounts for financial assets at fair value through profit or loss, except when they are carried at amortized cost or at fair value through other comprehensive income.

Subsequent measurement

Subsequently, financial assets are measured at amortized or fair value through other comprehensive income, or through profit or loss, based on the business model of the Group for the Management of Financial Assets. The business model is determined by the management of the Group.

Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognised when:
- The rights to receive cash flows from the asset have expired;
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the asset is recognised to the extent of the Group's continuing involvement in the asset. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial instruments – initial recognition and subsequent measurement (continued)

Recognition of expected credit loss

The Group recognizes the estimated provision for expected credit losses on financial assets measured at amortized cost and fair value through other comprehensive income in an amount equal to expected credit losses for the entire period, if the credit loss has increased significantly since initial recognition. The Group does not reduce the carrying amount of a financial asset at fair value through other comprehensive income but recognizes estimated provision in other comprehensive income.

In determining whether there has been a significant increase in the credit risk of a financial asset since its initial recognition, the Group focuses on changes in the risk of a default occurring over the life of the loan instrument, and not on changes in the amount of expected credit losses.

If the terms and conditions of the cash flows of a financial asset stipulated by the agreement have been revised or modified and the recognition of the financial asset has not been terminated, the Group assesses whether the credit risk of the financial instrument has changed significantly by comparing the following:

1) Risk assessment of default as of the reporting date (based on modified contractual terms);
2) Risk assessment of default upon initial recognition (based on the initial unmodified contractual terms).

If there is no significant increase in credit risk, the Group recognizes an allowance for losses on a financial asset in the amount equal to 12-month expected credit losses, with the exception of:

1) Acquired or created credit-impaired financial assets;
2) Trade receivables or contractual assets arising from transactions that are within the scope of IFRS 15 Revenue from Contracts with Customers; and
3) Lease receivables.

For financial assets referred to in paragraphs (1) to (3), the Group estimates the provision for losses in the amount of expected credit losses for the entire term.

If in the previous reporting period the Group estimated the estimated provision for losses on a financial instrument in an amount equal to expected credit losses for the entire term, but as of the current reporting date determines that there is no significant increase in credit risk, then at the current reporting date the Group should evaluate the estimated a provision equal to 12-month expected credit losses.

The Group recognizes, as profit or loss from impairment, the amount necessary to adjust the estimated provision for losses to the amount of expected credit losses as at the reporting date.

For acquired or created credit-impaired financial assets, the Group recognizes favorable changes in expected credit losses for the whole term as a recovery of impairment losses, even if the expected credit losses for the whole period are less than the expected credit losses that were included in the estimated cash flows at initial recognition.

Measurement of expected credit loss

The Group estimates expected credit losses for a financial instrument in a manner that reflects:

1) An unbiased and probability-weighted amount determined by assessing the range of possible results;
2) The time value of money;
3) Reasonable and confirmed information about past events, current conditions and projected future economic conditions available at the reporting date.

The maximum period considered in assessing expected credit losses is the maximum period under the contract (including extension options) during which the Group is exposed to credit risk.

For financial instruments that include both a loan and an unused component of the loan obligation, the Group's contractual ability to request repayment of the loan and annul the unused component of the loan obligation does not limit the Group's exposure to credit loss risk by the contractual deadline for notifying. For such financial instruments, the Group estimates credit losses for the entire period of exposure to credit risk, and expected credit losses will not be reduced as a result of the Group's activities in managing credit risks, even if such a period exceeds the maximum period under the contract.

To achieve the goal of recognizing expected credit losses over the entire term arising from a significant increase in credit risk since initial recognition, it may be necessary to assess a significant increase in credit risk on a group basis, for example, by analysing information indicating a significant increase in credit risk for a group or subgroup of financial instruments. This ensures that the Group achieves the goal of recognizing expected credit losses for the entire period in the event of a significant increase in credit risk, even if confirmation of such a significant increase in credit risk at the level of an individual instrument is not yet available.

Financial liabilities

Initial recognition and measurement

Financial liabilities at initial recognition are classified as financial liabilities at fair value through profit or loss, loans and borrowings, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

Financial liabilities are recognised initially at fair value plus, in the case of loans and borrowings, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings, and bonds issued.

Subsequent measurement

The measurement of financial liabilities depends on their classification as described below:

<u>Loans and borrowings</u>

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated statement of comprehensive income.

<u>Trade and other payables</u>

Trade and other payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate method.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial instruments – initial recognition and subsequent measurement (continued)

Financial liabilities (continued)

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated statement of comprehensive income.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

Inventory

Inventories are accounted for on a FIFO basis.

Inventories are valued at the lower of cost and net realizable value.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at banks and on hand and short-term deposits with a maturity till 3 (three) months or less.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits as defined above, net of outstanding bank overdrafts.

Restricted cash

In accordance with loan agreements on projects financing signed with International Bank for Reconstruction and Development (the "IBRD") and European Bank for Reconstruction and Development (the "EBRD"), the Group opened bank escrow accounts, necessary for debt service. Cash, held on these bank accounts, can be used exclusively for the purposes of planned payments on interest and principal loan amounts. If cash is restricted in use for the period not exceeding 12 (twelve) months from the reporting date, such cash is treated as current asset and an appropriate disclosure is provided in the notes to the consolidated financial statements. If cash is restricted in use for the period exceeding 12 (twelve) months from the reporting date, such cash is reflected within non-current assets.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the consolidated statement of comprehensive income, net of any reimbursement.

Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. The Group assesses its revenue arrangements against specific criteria to determine if it is acting as principal or agent. The Group has concluded that it is acting as a principal in all of its revenue arrangements.

The Group recognizes revenue to reflect the provision of promised services to consumers in the amount of compensation that the Group expects to be entitled to receive in exchange for goods or services.

The Group, when recognizing revenue, takes the following steps:

1) Identification of the contract with the consumer;
2) Identification of the obligation to be executed under the contract;
3) Determination of transaction price;
4) Distribution of the transaction price between certain duties to be performed under the contract;
5) Recognition of proceeds at the time of (or as far as) the performance of the obligations to be performed under the contract.

Revenue from rendering of services is recognized by reference to the stage of completion. The Group receives its revenue from rendering of transmission services of electricity from power generators to wholesale and major customers, technical dispatching of the input of electricity into the energy system and consumption of electricity, organization of balancing of electricity producing and consumption and ensuring a contractual power supply with energy systems of neighbouring countries and other.

Tariffs for services of electricity transmission, technical dispatch, organization of balancing of production/consumption of electricity are approved by the Committee.

Revenues from providing a contractual power supply with energy systems of neighbouring countries are recognised in accordance with terms of contracts conducted on the basis of Agreement between the Government of Republic of Kazakhstan and Russian Federation On Measures Securing Parallel Operation of Unified Power Systems of the Republic of Kazakhstan and Russian Federation.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition (continued)

Also, from 1 January 2019, with the launch of the capacity market in the Republic of Kazakhstan, the Group provides services to ensure the readiness of electricity capacity to bear the power load. Revenues from the provision of services to ensure the readiness of electricity capacity to bear the power load are recognized monthly based on the volume of services rendered. The volume of the service for ensuring the readiness of electric power to bear the power load for each specific buyer is the maximum, for the respective month, electric power consumption, indicated in the act on the actual maximum volume of electric power consumption for a month.

Interest income

For all financial instruments measured at amortised cost and interest bearing financial assets classified as available for sale, interest income or expense is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is included in the consolidated statement of comprehensive income.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that the Group incurs in connection with the borrowing of funds.

Lease

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date. The arrangement is assessed for whether fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

The Group as a lessee

Finance leases that transfer substantially all the risks and benefits incidental to ownership of the leased item to the Group, are capitalised at the commencement of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance costs and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance costs are recognised in profit or loss.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term. Operating lease payments are recognised as an operating expense in the consolidated statement of comprehensive income on a straight-line basis over the lease term.

Pension obligations

In accordance with the legislation of the Republic of Kazakhstan, the Group deducted 10% of employees' salaries, but no more than KZT 212,500 per month (2018: KZT 212,130) to accumulative pension funds. Pension fund payments are withheld from employees' salaries and included with payroll expenses in the consolidated statement of comprehensive income when they are incurred. The Group has no other retirement benefit obligations.

Current income tax

Current income tax assets and liabilities for the current and previous periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax relating to items recognised directly in equity is recognised in equity and not in the consolidated statement of comprehensive income. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred income tax liabilities are recognised for all taxable temporary differences, except:
- Where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:
- Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognized deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Deferred tax (continued)

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Dividends

Dividends are recognised as a liability and deducted from equity at the reporting date only if they are approved before or on the reporting date. Dividends are disclosed when they are proposed before the reporting date or proposed or declared after the reporting date but before the consolidated financial statements are authorised for issue.

Contingent liabilities and contingent assets

Contingent liabilities are not recognised in the consolidated financial statements, but are disclosed in the consolidated financial statements unless the possibility of any outflow in settlement is remote.

A contingent asset is not recognised in the consolidated financial statements but disclosed in the consolidated financial statements when an inflow of economic benefits is probable.

4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosures, and the disclosure of contingent liabilities and assets. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

Revaluation of property, plant and equipment

The Group performed revaluation of NES assets as at 1 October 2018. The Group engaged Deloitte TSF LLP, an accredited independent appraiser, to assess the fair value of the NES assets.

The revalued NES assets represent one class of assets according to IFRS 13, based on the nature, characteristics and risk of the property. Input data for determining the fair value of NES assets refer to Level 3 in the fair value hierarchy (unobservable inputs).

After 2017, the Committee approved an increase in tariffs for electricity transmission services, technical dispatching and balancing the production and consumption of electricity. Higher tariffs resulted in the revaluation surplus on certain assets credited to other comprehensive income in the amount of KZT 113,259,316 thousand, and respective deferred tax liability in the amount of KZT 22,651,864 thousand and revaluation gain amounting to KZT 3,342,507 thousand was credited to profit and loss to the extent of revaluation deficit recognized in these assets in prior periods.

Fair value of NES assets was determined by using the cost approach. The cost approach has been used due to highly specialized nature of the assets and because there is no history of such assets ever being sold. Within cost approach, the method of determining the replacement cost or the cost of reproduction was used to calculate the total cost of replacement of fixed assets less all types of accumulated depreciation, as well as the method of calculation by analogues, the method of specific indicators and the method of indexation of past costs.

The appraised current replacement cost has been further compared to the recoverable amount identified based on the discounted cash flow model. The cash flows are derived from the budget for the next five (5) years.

As a result of the assessment, the amount of KZT 527,147,904 thousand was recognised as a fair value of NES assets as of 1 October 2018.

In assessment of the fair value in 2018 the following main assumptions have been applied:

Discount rate (WACC)	11.82%
Long term growth rate	3.6%
Remaining useful life of the primary asset	40 years

An increase in the discount rate by 0.5% or a reduction in long term growth rate by 0.5% would result in a decrease in the fair value of Group's property, plant and equipment for approximately KZT 40,116,819 thousand or KZT 26,219,011 thousand, respectively.

Taxes

BUncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and benefit already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority.

Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective domicile of the Group companies.

4. SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS (continued)

Taxes (continued)

As the Group assesses the probability for litigation and subsequent cash outflow with respect to taxes as remote, no contingent liability has been recognised.

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised in the consolidated financial statements, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, their fair value is determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values. The judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the fair value reported in the consolidated financial statements.

Bonds DSFK

On 28 December 2017, in accordance with the Decree of the Government of the Republic of Kazakhstan dated 7 November 2017, the Group acquired bonds of Special Financial Company DSFK LLP (“DSFK bonds”) using the funds placed with RBK Bank JSC (“RBK Bank”). The nominal value of deposits placed with RBK Bank before the transaction was KZT 1,498,249 thousand. DSFK bonds carry coupon interest of 0.01% per annum (paid annually) and mature in 15 years. The bonds are secured by a financial guarantee of Kazakhmys Corporation LLP of KZT 411,883 thousand. The guarantee is exercisable upon request of the Group not earlier than the fifth anniversary after the inception of the bonds.

Management of the Group believes that at 31 December 2019 DSFK bonds are non-recoverable. Accordingly, management of the Group believes that fair value of DSFK bonds is limited to their recoverable amount that is equal to the fair value of the guarantee. The Group does not hold the bonds for all contractual cash flows, so as at 31 December 2019, the bonds were classified as financial instruments at fair value through profit or loss. As at 31 December 2019, the Group revalued the fair value of the bonds at a discount rate of 12.9%, which represents the market discount rate as at 31 December 2019.

Samruk-Kazyna Bonds

During May-June 2018, the Group purchased coupon bonds of Samruk-Kazyna JSC with par value of KZT 26,000,000 thousand at Kazakhstan stock exchange JSC. The bonds were classified at amortised cost and initially recognized at fair value using a discount calculated at a market rate of 8.4%.

Purchase and sale of electricity generated by renewable energy facilities

In order to create conditions for the development of the renewable energy sector (hereinafter – “RES”), the Government of the Republic of Kazakhstan adopted a mechanism of state support based on the introduction of a centralized purchase by a single buyer – “RFC” LLP of electricity produced by renewable energy facilities. The activities of the “RFC” LLP are regulated by the Law of the Republic of Kazakhstan On Supporting the Use of Renewable Energy Sources.

After analysing the contracts for the purchase and sale of electricity generated by renewable energy facilities, the Group’s management made significant judgment that the Group momentarily obtains control over the electricity generated by renewable energy facilities and transfers it to customers. The management of the Group believes that buyers consider the Group as the party that bears the main responsibility for the implementation of the contract for the sale of electricity produced by renewable energy facilities, since the Group is obliged to supply the agreed amount of electricity, while all expenses for balancing production and consumption of electricity and technological losses are incurred by the Group.

Moreover, contracts for the purchase of electricity generated by renewable energy facilities are concluded by the Group for a period of 15 years, that is, the Group has the long-term obligation to purchase electricity for the electricity generated by renewable energy facilities wherein contracts with customers are signed for a period of one year.

Therefore, the Group Management determined that the Group is a principal in the sale of electricity generated by renewable energy facilities, and the Group recognizes revenue in the gross amount to which the entity expects to be entitled.

Determination of the lease component in renewable energy purchase agreements

A subsidiary of the Group, RFC has entered into long-term contracts for the purchase of electricity produced at power plants using renewable energy sources (hereinafter referred to as “RES power stations”). According to these agreements, the RFC has the right to receive almost all economic benefits from the use of a renewable energy plant during the period of use, defined as the 15-year period of validity of purchase agreements. The RFC purchases the entire amount of electricity produced at these renewable energy plants. Renewable energy purchase agreements provide for fixed tariffs in Tenge for each kWh of electricity generated at renewable energy plants.

Therefore, the Group’s management determined that renewable energy purchase agreements contain a lease component in accordance with IFRS 16. However, the Group’s management cannot reliably estimate the amount of electricity due to high fluctuations in the volumes of production that will be generated at each specific power plant, as the nature of the renewable energy business depends to a large extent on external factors such as weather conditions. Accordingly, the management of the Group was not able to reliably assess lease obligations (and, accordingly, right to use asset).

Estimated allowance for expected credit losses on receivables

The Group uses the estimated reserves matrix to calculate the ECL for receivables. Valuation reserve rates are set depending on the number of days of delay in payment for groups of different customer segments with similar loss characteristics (i.e., by geographic region, product type, type and rating of customers, collateral by letters of credit and other forms of credit risk insurance).

Initially, observable data on the occurrence of defaults in past periods underlies in the basis of the estimated reserves matrix. The Group will update the matrix to adjust past experience with credit losses, considering forward-looking information. At each reporting date, the observed default level data in previous periods are updated and changes in forecast estimates are analyzed.

The assessment of relationship between historical observed default levels, forecasted economic conditions, and ECL is a significant estimate. The value of the ECL is sensitive to changes in circumstances and projected economic conditions. Past experience of occurrence of credit losses and the forecast of economic conditions may also not be indicative of actual default of the buyer in the future.

5. OPERATING SEGMENTS INFORMATION

Geographic information

Revenues from external customers based on the geographic locations of the customers represent the following:

In thousands of Tenge	**2019**	2018
Revenue from Kazakhstan customers	**247,186,271**	165,451,444
Revenue from Russian customers	**15,245,821**	9,741,509
Revenue from Uzbekistan customers	**708,465**	561,066
Revenue from Kyrgys customers	**21,516**	43,367
Total revenue per consolidated statement of comprehensive income	**263,162,073**	175,797,386

Management analyses the Group's revenue and profit before tax determined in accordance with IFRS.

For the year ended 31 December 2019 the revenue from one customer, Samruk-Energo Group, including its joint-ventures, amounted to KZT 38,464,643 thousand, arising from electricity transmission and the provision of related support, ensuring the readiness of electric power to bear the load, as well as the sale of purchased electricity (for the year ended 31 December 2018: KZT 33,049,610 thousand).

Operating segments

For management purposes, the Group's activities are organized into business units based on their services, and has three reportable operating segments, as follows:

- *Electricity transmission and related support.* Electricity transmission is regulated by the Law as the Group is a natural monopolist in electricity transmission, technical dispatch and electricity production-consumption balancing services. According to the Law, the Group's electricity transmission, technical dispatch and electricity production-consumption tariffs are approved by the Committee.
- *Ensure readiness of electricity capacity to bear the power load.* From 1 January 2019, the electricity capacity market was put into operation in the Republic of Kazakhstan, the main purpose of which is to ensure the balance of the reliability of the power system of the Republic of Kazakhstan. Balance reliability refers to the ability of a power system to meet consumer demand for electricity at any given time.
- *Sale of purchased electricity.* The sale of purchased electricity segment includes the renewable energy sector (hereinafter – "RES") created by the Government of the Republic of Kazakhstan in order to create conditions for the development of the RES. The renewable energy sector is regulated by the Law of the Republic of Kazakhstan dated 4 July 2009 No. 165-IV On Supporting the Use of Renewable Energy Sources.

	For the year ended 31 December 2019					
In thousands of Tenge	**Electricity transmission and related support services**	**Ensure readiness of electricity capacity to bear the power load**	**Sale of purchased electricity**	**Other**	**Elimination**	**Total**
Revenue from sales to external customers	**153,938,491**	**67,727,114**	**40,838,117**	**658,351**	**–**	**263,162,073**
Revenue from sales to other segments	**118,642**	**3,366,165**	**32,811**	**4,009,395**	**(7,527,013)**	**–**
Total revenue	**154,057,133**	**71,093,279**	**40,870,928**	**4,667,746**	**(7,527,013)**	**263,162,073**
Gross profit	**50,246,401**	**12,809,151**	**(710,722)**	**1,188,292**	**(627,726)**	**62,905,396**
General and administrative expenses	**(8,454,964)**	**(244,126)**	**(118,534)**	**(546,169)**	**529,586**	**(8,834,207)**
Selling expenses	**(411,350)**	**–**	**–**	**–**	**29,072**	**(382,278)**
Finance income	**3,861,445**	**357,094**	**232,623**	**70,749**	**(350,381)**	**4,171,530**
Finance costs	**(9,200,695)**	**–**	**–**	**–**	**–**	**(9,200,695)**
Share in profit of an associate	**774,374**	**–**	**–**	**–**	**–**	**774,374**
Foreign exchange gain/(loss), net	**469,269**	**–**	**1**	**(141)**	**–**	**469,129**
Reversal of impairment of property, plant and equipment	**(28,364)**	**–**	**–**	**–**	**–**	**(28,364)**
Income tax expense	**(6,906,005)**	**(2,597,311)**	**144,113**	**(162,801)**	**–**	**(9,522,004)**
Profit/(loss) for the reporting period	**30,942,952**	**10,358,076**	**(574,723)**	**614,608**	**(591,943)**	**40,748,970**
Total comprehensive income/(loss)	**30,942,952**	**10,358,076**	**(574,723)**	**614,608**	**(591,943)**	**40,748,970**
Other segment information						
Total segment assets	**729,742,694**	**17,967,007**	**8,166,822**	**4,570,336**	**(3,459,138)**	**756,987,721**
Total segment liabilities	**260,216,629**	**10,741,958**	**4,882,708**	**914,410**	**(1,606,008)**	**275,149,697**
Accrual of expected credit losses for doubtful debts	**94,761**	**(236,653)**	**2,584**	**9,121**	**–**	**(130,187)**
Investments in an associate	1,862,241	–	–	–	–	1,862,241

	For the year ended 31 December 2018					
Revenue from sales to external customers	154,344,611	–	21,023,257	429,518	–	175,797,386
Revenue from sales to other segments	69,951	–	1,892	3,721,185	(3,793,028)	–
Total revenue	**154,414,562**	**–**	**21,025,149**	**4,150,703**	**(3,793,028)**	**175,797,386**
Gross profit	62,323,417	–	61,023	972,592	(559,880)	62,797,152
General and administrative expenses	(7,517,505)	–	(194,637)	(591,710)	526,194	(7,777,658)
Selling expenses	(284,988)	–	–	–	300	(284,688)
Finance income	4,968,027	–	156,528	99,908	(273,126)	4,951,337
Finance costs	(3,862,511)	–	–	–	–	(3,862,511)
Share in profit of an associate	325,786	–	–	–	–	325,786
Foreign exchange gain/(loss), net	(5,865,173)	–	(2)	(479)	–	(5,865,654)
Reversal of impairment of property, plant and equipment	266,291	–	–	–	–	266,291
Income tax expense	(10,895,379)	–	(14,114)	(72,311)	(132)	(10,981,936)
Profit/(loss) for the reporting period	40,044,274	–	56,229	412,975	(470,603)	40,042,875
Total comprehensive income/(loss)	40,044,274	–	56,229	412,975	(470,603)	40,042,875
Other segment information						
Total segment assets	750,476,432	–	4,178,014	4,332,212	(3,135,956)	755,850,702
Total segment liabilities	279,514,195	–	3,452,204	960,513	(770,014)	283,156,898
Accrual of expected credit losses for doubtful debts	(561,526)	–	(3,111)	3,243	–	(561,394)
Investments in an associate	1,107,867	–	–	–	–	1,107,867

6. PROPERTY, PLANT AND EQUIPMENT AND ADVANCES PAID FOR NON-CURRENT ASSETS

	For the year ended 31 December 2019					
In thousands of Tenge	**Land**	**Buildings**	**NES assets**	**Vehicles and other property, plant and equipment**	**Construction-in-progress**	**Total**
As at 1 January 2018	1,737,558	13,807,910	844,259,049	38,997,861	83,208,832	982,011,210
Additions	16,727	–	5,022	1,724,727	40,872,762	42,619,238
Transfers	16,850	3,623,149	64,217,441	(6,272,225)	(61,585,215)	–
Revaluation surplus (OCI)	–	–	203,616,876	–	–	203,616,876
Revaluation (P&L)	–	–	5,084,250	–	–	5,084,250
Disposals	–	(6,529)	(488,177)	(606,139)	(33,074)	(1,133,919)
Transfer to intangible assets	–	–	–	(219,328)	(59,412)	(278,740)
Refunds on the project	–	–	(267,056)	–	–	(267,056)
As at 31 December 2018	1,771,135	17,424,530	1,116,427,405	33,624,896	62,403,893	1,231,651,859
Additions	**50,427**	**76,411**	**214,121**	**1,382,027**	**16,641,467**	**18,364,453**
Transfers	**88,694**	**1,236,427**	**52,579,631**	**7,362,162**	**(61,266,914)**	**–**
Disposals	**–**	**(862)**	**(817,105)**	**(544,568)**	**(700,861)**	**(2,063,396)**
Transfer to intangible assets	**–**	**–**	**–**	**–**	**(80,518)**	**(80,518)**
As at 31 December 2019	**1,910,256**	**18,736,506**	**1,168,404,052**	**41,824,517**	**16,997,067**	**1,247,872,398**
Accumulated depreciation and impairment						
As at 1 January 2018	–	(2,076,307)	(421,939,104)	(22,165,404)	(536,217)	(446,717,032)
Charge for the period	–	(309,915)	(23,682,717)	(2,334,589)	–	(26,327,221)
Transfer	–	(1,623,546)	(1,444,752)	3,068,298	–	–
Revaluation surplus (OCI)	–	–	(90,357,560)	–	–	(90,357,560)
Revaluation (P&L)	–	–	(1,741,743)	–	–	(1,741,743)
Disposals	–	6,486	350,602	600,452	19,868	977,408
Transfer to intangible assets	–	–	–	184,365	–	184,365
Reversal of impairment	–	–	–	–	266,291	266,291
As at 31 December 2018	–	(4,003,282)	(538,815,274)	(20,646,878)	(250,058)	(563,715,492)
Charge for the period	**–**	**(546,045)**	**(30,658,153)**	**(2,537,292)**	**–**	**(33,741,490)**
Transfer	**–**	**(99,574)**	**(106,641)**	**206,215**	**–**	**–**
Disposals	**–**	**389**	**672,967**	**453,854**	**–**	**1,127,210**
Reversal of impairment	**–**	**–**	**–**	**–**	**28,364**	**28,364**
As at 31 December 2019	**–**	**(4,648,512)**	**(568,907,101)**	**(22,524,101)**	**(221,694)**	**(596,301,408)**
Net book value						
As at 1 January 2018	1,737,558	11,731,603	422,319,945	16,832,457	82,672,615	535,294,178
As at 31 December 2018	1,771,135	13,421,248	577,612,131	12,978,018	62,153,835	667,936,367
As at 31 December 2019	**1,910,256**	**14,087,994**	**599,496,951**	**19,300,416**	**16,775,373**	**651,570,990**

If NES assets were measured using the cost model, net of accumulated depreciation, the carrying amount would be as follows:

In thousands of Tenge	**31 December 2019**	31 December 2018
Cost	**409,926,673**	356,156,250
Accumulated depreciation	**(112,519,473)**	(92,805,394)
Net book value	**297,407,200**	263,350,856

As at 31 December 2019 and 31 December 2018 the cost of fully amortised property, plant and equipment, which is still in use amounted to KZT 35,090,534 thousand and KZT 18,796,968 thousand, respectively.

Capitalized costs on issued bonds

During the year ended 31 December 2019 the Group capitalized the cost of coupon interest on issued bonds (less investment income) amounted to KZT 2,118,729 thousand (for the year ended 31 December 2018: KZT 7,806,352 thousand) (Note 16).

Construction in progress

Construction in progress is mainly represented by equipment and construction works as part of the implementation of the project "Construction of 500 kW line Shulbinskaya GES (Semey) – Aktogay – Taldykorgan – Alma" and project "Pavlodar Electricity Transmission Reinforcement".

Advances paid for non-current assets

As at 31 December 2019 and 31 December 2018 advances paid for non-current assets mainly represent prepayments made to suppliers for construction works and services related to the project "Construction of 500 kW line Shulbinskaya GES (Semey) – Aktogay – Taldykorgan – Alma".

7. INVESTMENTS IN ASSOCIATE

The Group has 20% share in Batys Transit JSC. Principal place of operations and country of incorporation of Batys Transit JSC ("Batys Transit") is the Republic of Kazakhstan. The main activity of Batys Transit is realization of a project on construction and exploitation of interregional power line, which connects the North Kazakhstan region with Aktobe region and construction and exploitation of street lighting networks in Atyrau city. Batys Transit has bonds traded on the Kazakhstan Stock Exchange. The following table illustrates the summarised financial information about Batys Transit:

In thousands of Tenge	**31 December 2019**	31 December 2018
Statement of financial position		
Current assets	**11,609,091**	11,699,041
Non-current assets	**20,448,279**	17,196,869
Current liabilities	**(4,311,941)**	(20,948,823)
Non-current liabilities	**(18,334,225)**	(2,407,751)
Net assets	**9,411,204**	5,539,336

7. INVESTMENTS IN ASSOCIATE (continued)

In thousands of Tenge	**31 December 2019**	31 December 2018
Group's share in net assets	**1,862,241**	1,107,867
Carrying amount of the investments	**1,862,241**	1,107,867

In thousands of Tenge	**31 December 2019**	31 December 2018
Statement of comprehensive income		
Revenue	**14,248,515**	9,761,586
Net profit	**3,871,868**	1,628,930
Group's share in profit of Batys Transit	**774,374**	325,786

As of 31 December 2019 and 31 December 2018, the associate had no contingent liabilities or capital commitments.

During the year 2019 the Group received the dividends from an associate in the amount of KZT 20,000 thousand for the year ended 2017.

8. INVENTORIES

In thousands of Tenge	**31 December 2019**	31 December 2018
Raw and other materials	**1,319,421**	1,161,158
Spare parts	**848,899**	1,177,463
Fuel and lubricants	**90,399**	172,197
Other inventory	**188,556**	26,606
Less: allowance for obsolete inventories	**(313,118)**	(246,046)
	2,134,157	2,291,378

Movement in the allowance for obsolete inventories was as follows:

In thousands of Tenge	**2019**	2018
At 1 January	**246,046**	655,684
Charge (Note 23)	**91,041**	2,960
Reversal (Note 23)	**(23,509)**	(401,710)
Write-off	**(460)**	(10,888)
At 31 December	**313,118**	246,046

9. TRADE ACCOUNTS RECEIVABLE

In thousands of Tenge	**31 December 2019**	31 December 2018
Trade accounts receivable	**24,006,143**	11,276,617
Less: provision for expected credit losses	**(2,104,309)**	(2,024,770)
	21,901,834	9,251,847

Movement in the provision for expected credit losses was as follows:

In thousands of Tenge	**2019**	2018
At 1 January	**2,024,770**	1,409,589
Adoption of IFRS 9	**–**	113,156
Charge	**824,194**	780,206
Reversal	**(739,689)**	(278,181)
Write-off	**(4,966)**	–
At 31 December	**2,104,309**	2,024,770

As at 31 December 2019 trade accounts receivable included accounts receivable from the customer, Uzbekenergo JSC, in the amount of KZT 1,472,045 thousand (31 December 2018: KZT 1,645,773 thousand.)

As at 31 December 2019 provision for debts from Uzbekenergo JSC amounted to KZT 1,332,370 thousand (31 December 2018: KZT 1,339,036 thousand).

The ageing analysis of trade receivables is as follows:

			Trade accounts receivable			
In thousands of Tenge	**Total**	**Current**	**Days past due**			
			30-90 days	**91-180 days**	**181-270 days**	**Above 271 days**
31 December 2019	**24,006,143**	**20,372,759**	**859,963**	**504,020**	**376,674**	**1,892,727**
Less: provision for expected credit losses	**(2,104,309)**	**(39,061)**	**(21,395)**	**(49,478)**	**(102,492)**	**(1,891,883)**
	21,901,834	**20,333,698**	**838,568**	**454,542**	**274,182**	**844**
31 December 2018	11,276,617	9,091,389	124,090	23,167	7,116	2,030,855
Less: provision for expected credit losses	(2,024,770)	(26,650)	(7,347)	(3,403)	(1,735)	(1,985,635)
	9,251,847	9,064,739	116,743	19,764	5,381	45,220

Trade accounts receivable were denominated in the following currencies:

In thousands of Tenge	**31 December 2019**	31 December 2018
Tenge	**20,907,577**	8,207,636
Russian Rouble	**931,182**	737,474
US Dollars	**63,075**	306,737
	21,901,834	9,251,847

10. OTHER CURRENT ASSETS

In thousands of Tenge	**31 December 2019**	31 December 2018
Other receivables for property, plant and equipment and constructions	**399,974**	399,974
Advances paid for goods and services	**314,710**	81,571
Deferred expenses	**92,629**	95,253
Loans receivable from employees	**1,521**	2,937
Other	**402,998**	375,946
Less: provision for expected credit losses	(472,349)	(427,059)
	739,483	528,622

Movement in the provision for expected credit losses and impairment of other current assets are as follows:

In thousands of Tenge	**2019**	2018
At 1 January	**427,059**	394,078
Adoption of IFRS 9	–	62
Charge	**93,972**	85,451
Reversal	**(48,533)**	(26,198)
Write-off	**(149)**	(26,334)
At 31 December	**472,349**	427,059

11. OTHER FINANCIAL ASSETS

In thousands of Tenge	**31 December 2019**	31 December 2018
Financial assets at amortised cost		
Bonds of Samruk-Kazyna	**25,886,318**	25,342,228
Bank deposits	**19,194,586**	18,786,773
Placements with Eximbank Kazakhstan	**2,865,652**	2,930,115
Eurobonds of the Ministry of Finance of the Republic of Kazakhstan	**1,663,184**	–
Placements with Kazinvestbank JSC	**1,239,455**	1,261,470
Placements with DeltaBank JSC	**1,230,000**	1,230,000
Bonds of Batys-Transit	**–**	998,558
Interest accrued on Samruk-Kazyna bonds	**463,667**	463,667
Interest accrued on Ministry of Finance Eurobonds	**13,304**	–
Interest accrued on Batys Transit bonds	**–**	56,862
Less: provision for impairment of placements with Eximbank Kazakhstan	**(2,865,652)**	(2,930,115)
Less: provision for impairment of placements with Kazinvestbank JSC	**(1,239,455)**	(1,261,470)
Less: provision for impairment of placements with Deltabank JSC	**(1,230,000)**	(1,230,000)
Less: provision for expected credit losses of Batys Transit bonds	**–**	(92,315)
Less: provision for expected credit losses	**(297,167)**	(86,316)
	46,923,892	45,469,457
Financial assets at fair value through profit or loss		
Bonds of Special Financial Company DSFK	**288,613**	267,040
	288,613	267,040
Total other financial assets	**47,212,505**	45,736,497
Other current financial assets	**45,260,710**	20,127,229
Other non-current financial assets	**1,951,795**	25,609,268
Total other financial assets	**47,212,505**	45,736,497

Movement in the provision for impairment of other financial assets are as follows:

In thousands of Tenge	**2019**	2018
At 1 January	**5,600,216**	2,512,483
Adoption of IFRS 9	**–**	643,320
Accrual	**508,905**	3,152,002
Reversal	**(476,847)**	(707,589)
At 31 December	**5,632,274**	5,600,216

11. OTHER FINANCIAL ASSETS (continued)

Bonds of Samruk-Kazyna JSC

During May-June 2018, the Group acquired coupon bonds of Samruk-Kazyna JSC with nominal value of KZT 26,000,000 thousand at cost lower than par value for KZT 25,159,831 thousand at Kazakhstan Stock Exchange JSC. The bonds mature on 13 March 2020. The Group also capitalized transaction costs associated with the payment of a brokerage fee in the amount of KZT 5,108 thousand and coupon income paid to the previous bondholder – Qazkom bank JSC from the beginning of the coupon period until the date of purchase of the bonds, which amounted to KZT 380,333 thousand. Thus, the total discount for the acquisition amounted to KZT 454,728 thousand, which was calculated as the difference between the amount paid and the nominal value and which will be capitalized in the value of the bonds within 2 years prior to the maturity date of the bonds. During the year ended 31 December 2019, amortization of the discount in amount of KZT 227,364 thousand was recognized as financial income in the consolidated statement of comprehensive income.

The Group recognised the bonds at fair value in the amount of KZT 24,931,352 thousand, including the discount of KZT 613,920 thousand, calculated as the difference between the total paid amount and its fair value, which was recognized as finance costs in the consolidated statement of comprehensive income. The Group classifies the bonds as carried at amortised cost. During the year ended 31 December 2019, amortization of the discount amounted to KZT 316,727 thousand.

Bonds of Special Financial Company DSFK LLP

For the year ended 31 December 2019, Special Financial Company DSFK LLP redeemed bonds amounting to KZT 22,141 thousand.

As at 31 December 2019, the Group reassessed the fair value of bonds and increased their carrying amount to KZT 288,613 thousand, recognizing gain from revaluation of financial instruments in the amount of KZT 43,714 thousand as finance income in the consolidated statement of comprehensive income.

Bonds of Batys Transit

In 2007-2009 the Group acquired bonds of Batys Transit JSC, an associate listed on the Kazakhstan Stock Exchange. The bonds are secured with Guarantee of the Government of Republic of Kazakhstan in accordance with guarantee agreement dated 9 January 2006. The coupon interest rate on bonds is 10.5%. The bonds are classified as financial assets carried at amortised cost. During the year ended 31 December 2019, the amortization of discount amounted to KZT 37,080 thousand. The bonds were fully realised on 23 September 2019.

Deposits

As at 31 December 2019 and 31 December 2018 the deposits include accrued interest income in the amount of KZT 16,284 thousand and KZT 52,198 thousand, respectively.

Placements with Eximbank Kazakhstan JSC

As at 31 December 2017, the Group's deposits in Eximbank Kazakhstan (hereinafter referred to as "Eximbank") amounted to 8,000 thousand Dollars (equivalent to KZT 2,658,640 thousand). According to the agreement, the deposit term expired in November 2017. The deposit was not returned by Eximbank to the Group. As a result of negotiations with Eximbank representatives and the analysis conducted, the Group management concluded that the placements are fully recoverable and will be returned within one year. In this regard, as at 31 December 2017, the Group assessed the impact of the temporary factor and recognized a discount of KZT 150,489 thousand. During the year ended 31 December 2018, the Group fully amortized the discount in finance income in consolidated statement of comprehensive income.

On 27 August 2018, based on the resolution of the Board of the National Bank of the Republic of Kazakhstan a decision was made to revoke the license of Eximbank for accepting deposits and opening bank accounts for individuals. In this regard, the Group reclassified cash and cash equivalents held in Eximbank within other financial assets and accrued a provision of 100%, which amounts to KZT 2,930,115 thousand.

On November 14, 2019, the Liquidation Commission of Eximbank Kazakhstan JSC made a payment in the amount of 178 thousand US dollars (equivalent to KZT 69,151 thousand at the date of payment), according to the approved register of creditors' claims dated 13 June, 2019. The Group recognized the related reversal of impairment allowance.

Notes of the National Bank of the Republic of Kazakhstan

In April 2019, the Group acquired discount notes of the National Bank of the Republic of Kazakhstan in the amount of 70,000 thousand units with a nominal value of 1,000 Tenge at a price lower than the nominal value for a total amount of 6,800,514 thousand Tenge from Kazakhstan Stock Exchange JSC. Circulation period of notes of the National Bank of the Republic of Kazakhstan was till 23 August 2019. In June 2019, the Group partially sold notes in the total amount of KZT 4,917,705 thousand, recognizing a loss on sale in the amount of KZT 6,230 thousand. During the reporting period, finance income of 123,420 thousand Tenge was recognized.

Eurobonds of the Ministry of Finance of the Republic of Kazakhstan

On 26 April 2019, the Group acquired Eurobonds of the Ministry of Finance of the Republic of Kazakhstan in the amount of 4,200,000 at a rate of 3.875% per annum and maturity until October 2024 at a price higher than the nominal amount of 4,368 thousand USD (equivalent of 1,656,736 thousand Tenge).

Other financial assets were represented in the following currencies:

In thousands of Tenge	**Interest rate**	**31 December 2019**	31 December 2018
Tenge	11.85-12%	**26,899,100**	28,020,599
US Dollars	0.3-1.5%	**20,313,405**	17,715,898
		47,212,505	45,736,497

12. RESTRICTED CASH

In thousands of Tenge	**31 December 2019**	31 December 2018
Cash on reserve accounts	**2,932,192**	2,895,401
Cash on debt service accounts	**1,057,574**	1,122,487
Cash reserved for return on guarantee obligations	**292,786**	204,168
Less: provision for expected credit losses	**(8,467)**	(46,480)
	4,274,085	4,175,576

As at 31 December 2019 and 31 December 2018 restricted cash mainly represents cash held on a debt service account and reserve account.

During 2019 and 2018 no interest on restricted cash was charged.

According to the terms of the loan agreements with IBRD and EBRD, the Group's creditors, the Group accumulates cash on a special debt service bank account opened with Kazakhstan bank during the semi-annual period preceding the scheduled date of payment of principal, interest and commission fees related to the IBRD and EBRD loans.

In accordance with the terms of the guarantee agreements with the Government of the Republic of Kazakhstan, the guarantor of the Group's loans (Note 15), the Group is obliged to hold cash on a special reserve account opened in a Kazakhstan bank. The Group is obliged to reserve cash for at least 110% of the upcoming semi-annual payment of principal, interest and commission fees of the IBRD loans.

The movement in the provision for expected credit losses on restricted cash was as follows:

In thousands of Tenge	**2019**	2018
At 1 January	**46,480**	–
Adoption of IFRS 9	**–**	86,409
Charge	**19,390**	58,528
Reversal	**(57,403)**	(98,457)
At 31 December	**8,467**	46,480

As at 31 December 2019 and 31 December 2018, restricted cash taking into account the funds planned to be repaid were denominated in the following currencies:

In thousands of Tenge	**31 December 2019**	31 December 2018
US Dollars	**3,981,663**	3,971,500
Tenge	**292,422**	204,076
	4,274,085	4,175,576

13. CASH AND CASH EQUIVALENTS

In thousands of Tenge	**31 December 2019**	31 December 2018
Short-term deposits, in Tenge	**17,795,817**	12,671,231
Current accounts with banks, in Tenge	**3,136,231**	2,993,477
Current accounts with banks, in foreign currencies	**263,712**	19,634
Cash on hand, in Tenge	**2,672**	3,914
Cash at special accounts, in Tenge	**86**	580
Short-term deposits, in foreign currencies	**–**	3,380,960
Less: provision for expected credit losses	**(19,236)**	(9,096)
	21,179,282	19,060,700

As at 31 December 2019 and 31 December 2018 the Group placed short-term deposits with banks at 7-9% per annum (2018: 7-9% per annum) and current accounts with banks at 3.69% per annum (2018: 4.9% per annum).

Movement of the provision for expected credit losses on cash and cash equivalents is as follows:

In thousands of Tenge	**2019**	2018
As at 1 January	**9,096**	–
Adoption of IFRS 9	**–**	43,225
Accrual	**26,334**	157,021
Reversal	**(16,194)**	(191,150)
As at 31 December	**19,236**	9,096

As at 31 December 2019 and 31 December 2018, cash and cash equivalents were denominated in the following currencies:

In thousands of Tenge	**31 December 2019**	31 December 2018
Tenge	**20,915,735**	15,661,766
US Dollars	**258,492**	3,394,135
Russian Rouble	4,278	1,240
Euro	450	3,242
Others	327	317
	21,179,282	19,060,700

14. EQUITY

As at 31 December 2019 and 31 December 2018 share capital of the Group comprised of 260,000,000 shares for the total amount of KZT 126,799,554 thousand that were issued and fully paid.

Treasury shares

In November 2016 the Group repurchased shares placed on the open market consisting of 1,390 shares for the total amount of KZT 930 thousand.

Dividends

In May 2018, shareholders approved the distribution of 70% of net profit for 2017 less net income distributed for the 1st half-year of 2017. The amount to be paid comprises KZT 10,433,745 thousand to all common shareholders of the Group, which is KZT 40.13 per common share.

In November 2018, shareholders approved the distribution of 80% of net profit for the 1st half-year 2018. The amount of dividends to be distributed amounted to KZT 20,937,687 thousand to all common shareholders of the Group, which is KZT 80.53 per common share.

In May 2019, shareholders approved the distribution of 87.7% of net profit for 2018 minus the amount of net profit distributed for the first half of 2018. The amount to be paid was KZT 14,177,724 thousand to all common shareholders of the Group, which is KZT 54.53 per ordinary share.

In October 2019 shareholders approved the distribution of 77.4% of net profit for the 1st half-year 2019. The amount of dividends to be distributed amounted to KZT 17,464,107 thousand to all common shareholders of the Group, which is KZT 67.17 per ordinary share.

Earnings per share

Basic and diluted earnings per share are calculated by dividing net profit for the period by the weighted average number of common shares outstanding during the period. The Group had weighted average number of common shares in circulation in the amount of 259,998,610 shares during the year ended 31 December 2019 (for the year ended 31 December 2018: 259,998,610 shares). For the year ended 31 December 2019 and 2018 basic and diluted earnings per share were KZT 156.73 and KZT 154.01, respectively.

Book value per share

In accordance with the decision of the Exchange Board of the Kazakhstan Stock Exchange JSC ("KASE") dated 4 October 2010 financial statements shall disclose book value per share (ordinary and preferred) as of the reporting date, calculated in accordance with the KASE rules.

In thousands of Tenge	**31 December 2019**	31 December 2018
Total assets	**756,987,721**	755,850,702
Less: intangible assets	**(1,411,900)**	(1,472,307)
Less: total liabilities	**(275,149,697)**	(283,156,898)
Net assets	**480,426,124**	471,221,497
Number of ordinary shares	**260,000,000**	260,000,000
Book value per ordinary share, Tenge	**1,848**	1,812

Asset revaluation reserve

Asset revaluation reserve represents revaluation surplus recognized as a result of revaluation of Group's NES assets as at 1 October 2018 (previous revaluation was held as at 1 June 2014) (Note 6). Transfer of asset revaluation surplus into retained earnings, upon disposal of PPE and transfer of NES assets into other classes of PPE, for the year ended 31 December 2019 amounted to KZT 470,944 thousand (for the year ended 31 December 2018: KZT 625,985 thousand).

15. BORROWINGS

In thousands of Tenge	**31 December 2019**	31 December 2018
International Bank of Reconstruction and Development (IBRD)	**44,314,813**	55,146,729
European Bank of Reconstruction and Development (EBRD)	**18,694,174**	19,155,131
	63,008,987	74,301,860
Less: current portion of loans repayable within 12 months	**(6,083,377)**	(11,420,710)
	56,925,610	62,881,150

As at 31 December 2019 and 31 December 2018 the accrued and unpaid interest amounts to KZT 760,458 thousand and KZT 903,984 thousand, respectively. As at 31 December 2019 and 31 December 2018 the unamortized portion of loan origination fees amounts to KZT 303,894 thousand and KZT 321,868 thousand, respectively.

Loans were denominated in the following currencies:

In thousands of Tenge	**31 December 2019**	31 December 2018
US Dollars	**44,314,813**	55,146,729
Euro	**18,694,174**	19,155,131
	63,008,987	74,301,860

15. BORROWINGS (continued)

"Kazakhstan National Electricity Transmission Rehabilitation Project"

In 1999 the Group received the following credit line facilities for the purpose of implementation of the "Kazakhstan National Electricity Transmission Rehabilitation Project", USD 140,000 thousand from IBRD for the 20 (twenty) years period, secured by a guarantee of the Government of the Republic of Kazakhstan. The loan is repayable by annual instalments commencing 2005. An interest at LIBOR base rate plus general spread is payable semi-annually. As at 31 December 2019 the loan is fully repaid (as at 31 December 2018 the outstanding balance amounted to USD 13,460 thousand, equivalent to KZT 5,171,332 thousand).

"Construction of the second North-South 500 kW Electricity Transmission line"

In 2005 for the purpose of implementation of the Phase II of the "Construction of the second North-South 500 kW Electricity Transmission line", the Group received a credit line facility of USD 100,000 thousand provided by IBRD for a period of 17 (seventeen) years of which first 5 (five) years are a grace period. This credit line facility is secured by a guarantee of the Government of the Republic of Kazakhstan. An interest at LIBOR Dollar rate plus general spread is paid semi-annually. In 2011 the non-disbursed part of this IBRD credit line in the amount of USD 1,918 thousand was cancelled due to the fact that actual costs incurred within this project were less than expected. The outstanding balances as at 31 December 2019 and 31 December 2018 are USD 24,506 thousand (equivalent to KZT 9,375,865 thousand) and USD 32,662 thousand (equivalent to KZT 12,548,744 thousand), respectively.

"Kazakhstan National Electricity Transmission Rehabilitation Project, Phase 2"

In 2008, for the realization of the "Kazakhstan National Electricity Transmission Rehabilitation Project, Phase 2" the Group opened the following credit lines:

(a) Two credit-line facilities of Euro 127,500 thousand and Euro 75,000 thousand from EBRD for 15 (fifteen) years, of which the first 4 (four) years are a grace period. An interest at the interbank six months EURIBOR rate plus a 3.85% margin is payable semi-annually. The outstanding balances as at 31 December 2019 and 31 December 2018 are Euro 43,130 thousand (equivalent to KZT 18,502,553 thousand) and Euro 43,130 thousand (equivalent to KZT 18,949,805 thousand), respectively;

(b) A credit line facility of Euro 47,500 thousand from EBRD for 12 (twelve) years, of which the first 4 (four) years are a grace period. As at 31 December 2019 and 31 December 2018, the debt under the above credit line is fully repaid;

(c) A credit line facility of Euro 5,000 thousand from EBRD for 9 (nine) years, of which the first 4 (four) years are a grace period. As at 31 December 2019 and 31 December 2018, the debt under the above credit line is fully repaid.

In November 2017, the Group early repaid four semi-annual principal payments of the loan in the amount of 44,253 thousand euro (equivalent to KZT 17,410,008 thousand), which were scheduled to be paid in February and August 2019 and 2020.

“Moinak Electricity Transmission Project”

In 2009, for the realization of the “Moinak Electricity Transmission Project” a credit line facility from IBRD of USD 48,000 thousand was opened for 25 (twenty five) years, of which the first 5 (five) years are a grace period.

The credit line facility is secured by the guarantee of the Government of the Republic of Kazakhstan. An interest rate is USD LIBOR rate plus fixed spread 0.85% is payable semi-annually. In May 2013 unused portion of the credit line from the IBRD in the amount of USD 3,274 thousand was cancelled due to the fact that the amount of actual expenses incurred in the course of the project was less than expected. The outstanding balances as at 31 December 2019 and 31 December 2018 are USD 33,545 thousand (equivalent to KZT 12,833,821 thousand) and USD 35,781 thousand (equivalent to KZT 13,747,016 thousand), respectively.

“Construction of the Alma 500 kW substation with connection to NES of Kazakhstan with the voltage of 500, 200 kW”

In 2010 for the realization of the project “Construction of the Alma 500 kW substation with connection to NES of Kazakhstan with the voltage of 500, 200 kW” the Group received a credit line facility of USD 78,000 thousand from IBRD for 25 (twenty five) years, of which the first 5 (five) years are a grace period. The credit line facility is secured by a guarantee of the Government of the Republic of Kazakhstan. An interest at LIBOR Dollar rate plus fixed spread 1.15% is repayable semi-annually. In July 2014 undeveloped part of the credit line from the IBRD in the amount USD 6,644 thousand has been cancelled due to the fact that the amount of actual costs was less than expected costs. The outstanding balances as at 31 December 2019 and 31 December 2018 are USD 57,085 thousand (equivalent to KZT 21,840,184 thousand) and USD 60,653 thousand (equivalent to KZT 23,302,847 thousand), respectively.

16. BONDS PAYABLE

In thousands of Tenge	**31 December 2019**	31 December 2018
Nominal value of issued bonds	**83,800,000**	83,800,000
Accrued coupon interest	**3,645,344**	4,097,122
Less: discount on bonds issued	**(86,190)**	(93,747)
Less: transaction costs	**(42,626)**	(46,149)
	87,316,528	87,757,226
Less: current portion of bonds repayable within 12 months	**(3,645,344)**	(4,097,122)
	83,671,184	83,660,104

Under the State Program “Nurly Zhol” the Group placed two tranches of coupon bonds on “Kazakhstan Stock Exchange” JSC in order to finance the projects “Construction of 500 kW line Semey – Ak-togay – Taldykorgan – Alma”:

a) During the period from June to August 2016 the Group issued coupon bonds with nominal amount of KZT 47,500,000 thousand under floating interest rate equal to the inflation rate in Republic of Kazakhstan plus 2.9% with the maturity in 2031 (the minimum rate of the consumer price index is set at 5%). The coupon rate for the first coupon period from 26 May 2017 to 26 May 2018 is 10.6% per annum. The coupon rate for the third coupon period from 26 May 2018 to 26 May 2019 is 9.5% per annum.

16. BONDS PAYABLE (continued)

All bonds under this program were acquired by United Pension Saving Fund.

Bonds were issued with discount in the amount of KZT 111,945 thousand.

b) In August 2017, the Group placed the second tranche of coupon bonds amounting to KZT 36,300,000 thousand with a fixed rate of 11.5%.

The received cash has been temporarily placed on short-term bank deposits.

All bonds under this program were acquired by United Pension Saving Fund and other entities.

During the year ended 31 December 2019 the Group capitalized the borrowing costs of coupon interest on the issued bonds less investment income in the amount of KZT 2,118,729 thousand (for the year ended 31 December 2018: KZT 7,806,352 thousand) (Note 6).

17. TRADE AND OTHER ACCOUNTS PAYABLE

In thousands of Tenge	**31 December 2019**	31 December 2018
Accounts payable for electricity purchased	**10,277,750**	6,145,704
Accounts payable for inventories, works and services	**7,844,832**	1,599,150
Accounts payable for property, plant and equipment and construction works	**5,266,900**	14,902,860
Less: discount on accounts payable	**–**	(2,417)
	23,389,482	22,645,297

As at 31 December 2019 and 31 December 2018 trade and other accounts payable are denominated in the following currencies:

In thousands of Tenge	**31 December 2019**	31 December 2018
Tenge	**22,386,569**	21,281,317
Russian Rouble	**938,700**	1,314,273
Euro	**22,893**	10,492
US Dollars	**41,320**	39,215
	23,389,482	22,645,297

18. CONSTRUCTION OBLIGATION

On 28 November 2013 in accordance with the decision of the Board of Samruk-Kazyna, the Group was committed to build a kindergarten in Nur-Sultan city and transfer it upon completion to the Akimat of Nur-Sultan. In 2014, the Group has estimated construction costs and signed a contract with the construction company. Accordingly, the Group recognized construction obligation for the total amount of KZT 683,430 thousand and the corresponding distribution to shareholders.

19. TAXES PAYABLE OTHER THAN INCOME TAX

In thousands of Tenge	**31 December 2019**	31 December 2018
VAT payable	**2,391,947**	1,143,918
Personal income tax	**284,573**	258,047
Contributions payable to pension fund	**345,742**	327,461
Social tax	**244,406**	212,394
Social contribution payable	**82,635**	75,179
Property tax	**1,599**	113,427
Other	**20,442**	14,015
	3,371,344	2,144,441

20. OTHER CURRENT LIABILITIES

In thousands of Tenge	**31 December 2019**	31 December 2018
Due to employees	**3,662,535**	3,116,621
Other	**321,065**	285,378
	3,983,600	3,401,999

21. REVENUE FROM CONTRACTS WITH CUSTOMERS

In thousands of Tenge	**2019**	2018
Electricity transmission services	**106,160,250**	108,098,580
Sale of services to ensure readiness of electricity capacity to bear the power load	**67,727,113**	–
Sale of purchased electricity	**40,826,184**	21,066,623
Technical dispatch	**23,003,501**	23,825,594
Balancing of electricity production and consumption	**16,493,329**	16,387,265
Sale of electricity for compensation of the interstate balances of electricity flows	**6,326,309**	4,213,782
Power regulation services	**708,465**	561,066
Other	**1,916,922**	1,644,476
	263,162,073	175,797,386

21. REVENUE FROM CONTRACTS WITH CUSTOMERS (continued)

In thousands of Tenge	**2019**	2018
Revenue recognition timeline		
The goods are transferred at a certain point in time	**47,152,493**	25,280,405
The services are provided over a period of time	**216,009,580**	150,516,981
Total revenue from contracts with customers	**263,162,073**	175,797,386

Discounts to customers are authorised by the Committee of the Republic of Kazakhstan for the Regulation of Natural Monopolies.

22. COST OF SALES

In thousands of Tenge	**2019**	2018
Cost of electricity capacity readiness services	**58,282,988**	–
Cost of purchased electricity	**41,456,649**	20,936,916
Depreciation and amortization	**33,490,579**	26,045,313
Payroll expenses and related taxes	**16,930,191**	15,884,891
Technical losses of electric energy	**16,022,320**	20,360,585
Cost of purchased electricity for compensation of interstate balances of electricity flows	**14,807,491**	11,837,990
Taxes other than income tax	**8,845,051**	7,160,040
Repair and maintenance expenses	**5,933,830**	5,649,745
Security services	**1,157,369**	1,175,967
Inventories	**532,806**	1,624,868
Other	**2,797,403**	2,323,919
	200,256,677	113,000,234

23. GENERAL AND ADMINISTRATIVE EXPENSES

In thousands of Tenge	**2019**	2018
Payroll expenses and related taxes	**5,488,847**	4,876,226
Depreciation and amortization	**832,919**	649,892
Consulting services	**253,477**	199,922
Rent expenses	**137,628**	116,859
Expenses for the Board of Directors	**134,017**	150,695
Business trip expenses	**123,870**	146,804
Expenses for the rights to use the software	**122,693**	241,799
Taxes other than income tax	**122,354**	411,913
Trainings	**83,363**	116,953
Utilities	**76,023**	104,743
Materials	**69,665**	75,948
Charge/(reversal) for obsolete inventories (Note 8)	67,532	(398,750)
Insurance	52,394	75,153
Other	1,269,425	1,009,501
	8,834,207	7,777,658

24. FINANCE INCOME/(COSTS)

In thousands of Tenge	**2019**	2018
Finance income		
Interest income from deposits, current accounts and bonds	**3,693,259**	5,237,834
Amortization of discount on other financial assets	**544,470**	622,497
Income from the National Bank notes	**123,420**	–
Amortization of discount on accounts receivable	**107,536**	136,312
Others	**43,885**	47,245
	4,512,570	6,043,888
Less: interest capitalized into cost of qualifying asset (Note 6)	**(341,040)**	(1,092,551)
	4,171,530	4,951,337
Finance costs		
Bond coupon	**8,243,226**	8,898,903
Interest on borrowings	**2,399,085**	2,307,237
Commission on bank guarantees	**925,963**	842,940
Interest expense on finance leases	**36,235**	24,597
Amortization of loan origination fees	**24,394**	24,069
Other costs on bonds issued	**17,329**	3,390
Discounting of the other financial assets	**11,816**	660,278
Other	**2,416**	–
	11,660,464	12,761,414
Less: interest capitalized into cost of qualifying assets (Note 6)	**(2,459,769)**	(8,898,903)
	9,200,695	3,862,511

25. FOREIGN EXCHANGE GAIN/(LOSS), NET

On 20 August 2015 the National Bank of Republic of Kazakhstan and the Government of the Republic of Kazakhstan decided to shift to freely floating currency exchange rate as a part of implementation of inflation targeting program. As a result of change of exchange rate of Tenge for the year ended 31 December 2019, the Group incurred net foreign exchange gain in the amount of KZT 469,129 thousand (for the year ended 31 December 2018: net foreign exchange loss in the amount of KZT 5,865,654 thousand).

26. INCOME TAX EXPENSE

In thousands of Tenge	**2019**	2018
Current income tax		
Current income tax expense	**9,880,628**	9,747,232
Adjustments in respect of current income tax of previous year	**(133,995)**	384,447
Deferred tax		
Deferred income tax (benefit)/expense	**(224,629)**	850,257
Total	**9,522,004**	10,981,936
Income tax expense reported in consolidated statement of comprehensive income		
Deferred tax on revaluation of NES assets	–	22,651,864
Total income tax expense reported in consolidated statement of comprehensive income	**9,522,004**	33,633,800

The income tax rate in the Republic of Kazakhstan is 20% in 2019 and 2018.

A reconciliation of the 20% income tax rate and actual income tax recorded in consolidated statement of comprehensive income is provided below:

In thousands of Tenge	**2019**	2018
Profit before tax	**50,270,974**	51,024,811
Tax at statutory income tax rate of 20%	**10,054,195**	10,204,962
Accrual of allowance for expected credit loss	**26,874**	472,953
Adjustments in respect of current income tax of previous year	**(133,995)**	384,447
Accrual of allowance for doubtful accounts receivable from non-residents	**(43,349)**	42,678
Property tax fines and penalties	–	22,624
Accrual/(reversal) of allowance for obsolete inventories	**12,889**	(79,750)
Interest income from securities	**(334,796)**	(264,453)
Other permanent differences	**(59,814)**	198,475
Income tax expense reported in profit or loss	**9,522,004**	10,981,936

Tax effect on temporary differences leading to deferred income tax assets and liabilities at 31 December 2019 and 31 December 2018 is provided below:

	Consolidated statement of financial position		Consolidated statement of comprehensive income	
In thousands of Tenge	**31 December 2019**	31 December 2018	**2019**	2018
Accounts receivable	**208,610**	145,837	**62,773**	47,725
Accrued liabilities	**602,636**	664,812	**(62,176)**	25,969
Property, plant and equipment	**(90,753,059)**	(90,977,091)	**224,032**	(923,951)
Deferred tax benefit/(expense)	–	–	**224,629**	**(850,257)**
Net deferred tax liabilities	**(89,941,813)**	**(90,166,442)**	–	–

Deferred tax assets and liabilities reflected in consolidated statement of financial position are presented as follows:

In thousands of Tenge	**31 December 2019**	31 December 2018
Deferred tax assets	**53,436**	3,760
Deferred tax liabilities	**(89,995,249)**	(90,170,202)
Net deferred tax liabilities	**(89,941,813)**	(90,166,442)

The Group offsets tax assets and liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

27. TRANSACTIONS WITH RELATED PARTIES

Related parties include key management personnel of the Group, enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by the Group's key management personnel and other entities controlled by the Government. The related party transactions were made on terms agreed between the parties that may not necessarily be at market rates, except for regulated services, which are provided based on tariffs available to related and third parties.

The following table provides the balances of trade accounts payable to/receivable from related parties as at 31 December 2019 and 31 December 2018:

In thousands of Tenge		**Trade accounts receivable from related parties**	**Trade accounts payable to related parties**
Subsidiaries of Samruk-Kazyna Group	**31 December 2019**	**4,562,033**	5,212,732
	31 December 2018	2,164,091	2,429,524
Associates of Samruk-Kazyna	**31 December 2019**	**122,745**	**469,270**
	31 December 2018	282,452	446,573
Entities under joint control of Samruk-Kazyna	**31 December 2019**	**225,098**	**47,233**
	31 December 2018	284,393	50,160
Associates of the Group	**31 December 2019**	**51,357**	**874**
	31 December 2018	114,214	–

The Group had the following transactions with related parties for the year ended 31 December 2019 and 31 December 2018:

In thousands of Tenge		**Trade accounts receivable from related parties**	**Trade accounts payable to related parties**
Subsidiaries of Samruk-Kazyna Group	**2019**	**44,420,011**	35,862,210
	2018	36,239,819	24,608,638
Associates of Samruk-Kazyna	**2019**	**7,612,678**	**2,749,820**
	2018	8,629,245	1,229,587
Entities under joint control of Samruk-Kazyna	**2019**	**7,212,565**	**5,797,907**
	2018	5,393,545	39,702
Associates of the Group	**2019**	**1,745,632**	**6,257**
	2018	492,394	3,973

27. TRANSACTIONS WITH RELATED PARTIES (continued)

The Group's sales to related parties mainly represent electricity transmission, technical dispatch and services on organizing and balancing of electricity production and consumption services, electrical capacity readiness services. The Group's purchases from related parties mainly represent communication services, energy services, purchase of electricity and purchase of electric capacity readiness maintenance services.

As at 31 December 2019 the Group's borrowings of KZT 44,558,028 thousand were guaranteed by the Government of the Republic of Kazakhstan (31 December 2018: KZT 55,407,918 thousand).

In 2007-2009 the Group acquired bonds of Batys Transit JSC, an associate listed on the Kazakhstan Stock Exchange. The bonds are secured with Guarantee of the Government of Republic of Kazakhstan in accordance with guarantee agreement dated 9 January 2006. The coupon interest rate on bonds is 7.3%. The bonds are classified as financial assets carried at amortised cost. As at 31 December 2019, Batys Transit bonds were fully paid (as at 31 December 2018: KZT 906,243 thousand).

As at 31 December 2019 the Group had accounts receivable for the sale of property, plant and equipment of Balkhash TES JSC, a related party, in the amount of KZT 220,494 thousand (as at 31 December 2018: KZT 219,851 thousand). In accordance with sales agreement Balkhash TES JSC must repay the outstanding balance before the end of 2018. However, as at 31 December 2019 the debt was not paid off. In connection with the suspension of construction of Balkhash TES JSC, the management of the Group made a decision to accrue a provision for receivables of 100%.

On 30 September 2015 the Group has sold buildings and constructions with equipment and land located in Astana city to its related party Kazpost JSC for KZT 2,161,476 thousand. In accordance with sales agreement Kazpost JSC will repay the outstanding balance by equal monthly payments until June 2027. Accordingly, the Group discounted the future cash flows using discount rate of 10.37%, which is the Group Management's best estimate of market rate. As at 31 December 2019 the discount on accounts receivable from Kazpost JSC amounted to KZT 436,820 thousand. As at 31 December 2019 the receivables net of discount comprised KZT 1,020,538 thousand, of which KZT 840,324 thousand was accounted for within long-term receivables from related parties. During the year ended 31 December 2019, the Group recognized income from amortization of a discount on long-term receivables from Kazpost JSC in the amount of KZT 107,536 thousand (during the year ended 31 December 2018: KZT 115,894 thousand).

In 2017, the Group entered into a long-term contract with a related party, Samruk-Kazyna Business Contract LLP, for leasing out the rights to use the software. Since, at the end of the contract, the rights to use the software will be transferred to the Group, the Group recognized finance lease liability. As at 31 December 2019, finance lease liability amounts to KZT 419,543 thousand (as at 31 December 2018: KZT 193,498 thousand).

Compensation to key management personnel and all related expenses (taxes, contributions, sick leaves, vacation pay, material assistance and others) included in salary expenses in the consolidated statement of comprehensive income amounted to KZT 543,682 thousand for the year ended 31 December 2019 (for the year ended 31 December 2018: KZT 405,885 thousand). Compensation to key management personnel mainly consists of contractual salary and performance bonus based on operating results.

28. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial liabilities comprise borrowings, bonds payable, trade and other payables. The main purpose of these financial liabilities is to finance the Group's investment projects and operations. The Group has trade and other receivables, cash and cash equivalents, short-term deposits that arrive directly from its operations, as wells as investments in debt securities.

The Group is exposed to interest rate risk, foreign currency risk, credit risk and liquidity risk.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term and short-term borrowings with floating interest rates (Notes 15 and 16).

The Group limits its interest rate risk by monitoring changes in interest rates in the currencies in which the borrowings are denominated. The following table demonstrates the sensitivity of the Group's profit before tax to a reasonably possible change in interest rates with all other variables held constant.

In thousands of Tenge	**Increase/(decrease) in basis points* / in percentage**	**Effect on profit before tax**
For the year ended 31 December 2019		
LIBOR	**0.35/(0.35)**	**(154,175)/154,175**
EURIBOR	**0.15/(0.15)**	**(27,754)/27,754**
Inflation rate in the Republic of Kazakhstan	**1%/0%**	**(474,270)/–**
For the year ended 31 December 2018		
LIBOR	0.5/(0.15)	(273,850)/82,155
EURIBOR	0.2/(0.01)	(37,900)/1,895
Inflation rate in the Republic of Kazakhstan	1%/0%	(474,207)/–

** 1 basis point = 0.01%.*

The assumed movement in basis points for the interest rate sensitivity analysis is based on the currently observable market environment, showing a significantly higher volatility than in prior years.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's financing activities. Also, the Group's exposure to the risk of changes in foreign exchange rates relates to the Group's operating activities (when revenue or expense is denominated in a different currency from the Group's functional currency).

The following tables demonstrate the sensitivity to a reasonably possible change in the US Dollar and Euro exchange rate, with all other variables held constant. The Group's exposure to foreign currency changes for all other currencies is not material.

28. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Foreign currency risk (continued)

In thousands of Tenge	Increase/(decrease) in exchange rate	Effect on profit before tax
At 31 December 2019		
US Dollar	**12%/(9%)**	**(2,368,740)/1,776,555**
Euro	**12%/(9%)**	**(2,245,994)/1,684,496**
At 31 December 2018		
US Dollar	14%/(10%)	(4,171,674)/2,979,767
Euro	14%/(10%)	(2,682,733)/1,916,238

** In absolute terms increase/(decrease) in exchange rate of Tenge in relation to US Dollar comprised 45.91/(34.43) Tenge;*
*** In absolute terms increase/(decrease) in exchange rate of Tenge in relation to Euro comprised 51.48/(38.61) Tenge.*

Credit risk

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities, primarily trade receivables (Note 9) and from its financing activities, including deposits with banks (Notes 11, 12 and 13). The Group's exposure and the creditworthiness of its counterparties are controlled constantly. It is the Group's policy to enter into financial instruments with a diversity of creditworthy parties. The maximum exposure to the credit risk is represented by the carrying value of each financial asset (Notes 9, 11, 12 and 13).

Book value of financial assets recognized in consolidated financial statements of the Group less impairment allowance reflects the maximal extent of the Group's credit risk.

An impairment analysis is performed by Group management at each reporting date on an individual basis for all customers based on number of days the receivables are overdue. The calculation is based on actual incurred historical data. The maximum exposure to the credit risk is represented by the carrying value of each class of financial assets disclosed in Note 9. The Group does not hold collateral as security.

During 2016-2018 some banks were deprived of a license to conduct banking and other operations by the National Bank (Note 11).

The Group is exposed to credit risk from its operating activities and investing activities. With regard to investing activities, the Group mainly places deposits with Kazakhstani banks.

The following table shows the balance of cash and cash equivalents and bank deposits placed in banks at the reporting date using the credit rating agency "Standard & Poor's" and "Fitch" less accrued provisions:

In thousands of Tenge	**Location**	**Rating**		**31 December 2019**	31 December 2018
		2019	2018		
Halyk Bank Kazakhstan JSC	**Kazakhstan**	**BB/Stable**	BB/Negative	**15,190,343**	17,781,948
ATF Bank JSC	**Kazakhstan**	**B/Stable**	B/Negative	**11,477,329**	13,812,397
ForteBank JSC	**Kazakhstan**	**B+/Stable**	B/Positive	**12,486,567**	9,589,361
BankCenterCredit JSC	**Kazakhstan**	**B/Stable**	B/Stable	**5,193,789**	748,533
				44,348,028	41,932,239

Liquidity risk

The management of the Group has built an appropriate liquidity risk management framework in accordance with the short, medium and long-term funding and liquidity management requirements. The Group manages its liquidity risk by maintaining adequate reserves, bank loans and credit lines, by monitoring projected and actual cash flows and comparing maturity dates of financial assets and liabilities.

The Group assessed the concentration of risk with respect to refinancing its debt and concluded it to be low. The Group has access to a sufficient variety of sources of funding and debt maturing within 12 (twelve) months can be rolled over with existing lenders.

The table below summarises the maturity profile of the Group's financial liabilities based on contractual undiscounted payments.

In thousands of Tenge	**On demand**	**Due more than 1 month but not later than 3 months**	**Due more than 3 months but not later than 1 year**	**Due more than 1 year but not later than 5 years**	**Due more than 5 years**	**Total**
At 31 December 2019						
Borrowings	–	**1,618,831**	**5,662,720**	**38,119,263**	**27,519,216**	**72,920,030**
Bonds payable	–	**1,981,750**	**5,945,250**	**31,708,000**	**139,689,340**	**179,324,340**
Trade and other accounts payable	–	**23,389,482**	–	–	–	**23,389,482**
	–	**26,990,063**	**11,607,970**	**69,827,263**	**82,649,240**	**275,633,851**
At 31 December 2018						
Borrowings	–	1,762,822	11,247,280	43,588,081	31,227,973	87,826,156
Bonds payable	–	–	4,097,122	43,330,638	153,132,875	200,560,635
Trade and other accounts payable	–	22,645,297	–	–	–	22,645,297
	–	24,408,119	15,344,402	86,918,719	184,360,848	311,032,088

28. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios to support its business and maximise the shareholder's value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares.

The Group monitors capital using a debt to capital ratio, which is debt divided by total capital. The Group's objective is to keep the ratio not higher than 0.5. Debt is considered to be equal to all borrowings and bonds payable. Capital is considered to be equal to the total liabilities and entire equity.

In thousands of Tenge	**31 December 2019**	31 December 2018
Debt/capital	**0.20**	0.21

In thousands of Tenge	**31 December 2019**	31 December 2018
Long-term borrowings and long-term bonds payable	**140,596,794**	146,541,254
Short-term borrowings and short-term bonds payable	**9,728,721**	15,517,832
Debt	**150,325,515**	162,059,086
Total liabilities	**275,149,697**	283,156,898
Equity	**481,838,024**	472,693,804
Total equity and liabilities	**756,987,721**	755,850,702

The structure of the Group capital includes the share capital as disclosed in Note 14, reserves and retained earnings.

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: other techniques for which all inputs that have a significant effect on the recorded fair value are observable, either directly or indirectly.
- Level 3: techniques that use inputs that have a significant effect on the recorded fair value that are not based on observable market data.

The following table provides the fair value measurement hierarchy of the Group's assets and liabilities:

Assets measured at fair value

In thousands of Tenge	**31 December 2019**	**Level 1**	**Level 2**	**Level 3**
Revalued property, plant and equipment				
NES assets (Note 6)	**599,496,951**	**–**	**–**	**599,496,951**

In thousands of Tenge	**31 December 2018**	**Level 1**	**Level 2**	**Level 3**
Revalued property, plant and equipment				
NES assets (Note 6)	577,612,131	–	–	577,612,131

Assets for which fair values are disclosed

In thousands of Tenge	**31 December 2019**	**Level 1**	**Level 2**	**Level 3**
Financial assets				
Other financial assets (Note 11)	**47,212,505**	**–**	**47,212,505**	**–**

In thousands of Tenge	**31 December 2018**	**Level 1**	**Level 2**	**Level 3**
Financial assets				
Other financial assets (Note 11)	45,736,497	–	45,736,497	–

Liabilities for which fair values are disclosed

In thousands of Tenge	**31 December 2019**	**Level 1**	**Level 2**	**Level 3**
Financial liabilities				
Bonds payable (Note 16)	**87,316,528**	**–**	**87,316,528**	**–**
Borrowings (Note 15)	**63,008,987**	**–**	**63,008,987**	**–**

In thousands of Tenge	**31 December 2018**	**Level 1**	**Level 2**	**Level 3**
Financial liabilities				
Bonds payable (Note 16)	**87,757,226**	**–**	**87,757,226**	**–**
Borrowings (Note 15)	**74,301,860**	**–**	**74,301,860**	**–**

For the year ended 31 December 2019 and 31 December 2018, there were no transitions between Level 1, 2, and 3 of the fair value of financial instruments.

28. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Fair values of financial instruments

As at 31 December 2019 and 31 December 2018 the management assessed that the fair value of financial instruments of the Group, such as trade accounts receivable and payable, other financial assets, cash and cash equivalents, cash restricted in use, approximates their carrying amounts largely due to the short-term maturities of these instruments. Borrowings and bonds payable are stated at amortized costs which approximate their fair values.

29. COMMITMENTS AND CONTINGENCIES

Changes in liabilities arising from financing activities

In thousands of Tenge	1 January 2019	**Cash flows**	**Foreign exchange movement**	**New leases**	**Other**	**31 December 2019**
Borrowings	74,301,860	**(10,517,957)**	**(673,696)**	**–**	**(101,220)**	**63,008,987**
Bonds payable	87,757,226	**–**	**–**	**–**	**(440,698)**	**87,316,528**
Finance leases obligations	193,498	**(132,116)**	**–**	**289,831**	**68,329**	**419,542**
Total liabilities from financing activities	162,252,584	**(10,650,073)**	**(673,696)**	**289,831**	**(473,589)**	**150,745,057**

In thousands of Tenge	1 January 2018	Cash flows	Foreign exchange movement	New leases	Other	31 December 2018
Borrowings	73,732,077	(9,217,048)	9,522,579	–	264,252	74,301,860
Bonds payable	88,056,742	–	–	–	(299,516)	87,757,226
Finance leases obligations	12,957	(59,323)	–	209,504	30,360	193,498
Total liabilities from financing activities	161,801,776	(9,276,371)	9,522,579	209,504	(4,904)	162,252,584

The Other column shows the amounts of received but not yet paid loan interest, including liabilities under Finance leases. The Group classifies the interest paid as cash flows from operating activities.

Operating environment

The Republic of Kazakhstan continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the Kazakhstani economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

The Kazakhstan economy has been negatively impacted by a drop in oil prices. Interest rates in Tenge remain high. Combination of these factors resulted in a reduced access to capital, a higher cost of capital, increased uncertainty regarding further economic growth, which could negatively affect the Group's financial position, results of operations and business prospects. Management of the Group believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances.

Taxation

Kazakhstan's tax legislation and regulations are subject to ongoing changes and varying interpretations. Instances of inconsistent opinions between local, regional and national tax authorities are not unusual, including an opinion on the IFRS approach regarding revenue, expenses and other accounts of financial statements. The current regime of penalties and interest related to reported and discovered violations of Kazakhstan's tax laws are severe. Penalties are generally 50 80% of the taxes additionally assessed and interest is assessed at the refinancing rate established by the National Bank of the Republic of Kazakhstan multiplied by 1.25. As a result, penalties and interest can amount to multiples of any assessed taxes. Fiscal periods remain open to review by tax authorities for 5 calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods. Because of the uncertainties associated with Kazakhstan's tax system, the ultimate amount of taxes, penalties and interest, if any, may be in excess of the amount expensed to date and accrued at 31 December 2019.

Compliance with loan covenants

From 1999 till 2011 the Group concluded loan facility agreements with EBRD and IBRD (the "Creditors") of which are effective for the amounts of 506 million US Dollars and 228 million Euro (Note 15). According to the Loan facility Agreements concluded between the Group and the Creditors, the Group has to comply with the following covenants:

- Current ratio of not less than 1:1;
- Total debt to total capital of not more than 50%;
- Earnings before interest, income tax, depreciation and amortization ("EBITDA") to interest expense of not less than 3:1;
- Net debt to EBITDA of not more than 4:1;
- Self-financing ratio of not less than 20%;
- Debt service ratio of not less than 1.2.

Management believes that the Group complied with all existing loan covenants with EBRD and IBRD as at 31 December 2019 and 31 December 2018. The Group excludes from EBITDA the foreign exchange loss, as management believes that foreign exchange loss meets definition of non-cash impairment and as such shall be excluded from the calculation of EBITDA as provided in the loan agreement. As of 31 December 2019 the Group excluded from EBITDA the foreign exchange gain of KZT 469,129 thousand (during the year ended 31 December 2018: the foreign exchange loss of KZT 5,865,654 thousand).

Insurance

As at 31 December 2019, the Group insured production assets with a replacement value of KZT 184,150,797 thousand. The insurance payment is limited to the replacement value of property, plant and equipment. The Group does not insure its other property. Since absence of any insurance does not imply a reduction of the cost of assets or origination of liabilities, no provision has been made in these consolidated financial statements for unexpected expenses associated with damage or loss of such assets.

Contractual commitments

To ensure the stable and reliable performance of the national electricity grid, the Group developed a capital investment plan. As at 31 December 2019, the Group's outstanding contractual commitments within the frameworks of this plan amount to KZT 52,925,016 thousand (31 December 2018: KZT 8,356,462 thousand).

29. COMMITMENTS AND CONTINGENCIES (continued)

Contractual commitments (continued)

Due to the fact that a significant part of the plan on capital investments and, open contracts in particular, consist of equipment and spare parts purchased outside of the Republic of Kazakhstan, there is a likelihood of fluctuations in the value of contractual obligations. The main cause of these variations is the effect of changes in exchange rates caused by the transition to the regime of free-floating exchange rate in the framework of the implementation of target-based inflation.

Tariffs for the transmission of electrical energy, technical dispatching of grid output and consumption of electrical energy and organization of balancing the production and consumption of electric energy

Temporary compensating tariffs for consumers for 2019, approved by the Committee for the following regulated services of the Group:

- Transmission of electric energy in the amount of KZT 2.496 per kWh;
- Technical dispatching of the grid output and consumption of electric energy in the amount of KZT 0.237 per kWh;
- Organization of balancing the production and consumption of electric energy in the amount of KZT 0.088 per kWh.

Tariff on sale of electricity from renewable energy sources

The tariff on sale of electricity, produced by the renewable energy sources, to conditional consumers is calculated in accordance with the “Rules for determining the tariff for the support of renewable energy sources”, approved by Government Decision No. 290 dated 1 April 2014 and the “Rules for pricing in socially significant markets”, approved by Order of the Minister of National Economy of the Republic of Kazakhstan dated 1 February 2017 No. 36. The tariff on sale of electricity include the costs of the accounting and finance center for the purchase of electricity, produced by the renewable energy facilities, the costs of services for the organization of balancing the production and consumption of electricity, the costs of forming a reserve fund and the costs associated with the activities of the RFC on renewable energy sources.

The management believes that during 2019 the calculation and application of tariffs on sale and purchase of electricity, produced by the renewable energy facilities, was carried out properly and in accordance with applicable norms and legislative acts.

Tariffs for the provision of services to ensure readiness of electricity capacity to bear the power load

The tariff for the provision of ensure readiness of electricity capacity to bear the power load is calculated in accordance with the “Rules for calculating and posting the price of the ensure readiness of electricity capacity to bear the power load on the Internet resource as a single purchaser”, approved by the Order of the Minister of Energy of the Republic of Kazakhstan dated 3 December 2015 No. 685. The calculation of the price of the ensure readiness of electricity capacity to bear the power load for the coming calendar year is carried out by “RFC on RES” LLP based on:

1) The weighted average price of the service to ensure readiness of electricity capacity, estimated according to the results of centralized trading of electricity capacity;
2) The weighted average price of the service to ensure readiness of electricity capacity of all contracts for the purchase of the services for maintaining readiness of electricity capacity, concluded by a single purchaser with the winners of tenders for the construction of generating units that are newly put into operation, with existing energy-producing organizations that have concluded an investment agreement for modernization, expansion, reconstruction and (or) updating with an authorized body, as well as with existing energy-producing organizations, comprising heat and power plants;
3) Forecast applications for the consumption of energy supplying, energy-transmitting organizations and consumers, which are subjects of the wholesale market;
4) Forecast demand for electricity capacity for the coming and subsequent calendar years.

Annually, prior to 1 December RFC LLP places on its Internet resource a price for a service to ensure readiness of electricity capacity to bear the power load for the coming calendar year along with supporting calculations. The price of the service to ensure readiness of electricity capacity to bear the power load for 2019 was 613 thousand Tenge / MW * month (excluding VAT), for 2020 is 800 thousand Tenge / MW * month (excluding VAT).

The impact of legislative changes on profits

In accordance with Order of the Minister of Energy of the Republic of Kazakhstan dated 8 November 2019 No. 361, amendments and additions were made to Order No. 152 of 27 February 2015 On Approving the Rules for the Organization and Functioning of the Electric Power Market (hereinafter – “the Rules”). One of the addendum to the Rules was to amend the calculation of the actual volume of services to ensure readiness of electricity capacity for energy-producing organizations by including an additional coefficient k8. The use of the coefficient in calculation of the actual volumes of services to ensure readiness of electricity capacity in December 2019 significantly affected the revenue and cost parameters for December 2019 for this type of activity.

Possible further changes to the Rules on the validity of the k8 coefficient may lead to significant changes in the revenue and cost indicators.

30. SUBSEQUENT EVENTS

On 23 January 2020, the Group transferred “Kindergarten No. 95” of Nur-Sultan City to the balance of the State Treasury Enterprise and recognized a corresponding decrease in the construction obligation.

In December 2019, a final payment was made on IBRD loan (loan agreement 4526-KZ dated 21 December 1999), attracted as part of the project “Kazakhstan National Electricity Transmission Rehabilitation Project”. A confirmation letter on the full implementation of obligations to the IBRD was received in January 2020, after which cash in the amount of 2,932,192 thousand Tenge was transferred to the current account in cash and cash equivalents.