

Public Joint Stock Company Federal Grid Company of Unified Energy System

2019 ANNUAL FINANCIAL REPORT

In compliance with the UK Disclosure and Transparency Rules



April 2020

Moscow

Contents

3
3
4
7
8
11
15
18
21
32
32

1. ABOUT THE COMPANY

Public Joint Stock Company Federal Grid Company of Unified Energy System (hereinafter, "PJSC FGC UES", "FGC", the "Company") was established in 2002 in the course of reforming the Russian power sector. The Company's key activities are:

- electricity transmission through a transmission network;
- technological connection services.

We are included in the list of strategically important companies for Russia's industrial development.

As a result of our 17-year effective work, we have become one of Russia's largest power sector companies by market capitalisation, and also one of the leading blue chips issuer on the Russian stock market.

More than 22.4 thousand employees ensure sustainable and efficient operation of 148.3 thousand kilometres of electricity transmission lines¹ and 951 substations¹ in 79 regions of Russia.

As of 31 December 2019, FGC has 45 regional branches, including:

- 8 MPS branches (Transmission Network);
- 36 EMPS branches (Transmission Network Companies);
- 1 Bely Rast Special Production Plant branch.

You can find more information on the Company's structure and history at our corporate website www.fsk-ees.ru/eng/, in the About Us/About Company section.

2. CORPORATE GOVERNANCE

With a focus on long-term goals, we ensure advanced transparency of our activities, social responsibility, environmental protection, workplace safety and social protection of our employees.

Corporate governance system of the Company is based on compliance with the requirements of the Russian legislation, the listing rules of the Moscow Exchange and the key recommendations of the Russian Corporate Governance Code (CGC). As a company with global depositary receipts traded at the London Stock Exchange, Federal Grid Company complies with the applicable requirements of the UK Corporate Governance Code.

The Company's supreme governing body is the General Meeting of Shareholders. The Board of Directors, elected by the General Meeting of Shareholders, manages the strategy and supervises operations of the Company's executive bodies, who are also accountable to the General Meeting of Shareholders. Current activities of the Company are managed by the sole executive body — the Chairman of the Company's Management Board, and the collective executive body — the Company's Management Board.

The Board of Directors' primary focus is maintaining and ensuring further development of the Unified National Electric Grid (UNEG) infrastructure, as well as upgrading the Company's governance efficiency and sustainability.

Expert committees are formed under the Board of Directors to increase the efficiency and quality of its activities. Regular committees ensuring the development of recommendations to the Board of Directors on the matters of its competence include: the Audit Committee, the HR and Remuneration Committee, Strategy Committee and Investment Committee.

Corporate management system of PJSC FGC UES is developed in accordance with the principles and recommendations of the national Corporate Governance Code, the provisions of which are based on the best international practices and principles of corporate governance developed by the Organisation for Economic Cooperation and Development (OECD). In accordance with CGC, the candidates to the

¹ Information on the number of substations and the length of power transmission lines of PJSC FGC UES according to the data of state registered ownership of PJSC FGC UES and other owners, including 0.4–110 kV voltage class facilities, but not including power transmission lines and SS of 10 kV and lower, accepted by PJSC FGC UES for free use and operating in the territory of the Krasnodar Territory.

Company's governance bodies shall meet the basic requirements to their knowledge, experience, skills and business qualities. CGC does not provide any recommendations on gender, age or other diversity of members of the governing bodies. Therefore, these approaches are not formalised in the form of policies or other local regulations in the Company.

To protect the interests of our shareholders, we have effective external and internal control systems in place. The external control is performed by the independent auditor.

In 2019, shareholders, as well as last year, were given the opportunity to participate in voting by filling an electronic bulletin on the website of the Company's registrar (JSC Registration Company STATUS). Additionally, the opportunity to send questions on the General Meeting of Shareholders to a dedicated email address was provided, and a forum for PJSC FGC UES shareholders was organised.

The Company updated a number of corporate documents in the reporting year: approved a new version of the Corporate Governance Code of PJSC FGC UES, a new version of the Regulations on the Information Policy, a new version of the Regulations on the Protection of Insider Information of PJSC FGC UES. The amendments to the Corporate Governance Code are aimed at ensuring continuity and development of positive management practice in the Company. The new version of the Regulations on the Information Policy expands the list of information that the Company undertakes to disclose additionally. The Regulations on the Protection of Insider Information was changed in accordance with the amendments made to Russian Federal Law No. 224-FZ of 27 July 2010 "On Combating Unfair Use of the Insider Information and Market Scheming...".

In addition, the Company has developed a Sustainable Development Policy that defines the goals, objectives and principles of the Company's activities in the field of sustainable development, as well as approaches to interaction with stakeholders and reporting principles.

The Company continues to further improve its corporate governance, taking into account changes in the external environment and development of Russian and international corporate governance practices.

More information on the Company's corporate governance is available at our website www.fsk-ees.ru/eng/ in the lnvestors/Corporate Governance section.

3. SHARE CAPITAL

As of 31 December 2019, the authorised capital of PJSC FGC UES amounted to RUB 637,332,661,531 and 50 kopecks divided into 1,274,665,323,063 ordinary shares with a nominal value of 50 kopecks each.

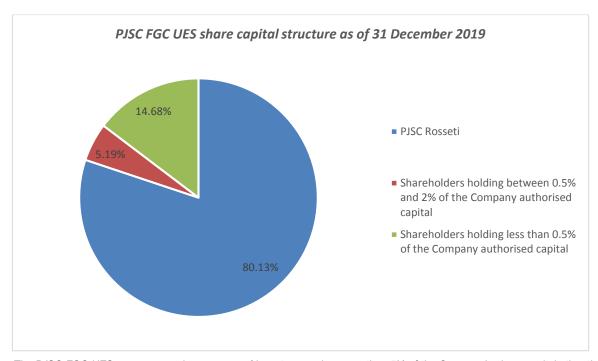
In accordance with the PJSC FGC UES Articles of Association the number of authorised shares amounted to 72,140,500,768 ordinary shares with a nominal value of 50 kopecks each and a total nominal value of RUB 36,070,250,384. Authorised ordinary shares have the same rights as outstanding ordinary shares.

In 2019, there were no issues or placements of additional shares by PJSC FGC UES. Preferred shares were not placed.

In the reported period there were no significant changes in the structure of our share capital. Currently, FGC has over 460,000 shareholders. PJSC Rosseti is the Company's main shareholder, owning 80.13% of its authorised capital. The Russian Federation, represented by the Federal Agency for State Property Management (Rosimushchestvo), owns 0.59% of the Company's authorised capital.

Since June 2013, a shareholders agreement, signed by PJSC Russian Grids and the Federal Agency for State Property Management, regarding managing and voting of FGC's shares has been in place. The agreement covers all voting shares of PJSC FGC UES held or purchased in future by the parties.

By the end of 2019, the Company's free-float shares amounted to 18.2%. Institutional investors are the key minority shareholders; the share of retail investors amounts to about 3.5%.



The PJSC FGC UES management is not aware of investors owning more than 5% of the Company's share capital other than those indicated above.

The share of foreign institutional investors is over 50% of free-float. These include funds from major global management companies such as BlackRock, Vanguard, State Street Global Advisors, BNY Mellon Investment Management and JP Morgan Asset Management, and public investment funds, in particular of Norway, UAE. By the end of 2019, the funds and investment mandates, managed by Prosperity Capital Management Ltd, are the largest foreign shareholders of FGC (2.2% of the authorised capital).

64% of FGC shares, held by non-residents, is accumulated in funds and managing companies, followed far behind by banks and trusts (16%), sovereign funds (12%), funds of pension and insurance companies (5%), brokers (2%), and others (1%).

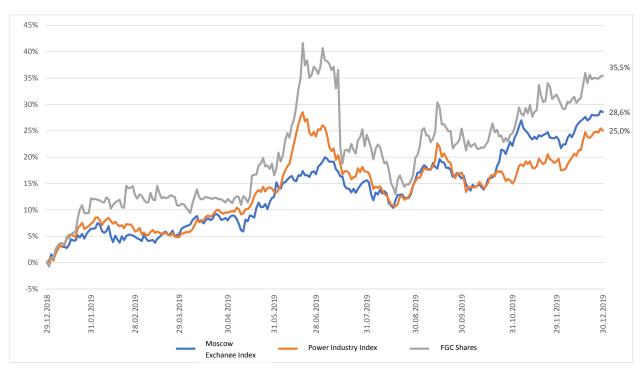
Most investors view FGC shares as an undervalued asset (Value) or an asset with good growth prospects (Growth). Short-term investors, including brokers and hedge funds, are guided by the current market situation. Foreign investors also include the companies focused on various index solutions.

More information on the Company's share capital structure and dynamics is available at our website www.fsk-ees.ru/eng/ in the Investors/Share Information section.

Market quotations for FGC shares in 2019

FGC shares are included in the quotation list of Level 1 of the Moscow Exchange and are also included in the calculation base of key domestic indices (MICEX Index: code IMOEX; Broad Market Index: code MOEXBMI; Power Sector Index: code MOEXEU).

The shares of PJSC FGC UES in 2019 showed the leading dynamics compared to the indices of the Moscow Exchange and the electric power industry. Over the year, the value of the Company's shares increased by 35.5% (from 14.8 kopecks at the end of 2018 to 20.1 kopecks at the end of 2019), while the Moscow Exchange index grew by 28.6% and the MOEXEU industry index by 25.0%. The Company's market capitalisation as of 31 December 2019 amounted to RUB 256.6 billion.



Against the background of the recovery of investors' interest in the assets of emerging markets as a whole, and the Russian market in particular, there was increased investor demand for certain dividend stories, to which analysts refer the shares of PJSC FGC UES. More information on the market quotations for the Company's shares are available at our website www.fsk-ees.ru/eng/ in the lnvestors/Share Information/Interactive Stock Chart section.

Depositary receipts programme

On 30 June 2008, Federal Grid Company launched a Depository Receipts Programme, not subject to listing procedures (Regulation S and Rule 144A). In 2011, the Company performed a technical listing of GDRs on the Main Market of the London Stock Exchange, where trading of Federal Grid Company's GDRs was launched on 28 March 2011. The Bank of New York Mellon (BNY Mellon) has been the depository bank for the GDR Programme since 1 July 2013.

As of 31 December 2019, the scope of the GDR Programme made 0.043 % of the Company's authorised capital.

Key features of the GDR Programm	Key 1	features	of the	GDR	Programme
----------------------------------	-------	----------	--------	-----	-----------

	Regulation S	Rule 144A
Ratio	1 GDR: 500 shares	1 GDR: 500 shares
International code	ISIN: US3133542015	ISIN: US3133541025 CUSIP: 313354102
	CUSIP: 313354201	
Cost of 1 GDR as of 31 December 2019	USD 1.6	_
Amount of GDRs issued as of 31 December 2019	1,046,197	46,034

More information on the Company's depositary receipts trading is available at our website www.fsk-ees.ru/eng/ in the Investors/Share Information/GDR Programme section.

You can also find relevant information on the GDR Programme at the official website of the London Stock Exchange at www.londonstockexchange.com, under Federal Grid Company's ticker symbol — FEES.

Dividend Policy

Our dividend policy is based on the strict approach of balancing the interests of our shareholders and the Company's development needs taking into account the necessity to increase the Company's capital-raising potential and capitalisation.

A resolution on dividends payment is adopted by the General Meeting of Shareholders, subject to a recommendation made by the Board of Directors. The recommended amount of dividend payments is determined on the basis of the financial performance results of the Company in accordance with Federal Law No. 208-FZ of 26 December 1995 "On Joint Stock Companies", Regulations of the Government of the Russian Federation No. 1094-r of 29 May 2017, and Regulations on the Dividend Policy of PJSC FGC UES approved by the Board of Directors on 28 May 2018 (Minutes No. 406 of 30 May 2018).

In accordance with the Russian legislation, the Articles of Association of PJSC FGC UES, and the Regulations on Dividend Policy, the source for dividend payments is the Company's net profit that is determined on the basis of the Company's annual accounting statements. In the Regulations on Dividend Policy, the dividend amount was fixed to no less than 50% of the adjusted net profit calculated according to financial statements as per RAS or IFRS.

Upon the results of 2019, the Company's net profit amounted to RUB 58.1 billion under RAS (RUB 86.6 billion under IFRS). Taking into account the net profit received, the Board of Directors of the Company recommended the General Meeting of Shareholders of PJSC FGC UES to allocate RUB 23.3 billion for dividend payment in 2019. With regard to the dividends paid for 9M 2019 (RUB 11,229.3 million), the amount payable in 2020 will comprise RUB 12,102.1 million (RUB 0.009494338212 per share). A resolution to pay the dividends will be adopted by the Annual General Meeting of Shareholders of PJSC FGC UES on 15 May 2020.

4. MARKET REVIEW

In Russia, PJSC FGC UES transmits electricity via the UNEG transmission network and provides services for technological connection to the network. In addition to PJSC FGC UES, a number of services for transmission, distribution and technological connection in UNEG are provided by regional network organisations: JSC Network Company (Kazan), LLC Bashkir Network Company, JSC RES (Novosibirsk), JSC Irkutsk Power Network Company. These organisations do not compete directly with PJSC FGC UES, as they operate within their service areas.

The volume and physical characteristics of the services rendered by FGC are highly dependent on overall economic environment due to infrastructural nature of power industry in general and power networks in particular. Over the past five years, the volume of the FGC UES market for electricity transmission services has stabilised and is determined by the low growth rates of electricity consumption, the possibilities for optimising consumption modes and the development of distributed generation.

Electricity consumption volume within UES for 2019 amounted to 1,059 billion kWh, which is 0.4 % more than in 2018. According to the forecast in the Scheme and Development Programme of UES for 2019–2025, the growth rate of electricity consumption will be about 1% per year on average.

Electricity transmission via networks is an infrastructural as well as a natural monopoly type of operation. The market of goods and services related to a natural monopoly, according to the legislation, falls under state regulation.

The procedure of setting tariffs for electricity transmission services under the UNEG is defined by the Resolution of the Government of the Russian Federation No 1178 of 29.12 December 2011 "On Pricing in Regulated Areas (Tariffs) in the Electric Power Industry".

Tariffs for the transmission of electric energy under the UNEG are approved as the tariff rate for services on the electric energy transmission for the maintenance of power grid facilities of enterprises included in the UNEG, and the tariff rate for electricity transmission services used for the purpose of determining the costs of standard losses of electric energy during its transmission via the electric grids of the UNEG.

Tariff rates for electricity transmission services for the maintenance of power grid facilities included in the UNEG are set by the FAS of Russia on the basis of the return on invested capital method (RAB regulation). In order to establish the tariffs for each year of the regulated period, the required gross revenue (RGR) is determined by summing up the return on capital values, the rated return on invested capital, and the operating expenses required for provision of electricity transmission services via the UNEG. To prevent sharp increase in tariffs, the RAB regulation method provides for a smoothing mechanism that redistributes the required gross revenue over the years throughout the entire long-term regulation period.

Tariffs for network services of FGC for 2019–2020 are approved by FAS of Russia. The tariff growth amounted to 5.5% from 1 July 2019; the tariff growth will remain at the same level from 1 July 2020.

The tariff rates for the electricity transmission services aimed at determining expenses for the payment of electric power losses in the course of its transmission via the UNEG. It is determined by the formula and calculated by the commercial operator of the wholesale market for the settlement period based on the cost of electricity purchased by the Unified National (All-Russian) Electric Grid management company on the wholesale market to compensate for the electricity losses in the constituent entity of the Russian Federation which is part of either pricing or non-pricing zones of the wholesale electricity and capacity market.

The dynamics of changes in the tariffs corresponds to the price change dynamics in the WECM of electricity, including capacity.

Tariffs for technological connection. The FAS of Russia defines two payment methods for technological connection to the UNEG facilities: the approval of individual payment for a specific applicant (in case if construction of electrical grid facilities is required) and approval of the payment per formula using the standard tariff rate.

5. DEVELOPMENT STRATEGY

When determining its strategic development priorities, the Company is guided by the priorities of state policy in the field of the electric grid complex. Top level document of the Rosseti Group of Company is the Development Strategy of PJSC Rosseti and its subsidiaries and affiliates (Rosseti Group of Companies) till 2030 approved by the Board of Directors of PJSC Rosseti (minutes No. 388 of 26 December 2019).

The main strategic priorities of the state policy are determined in the Development Strategy of the Russian Electric Grid Complex until 2030:

- long-term reliable, high-quality and affordable energy supply to consumers;
- ensuring reliable and safe operation of the electric grid complex;
- developing the most efficient grid infrastructure in line with global standards;
- maintaining the tariff level, which provides for an acceptable level of electricity costs for the Russian economy and supports the investment attractiveness.

In its activities, FGC focuses on the following strategic priorities:

Strategic priorities	Plans and targets until 2024
Reliability and quality of energy supply to consumers	The reliability of electricity transmission services will be maintained at a consistently high level due to: • timely identification and analysis of factors affecting reliability and industrial safety;
	 compliance with the Unified Technical Policy and implementation of the Innovative Development Programme; implementation of the technical upgrade and reconstruction programme; implementation of the maintenance and repair programme; implementation of the lighting-surge proofness improvement programme; improvement of the UNEG monitoring and control level; development of the production assets management system.

Development of UNEG infrastructure	The Company's priority projects for the development of UNEG infrastructure until 2024 include
	 those aimed at implementing power distribution schemes for power plants (NPPs, HPPs, TPPs, generation based on renewable energy sources, upgrade of existing power plants); implementation of measures of providing external power supply to PJSC Gazprom facilities during the construction of gas producing, gas transporting and gas processing capacities in the Far Eastern federal district (the Power of Siberia complex project); electrification of the West-East and North-South transport corridors along with the Baikal-Amur and Trans-Siberian railways to increase freight traffic up to 180 million tonnes in conjunction with the transport infrastructure development; investment projects for the provision of electricity to enterprises and oil and gas fields.
Customer satisfaction	 Uninterrupted power supply to consumers; Priority fulfilment of investment projects for the technological connection in the contractual/regulatory term; Improving the quality of contractual obligations on technological
	connection.
Effective governance	 The annual reduction in controlled operating costs amounted to 2%; the annual increase in labour productivity amounted to at least 5%; technological and price audits of investment projects and investment programmes; improvement of the investment planning quality; improvement of the design work quality using the capabilities of information support and digital technologies; rise in the share of retrofitting and upgrading activities in the Company's investment programme structure.
Financial sustainability	The Company plans to finance Rosseti FGC UES's operating and investment activities in compliance with established debt burden restrictions and maintain the Company's credit ratings at the sovereign level.
	The Company is committed to
	a balanced credit policy within the framework of current Regulation on Credit Policy; if possessary prompt adjustment of the investment programme financing in
	 if necessary, prompt adjustment of the investment programme financing in order to limit the debt burden and increase resistance to external shocks; continuous work with credit rating agencies and the investment community aimed at maintaining and increasing the business transparency and consistency, which will help to support credit ratings of the Company at the sovereign level and reduce the risk premium in the interest payable on the borrowed funds.

Long-Term Development Programme

In 2019, the validity period of the Long-Term Development Programme (LDP) established in 2014 came to an end. Main directions of the Company's strategic development is specified in the LDP for 2020–2024.

In the LDP established in 2014, 11 objectives covering all aspects of the Company's activities: investment activity, stable operation of UNEG of Russia, technological connection, financial stability, saving of expenses. Implementation of major investment projects (including energy supply to BAM, TransSib, BRELL, projects on providing energy infrastructure for international sports events).

During implementation of the LDP established in 2014:

- reliability and quality of the services were improved;
- measures for reducing specific investment costs were implemented;

measures on increasing operating efficiency were gradually implemented.

The Long-Term Development Programme of PJSC FGC UES for 2020–2024 has been developed in line with the targets and provisions of the Russian Electric Grid Complex Development Strategy² and the instructions of the President of the Russian Federation and the Government of the Russian Federation.

In the course of development of the new LDP, external challenges and internal factors objectively affecting Company's operations were considered. The Company's actions are driven by the need to increase efficiency of its activities while maintaining high levels of energy supply for the users of the transmission network. At the same time, FGC UES strives to firm achievement of target points for improving efficiency established by state administration: increasing performance, reducing operational costs, increasing investment performance, improving production asset management.

The new Long-Term Development Programme is developed based on the continuity principle relating to the approved LDP 2014, but with new trends and challenges taken into account.

Risk management system

Risk management system, being an element of internal control and risk management system, is a set of mechanisms and tools ensuring availability of corresponding organisational structure and measures to develop, adopt, monitor, revise and constantly improve risk management processes within FGC.

The Risk Management System of PJSC FGC UES has been established based on the generally accepted conceptual frameworks for risk management that were developed by the Committee of Sponsoring Organisations of the Treadway Commission - COSO ERM Enterprise Risk Management. Integrated Framework.

PJSC FGC UES's Regulations on Risk Management³ has been developed with due account of the best Russian and international standards.

FGC UES has approved a Register⁴ of Key Operational Risks (KOR) and evaluates their impact on the achievement of the Company's target performance indicators, and annually updates the materiality level and takes measures related to risk management.

Risk assessment is carried out using the scenario and/or expert method. The risk materiality level is determined based on the results of the assessment in accordance with the materiality levels (moderate, significant, critical) determined in the Methodology for Assessing Operational Risks⁵.

The following table provides brief characteristics of the Company's material risks and specifies risk relevance with its changes in 2019. In comparison with the risk assessment results of the previous year, there were no material risks with growing relevance in the reporting year.

No.	Risk group, list of risks	Risk description	Risk significance assessment* and dynamics
1	2	3	5
1	Financial results and creditworthiness	The risk of deviation of the actual electricity transmission services volume from the value set in the Business Plan	

² Approved by Directive No. 511-r of the Government of the Russian Federation of 3 April 2013.

³ Approved by the resolution of the Board of Directors of 16 November 2015 (Minutes No. 291 of 19 November 2015); changes introduced by the resolution of the Board of Directors of 12 December 2016 (Minutes No. 347 of 13 December 2016).

 $^{^4}$ Approved by resolution of the Board of Directors on 27 January 2015 (an extract of Meeting Minutes of the Board of Directors No. 248/1 of 29 January 2015).

⁵ Approved by Order No. 86 of 21 March 2016.

2	Financial results and creditworthiness	Risk of deviation of the actual volumes of technological connection from the value set in the Business Plan	
3	Financial results and creditworthiness	Risk of deviation of expenditures on purchasing losses from the value set in the Business Plan	
4	Financial results and creditworthiness	Risk of deviation of the overdue accounts receivable from the amount set in the Business Plan	$\bigcirc \downarrow$
5	Investment Activities	Risk of failure to fulfil the main parameters of the Investment Programme	
6	Achievement of strategic objectives in terms of uninterrupted power supply and quality of technological connection services	The risk of failure to achieve the reliability level of electricity transmission services, established under tariff regulation	
7	Human capital	Risk of accident at the fault of the Company	$\stackrel{\longrightarrow}{\bullet}$
* _	ritical — Significa		

6. OPERATING ACTIVITIES

PJSC FGC UES performs regulated operations of providing the electric power transmission services via the UNEG, distribution electrical grids (hereinafter – DEG facilities), technological connection to the electrical grids, as well as other non-regulated activities.

Electric power transmission services

FGC's core activity and source of revenue is the transmission of electricity via the UNEG.

According to Russian legislation, electricity transmission services via the UNEG are monopolistic activities regulated by the Russian Government.

The cost of electricity transmission services is set by the tariffs approved by the federal executive authority for tariff regulation — the Federal Antimonopoly Service (FAS of Russia). The main consumers of the FGC UES electric power transmission services are regional distribution companies, retail suppliers and large industrial enterprises.

In 2019, revenue from electricity transmission services provided by the Company amounted to RUB 222.4 billion according to the IFRS consolidated financial statements. In the end of 2019, electricity supply to customers via the UNEG had an increase of 0.2% against 2018 to reach 558.7 bln kWh. Electricity losses in the UNEG amounted to 23.2 billion kWh by the end of 2019. With an increased electricity supply from the grid, the relative value of losses decreased by 0.25 p.p., while the electricity losses were down by 1,343 million KWh or 5.47% in absolute terms. Changes in electricity losses were caused by shifts in the UNEG's operation in 2019 due to changes in power plants loading and redistribution of the consumer load in Rosseti FGC UES' grids.

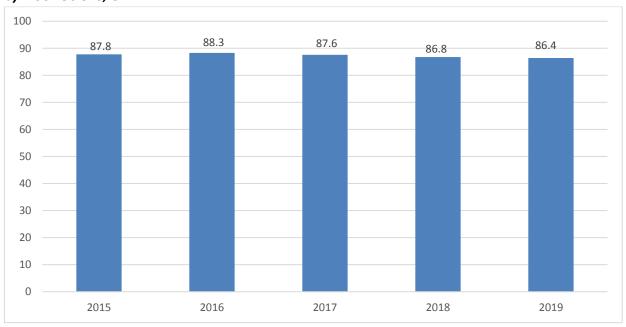
In 2019, the Company continued to implement the PJSC FGC UES Programme for Energy Saving and Energy Efficiency Improvement for 2015–2019 (approved by the resolution of the Management Board, extract No. 1326/2 of 4 August 2015). As for 2019, operational benefits of measures implemented by PJSC FGC UES aimed to reduce electricity losses in general amounted to 54.42 million kWh.

We also note a growth in the number of consumers; the total amount of valid agreements on electricity transmission via the UNEG has increased by 6.5% to 641 by the end of 2019. The number of contracts grew due to the activities carried out to ensure new technological connection to the UNEG, as well as the conclusion of contracts with consumers of the Company's services technologically connected to facilities of other entities.

PJSC FGC UES purchase electricity in the volume corresponding to the actual volume of losses in the UNEG. This purchase occurs in the constituent entities of the Russian Federation united into pricing and non-pricing zones.

The scope of services provided in the backbone transmission network depends on the general state of the national economy and is determined as power capacity supplied to the consumers of electricity transmission services and capacity of power receivers connected to the network.

Power capacity paid by the consumers of electricity transmission services through the UNEG provided by PJSC FGC UES, GW



In 2019, the value of paid capacity under the UNEG amounted to an average of 86.4 GW; by the end of 2019, the reduction in paid capacity was 0.4 GW (about 0.5%) compared to 2018, which was primarily due to the continued implementation of the schedule of phased transition to settlements with subsidiaries and affiliates of PJSC Rosseti, approved by the Board of Directors of PJSC Rosseti at the reported actual capacity level.

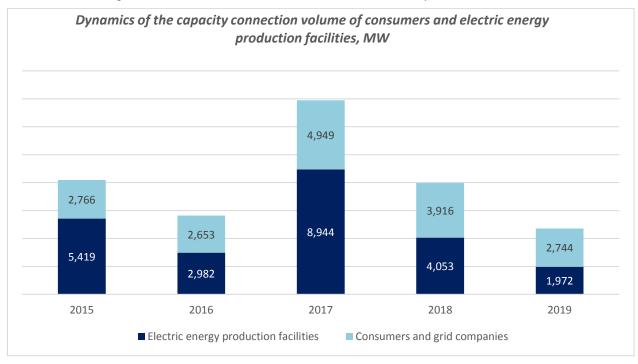
For more details on the electricity transmission services provided by the Company visit our website http://www.fsk-ees.ru/consumers/uslugi_po_peredache_elektroenergii/

Technological connection services

Technological connection is the Company's comprehensive service that connects electricity receiving devices of consumers, power generation facilities and electric grid facilities to the electric grid system of PJSC FGC UES. We provide these services to both new and existing consumers who want to change operation parameters of an energy facility.

The amount of payment for technological connection is calculated on the basis of maximum capacity of connected electricity receiving devices and the standard tariff rate set by the FAS Russia for the current regulatory period. Payment for technological connection under an individual project is approved individually by the FAS Russia for each applicant.

In the reporting year, the Company implemented technological connection under 202 contracts, including 12 connections of generation facilities and 190 connections of electricity consumers.



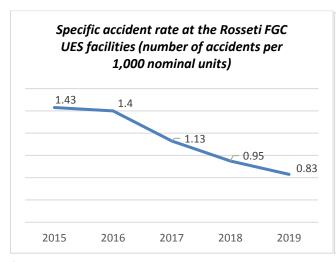
In 2019, in order to connect electricity generation facilities, PJSC FGC UES implemented 12 contracts with a declared capacity of 1,972 MW. In 2019, the indicators of capacity and the number of contracts were down against 2018 due to the completion of large generation projects.

For more details on the electricity transmission services provided by the Company visit our website http://portaltp.fsk-ees.ru/sections/Map/map.jsp

Improving the quality of our services

A higher level of responsibility of FGC in terms of providing sustainable and reliable power supply is connected with peculiarities of Russian climate. We understand our great responsibility and do our utmost for electricity to be delivered to our consumers continuously, with no failures and in compliance with all technical specifications.

In 2019, the specific accident rate at FGC's facilities declined by 12% and the number of accidents decreased by 11% due to the introduction of new equipment, personnel development and other activities. The number of staff errors decreased compared to 2018 and accounted for less than 0.6% of the total number of accidents.





^{*} Starting from 1 January 2017, in accordance with the Production Meeting Minutes of PJSC FGC UES and JSC SO UES technical management, the events related to decommissioning SS and overhead line equipment upon urgent dispatching orders and disruptions in SCS operation which do not fall within the scope of paragraph 4 of the Accident Investigation Rules in Power Industry were investigated and recorded in addition to the existing accident investigation process. For adequate comparison of the number of accidents, the information on the accident number for 2014-2016 was supplemented with the above-stated events based on the materials submitted by JSC SO UES.

The indicator of electricity shortage tends to stabilise within the medium-term value. In 2019, the electricity undersupply indicator fell by 7.1% to 1,423 MWh compared to 2018. The increase in the indicator compared to 2015 and 2016 was due to higher requirements for technological violations taken into account when calculating the reliability of indicators in accordance with Order No. 1256 of the Ministry of Energy dated 29 November 2016 and the corresponding Order No. 443 of PJSC FGC UES dated 30 November 2018.

The reliability level of the services provided is determined as the ratio of the actual total duration of electricity outage in the control period (hour) to the maximum number of technological connection points of service consumers for the same period and amounted to 0.0096. Target value of the services reliability indicator amount to 0.0334 in 2020.

Other types of activities

In addition to electricity transmission technological connection services, the Company and its subsidiaries (hereinafter, the "Group") carry out other activities:

- The Group's JSC Mobile GTES sales electricity;
- The Group started to render services for the construction of transmission facilities on the territory of Russia in the second half of 2015;
- Other activities carried out by the Group (lease of property, maintenance and repair of electric grids, communication services, design and survey).

These activities do not have a significant impact on its revenue (less than 4%) and are not core.

Key production indicators

Indicator			Growth
indicator	2019	2018	2019/2018, %
Number of substations ⁶ , units ⁷	951	958	-0.7
Total length of power transmission lines including rented ones, thousand km ¹¹	148.3	145.9	1.6
Electricity transmitted from the UNEG, bln kWh	558.7	557.7	0.2
Actual electricity losses, bln kWh	23.2	24.5	-5.5
Transformer capacity including rented substations, GVA	352.9	351.9	0.3
Power capacity paid by the consumers of electricity transmission services provided by PJSC FGC UES via the UNEG	86.4	86.8	-0.5

7. DEVELOPMENT OUTLOOK

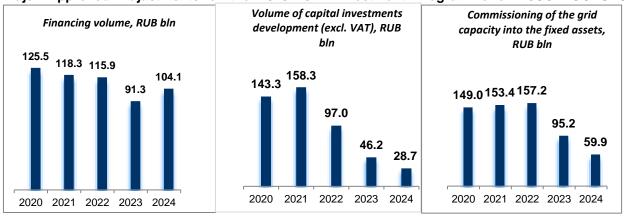
INVESTMENTS

The Company performs construction of new and reconstruction of the existing electrical grid facilities. We pay special attention to modernisation and increase of operation reliability of the unified power system for uninterrupted power supply to the consumers.

When carrying out investment activities, the Company is guided by the principles of efficiency and effectiveness of investments, matching investment objectives to its strategic goals.

The key investment programme⁸ activities scheduled for 2015–2019 were fulfilled. In the course of their implementation, over 7,800 km of electricity transmission lines and 30,900 MVA of transformer capacity were commissioned. In 2019, a new Investment Programme⁹ for the next five years (2020–2024) was adopted.

Major Approved Adjustments of the 2020-2024 Investment Programme of PJSC FGC UES



The Company's Investment Programme is aimed at providing for the commissioning of fixed assets with a capacity of 40,200 MVA, and 8,700 km of electricity transmission lines. The total amount of investments planned amounts to RUB 555,15 billion. It is planned to finance the Investment Programme 2020–2024

⁶ Including leased facilities, as well as switchgear and substation units owned by other entities.

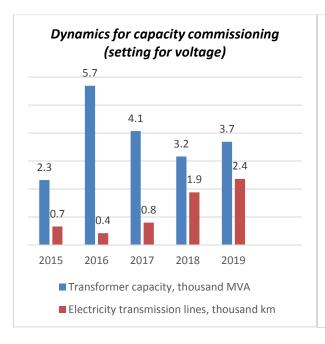
⁷ Information on the number of PJSC FGC UES' substations and length of power transmission lines according to the data of state registered ownership of PJSC FGC UES and other owners, including facilities of 0.4–110 kV, but excluding power transmission lines and substations of 10 kV and lower, accepted by PJSC FGC UES for free use and operation in the Krasnodar Krai.

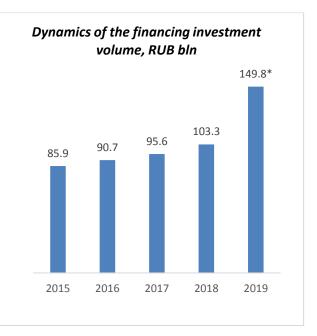
⁸ Approved by Order of the Ministry of Energy of Russia No. 980 of 18 December 2015 (taking into account the amendments, introduced as per Orders of the Ministry of Energy of Russia No. 31@ of 27 December 2017 and No. 36@ of 27 December 2019).

⁹ Order No. 36@ of the Ministry of Energy of Russia of 27 December 2019.

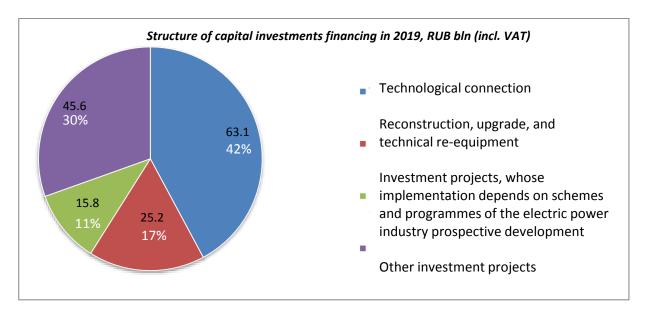
using PJSC FGC UES's own funds and bonds. The Programme provides even distribution of the investment costs within five-year period, which will allow the Company to keep balanced structure of the financing sources.

Fulfilment of the Investment Programme in 2019





^{*} including the non-cash part of RUB 34.8 billion in the framework of electric grid asset exchange with JSC DVEUK.



In 2019, as part of the investment programme, the Company carried out several major projects for the construction of overhead lines and substations, including in the Far East and Western Siberia (OHL 220 kV Ust-Ilimsk HPP – Ust-Kut No. 2; SS 220 kV Sukhoi Log with single-chain OHL 220 kV Peleduy – Sukhoi Log and two single-chain OHL 220 kV Sukhoi Log – Mamakan; OHL 220 kV Komsomolskaya — Selikhino — Vanino, and reconstruction of SS 220 kV Petrovsk – Zabaikalskaya).

For more information on FGC's investment activities visit our official site http://www.fsk-ees.ru/investment-program/

INNOVATION

The Company's innovation priorities are defined in the PJSC FGC UES Innovative Development Programme for 2016-2020 with an outlook for 2025¹⁰.

The result of the Innovative Development Programme's implementation shall be creation of an electric power system with an intelligent grid, which differs from the existing grid by the presence of certain innovative components: automatic systems for electric power transmission control, active grid elements with variable parameters, a system for monitoring the current grid state, automated real time systems of maintaining the power system's operation within the set parameters as part of the unified analysis and decision making system.

Priority directions of innovative development of PJSC FGC UES

Direction	Brief Description		
Digital Substation	Digital Substation is a substation with a high level of automation.		
	Implementation period: 2016–2025		
	Technologies: SS equipment on the basis of IEC 61850 standard, switches, intelligent electronic devices, etc.		
Digital Design	Engineering ecosystem based on modern design information technologies.		
	Implementation period: 2015–2025 (modification and development of the informational services: 2020-2025).		
	Technologies: CAD (PLM, BIM), modelling tools, electronic design services, data processing logistics, mobile terminals, geolocation, laser technologies, etc.		
Energy Efficiency	Complex of measures: (1) improving the efficiency of transformer cooling systems and automating the heating operation; (2) researching and testing of functional wire coatings (3) creating distributed (intelligent) systems for controlling voltage and reactive power.		
	Implementation period: 2015–2022 (implementation of targeted programmes: 2018–2025).		
	Technologies: automation, functional wire coatings.		
Remote control and security	The Automated Process Control System (APCS) allows to carry out remote control, increase system reliability, reduces management costs, provides high availability.		
	Implementation period: 2016–2025		
	Technologies: systems of technological control of the level of control centres (SCADA, EMS) and the level of objects (SSPI, SSPTI), modern digital measurement systems.		
The quality of electric power	Voltage regulation devices, symmetry and harmonic compensation systems are placed in complex circuit-mode nodes of the network, which allows to provide control at a new quality level.		
	Implementation period: 2016–2025		
	Technologies: FACTS technologies package, symmetry and harmonic compensation systems, distributed monitoring and control systems, etc.		

-

¹⁰ Approved by the resolution of the Board of Directors of PJSC FGC UES, Minutes No. 328 of 28 June 2016. The adjusted Innovative Development Programme was approved by the resolution of the Board of Directors of PJSC FGC UES (Minutes No. 370 of 7 June 2017).

Reliability and	Development of a methodology for the integrated management of production
Asset Management	funds and assets, based on the planning of technical impacts on equipment, taking into account the analysis of its current technical condition, costs and potential risks.
	Implementation period: 2016–2019 (modification and development: 2020–2025)
	Technologies: Transaction asset management systems, mobile terminals, unmanned aerial vehicles, impact modelling systems, remote reading of information from sensors and RFID systems, etc.
Composite materials and superconductivity	Development of new technical solutions with wider use of new construction materials, establishing a production base and corresponding standard solutions, industry standards and standards of the organisation.
	Implementation period: 2015–2025.
	Technologies: Composite materials for OHL and SS structures, composite materials for insulating products, composite cores and conductor products, high-temperature superconductivity technology, etc.

One of the tools used for the implementation of PJSC FGC UES' Innovative Development Programme for 2016–2020 with an outlook for 2025 is the R&D Programme of PJSC FGC UES.

The R&D Programme is designed to ensure sustainable and long-term financing for development of new technologies, equipment and tools within the Company's Investment Programme, to improve reliability, quality and energy efficiency of electricity supply to customers via upgrading Russian UES grids.

In 2019, the Company allocated RUB 0.92 billion for the R&D in accordance with the Investment Programme (in 2018, it amounted to RUB 0.6 billion).

For more information on FGC's innovation activities visit our official site <a href="http://www.fsk-ees.ru/innovation/innovative-development-development/innovative-development-

8. MOTIVATION POLICY FOR TOP MANAGEMENT

The Company's system of remuneration payable to executive bodies is stipulated by the Regulations on Terms of Employment Contracts and Payment of Remuneration and Compensation to PJSC FGC UES' Top Management.¹¹

The remuneration is comprised of fixed (salary) and variable (bonuses) parts. Amount of bonus predominantly depends on achieving of KPIs by top management. The variable part is comprised of quarterly and yearly bonuses (according to the results of achieved quarterly and yearly KPI, correspondingly). If any KPI is not achieved, bonuses of all members of the Management Board, including the Chairman of the Management Board, get reduced by a certain percent depending on the KPI's weight.

The Board of Directors approves the Company's KPI targets (adjusted values) and reports on their fulfilment, on the basis of which bonuses are paid to the Chairman and members of the Management Board.

_

¹¹ Approved by the Board of Directors, minutes No. 105 of 17 June 2010.

Total (aggregated) remuneration paid to the Chairman and members of the Management Board, RUB thousand

Type (element) of remuneration	2019
Fixed part	
Salary (wage)	95,452
Total fixed part of remuneration	95,452
Variable part	
Bonuses accrued in accordance with employment contract ¹²	186,443
Other types of remuneration	43,125
Severance allowances, compensations and other payments accrued in connection with early termination of powers	8,622
Total variable part of remuneration	238,190
Total remuneration	333,642

_

¹² Including those who terminated the powers early in previous periods.

Dynamics of actual KPIs

Strategic priorities		2018	201	19 ¹³
	КРІ	Assessment of KPI achievement	Target KPI	Assessment of KPI achievement
Reliability of power supply to consumers	Absence of increase in major accidents	KPI was achieved in all quarters	No increase	KPI was achieved in all quarters
	Absence of increase in the number of people injured in accidents	KPI was achieved in Q2 and Q3	No increase	KPIs achieved in all quarters except Q4
Development of UNEG infrastructure	Compliance with the commissioning schedule	74% (achieved)	≥ 90 %	Q3 — 95% Q4 — 105%
Customer satisfaction	Respect of deadlines for technological connections	1.0	≤ 1.1	1.0
	Achievement of reliability of services provided	0.22	≤ 1.00	Achieved
Financial sustainability	Consolidated net debt/EBITDA*	KPI was achieved in all quarters	Q1, Q2, Q3, Q4 ≤ 3.0	KPI was achieved in all quarters
	Implementation of the Action Plan to reduce account receivables	KPI was achieved in all quarters	≥ 100.0 %	KPI was achieved in all quarters
Effective governance	EBITDA*	KPI was achieved in all quarters	for Q1, H1 and 9 months of the reporting period ≥ 0; annual value ≥ 3.0%	KPI was achieved in all quarters
	Consolidated net cash flow*	RUB 21.6 bln	> RUB 5 bln	RUB 27.5 bln
	Reduction in unit operating expenses (costs)	10.6 %	≥ 2.0 %	5.1 %
	Increase in capacity utilisation of electric grid equipment*	Achieved	Achieved	Achieved
	Level of electricity losses	Achieved	≤ 4.57 %	4.15 %
	Reduction of the unit investment costs*	1.00	≤ 1.00	0.92
	Improvement of labour productivity	10.71 %	≥ 2.00 %	4.72 %
	Efficiency of innovation activities	108 %14	≥ 90 %	No evaluation ¹⁵

st The indicator has not been applied since 2020

¹³ The expected level of KPI achievement is shown for Q4 and the full year 2019. The final actual values—the source of information needed for KPI calculation—are approved by the Company's Board, taking into account the timing and report preparation procedure.

¹⁴ Report on the key performance indicator "Innovation activity efficiency" achievement by the top management of PJSC FGC UES for 2018 was recommended for approval by the Management Board at the Board of Directors' meeting (Meeting Minutes of the Management Board No. 1676 of 27 December 2019) and by the HR and Remuneration Committee of PJSC FGC UES' Board of Directors (Minutes No. 70 of 23 January 2020).

¹⁵ KPI achievement can be assessed only upon the review of the Innovation Development Programme 2019 implementation report by Russian authorised federal executive bodies (in accordance with the procedure approved by Instruction of the Russian Government No. DM-P36-7563 dated 7 November 2015, or any other document regulating the procedure for monitoring and assessing the quality of development, update and implementation of innovative development programmes of joint-stock companies with state participation).

9. FINANCIAL RESULTS

This report contains selected financial information, which has been derived from the Consolidated Financial Statements of PJSC "FGC UES" (the "Company") and its subsidiaries (the "Group") as at and for the year ended 31 December 2019, prepared in accordance with International Financial Reporting Standards ("IFRS"). The selected financial and operating data below should be read in conjunction with the Group's consolidated financial statements prepared in accordance with IFRS.

Summary of results

For the year ended 31 December 2019 and 2018, the Group's revenue amounted to RUR 249,611 million and RUR 253,979 million, respectively. For the year ended 31 December 2019 the Group's profit amounted to RUR 86,638 million compared to RUR 92,845 million for the year ended 31 December 2018.

Consolidated Statement of Profit or Loss (IFRS)

	Year ended 31 December	Year ended 31 December
(in millions of roubles)	2019	2018
Revenues	249,611	253,979
Other operating income	6,291	6,474
Operating expenses	(155,282)	(151,210)
Gain on disposal of assets	10,444	-
Accrual of allowance for expected credit losses (Impairment)/reversal of impairment of property, plant and	(1,624)	(4,634)
equipment, net	(6,726)	2,248
Operating profit	102,714	106,857
Finance income	13,796	12,981
Finance costs	(6,896)	(4,862)
Disposal of associate	(62)	-
Share of profit of associates and joint ventures	144	125
Profit before income tax	109,696	115,101
Income tax expense	(23,058)	(22,256)
Profit for the year	86,638	92,845

Consolidated Statement of Financial Position (IFRS)

(in millions of roubles)	31 December 2019	31 December 2018
ASSETS	2019	2010
Non-current assets		
Property, plant and equipment	1,024,901	937,277
Right-of-use assets	12,719	-
Intangible assets	6,609	6,638
Investments in associates and joint ventures	1,296	1,442
Financial investments	45,711	37,956
Deferred income tax assets	275	207
Trade and other accounts receivable	72,084	72,987
Advances given and other non-current assets	2,107	1,018
Total non-current assets	1,165,702	1,057,525
Current assets	, ,	
Cash and cash equivalents	37,077	37,618
Bank deposits	25,789	3,811
Trade and other accounts receivable	41,823	68,025
Income tax prepayments	93	56
Inventories	16,968	17,037
Advances given and other current assets	2,576	3,503
Navanoes given and other outlent assets	124,326	0,000
Assets held for sale	313	_
Total current assets	124,639	
TOTAL ASSETS	1,290,341	
	, ,	
EQUITY AND LIABILITIES		
Equity		
Share capital: Ordinary shares	637,333	637,333
Treasury shares	(4,719)	(4,719)
Share premium	10,501	10,501
Reserves	30,937	25,167
Retained earnings	227,558	170,699
Equity attributable to shareholders of FGC UES	901,610	838,981
Non-controlling interests Total equity	174	181
	901,784	839,162
Non-current liabilities		
Deferred income tax liabilities	46,871	29,586
Non-current debt	208,343	224,585
Trade and other accounts payable	14,121	12,055
Advances from customers	8,525	2,441
Taxes other than on income payable	1,705	505
Government grants	811	867
Retirement benefit obligations	6,955	5,950
Total non-current liabilities	287,331	275,989
Current liabilities		
Accounts payable to shareholders of FGC UES	11,388	213
Current debt and current portion of non-current debt	31,444	22,224
Trade and other accounts payable	41,580	46,835
Advances from customers	8,872	13,227
Taxes, other than on income payable	4,265	6,863
Provisions for liabilities and charges	1,202	683
Income tax payable	2,475	3,846
Total current liabilities	101,226	93,891
Total liabilities	388,557	369,880
TOTAL EQUITY AND LIABILITIES	1,290,341	1,209,042

Consolidated Statement of Cash Flows (IFRS)

(in millions of roubles)	Year ended 31 December 2019	Year ended 31 December 2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Profit before income tax	109,696	115,101
Adjustments to reconcile profit before income tax to net cash provided by op	erations	
Depreciation of property, plant and equipment	35,564	32,346
Depreciation of right-of-use assets	899	-
Loss/(gain) on disposal of property, plant and equipment	1,094	(310)
Amortisation of intangible assets	1,405	1,154
Impairment/(reversal of impairment) of property, plant and equipment,		
net	6,726	(2,248)
Gain on disposal of assets	(10,444)	-
Share of profit of associates and joint ventures	(144)	(125)
Accrual of allowance for expected credit losses	1,624	4,634
Accrual/(reversal) of provision for liabilities and charges	863	(778)
Disposal of an associate	62	-
Finance income	(13,796)	(12,981)
Finance costs	6,896	4,862
Other non-cash items	(132)	(2)
Operating cash flows before working capital changes, income tax		
paid and other changes in long-term assets and liabilities	140,313	141,653
Decrease in long-term trade and other accounts receivable	845	-
(Increase)/decrease in long-term advances given and other non-		
current assets	(936)	265
(Decrease)/increase in long-term accounts payable	(5,027)	1,194
Increase in long-term advances from customers	7,824	2,422
Working capital changes:		
Decrease/(increase) in trade and other accounts receivable	7,865	(9,747)
Decrease in advances given and other current assets	1,727	2,785
Decrease/(increase) in inventories	362	(967)
(Decrease)/increase in trade and other payables	(811)	778
Increase/(decrease) in provisions for liabilities and charges	519	(3,700)
(Decrease)/increase in advances from customers	(7,841)	673
Income tax paid	(8,606)	(11,286)
Net cash generated by operating activities	136,234	124,070
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property, plant and equipment	(92,315)	(88,941)
Proceeds from disposal of property, plant and equipment	484	1,029
Purchase of intangible assets	(2,194)	(2,049)
Redemption of promissory notes	10	10
Placement of bank deposits	(30,554)	(24,134)
Redemption of bank deposits	8,830	20,323
Dividends received	1,463	2,251
Loans given	(5)	(53)
Repayment of loans given	23	23
Proceeds from sale of financial investments	32,141	3,708
Interest received	3,048	3,194
Net cash used in investing activities	(79,069)	(84,639)
CASH FLOWS FROM FINANCING ACTIVITIES:	(13,003)	(04,033)
	22	10.054
Proceeds from current and non-current borrowings		10,054
Repayment of current and non-current borrowings	(19,443) (783)	(20,436)
Repayment of principal portion of lease liabilities	(783) (20, 205)	(115)
Dividends paid	(20,205)	(18,635)
Acquisition of non-controlling interests	(74)	(504)
Interest paid	(17,223)	(14,712)
Net cash used in financing activities	(57,706)	(44,348)
Net decrease in cash and cash equivalents	(541)	(4,917)
Cash and cash equivalents at the beginning of the period	37,618	42,535
Cash and cash equivalents at the end of the period	37,077	37,618

Non-IFRS Financial Information

(in millions of roubles, except for margins and ratios in %)	Year ended 31	Year ended 31
	December 2019	December 2018
EBITDA (1)	140,664	140,482
EBITDA margin (2)	56.4%	55.3%
Adjusted EBITDA ⁽³⁾	136,101	133,571
Adjusted EBITDA margin (2)	54.5%	52.6%
Adjusted operating profit (4)	98,996	104,609
Adjusted operating profit margin (2)	39.7%	41.2%
Adjusted profit for the year (5)	83,713	91,047
Return on assets (6)	6.7%	7.8%
Return on equity (7)	9.6%	11.4%

- (1) EBITDA represents profit for the year before income tax, finance income and costs, depreciation and amortisation;
- (2) Margins are calculated as EBITDA, adjusted EBITDA and adjusted operating profit divided by the total revenue for the year;
- (3) Adjusted EBITDA is calculated as EBITDA adjusted to exclude impairment / (reversal of impairment) of property, plant and equipment, revenue from connection services, expenses related to accrual of allowance for expected credit losses, gain on disposal of assets, disposal of associate and movement in provision for legal claims and including financial income;
- (4)Adjusted operating profit is calculated as operating profit adjusted for impairment / (reversal of impairment) of property, plant and equipment and gain on disposal of assets;
- (5)Adjusted profit for the year is calculated as profit for the year adjusted for impairment / (reversal of impairment) of property, plant and equipment, gain on disposal of assets, disposal of associate and including respective deferred income tax;
- (6)Return on assets is calculated as adjusted profit for the year divided by the average total assets for the year;
- (7)Return on equity is calculated as adjusted profit for the year divided by the average total equity for the respective year.

The indicators presented above are not financial performance measures that are required by, or presented in accordance with IFRS. Accordingly, they should not be considered as alternatives to profit for the year as a measure of operating performance or to cash flows from operating activities as a liquidity measure. The Group's calculation of these ratios may be different from calculations used by other companies and therefore comparability may be limited. The Group believes that EBITDA and Adjusted EBITDA provide useful information to investors, because they are indicators of the strength and performance of its ongoing business operations and indicators of its ability to fund discretionary spending, such as: capital expenditures, the acquisition of subsidiaries and other investments and its ability to incur and service debt. While depreciation and amortisation are considered operating costs under IFRS, these expenses primarily represent non-cash current year allocations of costs associated with long-lived assets that have been acquired or constructed in prior periods.

Adjusted profit for the year

Adjusted profit for the year is used to calculate the return on assets and the return on equity indicators. Profit for the year was adjusted for impairment / (reversal of impairment) of property, plant and equipment, gain on disposal of assets, disposal of associate and including respective deferred income tax.

The following table sets forth a reconciliation of adjusted profit for the year to profit for the periods indicated.

(in millions of roubles)	Year ended 31 December 2019	Year ended 31 December 2018
Profit for the year	86,638	92,845
Adjustments to profit for the year:	,	,
Gain on disposal of assets	(10,444)	-
Impairment/(reversal of impairment) of property, plant and	,	
equipment, net	6,726	(2,248)
Disposal of associate	62	-
Deferred income tax on adjustments	731	450
Adjusted profit for the year	83,713	91,047

EBITDA and Adjusted EBITDA

EBITDA represents profit for the year before income tax, finance income and costs, depreciation and amortisation. Adjusted EBITDA represents EBITDA adjusted to exclude impairment / (reversal of impairment) of property, plant and equipment, revenue from connection services, expenses related to accrual of allowance for expected credit losses, gain on disposal of assets, disposal of associate and movement in provision for legal claims and including financial income.

The following table sets forth a reconciliation of profit for the year to EBITDA and adjusted EBITDA for the periods indicated.

(in millions of roubles)	Year ended 31 December 2019	Year ended 31 December 2018
Profit before income tax	109,696	115,101
Add back:		
Finance income	(13,796)	(12,981)
Finance costs	6,896	4,862
Depreciation and amortisation	37,868	33,500
EBITDA	140,664	140,482
Adjustments to EBITDA:		
Revenue from connection services	(17,190)	(21,500)
Gain on disposal of assets	(10,444)	-
Impairment/(reversal of impairment) of property, plant and	,	
equipment, net	6,726	(2,248)
Allowance for expected credit losses	1,624	4,634
Disposal of associate	62	-
Movement in provision for legal claims	863	(778)
Add back:		, ,
Finance income	13,796	12,981
Adjusted EBITDA	136,101	133,571

Liquidity ratios and other measures

(in millions of roubles, except ratios)	Year ended	Year ended
	31 December 2019	31 December 2018
Current liquidity ratio (1)	1.39	1.62
Cash liquidity ratio (2)	0.70	0.44
Total equity/Total assets ratio (3)	0.71	0.69
Net debt (4)	176,859	205,370

- (1) Current liquidity ratio is calculated as total current assets divided by total current liabilities net of accounts payable to shareholders of FGC UES;
- (2) The cash liquidity ratio is calculated as a sum of cash and cash equivalents, short-term bank deposits and short-term promissory notes divided by total current liabilities net of accounts payable to shareholders of FGC UES;
- (3) The total equity to total assets ratio is calculated as sum of equity and accounts payable to shareholders of FGC UES divided by total assets;
- (4) Net debt represents non-current and current debt reduced by cash and cash equivalents, short-term bank deposits and short-term promissory notes.

Revenue

The Group's revenue is derived primarily from the provision of electricity transmission services. Changes in this type of revenue are primarily dependent on changes in tariffs set by the Federal Antimonopoly Service on tariffs (FAS) and volumes of electricity transmitted during the year. The Group also earns revenue from the services of technological connection of electricity producers to power grids, services rendered under transmission facilities construction contracts and sale of electricity to the third parties at the wholesale of electricity and capacity market.

The Group's revenue decreased by RUR 4,368 million, or 1.7%, from RUR 253,979 million for the year ended 31 December 2018 to RUR 249,611 million for the year ended 31 December 2019.

The table below sets out the Group's revenue for the periods indicated.

(in millions of roubles except for percentages)	Year ended 31 December 2019	Percenta ge of total revenue	Year ended 31 December 2018	Percentage of total revenue	Percentage change between the Year ended 31 December 2019 and 2018
Transmission fee	222,382	89.1%	213,131	83.9%	4.3%
Connection services	17,190	6.9%	21,500	8.5%	(20)%
Construction services	4,391	1.8%	6,062	2.4%	(27.6)%
Electricity sales	1,676	0.7%	9,409	3.7%	(82.2)%
Other revenues	3,972	1.5%	3,877	1.5%	2.5%
Total revenues	249,611	100%	253,979	100%	(1.7)%

Transmission fee

The Group's revenue from electricity transmission services increased by RUR 9,251 million, or 4.3%, from RUR 213,131 million for the year ended 31 December 2018 to RUR 222,382 million for the year ended 31 December 2019. The increase was primarily caused by the following factors:

- higher revenue from electricity transmission following tariff increases by 5.5% in both periods since 1 July 2018 and since 1 July 2019;
- higher revenue from compensation of losses due to increase of tariff for regulatory and technological losses of electricity, the amount of which is equal to the weighted average rate for the purchase of electricity and power of PJSC ATS in accordance with Decree № 458 of the Government of the Russian Federation, dated 11 May 2015.

Connection services

The Group's revenue from connection services decreased by RUR 4,310 million, or 20%, from RUR 21,500 million for the year ended 31 December 2018 to RUR 17,190 million for the year ended 31 December 2019. The decrease was in accordance with services schedule based on customer orders.

Construction services

The Group's revenue from construction services decreased by RUR 1,671 million, or 27.6%, from RUR 6,062 million for the year ended 31 December 2018 to RUR 4,391 million for the year ended 31 December 2019. The decrease is due to the change in the work completion percentage at various stages of construction projects.

Electricity sales

The Group's revenue from electricity sales decreased by RUR 7,733 million, or 82.2%, from RUR 9,409 million for the year ended 31 December 2018 to RUR 1,676 million for the year ended 31 December 2019 as a result of decrease in volume of electricity sold by JSC "MGTES".

Other revenues

The Group's other revenues increased by RUR 95 million, or 2.5%, from RUR 3,877 million for the year ended 31 December 2018 to RUR 3,972 million for the year ended 31 December 2019. Other revenues include rental income, grids repair and maintenance services, communication services, design works and research and development services.

Other operating income

Other operating income primarily includes income from non-core activities and other one-off items. The Group's other operating income decreased by RUR 183 million, or 2.8%, from RUR 6,474 million for the year ended 31 December 2018 to RUR 6,291 million for the year ended 31 December 2019 mainly due to decrease of insurance compensation.

Operating expenses

The table below sets out the Group's operating expenses for the periods indicated.

(in millions of roubles except for percentages)	Year ended 31 December 2019	Percentag e of total operating expenses	Year ended 31 December 2018	Percentage of total operating expenses	Percentage change between the year ended 31 December 2019 and 2018
Purchased electricity for production needs	37,737	24.3%	38,102	25.2%	(1.0)%
Depreciation of property, plant and equipment, right-of-use assets and intangible assets	37,868	24.4%	33,500	22.2%	13.0%
Employee benefit expenses and payroll taxes	32,066	20.7%	29,121	19.3%	10.1%
Taxes, other than on income	13,426	8.6%	14,728	9.7%	(8.8)%
Materials, repairs and maintenance expenditure	6,552	4.2%	5,915	3.9%	10.8%
Fuel for mobile gas-turbine electricity plants	68	0.0%	6,568	4.3%	(99.0)%
Subcontract works for construction contracts	3,132	2.0%	3,910	2.6%	(19.9)%
Materials for construction contracts	165	0.1%	1,994	1.3%	(91.7)%
Other expenses	24,268	15.7%	17,372	11.5%	39.7%
Total operating expenses	155,282	100%	151,210	100%	2.7%

Purchased electricity

The Group's expenses for purchase of electricity for production needs decreased by RUR 365 million or 1% from RUR 38,102 million for the year ended 31 December 2018 to RUR 37,737 million for the year ended 31 December 2019.

Depreciation of property, plant and equipment, right-of-use and intangible assets

The Group's depreciation for property, plant and equipment, right-of-use assets and intangible assets increased by RUR 4,368 million or 13.0% from RUR 33,500 million for the year ended 31 December 2018 to RUR 37,868 million for the year ended 31 December 2019. This was in line with the increase of property, plant and equipment balance for the reporting period as well as a result of the implementation of IFRS 16 Leases since 1 January 2019.

Employee benefit expenses and payroll taxes

The Group's employee benefit expenses and payroll taxes increased by RUR 2,945 million or 10.1% from RUR 29,121 million for the year ended 31 December 2018 to RUR 32,066 million for the year ended 31 December 2019 as a result of changes in pension service costs related to defined benefit plans. *Taxes other than on income*

The Group's taxes other than on income decreased by RUR 1,302 million, or 8.8%, from RUR 14,728 million for the year ended 31 December 2018 to RUR 13,426 million for the year ended 31 December 2019 mainly due to the cancellation of property tax for movable property.

Materials, repairs and maintenance expenditure

The Group's expenses for materials, repairs and maintenance increased by RUR 637 million, or 10.8%, from RUR 5,915 million for the year ended 31 December 2018 to RUR 6,552 million for the year ended 31 December 2019 as a result of higher volumes of work being undertaken to ensure the reliable operations of UNEG facilities.

Fuel for mobile gas-turbine electricity plants

The Group's expenses for the purchase of fuel for mobile gas-turbine electricity plants decreased by RUR 6,500 million, or 99.0%, from RUR 6,568 million for the year ended 31 December 2018 to RUR 68 million for the year ended 31 December 2019 as a result of decrease in volumes of electricity generated and sold by JSC "MGTES".

Works related to the construction contracts and materials for construction

The Group's expenses for subcontract works and materials for construction contracts decreased by RUR 2,607 million, or 44.2%, from RUR 5,904 million for the year ended 31 December 2018 to RUR 3,297 million for the year ended 31 December 2019 as a result of change in the work completion percentage at various stages of construction projects (in line with decrease of revenue from construction services).

Gain on disposal of assets

Following the consolidation of certain UNEG facilities that had previously belonged to JSC Far East Energy Management Company within the framework of an asset exchange agreement, the Group has recognised disposal of property, plant and equipement with the carrying value of RUR 16,045 million and accounts receivable with the carrying value of RUR 5,372 million, and at the same time recognised additions to property, plant and equipment at fair value of RUR 34,564 million, long-term accounts payable at fair value of RUR 2,713 million and short-term accounts payable at fair value of RR 2,384 million at initial recognition. The Group also recognised VAT recoverable amounted to RUR 2,394 million.

The Group recognised gain on disposal of assets in the amount of RUR 10,444 million for the year ended 31 December 2019.

Accrual of expected credit losses

The Group recognised a net accrual of the allowance for expected credit losses in the amount of RUR 1,624 million for the year ended 31 December 2019 and RUR 4,634 million for the year ended 31 December 2018.

(Impairment) / reversal of impairment of property, plant and equipment, net

The Group recognised a net impairment of property, plant and equipment in the amount of RUR 6,726 million for the year ended 31 December 2019 as a result of the impairment test of property, plant and equipment performed by the Group. The Group recognised a net reversal of the impairment of property, plant and equipment in the amount of RUR 2,248 million for the year ended 31 December 2018 as a result of reversal of the impairment for individual assets.

Finance income

Finance income primarily includes interest income from investments in bank deposits, dividend income and unwind of discount of accounts receivable. Finance income increased by RUR 815 million, or 6.3%, from RUR 12,981 million for the year ended 31 December 2018 to RUR 13,796 million for the year ended 31 December 2019. The increase was due to increase of income from unwinding of discount of accounts receivable that was partially compensated by decrease of interest income from investments in bank deposits.

Finance costs

Finance costs increased by RUR 2,034 million, or 41.8%, from RUR 4,862 million for the year ended 31 December 2018 to RUR 6,896 million for year ended 31 December 2019. The increase was primarily attributable to the effect from implementation of IFRS 16 Leases since 1 January 2019.

Income tax expenses

The Group recognised an income tax expense in the amount of RUR 23,058 million for the year ended 31 December 2019 and RUR 22,256 million for the year ended 31 December 2018. The effective tax rate increased from 19.3% to 21% due to changes in items which are not deductible for taxation purposes.

Profit for the year

As a result of the above-mentioned factors, the Group recognised profit in the amount of RUR 86,638 million for the year ended 31 December 2019 compared to RUR 92,845 million for the year ended 31 December 2018.

Capital resources

The electricity transmission business is capital-intensive and many of the Group's facilities are subject to long term usage and require regular maintenance and upgrades. Expenditures to maintain, expand and increase the efficiency and size of the transmission grid are, accordingly, an important priority and have a significant effect on the Group's cash flows and future operating results.

The table below sets out total additions to property, plant and equipment and construction in progress, as well repair and maintenance expenditures for the periods indicated.

(in millions of roubles)	Year ended	Year ended
	31 December 2019	31 December 2018
Total addition to property, plant and equipment and construction in progress	132,588 *	104,884
Repairs and maintenance of equipment	3,885	3,288
Materials for repair	2,667	2,627

^{*} includes property plant and equipment received from to JSC Far East Energy Management Company within the framework of an asset exchange agreement amounted to RUR 34,564 million.

Liquidity

The Group's primary sources of liquidity are cash generated via operating activities, debt and equity financing. Future requirements for the Group's business needs, including those to fund additional capital expenditures in accordance with its business strategy, are expected to be financed by a combination of cash flows generated by the Group's operating activities, as well as external financing sources and funds from the Russian Government.

The table below summarizes the Group's cash flows for the periods indicated.

(in millions of roubles)	Year ended	Year ended
	31 December 2019	31 December 2018
Net cash generated by operating activities	136,234	124,070
Net cash used in investing activities	(79,069)	(84,639)
Net cash used in financing activities	(57,706)	(44,348)
Net decrease in cash and cash equivalents	(541)	(4,917)
Cash and cash equivalents at the beginning of the year	37,618	42,535
Cash and cash equivalents at the end of the year	37,077	37,618

Net cash generated by operating activities

Net cash generated by the Group's operating activities increased by RUR 12,164 million, or 9.8%, from RUR 124,070 million for the year ended 31 December 2018 to RUR 136,234 million for the year ended 31 December 2019.

Net cash used in investing activities

Net cash used in the Group's investing activities decreased by RUR 5,570 million, or 6.6%, from RUR 84,639 million for the year ended 31 December 2018 to RUR 79,069 million for the year ended 31 December 2019. This was mainly caused by cash proceeds from partial sale of investment in shares of PJSC "Inter RAO" according to payment schedule and was partially mitigated by increase in the net effect of investment in bank deposits and the increase in purchase of property, plant and equipment purchases.

Net cash used in financing activities

Net cash outflow from financing activities of the Group increased by RUR 13,358 million, or 30.1%, from RUR 44,348 million for the year ended 31 December 2018 to RUR 57,706 million for the year ended 31 December 2019. This was mainly caused by the redemption of borrowings using internal resources (in 2018 borrowings were partially refinanced).

Debt

As at 31 December 2019, the Group's total debt amounted to RUR 239,787 million as compared to RUR 246,809 million as at 31 December 2018.

The following table sets out the Group's current debt and non-current debt for the periods indicated.

(in millions of roubles)	31 December 2019	31 December 2018
Total current debt and current portion of non-current debt	31,444	22,224
Total non-current debt	208,343	224,585
Total debt	239,787	246,809
Net debt	176.859	205.370

The key reasons for the decrease of the Group's debt relates to a redemption of loan participation notes that was partly compensated by the implementation of IFRS 16 Leases since 1 January 2019.

Credit ratings

On 12 February 2019, Moody's rating agency increased the PJSC FGC UES' credit rating to the investment category (Baa3 Stable). In October 2019, Fitch agency increased PJSC FGC UES' credit rating from BBB—to BBB.

The Company's credit ratings assigned by international rating agencies Standard & Poor's, Moody's and Fitch Ratings based on their global scales remain at the sovereign level. The credit rating from Russian rating agency ACRA has been confirmed on a par with credit rating of the financial obligations of the Government of the Russian Federation.

Credit Ratings of the Company as of 31 December 2019

Rating agency	International scale rating	Forecast	Date of last rating review
Standard & Poor's	BBB-	Stable	16 May 2019
Moody's	Baa3	Stable	12 February 2019
Fitch Ratings Ltd	BBB	Stable	15 October 2019
Rating agency	National scale rating	Forecast	Date of last rating review
JSC ACRA	AAA (RU)	Stable	25 November 2019

10. DISCLAIMER

This Report has been prepared for shareholders of Public Joint Stock Company "Federal Grid Company of Unified Energy System" (the Company) and for no other person. The Company, its directors, employees, agents or advisers do not accept responsibility for any other person to whom this document is shown or into whose hands it may reach, and any such responsibility or liability is expressly disclaimed against.

By their very nature, statements concerning risks and uncertainties that the Company faces in this Report involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements contained in this Annual Financial Report reflect knowledge and information that were available at the date of preparing this Report. The Company is under no obligation to update these forward looking statements. Further, nothing in this Report should be construed as a profit forecast.

11. RESPONSIBILITY STATEMENT

I hereby confirm that to the best of my knowledge:

Sharonof

- (a) the consolidated financial statements, prepared in accordance with International Financial Reporting Standards, give a true and fair assessment of the assets, liabilities, financial position and profit or loss of PJSC FGC UES, and those of consolidated enterprises taken as a whole (the Group); and
- b) this Annual Financial Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of principal risks and uncertainties that cause them.

M. Tikhonova,

Deputy Chairman of Corporate Governance of the Management Board, Member of the Management Board of PJSC FGC UES 28 April 2020