



2016

SUSTAINABILITY REPORT

KEGOC JSC

CONTENT

| | | | |
|---|----|--|----|
| Independent Assurance Report on The Sustainability Report of KEGOC JSC | 02 | ECONOMICS | 31 |
| LETTER FROM THE CHAIRMAN OF THE MANAGEMENT BOARD | 04 | ENVIRONMENTAL PROTECTION | 35 |
| ABOUT THE REPORT | 06 | Ambient Air Protection | 36 |
| Principles of Report Preparation | 06 | Waste Management | 37 |
| Stakeholder Engagement and Materiality Assessment | 07 | Water and Soil Impact | 38 |
| Materiality Matrix | 09 | Environmental Actions during Investment Projects Implementation | 38 |
| GENERAL INFORMATION | 11 | Power Saving | 39 |
| Geography of Operations | 12 | SOCIAL RESPONSIBILITY | 43 |
| KEGOC Structure | 14 | HR Policy | 43 |
| Operating Activity | 17 | Personnel Development and Training | 51 |
| Electricity Transmission | 19 | Personnel Motivation and Incentives | 51 |
| Technical dispatch control | 19 | Operational Safety | 53 |
| Management of electricity production and consumption balancing | 20 | APPENDIX 1. GRI CONTENT INDEX | 56 |
| Investment Activity | 23 | APPENDIX 2. GLOSSARY | 64 |
| CORPORATE GOVERNANCE | 25 | CONTACTS | 66 |
| Shareholders | 25 | | |
| The Board of Directors and its Committees | 26 | | |
| Business Ethics | 28 | | |

NURTEAM AUDIT

Assurance & Advisory

NURTEAM AUDIT LLP
Office 326, 236 B Gagarin Ave., Almaty, 050000
Tel: +7 (727) 352-81-55
e-mail: office@nurteamaudit.com
web: www.nurteamaudit.com

INDEPENDENT ASSURANCE REPORT ON THE SUSTAINABILITY REPORT OF KEGOC JSC

For management and stakeholders of KEGOC JSC

Identification and description of the subject matter

At the request of KEGOC JSC (hereinafter 'the Company') we have provided a limited level of assurance on the qualitative and quantitative information disclosed in the Sustainability Report of KEGOC JSC for the year of 2016 (hereinafter 'the Report').

Identification of the criteria

The criteria of our engagement were the Global Reporting Initiative's Sustainability Reporting Guidelines (hereinafter 'the GRI Guidelines') and the sustainability reporting principles of the Company. We believe that these criteria are appropriate given the purpose of our assurance engagement.

Management's responsibility

The Company's management is responsible for establishing sustainability policies and procedures, and for the preparation of the Report and the information contained therein. This responsibility includes designing, implementing and maintaining a system of internal controls sufficient for preparation of the Report without material misstatements due to fraud or error. Management is also responsible for selecting and applying appropriate reporting principles and the use of appropriate methods of measurement and evaluation.

Our responsibilities

Our responsibility is to independently express conclusions with regard to the subject of our review.

Summary of work performed

Our engagement was conducted in accordance with International Standard on Assurance Engagements (ISAE3000) 'Assurance Engagements Other than Audits or Reviews of Historical Financial Information', issued by IFAC, and accordingly included the following procedures:

- Analysis of the Company's sustainability policies and procedures described in the Report;
- Interviews with managers and key personnel of the Company, responsible for preparation of sustainability information, implementation of the Company's sustainability policies and procedures, and for the related activities and results;
- Comparative analysis of the Report with regard to the sustainability reports of the comparable companies;
- Analysis of material issues in field of sustainable development identified by the Company;
- Identification of the material issues on the basis of the procedures described above, and analysis of reflection of the material issues in the Report;
- Analysis of sample data based on key economic, environmental, labour and industry performance indicators, and of the reporting processes in order to receive evidence of that the data are properly collected, prepared, collated and included in the Report;
- Assessment of conformity of the Report and its underlying reporting processes to the applicable sustainability reporting principles of GRI Standards used by the Company;
- Assessment of conformity of data and information disclosure in the Report to GRI Standards requirements.

The scope of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore a lower level of assurance is provided.

Conclusions

Based on our work described in this report, nothing has come to our attention that causes us to believe that the information in the Report does not represent fairly in all material respects the sustainability policies, activities, events and performance of the Company for the year ended on December 31, 2016 in accordance with GRI Standards and sustainability reporting principles of the Company.

Nothing has come to our attention that causes us to believe that the Report is not prepared 'in accordance' with the GRI Standards using Core option.

Almaty,
26 May 2017



Timur Bidsbayev
CEO of NURTEAM AUDIT LLP

LETTER FROM THE CHAIRMAN OF THE MANAGEMENT BOARD



Dear readers,

Here is a regular KEGOC's Sustainability Report disclosing the Company's economic, environmental and social activity in 2016. Under present-day conditions the high operational indicators are difficult to achieve without prioritizing socially responsible business principles. KEGOC is an infrastructural company vital to the country economy, which functions as a System Operator of Kazakhstan National Power Grid.

In view of its specific business, KEGOC bears great responsibility to a broad range of stakeholders, primarily consumers, shareholders and personnel. According to KEGOC's Long-Term Development Strategy, the Company is aimed at ensuring reliable operation of Kazakhstan's Unified Power System, stable financial position and cash flows for shareholders and development, as well as sustainable development. Once implemented, the set goals will enable KEGOC to become a world-class company and the regional centre of expertise in the power industry.

The results of 2016 demonstrated successful implementation of the Company's objectives. Thus, SML and WWP network reliability indicators conform to the reliability levels of similar foreign power grid system operators based on benchmarking results. We are committed to improving the quality of services rendered. The consumer satisfaction measurement based on the previous year results rated at 4.56 on a five-score scale, this attests to the trust, satisfaction with the service quality and personnel performance of the Company.

It should be noted that the Company proceeds implementation of large-scale investment projects to ensure grid reliability and meet the domestic economy electricity demand. In particular, under the Nurly-Zhol State Programme the Company is implementing the 500 kV North-East-South Electricity Transmission Project. The first phase of the project to construct 700 kilometers of transmission lines and new 500 kV Semei SS, extend existing 500 kV Ust-Kamenogorsk SS, 1,150 kV Ekibastuzskaya SS and 220 kV Shulbinsk HPP SS completed all construction and erection works in 2016 well ahead of the works schedule.

Based on 2016 results the Company gained the record profit over the last years amounting to KZT 27.59 billion. The year was also good for the Company's shareholders. KEGOC's shares are highly liquid and appealing for our investors, as evidenced by the increase in their cost. In early 2017, KEGOC's shares on the Kazakhstan Stock Exchange were traded higher than 1,300 tenge per share, which is 2.5 times higher than the initial offering price.

Based on the dividend policy principles, the Company plans to further unconditionally exercise rights and interests of KEGOC's shareholders.

The Company pays great attention to development of social and labour relations, i.e. creates comfortable and safe working environment, and implements social programmes. In September 2016, the trade union conference adopted a new Collective Bargaining Agreement for 2016-2020 between KEGOC and its personnel to reflect the changes in labour law of the Republic of Kazakhstan and the personnel's interests. The new document is aimed at improving the social and labour relations between the employer and the Company's personnel and reflects the social support to the Great Patriotic War veterans, equated persons and long-service power engineers.

The reporting year also highlights the effective work on implementing the comprehensive and large-scale Business Transformation Programme. The business processes and the organizational structure are optimized, the Company is launching the third and decisive stage of the programme to implement the project portfolio.

Importantly, the business transformation programme process increases the requirements to the personnel, thus promoting its future development. We will continue this work. We are proud that over the four years already our company has been a leader in the Samruk-Kazyna group of companies in terms of the Social Stability Rating (82%) and the Personnel Engagement Index (73%).

Plans for 2016 are no less ambitious. The Company needs to further keep and increase the achieved grid reliability indicators, improve efficiency based on sustainability priorities, ensure financial stability, increase return on equity, customers' satisfaction with service quality and employees' satisfaction with labour conditions and incentive system, in short, provide stakeholders with comfortable conditions at all phases of engaging with the Company. (102-14)

Bakytzhan Kazhiyev,

Chairman of the Management Board

ABOUT THE REPORT

The KEGOC's Sustainability Report 2016 (hereinafter referred to as 'the Report') is the eighth (since 2009) sustainability report that continues to disclose the annual non-financial reporting of the Company. **(102-52)** The previous KEGOC's Sustainability Report 2015 was published in June 2016. **(102-51)** All the Company's reports are available on KEGOC's official website. It should be noted that in 2016 our Company won the Competition of Annual Reports organized by RAEX (Expert RA Kazakhstan) and supported by the Kazakhstan Stock Exchange in the Best Sustainability Report nomination among 137 companies. This report has been prepared in accordance with the GRI Standards: Core option and describes the relevant activities of the Company from 1 January through 31 December 2016. **(102-54, 102-50)** In addition, this report contains information reaffirming KEGOC's commitment to UN Global Compact wherein the Company has been a member since 2013. Since 2011 KEGOC has engaged an independent external party on a competitive basis to confirm the compliance of the Report's information with the GRI Standards. The Company has contractual

relationship with organization assuring the Report for 2016. The Report's assurance level is limited. The Report shall be approved by KEGOC's Board of Directors prior to publication. **(102-56)** As the Report for 2015 was prepared in accordance with the G4 GRI guidelines requirements, this Report has changed as a result of changes in the applied GRI methodology. The Report Boundaries have not changed compared to the previous Report: KEGOC prepared the Report on a 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. **(103-1) (102-49)** The full version of KEGOC's consolidated financial statements (including subsidiaries) is available on the Company's website www.kegoc.kz. **(102-45)** Any information concerning the plans referred to in this 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.

PRINCIPLES OF REPORT PREPARATION

During the Report preparation the Company focuses on the following principles:
Materiality – KEGOC's Report covers the topics reflecting the

Company's significant impacts on the economy, environment and society. KEGOC analysed the materiality including questioning the external and internal stakeholders and power

industry experts to identify most relevant sustainability-related topics to be disclosed.

Stakeholder Engagement – 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 long-term development strategy defines the sustainability goals, objectives, main initiatives and strategic KPIs, the information on their achievement in 2016 is included in this Report.

Completeness – the 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 the

Representative office in Almaty, and subsidiaries with regard to all significant sector-specific impacts on the economy, environment and society. In some cases the Sustainability Report refers to the Company’s 2016 Annual Report, KEGOC’s website or other publicly available documents to avoid duplication.

Balance – the Report reflects positive and negative topics of KEGOC’s performance. The Report discloses the dynamics of some indicators for the last three years.

Comparability – the Report is prepared in accordance with GRI standards allowing the stakeholders to compare KEGOC’s activities with the other organizations’.

Accuracy and Reliability – the 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 – the Report is prepared on a scheduled basis and published in the second quarter of the year following the reporting year.

Clarity – KEGOC seeks to make the Report understandable and accessible to a wide range of stakeholders.

STAKEHOLDER ENGAGEMENT AND MATERIALITY ASSESSMENT

KEGOC defined groups of the interested parties (stakeholders) based on the level of their impact on the Company’s operations; the Company is engaged

in continuous open dialogue with them and regularly discloses information relating to KEGOC’s sustainable development.

| Stakeholders | Engagement | Engagement channels |
|-----------------------------------|--|---|
| Financial groups and shareholders | The Company timely and fully fulfils its financial liabilities to investors and seeks for long-term cooperation based on mutual trust. 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 annual and interim reports of the Company, submission of periodic reports to international financial institutions (IFI), meetings, missions and visits of the IFI delegations to control the progress of projects implemented through loan proceeds, placing information on web-site, conducting general meetings of shareholders, regular reporting to the shareholders. From 1 January to 31 December 2016, there were no claims from the shareholders in relation to activities of KEGOC and its officers. (102-44) |

| Stakeholders | Engagement | Engagement channels |
|---|--|---|
| 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, working meetings, replies to requests, operational meetings. |
| 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; public hearings, disclosure of information on the activity on website and in mass media, replies to requests, conducting briefings and press conferences. |
| Suppliers | During procurement of goods, works and services the Company relies on the following principles: publicity and transparency of 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, assessment of suppliers. Preliminary discussion of draft tender documentation with potential suppliers. |
| Consumers | The Company has implemented and adheres to the consumer-oriented principle, has established and secured the mechanism for determining 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. |
| Human resources | 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. |
| Subsidiaries | The Company seeks for balanced development of subsidiaries and affiliates 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. |
| 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, Committee for Operational and Technological Coordination of the CIS and the Baltics Power Systems, Energiya Coordinating Dispatch Centre, etc.), coordination of power systems operation modes and regulatory documentation. |

(102-40, 102-42, 102-43)

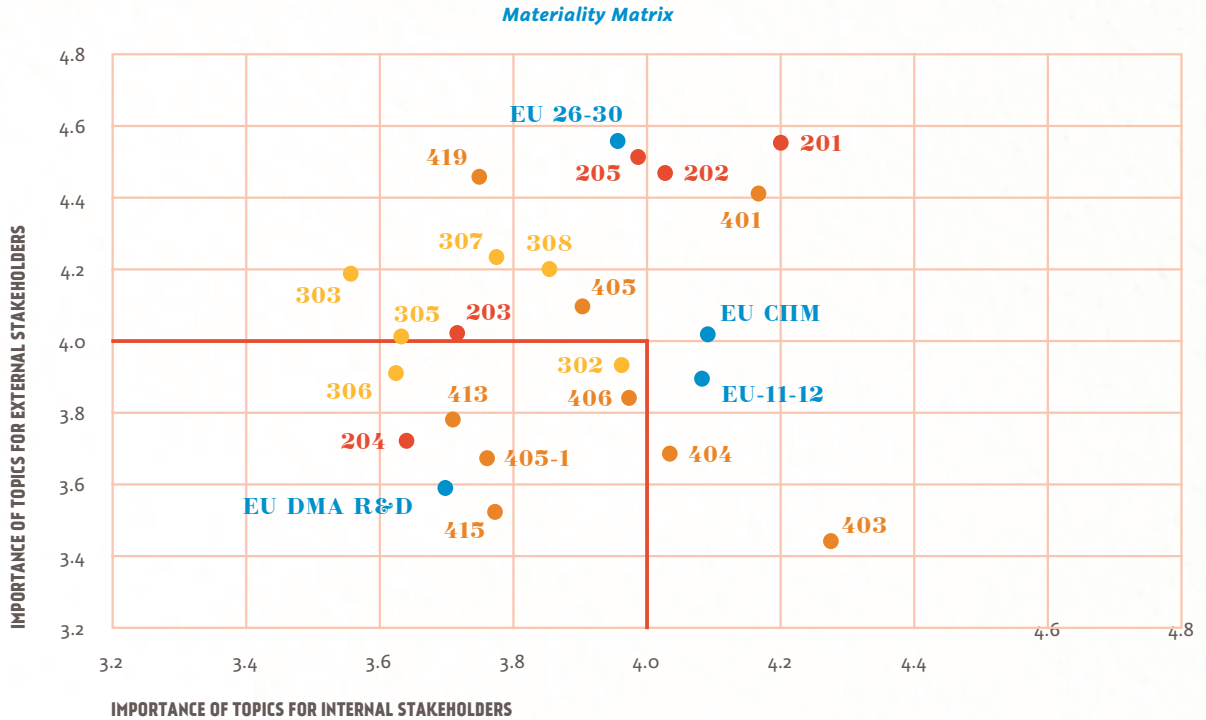
The Company's Report seeks to reflect the relevant and material information for stakeholders. For the purpose of the Report preparation, KEGOC analysed the materiality of topics disclosed in the Report. The material topics considered the fullest list

covering sector-specific governance of the Company, economic performance of the Company, observance of human rights, and Company's impacts on the society and environment. Moreover, to define most relevant topics to be disclosed in the Report an

evaluation survey was conducted based on a five-score scale of external (814 persons from population, 36 persons from experts) and internal stakeholders (472 persons). (103-2) The stakeholders questioning resulted in the materiality matrix illustrating KEGOC's operations key topics of stakeholders' interest and demonstrating the differences in relevancy of selected topics for internal and external stakeholders. Each

topic was assigned an average score depending on the level of importance for stakeholders. (103-1)

KEGOC's Coordinating Council for Sustainable Development and Integrated Management System recognized the topics above the control line (or in terms of importance for internal and external stakeholders above score 4) in the materiality matrix as top-priority and mandatory for disclosure. (102-46), (103-3)



List of topics: G4-19 (102-47)

- 201 Economic Performance
- 202 Market Presence
- 203 Indirect Economic Impacts
- 205 Anti-corruption
- 303 Water
- 305 Effluents and Waste
- 307 Environmental Compliance

- 401 Employment
- 403 Health and Safety
- 404 Training and Education
- 405 Diversity and Equal Opportunity
- 419 Social and Economic Compliance
- EU Disasters and Emergencies
- EU Power System Efficiency
- EU Access to Services

Compared to the topics (aspects) disclosed in Report for 2015 the stakeholders questioning defined 'Indirect Economic Impacts', 'Water', 'Effluents and Waste', 'Diversity and Equal

Opportunity' as material topics, and 'Security Practices', 'Customer Privacy' ceased to be material topics to be disclosed in Report for 2016. (102-49)

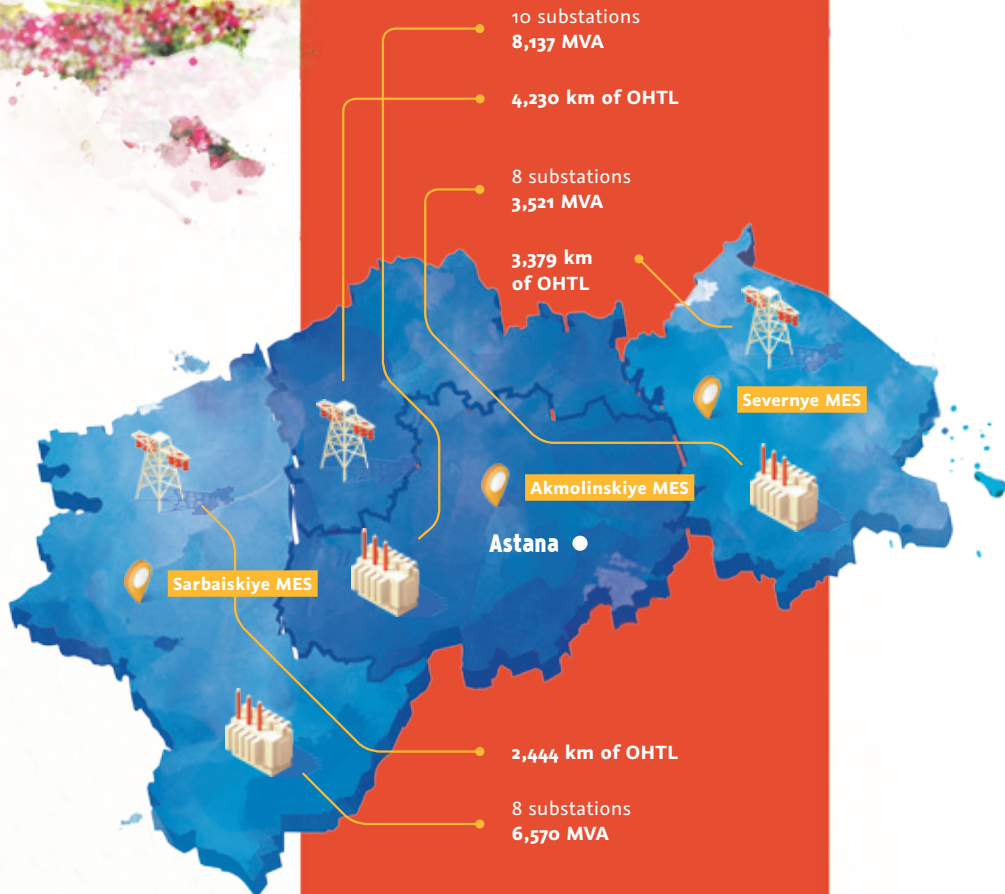


Astana Akorda

Akorda is the Kazakhstan President's Residency. It is situated on the left bank of the Ishim river in Astana, the capital of Kazakhstan, three hundred meters from Baiterek, the capital's monument. Total area of building makes 36,720 m².

Akorda was included in the top-10 of the most beautiful world presidential palaces. The Residency's name 'Akorda' is translated as 'White horde'. 'White' in terms of the Turkic culture stands for sacred (sacral). This notion personifies joy and happiness, sincerity and generosity, honour and goodness.

Geography of Operations: NORTHERN KAZAKHSTAN



GENERAL INFORMATION

Kazakhstan Electricity Grid Operating Company (KEGOC) joint-stock company operates the National Power Grid (NPG) of Kazakhstan and is the System Operator of the Kazakhstan Unified Power System. **(102-1)**

Before 2006, 100 % of KEGOC's shares had been owned by the Government. In 2006, state share (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 (Kazakhstan holding for management of state assets). Samruk-Kazyna became a legal successor of Samruk.

On 18 December 2014 as part of the Programme for public offering of shares of affiliates and subsidiaries of Samruk-Kazyna Sovereign Wealth Fund (hereinafter referred to as 'Samruk-Kazyna') on the stock market, KEGOC placed 25,999,999 authorized ordinary shares on the Kazakhstan Stock Exchange through subscription. As of 31 December 2016, KEGOC declared and placed 260,000,000 ordinary shares in total, including 234,000,001 (90 % plus one ordinary share) owned by Samruk-Kazyna, 25,998,609 shares belonging to minority shareholders and 1,390 shares repurchased by KEGOC at request of minority shareholder. **(102-5)**

In 2016, no essential changes in the scope or ownership structure were at the Company. **(102-10)**

Registered address: 59, Tauyelsizdik Ave., Almaty district, 010010, Astana, Republic of Kazakhstan. **(102-3)**

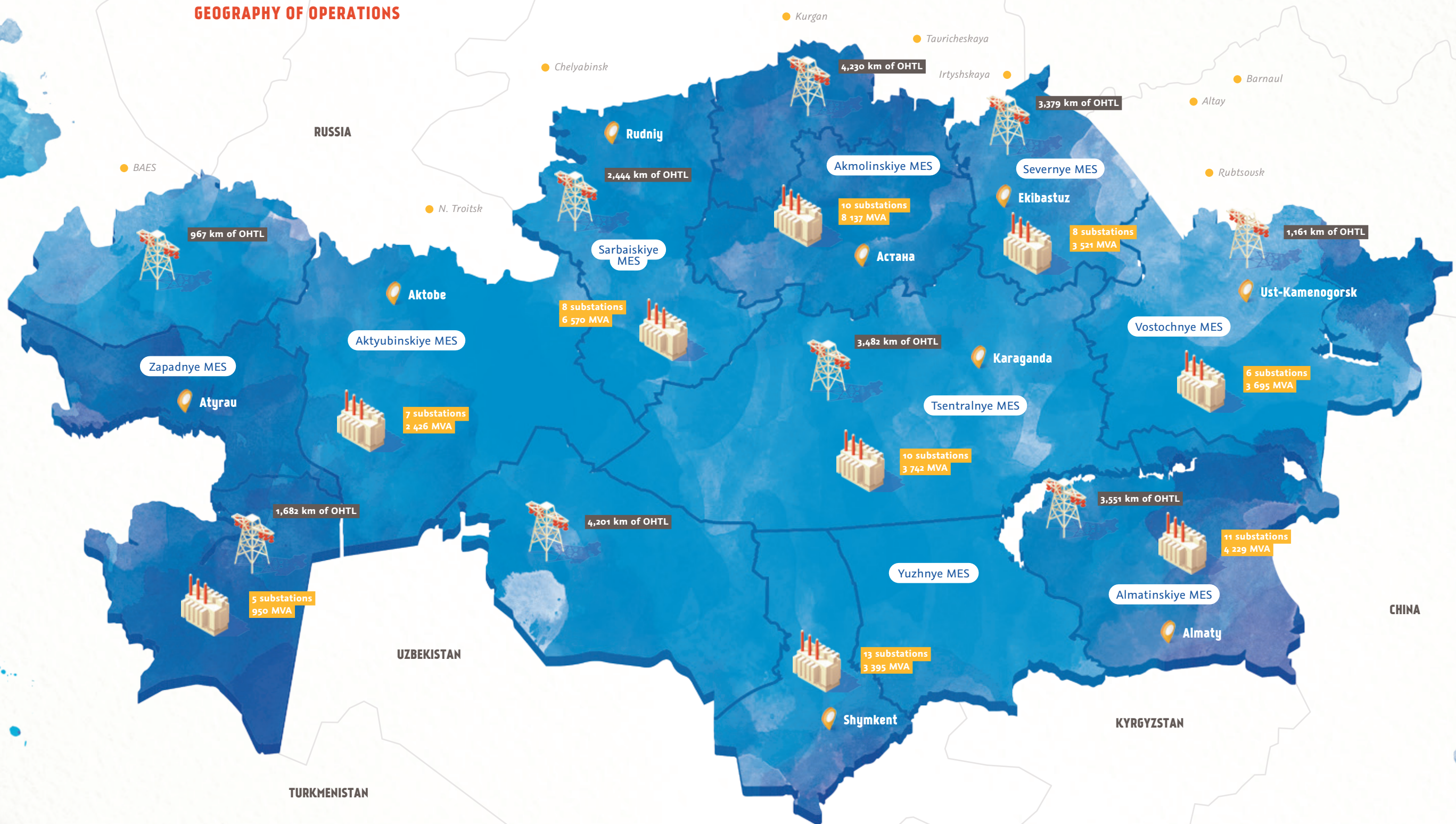
In accordance with the laws of the Republic of Kazakhstan in electric power industry, KEGOC as a System Operator of the Unified Power System of the Republic of Kazakhstan carries out the following core activities:

- electricity transmission in the national power grid;
- technical dispatching of the electricity supply to the grid and electricity consumption;
- management of the electricity production and consumption balancing; **(102-2)**

The above mentioned services fall under the sphere of natural monopoly; and thus KEGOC's operations are regulated by the Law of the Republic of Kazakhstan on Natural Monopolies and Regulated Markets.

KEGOC operates throughout the territory of the Republic of Kazakhstan. **(102-4)** The structure of the Company includes 9 intersystem electric networks branches (MES branches), the National Dispatch Centre of the System Operator (NDC SO) and KEGOC's Representative Office in Almaty. MES branches render system services in operational control zone of the branch. The NDC SO performs the centralized dispatch control of the UPS of the Republic of Kazakhstan. The centralized operational and dispatch control is organised as direct operational subordination of nine regional dispatch centres (RDCs) to NDC SO; these RDCs are the structural subdivisions of MES branches. **(102-6)**

GEOGRAPHY OF OPERATIONS



CHINA

KEGOC STRUCTURE

Branches

| Akmolinskiye MES | Aktyubinskiye MES | Almatinskiye MES | Vostochnye MES | Zapadnye MES |
|------------------|-------------------|------------------|----------------|---------------|
| 10 SS | 7 SS | 11 SS | 6 SS | 5 SS |
| 8,137 MVA | 2,426 MVA | 4,229 MVA | 3,695 MVA | 950 MVA |
| OHTL 4,230 km | OHTL 967 km | OHTL 3,551 km | OHTL 1,161 km | OHTL 1,682 km |

| Sarbaiskiy MES | Severnyye MES | Tsentrallye MES | Yuzhnyye MES | NDC SO |
|----------------|---------------|-----------------|------------------|--------|
| 8 SS | 8 SS | 10 SS | 13 SS | 9 RDCs |
| 6,570 MVA | 3,521 MVA | 3,742 MVA | 3,395 MVA | |
| OHTL 2,444 km | OHTL 3,379 km | OHTL 3,482 km | 4,201 km of OHTL | |

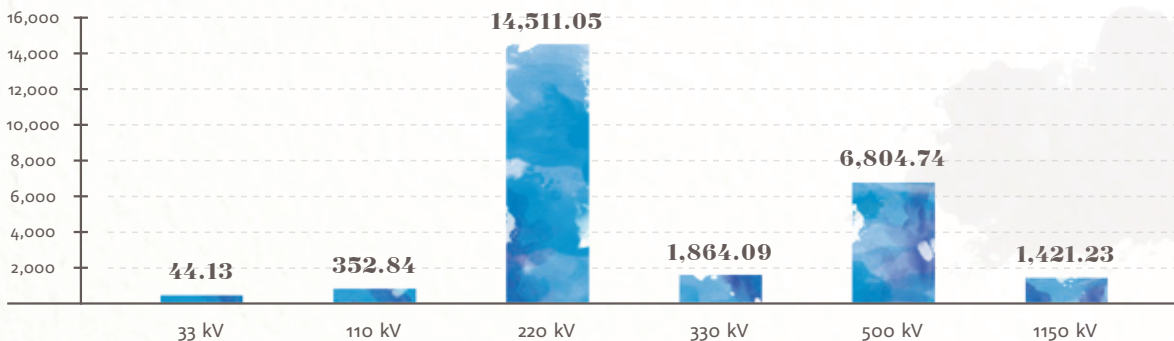
KEGOC is a parent company of subsidiaries EnergoInform JSC and Financial Settlement Centre for Renewable Energy Sources Support LLP. EnergoInform provides informational support of the Company activity. The Financial Settlement Centre for Renewable Energy Sources Support LLP was established in 2013 to encourage investments in renewable energy sector and increase the share of renewable energy in the Kazakhstan energy mix through government-guaranteed and centralized electricity purchase from all renewable energy facilities (who have chosen such support scheme) in accordance with the fixed rates. In addition, KEGOC is a co-founder (20 % of shares) of Batys Transit JSC established in 2005 to implement the project for the

construction of inter-regional power transmission line linking the North Kazakhstan with Aktobe oblast.

Detailed information about the MES Branches is available on KEGOC's website at the Company section. [\(102-7\)](#)

The main asset of the Company is the National Power Grid comprising as of 31 December 2016 of 360 overhead transmission lines of 0.4-1,150 kV totalling to 25,096,597 km (circuits) and 78 electric substations (SS) of 35-1,150 kV with transformer installed capacity of 36,662.55 MVA. They ensure the cross-border electric power flows, transmit electric power from power plants and connect the regional power companies and major consumers. [\(102-6\)](#)

Length of KEGOC lines, km



Quantity and capacity of KEGOC's substations

54 SS

220 kV (11,136 MVA)

18 SS

500 kV (16,114 MVA)

3 SS

1 150 kV (9,384 MVA)

1 SS

110 kV (5 MVA)

2 SS

35 kV (23 MVA)

EU1
EU4

KEGOC is a member and participant of:

- **Kazakhstan Electricity Association of Legal Entities** with major objectives to support all organizations with direct or other relation with power industry; participate in elaboration of state programmes, laws and regulatory acts relating to power industry; support and protect its members' positions in issues where sector interests depend on the decisions of the Government, judicial and other authorities.
- **KAZENERGY Kazakhstan association of oil, gas and energy sector organizations** with major objectives to protect the Association members' interests and rights at 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; spread a 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 with the Kazakhstan community.

- **Atameken National Chamber of Entrepreneurs of the Republic Kazakhstan** established to enhance the negotiation power of business with Kazakhstan Government and public authorities;
- **Kazakhstan Electric Capacity Reserve Pool** (ECR Pool) with the main objective to provide contract-based capacity reserves to secure uninterrupted power supply to the consumers-founders in case of unforeseen failures of generating capacities and outages of transmission lines in Kazakhstan.
- **Association of Competition and Commodity Markets Development**, which is a non-profit organization bringing together, on a voluntary basis, legal entities to coordinate entrepreneurial activity as well as represent and protect common interests in state bodies, government agencies, international and public organizations in terms of developing competition and commodity markets. Accession to this organization will enable the Company to initiate and promote necessary changes in antimonopoly legislation in KEGOC's interests. The Association's work will result in preparation and participation in preparation of draft regulatory legal acts, development of international non-governmental contacts to exchange the experience, hold workshops, conferences, roundtables and other activities, assist in development of competition and entrepreneurship, prevention of antimonopoly legislation violations.
- **Kazakhstan Taxpayers Association**, a non-profit organization aimed at assisting in protection of legal rights and interests of taxpayers, improvement of their knowledge in order to ensure voluntary and timely payment of taxes. The Association systematizes and analyses taxation problematic issues, proposals and remarks received from the association members.

The systematic work will result in dialogues between representatives of the concerned ministries and taxpayers during roundtables, conferences, forums and working groups as well as the range of proposals on making amendments and addenda to Kazakhstan tax legislation.

In addition, for the purpose to promote establishment of efficient electricity market with the neighbouring countries and develop international cooperation, KEGOC constantly takes part in the work of such international sectoral organizations as:

- CIS Electric Power Council;
- 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.

In 2016, KEGOC became a member society of International Council on Large Electric Systems (Conseil International des Grands Réseaux Électriques – CIGRE). Established in France in 1921, today CIGRE is one of most reputable and significant scientific and technical associations in energy sector, greatly influencing the power industry development strategy in many countries. **(102-13)**

In addition, KEGOC is a member of the UN Global Compact, one of fundamental international initiatives on commitment to corporate social responsibility. As part of the UN Global Compact the Company adheres to the following principles:

Human Rights Principles

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.

Principle 2: Businesses should make sure that they are not complicit in human rights abuses.

Labour Principles

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour.

Principle 5: Businesses should uphold the effective abolition of child labour.

Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.

Environment Principles

Principle 7: Businesses should support a precautionary approach to environmental challenges.

Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.

Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption Principles

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

In addition to obligations on full compliance with requirements of Kazakhstan legislation and internal regulatory documents, since 2008 the Company has undertaken a voluntary initiative on implementation and certification of the integrated management system (IMS) according to the requirements of international standards ISO 9001, ISO 14001, OHSAS 18001 and ISO /EAC 27001 since 2015. The certification scope is system services, covering the whole Company including branches and subsidiaries. **(102-12)**

In 2016 the members of the Board of Directors initiated the establishment of *the Occupational Health, Safety,*

and Environmental Protection Committee to focus on sustainable development issues, namely environment, labour and safety as well as elaboration and submission to the Board of Directors of recommendations on these issues.

KEGOC has a standing Coordination Council for Sustainable Development and IMS with the main objectives as follows:

- promote and meet the sustainability principles in accordance with international practice;
- ensure planning on sustainability management issues and IMS when establishing, maintaining and constantly improving management system performance;
- ensure defining sustainability and IMS responsibility and authorities;
- receive objective evidence on implementing sustainability actions at KEGOC;
- secure obligations on IMS elaboration and implementation as well as constant improvement of its performance;
- develop and operate the sustainability and IMS information exchange process with concerned parties (stakeholders).
- define requirements of consumers, legislative and regulatory IMS requirements, meet the requirements to enhance satisfaction of consumers. **(102-18)**

OPERATING ACTIVITY

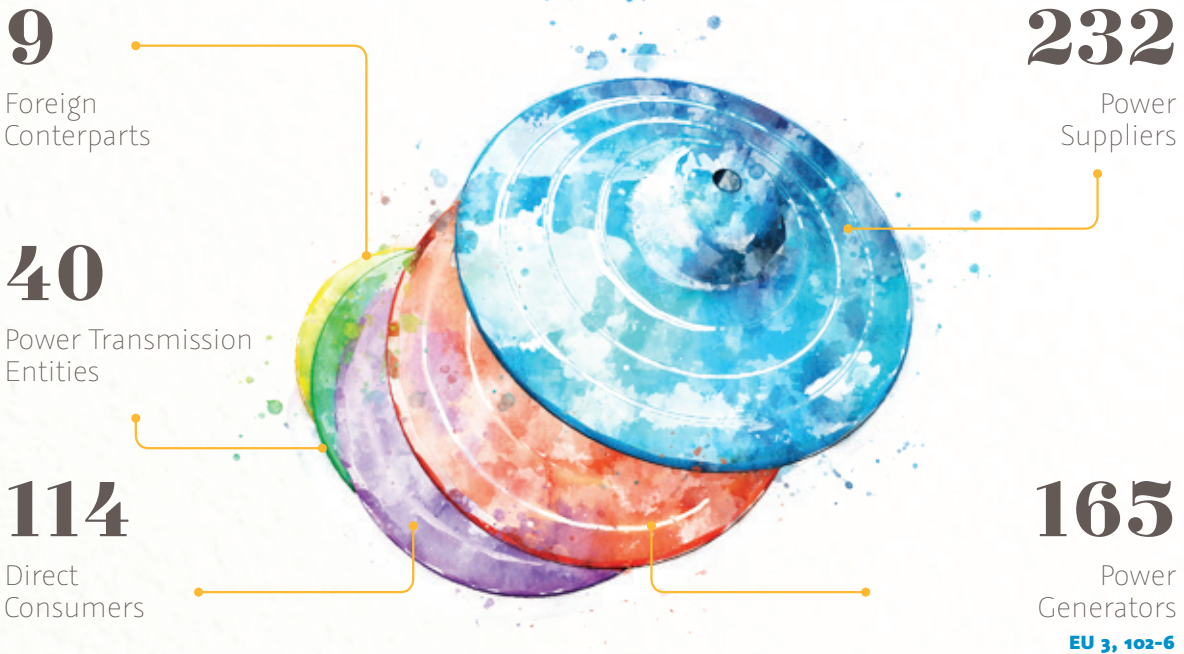
In accordance with the Law of the Republic of Kazakhstan On Electric Power Industry, KEGOC as a System Operator ensures a non-discriminatory access to the electricity market for all market players. The National Power Grid shall be connected pursuant to the Grid Code and Rules of Electricity Usage. KEGOC ensures equal access conditions to the National Power Grid for all wholesale electricity market participants. Detailed information on how to access the NPG is available at Our Operations on the Company's official website.

KEGOC's service consumers include legal entities: power generators, power transmission entities, power suppliers and industrial enterprises. **(102-6)**

In 2016, the full scope of system services was rendered to the wholesale market entities in accordance with the executed contracts and requests from consumers. The total number of contracts and agreements for provision of services to consumers, electricity purchase contracts, that either remain in effect from 2015 or are entered into in 2016 made:

| Agreements | Quantity |
|---|------------|
| Electricity transmission via trans-regional networks; | 222 |
| Technical dispatching of the electricity supply and consumption in the grid | 83 |
| Management of Electricity Production and Consumption Balancing | 225 |
| Supply and transmission of reserve electric power | 1 |
| Purchase of electricity to cover losses and economic needs | 18 |
| Purchase of power control services | 2 |
| Purchase of electricity from the Russian Federation to compensate for the deviation of actual hourly volume of interstate net power flow from the planned one | 1 |
| Sale of electricity to the Russian Federation to compensate for the deviation of actual hourly volume of interstate net power flow from the planned one | 1 |
| Electricity transmission (transit) services for FGC UES PJSC. | 1 |
| Power (frequency) control services for UzbekEnergo JSC | 2 |
| Purchase of electricity transmission services from Batys Transit JSC to cover losses | 1 |
| Purchase of unscheduled electricity | 1 |
| Purchase of electricity to manage unscheduled electricity flows (from Kyrgyzstan NPG) | 1 |
| Sale of electricity to manage unscheduled electricity flows (for Kyrgyzstan NPG) | 1 |
| TOTAL | 560 |

Number of agreements on core activity by consumer categories

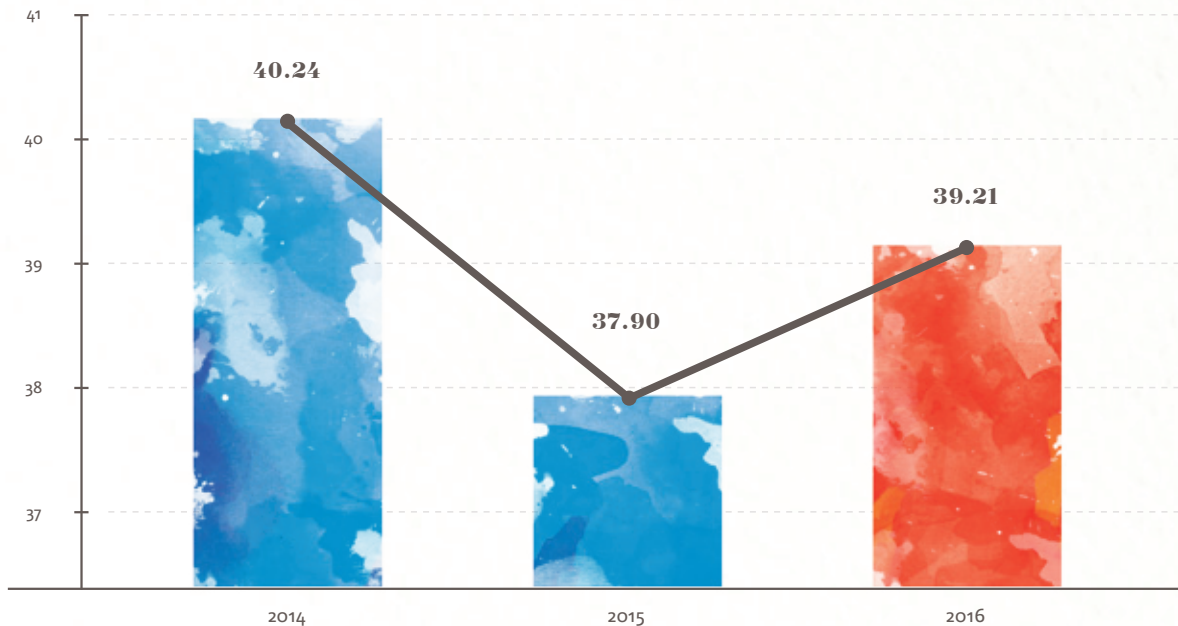


ELECTRICITY TRANSMISSION

The actual volume of services for transmission of electricity via the NPG in 2016 amounted to 39,213.5 million kWh. In comparison with 2015 it has grown up by 1,316.5 million kWh or 3.5%, mainly owing to the resumed electricity export to Russian Federation and Kyrgyz Republic, which was not provided in 2015. The volume of electricity exported in 2016 amounted to 1,991.7 million kWh. In 2016, KEGOC and FGC UES in accordance with the contract arranged for electricity transmission (transit) via

KEGOC's networks from the Russian Federation through the Republic of Kazakhstan back to the Russian Federation. The scope of services rendered by KEGOC for this transit amounted to 3,630.6 million kWh which is by 30.9 million kWh less than in 2015. The largest consumers of KEGOC electricity transmission services in 2016 were: FGC UES PJSC, TemirZholEnergo LLP, KazZinc LLP, AlmatyEnergoSbyt LLP, and ShygysEnergoTrade LLP.

Electricity Transmission via KEGOC's Networks, billion kWh

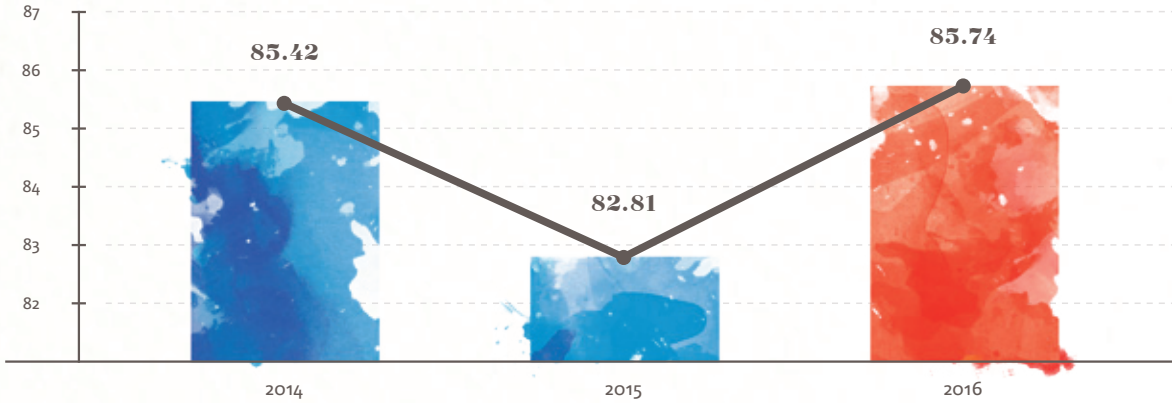


TECHNICAL DISPATCH CONTROL

The actual volume of services on technical dispatching of electricity supply in the grid and consumption in 2016 was 85,738.6 million kWh. The volume of services in comparison with 2015 increased by 2,929.7 million kWh or 3.5%, which was due to the increase in generation and electricity supply to the grid by

energy producing organisations of the Republic of Kazakhstan. The largest consumers of KEGOC's technical dispatching services are Eurasian Energy Corporation JSC, Nurzhanov Ekibastuz GRES-1 LLP, Kazakhmys Energy LLP, Almaty Power Stations JSC, EGRES-2 Power Station JSC.

Technical Dispatch Control, billion kWh

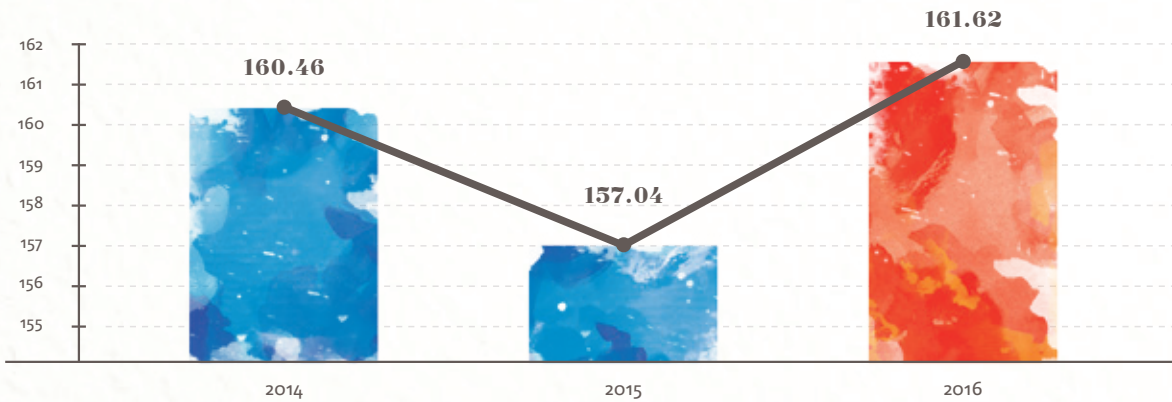


MANAGEMENT OF ELECTRICITY PRODUCTION AND CONSUMPTION BALANCING

The actual amount of electricity generation and consumption balancing in 2016 was 161,616.0 million kWh. The volume of services as compared to 2015 increased by 4,577.9 million kWh or 2.9% due to the common growth of electricity production and consumption

on the wholesale market of the Republic of Kazakhstan. The largest consumers of these services in 2016 were: Eurasian Energy Corporation JSC, LLP Nurzhanov Ekibastuz GRES-1 LLP, Kazakhmys Energy LLP, ArcelorMittal Temirtau JSC, and AlmatyEnergSbytt LLP.

Electricity Production and Consumption Balancing, bln kWh



(102-7)

Under international agreements KEGOC performs the electricity purchase/sale activities with power systems of neighbouring countries.

Thus, in 2016 KEGOC:

Sold electricity:

- to the Russian Federation to cover hourly deviations

of the actual interstate balance flows of electricity from the scheduled ones amounting to 854.923 million kWh, which is 134.7 million kWh less than in 2015;

- to Kyrgyz Republic to settle the unscheduled electricity flows between the power systems of the Republic of Kazakhstan and Kyrgyz Republic amounting to 4.7 million kWh.

Purchased electricity:

- from the Russian Federation and Kazakhstan power plants to cover hourly deviations of the actual interstate electricity balance flows from the scheduled ones amounting to 854.923 million kWh, which is 134.7 million kWh less than in 2015;
- from Kyrgyz Republic to compensate technical transmission losses to the amount of 13.1 million kWh;
- from Kazakhstan power plants to manage unscheduled electricity flows from Kazakhstan UPS to Kyrgyzstan power system to the amount of 4.7 million kWh.

In 2016, the Company also purchased electricity for technical transmission losses compensation and NPG auxiliary needs to the amount of 2,509.006 million kWh including 71.8 million kWh from the Russian Federation and 13.1 million kWh from the Kyrgyz Republic. In 2016, the volume of electricity purchased to cover the losses increased by 59.958 million kWh compared to 2015 (from 2,449.049 million kWh in 2015 to 2,509.006 million kWh in 2016). **(102-7)**

To improve the quality of the services provided, KEGOC developed the internal standard 'System Services and Consumers' Claims Management' according to which, at least once every six months, a survey of system services consumers is undertaken. It also appeals 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 system services, the quality of RDC regarding the operational dispatch management and make suggestions on improving the quality of KEGOC services. The survey results are analysed to improve the quality of rendered services. **(103-2)** In 2016, the average annual consumer satisfaction was rated at 4.56 points on the five-point scale. **(103-3)** The customer satisfaction is at the target level. The criteria that need improvement are addressed respectively. **(102-43)**

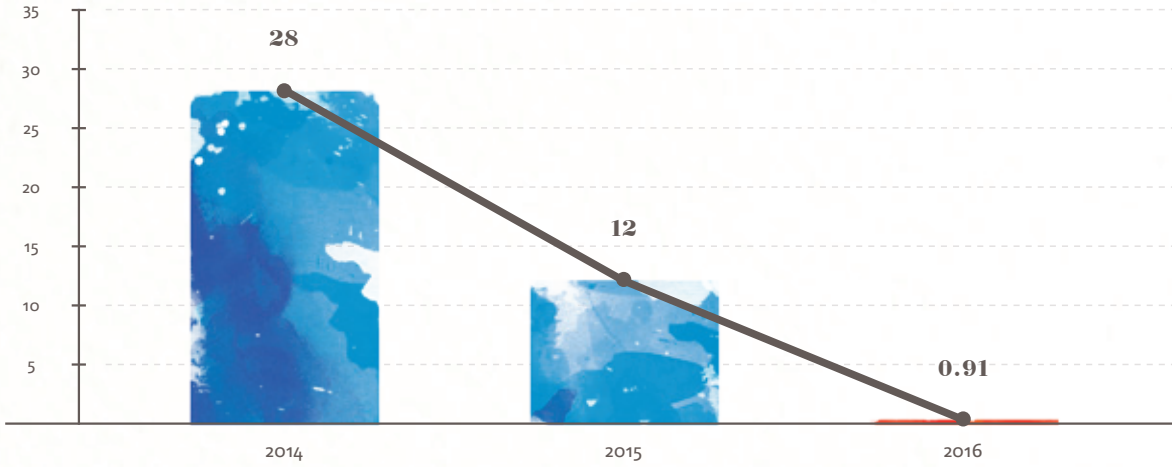
The Company annually arranges public hearings for consumers and other stakeholders to report on its activities relating to the provision of regulated services

(goods, work) in order to strengthen the protection of consumers' rights and ensure transparency of the Company's activities. The basic principles of annual reports are publicity, transparency of the Company's activities and observance of the balance of consumer interests. Thus, in April 2016 the Company held public hearings to report on the Company's performance in 2015 to consumers and other stakeholders.

The Company on a regular basis evaluates the compliance of the rendered system services with the legal requirements of the Republic of Kazakhstan. In 2016, there were violations of legislation and regulatory requirements related to the provision of services. KEGOC was administratively sanctioned for violations of the Law of the Republic of Kazakhstan On Natural Monopolies and Regulated Markets revealed during the scheduled inspection of the Committee on Regulation of Natural Monopolies and Protection of Competition and the Ministry of Energy of the Republic of Kazakhstan (CRNMPC). The violations included: conclusion of contracts for system services not in compliance with the standard contracts approved by the Government of the Republic of Kazakhstan and the authorized body (the wording used with regard to the terms of payment and tariffs not provided for in the standard contracts); engagement in other activities not agreed upon by CRNMPC; the Company's assets not related to its primary business; failure to fulfil the investment program and tariff estimates for the regulated services. As a result, KEGOC was sentenced to the administrative penalty to pay fines amounting in total to 10.819 million tenge. Based on the revealed violations, the Company developed corrective and preventive action plans. It should be noted that amendments to the Law of the Republic of Kazakhstan On Natural Monopolies and Regulated Markets have been enacted since 01 January 2017, lifting the ban on performance of other activities and ownership of assets not related to the primary business for natural monopolists. **(419-1)**

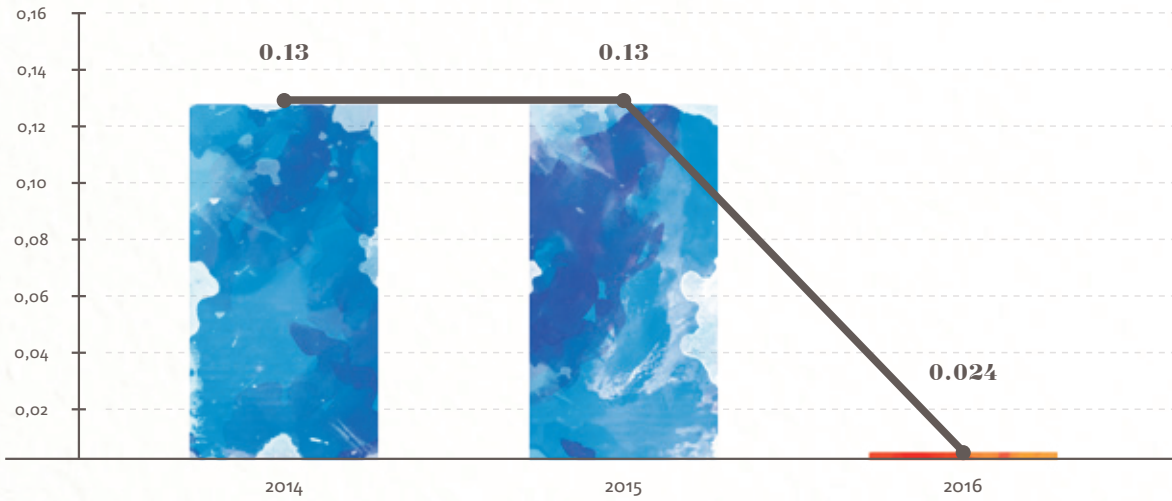
The power industry in the Republic of Kazakhstan is of great importance as the key national industries such as metallurgy and oil and gas production are the highly energy intensive industries. Accordingly, the competitiveness of the production industries in Kazakhstan and the living standards are highly dependent on the reliability and quality of energy supply to consumers. **(103-1)** The Company uses sectoral indices when evaluating the network reliability level:

SAIDI



SAIDI – System Average Interruption Duration Index – defines the average one interruption duration per year.

SAIFI



SAIFI – System Average Interruption Frequency Index – defines the average interruption frequency index. (103-2)

EU28, EU29

The observed tendency of SAIDI and SAIFI improvement is the result of activities undertaken by the Company to improve the reliability of NPG. **(103-3)**

Analysis of the used KPIs carried out under the Business Transformation Programme showed their insufficiency for achieving the goals of the Company's Strategy. To assess the grid reliability level SML (System Minutes Lost) and WWP (Percentage of Work Problems) indicators were defined. The indicators have the following advantages:

- reflect the level of technical reliability and operation of Kazakhstan NPG (interregional and interstate electric

networks);

- include all types of outages within the Company's responsibility;
- reflect the specifics of activities of the grid System Operator (which functions are defined by the power industry legislation).

In 2016 SML was 0.24 minutes and WWP was 99.83% corresponding to the reliability values similar to system operators' of electric networks based on the results of conducted benchmarking.

INVESTMENT ACTIVITY

Taking into account the development prospects of the interregional network and power delivery from new generating capacities scheduled to be commissioned, the Company pursues the active investment policy aimed at the upgrading of the national power grid, the construction of new electric power facilities to meet the consumer's electricity needs in the country, and create the export and transit potential. It should be noted that all investment projects are also socially oriented.

(103-1)

As part of Nurly-Zhol State Programme, KEGOC is implementing the large-scale project for construction of 500 kV OHTL North-East-South Transit. The Project shall be implemented in two phases:

- Phase I: Construction of 500 kV Ekibastuz – Shulbinsk HPP (Semey) – Ust-Kamenogorsk transmission line.
- Phase II: Construction of 500 kV Shulbinsk HPP (Semey)– Aktogai – Taldykorgan – Alma transmission line.

All construction and erection works of Phase I of the project were successfully completed in 2016 ahead of the work schedule instead of the scheduled completion period in 2017. The project constructed 500 kV OHTL Ekibastuz– Shulbinsk HPP (Semey)– Ust-Kamenogorsk with the total length of 598.5 km and 220 OHTL Semey– Shulbinsk

HPP including 500 kV Semey SS cross-connection lines with the total length of 106 km. In addition, new 500 kV Semey SS was constructed, the existing 500 kV Ust-Kamenogorskaya SS, 1150 kV Ekibastuzskaya SS and 220 kV Shulbinsk HPP SS were extended. The facilities were launched on 6 December 2016 during the national teleconference held under the Industrialization Day with the head of the state.

In 2016, KEGOC proceeded with the implementation of the following projects:

- **500 kV OHTL Shulbinsk HPP (Semey)-Aktogai-Taldykorgan-Alma Construction Project;**
- **Pavlodar Electricity Transmission Reinforcement Project;**
- **National Power Grid Rehabilitation Project. (103-3)**

In 2016 the Company disbursed more than KZT 44,001.05 million exclusive of VAT including KZT 40,035.46 million for large strategic projects implementation, KZT 2,586.89 million for renovation and replacement of existing assets and KZT 1,378.70 million for payment of capitalized interest under the loan. **(203-2)**

For more detailed information on the investment activity please see the Annual Report of KEGOC for 2016.



Karaganda Palace of Culture of Miners

Palace of Culture of Miners is one of Karaganda's symbols. Kazakh Drama Theatre and Musical Comedy Theatre are located in its building.

In 1940 based on the project of I. Brenner and Ya. Yanosha, the local architects, the construction of the Palace of Culture of Miners commenced. When the Great Patriotic War started, the construction of the Palace was temporarily suspended. At the end of 1950 central parts of the Palace were implemented. In 1952 the Palace was completely commissioned.

Geography of Operations: CENTRAL KAZAKHSTAN



CORPORATE GOVERNANCE

In accordance with the Strategy the Company made its mission to achieve the corporate governance level of leading world companies. To further improve the corporate governance, implementation and compliance with the Corporate Governance Code approved by the General Meeting of Shareholders in 2015, the Company directs its efforts to ensure:

- efficient exercise of shareholders' rights;
- fair treatment to shareholders;
- efficient balanced dividend policy;
- efficient performance of the Board of Directors and Management Board of KEGOC;

- sustainability and efficient stakeholders interaction system;
- proper disclosure of information about the Company to stakeholders;
- improved risk management and internal control systems.

In accordance with the Charter of KEGOC JSC the Company's bodies are:

- the General Meeting of Shareholders – the superior body;
- the Board of Directors – the governing body;
- the Management Board – the executive body. **(102-18)**

SHAREHOLDERS

As of 31 December 2016, KEGOC declared and placed in total 260,000,000 ordinary shares, including 234,000,001 (90 % plus one ordinary share) owned by Samruk-Kazyna, 25,998,609 shares belonging to minority shareholders and 1,390 shares repurchased by KEGOC at the request of minority shareholder. The General Meeting of Shareholders shall run its activities 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 Shareholders. In 2016 KEGOC held three General Meetings of Shareholders:

On 29 January 2016 the extraordinary General Meeting of Shareholders was held to assign Ernst&Young LLP as an auditor of KEGOC financial statements for 2016– 2018, and the audit service fee amounting to one hundred and twenty-four million tenge (KZT 124,000,000), exclusive of VAT.

On 29 April 2016 the annual General Meeting of Shareholders was held where:

- the annual financial statements were approved and the decision not to pay KEGOC's dividends for 2015 on ordinary shares of KEGOC was made;

- claims from the shareholders in relation to KEGOC's activities and its officers and results of consideration of such claims were reviewed.

On 28 October 2016 the extraordinary General Meeting of Shareholders was held where:

- the decision on changing the number of members of KEGOC's Board of Directors and electing new members of KEGOC's Board of Directors was made, as well as the term of office, the amount and terms of remuneration and compensation of expenses for new members of KEGOC's Board of Directors was defined;
- amendments and addenda were made to the Regulations on the KEGOC's Board of Directors;
- the interim financial statements and distribution of the net income were approved; the decision to pay dividends on ordinary shares and the amount of dividends per ordinary share of KEGOC for H1 2016 was made.

THE BOARD OF DIRECTORS AND ITS COMMITTEES

From 01 January to 28 October 2016, the Company's Board of Directors included the following members: K. Bektemirov, Chairman of the Board of Directors, B. Kazhiyev, Chairman of the Management Board and A. Spitsyn, L. Sutera, D. Fache and Ya. Bialek, independent directors.

Based on the decision of the extraordinary General Meeting of Shareholders of KEGOC dated 28 October 2016 (Minutes No. 5) the Board of Directors is newly formed of eight (8) members to ensure the balanced membership of the Board of Directors with account of fair treatment to shareholders as follows:

Kuanysh Bektemirov, Chairman of KEGOC's Board of Directors, representative of the major shareholder– Samruk-Kazyna, born in 1970, nationality: Kazakhstan.

Anatoliy Spitsyn, independent director, director of the Institute for Strategic Studies of Integration Problems of the Eurasian Economic Community, born in 1939, nationality: the Russian Federation. Chairman of the Strategic Planning and Corporate Governance Committee, member of the Audit Committee, the Nomination and Remuneration Committee and the Occupational Health, Safety, and Environmental Protection Committee of KEGOC.

Luca Sutera, independent director, Chief Financial Officer, member of the Management Board at NEBRAS POWER (Qatar National Energy Company), born in 1971, nationality: Italy. Chairman of the Audit Committee, the Nomination and Remuneration Committee and the Occupational Health, Safety,

and Environmental Protection Committee under KEGOC's Board of Directors.

Dominique Fache, independent Director, Chairman of RTF Board of Directors, member of the Board of Directors at Sophia Antipolis Science Park, Nice, France, born in 1949, nationality: France. Chairman of the Nomination and Remuneration Committee, Chairman of the Occupational Health, Safety, and Environmental Protection Committee, member of the Strategic Planning and Corporate Governance Committee under KEGOC's Board of Directors.

Janusz Bialek, independent director, Director of the Skoltech Centre for Energy Systems, Skolkovo Institute of Science and Technology, born in 1955, nationality: UK, Poland and Northern Ireland. Member of the Nomination and Remuneration Committee and the Occupational Health, Safety, the Environmental Protection Committee and the Audit Committee under KEGOC's Board of Directors.

Suinshlik Tiyyessov, member of KEGOC's Board of Directors, of the major shareholder– Samruk-Kazyna, born in 1946, nationality: Kazakhstan.

Zhanna Yegimbayeva, member of KEGOC's Board of Directors, representative of major shareholder– Samruk-Kazyna, Adviser to National Holding Company Baiterek JSC, born in 1953, nationality: Kazakhstan. Member of the Occupational Health, Safety and Environmental Protection Committee of the Board of Directors of KEGOC.

Bakytzhan Kazhiyev, member of the Board of Directors of KEGOC, Chairman of the Management Board of Kazakhstan Electricity Grid Operating Company (KEGOC), born in 1964, nationality: Kazakhstan.

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) is 75%. The more detailed information on the composition and operation of KEGOC's Board of Directors and Management Board in 2016 is set out in KEGOC Annual Report for 2016. **(202-2)**

In 2016, the Board of Directors held 12 meetings in presentia and three meetings in absentia, considered 153 issues including sustainability and decided to:

- approve amendments and addenda to KEGOC's Long-Term Development Strategy 2025 which includes one of three strategic goals 'Sustainability' and sets target values for indicators in human resource management, environment, and occupational safety and health;
- consider annual/interim financial statements, proposals for payment/non-payment of dividends on ordinary shares and the amount of dividends per KEGOC's ordinary share;
- review reports on the implementation of the investment program and major investment projects;
- approve Guidelines on the sustainability management system;
- approve the Annual Report and the Sustainability Report for 2015;
- approve the Action Plan for KEGOC's Corporate Governance improvement and KEGOC's Corporate Governance Code introduction for 2016-2020, including sustainability activities;
- establish the Occupational Health, Safety and Environmental Protection Committee of the Board of Directors of KEGOC and approve the Regulations thereto.
- approve the Risk Registries and Risk Maps, the Key Risk and Risk Appetite Management Action Plan and review quarterly sustainability risk reports and risk management activities;

- approve the Action Plan to maintain the high level of the KEGOC social stability in 2016-2018;

To review the most important issues, including sustainability issues, and prepare recommendations for the Board of Directors of KEGOC, the following committees, being consultative and advisory bodies of the Board of Directors, were established:

- Audit Committee;
- Nomination and Remuneration Committee;
- Strategic Planning and Corporate Governance Committee;
- Occupational Health, Safety and Environmental Protection Committee.

The Audit Committee was established to work out and submit to the Board of Directors the recommendations relating to:

- control over the financial and economic activities of the Company;
- internal control and risk management systems reliability assessment;
- internal and external audit independence, and the processes ensuring enforcement of the laws of the Republic of Kazakhstan.

The Nomination and Remuneration Committee was established to work out and submit to the Board of Directors the recommendations relating to:

- election or appointment of candidates for independent directors, the composition of the Management Board, and the Corporate Secretary;
- respective remuneration to the directors, members of the Management Board and the Corporate Secretary;
- provision of social support for KEGOC's employees.

The Strategic Planning and Corporate Governance Committee was established to work out and submit to the Board of Directors the recommendations relating to:

- priority areas of the Company's activities, as well as the development strategy, the Development Plan, investment programmes and large investment projects of the Company;
- improvement of corporate governance in the Company, implementation of the Corporate Governance Code;
- review of the Company sustainability activities;

- strategic risks in order to integrate the risk management system into the planning process.

The Occupational Health, Safety, and Environmental Protection Committee was established to work out and submit to the Board of Directors the recommendations relating to:

- the policy and procedures for ensuring occupational health, safety and environmental protection including the system of reporting to the Management Board and the Board of Directors;
- monitoring of strategic KPIs relating to the occupational health, safety and environmental protection, and achievement of goals in this area set by the Board of Directors;

- results of investigation of major technological failures, group accidents with severe outcomes and provision of recommendations on the necessary measures;
- compliance of the practice accepted in the Company with the advance practice in securing occupational health, safety and environmental protection.

The Committee shall operate in accordance with the Regulations on the Occupational Health, Safety and Environmental Protection Committee under KEGOC's Board of Directors.

In 2016, the Committee held one meeting in praesentia to review the Regulations on the Occupational Health, Safety and Environmental Protection Committee of the Board of Directors of KEGOC and Occupational Health and Security Report of KEGOC. **(102-18)**

BUSINESS ETHICS

The Company operation is based on the fundamental corporate values, such as honesty, reliability and competence of employees, working efficiency, mutual support, respect for others, stakeholders and the Company on the whole. **(103-1)** The Board of Directors approved the Business Ethics Code of KEGOC, whereby the Company follows the principles of business ethics: honesty, mutual respect, trust, fairness, integrity, transparency and accountability. The Business Ethics Code defines the general standards of conduct, moral and ethical standards, intolerance to corruption and private benefit in the performance of official duties. All employees of the Company, including officers, shall

study the provisions of the Business Ethics Code on a regular basis, when employed and in case of amendments to the Code. Knowledge of the Business Ethics Code provisions shall be checked annually by mandatory qualification test questions. In 2014, the Board of Directors appointed the Ombudsman. One of his tasks is to ensure compliance with the Business Ethics Code by officials and employees of KEGOC and, if necessary, to explain the Code provisions.

KEGOC adheres to the policy of zero tolerance for corruption in all its manifestations in cooperation with all stakeholders and for concealment of corruption offences. KEGOC makes

every effort to prevent corruption and other illegal actions of its officials and employees. Officials and employees involved in corruption shall be dismissed and held accountable in accordance with the procedure stipulated by the laws. **(102-16)**

The Company has adopted and applies the Policy for management of risks of the breach of anti-corruption and other laws of the Republic of Kazakhstan applicable to KEGOC activity, which was represented to all employees of the Company. All employees are regularly informed of the effective anti-corruption policies and methods. KEGOC takes measures to promote dialogue with stakeholders in order to raise their awareness of anti-corruption efforts. **(205-2) (103-2)** In 2016 there was no breach of anti-corruption laws of the Republic of Kazakhstan in the Company. **(205-3) (103-3)**

In 2016, to inform of sustainability and anti-corruption principles KEGOC adheres to and calls for their compliance, the Company forwarded the information letter to all consumers of the Company's system services. In addition, standard contracts with suppliers of goods, works and services were supplemented with provisions on compliance with anti-corruption, environmental, labour legislation, as well as compliance with the Company's internal safety rules in case of presence and work on the territory of KEGOC's facilities. **(205-2)**

One of the priority lines of the Company is to ensure that KEGOC operations are performed in conformity to Kazakhstan legislation, industry and internal rules. To mitigate the risk of legislation violation, the Company monitors the compliance of KEGOC operations with the applicable regulatory legal acts on a regular basis. In case of identified non-compliances,

they are respectively eliminated. In addition, the Company's Internal Audit Service makes an estimate of the laws and regulations compliance control system. **(103-1)**

KEGOC has a hotline to receive and consider claims and appeals about violations. It enables any person to report the Audit Committee of KEGOC's Board of Directors, confidentially, on illegal actions committed or to be committed by KEGOC officials and employees. **(103-2)**

The KEGOC's hotline provides for two ways of submitting claims and appeals:

- by mail to the following address: To Secretary of Audit Committee, Board of Directors of KEGOC, 59 Tauyelsizdik Ave., Astana, marked CONFIDENTIALLY;
- by sending an e-mail to: svakegoc@yandex.ru.

KEGOC shall carefully investigate all corrupt and other illegal actions to take appropriate measures. The rights of persons who reported on all corruption actions shall not be prejudiced.

In 2016, the Audit Committee received five appeals including:

- three appeals from suppliers of the Company regarding alleged breaches of contract terms;
- one appeal of the Company's employee regarding alleged violations of the internal documents requirements;
- one appeal of the Company's employee regarding the labor practice.

During 2016, three appeals were handled and settled, the appeals of two suppliers will be settled in 2017.

No appeals relating to the impact on the enjoyment of human rights, as well as the environmental impact were received in 2016. There were no appeals submitted to the Audit Committee before 2016 and settled in 2016. **(102-44, 103-3)**



Irtysk river Bukhtarma Reservoir

Bukhtarma reservoir is the reservoir built by the Bukhtarma HPP dam on the Irtysk river. It is the Kazakhstan's largest reservoir. It makes the top five largest artificial reservoirs in the world.

Reservoir filling started in 1960 by use of the Bukhtarma HPP. Since 1966 the reservoir is regulating the flow. Bukhtarma reservoir consists of two sections: river section – running along the Irtysk river and the Zaisan lake.

Geography of Operations: EASTERN KAZAKHSTAN



ECONOMICS

The economic component of KEGOC's activities is of strategic importance both for the Company and for the economy of the state. It is aimed at increasing the long-term value for shareholders and investors of KEGOC.

(103-1)

Procedures for formation and approval of the Development 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 Development Plan and Budgets approved by the Board of Directors of KEGOC. The development plan shall be prepared in a consolidated manner and include plans of the subsidiaries for a five-year period on a rolling basis. Annual budgets shall be approved for the Development Plan implementation. **(103-2)** The Development Plan shall be monitored by KEGOC's Board of Directors on a quarterly basis.

Consolidated revenues based on 2016 results amounted to KZT 188,716.3 million and increased by 12.5% (or KZT 20,982.8 million) compared to 2015 indicators. Operating revenues amounted to KZT 130,001.4 million. The operating revenues growth by 18.1% (or KZT 19,940.0 million) was due to increase in tariffs for regulated services, growth of regulated services volume and of electricity purchase/sale transactions

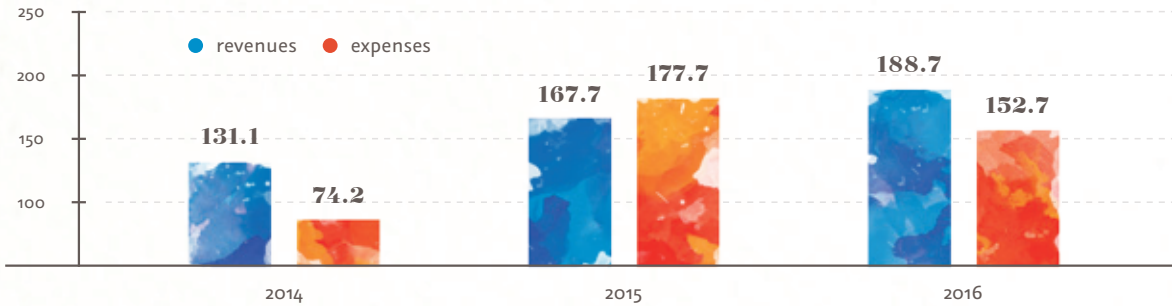
conducted by FSC RES LLP, as well as power regulation service revenues.

Non-operating revenues for 2016 amounted to KZT 58,714.8 million increasing by 1.8% (or KZT 1,042.9 million) compared to 2015 mainly due to increase in deposit operations revenues and revenues from the fixed assets non-repayable receipt. At the same time, there is decrease in revenues from sale of fixed assets, and revenues from fines and penalties under commercial contracts.

Consolidated expenses in 2016 amounted to KZT 152,741.4 million, this 14% (or KZT 24,939.1 million) less than in 2015. Cost of sale of services rendered in 2016 was KZT 79,388.8 million, increasing by 5.1% (or KZT 3,846.2 million) compared to 2015 mainly due to higher expenses for purchase of electricity generated by renewable energy sources, labour payment for the operating personnel and depreciation. And, expenses reduced for electricity purchase for compensation of technical loss.

General and administrative expenses in 2016 amounted to KZT 17,640.4 million, this twice (or KZT 9,075.7 million) higher than in 2015. The increase is mainly due to higher expenses for provision for accounts receivable, property tax, labour payment, consultancy and business transformation centre services. Other expenses totalled to KZT 49,439.3 million, reducing by 43.6% (or KZT 38,288.1 million) compared to 2015 mainly due to decrease in currency exchange losses.

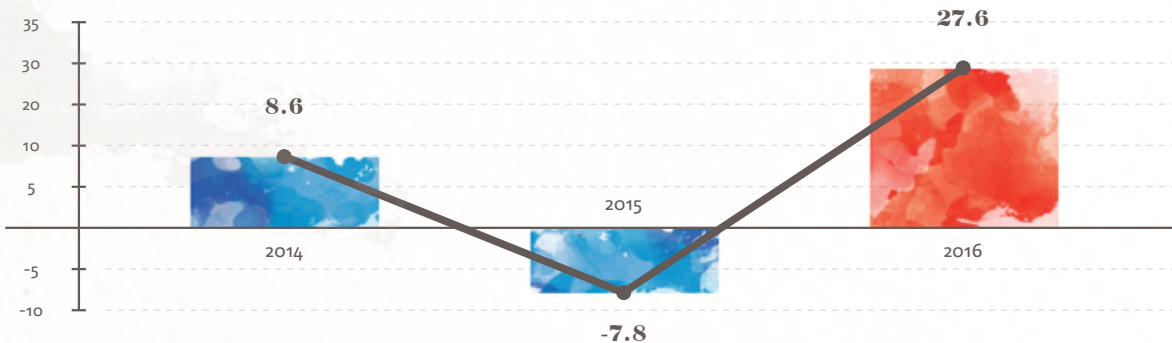
Revenues and Expenses Behaviour, KZT billion



Based on 2016 results, net income was received to the amount of KZT 27,590.2 million, as compared to losses amounting to KZT 7,779.6 million received based on 2015 results. Additionally, it should be noted that 2014-2015 financial indicators were affected by change in the tenge to dollar exchange rate and fixed assets revaluation in 2014. In 2017, the expected revenues are KZT 156,975.6 million,

including KZT 153,887.5 million of operating revenues and KZT 3,088.1 million of non-operating revenues. Expenses are estimated at the amount of KZT 122,505.2 million, including KZT 102,923.4 million of sale costs, and KZT 14,288.7 million of general and administrative expenses. The total profit expected in 2017 amounts to KZT 27,479.5 million.

Net income behaviour, KZT billion



| KZT billion | 2014 | 2015 | 2016 |
|----------------------------------|------------|------------|------------|
| Total capitalization | 467,373.88 | 512,207.15 | 537,183.03 |
| Equity capital | 359,777.47 | 340,976.61 | 362,084.07 |
| Borrowed funds | 107,596.41 | 171,230.54 | 175,098.96 |
| Funds from the government | - | - | - |
| Created economic value | 131,062.71 | 167,733.45 | 188,716.28 |
| Operating income | 93,519.76 | 110,061.46 | 130,001.43 |
| Financial income | 2,009.86 | 4,022.45 | 5,394.65 |
| Other income | 35,533.09 | 53,649.54 | 53,320.20 |

| KZT billion | 2014 | 2015 | 2016 |
|---|------------|------------|------------|
| Distributed economic value: | 122,446.69 | 186,570.82 | 167,607.90 |
| Payroll expenses | 14,330.83 | 14,425.24 | 18,166.63 |
| Expenses on taxes and levies to the government budget | 8,284.83 | 3,037.56 | 16,803.15 |
| Payments to capital providers | 4,332.76 | 15,846.80 | 12,539.67 |
| Charity and sponsorship | 134.2 | 152.17 | - |
| Other operating expenses | 67,675.91 | 64,499.28 | 70,659.13 |
| Other non-operating expenses | 27,388.15 | 88,609.77 | 49,439.31 |
| Economic cost to distribution | 8,616.02 | -18,837.37 | 21,108.39 |

(102-7), (201-1), (201-4)

The stable financial performance of the Company allows fulfilling its obligations to stakeholders with regard to the following in a timely and complete manner:

- payment of salary and provision of social support;
- payment of dividends to shareholders;
- fulfilment of investment projects and improvement of the quality and reliability of the NPG operation;
- timely payments to suppliers;
- tax payments. **(103-3)**

Procurement in KEGOC shall be carried out in accordance with the Rules for procurement of goods, works and services by Sovereign Wealth Fund Samruk-Kazyna Joint-Stock Company, and organizations whose fifty per cent of shares (participation quota) directly or indirectly belong to Samruk-Kazyna on the right of ownership or beneficial ownership, approved by the Decision of the Board of Directors of Samruk-Kazyna (hereinafter – the Procurement Rules of the Fund). The procurement process includes: development and approval of procurement plans; supplier selection; execution and performance of the procurement contract. The Fund's Procurement Rules contain provisions entitling the customer to include in tender documents the qualification requirements to a potential supplier regarding its experience, in case the procurement amount exceeds KZT 75 million; the requirement to a potential supplier to have qualified specialists experienced in the relevant field; special requirements to potential suppliers and experts they involve in accordance with the requirements of standards and (or) other documents specified by the customer and (or) the law of the Republic of Kazakhstan, in case of procurement of works and services to be performed at hazardous production

facilities of the customer. Indication of other qualification requirements in tender documents is a flagrant violation of the Fund's Procurement Rules. The Company's suppliers are organizations (both residents and non-residents of the Republic of Kazakhstan) that supply goods, perform work and provide services to ensure the performance of KEGOC's core business. Organizations included in the List of Unreliable Potential Vendors (Suppliers) of Samruk-Kazyna and (or) in the Register of Mala Fides Participating in Public Procurement Projects and (or) in the List of False Enterprises cannot be suppliers of the Company. Also, when holding procurement process through open tender and request for quotations, the Company may provide that procurement process is conducted only among certain categories:

- manufactures of the purchased goods, which are included in the Register of manufacturers of the Holding;
- disabled persons organisations (individuals with disabilities carrying out business activities) that manufacture purchased goods and included in the Register of disabled persons organizations (individuals with disabilities carrying out business activities) of the Holding.

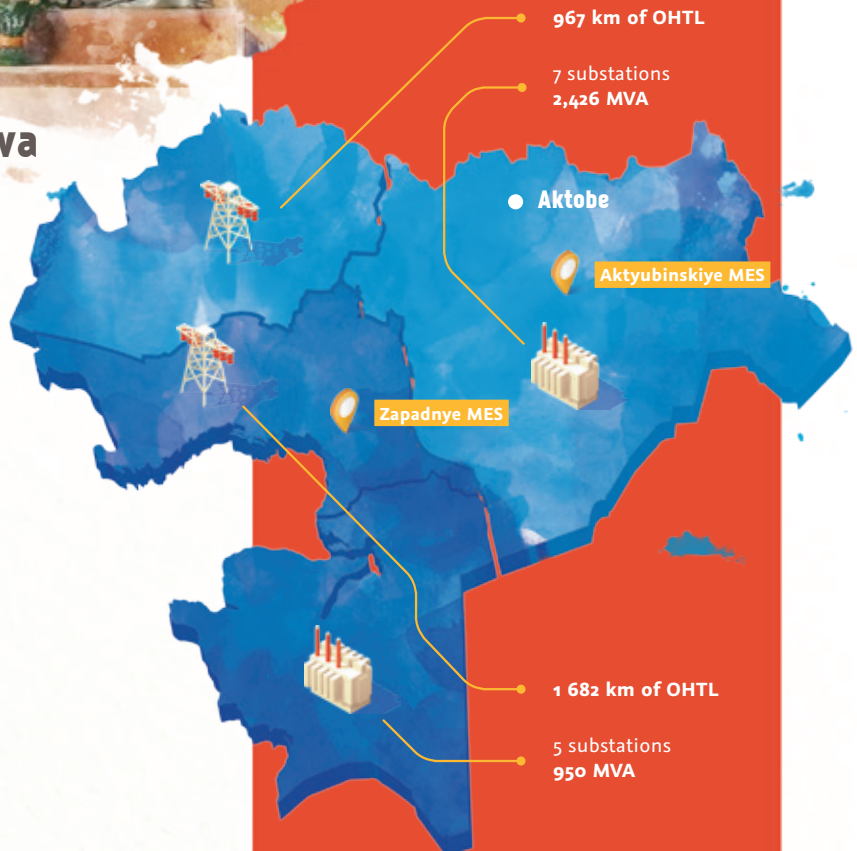
The total number of suppliers involved by the organization and the estimated number of suppliers in the supply chain, the estimated cash value of payments made to suppliers are determined based on the results of procurement through an open tender or price quotations bidding. The estimated cash value of payments made to procurement suppliers by a single-source procurement shall not exceed the amount provided for procurement plans (annual, long-term). **(102-9)**



Aktobe Aliya Moldagulova Monument

The memorial complex of the Hero of the Soviet Union, Aliya Moldagulova, was opened on 23 September 2005. Sculptors Bakytzhan Abishev and Yerken Sergebayev tried to move away from generally used image of Aliya as a severe warrior of the Soviet Army. The heroine is a young 18-year-old girl that tragically died during the war. Aliya's bronze figure stands on a granite pedestal. The monument with the pedestal is 6 meters high. It is framed by two granite reliefs 2.3 meters high and 12 meters long, which depict the history of the people from the Saka times to our days.

Geography of Operations: WESTERN KAZAKHSTAN



ENVIRONMENTAL PROTECTION

KEGOC considers environmental activities as an integral part of its day-to-day operations, completely understanding the necessity to keep environmental balance, to ensure environmentally sustainable social and economical development. **(103-1)** In order to minimize environmental impact, the Company has the Environmental Management System (EMS) aimed at ensuring the performance and improvement of environmental performance in accordance with KEGOC's Environmental Policy, as well as the management of environmental aspects and risks associated with the specific nature of the Company's operations.

Environmental responsibility is a key principle of KEGOC Environmental Policy. The goal of KEGOC Environmental Policy is 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. **(103-1)** The management of KEGOC assumes responsibility for the implementation of the obligations undertaken by the Environmental Policy for the continuous improvement and prevention of pollution, as well as compliance with applicable legislative and other requirements to which KEGOC is related in respect of its environmental aspects. All employees of the Company as well as employees of contractors working for the Company shall read and understand KEGOC's Environmental Policy.

KEGOC annually prepares its Environmental Programme, which defines necessary environmental actions, as well as costs for their implementation. **(103-2)** In 2016, the following environmental protection measures were carried out by external organizations:

- environmental monitoring of ambient air, soils and water resources;
- drafting environmental regulation documents for four MES branches;
- developing safety data sheets;
- management of industrial waste by types.

KEGOC's overhead transmission lines and outdoor switchgears are not the active sources of environmental pollution. Electromagnetic field, audible noise, vibration and emissions, discharges and solid waste resulting from maintenance, repair, rehabilitation, and construction of networks and substations have an insignificant environmental impact. The main principle of public health protection from industrial frequency electromagnetic field provides for establishment of sanitary protection zones and clear zones for the NPG facilities; the staff shall be provided with stationery protection devices at substations and personal protection in addition to the above-mentioned measures. Areas of sanitary protection zones shall be determined in accordance with the existing sanitary and epidemiological norms of acceptable noise, electromagnetic radiation and other physical factors on the border of the

sanitary protection zone. All the Company's facilities shall be designed, constructed and operated in full conformity with the Sanitary and Epidemiological Rules and Norms and Sanitary and Epidemiological Requirements for Establishment of Sanitary Protection Zone at Production Facilities approved by order of the Minister of National Economy of the Republic of Kazakhstan.

Main sources of environmental impact from operations of electric-power grids and substations include:

- physical factors (industrial frequency electromagnetic field, noise, vibration and other physical factors);
- operations of KEGOC MES branches to maintain networks and substations;
- wastes generated during substation equipment operation, repair and upgrade.
- environmental actions during implementation of investment projects.

AMBIENT AIR PROTECTION

According to maximum permissible emissions (MPE), the MES branches identified stationary sources of harmful emissions (both organized and unorganized emission sources). In order to reduce emissions from stationary sources, the MES branches conducted the operational monitoring, namely, they kept records of hours of operation for each item of equipment

and consumption of materials. The fact of the reduced emissions was supported by the findings of the environmental monitoring conducted by the specialized organisations. The volume of gross emissions from stationary sources in 2016 was 21.06 tonnes given that the fixed standard rate was 25.74 tonnes per year.

Actual volumes of gross emissions from stationary sources are given in the table below:

| Types of emissions | 2014 | 2015 | 2016 |
|--------------------------|-------|-------|-------|
| Total, including: | 24.27 | 21.15 | 21.06 |
| solid | 9.54 | 4.98 | 7.87 |
| gas | 14.73 | 16.17 | 13.19 |
| <i>where:</i> | | | |
| hydrocarbons | 4.16 | 1.32 | 2.73 |
| COX | 5.94 | 4.82 | 4.61 |
| SO ₂ | 0.10 | 0.08 | 0.08 |
| NOX | 0.62 | 0.77 | 0.82 |
| other | 3.91 | 9.18 | 4.95 |

According to the Code of the Republic of Kazakhstan On taxes and other mandatory payments to the budget, the emissions from mobile sources are not measured, the amount of the used fuel shall be applied to calculation of payments for emissions

from mobile sources. Employees and materials used in the Company's operations and work performance are transported over short distances, so this has no great impact on the environment. (305-7)

In 2016, according to the UN Framework Convention on Climate Change, Kyoto Protocol and environmental laws of the Republic of Kazakhstan, MES branches made an inventory of greenhouse gases emitted from the Company operations in 2015. Emissions of greenhouse gases were calculated and included vehicles, standby supply units, SF6 circuit-breakers. The 2015 reports on inventory of greenhouse gases were registered and sent to the territorial environment departments.

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 (CO₂), methane (CH₄), nitrous oxide (N₂O) and perfluorocarbons (PCFs). Following the results of KEGOC’s 2008-2015 inventory of greenhouse gases emitted by vehicles and independent power supply sources (negligible amount), emissions of the said gases are stable (about 13,000 tonnes 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 2016-2020.

The Company does not emit any ozone-depleting substances influencing the climate change. **EU5**

WASTE MANAGEMENT

Dynamics of waste production by hazard level

| tonne | 2014 | 2015 | 2016 |
|--------------------|-------|-------|-------|
| ‘green’ – G index* | 2,482 | 2,490 | 2,722 |
| ‘amber’ – A index* | 324 | 905 | 446 |
| ‘red’ – R index* | – | – | 10.5 |

* – waste hazard level breakdown is given as per the Environmental Code of the Republic of Kazakhstan

The main waste products are transformer oil and scrap metal generated in the course of operation, repair and rehabilitation of the equipment. Production wastes are stored in specifically equipped areas and premises with hard surface. The outline map of waste disposal was developed for each substation. In 2016, KEGOC subdivisions generated 3,179.12 tonnes of wastes:

- solid domestic waste – 886.12 tonnes,
- non-ferrous scrap metal – 47.82 tonnes,
- ferrous scrap metal – 986.38 tonnes,
- waste oil – 421.07 tonnes,
- construction and other waste – 825.83 tonnes,
- mercury containing waste – 1.36 tonnes,
- PCBs containing waste – 10.5 tonnes.

The above includes 1,043 tonnes disposed at landfills, and 553 tonnes of waste transferred for recycling for the purpose of re-use under the contracts executed with the specialized organisations; at that, costs for waste disposal at landfills were KZT 8.75 million, recycling– KZT 4.6 million (mercury containing waste– KZT 0.63 million, production waste by types– KZT 3.97 million).

Transformer oil and scrap metal were disposed by specialised organisations. In 2016, centralised contracts are signed with specialised organisations for production waste disposal: 858 tonnes of waste transformer oil and 1746 tonnes of non-ferrous and ferrous metal generated in 2015 and 2016 were disposed.

WATER AND SOIL IMPACT

The Company does not use water in its industrial 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 MES branches with specialized organisations. There are no discharges into water bodies and relief. Water is supplied from artesian wells at 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. 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 shall be checked on regular basis. (303-2)

ENVIRONMENTAL ACTIONS DURING INVESTMENT PROJECTS IMPLEMENTATION

The Company shall address the environmental issues in a comprehensive way when implementing its investment projects. The design shall provide 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 across forest-steppe zone, environmental impact assessment (EIA) shall be 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. (103-3) For example, as part of the Investment Programme implementation, in 2016, the EIA sections of the Development of design and estimate documentation for 'Installation of technical security facilities at 500 kV Zhambyl SS' and Installation of technical security facilities at 500 kV Zhitikara SS' were reviewed and approved. Under 500 kV Ekibastuz– Semey– Ust-Kamenogorsk Electricity Transmission Project, the Design and survey work and Environment impact assessments of the project 'Extension of 220 kV OSG of Shulbinsk HPP' were approved. Under 500 kV OHTL Shulbinsk HPP (Semey)– Aktogai– Taldykorgan– Alma Construction Project the following working projects EIAs were

approved: 'Construction of 220 kV cross-connection lines for connection of 220 kV OHTL Saryozek– No.152 Taldykorgan with 500 kV Taldykorgan SS' and Detailed Design of 'Construction of 220 kV cross-connection lines for connection of 220 kV OHTL Saryozek– No.152 Taldykorgan with 500 kV Taldykorgan SS'

In addition, a preliminary EIA for the Feasibility Study of the 'Amended Feasibility Study of the Pavlodar Electricity Transmission Reinforcement Project' was approved.

The fauna is mainly affected by interfering with noise due to withdrawal of lands for construction, preparation and levelling of the sites, arrangement of temporary materials storage, and transportation of equipment and people. During construction and installation works the following activities shall be performed to preserve biodiversity and mitigate the impact: strict adherence to the work performance technology; instructions to employees relating to prohibition to hunt animals; prohibition to feed and bait wild animals; disposal of food and other waste in special containers with their subsequent removal; liquidation of fly-dumping; speed restriction for vehicles within the territory; timely reclamation of the OHTL route after completing excavation and other works, and natural grass restoration.

POWER SAVING

The main objective 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 losses while transmitting electricity 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. **(103-2)**

Electrical power system of Kazakhstan is defined by large concentration of powerful energy sources in Zone North and long length transit lines (about 1,000 km) due to vast territory

of Kazakhstan (main transits include North-South, and Pavlodar oblast– Aktobe oblast), which has a great influence on the level of technical losses. Also, technical losses in KEGOC grid depend on the operation modes of neighbouring states (electricity transit, export and import).

The technical losses of KEGOC in 2016 amounted to 2,513.2 million kWh or 6.1% of the electricity supply to the grid, which does not exceed the regulatory value approved by the authorized body in the amount of 6.2%. **EU12**

KEGOC annually performs activities to reduce technical losses. Following the results of 2016, such activities resulted in reduced electricity consumption amounting to 4,361 million kWh.

| Loss Reduction Measures in 2016 | Outcomes, million kWh |
|--|-----------------------|
| Line tripping under low-load conditions | 0.229 |
| Shutdown of power transformers under low load conditions | 4.132 |
| Total for KEGOC | 4.361 |

(103-3)

Moreover, in accordance with the Law of the Republic of Kazakhstan On Energy Saving and Energy Efficiency Raising, the Company proceeded with energy audit of its facilities. This audit was completed in 2016, based on results the action plan for energy saving and energy efficiency raising for 2016-2020 was developed.

Training of the personnel responsible for environmental issues at the Company, has been held on regular basis to raise awareness of the employees of their duties and responsibilities for environmental protection. In 2016, training courses on the

following topics were held at the Almaty University of Power Engineering and Telecommunications: 'Labor protection and environmental safety of technological processes and production' for the Company's employees.

Risk management system operates at KEGOC. This system is aimed at continuity and stability of the activity by limiting the impact of the external and internal negative factors on KEGOC's activity. In order to prevent adverse environmental impact, KEGOC annually assesses environmental risks and determines mitigating measures. Due to the fact that the activities of

KEGOC do not have a significant impact on the environment, the environmental risks are not relevant to the Company's key risks. KEGOC's environmental programme includes a set of measures required to manage environmental risks and to achieve target and planned values. PCBs containing waste, transformer oil and waste transformer oil were recognized as important environmental aspects in 2016.

The importance of the PCB-containing waste aspect is due to the fact that polychlorinated biphenyl is a dangerous substance according to the Environmental Code of the Republic of Kazakhstan (red hazard level). Based on the results of laboratory tests, 22 units of electrical equipment contaminated with PCBs were discovered at the following branches: Akmolinskiye MES, Vostochnye MES and Severnye MES. In the immediate aftermath of discovery, the safe storage of PCB-containing waste was organized and the branches concluded compulsory environmental insurance of the civil liability for reparation damage to life, health, property of third parties and (or) to the environment as a result of its accidental pollution caused by hazardous waste management. In order to destroy PCB-containing wastes procurement of services for packaging, transporting and destroying of PCB-containing wastes was planned in 2016, therefore, the extension of environmental insurance was not planned. However, in the Q2 2016, electronic procurement of these services was found to be unsupported, and it was necessary to conduct a detailed analysis of the procurement with the participation of representatives of the designated Authority, the UNDP and the GEF programme advisers on PCBs, and the contract of compulsory environmental insurance was concluded with an interruption of the liability insurance period. Thus, the Company unintentionally carried out its activities for a certain period of time without environmental liability insurance and was administratively sanctioned with a fine of KZT 2.121 million. **(307-1)**

The importance of the 'transformer oil' and 'waste transformer oil' aspects is associated with the presence of oil-filled equipment. The result of environmental aspects management was a decrease in the importance of the 'transformer oil' aspect, which is caused by the replacement of the auxiliary transformers with dry ones; oil circuit breakers with gas-

insulated or vacuum ones under the Kazakhstan Electricity Transmission Rehabilitation Project. The oil free equipment is environmentally friendly, improves fire safety, and excludes pollution of ground water and soils. KEGOC MES branches systematically (once or twice a day, depending on the requirements established at the MES branch) inspect equipment at their facilities for oil leakage in the oil supply systems, uptight fastening, and damaged bushings in oil-filled equipment. In addition, during the Operational Safety Days at Vostochnye MES and Sarbaiskiye MES branches of KEGOC the status check-up of energy facilities for environmental safety was carried out. To reduce the environmental impact of 'waste transformer oil' aspect, activities were carried out to prevent pollution of the land by the oil spills by observing the technology of repairing oil-filled equipment; temporary storage is provided at special sites in compliance with security measures, as well as the timely and centralized sale to the specialized organizations.

(102-11, 102-15)

The results of the inspection (witness audit) conducted in 2016 by the certification authority confirmed that the Company's operations with regard to the environmental management system met the requirements of ISO 14001. **(103-3)**

In 2017, the key environmental measures will cover:

- environmental monitoring;
- transformer oil regeneration for re-use in oil-filled equipment (up to 220 and 110 kV) during planned operational maintenance;
- inventory of greenhouse gases emitted from KEGOC operations into the environment in 2016;
- reduced technical consumption of the electricity in transmission lines by shutdown of transformers and line tripping under low-load conditions;
- extension of the list of waste transferred to the specialized organisations for recycling for the purpose of re-use: mercurial waste, used vehicle tires, industrial oil, greased rags, office equipment and other waste;
- preparation of the programme and holding the emergency environmental hazard response drills for prevention and liquidation of adverse impact on the environment extending the list of structural units for

- which the emergency environmental hazard response drills are held;
- receipt of the opinion of the state ecological examination for the facilities of the 500 kV Semey-Aktogai-Taldykorgan-Alma OHTL Construction Project;
- release of the information on the environment and NPG development projects to the public on the web-site of KEGOC and corporate portal. update of Knowledge Base on the environmental issues.



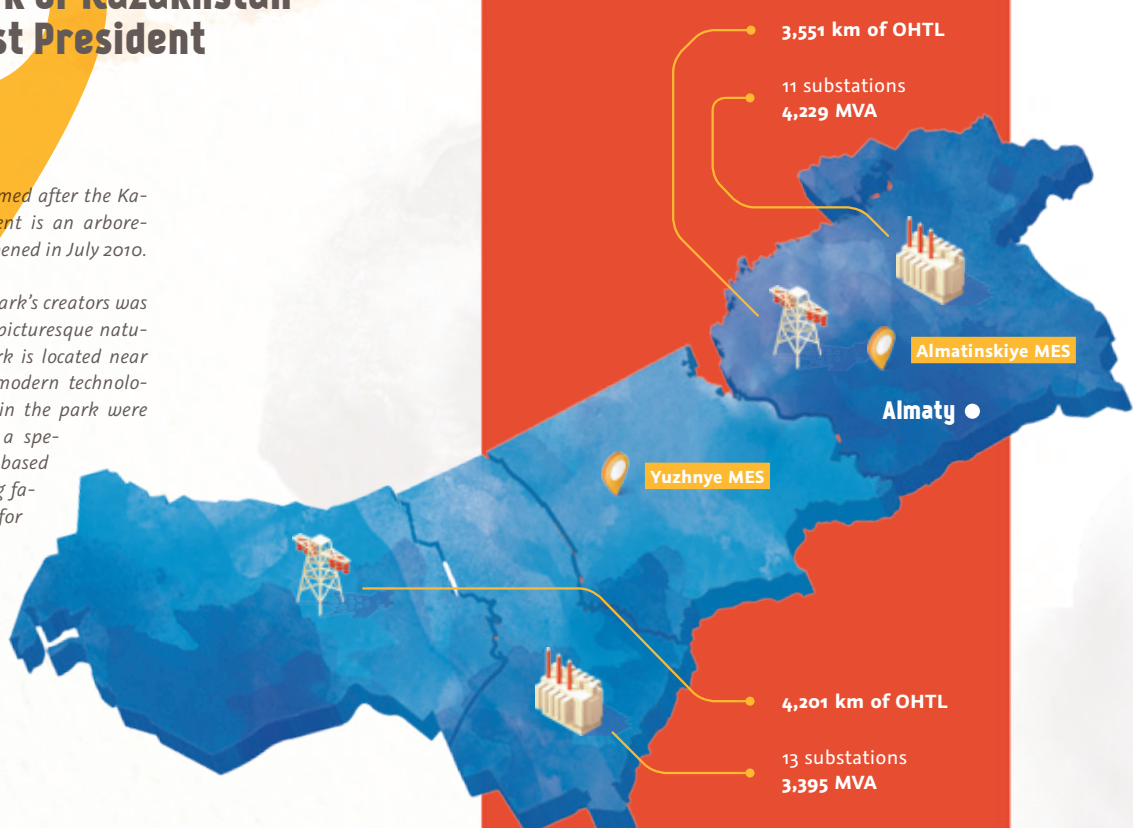


Almaty Park of Kazakhstan First President

The National Park named after the Kazakhstan First President is an arboretum park in Almaty opened in July 2010.

The main idea of the park's creators was the combination of a picturesque natural landscape (the park is located near the mountains) and modern technologies. Green plantings in the park were planted according to a specific arboretum plan, based on the idea of creating favourable conditions for outdoor recreation.

Geography of Operations: SOUTH KAZAKHSTAN



SOCIAL RESPONSIBILITY

HR POLICY

The human resources of KEGOC are the most important strategic factor for the Company's success. **(103-1)** KEGOC manages its human resources based on the principles of the Corporate Governance Code, Business Ethics Code, integrated management system, HR Policy and internal documents relating to HR motivation. The HR Policy is focused on balancing between economic and social efficiencies of HR involvement.

The key priorities of HR policy are:

- attraction, development and retention of highly qualified employees;
- adoption of the best practices of personnel management;
- establishment of executives talent pool;

- creation and development of shared values, social norms and rules governing employee behaviour;
- regulation of social and labour relations; prevention of labour conflicts;
- support of innovations and reforms at KEGOC.

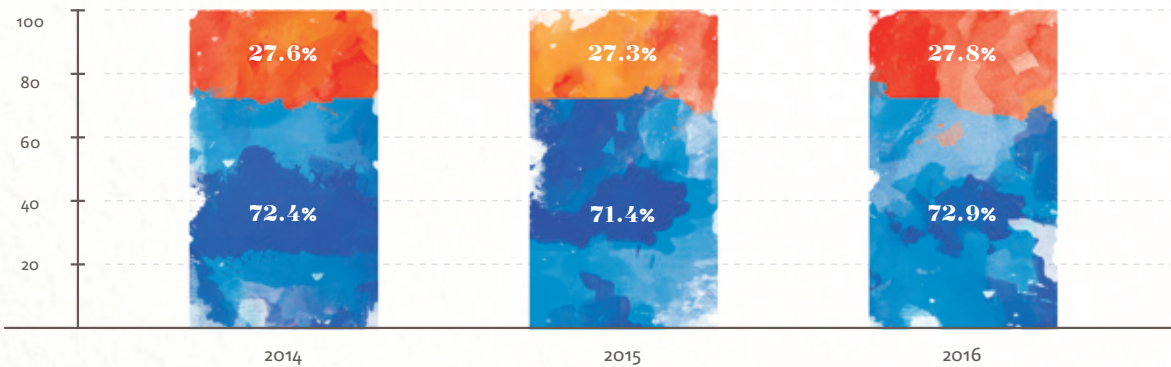
KEGOC supports and respects the protection of internationally proclaimed human rights and the rights envisaged by the Constitution of the Republic of Kazakhstan. **(103-2)** In 2016, there was no human rights abuses, discrimination in respect of race, gender, language, religion, national origin, social background, family status and sexual orientation at KEGOC. **(103-3)**

Staff listing of the Company's employees (including subsidiaries) as of 31 December 2016 is 4,728 people. **(102-7)**

| Subdivision | Full-time employees | | | Rotational employees | | | Part-time employees | | | Total |
|---------------------------------|---------------------|-------|--------|----------------------|------|--------|---------------------|------|--------|-------|
| | Total | male | female | Total | male | female | Total | male | female | |
| Akmolinskiye MES | 572 | 478 | 94 | - | - | - | 2 | 2 | - | 574 |
| Aktyubinskiye MES | 257 | 210 | 47 | - | - | - | - | - | - | 257 |
| Almatinskiye MES | 452 | 369 | 83 | 5 | 5 | - | - | - | - | 457 |
| Vostochnye MES | 277 | 214 | 63 | - | - | - | 2 | 2 | - | 279 |
| Zapadnye MES | 181 | 140 | 41 | 39 | 39 | - | - | - | - | 220 |
| Sarbaiskiye MES | 422 | 347 | 75 | - | - | - | 5 | 2 | 3 | 427 |
| Severnye MES | 382 | 287 | 95 | - | - | - | - | - | - | 382 |
| Tsentrалnye MES | 414 | 328 | 86 | 5 | 5 | - | - | - | - | 419 |
| Yuzhnye MES | 427 | 358 | 69 | - | - | - | 1 | 1 | - | 428 |
| NDC SO | 110 | 60 | 50 | - | - | - | - | - | - | 110 |
| Representative office in Almaty | 6 | 2 | 4 | - | - | - | - | - | - | 6 |
| Executive Administration | 336 | 172 | 164 | - | - | - | 4 | - | 4 | 340 |
| EnergInform | 786 | 426 | 360 | 4 | 2 | 2 | 23 | 2 | 21 | 813 |
| FSC RES | 16 | 9 | 7 | - | - | - | - | - | - | 16 |
| Total | 4,638 | 3,400 | 1,238 | 53 | 51 | 2 | 37 | 9 | 28 | 4,728 |

(102-8)

Personnel structure by gender



● male ● female

(405-1)

Personnel structure by categories, %

16.0%

Management

42.0%

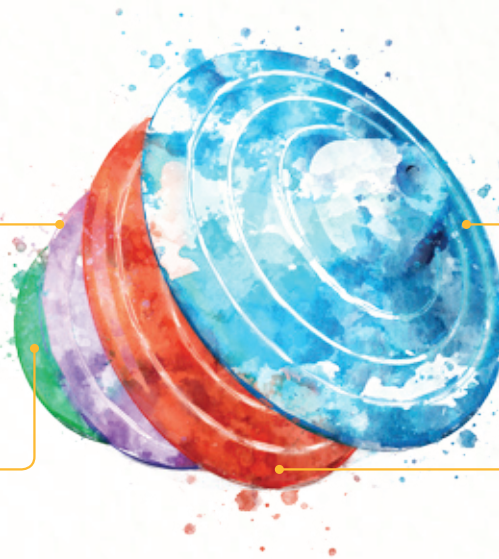
White collars

0.7%

Pink collars

41.3%

Blue collars



(405-1)

Personnel structure by categories, %

62.9%

Kazakhs

25.6%

Russians

2.1%

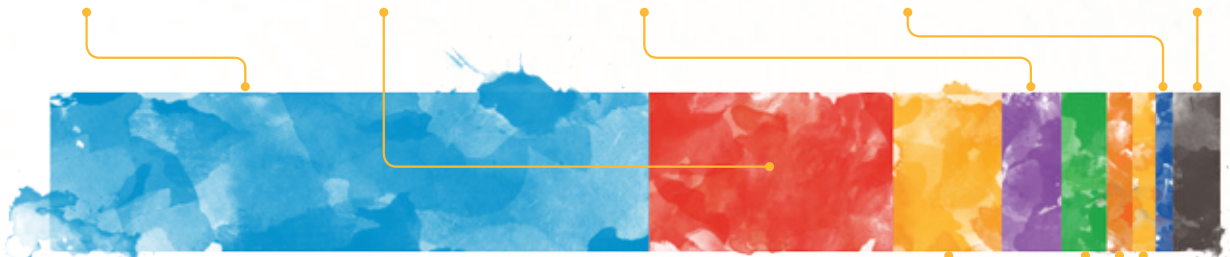
Tatars

0.6%

Belorusians

1.7%

Others



3.8%

Ukrainians

1.6%

Germans

0.9%

Uzbeks

0.8%

Koreans

* the word 'Others' means: Azerbaijanis, Armenians, Kirghiz, Turks, Uyghurs and other nationalities.

(405-1)

Personnel structure by age group, %

28.6%

from 51 and over

49.2%

from 31 to 50

22.2%

under 30



(405-1)

The share of employees who will reach the retirement age within 5-10 years of the staff listing as of 31 December 2016 is 1,191 people (25.2% of the staff listing), including OP– 1,078 people (22.8%), AMP– 113 people (2.4%).

Portion of employees who will reach retirement age within 5-10 years

16.6%

EI

11.9%

Akm

11.5%

Yuzhn

10.5%

Sarb

10.2%

Tsentr

9.5%

Sev

1.3%

NDC SO

9.7%

Alm

5.6%

Vost

5.0%

Akt

4.3%

Zap

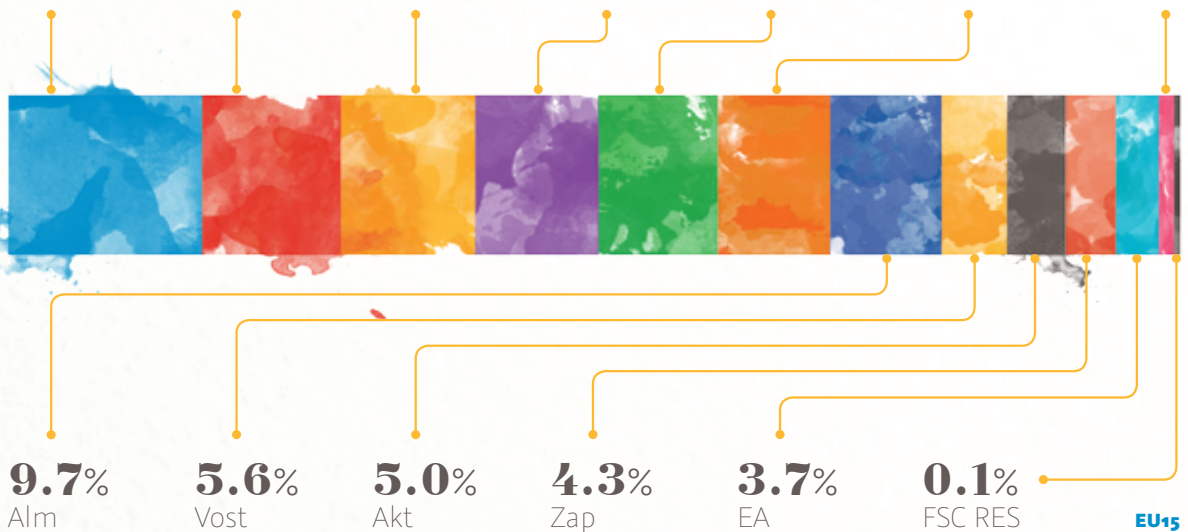
3.7%

EA

0.1%

FSC RES

EU15



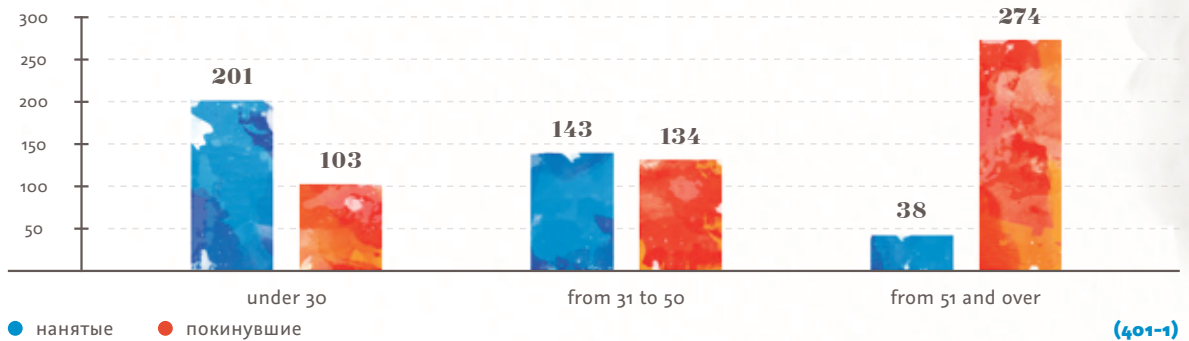
Personnel structure by work experience in the power industry, %



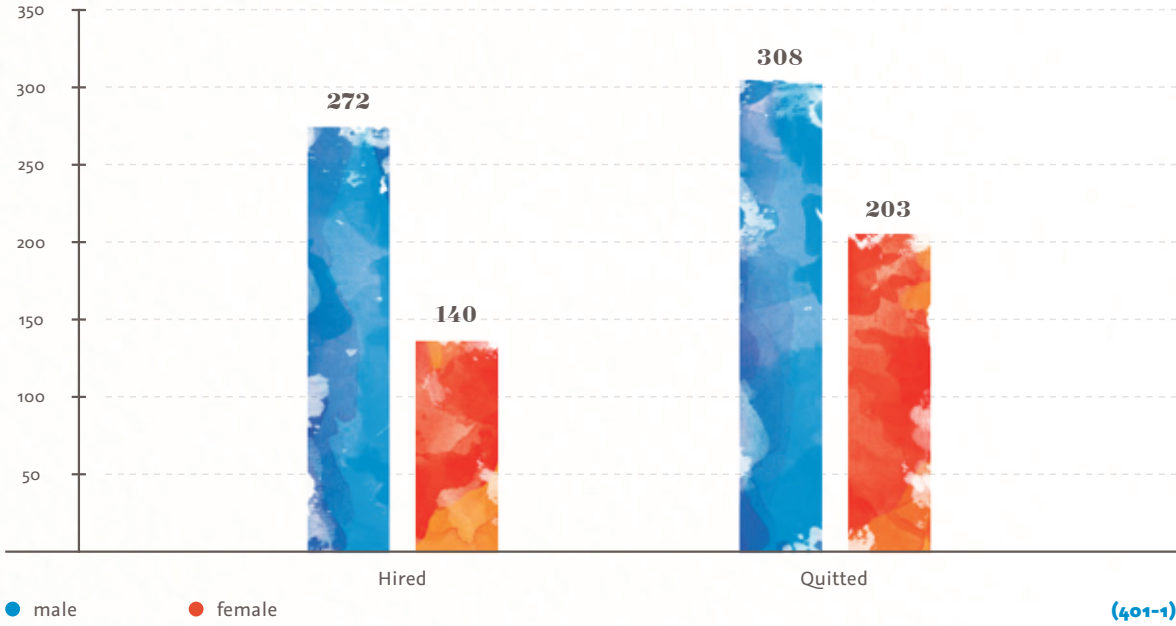
Employment procedure at the Company is exercised in accordance with KEGOC rules of competitive selection for filling vacant posts. To ensure transparency the existing procedures include search and selection of highly qualified specialists, maintenance of database on candidates, introduction of transparent competitive procedures while selecting the personnel, including testing elements to check the level of proficiency of candidates. In accordance with these Rules, in 2016 KEGOC held 101 competitive selections for filling vacant posts, including 7 at the Executive Administration, 66 at branches, 27 at Energoinform and one at FSC RES.

Adapting procedure was introduced to ensure a comfortable onboarding process. To increase the level of professional knowledge and skills of young operating specialists, assist in their professional development, preserve competence of experienced operating employees, adapt to corporate culture, traditions and rules of conduct at KEGOC, the coaching system was introduced. Best Mentor of the Year contest is annually held at the Company. In 2016, 53 coaches (mentors) among skilled managers and specialists, as well as 58 trainees (new joiners and transferred employees) were appointed at KEGOC branches. Upon the recommendation of KEGOC qualification commissions, the coaches received a bonus for coaching.

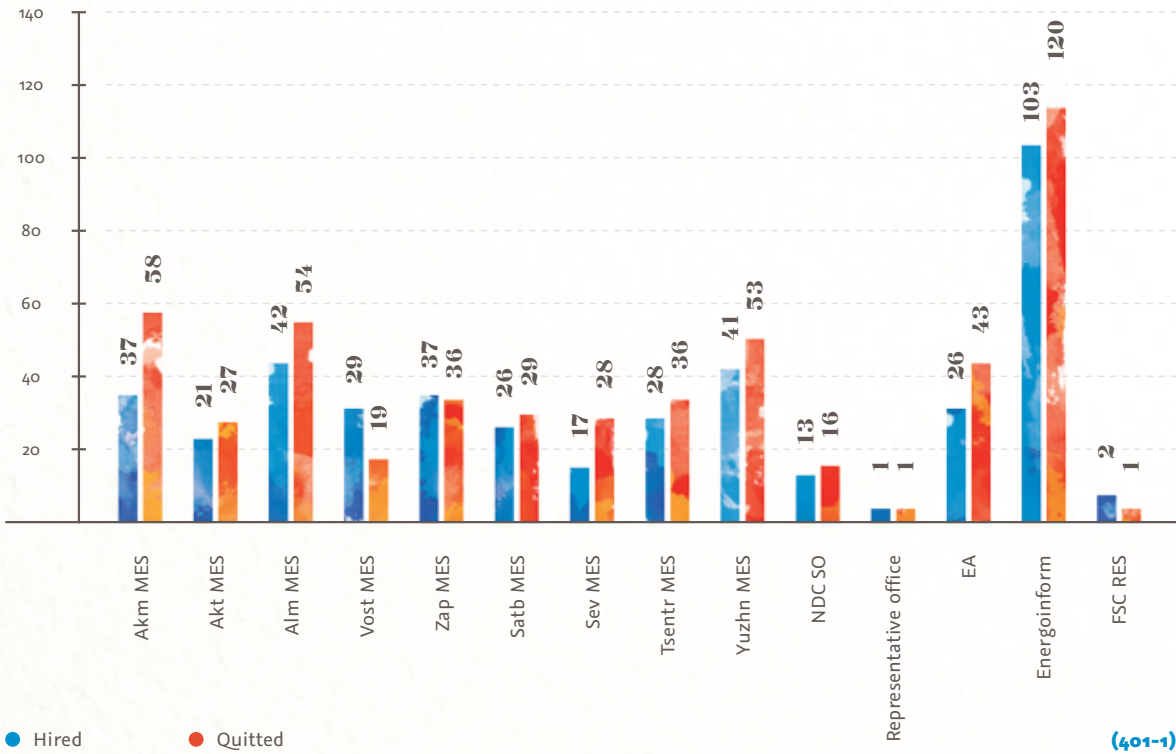
Hired and quitted the Company by age group, people



Hired and quitted the Company by gender, people



Hired and quitted the Company by regions, people



| | Number of personnel hired by the Company in 2016 * | | Number of personnel quitted the Company in 2016 * | |
|--|--|------|---|-------|
| | people | % | people | % |
| Total: | 412 | 8.71 | 511 | 10.81 |
| Gender breakdown | | | | |
| male employees | 272 | 5.75 | 308 | 6.51 |
| female employees | 140 | 2.96 | 203 | 4.29 |
| Age breakdown | | | | |
| under 30 | 201 | 4.25 | 103 | 2.18 |
| 31-50 | 143 | 3.02 | 134 | 2.83 |
| from 51 and over | 68 | 1.44 | 274 | 5.79 |
| Region breakdown (taking into account internal transfers) | | | | |
| Executive Administration | 26 | 0.54 | 43 | 0.91 |
| Akmolinskiye MES | 37 | 0.78 | 58 | 1.23 |
| Aktyubinskiye MES | 21 | 0.44 | 27 | 0.57 |
| Almatinskiye MES | 42 | 0.88 | 54 | 1.14 |
| Vostochnye MES | 29 | 0.61 | 19 | 0.40 |
| Zapadnye MES | 37 | 0.78 | 36 | 0.76 |
| Sarbaikiye MES | 26 | 0.54 | 29 | 0.61 |
| Severnye MES | 17 | 0.35 | 28 | 0.59 |
| Tsentrálne MES | 28 | 0.59 | 36 | 0.76 |
| Yuzhnye MES | 41 | 0.86 | 53 | 1.12 |
| NDC SO | 13 | 0.27 | 16 | 0.34 |
| Representative office in Almaty | 1 | 0.02 | 1 | 0.02 |
| EnergolInform | 103 | 2.18 | 120 | 2.54 |
| FSC RES | 2 | 0.04 | 1 | 0.02 |

* The difference between the total number of hired (quitted) employees in the Company and the number of hired (quitted) employees broken down by units of the Company is the result of the absence in the calculations throughout the Company of data regarding employees transferred from one units to another.

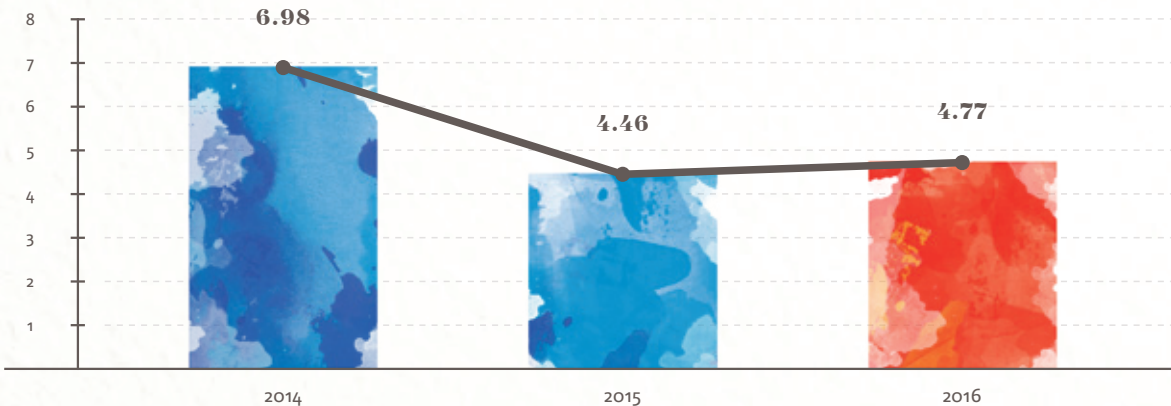
(401-1)

Personnel turnover, %*

| | |
|---------------------------------|-------|
| Executive Administration | 4.88 |
| Akmolinskiye MES | 4.62 |
| Aktyubinskiye MES | 4.62 |
| Almatinskiye MES | 7.34 |
| Vostochnye MES | 1.82 |
| Zapadnye MES | 16.40 |
| Sarbaiskiye MES | 3.27 |
| Severnye MES | 3.10 |
| Tsentrálne MES | 2.84 |
| Yuzhnye MES | 2.07 |
| NDC SO | 2.69 |
| Representative office in Almaty | 0 |
| Energolnform | 5.60 |
| FSC RES | 6.45 |
| Total for the Company | 4.77 |

* Turnover rate estimated as per Samruk-Kazyna Methodology, according to which the estimate includes the number of employees released from the post on their own request. The turnover estimate does not include employees: released from the post by agreement of the parties, within Samruk-Kazyna group, 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.

Personnel turnover, %



(401-1)

Average work duration of employees quitted KEGOC in 2016: 3.4 years for under 30 years old; 5.1 years for 31-50 years old; 9.2 years for 51 and over years old. Average work duration of male

employees quitted KEGOC in 2016 was 6.7 years, and female employees – 7.6 years. (401-1)

PERSONNEL DEVELOPMENT AND TRAINING

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

- independent study (self-education);
- in-service training (technical industrial study);
- short-time off-job training at the advanced training courses of the specialized training centres. **(103-2)**

In the reporting period, the professional training and professional development covered 1,871 employees or 39.57% of the staff listing. **(103-3)**

Average training hours for one employee was 38.49 hours, including AMP– 57.89 hours, and OP– 36.2 hours per year.

Average training hours for one male employee– 36.57, one female employee– 50.98 hours.

Total number of training hours amounted to 72,021, where men trained for 59,275 hours, women for 12,746 hours; AMP for 11,463 hours, OP for 60,558 hours. **(404-1)**

KEGOC's actual expenses for training in 2016 were KZT 185.26 million, including AMP– KZT 48.63 million and OP– KZT 136.63 million.

The effectiveness of training shall be assessed by supervisors of employees in six months after completed training on the following criteria: quality of the work performed (reducing nonconformities when performing functions, performance of new functions), increase in efficiency, elaboration and introduction of new documents, methods, processes, use/implementation of new knowledge, skills within professional activity. The assessment results shall be considered for arrangement of the next training

cycle. To improve performance of the employees and assess their qualification level and quality of functional duties performed by them, every year KEGOC arranges qualification tests for employees. In 2016, 685 employees or 14.5% of the Company's staff listing passed the qualification tests, including: 71.8% men and 28.2% women; 8.3% of AMP and 91.7% of OP from the total number of those who passed the qualification tests. **(404-3)**

KEGOC has been continuing the work on introducing a dual training system for operating personnel. The Company defined the business needs in training of students majoring in Electrical Equipment for Electrical Stations and Networks. The Company made a decision to continue maintaining social partnership with Karaganda Polytechnic College.

To promote and support the institution of labour dynasties, as a public promotion of the succession of generations and social stability, on 15 May 2016 in Astana the regular celebration of the Labour Dynasty Day of Samruk-Kazyna was held with the participation of the Fund's management. Akylbai family, which has 3 generations and 130 years of total service attended this event on behalf of KEGOC.

In September 2016, KEGOC together with the mayor's office of Astana held a Welcome Day at Akmolinskiye MES branch for 8-9 grades students of the capital secondary schools. This event brought together 80 school students to visit 500 kV TsGPP substation and the dispatch control office of the Akmola regional dispatch centre.

PERSONNEL MOTIVATION AND INCENTIVES

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;
- Rules for provision of social support for KEGOC's employees;

- Rules of reward and recognition of merits of KEGOC's employees. **(103-2)**

The Company provides equal remuneration for men and women, and single approach in calculating labour payments for men and women in KEGOC's branches located in every region of the country. **(405-2)**

| Average monthly salary rate of the employed* in the Republic of Kazakhstan based on the data of the Agency on Statistics of the Republic of Kazakhstan for 2016, KZT | Average monthly salary rate of the employed* in KEGOC in 2016, KZT | deviation |
|--|--|-----------|
| 114,712 | 191,287 | 166.8 % |

*employed' means the workers of the group below: operators, equipment operators, facilities and machines operators and machine fitters in compliance with the Job Classificatory (State Standard) GK RK 01-2005 of the Committee for Technical Regulation and Metrology under the Ministry for Industry and Trade of the Republic of Kazakhstan.

(202-1)

In accordance with the Rules for provision of social support for KEGOC’s employees and Collective Bargaining Agreement the Company provides financial assistance, makes compensation payments, medical insurance (health insurance), and provides assistance in solving housing issues for its employees. In accordance with the laws of the Republic of Kazakhstan and internal documents, the Company grants a maternity leave and a childcare leave until the child reaches the age of three (3) years. (103-2) In 2016 KEGOC’s medical insurance covered more than 2.5 thousand employees in the amount of KZT 166 million. In 2016, 222 employees of the Company received financial assistance for retirement in the amount of not less than one monthly salary; the Company paid out KZT 16.4 million for this purposes.

The Great Patriotic War veterans and equated persons, as well as unemployed pensioners registered in KEGOC are provided with the financial support to celebrate Victory Day and to celebrate professional holiday the Power Engineers’ Day. For this purpose, 956 pensioners were provided with financial support amounting to KZT 40.6 mln. in 2016.

Dynamic development of the Company and considerable operational and financial success fostered the establishment of professional association of employees in 2003. The trade union of Kazakhstan energy industry employees– Sectoral Trade Union of Energy Industry Employees Public Association (further– Trade Union) is an independent public association carrying out its activities independently, non-accountably and beyond the control of governmental authorities, employers and their associations, political organizations and other public associations operating within the entire territory of the Republic of Kazakhstan. The 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. One of the main goals of the Trade Union is

to ensure labour rights of its members and to regulate labour relations. 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 September 2016 the trade union conference approved a new Collective Bargaining Agreement for 2016-2020 between KEGOC and its personnel to reflect changes in labour law and personnel interests. 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) Collective Bargaining Agreement covers all employees of KEGOC, regardless of the type of employment. (102-41)

One of the key indicators of KEGOC’s HR policy 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 2016, the Personnel Engagement Index was 73%, and the Social Stability Rating was 82%. (103-3)

OPERATIONAL SAFETY

The social component of KEGOC's activity is based on the principles of social responsibility, which among other things include ensuring of labour safety and preservation of the employees' health. **(103-1)** 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 performs Occupational Health and Safety Management System with the view to ensure effectiveness and improvement of indicators regarding occupational safety in accordance with KEGOC policy in IMS as well as management of the risks associated with specific nature of the Company's activities.

KEGOC annually elaborates the Programme for occupational safety which defines necessary events and expenses for their implementation with the view of managing the risks detected at each work place. **(103-2)** Due to the fact that the risk of work-related accidents is one of the key risks, the actions for managing this risk are elaborated under the RMS of the Company and Occupational Health and Safety Management System. **(102-15)**

The annual plan of certification of workplaces and measures to bring working conditions at each work place in accordance with the requirements of the rules and regulations on labour protection were completed in 2016. At the facilities of MES branches, KEGOC measured electromagnetic field, audible noise and vibration, identified harmful and hazardous factors of the production environment affecting the health of employees at working places, developed and implemented action plans to improve the safety conditions in the organizations which work is related to the impact of harmful and hazardous factors, and set relevant benefits.

To monitor the health of employees, KEGOC carried out medical examinations. The employees are provided with the necessary personal protective equipment, including electrical protection devices, special food and medicines.

In all branches the safety workshops were delivered during repair campaign including qualification tests of repair crew and check of availability of the individual protection devices, instruments, harness, and special cloths.

During 2016 KEGOC organized and conducted inspections of the technical operation, safety, labour protection and fire safety in all MES branches; these inspections resulted in development of appropriate corrective measures.

In order to evaluate knowledge on technical maintenance, occupational health, and fire safety, employees of the Company passed a qualification test, the results of the test confirmed electrical safety groups.

To assess the state of occupational health and safety in the branches, KEGOC carried out Occupational Safety Days each month, which resulted in further actions to eliminate the detected violations.

The Company held a meeting in order to improve the work of reliability and occupational health units (groups) in improving the grid operation reliability and the occupational health of KEGOC's personnel and to exchange experience in addressing the problematic issues, personnel of the Company branches and EnergoInform, working in this areas, attended the meeting.

While works at KEGOC's facilities are being performed by contracting organizations the Company is responsible for ensuring safety of their workers. Before being admitted to the workplace all employees of contractors are provided with the introductory and initial briefings, in addition, 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 production 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 only by the personnel of the structural unit which is entitled and where the works will be performed. Construction and erection works are performed in specially reserved area, operations certificate is executed, and in cases when there is or may happen an occupational hazard, work permit shall be issued to perform dangerous works based on SNIP RK 1.03-05-2001. Work permit is carried out at the work place. 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. **EU 18** In 2016 there were no accidents, injuries with the personnel from contracting organizations at KEGOC facilities.

In accordance with the laws of the Republic of Kazakhstan, in 2016 KEGOC provided its employees with compulsory occupational injury insurance and compulsory third party liability insurance for owners of facilities, activity of which is associated with risk of causing damage to third parties. Actual costs for occupational safety made KZT 330.21 million in 2016. LTIFR indicator is introduced for assessing safe working conditions level which shows the lost time injuries occurred during operations. This indicator was equal to 0 in 2016.

More over in 2016 a fatal accident in Aktyubiskiye MES branch took place: during performance of works the electrician approached unacceptably close to the live 35 kV OHTL and was affected by electric shock.

Special investigation found that the accident occurred due to the unsafe behaviour and lack of proper supervision over the actions of the worker and control over the compliance with the requirements of safety regulations by responsible persons. Information on the accident was analysed in all structural units of KEGOC branches. The Company held unscheduled briefings on the following themes for the heads of operations and maintenance personnel and special drivers:

- 'Following instructional guidelines given at the admission and during carrying out of works in existing electric facilities';
- 'Usage and moving of lifting mechanisms';
- 'Safe driving at sites';
- 'Safe execution of works using special machinery';
- 'Carrying out of continuous supervision over the personnel during works performance'.

To analyse safe works performance and detect additional risks in operations, the Company is introducing video recording of works performance by operations and maintenance personnel at the sites. In this regard in 2016 the Company purchased 129

digital cameras and 129 notebooks for substations and line crews which will be used starting from 1 January 2017 at the sites.

To raise responsibility of the Company's workers with regard to their own safety the video clips and slides on safety violation consequences were prepared and demonstrated to the personnel.

One worker from the Reliability and Occupational Health Service from each branch passed training on 'Upgrading qualification of the specialists on road safety' and was given the certificate. Trained workers train drivers on traffic rules and examine them. During 2016 all Company's units conducted emergency and fire fighting trainings aimed at:

- checking the operational personnel abilities to prevent emergencies and to ensure their best elimination;
- checking the operational personnel abilities to render the first aid and to take the injured person away from the electric current effect;
- ensuring development or recovery of the skills of making prompt decision and response in a challenging situation with limited time for management problem solving;
- checking the personnel abilities to act quickly and adequately in case of fire;
- identification of personnel abilities to make adequate decisions in case of fire;
- checking the personnel abilities to prevent possible failures in the equipment operations in case of fire or combustion;
- checking the personnel actions to rescue and evacuate people and valuables;
- training KEGOC personnel in the procedures and rules of interaction with the units of state fire fighting service;
- define organisational and technical measures required to improve the personnel performance, fire fighting protection and improvement of the equipment reliability.

The results of the inspection (witness audit) conducted in 2016 by the certification authority confirmed that the Company's operations with regard to the environmental

management system met the requirements of OHSAS-2007. **(103-3)**

In addition, KEGOC ensures resources availability to respond to potential emergencies with short-term and long-term consequences, and its ability to efficiently develop and implement the emergency action plan. According to the

requirements of the Law of the Republic of Kazakhstan on Civil Protection the Company developed Action Plans to eliminate emergencies typical for the Company.

During 2016 the Company delivered the following instructions, trainings and exercises for management personnel and employees on civil defence:

| No. | Description of actions | Actually delivered |
|-----|---|--------------------|
| 1 | National command-staff exercises | 2 |
| 2 | Staff exercise | 11 |
| 3 | Facility-based exercises | 11 |
| 4 | Special tactical exercises with civil defence divisions | 11 |
| 5 | Earthquake exercises | 20 |
| 6 | Public alarm and mustering exercises | 22 |
| 7 | National and oblast emergencies and civil defence training courses including: • management personnel • commanders | 5 45 |

EU DMA

The main activities of the Programme for Occupational Safety and Health for 2017 will be:

- introduction of video recording of operational switching and repairing works to detect violations with regard to the occupational health and safety with further elaboration of measures thereof;
- increase responsibility of the personnel for their own safety by showing videos and slides about the consequences of safety rules violations;
- development of the programme (20 hours at least) and giving lessons on traffic rules followed by the exam on traffic rules;
- organize and conduct the contest of professional skills among KEGOC wiremen in nomination ‘The best wireman’;
- conduct training courses on basics of rules of traffic regulations for drivers.

APPENDIX 1. GRI CONTENT INDEX

| GRI standards | Number | Table of Contents | Page | Remark |
|--|--------|--|-------|--------|
| GRJ 102: GENERAL INFORMATION 2016 | | | | |
| | 102-1 | Name of the organisation: | 11 | |
| | 102-2 | Activities, brands, products, and services | 11 | |
| | 102-3 | Location of the organization's headquarters | 11 | |
| | 102-4 | Geography of operations | 11 | |
| | 102-5 | Nature of ownership and legal form | 11 | |
| | | Markets served | | |
| | 102-6 | - geographic breakdown | 11-13 | |
| | | - sectors served | 14 | |
| | | - types of customers and beneficiaries | 17-18 | |
| | | Scale of the organization | | |
| | 102-7 | - total number of employees | 43 | |
| | | - total number of units | 14 | |
| | | - revenues | 33 | |
| | | - total capitalization broken down in terms of debt and equity | 33 | |
| | | - quantity of products or services provided | 19-21 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---------------|--------|--|------------|---|
| | | Information on employees | | |
| | | - total number of employees by employment contract and gender | 44 | |
| | | - total number of permanent employees by employment type and gender | 44 | |
| | 102-8 | - total workforce by employees and contract employees, and by gender | - | There are no contract employees in the Company |
| | | - total workforce by region and gender | 44 | |
| | | <i>Sector addition to the General Standard Disclosures</i> | | |
| | | - total number of contracting entities employees (contractors, sub-contractors, 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 | 33 | |
| | 102-10 | Significant changes in the size, structure, and ownership | 11 | 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. |
| | 102-11 | Address of precautionary approach | 40 | |
| | 102-12 | Externally developed economic, environmental and social charters, principles or other initiatives to which the organization subscribes or which it endorses | 17 | |
| | 102-13 | Participation in association | 16 | |
| | 102-14 | Letter from the Chairman of KEGOC's Management Board | 5 | |
| | 102-15 | Description of key impacts, risks, and opportunities | 40, 53 | |
| | 102-16 | Organization's values, principles, standards and norms of behaviour | 29 | |
| | 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 | 17, 25, 28 | |
| | 102-40 | List of stakeholder groups | 7 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---------------|--------|---|-------|--|
| | | Percentage of total employees covered by collective bargaining agreement | 52 | |
| | | <i>Sector addition to the General Standard Disclosures</i> | | |
| | 102-41 | 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 collective bargaining agreement does not cover employees of the contractor, subcontractors and independent contractors |
| | 102-42 | Basis for identification and selection of stakeholders | 7 | |
| | 102-43 | Organization's approach to stakeholder engagement | 7, 21 | |
| | 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 | 7, 29 | |
| | 102-45 | Entities included in the organization's consolidated financial statements | 6 | |
| | 102-46 | Process for defining the report content and the Aspect Boundaries | 9 | |
| | 102-47 | List of material aspects | 9 | |
| | 102-48 | Effect of any restatements of information provided in previous reports | - | Indicator 202-1 'Ratio of standard entry level wage by gender compared to local minimum wage at significant locations of operation' is restated into 'Ratio of average monthly wage of KEGOC's employee compared to average monthly wage of the employee in the Republic of Kazakhstan', in compliance with the sector based on Job Classificatory of the Ministry of Industry and Trade of the Republic of Kazakhstan. Restatement was made for more representational comparison of wage levels in the Company and in the sector. |
| | 102-49 | Significant changes from previous reporting periods in the Scope and Aspect Boundaries | 6, 9 | |
| | 102-50 | Reporting period | 6 | |
| | 102-51 | Date of the most recent previous report | 6 | |
| | 102-52 | Reporting cycle | 6 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---|--------|---|-------|---|
| | 102-53 | Contact point for questions regarding the report | 66 | |
| | 102-54 | Report preparation option 'in accordance with' GRI standards | 6 | |
| | 102-55 | GRI Content Index | 56 | |
| | 102-56 | Organization's policy and current practice with regard to seeking external assurance | 6 | External auditor executing independent certification of report is selected on a competitive basis in accordance with the Fund's Procurement Rules. Board of Directors in accordance with the Charter and internal documents of the Company approves Sustainability Reports but does not participate in searching external auditor who executes independent certification of the report. |
| | 103-1 | Explanations on the aspects materiality and their boundaries* | 6, 9 | Each material aspect is applicable to a certain extent to all structural units and subsidiaries of the Company and also to our external stakeholders |
| | 103-2 | Organization's management approach related to material aspects | 9 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 9, 38 | |
| <i>Sectoral specific general reporting elements</i> | | | | |
| | EU 1 | Installed capacity by power sources and control mode | 15 | |
| | EU 2 | Clean energy generation by primary power sources and control mode | - | Not applicable. KEGOC is not a power generating company |
| | EU 3 | Quality of power consumers | 18 | |
| | EU 4 | Length of OHTLs and underground transmission lines by control mode | 14 | |
| | EU 5 | Allocation of CO ₂ e emissions allowances or its equivalent by scheme of green-gas emissions | 37 | |
| <i>Specific elements</i> | | | | |
| GRJ 200: Economic topics 2016 | | | | |
| Economic Performance | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the topics materiality and their boundaries* | 31 | |
| | 103-2 | Organization's management approach related to material aspects | 31 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 33 | |
| GRJ 201: Economic Performance 2016 | 201-1 | Direct economic value generated and distributed | 33 | |
| | 201-4 | Financial assistance received from government | 33 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---|--------|--|--------|---|
| Market Presence | | | | |
| <i>GRJ 103: Disclosures on the management approach 2016</i> | 103-1 | Explanations on the aspects materiality and their boundaries* | 31, 43 | |
| | 103-2 | Organization's management approach related to material aspects | 31, 43 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 33, 43 | |
| <i>GRJ 202: Market Presence, 2016</i> | 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation | 52 | |
| | 202-2 | Proportion of senior management hired from the local community at significant locations of operation | 27 | |
| Indirect Economic Impacts | | | | |
| <i>GRJ 103: Disclosures on the management approach 2016</i> | 103-1 | Explanations on the aspects materiality and their boundaries* | 23 | |
| | 103-2 | Organization's management approach related to material aspects | 31 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 23 | |
| <i>GRJ 203: Indirect Economic Impacts, 2016</i> | 203-2 | Significant indirect economic impacts including the extent of impacts | 23 | |
| Anti-corruption | | | | |
| <i>GRJ 103: Disclosures on the management approach 2016</i> | 103-1 | Explanations on the aspects materiality and their boundaries* | 28 | |
| | 103-2 | Organization's management approach related to material aspects | 29 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 29 | |
| <i>GRJ 205: Anti-corruption 2016</i> | 205-2 | Communication and training on anti-corruption policies and procedures | 29 | Special training on anti-corruption for the Company's employees was not held in 2016. |
| | 205-3 | Confirmed incidents of corruption and actions taken | 29 | |
| Sector specific aspect: System Efficiency | | | | |
| <i>GRJ 103: Disclosures on the management approach</i> | 103-1 | Explanation on material aspects and their boundaries* | 35 | |
| | 103-2 | Organization's management approach related to material aspects | 39 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 39 | |
| <i>GRJ EU: System Efficiency</i> | EU- 12 | Percentage of losses in electricity transmission and distribution | 39 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---|--------------------------------------|---|--------|---|
| GRJ 300: Environmental aspects 2016 | | | | |
| Water | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 35 | |
| | 103-2 | Organization's management approach related to material aspects | 35 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 40 | |
| GRJ 303: Water 2016 | 303-2 | Water sources which are significantly influenced by the water supply of the company | 38 | |
| Emissions | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 35 | |
| | 103-2 | Organization's management approach related to material aspects | 35 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 40 | |
| GRJ 305: Emissions 201 | 305-7 | NOx, SOx and other significant air emissions | 35 | |
| | <i>Sector additions to the ratio</i> | | | |
| | 305-7 | Emissions per MWh for: - net generation of total generating capacity; - net generation of total thermal power plants; | - | Not applicable. KEGOC is not a power generating company. |
| Compliance with environmental requirements | | | | |
| GRJ 103: Disclosures on the management approaches 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 29 | |
| | 103-2 | Organization's management approach related to material aspects | 29 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 29 | |
| GRJ 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 | 40 | |
| GRJ 400: Social aspects 2016 | | | | |
| Employment | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 43 | |
| | 103-2 | Organization's management approach related to material aspects | 43, 51 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 52 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---|-------------------------------------|--|--------|--------|
| GRJ 401: Employment 2016 | 401-1 | Total number and rates of new employee hires and employee turnover by age, gender and region | 47-50 | |
| | <i>Sector addition to the ratio</i> | | | |
| | 401-1 | Average work duration of employees leaved employment during the reporting period by gender and age group | 50 | |
| | <i>Sector specific ratios</i> | | | |
| | EU 15 | Percentage of employees eligible to retire in the next five and ten years by job category and region | 46 | |
| | EU 18 | Percentage of contracting and subcontracting entities employees trained in occupational health and safety | 54 | |
| Health and Safety | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 53 | |
| | 103-2 | Organization's management approach related to material aspects | 53 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 55 | |
| GRJ 403: Health and safety 2016 | 403-4 | Health and safety topics covered in formal agreements with trade unions | 52 | |
| Training and Education | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanations on the aspects materiality and their boundaries* | 43 | |
| | 103-2 | Organization's management approach related to material aspects | 51 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 51, 52 | |
| GRJ 404: Training and Education 2016 | 404-1 | Annual average hours of training per employee by gender and by employee category | 51 | |
| | 404-3 | Percentage of employees receiving regular performance and career development reviews, by gender and by employee category | 51 | |
| Diversity and Equal Opportunity | | | | |
| GRJ 103: Disclosures on the management approach 2016 | 103-1 | Explanation on material aspects and their boundaries* | 43 | |
| | 103-2 | Organization's management approach related to material aspects | 43, 52 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 43, 52 | |

| GRI standards | Number | Table of Contents | Page | Remark |
|---|--------|---|--------|--------|
| 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 | 44-47 | |
| | 405-2 | Ratio of basic salary of women to men by employee category and by significant locations of operation | 51 | |
| Social and Economic Compliance | | | | |
| GRI 103: Disclosures on the management approach 2016 | 103-1 | Explanation on material aspects and their boundaries* | 29 | |
| | 103-2 | Organization's management approach related to material aspects | 21, 29 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 21, 29 | |
| GRI 419: Social and Economic Compliance 2016 | 419-1 | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services | 21 | |
| Sector specific aspect: Accessibility | | | | |
| GRI 103: Disclosures on the management approach 2016 | 103-1 | Explanation on material aspects and their boundaries* | 21 | |
| | 103-2 | Organization's management approach related to material aspects | 21-22 | |
| | 103-3 | Assessment of the organization's management approach related to material aspects | 23 | |
| GRI EU: Accessibility | EU 28 | Frequency of power failures | 22 | |
| | EU 29 | System average interruption duration | 22 | |
| Sector specific aspect: Disasters and Emergencies | | | | |
| GRI EU: Emergencies and accidents response action plan | EU DMA | Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans | 55 | |

* Each material aspect is applying to some extent to all structural units and subsidiaries of the Company and to our external stakeholders

APPENDIX 2. GLOSSARY

| | |
|------------------|--|
| AMP | Administrative and Managing Personnel |
| Branches | KEGOC branches: MES and NDC SO |
| CHPP | Combined heat and power plant |
| CIS | Commonwealth of Independent States |
| Company | Kazakhstan Electricity Grid Operating Company (KEGOC) joint-stock company |
| CRNMPC | Committee for Regulation of Natural Monopolies and Protection of Competition of the Republic of Kazakhstan |
| DMA | Disclosures on Management Approach |
| ECR Pool | Kazakhstan Electric Capacity Reserve Pool |
| EIA | Environmental Impact Assessment |
| EMS | Environmental Management System |
| FSC RES | Financial Settlement Centre for Renewable Energy Sources Support LLP |
| GEF | Global Environment Fund |
| GRES | State Regional Power Plant |
| GTPP | Gas-Turbine Tower Plant |
| HPP | Hydro Power Plant |
| IAS | Internal Audit Service |
| ICS | Internal Control system |
| IFRS | International financial reporting standards |
| IMS | Integrated Management System |
| 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 |
| NGO | Non-Governmental Organizations |
| NPG | National Power Grid |
| OHTL | Overhead transmission line |
| OJSC | Open joint-stock company |
| OP | Operating personnel |
| PCB | Polychlorinated biphenyl |
| 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 |
| TPP | Thermal Power Plant |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| UPS | Unified Power System |
| VAT | Value-added tax |

CONTACTS

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

59 Tauyelsizdik Ave., Astana, Kazakhstan

Tel: +7(7172) 693-824, 690-203

Fax +7(7172) 690455

E-mail: kegoc@kegoc.kz

www.kegoc.kz

**FOR ENQUIRIES REGARDING KEGOC
SUSTAINABILITY REPORT**

Corporate Development Department:

Zhuldyz Zhumabayeva

Tel: +7 (7172) 690-326

E-mail: Zhumabayeva_Zh@kegoc.kz

Aizhan Ramzanova

Tel: +7 (7172) 690-434

E-mail: Ramzanova@kegoc.kz

We would be grateful for your comments and feedback. Your opinion and suggestions regarding the sustainable development will help us to improve the performance of KEGOC.

(102-53)